H11277

NOAA FORM 76-35A

U.S. DEPARTMENT OF COMMERCE

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY

DESCRIPTIVE REPORT

Type of Survey: Navigable Area

Registry Number: H11277

LOCALITY

State: Massachusetts

General Locality: Massachusetts Bay

Sub-locality: Gloucester Harbor

2003

CHIEF OF PARTY

Donald W. Haines, LCDR, NOAA

LIBRARY & ARCHIVES

DATE

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

REGISTRY NUMBER:

H11277

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: Massachusetts Bay

Sub-Locality: Gloucester Harbor

Scale: 1:10,000 Date of Survey: 09/8/03 to 09/17/03

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

Vessel: NOAA Ship THOMAS JEFFERSON, S-222

Chief of Party: LCDR Donald W. Haines, NOAA

Surveyed by: THOMAS JEFFERSON Personnel

Soundings by: Klein 5000 Side Scan 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

Verification by: Atlantic Hydrographic Branch Personnel

Soundings in: Meters at MLLW

Remarks: Bold, Italic, Red 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 H11277

Scale of Survey: 1:10,000 Year of Survey: 2003 NOAA Ship THOMAS JEFFERSON LCDR Donald W. Haines, Commanding Officer

A. AREA SURVEYED

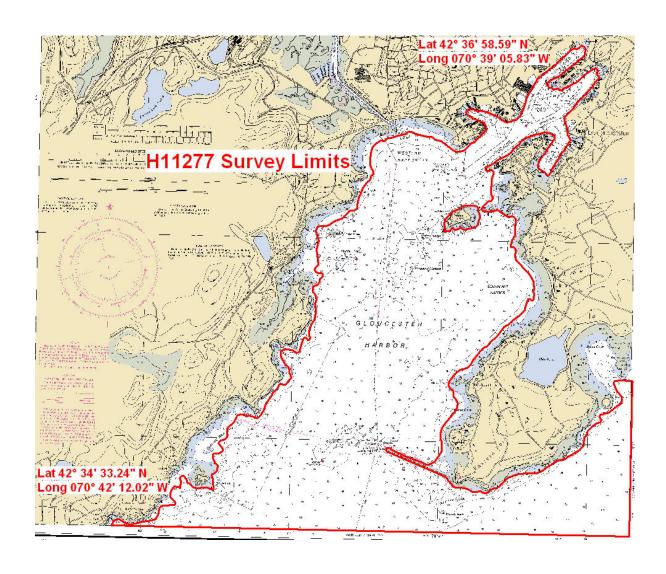
This hydrographic survey was conducted in accordance with Hydrographic Survey Letter Instructions for project OPR-A397-TJ-03.

This Descriptive Report pertains to Sheet "X," Gloucester Harbor, registry number H11277. This sheet was not included in the original instructions for project OPR-A397-TJ-03*. No supplemental instructions for this sheet were forwarded.

This project is being conducted to provide side scan sonar and multibeam data in support of the National Oceanic and Atmospheric Administration (NOAA) and National Ocean Service (NOS) nautical charts.

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

* Not submitted with original field records.



B. DATA ACQUISITION AND PROCESSING See Also Evaluation Report.

EQUIPMENT

Data were acquired by NOAA Ship THOMAS JEFFERSON's Launch 1005 and Launch 1014. Both launches are NOAA's standard 8.5-meter aluminum Jensen vessel with a typical 0.5 meter mean draft.

Launch 1005 acquired shallow-water multibeam (SWMB) data using a Reson SeaBat 8101 multibeam system. All positioning and attitude were determined with a TSS POS/MV 220 (version 2) GPS aided inertial navigation system.

Launch 1014 acquired SWMB hydrography with a Reson SeaBat 8125 multibeam system. For continuous refraction correctors at the transducer, a Digibar Pro was used for the surface sound velocity. Side Scan coverage was also acquired by 1014 using a hull-mounted Klein 5000 side scan sonar. All positioning and attitude were determined with a TSS POS/MV 320 (version 3) DGPS-aided inertial navigation system.

No unusual vessel configurations or problems were encountered. Refer to the Fall Data Acquisition and Processing Report (DAPR)*, dated August-November 2003, and the Horizontal and Vertical Control Report, dated January 20, 2004 for detailed equipment, vessel configuration and setting information. *Concur*.

*Filed with original field records.

QUALITY CONTROL

Side Scan Sonar Quality Control

A towfish altitude of eight to twenty percent of the range scale was maintained during data acquisition except in the deeper south central area of the sheet. *Concur.*

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

Shallow Water Multibeam Quality Control

There were no faults with the MBES system which affected data integrity. Refer to the Fall DAPR for detailed discussion of MBES system calibrations, data acquisition, and data processing. *Concur*.

A few areas with MBES data had apparent discontinuities between swaths run on different days of 10-15cm, which was attributed to the location of the primary tide gauge at Boston Light, MA, approximately 22 nautical miles away. This discrepancy is well within the error budget. *Concur*.

Crosslines

A total of 9.26 linear nautical miles (lnm) of MBES crossline data were collected, equivalent to 3.6% of all MBES data. There were significant areas of overlap between adjacent lines on different days. Overall, the comparison was satisfactory. 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 HIPS 5.4. *See also Evaluation Report.*

Junctions

Sheet "O" of OPR-A397-TJ-04 junctions with the south edge of this sheet. The data for Sheet "O" was acquired by Outside Source Data (OSD). The soundings from the data sets agree with less than 1% variance. *Concur*.

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*. Specified table detailing sound velocity casts was not submitted by the field party. Data pertaining to sound velocity casts are contained in the Pydro .PSS file.

* 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 primary tide station was at Boston Light, MA (844-4162) and secondary station Portland, ME (841-8150) served as secondary for datum determination. *Concur.*

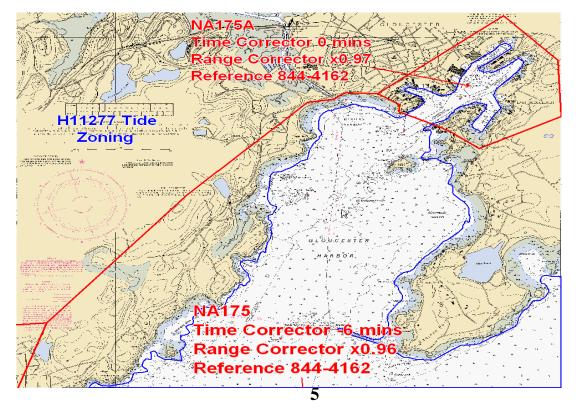
Tidal zoning for this survey is consistent with the Letter Instructions*. The zones used for this survey are as follows:

ZONE NAME	AME CORRECTOR (min) RATIO		REFERENCE	
NA175	-6	x0.96	844-4162	
NA175A	0	x0.97	844-4162	

^{*}Not submitted with original field records.

A Request for Approved Tides letter* was sent to N/OPS1 on September 26, 2003 (Appendix IV). Verified zones were downloaded via email in January 2004, and verified water levels from the N/OPS1 CO-OPS website were applied to all sounding data on January 23, 2004. *Approved tides were applied in office processing on May 18, 2005.*

*Not submitted with original field records.



HORIZONTAL CONTROL See also Evaluation Report.

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

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

The Fall Vertical and Horizontal Control Report*, dated January 20, 2004, was submitted on March 4, 2004.

*Filed with original field records.

D. RESULTS AND RECOMMENDATIONS

CHART COMPARISON

There are ten charts affected by this survey:

13281, 17th edition, May 20, 2000, scale 1:10,000 **13279**, 29th edition, January 10, 1998, scale 1:20,000 **13274**, 24th Edition, May 12, 2001, Scale 1:40,000 **13267**, 30th Edition, December 1, 2001, Scale 1:80,000 **13278**, 25th Edition, December 9, 2000, Scale 1:80,000 **13260**, 38th Edition, April 27, 2002, Scale 1:378,838 **13200**, 33rd Edition, January 19, 2002, Scale 1:400,000 **13009**, 30th Edition, August 31, 2002, Scale 1:500,000 **13006**, 30th Edition, July 20, 2002, Scale 1:675,000 **13003**, 46th Edition, January 2003, Scale 1:1,200,000

General Agreement with Charted soundings

Sounding data agreed well with charted depths. Discrete differences are addressed in the "Dangers to Navigation," "AWOIS," "Significant Charted Features," and "Significant Uncharted Features" sections in Appendix I. *Concur.*

Gloucester Inner Harbor

Gloucester Inner Harbor is maintained in many places by the U.S. Army Corps of Engineers. 200% Side Scan and 100% MBES was acquired in the harbor. Most maintained areas had depths deeper than the controlling depth; however, seven soundings were shoaler than the maintained depths. These depths with corresponding locations have been forwarded as DtoNs to MCD. LCDR Andrew L. Beaver, NOAA, Northeast Navigation Manager, is coordinating with the USACOE for further investigation of the items within their jurisdiction. *See also Evaluation Report*.

AWOIS Items and Significant Contacts

There were eight AWOIS items within the survey limits. All items were investigated fully and are addressed in Appendix I. *Concur*.

Dangers to Navigation

A total of twenty-eight Dangers to Navigation (DtoN) were reported by THOMAS

JEFFERSON. One DtoN was submitted September 29, 2003, fourteen dangers were submitted December 23, 2003, six dangers were submitted March 12, 2004 and seven dangers were submitted April 23, 2004. For the complete DtoN report, see Appendix I. Four Dangers to Navigation were identified during office review. See also Evaluation Report.

Charted Features

All items are addressed in other sections of this report. *Concur. See also Evaluation Report.*

Charting Recommendations

This survey is adequate to supersede all soundings or charts in common areas. *Concur.*

ADDITIONAL RESULTS

Aids to Navigation and Other Detached Positions

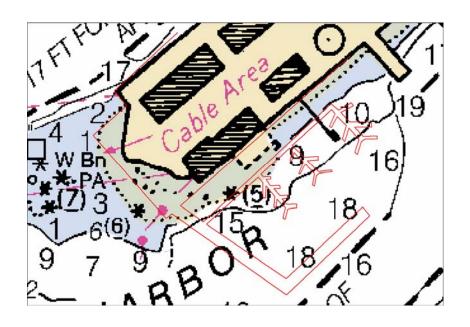
All aids to navigation positioned during this survey are on location. *Concur. See also Evaluation Report.*

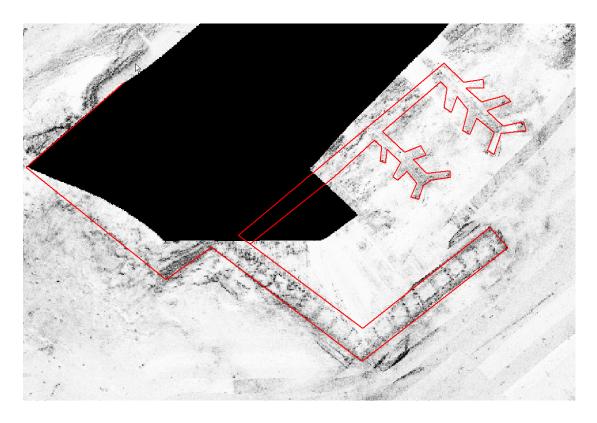
Bridges and Overhead Cables

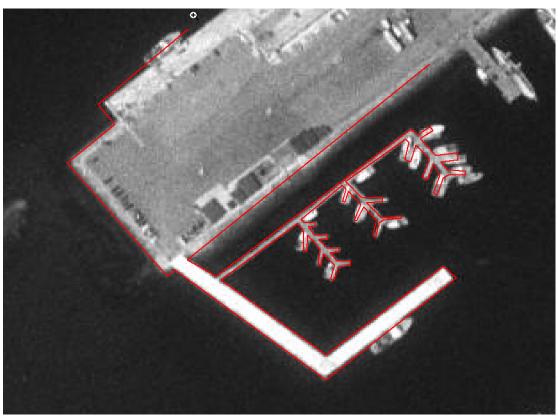
There were no bridges or overhead cables within the survey limits. *Concur.*

Shoreline

A new fishing pier in the Inner Harbor South Channel was completed in December 1993 along with a parking lot that is all part of the State Pier Facility. Outline was created using a Side Scan mosaic along with a USGS geo-referenced aerial photograph acquired from Microsoft's TerraServer dated March 29, 1995. A chartlet with the pier outlined is on the next page along with the aerial photo and side scan mosaic. *See Evaluation Report*.





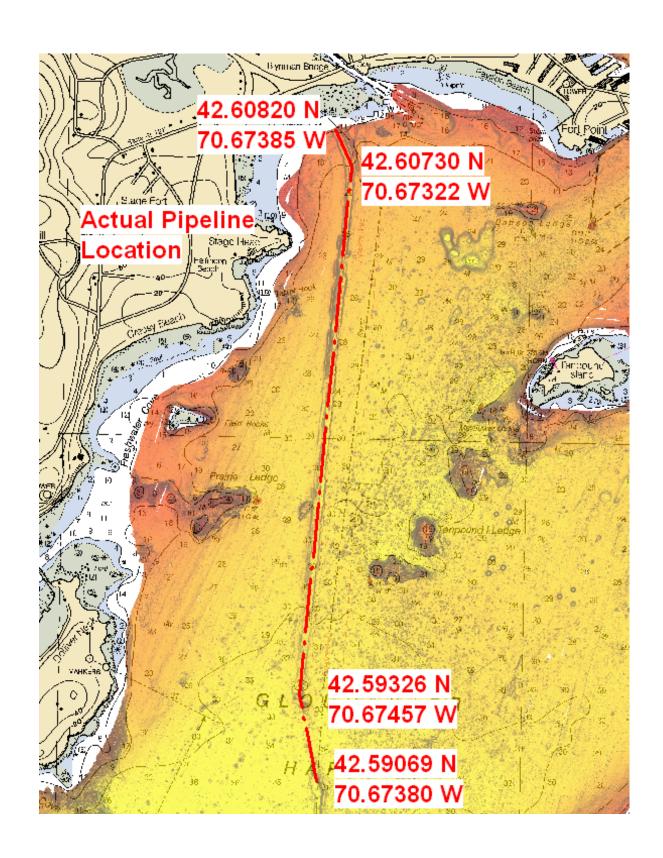


Ferry Rotues

No ferry routes were within the survey limits. *Concur.*

Submarine Cables and Pipelines

A pipeline extends the length of the Harbor starting from position Lat. 42° 36′ 32.91″ N, Long. 070° 40′ 30.30″ W, extending south through Dog Bar Channel and continues south off the survey. The overall least depth on the pipeline ranges from12 feet at the beginning, to 50 feet at the end. Although the pipeline falls within the charted pipeline area, it is located on the western edge of the pipeline area. Recommend charting the pipeline and pipeline area according to Digital Terrain Model (DTM). Positions on the chartlet are the turning points of the pipeline. See next page. *See Evaluation Report*.



APPROVAL SHEET

OPR-A397-TJ-03 Massachusetts Bay Massachusetts

Gloucester Harbor Survey Registry No. H11277

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.

I have ensured that standard field surveying and processing procedures were adhered to during this project in accordance with the Hydrographic Manual, Fourth Edition; Hydrographic Survey Guidelines; Field Procedures Manual, and the NOS Hydrographic Surveys Specifications and Deliverables, as updated for March, 2003. This survey was conducted as outlined in the Data Acquisition and Processing Report (August - November, 2003) submitted March 30, 2004, as well as the DAPR Change No. 1 sumbmitted April 11, 2004. Refer to the Horizontal and Vertical Control Report (20 January, 2004) submitted March 4, 2004 for further information not included with this Descriptive Report.

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

Respectfully Submitted,

ENS Andrew P. Seaman, NOAA

Junior Officer/Hydrographer

Approved and Forwarded:

LT Shepard M. Smith, NOAA

LCDR Donald W. Haines, NOAA

APPENDIX I

DtoN, AWOIS, and Item Investigation REPORT

Included in this Section:

- 1. DtoN's
- 2 AWOIS
- 3. Significant Charted Items
- 4. Significant Uncharted Items
- 5. **DP**'s

Appendix I: Survey Feature Report

H11277 Office Processing Note

Registry Number: H11277

State: Massachusetts

Locality: Massachusetts Bay

Sub-locality: Gloucester Harbor

Project Number: OPR-A397-TJ-03

Survey Dates: 09/07/2003 - 10/05/2006

This report contains office processing notes for survey H11277.

Due to a loss of the AWOIS database for this survey following a PYDRO crash, there is no "DR_AWOIS" section for this report. All AWOIS items are specifically identified as such and are classified as either "DR_Charted" or "DR_DTON" as appropriate.

Charts Affected

Number Version		Date	Scale
13281	17th Ed.	05/20/2000	1:10000
13279	31st Ed.	08/01/2004	1:20000
13274	26th Ed.	04/01/2005	1:40000
13267	32nd Ed.	12/01/2004	1:80000
13278	26th Ed.	06/01/2005	1:80000
13260	39th Ed.	06/01/2003	1:378838
13200	34th Ed.	12/01/2005	1:400000
13009	31st Ed.	10/01/2004	1:500000
13006	32nd Ed.	02/01/2005	1:675000
13003	48th Ed.	10/01/2004	1:1200000

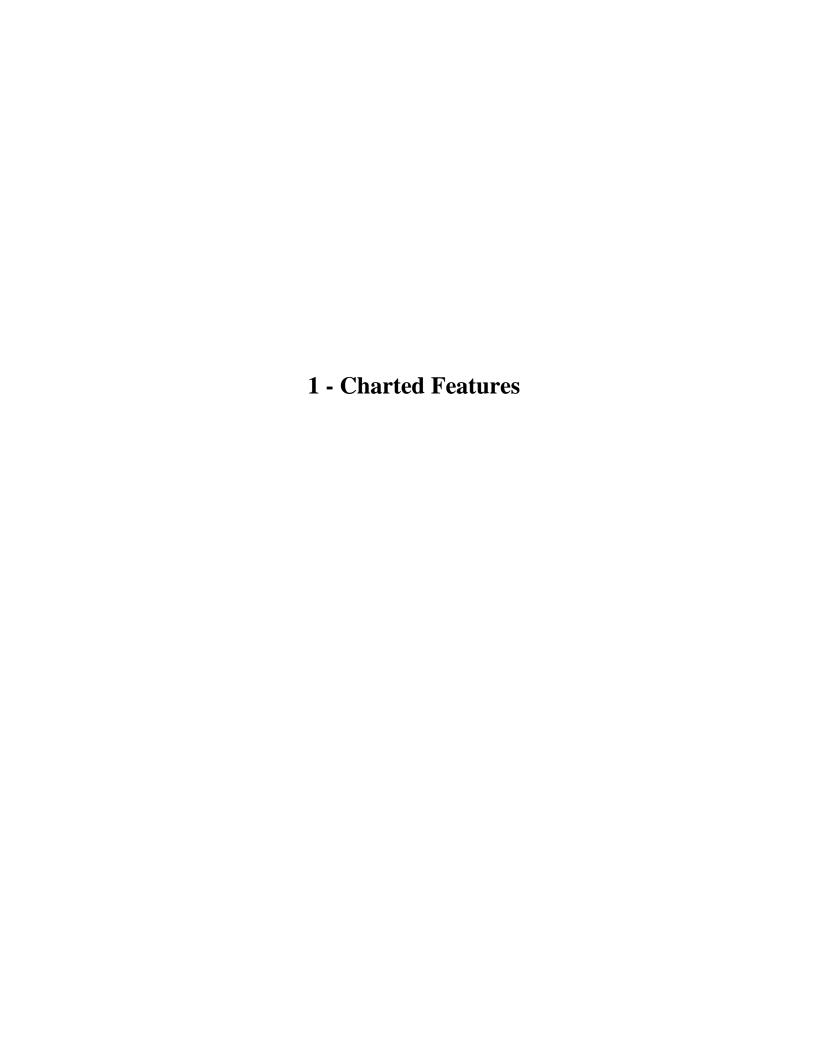
Features

No.	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	Sounding	10.89 m	042° 35' 04.225" N	70° 40' 18.745" W	
1.2	Rock	1.74 m	042° 35' 51.179" N	70° 40' 42.417" W	
1.3	Rock	3.01 m	042° 34' 39.096" N	70° 39' 57.966" W	
1.4	Rock	5.70m	042° 36′ 12.028″ N	70° 39' 58.980" W	
1.5	Rock	5.86 m	042° 35' 51.423" N	70° 40' 12.391" W	

1.6	Rock	5.85 m	042° 36' 12.193" N	70° 40' 01.626" W	
1.7	Wreck	7.35 m	042° 34' 47.315" N	70° 41' 28.542" W	11926
1.8	Rock	1.72 m	042° 35' 53.624" N	70° 40' 40.724" W	
1.9	Wreck	5.40 m	042° 36' 52.528" N	70° 39' 15.723" W	11932
1.10	Rock	5.12 m	042° 36' 41.957" N	70° 39' 23.816" W	11939
1.11	Rock	5.29 m	042° 36' 01.863" N	70° 40' 03.339" W	
1.12	Wreck	4.48 m	042° 36' 49.937" N	70° 39' 19.879" W	11937
1.13	GP	[None]	042° 36' 48.331" N	70° 39' 16.141" W	11933
1.14	Rock	4.05 m	042° 36' 22.129" N	70° 39' 59.865" W	
2.1	Rock	4.50 m	042° 35' 59.888" N	70° 40' 00.090" W	
2.2	Wreck	11.73 m	042° 35' 07.268" N	70° 40′ 30.132″ W	
2.3	Sounding	5.13 m	042° 35' 55.080" N	70° 40' 07.667" W	
2.4	Rock	10.84 m	042° 34' 33.297" N	70° 41' 26.299" W	
2.5	Rock	5.88 m	042° 34' 34.279" N	70° 41' 54.123" W	
2.6	Rock	5.02 m	042° 34' 35.632" N	70° 41' 51.772" W	
2.7	Rock	4.04 m	042° 34' 41.882" N	70° 41' 31.402" W	
2.8	Rock	3.35 m	042° 35' 16.178" N	70° 41' 02.859" W	
2.9	Rock	4.10 m	042° 35' 24.675" N	70° 40' 59.749" W	
2.10	Rock	-0.72 m	042° 36' 03.177" N	70° 39' 58.881" W	
2.11	Rock	3.85 m	042° 35' 08.910" N	70° 39' 57.878" W	
2.12	Rock	8.34 m	042° 34' 35.713" N	70° 41' 42.268" W	
2.13	Rock	2.94 m	042° 34' 38.417" N	70° 41' 44.952" W	
2.14	Rock	5.33 m	042° 34' 34.852" N	70° 41' 48.193" W	
2.15	Rock	0.67 m	042° 36' 09.340" N	70° 39' 44.255" W	
2.16	Rock	5.08 m	042° 35' 57.861" N	70° 40' 41.661" W	
2.17	Rock	5.37 m	042° 35' 59.045" N	70° 40' 41.323" W	
2.18	Rock	8.14 m	042° 34' 39.588" N	70° 39' 38.177" W	
2.19	Rock	10.21 m	042° 34' 38.591" N	70° 39' 32.856" W	
2.20	Rock	11.15 m	042° 34' 35.055" N	70° 39' 40.163" W	
2.21	Rock	2.87 m	042° 34' 45.358" N	70° 39' 55.946" W	
2.22	Rock	2.74 m	042° 34' 53.403" N	70° 40' 12.038" W	
2.23	Rock	2.79 m	042° 34' 43.226" N	70° 41' 37.676" W	
2.24	Rock	3.03 m	042° 35' 02.384" N	70° 41' 24.534" W	
2.25	Rock	2.58 m	042° 35' 00.052" N	70° 41' 28.894" W	
2.26	Rock	2.62 m	042° 34' 44.936" N	70° 39' 49.932" W	
2.27	Sounding	8.44 m	042° 35' 58.912" N	70° 39' 54.249" W	
		-			

2.28	Rock	2.93 m	042° 35' 51.721" N	70° 39' 31.601" W	
2.29	Rock	10.73 m	042° 34' 53.765" N	70° 41' 04.009" W	
2.30	Rock	3.53 m	042° 35' 29.766" N	70° 40' 53.301" W	
2.30	Rock	3.63 m	042° 35' 28.733" N	70° 40' 54.849" W	
2.31	Rock	3.03 m	042° 36' 29.831" N	70° 40′ 19.388″ W	
2.32	Rock	4.16 m	042° 36′ 12.931″ N	70° 40' 31.266" W	
			042° 36′ 04.743" N		
2.34	Rock	5.93 m		70° 40' 37.274" W	
2.35	Rock	4.71 m	042° 36' 55.699" N	70° 39' 06.479" W	
2.36	Rock	1.87 m	042° 36' 25.540" N	70° 39' 34.199" W	
2.37	Sounding	2.52 m	042° 36' 38.611" N	70° 39' 42.938" W	
2.38	Rock	4.19 m	042° 36' 56.574" N	70° 39' 08.786" W	
2.39	Rock	4.07 m	042° 36' 57.626" N	70° 39' 05.431" W	
2.40	Rock	3.65 m	042° 36' 57.021" N	70° 39' 06.490" W	
2.41	Sounding	7.97 m	042° 36' 17.163" N	70° 40' 13.928" W	
2.42	Rock	4.49 m	042° 36' 27.735" N	70° 40' 25.083" W	
2.43	Rock	3.65 m	042° 36' 21.782" N	70° 40' 29.310" W	
2.44	Rock	3.19 m	042° 36' 29.658" N	70° 40' 16.054" W	
2.45	Rock	7.30 m	042° 35' 58.577" N	70° 40' 05.382" W	
2.46	Rock	6.56 m	042° 36' 00.455" N	70° 39' 48.238" W	
2.47	Rock	5.10 m	042° 36' 00.799" N	70° 40' 01.302" W	
2.48	Rock	6.37 m	042° 36' 00.652" N	70° 40' 04.905" W	
2.49	Rock	5.57 m	042° 36' 01.019" N	70° 39' 56.004" W	
2.50	Rock	5.13 m	042° 36' 02.034" N	70° 39' 53.961" W	
2.51	Rock	2.94 m	042° 36' 07.834" N	70° 39' 36.477" W	
2.52	Rock	4.02 m	042° 36' 26.544" N	70° 39' 57.723" W	
2.53	Rock	3.13 m	042° 36' 44.298" N	70° 39' 19.738" W	
2.54	Rock	2.12 m	042° 36' 07.495" N	70° 39' 41.553" W	
2.55	Rock	2.40 m	042° 36' 07.527" N	70° 39' 43.027" W	
2.56	Rock	3.09 m	042° 36' 24.046" N	70° 40' 29.985" W	
2.57	Rock	5.74 m	042° 36' 25.051" N	70° 40' 01.005" W	
2.58	Rock	5.54 m	042° 36' 01.780" N	70° 39' 51.091" W	
2.59	Rock	5.00 m	042° 36' 03.046" N	70° 40' 03.308" W	
2.60	Rock	2.95 m	042° 36' 03.786" N	70° 39' 45.011" W	
2.61	Rock	1.00 m	042° 35' 55.253" N	70° 40' 46.120" W	
2.62	Rock	6.28 m	042° 35' 59.468" N	70° 39' 44.493" W	
2.63	Rock	8.65 m	042° 34' 47.851" N	70° 39' 24.803" W	

2.64	Rock	7.39 m	042° 34' 46.768" N	70° 39' 29.740" W	
3.1	Rock	13.36 m	042° 34' 41.003" N	70° 40' 54.730" W	
3.2	Rock	2.86 m	042° 34' 41.720" N	70° 41' 26.880" W	
3.3	Rock	1.34 m	042° 36' 12.128" N	70° 39' 44.506" W	
3.4	Rock	1.24 m	042° 36' 09.091" N	70° 39' 45.625" W	
3.5	Rock	0.55 m	042° 36' 06.127" N	70° 40′ 38.177" W	
3.6	Rock	5.59 m	042° 35' 16.632" N	70° 38' 46.340" W	
3.7	Rock	11.51 m	042° 35' 05.977" N	70° 38' 46.431" W	
3.8	Rock	3.05 m	042° 34' 41.900" N	70° 39' 52.771" W	
3.9	Rock	3.65 m	042° 34' 41.285" N	70° 39' 47.132" W	
3.10	Rock	2.23 m	042° 35' 17.783" N	70° 41' 01.349" W	
3.11	Wreck	4.98 m	042° 36' 26.603" N	70° 40′ 12.396″ W	
3.12	Rock	10.18 m	042° 34' 37.565" N	70° 41' 22.882" W	
3.13	Rock	2.48 m	042° 36' 25.243" N	70° 39' 34.930" W	
3.14	Rock	1.68 m	042° 36' 26.399" N	70° 39' 33.172" W	
3.15	Rock	3.00 m	042° 36' 33.609" N	70° 39' 19.155" W	
3.16	Rock	1.51 m	042° 36' 40.292" N	70° 39' 08.094" W	
3.17	Wreck	4.15 m	042° 36' 36.702" N	70° 39' 30.173" W	11928
3.18	Rock	4.05 m	042° 36' 38.164" N	70° 39' 51.209" W	
3.19	Rock	0.50 m	042° 36' 30.154" N	70° 39' 28.828" W	
3.20	Rock	3.41 m	042° 36' 56.658" N	70° 39' 07.004" W	
3.21	Obstruction	4.86 m	042° 36' 53.507" N	70° 39' 11.723" W	11930
3.22	Sounding	5.30 m	042° 36' 27.121" N	70° 39' 49.093" W	
3.23	Sounding	5.34 m	042° 36' 29.963" N	70° 39' 45.260" W	
3.24	Rock	4.17 m	042° 36' 34.547" N	70° 39' 38.515" W	
3.25	Obstruction	3.69 m	042° 36' 32.887" N	70° 39' 13.491" W	
3.26	Rock	3.57 m	042° 36' 25.653" N	70° 39' 17.735" W	
3.27	Rock	2.94 m	042° 36' 33.423" N	70° 39' 17.611" W	
3.28	Rock	3.29 m	042° 36' 01.134" N	70° 39' 59.026" W	
3.29	Rock	3.23 m	042° 34' 44.038" N	70° 41' 28.236" W	
3.30	Rock	3.41 m	042° 36' 05.407" N	70° 39' 41.207" W	
3.31	Rock	0.98 m	042° 35' 53.994" N	70° 40' 50.173" W	
3.32	Sounding	4.51 m	042° 36' 33.270" N	70° 39' 20.871" W	
	_				



1.1) Profile/Beam - 310/77 from h11277 / 1005_mb / 2003-251 / 338_1709

Survey Summary

Survey Position: 042° 35′ 04.225″ N, 70° 40′ 18.745″ W

Least Depth: 10.89 m

Timestamp: 2003-251.17:09:43.944 (09/08/2003)

Survey Line: h11277 / 1005_mb / 2003-251 / 338_1709

Profile/Beam: 310/77

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

100% MBES and 100% SSS was acquired over a 200 meter radius. No obstruction was found within the area.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-251/338_1709	310/77	0.00	0.000	Primary
ChartGPs - Digitized	1	0.60	104.7	Secondary (grouped)

Hydrographer Recommendations

Delete "Obstn" in surveyed position and chart as per digital data.

S-57 Data

[None]

Office Notes

Concur with clarification. Delete charted obstruction at 42°35′04.225″ N, 70°40′18.745″ W. Chart present survey soundings in common areas.

1.2) Profile/Beam - 1566/91 from h11277 / 1014_mb / 2003-252 / 321_1532

Survey Summary

Survey Position: 042° 35′ 51.179″ N, 70° 40′ 42.417″ W

Least Depth: 1.74 m

Timestamp: 2003-252.15:37:28.959 (09/09/2003)

Survey Line: h11277 / 1014_mb / 2003-252 / 321_1532

Profile/Beam: 1566/91

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

A charted rock with a current charted depth of 6 feet in Latitude 42°35'51.179" N, Longitude 70°40'42.417" W, was determined by the office processor to have a least depth of 5 feet.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-252/321_1532	1566/91	0.00	0.000	Primary
ChartGPs - Digitized	10	1.81	148.5	Secondary (grouped)
h11277/1014_mb/2003-252/321_1532	1553/216	12.36	177.7	Secondary (grouped)

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

5ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 1fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 1.736 m

WATLEV - 3:always under water/submerged

Office Notes

Chart a Dangerous 5 Rk in position $42^{\circ}35'51.179"$ N, $70^{\circ}40'42.417"$ W.

1.3) Profile/Beam - 102/3 from h11277 / 1005_mb / 2003-252 / 162_2105

Survey Summary

Survey Position: 042° 34′ 39.096″ N, 70° 39′ 57.966″ W

Least Depth: 3.01 m

Timestamp: 2003-252.21:05:57.813 (09/09/2003)

Survey Line: h11277 / 1005_mb / 2003-252 / 162_2105

Profile/Beam: 102/3

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

100% MBES and 100% SSS was acquired over the area. The depths on Webber Rock are adequately charted.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-252/162_2105	102/3	0.00	000.0	Primary
h11277/1005_mb/2003-252/161_2107	671/10	8.29	273.9	Secondary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

10ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 1 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 3.009 m

WATLEV - 3:always under water/submerged

Office Notes

Do not concur. The least depth, corrected to MLLW using approved water levels and verified tide zoning, is 10 feet. Delete the charted 9 foot sounding at $42^{\circ}34'39.078"$ N, $70^{\circ}39'57.601"$ W. Chart a dangerous rock, least depth 10 feet, in position $42^{\circ}34'39.096"$ N, $70^{\circ}39'57.966"$ W.

1.4) Profile/Beam - 8732/64 from h11277 / 1005_mb / 2003-252 / 286_1527

Survey Summary

Survey Position: 042° 36′ 12.028″ N, 70° 39′ 58.980″ W

Least Depth: 5.70 m

Timestamp: 2003-252.15:41:14.850 (09/09/2003)

Survey Line: h11277 / 1005_mb / 2003-252 / 286_1527

Profile/Beam: 8732/64

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

100% MBES and 100% SSS was acquired over the search area and a rock was found 20 meters south of the current charted position with a least depth as above.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-252/286_1527	8732/64	0.00	0.000	Primary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

19ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 3fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 5.736 m

WATLEV - 1:partly submerged at high water

Office Notes

Concur with clarification. Delete charted 18 foot rock at 42-36-12.628 N, 70-39-59.184 W. Chart a rock, least depth 18 feet, in position 42°36'12.028" N, 70°39'58.980" W.

1.5) Profile/Beam - 6204/44 from h11277 / 1005_mb / 2003-252 / 287_1602

Survey Summary

Survey Position: 042° 35′ 51.423″ N, 70° 40′ 12.391″ W

Least Depth: 5.86 m

Timestamp: 2003-252.16:11:57.092 (09/09/2003)

Survey Line: h11277 / 1005_mb / 2003-252 / 287_1602

Profile/Beam: 6204/44

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

100% MBES and 100% SSS was acquired over the area. The depths on Tenpound Island Ledge are adequately charted.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-252/287_1602	6204/44	0.00	0.000	Primary

Hydrographer Recommendations

Chart as per digital data.

S-57 Data

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

Attributes: VALSOU - 5.857 m

WATLEV - 3:always under water/submerged

Office Notes

Do not concur. Delete charted 18 foot rock. Chart a rock, least depth 19 feet, in position 42°35'51.423" N, 70°40'12.391" W.

1.6) Profile/Beam - 10377/87 from h11277 / 1005_mb / 2003-252 / 289_1704

Survey Summary

Survey Position: 042° 36′ 12.193″ N, 70° 40′ 01.626″ W

Least Depth: 5.85 m

Timestamp: 2003-252.17:20:21.041 (09/09/2003)

Survey Line: h11277 / 1005_mb / 2003-252 / 289_1704

Profile/Beam: 10377/87

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

A charted rock with a least depth of 19 ft, in Latitude 42° 36' 12.193° N, Longitude 70° 40' 01.626° W, was located by the office processor.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-252/289_1704	10377/87	0.00	0.000	Primary
h11277/1014_100/2003-251/016_1951	0002	13.33	136.1	Secondary

Hydrographer Recommendations

[None]

S-57 Data

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

Attributes: VALSOU - 5.849 m

WATLEV - 3:always under water/submerged

Office Notes

Retain as charted.

1.7) Profile/Beam - 286/53 from h11277 / 1005_mb / 2003-253 / 386_2011

Survey Summary

Survey Position: 042° 34' 47.315" N, 70° 41' 28.542" W

Least Depth: 7.35 m

Timestamp: 2003-253.20:11:40.431 (09/10/2003)

Survey Line: h11277 / 1005_mb / 2003-253 / 386_2011

Profile/Beam: 286/53

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

100% SSS coverage and 100% MBES coverage was acquired over the navigable area of the search radius. No wreck was found within the radius.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-253/386_2011	286/53	0.00	0.000	Primary

Hydrographer Recommendations

Remove Wreck "PA" in this position and chart as per digital data.

S-57 Data

[None]

Office Notes

Concur with clarification. Delete charted Wk PA at 42°34'47.315" N, 70°41'28.542" W. Chart present survey soundings in common areas.

This feature is AWOIS item #11926. After the crash of the Pydro PSS, the original AWOIS database features were lost. All AWOIS features are classified with "DR_Charted" or "DR_DTON," as required.

1.8) Profile/Beam - 1469/40 from h11277 / 1014_mb / 2003-252 / 321_1532

Survey Summary

Survey Position: 042° 35′ 53.624″ N, 70° 40′ 40.724″ W

Least Depth: 1.72 m

Timestamp: 2003-252.15:37:09.582 (09/09/2003)

Survey Line: h11277 / 1014_mb / 2003-252 / 321_1532

Profile/Beam: 1469/40

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

100% MBES and 100% SSS was acquired over the area. The depths on Prarie Ledge are adequately charted.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-252/321_1532	1469/40	0.00	0.000	Primary
h11277/1014_mb/2003-252/321_1532	1460/195	9.73	167.0	Secondary (grouped)

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

5ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 1fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 1.717 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. The present survey depths match the presently charted depths. Retain 5 Rk in position 42°35'53.624" N, 70°40'40.724" W as charted.

1 - Charted Features

1.9) Profile/Beam - 6076/153 from h11277 / 1014_mb / 2003-253 / 420_1255

Survey Summary

Survey Position: 042° 36′ 52.528″ N, 70° 39′ 15.723″ W

Least Depth: 5.40 m

Timestamp: 2003-253.13:15:26.506 (09/10/2003)

Survey Line: h11277 / 1014_mb / 2003-253 / 420_1255

Profile/Beam: 6076/153

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

200% SSS and 100% MBES coverage was acquired over the navigable area of the search radius. A rectangular object approximately 55 feet in length was found in the surveyed position.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-253/420_1255	6076/153	0.00	0.000	Primary

Hydrographer Recommendations

Remove "PA" from wreck symbol in this position and chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

17ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1)
3fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

Geo object 1: Wreck (WRECKS)

Attributes: CATWRK - 2:dangerous wreck

VALSOU - 5.396 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Delete charted Wreck PA. Chart a dangerous sunken wreck, least depth 17 feet, in position 42°36′52.528″ N, 70°39′15.723″ W.

This feature is AWOIS #11932. After the crash of the Pydro PSS, the original AWOIS database features were lost. All AWOIS features are classified with "DR_Charted."

1.10) Profile/Beam - 228/113 from h11277 / 1014_mb / 2003-253 / 454_1955

Survey Summary

Survey Position: 042° 36′ 41.957″ N, 70° 39′ 23.816″ W

Least Depth: 5.12 m

Timestamp: 2003-253.19:55:48.875 (09/10/2003)

Survey Line: h11277 / 1014_mb / 2003-253 / 454_1955

Profile/Beam: 228/113

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

200% SSS coverage and 100% MBES coverage was acquired over the entire search radius and a rock was found with a least depth as above.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-253/454_1955	228/113	0.00	0.000	Primary
h11277/1014_100/2003-251/114_1529	0003	0.48	029.3	Secondary
h11277/1014_100/2003-251/117_1548	0002	1.05	141.9	Secondary
h11277/1014_100/2003-251/111_1521	0015	3.87	037.0	Secondary
h11277/1014_100/2003-251/113_1517	0002	4.37	043.5	Secondary
h11277/1014_100/2003-251/111_1521	0019	4.41	044.7	Secondary
h11277/1014_200/2003-251/202_1746	0003	4.86	073.0	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

17ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 2 ³4fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 5.121 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Delete charted Rk (Rep Apr 1999). Chart a dangerous rock, least depth 17 feet, in the present survey position in $42^{\circ}36'41.957''$ N, $70^{\circ}39'23.816''$ W.

This feature is AWOIS item #11929. After the crash of the Pydro PSS, the original AWOIS database features were lost. All AWOIS features are classified with "DR_Charted."

1.11) Profile/Beam - 90/226 from h11277 / 1014_mb / 2003-254 / 271_1735

Survey Summary

Survey Position: 042° 36′ 01.863″ N, 70° 40′ 03.339″ W

Least Depth: 5.29 m

Timestamp: 2003-254.17:35:25.169 (09/11/2003)

Survey Line: h11277 / 1014_mb / 2003-254 / 271_1735

Profile/Beam: 90/226

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

100% MBES and 100% SSS was acquired over the area. The depths on Mayflower Ledge are adequately charted.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-254/271_1735	90/226	0.00	0.000	Primary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

17ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 2 ³4fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 5.295 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Chart a rock with least depth 17 feet in position 42°36'01.863" N, 70°40'03.339" W.

1.12) Profile/Beam - 736/23 from h11277 / 1014_mb / 2003-254 / 415_1425

Survey Summary

Survey Position: 042° 36′ 49.937″ N, 70° 39′ 19.879″ W

Least Depth: 4.48 m

Timestamp: 2003-254.14:27:46.265 (09/11/2003)

Survey Line: h11277 / 1014_mb / 2003-254 / 415_1425

Profile/Beam: 736/23

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

200% SSS and 100% MBES was acquired over the navigable area of the search radius. No wreck was found within the radius.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-254/415_1425	736/23	0.00	0.000	Primary

Hydrographer Recommendations

Remove Wreck PA in surveyed position and chart as per digital data.

S-57 Data

[None]

Office Notes

Concur with clarification. Delete charted Wreck PA in 042° 36′ 50.322″ N, 70° 39′ 19.294″ W. Chart present survey soundings in common areas.

This feature is AWOIS item #11927. After the crash of the Pydro PSS, the original AWOIS database features were lost. All AWOIS features are classified with "DR_Charted."

1.13) GP No. - 4 from ChartGPs - Digitized

Survey Summary

Survey Position: 042° 36′ 48.331″ N, 70° 39′ 16.141″ W

Least Depth: [None]

Timestamp: 2006-278.10:43:52 (10/05/2006)

GP Dataset: ChartGPs - Digitized

GP No.: 4

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

200% SSS and 100% MBES coverage was acquired over the navigable area of the search radius. There was not enough data acquired to confirm the presence of the pipe.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	4	0.00	0.000	Primary

Hydrographer Recommendations

Recommend no change to this item.

S-57 Data

[None]

Office Notes

Concur. Retain pipe as charted.

This feature is AWOIS item #11933. After the crash of the Pydro PSS, the original AWOIS database features were lost. All AWOIS features are classified with "DR_Charted."

1.14) Profile/Beam - 109/232 from h11277 / 1014_mb / 2003-254 / 500_1654

Survey Summary

Survey Position: 042° 36′ 22.129″ N, 70° 39′ 59.865″ W

Least Depth: 4.05 m

Timestamp: 2003-254.16:54:31.146 (09/11/2003)

Survey Line: h11277 / 1014_mb / 2003-254 / 500_1654

Profile/Beam: 109/232

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

100% MBES and 100% SSS was acquired over the area. The depths on Babson Ledge are adequately charted.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-254/500_1654	109/232	0.00	0.000	Primary
h11277/1014_mb/2003-254/500_1654	113/229	2.51	192.0	Secondary (grouped)

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

13ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 2 ¹/₄fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

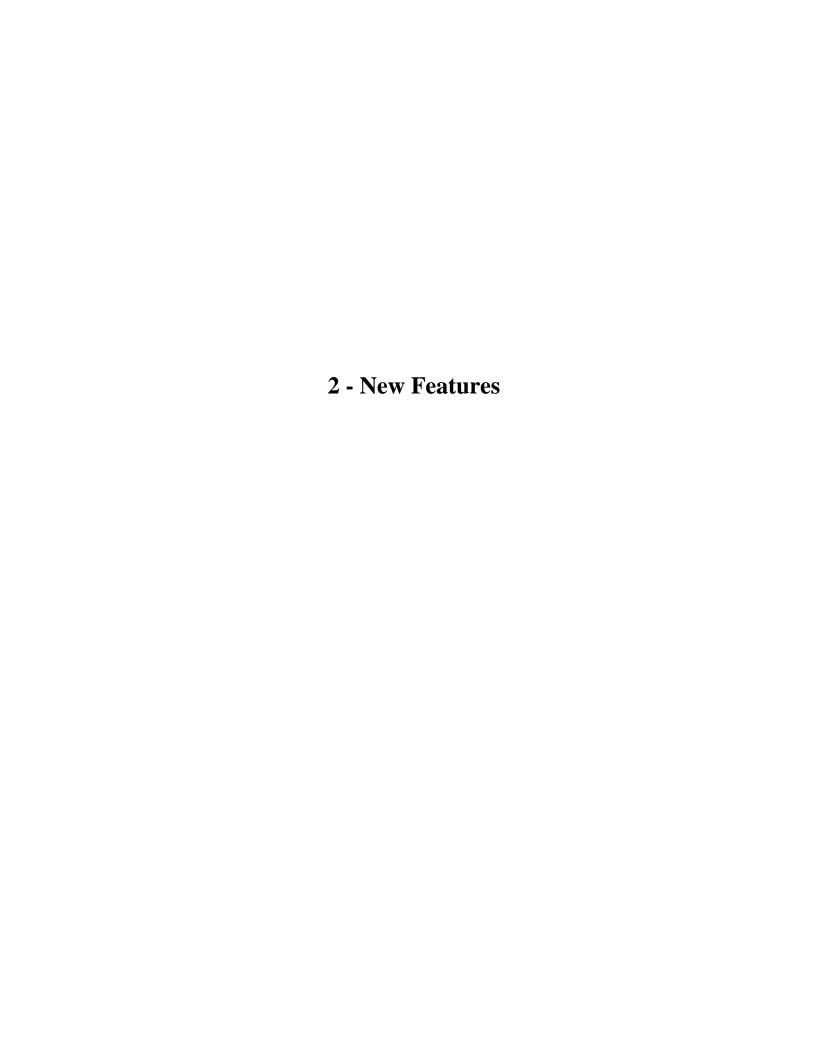
Geo object 1: Underwater rock / awash rock (UWTROC)

Attributes: VALSOU - 4.053 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. The present survey least depth on Babson Ledge is 13 feet at MLLW. Delete charted 12 foot rock. Chart a rock, least depth 13 feet, in position 42°36'22.129" N, 70°39'59.865" W.



2.1) Profile/Beam - 90/27 from h11277 / 1005_mb / 2003-251 / 201_1803

Survey Summary

Survey Position: 042° 35′ 59.888″ N, 70° 40′ 00.090″ W

Least Depth: 4.50 m

Timestamp: 2003-251.18:03:19.474 (09/08/2003)

Survey Line: h11277 / 1005_mb / 2003-251 / 201_1803

Profile/Beam: 90/27

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

An uncharted rock with a least depth of 15 ft, in Latitude 42° 35′ 59.888″ N, Longitude 70° 40′ 00.090″ W, was located during office processing.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-251/201_1803	90/27	0.00	0.000	Primary
h11277/1014_100/2003-251/014_1825	0012	15.40	126.6	Secondary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

15ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 2 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 4.505 m

WATLEV - 3:always under water/submerged

Office Notes

Chart a rock, least depth 15 feet, in position Latitude 42° 35' 59.888" N, Longitude 70° 40' 00.090" W.

2.2) Profile/Beam - 3292/57 from h11277 / 1005_mb / 2003-251 / 206_1937

Survey Summary

Survey Position: 042° 35′ 07.268″ N, 70° 40′ 30.132″ W

Least Depth: 11.73 m

Timestamp: 2003-251.19:42:59.455 (09/08/2003)

Survey Line: h11277 / 1005_mb / 2003-251 / 206_1937

Profile/Beam: 3292/57

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

100% MBES and 100% SSS was acquired over the area and a wreck was found with a least depth as above. Dive operations confirmed the location and depth of the wreck, named the "Lady Lynn." The overall length is 25-ft, width is 10-ft, and height is 4.5-ft. See dive report in Appendix V.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-251/206_1937	3292/57	0.00	0.000	Primary
h11277/1014_100/2003-251/012_1845	0001	2.79	254.1	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

38ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 6 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

Geo object 1: Wreck (WRECKS)

Attributes: CATWRK - 1:non-dangerous wreck

VALSOU - 11.735 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Chart a wreck, least depth 38 feet, in the present survey location in $42^{\circ}35'07.268"$ N, $70^{\circ}40'30.132"$ W.

2.3) Profile/Beam - 3111/9 from h11277 / 1005_mb / 2003-252 / 285_1513

Survey Summary

Survey Position: 042° 35′ 55.080″ N, 70° 40′ 07.667″ W

Least Depth: 5.13 m

Timestamp: 2003-252.15:18:18.562 (09/09/2003)

Survey Line: h11277 / 1005_mb / 2003-252 / 285_1513

Profile/Beam: 3111/9

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

A shoal with a least depth of 17 ft, in Latitude 42° 35′ 55.080″ N, Longitude 70° 40′ 07.767″ W, was located by the office processor.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-252/285_1513	3111/9	0.00	0.000	Primary
h11277/1014_100/2003-251/014_1825	0002	14.78	041.0	Secondary
h11277/1005_mb/2003-251/205_1923	527/21	15.69	289.6	Secondary
h11277/1005_mb/2003-251/205_1923	526/21	15.72	288.7	Secondary
h11277/1005_mb/2003-251/205_1923	528/21	15.72	290.4	Secondary
h11277/1005_mb/2003-251/205_1923	526/20	15.98	288.6	Secondary
h11277/1005_mb/2003-251/205_1923	527/20	15.99	289.5	Secondary
h11277/1005_mb/2003-251/205_1923	528/20	16.02	290.3	Secondary
h11277/1014_100/2003-251/014_1825	0006	33.37	089.9	Secondary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

17ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 2 ³4fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

[None]

Office Notes

Chart present survey soundings in common areas.

2.4) Profile/Beam - 3066/11 from h11277 / 1005_mb / 2003-253 / 367_2103

Survey Summary

Survey Position: 042° 34′ 33.297″ N, 70° 41′ 26.299″ W

Least Depth: 10.84 m

Timestamp: 2003-253.21:08:00.258 (09/10/2003)

Survey Line: h11277 / 1005_mb / 2003-253 / 367_2103

Profile/Beam: 3066/11

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

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

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-253/367_2103	3066/11	0.00	0.000	Primary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

35ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 5 ³4fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 10.843 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Chart a rock, least depth 35 feet, in position 42°34'33.297" N, 70°41'26.299" W.

2.5) Profile/Beam - 519/71 from h11277 / 1005_mb / 2003-253 / 369_1453

Survey Summary

Survey Position: 042° 34′ 34.279″ N, 70° 41′ 54.123″ W

Least Depth: 5.88 m

Timestamp: 2003-253.14:53:56.857 (09/10/2003)

Survey Line: h11277 / 1005_mb / 2003-253 / 369_1453

Profile/Beam: 519/71

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

An uncharted rock with a least depth of 19 ft, in Latitude 42° 34′ 34.279″ N, Longitude 70° 41′ 54.123″ W, was located by the office processor.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-253/369_1453	519/71	0.00	0.000	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

19ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1)
3 ¼fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 5.884 m

WATLEV - 3:always under water/submerged

Office Notes

Chart a rock, least depth 19 feet, in Latitude 42° 34' 34.279" N, Longitude 70° 41' 54.123" W.

2 - New Features

2.6) Profile/Beam - 805/72 from h11277 / 1005_mb / 2003-253 / 369_1453

Survey Summary

Survey Position: 042° 34′ 35.632″ N, 70° 41′ 51.772″ W

Least Depth: 5.02 m

Timestamp: 2003-253.14:54:22.991 (09/10/2003)

Survey Line: h11277 / 1005_mb / 2003-253 / 369_1453

Profile/Beam: 805/72

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

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

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-253/369_1453	805/72	0.00	0.000	Primary
h11277/1014_100/2003-251/101_1234	0005	3.45	252.2	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

16ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 2 ³4fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 5.022 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Chart a rock, least depth 16 feet, in position 42°34'35.632" N, 70°41'51.772" W.

2.7) Profile/Beam - 6818/14 from h11277 / 1005_mb / 2003-253 / 369_1453

Survey Summary

Survey Position: 042° 34' 41.882" N, 70° 41' 31.402" W

Least Depth: 4.04 m

Timestamp: 2003-253.15:03:32.086 (09/10/2003)

Survey Line: h11277 / 1005_mb / 2003-253 / 369_1453

Profile/Beam: 6818/14

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

An uncharted rock with a least depth of 13 ft, in Latitude 42° 34′ 41.882″ N, Longitude 70° 41′ 31.402″ W, was located by the office processor.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-253/369_1453	6818/14	0.00	0.000	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

13ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 2 ¹/₄fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 4.043 m

WATLEV - 3:always under water/submerged

Office Notes

Chart a rock, least depth 13 feet, in Latitude 42° 34' 41.882" N, Longitude 70° 41' 31.402" W.

2.8) Profile/Beam - 1557/30 from h11277 / 1005_mb / 2003-253 / 370_1514

Survey Summary

Survey Position: 042° 35′ 16.178″ N, 70° 41′ 02.859″ W

Least Depth: 3.35 m

Timestamp: 2003-253.15:16:21.653 (09/10/2003)

Survey Line: h11277 / 1005_mb / 2003-253 / 370_1514

Profile/Beam: 1557/30

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

An uncharted rock with a least depth of 11 ft, in Latitude 42° 35′ 16.178″ N, Longitude 70° 41′ 02.859″ W, was located by the office processor.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-253/370_1514	1557/30	0.00	0.000	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

11ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 1 ³4fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 3.348 m

WATLEV - 3:always under water/submerged

Office Notes

Chart a dangerous rock, least depth 11 feet, in Latitude 42° 35' 16.178" N, Longitude 70° 41' 02.859" W.

2.9) Profile/Beam - 3273/86 from h11277 / 1005_mb / 2003-253 / 370_1514

Survey Summary

Survey Position: 042° 35′ 24.675″ N, 70° 40′ 59.749″ W

Least Depth: 4.10 m

Timestamp: 2003-253.15:18:58.356 (09/10/2003)

Survey Line: h11277 / 1005_mb / 2003-253 / 370_1514

Profile/Beam: 3273/86

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

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

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-253/370_1514	3273/86	0.00	0.000	Primary
h11277/1014_100/2003-251/101_0260	0017	18.84	121.8	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

13ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 2 ¹/₄fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 4.103 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Chart a rock with least depth 13 feet in position 42°35'24.675" N, 70°40'59.749" W.

2.10) Profile/Beam - 6152/95 from h11277 / 1005_mb / 2003-253 / 372_1545

Survey Summary

Survey Position: 042° 36′ 03.177″ N, 70° 39′ 58.881″ W

Least Depth: -0.72 m

Timestamp: 2003-253.15:54:46.253 (09/10/2003)

Survey Line: h11277 / 1005_mb / 2003-253 / 372_1545

Profile/Beam: 6152/95

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

A rock that covers and uncovers was identified during office processing.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-253/372_1545	6152/95	0.00	0.000	Primary
h11277/1014_100/2003-251/101_1307	0006	39.08	054.0	Secondary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

-3ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 0 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: TECSOU - 3: found by multi-beam

VALSOU - -0.717 m

WATLEV - 4:covers and uncovers

Office Notes

Chart a dangerous rock awash, height -3 ft exposed at MLLW, in position 42°36'03.177" N, 70°39'58.881" W.

2.11) Profile/Beam - 1609/83 from h11277 / 1005_mb / 2003-253 / 374_1630

Survey Summary

Survey Position: 042° 35′ 08.910″ N, 70° 39′ 57.878″ W

Least Depth: 3.85 m

Timestamp: 2003-253.16:32:29.430 (09/10/2003)

Survey Line: h11277 / 1005_mb / 2003-253 / 374_1630

Profile/Beam: 1609/83

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

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

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-253/374_1630	1609/83	0.00	0.000	Primary
h11277/1014_100/2003-251/101_1309	0002	7.35	053.6	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

12ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 2fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 3.848 m

Office Notes

Concur with clarification. Chart a dangerous rock, least depth 12 feet, in position 42°35'08.910" N, 70°39'57.878" W.

2.12) Profile/Beam - 378/86 from h11277 / 1005_mb / 2003-253 / 401_1932

Survey Summary

Survey Position: 042° 34′ 35.713″ N, 70° 41′ 42.268″ W

Least Depth: 8.34 m

Timestamp: 2003-253.19:33:23.967 (09/10/2003)

Survey Line: h11277 / 1005_mb / 2003-253 / 401_1932

Profile/Beam: 378/86

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

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

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-253/401_1932	378/86	0.00	0.000	Primary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

```
27ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1)
4 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)
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S-57 Data

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

Attributes: VALSOU - 8.337 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Chart a rock with least depth 27 feet in position 42°34'35.713" N, 70°41'42.268" W.

2.13) Profile/Beam - 301/24 from h11277 / 1005_mb / 2003-253 / 405_1920

Survey Summary

Survey Position: 042° 34′ 38.417″ N, 70° 41′ 44.952″ W

Least Depth: 2.94 m

Timestamp: 2003-253.19:21:25.950 (09/10/2003)

Survey Line: h11277 / 1005_mb / 2003-253 / 405_1920

Profile/Beam: 301/24

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

An uncharted rock with a least depth of 9 ft, in Latitude 42°34'38.417" N, Longitude 70°41'44.952" W, was located by the office processor.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-253/405_1920	301/24	0.00	0.000	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

9ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 1 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 2.937 m

WATLEV - 3:always under water/submerged

Office Notes

Chart dangerous rock, least depth 9 feet, in position Latitude 42°34'38.417" N, Longitude 70°41'44.952" W.

2.14) Profile/Beam - 255/49 from h11277 / 1005_mb / 2003-253 / 406_1919

Survey Summary

Survey Position: 042° 34′ 34.852″ N, 70° 41′ 48.193″ W

Least Depth: 5.33 m

Timestamp: 2003-253.19:19:29.715 (09/10/2003)

Survey Line: h11277 / 1005_mb / 2003-253 / 406_1919

Profile/Beam: 255/49

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

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

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-253/406_1919	255/49	0.00	000.0	Primary
h11277/1014_100/2003-251/101_1563	0002	2.97	081.4	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

17ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 2 ³4fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 5.329 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Chart a dangerous rock, least depth 17 feet, in position 42°34'34.852" N, 70°41'48.193" W.

2.15) Profile/Beam - 606/88 from h11277 / 1005_mb / 2003-253 / 658_1604

Survey Summary

Survey Position: 042° 36′ 09.340″ N, 70° 39′ 44.255″ W

Least Depth: 0.67 m

Timestamp: 2003-253.16:04:55.828 (09/10/2003)

Survey Line: h11277 / 1005_mb / 2003-253 / 658_1604

Profile/Beam: 606/88

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

A rock was identified during office processing.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-253/658_1604	606/88	0.00	0.000	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

2ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 0 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 0.666 m

WATLEV - 3:always under water/submerged

Office Notes

Chart a dangerous rock, least depth 2 feet, in position 42°36'09.340" N, 70°39'44.255" W.

2.16) Profile/Beam - 276/14 from h11277 / 1005_mb / 2003-254 / 226_1714

Survey Summary

Survey Position: 042° 35′ 57.861″ N, 70° 40′ 41.661″ W

Least Depth: 5.08 m

Timestamp: 2003-254.17:14:26.455 (09/11/2003)

Survey Line: h11277 / 1005_mb / 2003-254 / 226_1714

Profile/Beam: 276/14

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

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

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-254/226_1714	276/14	0.00	0.000	Primary
h11277/1014_100/2003-251/101_1250	0014	3.05	227.8	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

16ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 2 ³4fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 5.075 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Chart a rock with least depth 16 feet in position 42°35'57.861" N, 70°40'41.661" W.

2.17) Profile/Beam - 395/9 from h11277 / 1005_mb / 2003-254 / 226_1714

Survey Summary

Survey Position: 042° 35′ 59.045″ N, 70° 40′ 41.323″ W

Least Depth: 5.37 m

Timestamp: 2003-254.17:14:37.308 (09/11/2003)

Survey Line: h11277 / 1005_mb / 2003-254 / 226_1714

Profile/Beam: 395/9

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

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

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-254/226_1714	395/9	0.00	0.000	Primary
h11277/1014_100/2003-251/101_1250	0013	2.28	232.8	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

17ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 2 ³4fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 5.370 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Chart a dangerous rock with least depth 17 feet in position $42^{\circ}35'59.045"$ N, $70^{\circ}40'41.323"$ W.

2.18) Profile/Beam - 1450/37 from h11277 / 1005_mb / 2003-260 / 842_1408

Survey Summary

Survey Position: 042° 34′ 39.588″ N, 70° 39′ 38.177″ W

Least Depth: 8.14 m

Timestamp: 2003-260.14:10:14.808 (09/17/2003)

Survey Line: h11277 / 1005_mb / 2003-260 / 842_1408

Profile/Beam: 1450/37

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

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

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-260/842_1408	1450/37	0.00	0.000	Primary
h11277/1014_100/2003-251/101_1310	0035	4.08	046.1	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

26ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 4 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 8.144 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Chart a dangerous rock with least depth 26 feet in position 42°34'39.588" N, 70°39'38.177" W.

2.19) Profile/Beam - 3212/86 from h11277 / 1005_mb / 2003-260 / 845a1456

Survey Summary

Survey Position: 042° 34′ 38.591″ N, 70° 39′ 32.856″ W

Least Depth: 10.21 m

Timestamp: 2003-260.15:02:52.590 (09/17/2003)

Survey Line: h11277 / 1005_mb / 2003-260 / 845a1456

Profile/Beam: 3212/86

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

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

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-260/845a1456	3212/86	0.00	0.000	Primary
h11277/1014_100/2003-251/101_1310	0034	1.00	159.8	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

33ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 5 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 10.207 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Chart a rock with least depth 33 feet in position 42°34'38.591" N, 70°39'32.856" W.

2.20) Profile/Beam - 3807/76 from h11277 / 1005_mb / 2003-260 / 845a1456

Survey Summary

Survey Position: 042° 34′ 35.055″ N, 70° 39′ 40.163″ W

Least Depth: 11.15 m

Timestamp: 2003-260.15:03:48.243 (09/17/2003)

Survey Line: h11277 / 1005_mb / 2003-260 / 845a1456

Profile/Beam: 3807/76

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

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

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-260/845a1456	3807/76	0.00	000.0	Primary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

36ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 6fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 11.150 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Chart a rock with least depth 36 feet in position 42°34'35.055" N, 70°39'40.163" W.

2.21) Profile/Beam - 660/46 from h11277 / 1005_mb / 2003-260 / 905_1239

Survey Summary

Survey Position: 042° 34′ 45.358″ N, 70° 39′ 55.946″ W

Least Depth: 2.87 m

Timestamp: 2003-260.12:40:40.717 (09/17/2003)

Survey Line: h11277 / 1005_mb / 2003-260 / 905_1239

Profile/Beam: 660/46

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

An uncharted rock with a least depth of 9 ft, in Latitude 42°34'45.358" N, Longitude 70°39'55.946" W, was located by the office processor.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-260/905_1239	660/46	0.00	0.000	Primary
h11277/1014_100/2003-251/101_1310	0007	4.47	295.8	Secondary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

9ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 1 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 2.866 m

WATLEV - 3:always under water/submerged

Office Notes

Chart a dangerous rock, least depth 9 feet, in Latitude 42°34'45.358" N, Longitude 70°39'55.946" W.

2.22) Profile/Beam - 1246/22 from h11277 / 1005_mb / 2003-260 / 913_1814

Survey Summary

Survey Position: 042° 34′ 53.403″ N, 70° 40′ 12.038″ W

Least Depth: 2.74 m

Timestamp: 2003-260.18:16:16.252 (09/17/2003)

Survey Line: h11277 / 1005_mb / 2003-260 / 913_1814

Profile/Beam: 1246/22

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

An uncharted rock with a least depth of 9 ft, in Latitude 42°34'53.403" N, Longitude 70°40'12.038" W, was located by the office processor.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-260/913_1814	1246/22	0.00	0.000	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

9ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 1 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 2.737 m

WATLEV - 3:always under water/submerged

Office Notes

Delete charted 14 foot sounding. Chart a dangerous rock, least depth 9 feet, in Latitude 42°34'53.403" N, Longitude 70°40'12.038" W.

2.23) Profile/Beam - 336/42 from h11277 / 1005_mb / 2003-260 / 917_1919

Survey Summary

Survey Position: 042° 34′ 43.226″ N, 70° 41′ 37.676″ W

Least Depth: 2.79 m

Timestamp: 2003-260.19:19:44.121 (09/17/2003)

Survey Line: h11277 / 1005_mb / 2003-260 / 917_1919

Profile/Beam: 336/42

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

An uncharted rock with a least depth of 9 ft, in Latitude 42°34'43.226" N, Longitude 70°41'37.676" W, was located by the office processor.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-260/917_1919	336/42	0.00	0.000	Primary
h11277/1014_100/2003-251/101_1234	0002	3.88	289.2	Secondary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

9ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 1 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 2.793 m

WATLEV - 3:always under water/submerged

Office Notes

Delete charted 10 foot sounding. Chart a dangerous rock, least depth 9 feet, in Latitude $42^{\circ}34'43.226''$ N, Longitude $70^{\circ}41'37.676''$ W.

2.24) Profile/Beam - 1244/50 from h11277 / 1005_mb / 2003-260 / 938_1957

Survey Summary

Survey Position: 042° 35′ 02.384″ N, 70° 41′ 24.534″ W

Least Depth: 3.03 m

Timestamp: 2003-260.19:59:44.764 (09/17/2003)

Survey Line: h11277 / 1005_mb / 2003-260 / 938_1957

Profile/Beam: 1244/50

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

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

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-260/938_1957	1244/50	0.00	0.000	Primary
h11277/1014_100/2003-251/101_0260	0003	2.33	273.4	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

10ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 1 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 3.026 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Chart a dangerous 10 foot rock in position 42°35'02.384" N, 70°41'24.534" W.

2.25) Profile/Beam - 1420/78 from h11277 / 1005_mb / 2003-260 / 941_1950

Survey Summary

Survey Position: 042° 35′ 00.052″ N, 70° 41′ 28.894″ W

Least Depth: 2.58 m

Timestamp: 2003-260.19:52:22.043 (09/17/2003)

Survey Line: h11277 / 1005_mb / 2003-260 / 941_1950

Profile/Beam: 1420/78

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

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

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-260/941_1950	1420/78	0.00	0.000	Primary
h11277/1014_100/2003-251/101_0260	0001	1.24	256.6	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

8ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 1 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 2.577 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Chart a rock, least depth 8 feet, in position 42°35'00.052" N, 70°41'28.894" W.

2.26) Profile/Beam - 464/71 from h11277 / 1005_mb / 2003-261 / 705_1311

Survey Summary

Survey Position: 042° 34′ 44.936″ N, 70° 39′ 49.932″ W

Least Depth: 2.62 m

Timestamp: 2003-261.13:11:54.892 (09/18/2003)

Survey Line: h11277 / 1005_mb / 2003-261 / 705_1311

Profile/Beam: 464/71

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

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

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-261/705_1311	464/71	0.00	0.000	Primary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

8ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 1 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 2.618 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Chart a rock with least depth 8 feet in position 42°34'44.936" N, 70°39'49.932" W.

2.27) Profile/Beam - 21/230 from h11277 / 1014_mb / 2003-250 / 305_1846

Survey Summary

Survey Position: 042° 35′ 58.912″ N, 70° 39′ 54.249″ W

Least Depth: 8.44 m

Timestamp: 2003-250.18:47:06.498 (09/07/2003)

Survey Line: h11277 / 1014_mb / 2003-250 / 305_1846

Profile/Beam: 21/230

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

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

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-250/305_1846	21/230	0.00	0.000	Primary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

```
27ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1)
4 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)
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S-57 Data

[None]

Office Notes

Concur with clarification. Chart present survey soundings in common areas.

2.28) Profile/Beam - 1020/131 from h11277 / 1014_mb / 2003-252 / 284_1341

Survey Summary

Survey Position: 042° 35′ 51.721″ N, 70° 39′ 31.601″ W

Least Depth: 2.93 m

Timestamp: 2003-252.13:45:14.005 (09/09/2003)

Survey Line: h11277 / 1014_mb / 2003-252 / 284_1341

Profile/Beam: 1020/131

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

An uncharted rock with a least depth of 9 ft, in , was located by the office processor.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-252/284_1341	1020/131	0.00	0.000	Primary
h11277/1014_100/2003-251/101_1310	0043	4.03	072.9	Secondary
h11277/1014_100/2003-251/101_1305	0031	7.93	353.3	Secondary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

9ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 1 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 2.932 m

WATLEV - 3:always under water/submerged

Office Notes

Delete charted 11 foot sounding. Chart a rock with least depth 9 feet in Latitude 42°35'51.721" N, Longitude 70°39'31.601" W.

2.29) Profile/Beam - 3832/226 from h11277 / 1014_mb / 2003-252 / 304_2040

Survey Summary

Survey Position: 042° 34′ 53.765″ N, 70° 41′ 04.009″ W

Least Depth: 10.73 m

Timestamp: 2003-252.20:53:23.507 (09/09/2003)

Survey Line: h11277 / 1014_mb / 2003-252 / 304_2040

Profile/Beam: 3832/226

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

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

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-252/304_2040	3832/226	0.00	0.000	Primary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

35ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 5 ³4fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 10.730 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Chart a dangerous rock with least depth 35 feet in position $42^{\circ}34'53.765"$ N, $70^{\circ}41'04.009"$ W.

2.30) Profile/Beam - 216/12 from h11277 / 1014_mb / 2003-252 / 316_1455

Survey Summary

Survey Position: 042° 35′ 29.766″ N, 70° 40′ 53.301″ W

Least Depth: 3.53 m

Timestamp: 2003-252.14:56:11.352 (09/09/2003)

Survey Line: h11277 / 1014_mb / 2003-252 / 316_1455

Profile/Beam: 216/12

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

An uncharted rock with a least depth of 11 ft in Latitude 42°35'29.766" N, Longitude 70°40'53.301" W, was located by the office processor.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-252/316_1455	216/12	0.00	0.000	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

11ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 1 ³4fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 3.532 m

WATLEV - 3:always under water/submerged

Office Notes

Chart a rock with least depth 11 feet in Latitude 42°35'29.766" N, Longitude 70°40'53.301" W.

2.31) Profile/Beam - 266/240 from h11277 / 1014_mb / 2003-252 / 316_1455

Survey Summary

Survey Position: 042° 35′ 28.733″ N, 70° 40′ 54.849″ W

Least Depth: 3.63 m

Timestamp: 2003-252.14:56:21.309 (09/09/2003)

Survey Line: h11277 / 1014_mb / 2003-252 / 316_1455

Profile/Beam: 266/240

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

100% MBES and 100% SSS coverage was acquired over the area and a rock field was found with a least depth as above.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-252/316_1455	266/240	0.00	000.0	Primary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

12ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 2fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 3.626 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Chart a dangerous rock with least depth 12 feet in position 42°35'28.733" N, 70°40'54.849" W.

2.32) Profile/Beam - 63/177 from h11277 / 1014_mb / 2003-252 / 321_1532

Survey Summary

Survey Position: 042° 36′ 29.831″ N, 70° 40′ 19.388″ W

Least Depth: 3.03 m

Timestamp: 2003-252.15:32:28.838 (09/09/2003)

Survey Line: h11277 / 1014_mb / 2003-252 / 321_1532

Profile/Beam: 63/177

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

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

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-252/321_1532	63/177	0.00	0.000	Primary
h11277/1014_100/2003-251/101_1305	0040	1.50	346.7	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

10ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 1 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 3.033 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Office processing found a rock with a least depth 10 feet that was slightly offset from the field position. Chart a dangerous rock, least depth 10 feet, in position 42°36′29.831" N, 70°40′19.388" W.

2.33) Profile/Beam - 726/8 from h11277 / 1014_mb / 2003-252 / 328_1548

Survey Summary

Survey Position: 042° 36′ 12.931″ N, 70° 40′ 31.266″ W

Least Depth: 4.16 m

Timestamp: 2003-252.15:50:40.271 (09/09/2003)

Survey Line: h11277 / 1014_mb / 2003-252 / 328_1548

Profile/Beam: 726/8

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

An uncharted rock with a least depth of 13 ft in 42°36'12.931" N, 70°40'31.266" W, was located by the office processor.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-252/328_1548	726/8	0.00	0.000	Primary
h11277/1014_100/2003-251/101_1304	0001	4.52	222.5	Secondary (grouped)
h11277/1014_mb/2003-254/101_1548	791/134	18.38	218.4	Secondary (grouped)
h11277/1014_mb/2003-254/101_1548	789/23	23.20	237.4	Secondary (grouped)

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

13ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 2 ¼fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 4.159 m

WATLEV - 3:always under water/submerged

Office Notes

Chart a dangerous rock with least depth 13 feet in position 42°36'12.931" N, 70°40'31.266" W.

2.34) Profile/Beam - 329/81 from h11277 / 1014_mb / 2003-252 / 332_1559

Survey Summary

Survey Position: 042° 36′ 04.743″ N, 70° 40′ 37.274″ W

Least Depth: 5.93 m

Timestamp: 2003-252.16:00:24.019 (09/09/2003)

Survey Line: h11277 / 1014_mb / 2003-252 / 332_1559

Profile/Beam: 329/81

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

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

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-252/332_1559	329/81	0.00	0.000	Primary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

19ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1)
3 ¼fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 5.935 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Chart a rock, least depth 19 feet, in position 42°36'04.743" N, -070°40'37.274" W.

2.35) Profile/Beam - 8088/155 from h11277 / 1014_mb / 2003-253 / 419_1332

Survey Summary

Survey Position: 042° 36′ 55.699″ N, 70° 39′ 06.479″ W

Least Depth: 4.71 m

Timestamp: 2003-253.13:59:29.222 (09/10/2003)

Survey Line: h11277 / 1014_mb / 2003-253 / 419_1332

Profile/Beam: 8088/155

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

An uncharted rock with a least depth of 15 ft, in Latitude 42° 36'55.699" N, Longitude 70° 39' 06.479" W, was located during office processing.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-253/419_1332	8088/155	0.00	0.000	Primary
h11277/1014_100/2003-251/111_1521	0008	4.54	259.4	Secondary
h11277/1014_200/2003-251/207_1717	0004	4.91	264.0	Secondary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

15ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 2 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 4.714 m

WATLEV - 3:always under water/submerged

Office Notes

Chart a rock with least depth 15 feet in position Latitude 42° 36'55.699" N, Longitude 70° 39' 06.479" W.

2.36) Profile/Beam - 725/230 from h11277 / 1014_mb / 2003-253 / 420_1237

Survey Summary

Survey Position: 042° 36′ 25.540″ N, 70° 39′ 34.199″ W

Least Depth: 1.87 m

Timestamp: 2003-253.12:39:52.146 (09/10/2003)

Survey Line: h11277 / 1014_mb / 2003-253 / 420_1237

Profile/Beam: 725/230

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

An uncharted rock with least depth of 6 ft in Latitude 42°36′25.540″ N, Longitude 70°39′34.199″ W, was located by the office processor.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-253/420_1237	725/230	0.00	000.0	Primary
h11277/1014_mb/2003-253/420_1237	699/239	10.38	045.3	Secondary (grouped)
h11277/1014_mb/2003-253/420_1237	699/240	10.39	045.1	Secondary (grouped)

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

6ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 1fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 1.873 m

WATLEV - 3:always under water/submerged

Office Notes

Chart a dangerous rock, least depth 6 feet, in Latitude 42°36'25.540" N, Longitude 70°39'34.199" W.

2.37) Profile/Beam - 8461/204 from h11277 / 1014_mb / 2003-253 / 420_1255

Survey Summary

Survey Position: 042° 36′ 38.611″ N, 70° 39′ 42.938″ W

Least Depth: 2.52 m

Timestamp: 2003-253.13:23:22.702 (09/10/2003)

Survey Line: h11277 / 1014_mb / 2003-253 / 420_1255

Profile/Beam: 8461/204

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

Evidence of shoaling with a least depth of 8 ft in Latitude 42°36'38.611" N, Longitude 70°39'42.938" W, was located by the office processor.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-253/420_1255	8461/204	0.00	0.000	Primary

Hydrographer Recommendations

[None]

S-57 Data

[None]

Office Notes

Chart present survey soundings in common areas.

2.38) Profile/Beam - 131/26 from h11277 / 1014_mb / 2003-253 / 464_2025

Survey Summary

Survey Position: 042° 36′ 56.574″ N, 70° 39′ 08.786″ W

Least Depth: 4.19 m

Timestamp: 2003-253.20:25:52.479 (09/10/2003)

Survey Line: h11277 / 1014_mb / 2003-253 / 464_2025

Profile/Beam: 131/26

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

An uncharted rock with a least depth of 13 ft, in Latitude 42° 36′ 56.574″ N, 70° 39′ 08.786″ W, was located during office processing.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-253/464_2025	131/26	0.00	0.000	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

13ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 2 ¹/₄fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 4.190 m

WATLEV - 3:always under water/submerged

Office Notes

Chart a dangerous rock with least depth 13 feet in Latitude 42° 36' 56.574" N, 70° 39' 08.786" W.

$2.39)\ Profile/Beam\ -\ 117/76\ from\ h11277\ /\ 1014_mb\ /\ 2003-253\ /\ 466_2022$

Survey Summary

Survey Position: 042° 36′ 57.626″ N, 70° 39′ 05.431″ W

Least Depth: 4.07 m

Timestamp: 2003-253.20:22:40.814 (09/10/2003)

Survey Line: h11277 / 1014_mb / 2003-253 / 466_2022

Profile/Beam: 117/76

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

An uncharted rock with a least depth of 13 ft, in , was located during office processing.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-253/466_2022	117/76	0.00	0.000	Primary
h11277/1014_mb/2003-253/466_2022	117/77	0.03	0.000	Secondary (grouped)
h11277/1014_mb/2003-253/467_2014	53/71	3.23	223.9	Secondary
h11277/1014_100/2003-251/111_1521	0010	30.77	282.5	Secondary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

13ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 2 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 4.072 m

WATLEV - 3:always under water/submerged

Office Notes

Chart a rock, least depth 13 feet, in position Latitude 42° 36' 57.626" N, Longitude 70° 39' 05.431" W. Delete charted "Blds rep." Chart "Blds."

2.40) Profile/Beam - 178/12 from h11277 / 1014_mb / 2003-253 / 466_2022

Survey Summary

Survey Position: 042° 36′ 57.021″ N, 70° 39′ 06.490″ W

Least Depth: 3.65 m

Timestamp: 2003-253.20:22:53.026 (09/10/2003)

Survey Line: h11277 / 1014_mb / 2003-253 / 466_2022

Profile/Beam: 178/12

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

An uncharted rock with a least depth of 12 ft, in Latitude 42° 36′ 57.021″ N, Longitude 70° 39′ 06.490″ W, was located during office processing.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-253/466_2022	178/12	0.00	0.000	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

12ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 2fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 3.654 m

WATLEV - 3:always under water/submerged

Office Notes

Chart a rock with least depth 12 feet in Latitude 42° 36′ 57.021" N, Longitude 70° 39′ 06.490" W.

2.41) Profile/Beam - 517/239 from h11277 / 1014_mb / 2003-254 / 104_1704

Survey Summary

Survey Position: 042° 36′ 17.163″ N, 70° 40′ 13.928″ W

Least Depth: 7.97 m

Timestamp: 2003-254.17:06:26.219 (09/11/2003)

Survey Line: h11277 / 1014_mb / 2003-254 / 104_1704

Profile/Beam: 517/239

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

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

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-254/104_1704	517/239	0.00	0.000	Primary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

```
26ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1)
4 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)
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S-57 Data

[None]

Office Notes

Concur with clarification. Chart present survey soundings in common areas.

2.42) Profile/Beam - 394/106 from h11277 / 1014_mb / 2003-254 / 231_1542

Survey Summary

Survey Position: 042° 36′ 27.735″ N, 70° 40′ 25.083″ W

Least Depth: 4.49 m

Timestamp: 2003-254.15:43:43.015 (09/11/2003)

Survey Line: h11277 / 1014_mb / 2003-254 / 231_1542

Profile/Beam: 394/106

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

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

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-254/231_1542	394/106	0.00	0.000	Primary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

14ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 2 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 4.493 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Chart a dangerous rock with least depth 14 feet in position $42^{\circ}36'27.734''$ N, $70^{\circ}40'25.083''$ W.

2.43) Profile/Beam - 486/38 from h11277 / 1014_mb / 2003-254 / 232_1529

Survey Summary

Survey Position: 042° 36′ 21.782″ N, 70° 40′ 29.310″ W

Least Depth: 3.65 m

Timestamp: 2003-254.15:31:04.341 (09/11/2003)

Survey Line: h11277 / 1014_mb / 2003-254 / 232_1529

Profile/Beam: 486/38

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

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

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-254/232_1529	486/38	0.00	0.000	Primary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

12ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 2fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 3.652 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Chart a dangerous rock with least depth 12 feet in position $42^{\circ}36'21.782''$ N, $70^{\circ}40'29.310''$ W.

2.44) Profile/Beam - 126/227 from h11277 / 1014_mb / 2003-254 / 239_1604

Survey Summary

Survey Position: 042° 36′ 29.658″ N, 70° 40′ 16.054″ W

Least Depth: 3.19 m

Timestamp: 2003-254.16:04:51.422 (09/11/2003)

Survey Line: h11277 / 1014_mb / 2003-254 / 239_1604

Profile/Beam: 126/227

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

100% MBES and 100% SSS was acquired over the area and a rock field ws found with a least depth as above.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-254/239_1604	126/227	0.00	0.000	Primary
h11277/1014_mb/2003-252/315_1501	3682/165	14.90	038.7	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

10ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 1 ³4fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 3.192 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Chart a rock with least depth 10 feet in position 42°36'29.658" N, 70°40'16.054" W.

2.45) Profile/Beam - 92/8 from h11277 / 1014_mb / 2003-254 / 266_1715

Survey Summary

Survey Position: 042° 35′ 58.577″ N, 70° 40′ 05.382″ W

Least Depth: 7.30 m

Timestamp: 2003-254.17:15:24.650 (09/11/2003)

Survey Line: h11277 / 1014_mb / 2003-254 / 266_1715

Profile/Beam: 92/8

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

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

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-254/266_1715	92/8	0.00	0.000	Primary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

24ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 4fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 7.300 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Chart a rock, least depth 24 feet, in position 42°35'58.577" N, 70°40'05.382" W.

2.46) Profile/Beam - 623/1 from h11277 / 1014_mb / 2003-254 / 268_1721

Survey Summary

Survey Position: 042° 36′ 00.455″ N, 70° 39′ 48.238″ W

Least Depth: 6.56 m

Timestamp: 2003-254.17:23:32.999 (09/11/2003)

Survey Line: h11277 / 1014_mb / 2003-254 / 268_1721

Profile/Beam: 623/1

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

An uncharted rock with a least depth of 21 feet was found during office processing.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-254/268_1721	623/1	0.00	0.000	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

21ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1)
3 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 6.559 m

WATLEV - 3:always under water/submerged

Office Notes

Chart a dangerous rock with least depth 21 feet in position 42°36'00.455" N, -070°39'48.238" W.

2.47) Profile/Beam - 714/110 from h11277 / 1014_mb / 2003-254 / 269_1724

Survey Summary

Survey Position: 042° 36′ 00.799″ N, 70° 40′ 01.302″ W

Least Depth: 5.10 m

Timestamp: 2003-254.17:26:59.999 (09/11/2003)

Survey Line: h11277 / 1014_mb / 2003-254 / 269_1724

Profile/Beam: 714/110

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

An uncharted rock with a least depth of 16 ft in Latitude 42°36'00.799" N, Longitude 70°40'01.302" W, was located by the office processor.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-254/269_1724	714/110	0.00	0.000	Primary
h11277/1014_mb/2003-254/269_1724	716/117	1.08	108.9	Secondary (grouped)

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

16ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 2 ³4fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 5.098 m

WATLEV - 3:always under water/submerged

Office Notes

Chart a dangerous rock, least depth 16 feet, in Latitude 42°36'00.799" N, Longitude 70°40'01.302" W.

2.48) Profile/Beam - 837/176 from h11277 / 1014_mb / 2003-254 / 269_1724

Survey Summary

Survey Position: 042° 36′ 00.652″ N, 70° 40′ 04.905″ W

Least Depth: 6.37 m

Timestamp: 2003-254.17:27:24.507 (09/11/2003)

Survey Line: h11277 / 1014_mb / 2003-254 / 269_1724

Profile/Beam: 837/176

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

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

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-254/269_1724	837/176	0.00	0.000	Primary
h11277/1014_mb/2003-254/269_1724	837/177	0.09	0.000	Secondary (grouped)

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

21ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1)
3 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 6.367 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Chart a dangerous rock, least depth 21 feet, in position 42°36'00.652" N, 70°40'04.905" W.

2.49) Profile/Beam - 328/35 from h11277 / 1014_mb / 2003-254 / 270_1728

Survey Summary

Survey Position: 042° 36′ 01.019" N, 70° 39′ 56.004" W

Least Depth: 5.57 m

Timestamp: 2003-254.17:29:22.681 (09/11/2003)

Survey Line: h11277 / 1014_mb / 2003-254 / 270_1728

Profile/Beam: 328/35

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

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

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-254/270_1728	328/35	0.00	0.000	Primary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

18ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 3fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 5.568 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Chart a dangerous rock with least depth 18 feet in position $42^{\circ}36'01.019"$ N, $70^{\circ}39'56.004"$ W.

2.50) Profile/Beam - 422/71 from h11277 / 1014_mb / 2003-254 / 271_1735

Survey Summary

Survey Position: 042° 36′ 02.034" N, 70° 39′ 53.961" W

Least Depth: 5.13 m

Timestamp: 2003-254.17:36:31.416 (09/11/2003)

Survey Line: h11277 / 1014_mb / 2003-254 / 271_1735

Profile/Beam: 422/71

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

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

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-254/271_1735	422/71	0.00	0.000	Primary
h11277/1014_100/2003-251/101_1305	0009	2.50	353.4	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

17ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 2 ³4fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 5.126 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Chart a dangerous rock, least depth 17 feet, in position 42°36'02.034" N, 70°39'53.961" W.

2.51) Profile/Beam - 460/95 from h11277 / 1014_mb / 2003-254 / 352_1755

Survey Summary

Survey Position: 042° 36′ 07.834" N, 70° 39′ 36.477" W

Least Depth: 2.94 m

Timestamp: 2003-254.17:56:48.208 (09/11/2003)

Survey Line: h11277 / 1014_mb / 2003-254 / 352_1755

Profile/Beam: 460/95

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

An uncharted rock with a least depth of 9 ft, in Latitude 42°36'07.834" N, Longitude 70°39'36.477" W, was located by the office processor.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-254/352_1755	460/95	0.00	0.000	Primary
h11277/1014_100/2003-251/101_1305	0024	2.05	093.5	Secondary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

9ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 1 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 2.937 m

WATLEV - 3:always under water/submerged

Office Notes

Chart a dangerous rock, least depth 9 feet, in Latitude 42°36'07.834" N, Longitude 70°39'36.477" W.

2.52) Profile/Beam - 259/23 from h11277 / 1014_mb / 2003-254 / 353_1641

Survey Summary

Survey Position: 042° 36′ 26.544″ N, 70° 39′ 57.723″ W

Least Depth: 4.02 m

Timestamp: 2003-254.16:42:24.069 (09/11/2003)

Survey Line: h11277 / 1014_mb / 2003-254 / 353_1641

Profile/Beam: 259/23

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

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

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-254/353_1641	259/23	0.00	0.000	Primary
h11277/1014_100/2003-251/101_1305	0003	0.87	027.4	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

13ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 2 ¹/₄fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 4.016 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Chart a dangerous rock with least depth 13 feet in position 42°36'26.544" N, 70°39'57.723" W.

2.53) Profile/Beam - 128/123 from h11277 / 1014_mb / 2003-254 / 389_1347

Survey Summary

Survey Position: 042° 36′ 44.298″ N, 70° 39′ 19.738″ W

Least Depth: 3.13 m

Timestamp: 2003-254.13:47:47.892 (09/11/2003)

Survey Line: h11277 / 1014_mb / 2003-254 / 389_1347

Profile/Beam: 128/123

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

An uncharted rock with a least depth of 10 feet, in Latitude 42°36'44.298" N, Longitude 70°39'19.738" W was located by the office processor.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-254/389_1347	128/123	0.00	0.000	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

10ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 1 ³4fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 3.134 m

WATLEV - 3:always under water/submerged

Office Notes

Chart a dangerous rock, least depth 10 feet, in Latitude 42°36'44.298" N, Longitude 70°39'19.738" W.

2.54) Profile/Beam - 110/112 from h11277 / 1014_mb / 2003-254 / 399_1754

Survey Summary

Survey Position: 042° 36′ 07.495″ N, 70° 39′ 41.553″ W

Least Depth: 2.12 m

Timestamp: 2003-254.17:54:47.232 (09/11/2003)

Survey Line: h11277 / 1014_mb / 2003-254 / 399_1754

Profile/Beam: 110/112

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

A charted rock with a least depth of 7 ft in Latitude 42°36′07.495" N, Longitude 70°39′41.553" W, was located by the office processor.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-254/399_1754	110/112	0.00	000.0	Primary
h11277/1014_100/2003-251/101_1305	0020	1.48	354.1	Secondary
h11277/1014_mb/2003-254/352_1755	208/177	6.54	197.8	Secondary (grouped)

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

7ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 1fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 2.121 m

Chart a dangerous rock, least depth 7 feet, in Latitude 42°36'07.495" N, Longitude 70°39'41.553" W.

2.55) Profile/Beam - 170/198 from h11277 / 1014_mb / 2003-254 / 399_1754

Survey Summary

Survey Position: 042° 36′ 07.527" N, 70° 39′ 43.027" W

Least Depth: 2.40 m

Timestamp: 2003-254.17:54:59.160 (09/11/2003)

Survey Line: h11277 / 1014_mb / 2003-254 / 399_1754

Profile/Beam: 170/198

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

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

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-254/399_1754	170/198	0.00	0.000	Primary
h11277/1014_100/2003-251/101_1305	0021	4.25	321.2	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

8ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 1 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 2.396 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Chart a dangerous rock with least depth 8 feet in position 42°36'07.527" N, 70°39'43.027" W.

2.56) Profile/Beam - 43/1 from h11277 / 1014_mb / 2003-254 / 411_1525

Survey Summary

Survey Position: 042° 36′ 24.046″ N, 70° 40′ 29.985″ W

Least Depth: 3.09 m

Timestamp: 2003-254.15:26:06.966 (09/11/2003)

Survey Line: h11277 / 1014_mb / 2003-254 / 411_1525

Profile/Beam: 43/1

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

An uncharted rock with a least depth of 10 ft, in Latitude 42°36′24.046″ N, Longitude 70°40′29.985″ W, was located by the office processor.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-254/411_1525	43/1	0.00	0.000	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

10ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 1 ³4fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 3.087 m

WATLEV - 3:always under water/submerged

Office Notes

Chart a dangerous rock, least depth 10 feet, in Latitude 42°36'24.046" N, Longitude 70°40'29.985" W.

2.57) Profile/Beam - 25/90 from h11277 / 1014_mb / 2003-254 / 462_1655

Survey Summary

Survey Position: 042° 36′ 25.051″ N, 70° 40′ 01.005″ W

Least Depth: 5.74 m

Timestamp: 2003-254.16:55:25.554 (09/11/2003)

Survey Line: h11277 / 1014_mb / 2003-254 / 462_1655

Profile/Beam: 25/90

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

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

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-254/462_1655	25/90	0.00	0.000	Primary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

19ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 3fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 5.739 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Chart a dangerous rock, least depth 19 feet, in position 42°36'25.051" N, 70°40'01.005" W.

2.58) Profile/Beam - 45/16 from h11277 / 1014_mb / 2003-260 / 1033

Survey Summary

Survey Position: 042° 36′ 01.780″ N, 70° 39′ 51.091″ W

Least Depth: 5.54 m

Timestamp: 2003-260.18:31:20.305 (09/17/2003) **Survey Line:** h11277 / 1014_mb / 2003-260 / 1033

Profile/Beam: 45/16

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

An uncharted rock with a least depth of 18 ft in Latitude 42°36'01.780" N, Longitude 70°39'51.091" W, was located by the office processor.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-260/1033	45/16	0.00	0.000	Primary
h11277/1014_mb/2003-254/332_1731	373/210	0.51	115.9	Secondary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

18ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 3fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 5.539 m

Chart a rock with least depth 18 feet in Latitude 42°36'01.780" N, Longitude 70°39'51.091" W.

2.59) Profile/Beam - 11/22 from h11277 / 1014_mb / 2003-260 / 1035

Survey Summary

Survey Position: 042° 36′ 03.046″ N, 70° 40′ 03.308″ W

Least Depth: 5.00 m

Timestamp: 2003-260.18:36:51.492 (09/17/2003) **Survey Line:** h11277 / 1014_mb / 2003-260 / 1035

Profile/Beam: 11/22

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

During office processing, a rock with least depth 16 feet was located approximately 25 meters to the east of a charted 18 foot rock. Delete charted 18-foot rock in 42-36-02.955 N, 70-40-04.423 W.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-260/1035	11/22	0.00	0.000	Primary
h11277/1014_100/2003-251/015_1812	0001	16.20	048.2	Secondary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

16ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 2 ³4fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 5.005 m

Chart a dangerous rock with least depth 16 feet in position 42°36'03.046" N, 70°40'03.308" W.

2.60) Profile/Beam - 142/240 from h11277 / 1014_mb / 2003-260 / 1065

Survey Summary

Survey Position: 042° 36′ 03.786″ N, 70° 39′ 45.011″ W

Least Depth: 2.95 m

Timestamp: 2003-260.18:27:45.690 (09/17/2003) **Survey Line:** h11277 / 1014_mb / 2003-260 / 1065

Profile/Beam: 142/240

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

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

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-260/1065	142/240	0.00	0.000	Primary
h11277/1014_100/2003-251/101_1305	0014	2.92	156.6	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

9ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 1 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 2.950 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Chart a dangerous rock, least depth 9 feet, in position 42°36'03.786" N, 70°39'45.011" W.

2.61) Profile/Beam - 480/39 from h11277 / 1014_mb / 2003-260 / 1097

Survey Summary

Survey Position: 042° 35′ 55.253″ N, 70° 40′ 46.120″ W

Least Depth: 1.00 m

Timestamp: 2003-260.20:52:58.215 (09/17/2003) **Survey Line:** h11277 / 1014_mb / 2003-260 / 1097

Profile/Beam: 480/39

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

During office processing, a rock was found.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-260/1097	480/39	0.00	0.000	Primary
h11277/1014_100/2003-251/101_1560	0001	2.21	116.9	Secondary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

3ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 0 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 1.000 m

WATLEV - 3:always under water/submerged

Office Notes

Chart a dangerous rock, least depth 3 ft, in Latitude 42°35'55.253" N, Longitude 70°40'46.120" W.

2.62) Profile/Beam - 21/175 from h11277 / 1014_mb / 2003-250 / 298_2007

Survey Summary

Survey Position: 042° 35′ 59.468″ N, 70° 39′ 44.493″ W

Least Depth: 6.28 m

Timestamp: 2003-250.20:07:43.714 (09/07/2003)

Survey Line: h11277 / 1014_mb / 2003-250 / 298_2007

Profile/Beam: 21/175

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

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

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-250/298_2007	21/175	0.00	0.000	Primary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

20ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 3 ¼fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 6.279 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. During office review, a shoaler depth was found for this rock. Chart a dangerous rock, least depth 20 feet, in position 42°35'59.468" N, 70°39'44.493" W.

2.63) Profile/Beam - 378/34 from h11277 / 1005_mb / 2003-260 / 838_1649

Survey Summary

Survey Position: 042° 34′ 47.851″ N, 70° 39′ 24.803″ W

Least Depth: 8.65 m

Timestamp: 2003-260.16:49:43.372 (09/17/2003)

Survey Line: h11277 / 1005_mb / 2003-260 / 838_1649

Profile/Beam: 378/34

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

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

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-260/838_1649	378/34	0.00	0.000	Primary
h11277/1005_mb/2003-260/838_1649	356/14	10.14	293.9	Secondary (grouped)
h11277/1014_100/2003-251/101_1311	0004	11.99	282.8	Secondary (grouped)
h11277/1014_100/2003-251/101_1311	0005	22.91	247.6	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

28ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 4 34fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 8.651 m

Concur with clarification. Chart a dangerous rock with least depth 28 feet in position $42^{\circ}34'47.851"$ N, $70^{\circ}39'24.803"$ W.

2.64) Profile/Beam - 401/13 from h11277 / 1005_mb / 2003-260 / 833_1639

Survey Summary

Survey Position: 042° 34′ 46.768″ N, 70° 39′ 29.740″ W

Least Depth: 7.39 m

Timestamp: 2003-260.16:39:57.092 (09/17/2003)

Survey Line: h11277 / 1005_mb / 2003-260 / 833_1639

Profile/Beam: 401/13

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

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

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-260/833_1639	401/13	0.00	0.000	Primary
h11277/1014_100/2003-251/101_1311	0003	18.53	331.8	Secondary
h11277/1005_mb/2003-260/838_1649	745/81	19.36	342.3	Secondary
h11277/1005_mb/2003-260/838_1649	745/81	19.36	342.3	Secondary
h11277/1014_100/2003-251/101_1310	0014	32.95	133.3	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

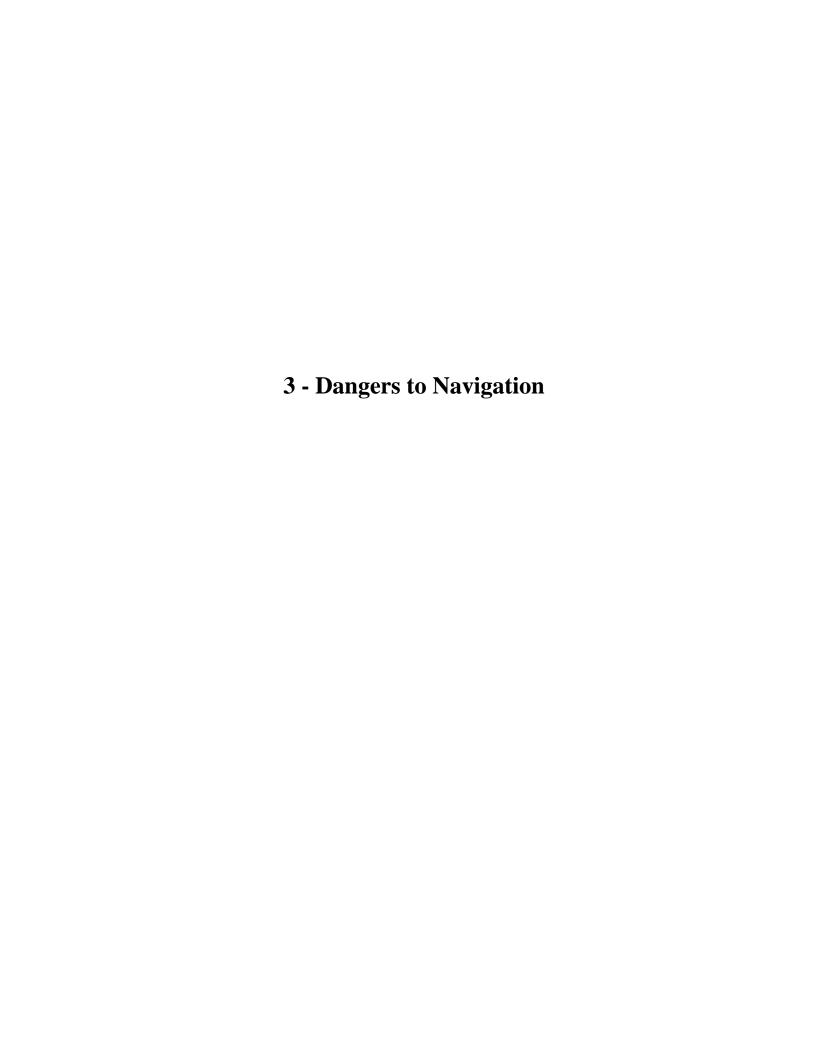
24ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 4fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 7.391 m

Concur with clarification. Office QC found a rock with least depth 24 feet 12 m from the rock located by the field. Chart a rock with least depth 24 feet in position 42°34'46.768" N, 70°39'29.740" W.



3.1) Profile/Beam - 7702/20 from h11277 / 1005_mb / 2003-252 / 288_1652

DANGER TO NAVIGATION

Survey Summary

Survey Position: 042° 34′ 41.003″ N, 70° 40′ 54.730″ W

Least Depth: 13.36 m

Timestamp: 2003-252.17:03:51.602 (09/09/2003)

Survey Line: h11277 / 1005_mb / 2003-252 / 288_1652

Profile/Beam: 7702/20

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

100% MBES coverage was acquired over the area and a rock was found with a least depth as above. This DtoN was submitted on December 23, 2003.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-252/288_1652	7702/20	0.00	0.000	Primary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

44ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 7 ¼fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 13.358 m

Concur with clarification. Chart a rock, least depth 44 feet, in position $42^{\circ}34'41.003''$ N, $70^{\circ}40'54.730''$ W. This rock is presently charted on the continual maintenance raster updated 9/15/2006.

3.2) Profile/Beam - 2472/28 from h11277 / 1005_mb / 2003-253 / 371_2038

DANGER TO NAVIGATION

Survey Summary

Survey Position: 042° 34′ 41.720″ N, 70° 41′ 26.880″ W

Least Depth: 2.86 m

Timestamp: 2003-253.20:42:00.064 (09/10/2003)

Survey Line: h11277 / 1005_mb / 2003-253 / 371_2038

Profile/Beam: 2472/28

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

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

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-253/371_2038	2472/28	0.00	0.000	Primary
h11277/1005_mb/2003-260/1010	379/20	21.23	295.7	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

9ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 1 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 2.858 m

Concur with clarification. Chart a dangerous rock, least depth 9 feet, in position $42^{\circ}34'41.720"$ N, $70^{\circ}41'26.880"$ W.

3.3) Profile/Beam - 3806/85 from h11277 / 1005_mb / 2003-253 / 372_1545

DANGER TO NAVIGATION

Survey Summary

Survey Position: 042° 36′ 12.128″ N, 70° 39′ 44.506″ W

Least Depth: 1.34 m

Timestamp: 2003-253.15:51:12.015 (09/10/2003)

Survey Line: h11277 / 1005_mb / 2003-253 / 372_1545

Profile/Beam: 3806/85

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

A dangerous rock was identified during office processing.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-253/372_1545	3806/85	0.00	0.000	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

4ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 0 ³4fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 1.339 m

Chart a dangerous rock, least depth 4 feet, in position 42°36'12.128" N, 70°39'44.506" W.

This rock is presently charted on the continual maintenance raster dated 9/15/2006.

3.4) Profile/Beam - 496/67 from h11277 / 1005_mb / 2003-253 / 660_1557

DANGER TO NAVIGATION

Survey Summary

Survey Position: 042° 36′ 09.091" N, 70° 39′ 45.625" W

Least Depth: 1.24 m

Timestamp: 2003-253.15:58:43.718 (09/10/2003)

Survey Line: h11277 / 1005_mb / 2003-253 / 660_1557

Profile/Beam: 496/67

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

100% MBES and 100% SSS coverage was acquired over the area and a rock was found with a least depth as above. This DtoN was submitted on December 23, 2003.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-253/660_1557	496/67	0.00	0.000	Primary
h11277/1014_100/2003-251/101_1310	0050	9.59	063.6	Secondary (grouped)
h11277/1014_100/2003-251/101_1410	0005	11.99	067.6	Secondary (grouped)

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

4ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1)
0 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 1.238 m

Concur with clarification. Chart a dangerous rock, least depth 4 feet, in position $42^{\circ}36'09.091"$ N, $70^{\circ}39'45.625"$ W.

This rock is presently charted on the continual maintenance raster dated 9/15/2006.

3.5) Profile/Beam - 154/35 from h11277 / 1005_mb / 2003-254 / 227_1717

DANGER TO NAVIGATION

Survey Summary

Survey Position: 042° 36′ 06.127″ N, 70° 40′ 38.177″ W

Least Depth: 0.55 m

Timestamp: 2003-254.17:17:33.560 (09/11/2003)

Survey Line: h11277 / 1005_mb / 2003-254 / 227_1717

Profile/Beam: 154/35

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

100% MBES and 100% SSS was acquired over the area and a rock was found with a least depth as above. This DtoN was submitted on September 29, 2003.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-254/227_1717	154/35	0.00	0.000	Primary
h11277/1005_mb/2003-254/226_1714	1273/72	21.34	249.9	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

2ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 0 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 0.549 m

Concur with clarification. Chart a dangerous rock, least depth 2 feet, in position $42^{\circ}36'06.127"$ N, $70^{\circ}40'38.177"$ W.

3.6) Profile/Beam - 312/12 from h11277 / 1005_mb / 2003-260 / 816_1714

DANGER TO NAVIGATION

Survey Summary

Survey Position: 042° 35′ 16.632″ N, 70° 38′ 46.340″ W

Least Depth: 5.59 m

Timestamp: 2003-260.17:14:51.298 (09/17/2003)

Survey Line: h11277 / 1005_mb / 2003-260 / 816_1714

Profile/Beam: 312/12

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

100% MBES and 100% SSS coverage acquired over the area and a rock was found with a least depth as above. This DtoN was submitted on December 23, 2003.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-260/816_1714	312/12	0.00	0.000	Primary

Hydrographer Recommendations

Chart rock as per digital data.

Cartographically-Rounded Depth (Affected Charts):

18ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 3fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 5.593 m

Concur with clarification. Chart a dangerous rock, least depth 18 feet, in position $42^{\circ}35'16.632"$ N, $70^{\circ}38'46.340"$ W.

This rock is presently charted on the continual maintenance raster dated 9/15/2006.

3.7) Profile/Beam - 1972/19 from h11277 / 1005_mb / 2003-260 / 837_1755

DANGER TO NAVIGATION

Survey Summary

Survey Position: 042° 35′ 05.977″ N, 70° 38′ 46.431″ W

Least Depth: 11.51 m

Timestamp: 2003-260.17:58:32.530 (09/17/2003)

Survey Line: h11277 / 1005_mb / 2003-260 / 837_1755

Profile/Beam: 1972/19

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

100% MBES and 100% SSS coverage was acquired over the area and a rock was found with a least depth as above. This DtoN was submitted on December 23, 2003.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-260/837_1755	1972/19	0.00	000.0	Primary

Hydrographer Recommendations

Chart a rock as per digital data.

Cartographically-Rounded Depth (Affected Charts):

38ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 6 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 11.508 m

Concur with clarification. Chart a dangerous rock, least depth 38 feet, in position $42^{\circ}35'05.977"$ N, $70^{\circ}38'46.431"$ W.

This rock is presently charted on the continual maintenance raster dated 9/15/2006.

3.8) Profile/Beam - 556/8 from h11277 / 1005_mb / 2003-260 / 902_1250

DANGER TO NAVIGATION

Survey Summary

Survey Position: 042° 34′ 41.900″ N, 70° 39′ 52.771″ W

Least Depth: 3.05 m

Timestamp: 2003-260.12:51:38.591 (09/17/2003)

Survey Line: h11277 / 1005_mb / 2003-260 / 902_1250

Profile/Beam: 556/8

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

100% MBES and 100% SSS coverage was acquired over the area and a rock field was found with a least depth as above. This DtoN was submitted on December 23, 2003.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-260/902_1250	556/8	0.00	0.000	Primary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

10ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 1 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 3.049 m

Concur with clarification. Chart a dangerous rock, least depth 10 feet, in position $42^{\circ}34'41.900"$ N, $70^{\circ}39'52.771"$ W.

This rock is presently charted on the continual maintenance raster dated 9/15/2006.

3.9) Profile/Beam - 1143/13 from h11277 / 1005_mb / 2003-260 / 903_1246

DANGER TO NAVIGATION

Survey Summary

Survey Position: 042° 34′ 41.285″ N, 70° 39′ 47.132″ W

Least Depth: 3.65 m

Timestamp: 2003-260.12:49:25.908 (09/17/2003)

Survey Line: h11277 / 1005_mb / 2003-260 / 903_1246

Profile/Beam: 1143/13

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

100% MBES and 100% SSS coverage acquired over the area and a rock field was found with a least depth as above. This DtoN was submitted on December 23, 2003.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-260/903_1246	1143/13	0.00	0.000	Primary
h11277/1014_100/2003-251/101_1310	0010	11.95	247.1	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

12ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 2fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 3.649 m

Concur with clarification. Chart a dangerous rock, least depth 12 feet, in position $42^{\circ}34'41.285"$ N, $70^{\circ}39'47.132"$ W.

This rock is presently charted on the continual maintenance raster dated 9/15/2006.

3.10) Profile/Beam - 647/64 from h11277 / 1005_mb / 2003-260 / 942_2040

DANGER TO NAVIGATION

Survey Summary

Survey Position: 042° 35′ 17.783″ N, 70° 41′ 01.349″ W

Least Depth: 2.23 m

Timestamp: 2003-260.20:41:44.536 (09/17/2003)

Survey Line: h11277 / 1005_mb / 2003-260 / 942_2040

Profile/Beam: 647/64

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

100% MBES and 100% SSS coverage acquired over the area and a rock was found with a least depth as above. This DtoD was submitted on December 23, 2003.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1005_mb/2003-260/942_2040	647/64	0.00	0.000	Primary
h11277/1014_100/2003-251/101_0260	0007	2.90	265.1	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

7ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 1 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 2.232 m

Concur with clarification. Chart a dangerous rock with least depth 7 feet in position 42°35'17.783" N, 70°41'01.349" W.

This rock is presently charted on the continual maintenance raster dated 9/15/2006.

3.11) Profile/Beam - 4771/204 from h11277 / 1014_mb / 2003-252 / 309_1904

DANGER TO NAVIGATION

Survey Summary

Survey Position: 042° 36′ 26.603″ N, 70° 40′ 12.396″ W

Least Depth: 4.98 m

Timestamp: 2003-252.19:20:12.779 (09/09/2003)

Survey Line: h11277 / 1014_mb / 2003-252 / 309_1904

Profile/Beam: 4771/204

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

100% MBES and 100% SSS was acquired over the area and a wreck was found with a least depth as above. This DtoN was submitted on December 23, 2003.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-252/309_1904	4771/204	0.00	0.000	Primary
h11277/1014_100/2003-251/101_1559	0001	6.84	043.7	Secondary
h11277/1014_100/2003-251/018_2018	0002	9.81	041.7	Secondary
h11277/1014_100/2003-251/019_2034	0001	10.12	038.9	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

16ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 2 ³4fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

Geo object 1: Wreck (WRECKS)

Attributes: CATWRK - 2:dangerous wreck

VALSOU - 4.981 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Chart a dangerous wreck, least depth 16 feet, in position 42°36'26.603" N, 70°40'12.396" W.

This wreck is presently charted on the continual maintenance raster dated 9/15/2006.

3.12) Profile/Beam - 4359/184 from h11277 / 1014_mb / 2003-252 / 314_1727

DANGER TO NAVIGATION

Survey Summary

Survey Position: 042° 34′ 37.565″ N, 70° 41′ 22.882″ W

Least Depth: 10.18 m

Timestamp: 2003-252.17:42:11.971 (09/09/2003)

Survey Line: h11277 / 1014_mb / 2003-252 / 314_1727

Profile/Beam: 4359/184

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

100% MBES coverage acquired over the area and a rock was found with a least depth above. This DtoN was submitted on December 23, 2003.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-252/314_1727	4359/184	0.00	000.0	Primary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

33ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 5 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 10.177 m

Concur with clarification. Chart a dangerous rock, least depth 33 feet, in position $42^{\circ}34'37.565"$ N, $70^{\circ}41'22.882"$ W.

This rock is presently charted on the continual maintenance raster dated 9/15/2006.

3.13) Profile/Beam - 678/141 from h11277 / 1014_mb / 2003-253 / 420_1237

DANGER TO NAVIGATION

Survey Summary

Survey Position: 042° 36′ 25.243″ N, 70° 39′ 34.930″ W

Least Depth: 2.48 m

Timestamp: 2003-253.12:39:42.769 (09/10/2003)

Survey Line: h11277 / 1014_mb / 2003-253 / 420_1237

Profile/Beam: 678/141

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

100% MBES and 200% SSS was acquired over the area and a rock was found iwth a least depth as above. This DtoN was submitted on March 12, 2006.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-253/420_1237	678/141	0.00	0.000	Primary
h11277/1014_mb/2003-253/419_1332	515/215	20.92	207.6	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

8ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 1 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 2.481 m

Concur with clarification. Chart a dangerous rock, least depth 8 feet, in position $42^{\circ}36'25.243"$, N $70^{\circ}39'34.930"$ W.

This rock is presently charted on the continual maintenance raster dated 9/15/2006 as an 8-foot sounding.

3.14) Profile/Beam - 813/138 from h11277 / 1014_mb / 2003-253 / 420_1237

DANGER TO NAVIGATION

Survey Summary

Survey Position: 042° 36′ 26.399″ N, 70° 39′ 33.172″ W

Least Depth: 1.68 m

Timestamp: 2003-253.12:40:09.718 (09/10/2003)

Survey Line: h11277 / 1014_mb / 2003-253 / 420_1237

Profile/Beam: 813/138

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

100% MBES and 200% SSS was acquired over the area and a rock was found with a least depth as above. This DtoN was submitted on March 12, 2004.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-253/420_1237	813/138	0.00	0.000	Primary
h11277/1014_100/2003-251/103_1513	0007	5.46	238.4	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

5ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 0 ³4fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 1.680 m

Concur with clarification. Chart a dangerous rock, least depth 5 feet, in position $42^{\circ}36'26.399"$ N, $70^{\circ}39'33.172"$ W.

This DTON is presently charted on the continual maintenance raster dated 9/15/2006 as a 5 foot sounding. Delete 5 foot sounding. Chart a 5 rk with danger curve.

3.15) Profile/Beam - 1879/4 from h11277 / 1014_mb / 2003-253 / 420_1237

DANGER TO NAVIGATION

Survey Summary

Survey Position: 042° 36′ 33.609″ N, 70° 39′ 19.155″ W

Least Depth: 3.00 m

Timestamp: 2003-253.12:43:42.515 (09/10/2003)

Survey Line: h11277 / 1014_mb / 2003-253 / 420_1237

Profile/Beam: 1879/4

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

100% MBES and 200% SSS was acquired over the area and a rock was found with a least depth as above. T his DtoN was submitted on March 12, 2004.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-253/420_1237	1879/4	0.00	0.000	Primary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

10ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 1 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 2.995 m

Concur with clarification. After application of approved water levels with final tide zoning, the least depth on this feature is 3.00 m (as opposed to 2.96m at the time of submission). Chart a dangerous rock, least depth 10 feet, in position 42°36'33.609" N, 70°39'19.155" W.

This rock is presently charted on the continual maintenance raster dated 9/15/2006 as a 9 Rk. Delete charted 9 Rk. Chart a 10 foot rock as above.

3.16) Profile/Beam - 63/164 from h11277 / 1014_mb / 2003-253 / 420_1255

DANGER TO NAVIGATION

Survey Summary

Survey Position: 042° 36′ 40.292″ N, 70° 39′ 08.094″ W

Least Depth: 1.51 m

Timestamp: 2003-253.12:55:25.988 (09/10/2003)

Survey Line: h11277 / 1014_mb / 2003-253 / 420_1255

Profile/Beam: 63/164

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

During office processing, a rock was identified.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-253/420_1255	63/164	0.00	0.000	Primary
h11277/1014_100/2003-251/103_1513	0013	49.39	208.2	Secondary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

5ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 0 34fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 1.509 m

Chart a dangerous rock, least depth 5 feet, in the present survey location in 42°36'40.292" N, 70°39'08.094" W. This rock is presently charted on the continual maintenance raster dated 9/15/2006.

3.17) Profile/Beam - 7633/20 from h11277 / 1014_mb / 2003-253 / 420_1255

DANGER TO NAVIGATION

Survey Summary

Survey Position: 042° 36′ 36.702″ N, 70° 39′ 30.173″ W

Least Depth: 4.15 m

Timestamp: 2003-253.13:20:37.369 (09/10/2003)

Survey Line: h11277 / 1014_mb / 2003-253 / 420_1255

Profile/Beam: 7633/20

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

100% MBES and 200% SSS was acquired over the navigable area of the search radius and a wreck was found with a least depth as above.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-253/420_1255	7633/20	0.00	0.000	Primary
h11277/1014_100/2003-251/105_1452	0006	6.13	061.3	Secondary (grouped)

Hydrographer Recommendations

Delete "PA" from wreck symbol in this position and chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

13ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 2 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

Geo object 1: Wreck (WRECKS)

Attributes: CATWRK - 2:dangerous wreck

VALSOU - 4.152 m

Concur with clarification. A charted Wreck with a least depth of 17 ft was identified by the field in Latitude 42° 36' 36.702" N, 70° 39' 30.173" W. Office QC of this item found a wreck with least depth 13 ft. It is recommended that the charted Dangerous Wk PA be deleted and a Dangerous Wk 13 be charted as shown on the present survey. This wreck was submitted as a Danger to Navigation on July 15, 2005.

This wreck is presently charted on the continual maintenance raster dated 9/15/2006.

This wreck is AWOIS Item #11928.

3.18) Profile/Beam - 9014/216 from h11277 / 1014_mb / 2003-253 / 420_1255

DANGER TO NAVIGATION

Survey Summary

Survey Position: 042° 36′ 38.164″ N, 70° 39′ 51.209″ W

Least Depth: 4.05 m

Timestamp: 2003-253.13:25:13.125 (09/10/2003)

Survey Line: h11277 / 1014_mb / 2003-253 / 420_1255

Profile/Beam: 9014/216

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

100% MBES and 200% SSS was acquired over the area and a rock was found with a least depth as above. This DTON was submitted on April 23, 2004.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-253/420_1255	9014/216	0.00	0.000	Primary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

13ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 2 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 4.054 m

Concur with clarification. Chart a dangerous rock, least depth 13 feet, in position $42^{\circ}36'38.164"$ N, $70^{\circ}39'51.209"$ W.

This rock is presently charted on the continual maintenance raster dated 9/15/2006.

3.19) Profile/Beam - 1212/238 from h11277 / 1014_mb / 2003-253 / 420_1428

DANGER TO NAVIGATION

Survey Summary

Survey Position: 042° 36′ 30.154″ N, 70° 39′ 28.828″ W

Least Depth: 0.50 m

Timestamp: 2003-253.14:32:57.362 (09/10/2003)

Survey Line: h11277 / 1014_mb / 2003-253 / 420_1428

Profile/Beam: 1212/238

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

During office processing, a dangerous rock with least depth 1 foot was found.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-253/420_1428	1212/238	0.00	0.000	Primary
h11277/1014_100/2003-251/103_1513	0008	4.47	200.1	Secondary

Hydrographer Recommendations

Cartographically-Rounded Depth (Affected Charts):

1ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 0 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 0.497 m

Chart a dangerous rock, least depth 1 foot, in 42°36'30.154" N, 70°39'28.828" W.

This rock is presently charted on the continual maintenance raster dated 9/15/2006.

3.20) Profile/Beam - 181/218 from h11277 / 1014_mb / 2003-253 / 467_2014

DANGER TO NAVIGATION

Survey Summary

Survey Position: 042° 36′ 56.658″ N, 70° 39′ 07.004″ W

Least Depth: 3.41 m

Timestamp: 2003-253.20:15:06.558 (09/10/2003)

Survey Line: h11277 / 1014_mb / 2003-253 / 467_2014

Profile/Beam: 181/218

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

100% MBES and 200% SSS was acquired over the area and a rock field was found with a least depth as above. This DtoN was submitted on March 12, 2004.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-253/467_2014	181/218	0.00	0.000	Primary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

11ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 1 ³4fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 3.413 m

Concur with clarification. Delete charted "Blds Rep." Chart a dangerous rock, least depth 11 feet, in position 42°36'56.658" N, 70°39'07.004" W. Add "Blds" notation in the common area.

This rock is presently charted on the continual maintenance raster dated 9/15/2006.

3.21) Profile/Beam - 453/117 from h11277 / 1014_mb / 2003-253 / 467_2014

DANGER TO NAVIGATION

Survey Summary

Survey Position: 042° 36′ 53.507″ N, 70° 39′ 11.723″ W

Least Depth: 4.86 m

Timestamp: 2003-253.20:16:00.872 (09/10/2003)

Survey Line: h11277 / 1014_mb / 2003-253 / 467_2014

Profile/Beam: 453/117

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

100% MBES and 200% SSS was acquired over the area and an obstruction was found with a least depth as above. This DTON was submitted on April 23, 2004.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-253/467_2014	453/117	0.00	0.000	Primary
h11277/1014_100/2003-251/112_1526	0001	2.44	096.3	Secondary
h11277/1014_100/2003-251/111_1521	0003	7.95	242.2	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

16ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 2 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN) **Attributes:** VALSOU - 4.858 m

Concur with clarification. Delete charted obstn PA in position 42-36-52.891 N, 70-39-13.933 W. Chart a dangerous obstruction, least depth 16 feet, in position 42°36'53.507" N, 70°39'11.723" W.

This obstruction is presently charted on the continual maintenance raster dated 9/15/2006.

This obstruction is AWOIS Item #11930. After the crash of the Pydro PSS, the AWOIS database was unrecoverable and all AWOIS items are classified as DR_Charted or DR_DTON.

3.22) Profile/Beam - 369/130 from h11277 / 1014_mb / 2003-253 / 480_2059

DANGER TO NAVIGATION

Survey Summary

Survey Position: 042° 36′ 27.121″ N, 70° 39′ 49.093″ W

Least Depth: 5.30 m

Timestamp: 2003-253.21:00:27.325 (09/10/2003)

Survey Line: h11277 / 1014_mb / 2003-253 / 480_2059

Profile/Beam: 369/130

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

100% MBES and 200% SSS was acquired over the area and a sounding was found with a least depth as above. This DTON was submitted on April 23, 2004.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-253/480_2059	369/130	0.00	0.000	Primary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

17ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 2 ³4fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

[None]

Concur with clarification. This DtoN is a 17-foot sounding in a federally maintained channel with a present controlling depth of 16 1/2 feet (as of October 2004). Defer final charting disposition to Marine Chart Division, Nautical Data Branch, Source Information Unit. The 17-ft sounding does not appear in the Chart Unit Base Cell file due to location within a federally maintained channel. The 17-ft sounding is incorporated in the Survey Scale BASE Cell file.

3.23) Profile/Beam - 659/1 from h11277 / 1014_mb / 2003-253 / 480_2059

DANGER TO NAVIGATION

Survey Summary

Survey Position: 042° 36′ 29.963″ N, 70° 39′ 45.260″ W

Least Depth: 5.34 m

Timestamp: 2003-253.21:01:25.255 (09/10/2003)

Survey Line: h11277 / 1014_mb / 2003-253 / 480_2059

Profile/Beam: 659/1

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

100% MBES and 200% SSS was acquired over the area and a sounding was found with a least depth as above. This DtoN was submitted on April 23, 2004.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-253/480_2059	659/1	0.00	0.000	Primary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

17ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 2 ³4fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

[None]

Concur with clarification. This DtoN is a 17-foot sounding in a federally maintained channel with a present controlling depth of 16 1/2 feet (as of October 2004). Defer final charting disposition to Marine Chart Division, Nautical Data Branch, Source Information Unit. The 17-ft sounding does not appear in the Chart Unit Base Cell file due to location within a federally maintained channel. The 17-ft sounding is incorporated in the Survey Scale BASE Cell file.

3.24) Profile/Beam - 168/230 from h11277 / 1014_mb / 2003-253 / 481_2110

DANGER TO NAVIGATION

Survey Summary

Survey Position: 042° 36′ 34.547″ N, 70° 39′ 38.515″ W

Least Depth: 4.17 m

Timestamp: 2003-253.21:10:43.978 (09/10/2003)

Survey Line: h11277 / 1014_mb / 2003-253 / 481_2110

Profile/Beam: 168/230

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

100% MBES and 200% SSS was acquired over the area and a rock was found with a least depth as above. This DtoN was submitted on April 23, 2004.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-253/481_2110	168/230	0.00	0.000	Primary
h11277/1014_100/2003-251/106_1504	0010	1.27	292.4	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

13ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 2 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 4.173 m

Concur with clarification. Chart a dangerous rock, least depth 13 feet, in position $42^{\circ}36'34.547"$ N, $70^{\circ}39'38.515"$ f W.

3.25) Profile/Beam - 1047/201 from h11277 / 1014_mb / 2003-253 / 522_1755

DANGER TO NAVIGATION

Survey Summary

Survey Position: 042° 36′ 32.887″ N, 70° 39′ 13.491″ W

Least Depth: 3.69 m

Timestamp: 2003-253.17:59:13.334 (09/10/2003)

Survey Line: h11277 / 1014_mb / 2003-253 / 522_1755

Profile/Beam: 1047/201

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

100% MBES and 200% SSS was acquired over the area and an obstruction was found with a least depth as above. This DTON was submitted on April 23, 2004.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-253/522_1755	1047/201	0.00	0.000	Primary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

12ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 2fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: VALSOU - 3.688 m

Concur with clarification. Chart a dangerous obstruction, least depth 12 feet, in the present survey position in $42^{\circ}36'32.887"$ N, $70^{\circ}39'13.491"$ W.

This obstruction is presently charted on the continual maintenance raster dated 9/15/2006.

3.26) Profile/Beam - 545/237 from h11277 / 1014_mb / 2003-253 / 533_1718

DANGER TO NAVIGATION

Survey Summary

Survey Position: 042° 36′ 25.653″ N, 70° 39′ 17.735″ W

Least Depth: 3.57 m

Timestamp: 2003-253.17:20:06.251 (09/10/2003)

Survey Line: h11277 / 1014_mb / 2003-253 / 533_1718

Profile/Beam: 545/237

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

100% MBES and 200% SSS was acquired over the area and a rock was found with a least depth as above. This DtoN was submitted on March 12, 2004.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-253/533_1718	545/237	0.00	0.000	Primary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

11ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 2fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 3.572 m

Concur with clarification. Chart a dangerous rock, least depth 11 feet, in position 42°36′25.653″ N, 70°39′17.735″ W.

This rock is presently charted as an 11 foot sounding in the continual maintenance raster dated 9/15/2006. The office processor recommends deleting the 11 foot sounding and charting an 11 foot rock with danger curve.

3.27) Profile/Beam - 163/2 from h11277 / 1014_mb / 2003-253 / 543_1744

DANGER TO NAVIGATION

Survey Summary

Survey Position: 042° 36′ 33.423″ N, 70° 39′ 17.611″ W

Least Depth: 2.94 m

Timestamp: 2003-253.17:44:56.877 (09/10/2003)

Survey Line: h11277 / 1014_mb / 2003-253 / 543_1744

Profile/Beam: 163/2

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

100% MBES and 200% SSS was acquired over the area and a rock was found with least depth as above. This DtoN was submitted on April 23, 2004.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-253/543_1744	163/2	0.00	0.000	Primary
h11277/1014_100/2003-251/016_1952	0001	2.75	344.6	Secondary (grouped)

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

9ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 1 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 2.938 m

Concur with clarification. Chart a dangerous rock with least depth 9 feet in 42°36'33.423" N, 70°39'17.611" W. This rock is presently charted on the continual maintenance raster dated 9/15/2006.

3.28) Profile/Beam - 631/233 from h11277 / 1014_mb / 2003-254 / 269_1724

DANGER TO NAVIGATION

Survey Summary

Survey Position: 042° 36′ 01.134″ N, 70° 39′ 59.026″ W

Least Depth: 3.29 m

Timestamp: 2003-254.17:26:43.370 (09/11/2003)

Survey Line: h11277 / 1014_mb / 2003-254 / 269_1724

Profile/Beam: 631/233

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

100% MBES and 100% SSS coverage was acquired over the area and a rock was found with a least depth as above. This DtoN was submitted on December 23, 2003.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-254/269_1724	631/233	0.00	0.000	Primary
h11277/1014_100/2003-251/101_1305	0007	4.53	283.5	Secondary (grouped)
h11277/1014_100/2003-251/101_1307	0007	15.07	127.2	Secondary
h11277/1014_100/2003-251/101_1305	0008	15.17	130.8	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

11ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 1 ³4fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 3.294 m

Office Notes

Concur with clarification. Chart a rock, least depth 11 feet, in position 42°36'01.134" N, 70°39'59.026" W. This rock is presently charted on the continual maintenance rasted dated 9/15/2006.

3.29) Profile/Beam - 12/112 from h11277 / 1014_mb / 2003-260 / 1014

DANGER TO NAVIGATION

Survey Summary

Survey Position: 042° 34′ 44.038″ N, 70° 41′ 28.236″ W

Least Depth: 3.23 m

Timestamp: 2003-260.12:47:42.020 (09/17/2003) **Survey Line:** h11277 / 1014_mb / 2003-260 / 1014

Profile/Beam: 12/112

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

100% MBES and 100% SSS was acquired over the area and a rock was found with a least depth as above. This DtoN was submitted on December 23, 2003.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-260/1014	12/112	0.00	0.000	Primary
h11277/1014_100/2003-251/101_1562	0009	14.41	283.3	Secondary (grouped)

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

10ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 1 3/4fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 3.234 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Chart a dangerous rock, least depth 10 feet, in position $42^{\circ}34'44.038"$ N, $70^{\circ}41'28.236"$ W.

This rock is shown on the continual maintenance raster dated on 9/15/2006.

3.30) Profile/Beam - 48/1 from h11277 / 1014_mb / 2003-260 / 1063

DANGER TO NAVIGATION

Survey Summary

Survey Position: 042° 36′ 05.407″ N, 70° 39′ 41.207″ W

Least Depth: 3.41 m

Timestamp: 2003-260.18:23:27.885 (09/17/2003) **Survey Line:** h11277 / 1014_mb / 2003-260 / 1063

Profile/Beam: 48/1

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

100% MBES and 100% SSS acquired over the area and a rock field was found with a least depth as above. This DtoN was submitted on December 23, 2003.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-260/1063	48/1	0.00	000.0	Primary
h11277/1014_100/2003-251/101_1305	0022	4.33	295.2	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

11ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 1 34fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 3.406 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Chart a dangerous rock, least depth 11 feet, in position $42^{\circ}36'05.407"$ N, $70^{\circ}39'41.207"$ W.

This rock is presently charted on the continual maintenance raster dated 9/15/2006.

3.31) Profile/Beam - 117/33 from h11277 / 1014_mb / 2003-260 / 1104

DANGER TO NAVIGATION

Survey Summary

Survey Position: 042° 35′ 53.994″ N, 70° 40′ 50.173″ W

Least Depth: 0.98 m

Timestamp: 2003-260.20:28:31.688 (09/17/2003) **Survey Line:** h11277 / 1014_mb / 2003-260 / 1104

Profile/Beam: 117/33

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

100% MBES and 100% SSS was acquired over the area and a rock was found with a least depth as above. This DtoN was submitted on December 23, 2003.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-260/1104	117/33	0.00	0.000	Primary
h11277/1014_mb/2003-260/1104	159/28	18.80	194.6	Secondary (grouped)
h11277/1014_100/2003-251/101_1560	0003	25.45	313.3	Secondary (grouped)

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

3ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 0 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

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

Attributes: VALSOU - 0.983 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Chart a dangerous rock, least depth 3 feet, in position $42^{\circ}35'53.994"$ N, $70^{\circ}40'50.173"$ W.

This rock is presently charted on the continual maintenance raster dated 9/15/2006.

3.32) Profile/Beam - 195/133 from h11277 / 1014_mb / 2003-254 / 366_1414

DANGER TO NAVIGATION

Survey Summary

Survey Position: 042° 36′ 33.270″ N, 70° 39′ 20.871″ W

Least Depth: 4.51 m

Timestamp: 2003-254.14:15:35.339 (09/11/2003)

Survey Line: h11277 / 1014_mb / 2003-254 / 366_1414

Profile/Beam: 195/133

Charts Affected: 13281_1, 13279_1, 13274_5, 13267_1, 13278_1, 13260_1, 13200_1, 13009_1, 13006_1,

13003_1

Remarks:

100% MBES and 200% SSS was acquired over the area and a rock with was found with a least depth as above. This DtoN was submitted on March 12, 2004.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11277/1014_mb/2003-254/366_1414	195/133	0.00	0.000	Primary
h11277/1014_100/2003-251/103_1513	0011	8.36	042.9	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

15ft (13281_1, 13279_1, 13274_5, 13267_1, 13278_1) 2 ½fm (13260_1, 13200_1, 13009_1, 13006_1, 13003_1)

S-57 Data

[None]

Office Notes

Do not concur. After office evaluation, it was determined that this feature was a burst of noise rather than a rock. Chart present survey soundings in common areas.

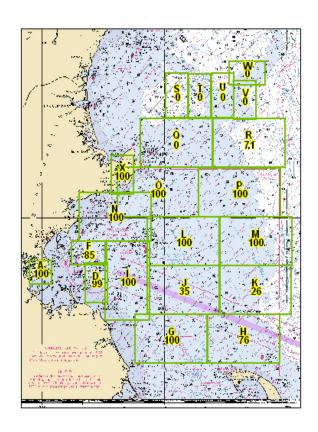
APPENDIX II

LIST OF GEOGRAPHIC NAMES

Geographic names as depicted on the chart were observed in common usage.

Hydrographer has no particular recommendation on geographical names. *Concur*.

APPENDIX III PROGRESS SKETCH



PROGRESS SKETCH OPR-A397-TJ-03 SEPT 2003

SEPT_2003

Note: NMRun (nautical miles run) on Sheets G- W contain X-Line and verification data milelage only as per Project Instructions. Percentage equals required X-Lines met. Sheet A was a request by AHB for Item investigations.

Project	Letter	NMRun	StartStopDN
A397	А	2.7	245-245
A397	D	301.0	245-272
A397	F	213.1	249-272
A397	G	49.4	248-262
A397	Н	35.1	248-248
A397	I	24.3	247-247
A397	J	13.0	272-272
A397	K	9.6	273-273
A397	L	49.3	249-260
A397	М	44.2	273-273
A397	N	12.6	260-260
A397	0	7.3	260-260
A397	P	59.6	273-273
A397	R	20.6	273-273
A397	Х	253.3	250-261

Project	Month	LNM_Hydro	LNM_MB	SV_Casts	Bottom_Sam	AW0IS_Items	Tide_Guage_Inst	DAS	DTime_equip_H
A397	September	1,095.10	1,095.10	110.00	0.00	0.00	2.00	19.00	0.00

Project	Letter	H_num	HQ_Est_SNM	CumlPercCompPre	CumiPercCompCt	SNM_CompCurl	CumSNMcon
A397	Α	H10990	17	99	100	0	17
A397	D	H10993	27	60	99	11	27
A397	F	H10995	27	33	85	14	23
A397	G	VV00037	108	0	100	108	108
A397	Н	VV00038	108	0	76	82	82
A397	1	VV00039	108	75	100	27	108
A397	J	VV00040	108	0	35	38	38
A397	К	VV00041	108	0	26	28	28
A397	L	VV00042	108	0	100	108	108
A397	М	VV00043	108	0	100	108	108
A397	N	VV00044	108	75	100	27	108
A397	0	VV00045	121	90	100	12	121
A397	Р	VV00046	121	0	100	121	121
A397	Q	VV00047	108	0	0	0	0
A397	R	VV00048	108	40	71	33	77
A397	s	VV00049	30	0	0	0	0
A397	Т	VV00050	30	0	0	0	0
A397	U	VV00051	30	0	0	0	0
A397	V	VV00052	27	0	0	0	0
A397	W	VV00053	27	0	0	0	0
A397	Х	H11277	27	0	100	27	27

APPENDIX IV <u>TIDES AND WATER LEVELS</u>

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

TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE: January 06, 2004

HYDROGRAPHIC BRANCH: Atlantic

HYDROGRAPHIC PROJECT: OPR-A397-TJ-2003

HYDROGRAPHIC SHEET: H11277

LOCALITY:

Gloucester Harbor, MA

TIME PERIOD:

September 7-18, 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: NA175, NA175A

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).

CHIEF, REQUIREMENTS AND DEVELOPMENT DIVISION





APPENDIX V

SUPPLEMENTAL SURVEY RECORDS AND CORRESPONDENCES

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

No changes are recommended to the Coast Pilot.

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

No bottom samples were acquired on this survey

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

All Aids to Navigation were positioned within 50 meters of their charted position.

V.4 DIVE REPORT

See attached.

NOAA Ship THOMAS JEFFERSON Dive Investigation Report Dive No._1_

	Survey In	ıformation		
AWOIS Item: N/A	Description: F/V Lady	y Lynn	Date: 18 September 2003	
Latitude -	Longitude	S	SS Contacts	
42° 35' 07.268" N	070° 40' 30.132" W			
SWMB day/line	e/time/ping/beam	VE	BES Positions	
2003_251/206	5_1937/3292/57			
SWM	B Depth	V	BES Depth	
38.5	0 feet			
	Dive Inf	ormation		
Dive Master: LCDR Donal	d W. Haines	Time In:		
Dive Tender:		Time Out:		
Diver #1: LCDR Douglas I	D. Baird, LT Shep M. Smith	Max Depth: 46 ft		
Diver #2: ENS Jasper D. S	chaer/ST Grant D. Froelich	Visibility/Current: 0.5	kts	
	Diver's Least Deptl	n Gauge Information		
Gauge Number:		CTD Location:		
Pre-Dive Deck Pressure:	15.09	CTD Time:		
Least Depth Pressure:	33.32	DLDG Depth:		
Post-Dive Deck Pressure:	15.09	Tide Corrector:		
Time of Least Depth:	1040	Item Least Depth:		
Narrative Report:	-	•	-	

A 25ft lobsterboat named the "Lady Lynn" is resting in 38 feet of water rightside up. The least depth is at the bow. It has a breadth of 10 feet and is 4.5 feet high.

ATLANTIC HYDROGRAPHIC BRANCH REVISED EVALUATION REPORT FOR H11277 (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. DATA ACQUISITION AND PROCESSING

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

MapInfo, version 6.5 PYDRO, version 5.2.1 CARIS HIPS/SIPS version 6.0 SP2 CARIS BASE Editor Version 1.0 CARIS HOM ENC Version 3.3 SP1 D-KART Inspector 5.0

Office processing entailed the use of CARIS Field Sheet Editor to generate a Bathymetry Associated with Statistical Error (BASE) navigation surface model. The BASE Surface model serves as bathymetric and feature presentation source for all cartographic components incorporated within the submitted Electronic Navigational Chart (ENC) exchange file.

The field unit submitted a series of surface models generated at different resolutions based upon depth ranges that allowed the highest resolution possible. AHB generated surface models at 1m resolution and combined the surfaces at 1m resolution.

BASE Editor processing included the generation of the combined surface model, creation of contours, and extraction of sounding data sets at survey. The combined resolution surface model was generalized to survey scale 1:5000, with default radius of 50m and user-chosen resolution of 5m. Selected soundings were extracted from the full density multibeam data at 5mm @ 1:5,000. Contours were created using standard NOAA depth curves with rounding at a meter-to-(foot plus 0.75).

Selected soundings were chosen using the CARIS HOM "Sounding Suppression" tool set to "Strong" (0, 0.5, 2.5). Soundings were truncated to millimeter precision during HOM processing and exported to the metric S-57 exchange file with default

CARIS environmental value of (-1,-1,T) Following export to the metric S-57 exchange set, the CARIS environment value was revised to the NOAA standard rounding regime of (0,0,N). The metric S-57 exchange set was converted to whole feet using the CARIS "Convert S-57 Base Cell Units" utility. Contours and depth areas were converted from meter-to-(foot plus 0.75) depth curves into metric equivalent of whole-foot depth contours. These depth contours and depth area objects were exported to the metric S-57 exchange set. Depth area and depth contour values were converted to chart units using the (0,0,N) rounding regime. The completed H-Cell was opened in D-Kart Inspector to check for errors in the S-57 exchange set.

Following completion of the H-Cell deliverable, the entire survey-scale sounding set was generated in CARIS HOM. Soundings, a general depth area object (0-50m) and metadata objects were exported to an S-57 exchange format file. Soundings were exported under the CARIS default rounding regime (-1,-1, T).

This survey was originally submitted to MCD in July 2006 and returned to the Atlantic Hydrographic Branch for revision in September 2006. At the time of H11277 original product generation, the tools were not the same as they are now. During this time period the Product surface did not retain the original geographic location of the designated depth within the generalized product surface model. The designated depth is the bathy data point which represents the group 2 feature. In order create an accurate navigational surface models from which all cartographic products are sources, it is important to retain the designated depths in the surface model. program did not maintain the designated depth's original surveyed location; the designated depths tended to migrate within the product surface grid. The migration distance was based upon the amount of generalization and cell resolution of the product surface. The generalized surface served as source for the depth curves within the BASE Cell file. soundings were extracted from the survey scale product, the potential for group 1 depth to lie outside the correct depth curve increase due to the fact that the curves and sounding data selections are sourced from two different resolution This does not take into account the horizontal defocusing that could occur if selected. Hopefully, the H-Cell documentation describes the Branch processing method. The group 2 feature objects do maintain the original location. When comparing the depth curves to the feature objects, one

may view the feature outside or incorrectly as compared to the generalized depth curves and depth areas. This is related to the generalized product surface compared to the actual feature location.

An extra depth contour is present in the H-Cell in position 42°36'51.35" N, 70°39'01.39" W. The object is an 18-foot contour between two depth areas with DRVAL_2 = 18 feet. This contour is 0.04mm at map scale.

A depth area with no soundings inside is located in 42°36′01.993″ N, 70°40′41.936″ W. The shape of this depth area was determined automatically by the CARIS BASE Editor contour drawing algorithm. There are no soundings located in this area in the survey-scale sounding set with sounding selection density of 5mm at survey scale (1:5000).

This revised report supersedes all prior versions of this report. Chart compilation data will be forwarded to Marine Chart Division, Silver Spring, Maryland.

CROSS LINES

The field unit acquired the required amount of cross line data for quality assurances and system assessment as specified in the NOS Hydrographic Surveys Specifications and Deliverables (NOS HHSSD), 2003 Edition, but did not perform the traditional CARIS Checkline QC. In lieu of the Checkline QC, visual inspection of the Standard Deviation layer in BASE Surface was performed. This method does not technically meet the conventional standards set forth in the NOS HHSSD. However, an OCS and Hydrographic Surveys Division (HSD) memorandum from Captain Parsons, dated 12/11/03, has given approval that NOAA field units vary from the established procedures and documentation with respect to CARIS HIPS 5.4 BASE Surface processing methods.

The surfaces were inspected for systematic artifacts and errors by the Atlantic Hydrographic Branch personnel and found to be satisfactory.

C. HORIZONTAL CONTROL

Horizontal control used for this survey during data

acquisition is based upon the North American Datum of 1983 (NAD 83), UTM projection zone 19. Office ENC processing of this survey required translating the datum to meet S-57 ENC requirements. During CARIS HOM processing the horizontal geodetic datum was translated to Latitude and Longitude (LLDG) World Geodetic System-84 (WGS-84) prior to exporting the HOM file to the S-57 ENC format. The S-57 ENC format serves as the exchange file submitted to Marine Chart Division.

D. CHART COMPARISON

13281 (17th Edition, May /00)
Corrected through NM May /00

Corrected through LNM May /00

13279 (31th Edition, Aug. /04)

Corrected through NM Aug. 7/04 Corrected through LNM Jul. 27/04

13274 (26th Edition, Apr. /05)

Corrected through NM Apr. 23/05 Corrected through LNM Apr. 19/05

13267 (30th Edition, Dec. /01)

Corrected through NM Dec. 25/04 Corrected through LNM Dec. 7/04

13278 (25th Edition, Dec. /00)

Corrected through NM Jun. 11/05 Corrected through LNM May 31/05

13260 (38th Edition, Apr. /02)

Corrected through NM Jun. 7/03 Corrected through LNM May 20/03

ENC Comparison

US4MA04M

The charted hydrography originates with prior surveys and requires no further consideration. The hydrographer makes adequate chart comparisons in section D.1. of the Descriptive Report. Attention is drawn to the following features:

1) An <u>11 ft sounding</u>, in Latitude 42° 36' 35.353" N, Longitude 70° 39' 45.027" W, was located during office

processing. This sounding is located in an area with a charted depth of 15 ft. It is recommended that present survey soundings be charted in this area.

- 2) Evidence of <u>shoaling</u> with a least depth of 8 ft in Latitude 42°36'38.611" N, Longitude 70°39'42.938" W, was located by the office processor. It is recommended that present survey soundings be charted.
- 3) A <u>sounding</u> with a least depth of <u>13 ft</u>, in Latitude 42°36'33.541" N, Longitude 70°39'36.242" W, was located by the office processor. This sounding is located in the Gloucester Inner Harbor in an area with a tabulated depth of 13 1/2 ft. It is recommended that present survey soundings be charted. This information was submitted to the Northeast Region Navigation Manager on July 18th, 2005.
- 4) A small (bares 5m high) uncharted wooden platform was visually observed in position 42°36'30.360" N, 70°40'01.216" W. Any uses of this platform are unknown. The office processor recommends charting a platform in the above location.



All other significant features, including several features identified by the office processor, are described in Appendix I of the Descriptive Report.

The federally maintained Gloucester Harbor entrance channel is not included in the H-Cell deliverable. No depth area objects, contour objects, or sounding feature objects are included in the H-Cell within the confined limits of the federally maintained channel. The position of the federally maintained channel was digitized from the raster nautical chart. The complete survey-scale sounding set, including

soundings in the federally controlled channel, is submitted. Except as noted in Appendix I or in the "Dangers to Navigation" section of this report, present survey soundings are equal to or deeper than the controlling depth of the federally maintained channel.

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

Charted Features

1) A visible rock with a drying height of 7' is currently charted in a slip at location 42°36' 35.90" N, 070° 39' 32.05" W. The field party did not observe a rock in the slip itself, but observed a large rock located directly under the adjacent charted pier. The office processor recommends deleting the charted rock at the above position.



2) A group of charted submerged piles located at 42°36'30.354" N, 70°40'00.071" W was not addressed by the field party. Bathymetry and imagery data acquired by the field is insufficient to prove or disprove these piles. Recommend retaining these piles as charted.

Gloucester Inner Harbor/Dangers to Navigation

Dangers to Navigation (DtoNs) were submitted by the field party on various dates during 2003-2004. No documentation, other than listing the dates of submission, was provided in the Descriptive Report for the submission of dangers to navigation. A follow-up check on DtoN submission showed that one out of 28 DtoNs had been received by the Marine Charting

Division (MCD). The DtoN report was regenerated by the office processor and submitted to MCD on May 15, 2005. The original field submission was located by the office processor on May 19 2005 and forwarded to MCD that day.

As of submission of this report, all dangers to navigation submitted to MCD by this office are presently shown on the continual maintenance raster updated September 15th, 2006. It is recommended that these features and soundings be retained as charted.

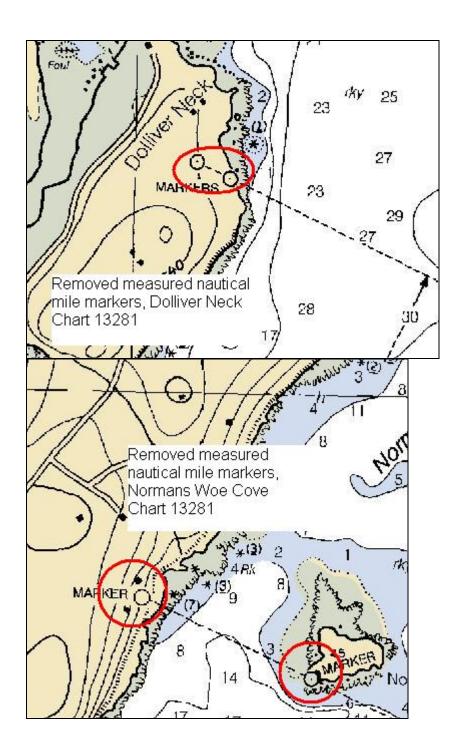
Dangers to Navigation 10 and 11 of the field submission are 17-foot soundings located in a channel whose charted controlling depth is 16 1/2 feet. Defer final recommendations and charting disposition to Marine Chart Division, Update Services Branch.

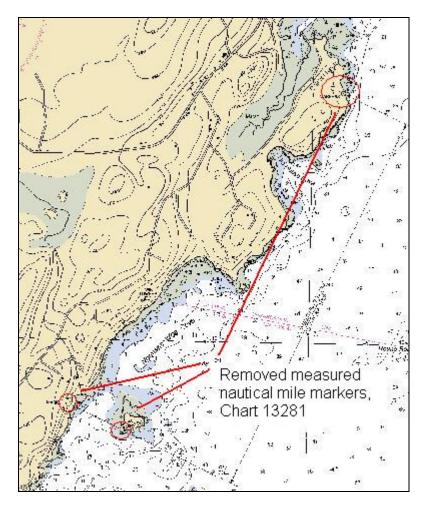
Four Dangers to Navigation were identified by the office processor during QC and compilation. These DtoNs are described in the above section. These DtoNs were submitted on July 15th, 2005.

ADDITIONAL RESULTS

Aids to Navigation

As per the acquisition logs, the charted range marks for a measured nautical mile starting at Norman's Woe Cove and ending at Dolliver Neck have been removed. This observation was made on Julian day 2003-253. Defer final charting disposition to MCD, Nautical Data Branch, Source Information Unit. These measured nautical mile markers are outside the survey limits and are not shown in the H-Cell.





Shoreline

No digitized outline of the pier or detached positions were provided to the processing branch for BASE Cell charting disposition of pier. Recommend final charting disposition to MCD Nautical Data Branch Source Information Unit and Remote Sensing Division's most recent photogrammetry.

Submarine Cables and Pipelines

A charted pipeline is located in the center of Gloucester Harbor. The actual position of this pipeline is located west of the charted "pipeline area" from approximately 0.5 nautical miles north of Dog Bar to the termination of the pipeline on shore. No bathymetry or imagery features were selected for this pipeline. The surveyed position of this pipeline was digitized in CARIS HOM ENC 3.3 based on termination points recorded in the Descriptive Report. Defer to MCD Nautical Data Branch, Source Information Unit for recommendations. South of charted Dog Bar, the surveyed position of the

pipeline is within 5m of the charted position of the pipeline. The office processor recommends retaining the pipeline as charted for its length south of Dog Bar.

COMPARISON WITH PRIOR SURVEYS

A comparison with prior surveys was not done during office processing in accordance with section 4. of the memorandum titled "Changes to Hydrographic Survey Processing", dated May 24, 1995.

ADEQUACY OF SURVEY

The present survey is adequate to supersede the charted hydrography within the common area. This is an adequate navigable area survey. No additional field work was recommended by the hydrographer by Branch personnel.

MISCELLANEOUS

ENC products were created by Atlantic Hydrographic Branch personnel, Norfolk, Virginia, using CARIS HOM v3.3. ENC products and electronic data will be forwarded to Marine Chart Division, Silver Spring, Maryland.

APPROVAL SHEET H11277

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

Date: 12/18/2006

Helen Stewart

Physical Scientist,

Atlantic Hydrographic Branch

All final products have undergone a comprehensive review as per the Atlantic Hydrographic Branch Processing Manual and are verified to be accurate and complete except where noted in the Evaluation Report.

Castle Eugene Parker

Date: 12/18/06

Physical Scientist,

Atlantic Hydrographic Branch

I have reviewed the Base Cell files, accompanying data, and reports. This survey and accompanying Marine Chart Division deliverables meet or exceed NOS requirements and standards for products in support of nautical charting except where noted in the Evaluation Report.

Approved:

Date: 12/18/06

Commander P. Tod Schattgen, NOAA

Chief, Atlantic Hydrographic Branch