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: H11601

LOCALITY

State: New York

General Locality: New York Harbor

Sub-locality: Lower Bay to Rockaway Inlet

2006

CHIEF OF PARTY
CDR Raymond C. Slagle, NOAA

LIBRARY & ARCHIVES

DATE

OPR-B310-TJ-06 H11601 February 1st, 2007

U.S. DEPARTMENT OF COMMERCE NOAA FORM 77-28 (11-72)

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

REGISTRY NUMBER:

HYDROGRAPHIC TITLE SHEET

H11601

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:

General Locality: New York Harbor and Approaches, NY

Sub-Locality: Lower Bay to Rockaway Inlet

Scale: 1:20,000 Date of Survey: 09/05/06 to 10/22/06

Instructions Dated: 07/06/06 Project Number: OPR-B310-TJ-06

Changes: N/A

Vessel: NOAA Ship THOMAS JEFFERSON, S-222

CDR Raymond C. Slagle, NOAA Chief of Party:

Surveyed by: **THOMAS JEFFERSON Personnel**

Reson SeaBat 8125 multibeam echosounder Soundings by:

Reson SeaBat 8101 multibeam echosounder

Graphic record checked by: N/A

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

Verification by: **Atlantic Hydrographic Branch**

Soundings in: **Feet Meters** at MLLW Bold, Red, Italic, notes were made during office processing.

Remarks:

1) All Times are UTC.

2) This is a Navigable Area Hydrographic Survey.

3) Projection is UTM Zone 18.

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DESCRIPTIVE REPORT

to accompany
HYDROGRAPHIC SURVEY H11601

Scale of Survey: 1:20, 000 Year of Survey: 2006 NOAA Ship THOMAS JEFFERSON (S222) CDR Raymond C. Slagle, Commanding

A. AREA SURVEYED

This hydrographic survey was conducted in accordance with Hydrographic Survey Letter Instructions for project OPR-B310-TJ-06, New York Harbor and Approaches, NY. The original instructions are dated July 06, 2006.

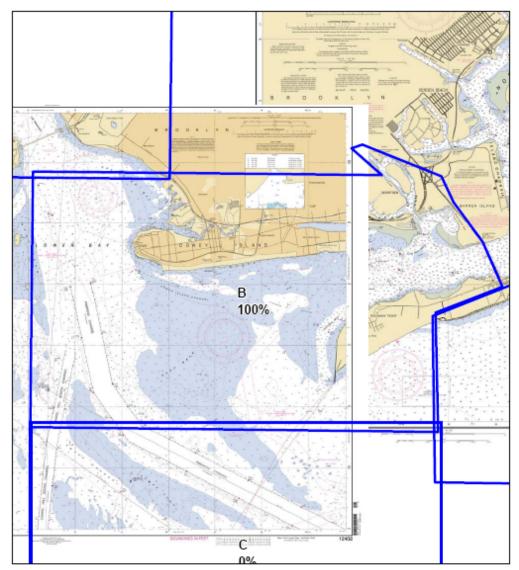
This Descriptive Report pertains to sheet "B" of project OPR-B310-TJ-06, which includes New York Harbor and Approaches. The assigned registry number for this sheet is H11601, as prescribed in the Letter Instructions.

The purpose of the project is to provide accurate depths and object detection in the New York Harbor and its approaches to support safe and efficient marine transportation in the region. A majority of the charted depths are pre-1982 and parts of the project area have not been surveyed since 1927. Containerized cargo volumes in the Port of New York and New Jersey rose 7.6% in 2005 to a record high; 5,322 ships called on the Port in 2005. The dollar value of the cargo moving through the port on those ships exceeded \$132 billion in 2005. This project will cover approximately 48 nm² of critical survey area as designated in NOAA Hydrographic Survey Priorities, 2004 edition.

Statistics

- Lineal nautical miles of single beam only sounding lines = 0
- Lineal nautical miles of multibeam only sounding lines = 1461.32
- Lineal nautical miles of side scan sonar only lines = 479.63
- Lineal nautical miles of any combination of the above techniques N/A
- Lineal nautical miles of crosslines = **72.16**
- Lineal nautical miles of developments = **2.40**
- Lineal nautical miles of shoreline/nearshore investigation = **none**
- Specific dates of data acquisition September 5-14, 18-26, 27-29 and October 4-6, 8-13, 15-22, and 2006.
- Number of bottom samples collected = **none**

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



Project	Sheet_Letter	H_num	HQ_Ect_SNM	CumiPeroCompPrev	CumiPeroCompCui	8NM_CompCurN	CumSNMoom
B310	В	11601	16	60	100	8	17
B310	С		0	0	0	0	0
B310	D		16	0	0	0	0
B310	A	11600	14	0	0	0	0

Project	Month	LNM_VBE	LNM_MB	LNM_SSS	SV_Casts	Bottom_Samp	AWOIS_items	Tide_Quage_Inst	DAS	DTime_equip_H	DTime_Weather_	D_Time_other_h
B310	AUG	0.00	732.90	294.60	90.00	0.00	0.00	0.00	20.00	94.00	0.00	0.00
B310	SEPT	0.00	746.10	476.10	77.00	0.00	26.00	0.00	24.00	14.00	0.00	16.00
B310	ост	0.00	870.80	0.00	88.00	0.00	20.00	0.00	22.00	31.00	38.00	0.00

Progress Sketch OPR-B310-TJ-06 October, 2006

B. DATA ACQUISITION AND PROCESSING See also the Evaluation Report.

EQUIPMENT

Data were acquired by NOAA Ship THOMAS JEFFERSON Hydrographic Survey Launches 3101 and 3102. Launches 3101 and 3102 are 9.5 meter aluminum vessels and have transducer drafts of 0.8 meters.

Launch 3101 acquired multibeam echosounder (MBES) data. A Reson SeaBat 8125 multibeam echosounder system was used for MBES hydrography. All positioning and attitude data were acquired with an Applanix POS/MV 320 (version 4) GPS-aided inertial navigation system.

Launch 3102 acquired MBES as well as side scan sonar (SSS) data. A Reson SeaBat 8101 multibeam echosounder system was used for MBES hydrography. A hull-mounted Klein 5000 side scan sonar system was used for SSS hydrography. All positioning and attitude data were acquired with an Applanix POS/MV 320 (version 3) GPS-aided inertial navigation system.

No unusual system configurations were used during this survey. Refer to the Data Acquisition and Processing Report (DAPR)*for detailed equipment and vessel configuration information (dated 1 September 2006).

QUALITY CONTROL

Side Scan Sonar Quality Control

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

Shallow Water Multibeam Quality Control

There were no faults with the MBES system which affected data integrity, with one exception. The Reson 8125 data exhibited a periodic dynamic timing latency, where certain periods of data displayed a roll-timing artifact. This timing latency was examined / identified in Caris HIPS 6.0 and corrected for in the Caris hvf file for each instance in which it occurred. Further specific discussion of this latency effect and the executed correction may be found in the 2006 DAPR.* Refer to this project's DAPR* for detailed discussion of SWMB system calibrations, data acquisition, and data processing.

*Data filed with original records.

Crosslines

A total of 72.16 linear nautical miles (LNM) of crosslines were run, equivalent to 5.0 % of the 1462.32 LNM of mainscheme data. Crossline and mainscheme sounding data were analyzed in a CARIS/HIPS workfile (see project DAPR). *Crossline data agreed with 95% to 99.6 % of the mainscheme data, based on the International Hydrographic Organization (IHO) statistical standards used in the CARIS Quality Control Report (see Separate II). *

Junctions See also the Evaluation Report.

This survey junctions with two other recent area surveys. H11400 (conducted by Navigation Response Team 5 in 2006) covers an inshore area near the northeast corner of the Verrazano-Narrows Bridge. Bathymetry data between H11400 and this survey differ by not more than two feet.

Survey H11600 was conducted in conjunction with this survey by NOAA Ship THOMAS JEFFERSON launches. H11600 overlaps this survey in the Northwest corner, and the difference in soundings between the two surveys is not more than one foot.

CORRECTIONS TO ECHO SOUNDING

All methods or instruments used were as described in the project DAPR. * All sound velocity casts were inserted into the Pydro PSS.

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^{*}Data filed with original records.

DATA PROCESSING

Thirty-nine CUBE surfaces cover the entire survey area. Each surface has a resolution of 1-meter. Additionally, two combined surfaces were created covering the entire area with resolutions of 2- and 5-meters.

Fieldsheet	Resolution	Fieldsheet	Resolution
H11601_1	1 meter	H11601_22	1 meter
H11601_2	1 meter	H11601_23	1 meter
H11601_3	1 meter	H11601_24	1 meter
H11601_4	1 meter	H11601_25	1 meter
H11601_5	1 meter	H11601_26	1 meter
H11601_6	1 meter	H11601_27	1 meter
H11601_7	1 meter	H11601_28	1 meter
H11601_8	1 meter	H11601_29	1 meter
H11601_9	1 meter	H11601_30	1 meter
H11601_10	1 meter	H11601_31	1 meter
H11601_11	1 meter	H11601_32	1 meter
H11601_12	1 meter	H11601_33	1 meter
H11601_13	1 meter	H11601_34	1 meter
H11601_14	1 meter	H11601_35	1 meter
H11601_15	1 meter	H11601_36	1 meter
H11601_16	1 meter	H11601_37	1 meter
H11601_17	1 meter	H11601_38	1 meter
H11601_18	1 meter	H11601_39	1 meter
H11601_19	1 meter	H11601_combined_all	2 meter
H11601_20	1 meter	TTTTOOT_COMBINEC_All	5 meter
H11601_21	1 meter	H11601_contacts_all	
H11601_100SSS	1 meter	H11601_200SSS	1 meter

The following values were used for computing TPE.

Vessel	Tide V	alues	Sound Speed Values			
	Measured	Zoning	Measured	Surface		
3101	1 0 0.18		0.05	0.3		
3102	0	0.18	0.05	0		

C. VERTICAL AND HORIZONTAL CONTROL

VERTICAL CONTROL

The operating National Water Level Observation Network (NWLON) stations at The Battery, NY (851-8750) and Sandy Hook, NJ (853-1680) will serve as datum control for the survey area.

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

STATION	CORRECTOR (min)	RATIO	REFERENCE
NY1	-6	x1.01	853-1680
NY2	-6	x1.04	853-1680
NY3	-30	x1.04	851-8750
SA1	-18	x1.00	853-1680

A request for Approved Tides letter was sent to N/OPS1 on October 23, 2006 (Appendix IV). Verified tides from the N/OPS1 CO-OPS website were downloaded on October 20, 2006, and applied to all sounding data. Final zoning was received from CO-OPS on February 20, 2007. Final zoning was applied by the field unit. *Approved tides were applied during field processing*.

HORIZONTAL CONTROL See also the Evaluation Report.

The horizontal datum used for this survey is the North American Datum of 1983 (NAD 83), projected using UTM zone 18.

Sounding positional control was determined using the Global Positioning System (GPS) corrected by U.S. Coast Guard differential GPS (DGPS) beacon stations. The primary and only DGPS beacon used for this survey was Sandy Hook, NJ. No horizontal control stations were required for this survey.

Horizontal dilution of precision (HDOP) was monitored daily on both launches. That value did not exceed 2.5, and adequate satellite coverage was maintained throughout the survey period.

D. RESULTS AND RECOMMENDATIONS See also the Evaluation Report.

CHART COMPARISON

There are six raster charts and two Electronic Navigation Charts (ENC's) affected by this survey:

12402, 10th edition, May 2nd, 2006, scale 1:15,000

OPR-B310-TJ-06 H11601 February 1st, 2007

12300, 45th edition, March 26th, 2005, scale 1:400,000 **12350**, 59th edition, March 11th, 2006, scale 1:20,000 **12326**, 50th edition, May 13th, 2006, scale 1:80,000 **12327**, 98th edition, September 5th, 2005 scale 1:40,000 **12334**, 67th edition, April 3rd, 2004, scale: 1:10,000 and, **US5NY19M**, 6th edition, October 16th, 2006 **US5NY50M**, 1st edition, November 20th, 2006.

General Agreement with Charted soundings

Most depths acquired within the Northwest region of H11601 agree within 1-4 feet of charted depths. One significant area of shoaling in this region is located approximately 300 meters southeast of Swinburne Island. Current soundings show depths 7 feet shoaler than charted. *Concur*

Most depths acquired within the Southwest region of the survey agree within one to two feet of charted soundings with the exception of one reported Danger to Navigation located 1,000 meters north of West Bank Light. *Concur*

See Appendix II Features Report Item #3.6 for final charting recommendation of DTON.

Most depths acquired within the Coney Island Channel agree within 1-3 feet of charted soundings with a few exceptions. Significant shoaling exists around Buoy "3" with differences of 9-12 feet. *Concur* There is also significant shoaling north and west of Buoy "9" extending approximately 400 meters outward from the buoy, correlating with charted "Shoaling rep (1990)". This area differs from charted soundings by 2-9 feet. *Concur* It is requested by the hydrographer that an Aid to Navigation (Buoy "11") be placed approximately 400 meters northeast of Buoy "9" to mark a safe passage between Coney Island Channel and Rockaway Inlet Channel. *Concur with clarification – Area will be covered by present survey depths*.

Most depths acquired within the East Bank region agree within 4-5 feet of charted soundings. In the center of this region there is a deep area with measured sounding 15-30 feet deeper than charted. This area appears to be man-made. *Concur*

Most depths acquired within the Fourteen Foot Channel do not agree with charted soundings. Within the eastern edge of the channel there is a deep area that appears to be man-made with depths 10-25 feet deeper than charted soundings. The northern edge of the channel has depths 4-8 feet shoaler than charted soundings. Within the remainder of this channel depths are 1 to 4 feet deeper than charted. *Concur*

The Southeast region contains multiple mounds that generally agree with charted soundings within 1-3 feet. Within the eastern quarter of this region, there is a shifting sandbar that is indicated in the Coast Pilot. This sandbar has shifted approximately 100 meters to the west. *Concur*

Most depths within the Rockaway Inlet Channel do not agree with charted depths. Differences of up to 9 feet exist. However, throughout the majority of the channel these differences are not navigationally significant as they are deeper than the entrance to the channel would allow. The most significant difference exists at the seaward entrance to the channel. Significant shoaling exists at the western edge of the entrance extending approximately 50 meters outward from Buoy "5". This shoaling differs from the chart by 4-6 feet. There is also significant shoaling at the eastern edge of the channel extending approximately 100 meters west of Rockaway Inlet Light with differences from charted soundings by 3-7 feet. *Concur with clarification – Area will be covered by present survey depths*.

Within the Northeast region of H11601 there are several significant areas of shoaling. On the western edge of the Sheepshead Bay Channel there is shoaling to 3 feet between Buoys "7" and "7A". Between Buoys "7A" and "6" there is significant shoaling to 11 feet. In both instances, the chart differs between 2-5 feet. At the entrance to this channel the chart indicates a least depth of 14 feet. Current soundings indicate a maximum depth of 12 feet in this area. There is also significant shoaling in the area of the Plumb Beach Channel. In the immediate vicinity of Buoy "7" there is significant shoaling with depths differing between charted soundings by 5-11 feet. Between Buoys "9" and "10" current soundings indicate a maximum depth 2 feet (almost 20%) shoaler than charted. There is one significant DTON approximately 400 meters south-southeast of Buoy "10" with depths 21 feet shoaler than charted. *Concur*

AWOIS Items and Significant Contacts

There are 33 AWOIS items within the survey limits. Twenty-four of these items were fully investigated with 200% SSS and 100% MBES. Four of the items were partially investigated. Five items were not investigated as they lay in water shoaler than that surveyed. See Appendix II for feature reports. *Concur*

Dangers to Navigation

A total of 46 Dangers to Navigation (DTONs) were reported by the hydrographer to N/CS26 (MCD). For complete DTON reports (sent September 9, 14, October 15, November 9, December 7, December 8, 2006 and January 31, 2007), see Appendix I. *Concur with clarification - See Appendix II, Features Report for final charting recommendations of DTON*.

Charted Features

All charted features are addressed in the item Investigations and Dangers to Navigation sections (Appendix I and II). *Concur with clarification - See Appendix II, Features Report for final charting recommendations.*

ADDITIONAL RESULTS

Aids to Navigation and Other Detached Positions

No Aids to Navigation were positioned, however there were discrepancies in the position of two buoys (G "7" and G "5" of the Rockaway Inlet Channel). No DTON reports were submitted regarding these buoys as the Coast Guard was notified and has or will reposition the buoys to their correct positions. See Appendix V for related correspondence with USCG Sector New York. *Concur*

Bridges and Overhead Cables

The only bridge within the survey limits is the Gil Hodges Memorial Lift Bridge connecting Rockaway Point to Barren Island. Imagery and Bathymetry acquired on and around the bridge supports show them to be properly charted. *Concur*

Ferry Routes

There are no ferry terminals within the survey limits; however, several ferries transit through the survey area. Ferries transit between Manhattan and several points along the northern New Jersey Coast. A typical route for a ferry leaving Manhattan will pass underneath the Verrazano-Narrows Bridge southbound. The ferries typically transit between the Chapel Hill North Channel and Ambrose Channel, avoiding the traffic separation schemes. No Ferry routes are charted. *Concur*

Submarine Cables and Pipelines

There was one charted and one uncharted pipeline surveyed during this project. The charted sewer line extending from Sheepshead Bay into Rockaway Inlet from 40°34'58.0" N., 073°55'52.7" W. to 40°33'59.1" N., 073°55'49.3" W is not correctly positioned.* South of Buoy "6" of the Sheepshead Bay Channel, the sewer line turns to the southwest approximately 30 meters before it is charted to turn. The surveyed portion of the sewer line currently extends from 40°34'30.3" N., 073°55'43.4" W. to 40°34'00.8" N., 073°55'50.4" W. North of Buoy "6" the sewer line could not be detected with SSS or MBES. *Concur with clarification – Sewerline not adequately surveyed. No change in charting is recommended.

An uncharted pipeline extends south out of Coney Island from 40°34'17.6" N., 073°58'23.2" W. to 40°34'11.5" N., 073°58'21.8" W. Bathymetric data was not collected over the entire length of the pipeline since it was detected near the end of the allotted project period. *Concur with clarification – Pipeline not adequately surveyed. No change in charting is recommended.

E. APPROVAL SHEET

OPR-B310-TJ-06 New York Harbor and Approaches New York

Lower Bay to Rockaway Inlet Survey Registry No. H11601

Field operations for this basic hydrographic survey were conducted under my daily supervision with frequent checks of progress and adequacy. All field sheets, this Descriptive Report, and all accompanying records and data are approved.

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

Also submitted in association with this descriptive report have been the following reports:

- 2006 Hydrographic Systems Readiness Review report (submitted 09 May 2006)
- OPR-B310-TJ-06 Horizontal and Vertical Control Report (submitted 04 December 2006)
- 2006 Data Acquisition and Processing Report (submitted 06 October 2006)

Respectfully,

Submitted:	
Uther L. Gardner, Jr., NOAA Chief Survey Technician	ENS William G. Winner, NOAA Junior Officer
Approved and Forwarded:	
LT Chris van Westendorp, NOAA Field Operations Officer	CDR Raymond C. Slagle, NOAA Commanding Officer

APPENDIX I

Dangers to Navigation (DTONs)

Registry Number: H11601 **State:** New York

Locality: New York Harbor

Sub-locality: Lower Bay to Rockaway Inlet

Project Number: OPR-B310-TJ-06 **Survey Date:** September 5, 2006

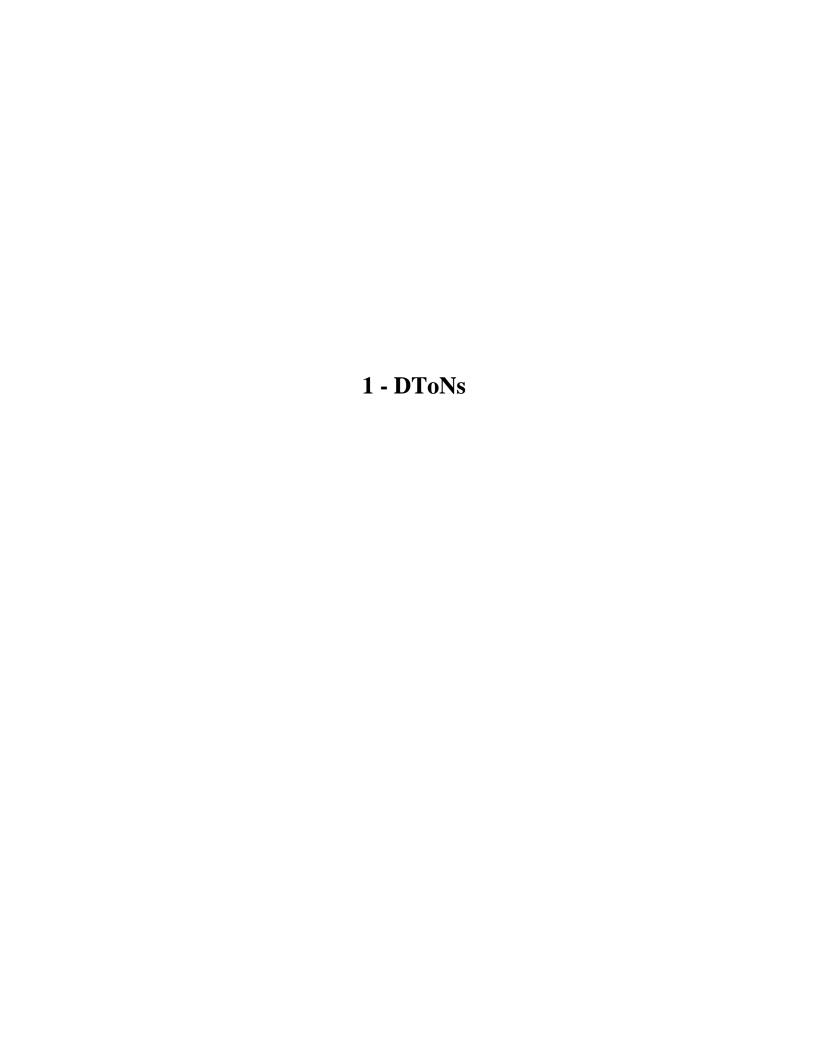
Charts Affected

Number	Version	Date	Scale
12402	9th Ed.	10/01/2004	1:15000
12350	59th Ed.	03/01/2006	1:20000
12327	98th Ed.	09/01/2005	1:40000
12326	49th Ed.	06/01/2003	1:80000
12300	45th Ed.	03/01/2005	1:400000
13006	32nd Ed.	02/01/2005	1:675000
5161	13th Ed.	10/01/2003	1:1058400
13003	48th Ed.	10/01/2004	1:1200000
14500	27th Ed.	10/01/2002	1:1500000

Features

No.	Name	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	DTON1 Wreck 7642/170	Wreck	6.13 m	40° 34' 34.632" N	074° 02' 34.482" W	
1.2	DTON2 Rock 2316/18	Rock	7.92 m	40° 35' 02.320" N	074° 02' 35.697" W	
1.3	DTON2 Rock 1449/238	Rock	7.36 m	40° 34' 36.800" N	074° 02' 26.084" W	
1.4	DTON2 Rock 4/236	Rock	8.30 m	40° 34' 48.798" N	074° 02' 24.393" W	
1.5	DTON2 Rock 3874/80	Rock	8.67 m	40° 35' 14.827" N	074° 02' 32.598" W	
1.6	DTON2 Obstn 2113/182	Obstruction	6.90 m	40° 34' 55.815" N	074° 02' 36.460" W	
1.7	DTON2 Rock 5580/223	Rock	7.68 m	40° 34' 04.571" N	074° 02' 19.999" W	
1.8	DTON2 Rock 6814/234	Rock	6.23 m	40° 34' 50.272" N	074° 02' 39.211" W	
1.9	DTON2 Rock 218/180	Rock	11.72 m	40° 34' 43.713" N	074° 01' 43.029" W	
1.10	DTON2 Rock 2215/48	Rock	7.03 m	40° 34' 20.565" N	074° 01' 20.781" W	

1.11	DTON2 Obstn 2846/183	Obstruction	4.80 m	40° 33' 46.787" N	074° 00' 44.913" W	
1.12	DTON2 Rock 867/236	Rock	5.88 m	40° 34' 00.944" N	074° 00' 42.594" W	
1.13	DTON2 Sndg 1335/49	Shoal	6.21 m	40° 33' 56.836" N	074° 00' 51.921" W	
1.14	DTON6 SNDG 30/2	Shoal	1.79 m	40° 33' 50.701" N	073° 58' 34.347" W	
1.15	DTON6 Obstn 800/150	Obstruction	8.48 m	40° 33' 37.298" N	074° 02' 09.101" W	
1.16	DTON4 Obstn 914/53	Obstruction	2.83 m	40° 34' 10.258" N	073° 59' 51.369" W	
1.17	DTON3 Rock 2075/240	Rock	6.89 m	40° 31' 56.963" N	074° 02' 28.293" W	
1.18	DTON3 Wreck 2418/4	Wreck	8.27 m	40° 32' 03.957" N	074° 02' 25.641" W	
1.19	DTON3 Wreck 1490/44	Wreck	8.31 m	40° 31' 54.980" N	074° 02' 23.573" W	
1.20	DTON8 Obstruction 6866/226	Obstruction	8.52 m	40° 31' 44.162" N	074° 02' 25.735" W	
1.21	DTON5 7861/236	Obstruction	7.24 m	40° 31' 53.790" N	074° 02' 15.768" W	
1.22	DTON4 Obstn 1752/33	Obstruction	7.22 m	40° 33' 45.428" N	074° 02' 20.311" W	
1.23	DTON4 Obstn 1872/148	Obstruction	4.16 m	40° 33' 03.156" N	074° 02' 29.538" W	
1.24	DTON4 Obstn 143/239	Obstruction	7.29 m	40° 33' 57.717" N	074° 02' 19.735" W	
1.25	DTON6 Obstn 4988/121	Obstruction	5.90 m	40° 31' 44.637" N	073° 56' 58.057" W	
1.26	DTON6 Obstn 7784/105	Obstruction	3.98 m	40° 32' 27.177" N	073° 57' 08.462" W	
1.27	DTON6 Obstn 11763/223	Obstruction	5.91 m	40° 32' 01.405" N	073° 56' 27.771" W	
1.28	DTON6 Obstn 5126/190	Obstruction	3.98 m	40° 32' 32.135" N	073° 57' 08.122" W	
1.29	DTON6 SNDG 436/240	Shoal	1.80 m	40° 34' 29.101" N	073° 55' 47.190" W	
1.30	DTON7 SNDG 1608/72	Shoal	2.56 m	40° 31' 56.790" N	073° 55' 58.116" W	
1.31	DTON7 SNDG 1338/27	Shoal	2.77 m	40° 31' 58.182" N	073° 55' 59.466" W	
1.32	DTON7 SNDG 2376/98	Shoal	2.57 m	40° 31' 53.146" N	073° 55' 53.894" W	
1.33	DTON7 SNDG 2726/96	Shoal	3.20 m	40° 31' 51.610" N	073° 55' 51.848" W	
1.34	DTON6 Obstn 1282/41	Obstruction	5.58 m	40° 34' 33.592" N	074° 02' 33.414" W	
1.35	DTON6 Obstn 3172/27	Obstruction	3.54 m	40° 34' 47.586" N	073° 55' 50.711" W	
1.36	DTON4 Sndg 5289/41	Shoal	0.66 m	40° 34' 38.172" N	073° 54' 43.874" W	
1.37	DTON4 Wreck 509/33	Wreck	2.47 m	40° 35' 08.407" N	073° 54' 13.639" W	
1.38	DTON4 Wreck 759/35	Wreck	3.11 m	40° 34' 33.376" N	073° 54' 13.450" W	
1.39	DTON6 Obstn 133/18	Obstruction	5.95 m	40° 31' 36.946" N	073° 57' 29.380" W	
1.40	DTON7 SNDG 1527/79	Shoal	2.75 m	40° 31' 54.383" N	073° 55' 56.703" W	
1.41	DTON7 SNDG 1709/67	Shoal	3.06 m	40° 32' 00.144" N	073° 56' 01.409" W	
1.42	DTON7 SNDG 4026/38	Shoal	3.50 m	40° 31' 49.731" N	073° 55' 47.825" W	
1.43	DTON7 SNDG 1211/23	Shoal	3.60 m	40° 32' 01.886" N	073° 56' 00.286" W	
1.44	DTON7 SNDG 3210/4	Shoal	3.32 m	40° 31' 50.232" N	073° 55' 43.869" W	
1.45	DTON8 Sounding 1332/188	Shoal	1.49 m	40° 34' 19.734" N	073° 54' 58.434" W	



1.1) DTON1 Wreck 7642/170

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 34′ 34.632″ N, 074° 02′ 34.482″ W

Least Depth: 6.13 m

Timestamp: 2006-249.17:28:35.446 (09/06/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-249 / 426_1721

Profile/Beam: 7642/170

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This dangerous wreck was found with 200% Klein SSS and 100% Reson 8125 MBES. Soundings were corrected to MLLW using observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-249/426_1721	7642/170	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-248/124_1749	0003	0.65	082.7	Secondary (grouped)
h11601/tj_3102_klein5000_sss200/2006-250/230_1534	0001	2.96	049.0	Secondary (grouped)
h11601/tj_3101_reson8125/2006-249/426_1721	7641/74	4.76	074.6	Secondary (grouped)

Hydrographer Recommendations

Chart a dangerous wreck with least depth of 6.13 m (20 ft).

Cartographically-Rounded Depth (Affected Charts):

20ft (12402_1, 12327_1, 12326_1) 3 ¹/₄fm (12300_1, 13006_1, 13003_1, 14500_1) 6.1m (5161_1)

S-57 Data

Geo object 1: Wreck (WRECKS)

Attributes: CATWRK - 2:dangerous wreck

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 6.134 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

See Descriptive Report, Appendix 2, Survey Features Report for final charting recommendation.

Feature Images

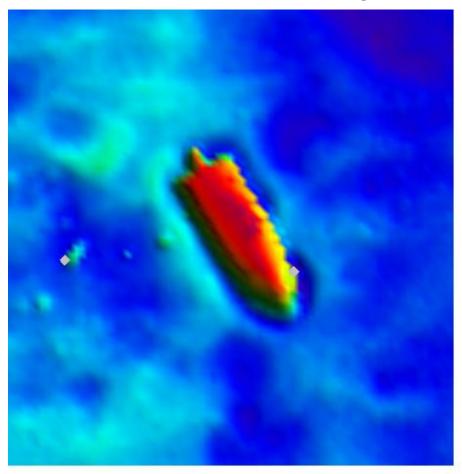


Figure 1.1.1

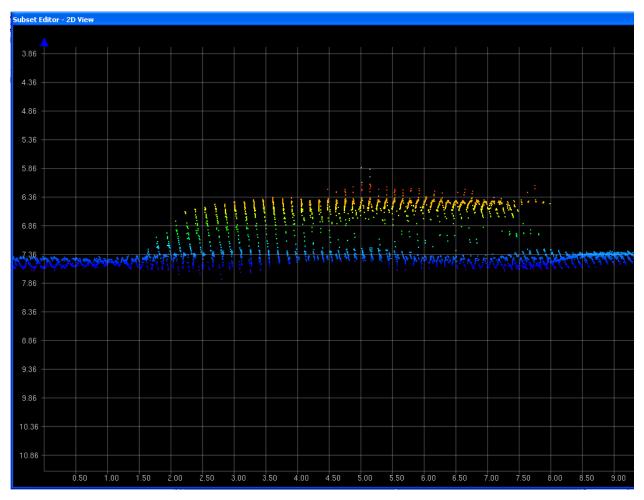


Figure 1.1.2

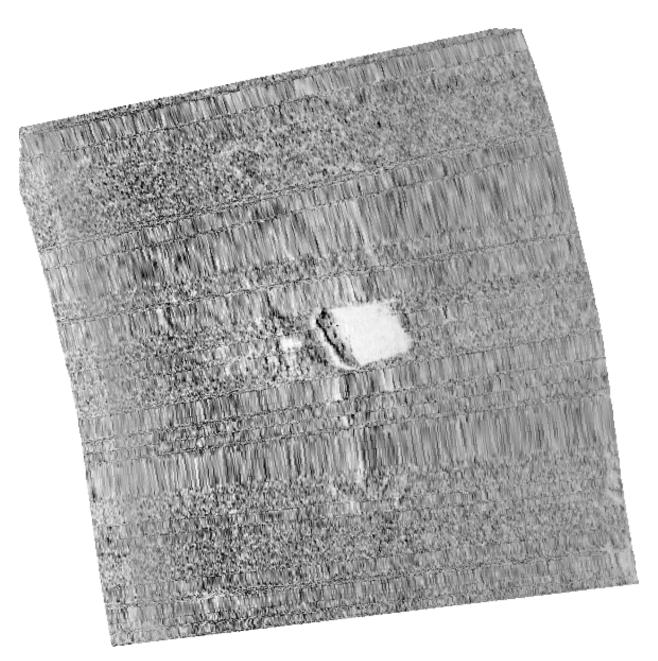


Figure 1.1.3

1.2) DTON2 Rock 2316/18

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 35′ 02.320″ N, 074° 02′ 35.697″ W

Least Depth: 7.92 m

Timestamp: 2006-248.14:12:07.719 (09/05/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-248 / 381_1408

Profile/Beam: 2316/18

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous rock was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings were corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-248/381_1408	2316/18	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-248/121_1816	0002	1.56	044.2	Secondary (grouped)
h11601/tj_3102_klein5000_sss200/2006-250/227_1507	0004	1.88	046.0	Secondary
h11601/tj_3102_klein5000_sss200/2006-250/224_1450	0002	1.98	289.2	Secondary (grouped)

Hydrographer Recommendations

Chart a dangerous rock with least depth of 7.92 meters (26 feet).

Cartographically-Rounded Depth (Affected Charts):

26ft (12402_1, 12327_1, 12326_1) 4 ½fm (12300_1, 13006_1, 13003_1, 14500_1) 7.9m (5161_1)

S-57 Data

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

Attributes: TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 7.921 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

See Descriptive Report, Appendix 2, Survey Features Report for final charting recommendation.

Feature Images

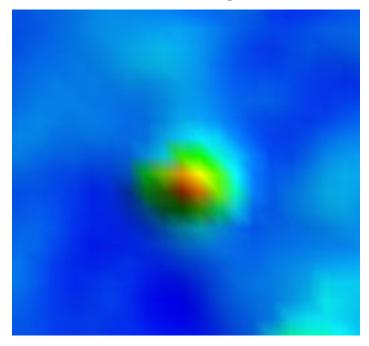


Figure 1.2.1

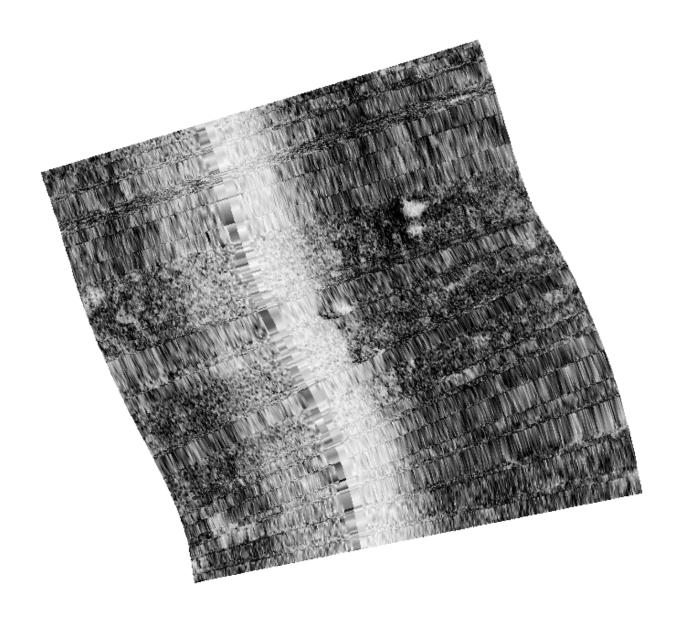


Figure 1.2.2

1.3) DTON2 Rock 1449/238

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 34′ 36.800″ N, 074° 02′ 26.084″ W

Least Depth: 7.36 m

Timestamp: 2006-248.18:51:40.363 (09/05/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-248 / 386_1849

Profile/Beam: 1449/238

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous rock was acquired with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings are corrected to MLLW using observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-248/386_1849	1449/238	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-248/121_1815	0005	0.96	327.3	Secondary
h11601/tj_3102_klein5000_sss100/2006-248/140_1832	0004	2.90	210.5	Secondary

Hydrographer Recommendations

Chart a dangerous rock with least depth 7.36 meters (24.2 feet).

Cartographically-Rounded Depth (Affected Charts):

24ft (12402_1, 12327_1, 12326_1) 4fm (12300_1, 13006_1, 13003_1, 14500_1) 7.3m (5161_1)

S-57 Data

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

Attributes: TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 7.363 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

See Descriptive Report, Appendix 2, Survey Features Report for final charting recommendation.

Feature Images

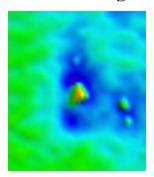


Figure 1.3.1

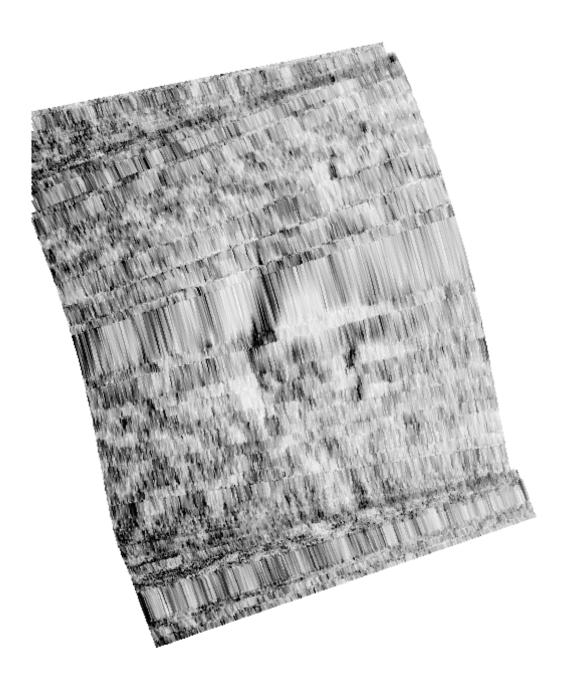


Figure 1.3.2

1.4) DTON2 Rock 4/236

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 34′ 48.798″ N, 074° 02′ 24.393″ W

Least Depth: 8.30 m

Timestamp: 2006-248.15:17:00.850 (09/05/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-248 / 393_1516

Profile/Beam: 4/236

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous rock cluster was found with 200% Klein 5000 SSS and 100% Reson 8125 Reson MBES. Soundings are corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-248/393_1516	4/236	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-248/129_1405	0003	2.52	233.2	Secondary (grouped)
h11601/tj_3102_klein5000_sss100/2006-248/140_1832	0003	5.47	254.2	Secondary (grouped)

Hydrographer Recommendations

Chart a dangerous rock with least depth 8.30 meters (27.2 feet).

Cartographically-Rounded Depth (Affected Charts):

27ft (12402_1, 12327_1, 12326_1) 4 ½fm (12300_1, 13006_1, 13003_1, 14500_1) 8.3m (5161_1)

S-57 Data

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

Attributes: TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 8.300 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

See Descriptive Report, Appendix 2, Survey Features Report for final charting recommendation.

Feature Images

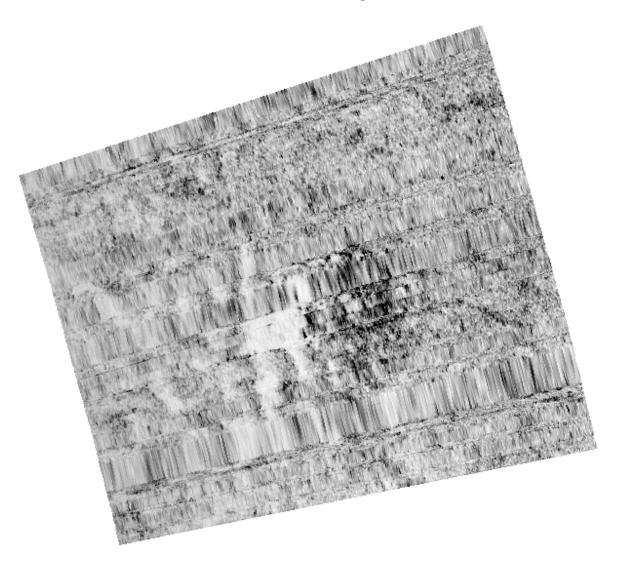


Figure 1.4.1

1.5) DTON2 Rock 3874/80

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 35′ 14.827″ N, 074° 02′ 32.598″ W

Least Depth: 8.67 m

Timestamp: 2006-248.15:21:42.226 (09/05/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-248 / 393_1516

Profile/Beam: 3874/80

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous rock cluster was found with 200% Klein 5000 SSS and 100% Reson 8125 Reson MBES. Soundings are corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-248/393_1516	3874/80	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-248/129_1405	0004	0.65	234.6	Secondary (grouped)
h11601/tj_3102_klein5000_sss100/2006-248/140_1832	0001	1.24	050.8	Secondary (grouped)
h11601/tj_3102_klein5000_sss200/2006-250/222_1421	0001	4.01	274.0	Secondary (grouped)

Hydrographer Recommendations

Chart a dangerous rock with least depth of 8.67 meters (28.4 feet).

Cartographically-Rounded Depth (Affected Charts):

28ft (12402_1, 12327_1, 12326_1) 4 ³4fm (12300_1, 13006_1, 13003_1, 14500_1) 8.6m (5161_1)

S-57 Data

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

Attributes: TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 8.674 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

See Descriptive Report, Appendix 2, Survey Features Report for final charting recommendation.

Feature Images

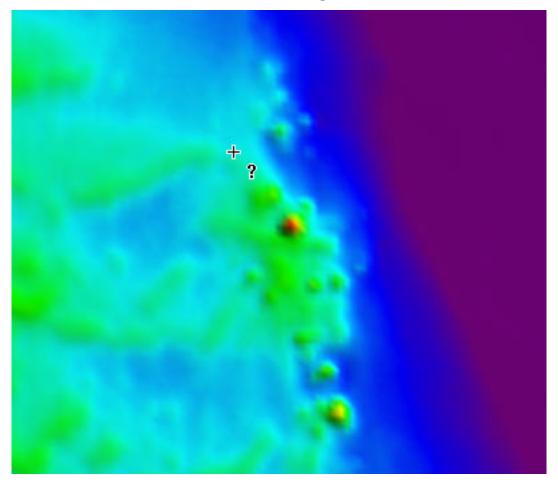


Figure 1.5.1

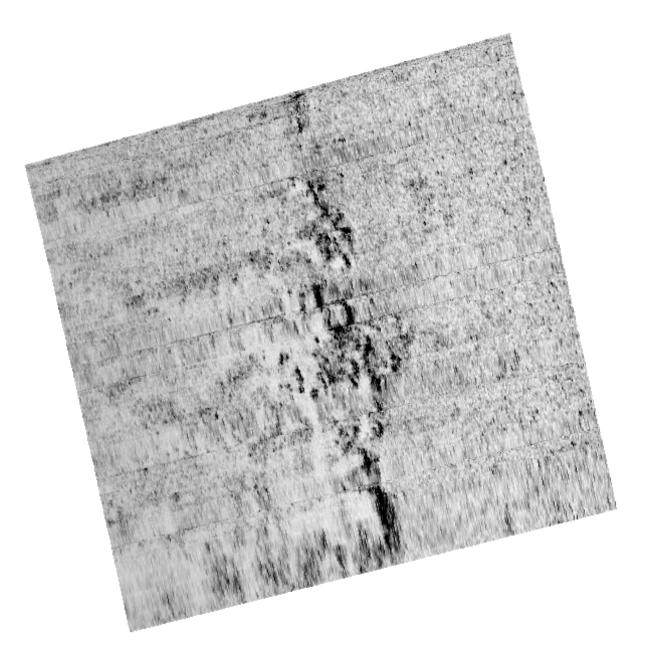


Figure 1.5.2

1.6) DTON2 Obstn 2113/182

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 34′ 55.815″ N, 074° 02′ 36.460″ W

Least Depth: 6.90 m

Timestamp: 2006-248.17:54:27.718 (09/05/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-248 / 553_1751

Profile/Beam: 2113/182

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous obstruction was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings are corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-248/553_1751	2113/182	0.00	000.0	Primary
h11601/tj_3102_klein5000_sss100/2006-248/121_1815	0006	0.54	273.3	Secondary
h11601/tj_3102_klein5000_sss200/2006-250/227_1507	0005	1.70	055.8	Secondary

Hydrographer Recommendations

Chart a dangerous obstruction with least depth 6.90 meters (22.6 feet).

Cartographically-Rounded Depth (Affected Charts):

22ft (12402_1, 12327_1, 12326_1) 3 ³/₄fm (12300_1, 13006_1, 13003_1, 14500_1) 6.9m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 6.896 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

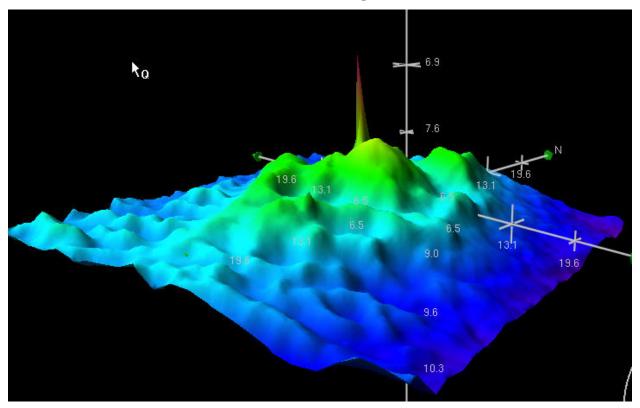


Figure 1.6.1

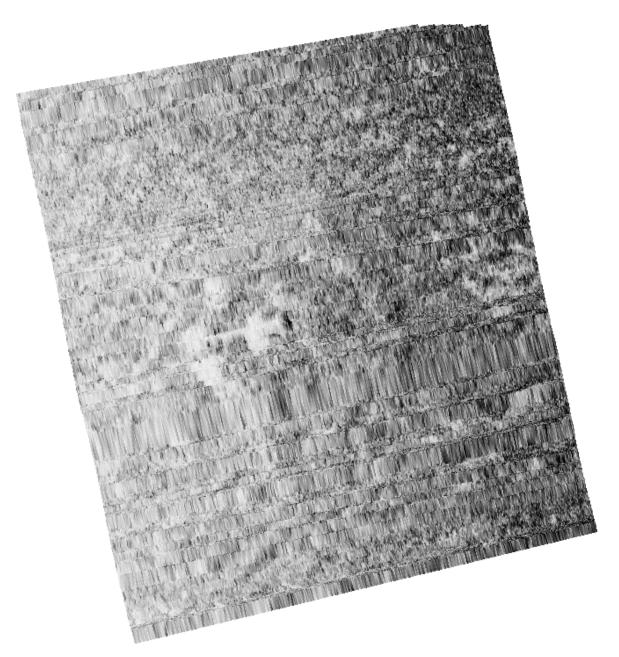


Figure 1.6.2

1.7) DTON2 Rock 5580/223

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 34′ 04.571″ N, 074° 02′ 19.999″ W

Least Depth: 7.68 m

Timestamp: 2006-249.18:09:50.520 (09/06/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-249 / 380_1803

Profile/Beam: 5580/223

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous rock was found with 200% Klein 5000 SSS and 100% Reson 8125 Reson MBES. Soundings are corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-249/380_1803	5580/223	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss200/2006-250/227_1508	0001	1.74	110.1	Secondary
h11601/tj_3102_klein5000_sss100/2006-248/121_1815	0001	2.14	203.1	Secondary

Hydrographer Recommendations

Chart a dangerous rock with least depth 7.68 meters (25.2 feet).

Cartographically-Rounded Depth (Affected Charts):

25ft (12402_1, 12327_1, 12326_1) 4 ½fm (12300_1, 13006_1, 13003_1, 14500_1) 7.7m (5161_1)

S-57 Data

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

Attributes: TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 7.678 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

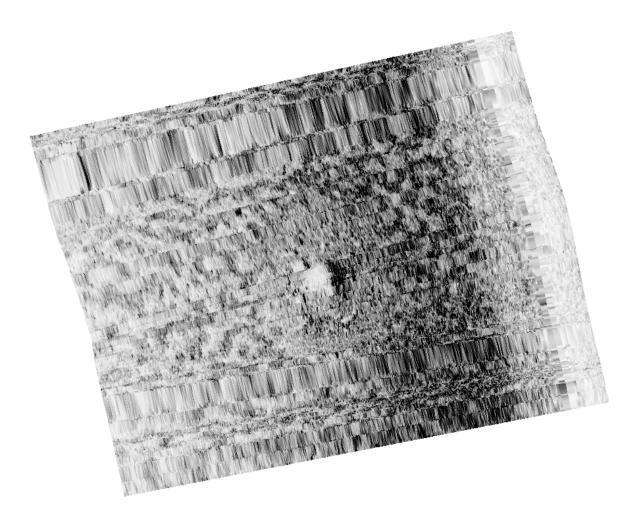


Figure 1.7.1

1.8) DTON2 Rock 6814/234

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 34′ 50.272″ N, 074° 02′ 39.211″ W

Least Depth: 6.23 m

Timestamp: 2006-249.13:35:04.457 (09/06/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-249 / 425_1327

Profile/Beam: 6814/234

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous rock was found with 200% Klein 5000 SSS and 100% Reson 8125 Reson MBES. Soundings are corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-249/425_1327	6814/234	0.00	000.0	Primary
h11601/tj_3102_klein5000_sss100/2006-248/124_1749	0002	0.99	346.8	Secondary
h11601/tj_3102_klein5000_sss200/2006-250/230_1534	0002	2.34	094.7	Secondary

Hydrographer Recommendations

Chart a dangerous rock with least depth 6.23 meters (20.4 feet).

Cartographically-Rounded Depth (Affected Charts):

20ft (12402_1, 12327_1, 12326_1) 3 ¹/₄fm (12300_1, 13006_1, 13003_1, 14500_1) 6.2m (5161_1)

S-57 Data

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

Attributes: TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 6.228 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

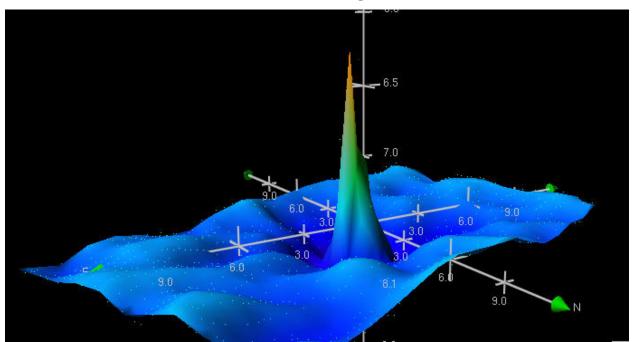


Figure 1.8.1

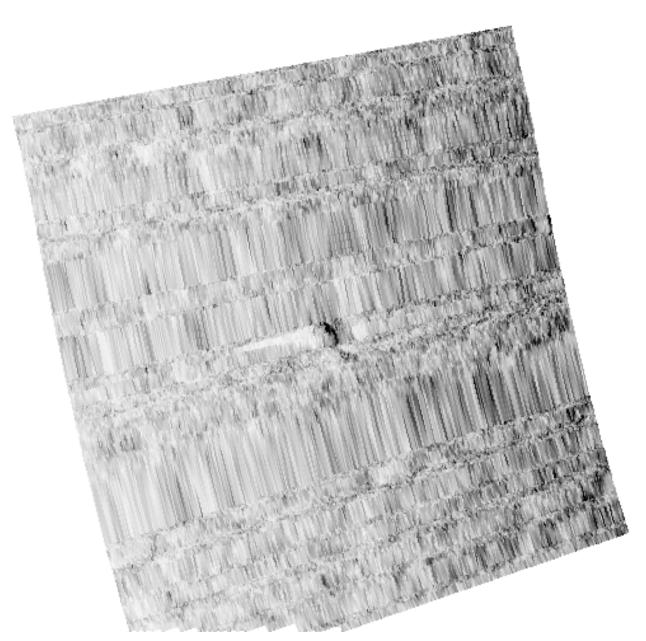


Figure 1.8.2

1.9) DTON2 Rock 218/180

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 34′ 43.713″ N, 074° 01′ 43.029″ W

Least Depth: 11.72 m

Timestamp: 2006-250.16:16:35.849 (09/07/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-250 / 331_1615

Profile/Beam: 218/180

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous rock was found with 200% Klein 5000 SSS and 100% Reson 8125 Reson MBES. Soundings are corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-250/331_1615	218/180	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss200/2006-249/228_1823	0001	2.23	148.0	Secondary (grouped)
h11601/tj_3102_klein5000_sss100/2006-248/135_1907	0001	2.54	161.1	Secondary (grouped)

Hydrographer Recommendations

Chart a dangerous rock with least depth 11.72 meters (38.4 feet).

Cartographically-Rounded Depth (Affected Charts):

38ft (12402_1, 12327_1, 12326_1) 6 ½fm (12300_1, 13006_1, 13003_1, 14500_1) 11.7m (5161_1)

S-57 Data

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

Attributes: TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 11.720 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

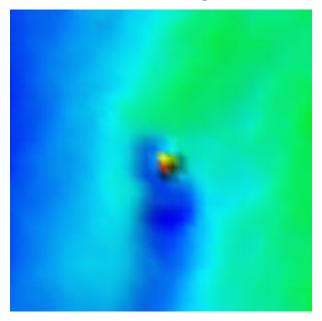


Figure 1.9.1

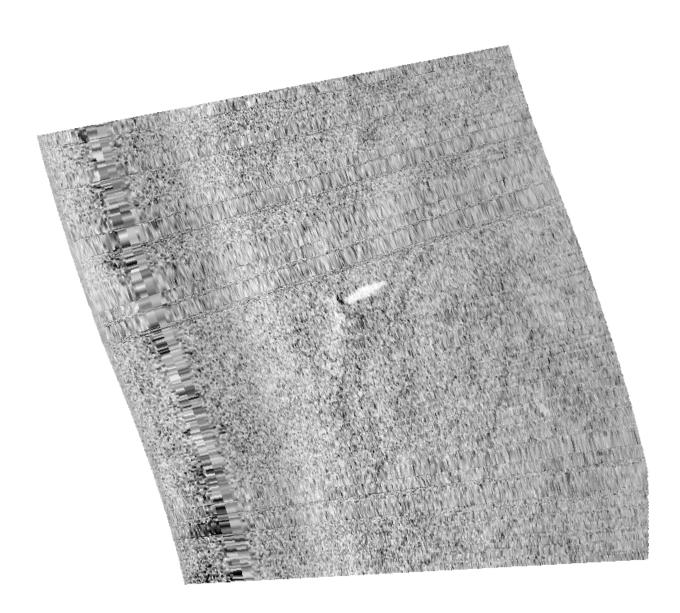


Figure 1.9.2

1.10) DTON2 Rock 2215/48

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 34′ 20.565″ N, 074° 01′ 20.781″ W

Least Depth: 7.03 m

Timestamp: 2006-250.17:22:26.913 (09/07/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-250 / 356_1719

Profile/Beam: 2215/48

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous rock was found with 200% Klein 5000 SSS and 100% Reson 8125 Reson MBES. Soundings are corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-250/356_1719	2215/48	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-249/127_1332	0001	0.35	147.7	Secondary

Hydrographer Recommendations

Chart a dangerous rock with least depth 7.03 meters (23.1 feet).

Cartographically-Rounded Depth (Affected Charts):

23ft (12402_1, 12327_1, 12326_1) 3 ³/₄fm (12300_1, 13006_1, 13003_1, 14500_1) 7.0m (5161_1)

S-57 Data

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

Attributes: TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 7.033 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

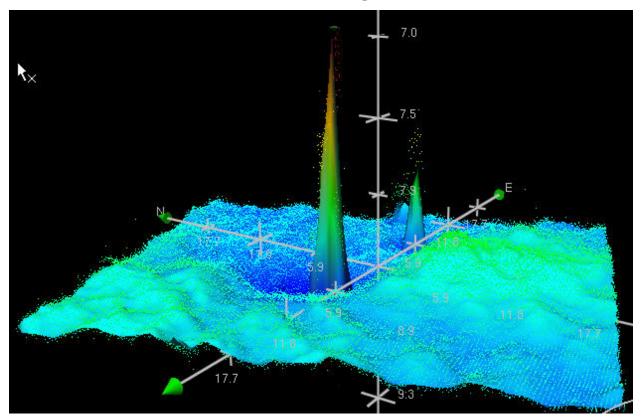


Figure 1.10.1

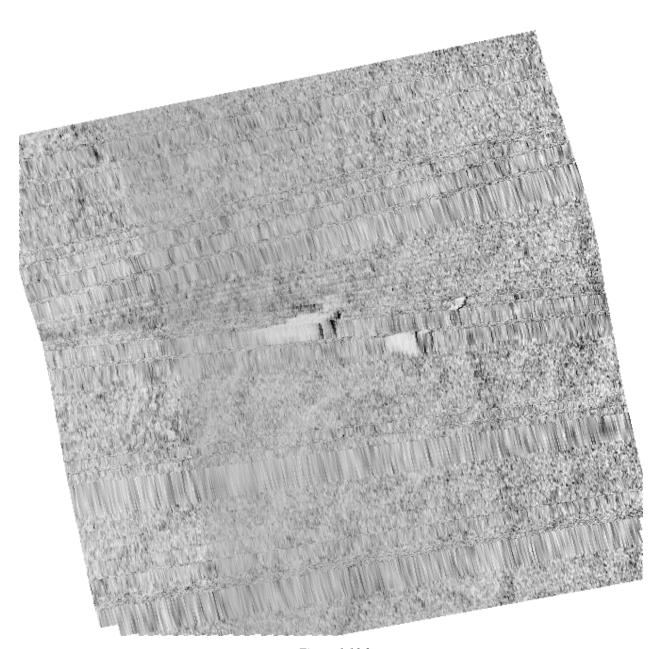


Figure 1.10.2

1.11) DTON2 Obstn 2846/183

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 33′ 46.787″ N, 074° 00′ 44.913″ W

Least Depth: 4.80 m

Timestamp: 2006-251.17:40:28.905 (09/08/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-251 / 447_1737

Profile/Beam: 2846/183

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous obstruction (a possible barge or barrel) was found with 200% Klein 5000 SSS and 100% Reson 8125 Reson MBES. Soundings are corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-251/447_1737	2846/183	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss200/2006-249/226_1642	0006	1.92	344.8	Secondary
h11601/tj_3102_klein5000_sss100/2006-249/179_1414	0001	2.23	345.6	Secondary (grouped)
h11601/tj_3102_klein5000_sss100/2006-249/181_1431	0001	3.45	303.2	Secondary (grouped)
h11601/tj_3102_klein5000_sss100/2006-249/179_1414	0004	3.61	070.9	Secondary

Hydrographer Recommendations

Chart a dangerous obstruction with least depth 4.80 meters (15.7 feet).

Cartographically-Rounded Depth (Affected Charts):

16ft (12402_1, 12327_1, 12326_1) 2 ½fm (12300_1, 13006_1, 13003_1, 14500_1) 4.8m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

H11601 DR DtoNs 1 - DToNs

Attributes: QUASOU - 6:least depth known

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 4.802 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

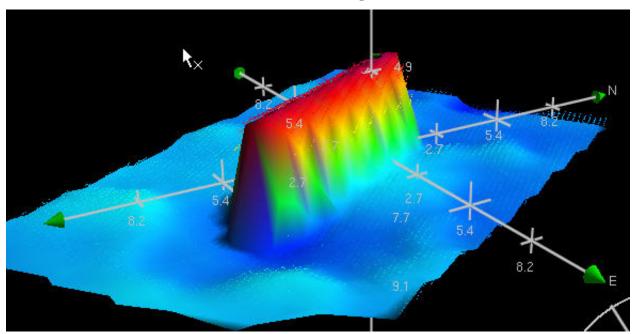


Figure 1.11.1

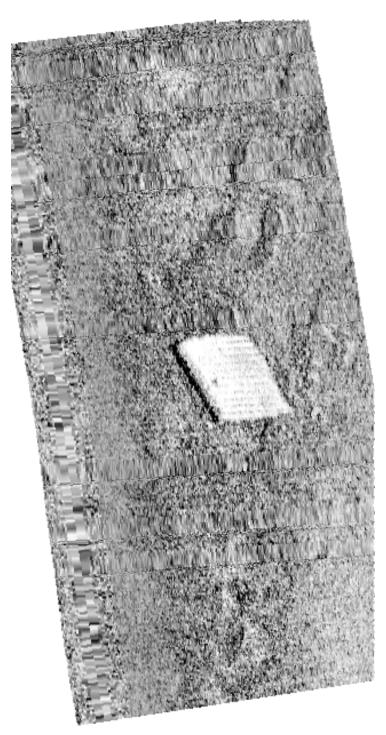


Figure 1.11.2

1.12) DTON2 Rock 867/236

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 34′ 00.944″ N, 074° 00′ 42.594″ W

Least Depth: 5.88 m

Timestamp: 2006-251.16:24:05.480 (09/08/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-251 / 463_1623

Profile/Beam: 867/236

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous rock was found with 200% Klein 5000 SSS and 100% Reson 8125 Reson MBES. Soundings are corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-251/463_1623	867/236	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-249/172_1527	0001	1.39	156.0	Secondary (grouped)
h11601/tj_3102_klein5000_sss200/2006-249/269_1629	0001	2.18	027.3	Secondary (grouped)

Hydrographer Recommendations

Chart a dangerous rock with least depth 5.88 meters (19.3 feet).

Cartographically-Rounded Depth (Affected Charts):

19ft (12402_1, 12327_1, 12326_1)
3 ¹/₄fm (12300_1, 13006_1, 13003_1, 14500_1)
5.9m (5161_1)

S-57 Data

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

Attributes: TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 5.884 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

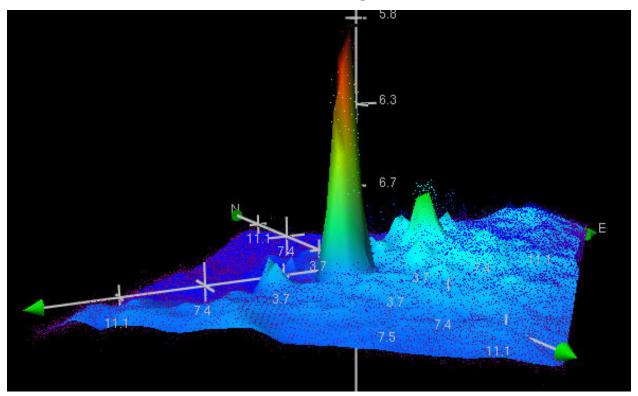


Figure 1.12.1

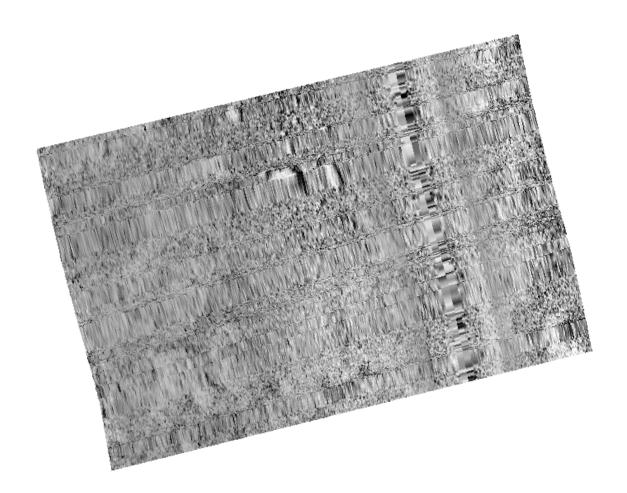


Figure 1.12.2

1.13) DTON2 Sndg 1335/49

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 33′ 56.836″ N, 074° 00′ 51.921″ W

Least Depth: 6.21 m

Timestamp: 2006-251.15:57:43.043 (09/08/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-251 / 467_1555

Profile/Beam: 1335/49

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted shoal sounding area (possible debris or rock mound) was found with 200% Klein 5000 SSS and 100% Reson 8125 Reson MBES. Soundings are corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-251/467_1555	1335/49	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-249/179_1414	0002	0.53	303.9	Secondary (grouped)
h11601/tj_3102_klein5000_sss200/2006-249/263_1650	0002	3.08	006.1	Secondary (grouped)

Hydrographer Recommendations

Chart a new sounding with least depth 6.21 meters (20.4 feet).

Cartographically-Rounded Depth (Affected Charts):

20ft (12402_1, 12327_1, 12326_1) 3 ½fm (12300_1, 13006_1, 13003_1, 14500_1) 6.2m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)

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

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VERDAT - 12:Mean lower low water

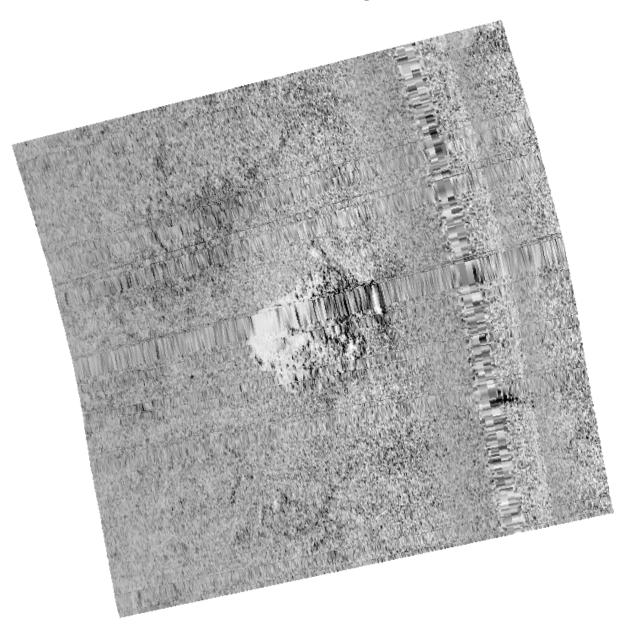


Figure 1.13.1

1.14) DTON6 SNDG 30/2

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 33′ 50.701″ N, 073° 58′ 34.347″ W

Least Depth: 1.79 m

Timestamp: 2006-254.15:31:00.255 (09/11/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-254 / 185_1530

Profile/Beam: 30/2

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted shoal sounding area was found with 100% Reson 8125 Reson MBES. Six-foot sounding contour extends from this position to G C "3" buoy. Soundings are corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-254/185_1530	30/2	0.00	0.000	Primary
h11601/tj_3101_reson8125/2006-254/185_1530	12/182	7.62	159.2	Secondary (grouped)

Hydrographer Recommendations

Chart a new sounding with depth 1.79 meters (5.9 feet).

Cartographically-Rounded Depth (Affected Charts):

6ft (12402_1, 12327_1, 12326_1) 1fm (12300_1, 13006_1, 13003_1, 14500_1) 1.8m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)

Attributes: QUASOU - 1:depth known

STATUS - 1:permanent

TECSOU - 3: found by multi-beam

VERDAT - 12:Mean lower low water

1.15) DTON6 Obstn 800/150

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 33′ 37.298″ N, 074° 02′ 09.101″ W

Least Depth: 8.48 m

Timestamp: 2006-254.18:53:03.117 (09/11/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-254 / 532_1851

Profile/Beam: 800/150

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous obstruction was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings are corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-254/532_1851	800/150	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-248/159_1808	0002	0.35	162.1	Secondary
h11601/tj_3102_klein5000_sss200/2006-250/253_1440	0002	3.10	304.2	Secondary
h11601/tj_3101_reson8125/2006-254/532_1851	860/209	26.95	001.7	Secondary (grouped)
h11601/tj_3102_klein5000_sss100/2006-248/159_1808	0003	28.38	358.4	Secondary

Hydrographer Recommendations

Chart dangerous obstruction with least depth 8.48 meters (27.8 ft).

Cartographically-Rounded Depth (Affected Charts):

28ft (12402_1, 12327_1, 12326_1) 4 ½fm (12300_1, 13006_1, 13003_1, 14500_1) 8.5m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

H11601 DR DtoNs 1 - DToNs

Attributes: QUASOU - 1:depth known

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 8.477 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Figure 1.15.1

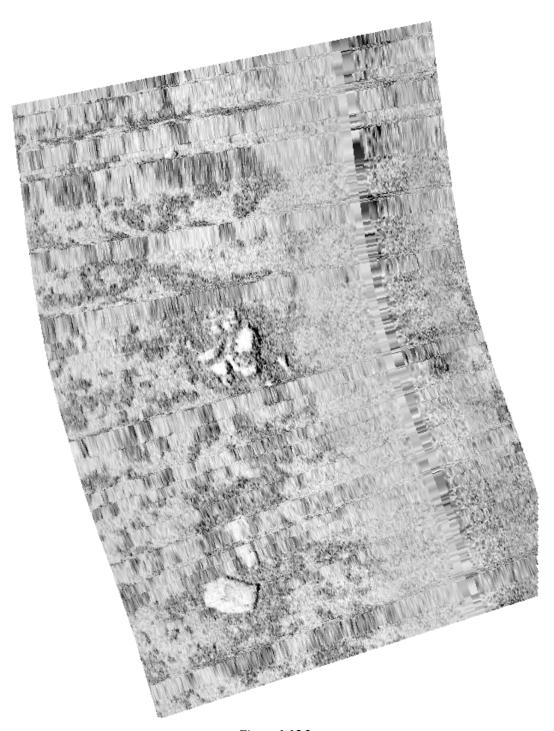


Figure 1.15.2

 $[Image\ file\ h:/h11601/public_relation_constituent_products/field_plots/ambrose_obs_40-33-37_074-02-09.jpg\ does\ not\ exist.]$

1.16) DTON4 Obstn 914/53

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 34′ 10.258″ N, 073° 59′ 51.369″ W

Least Depth: 2.83 m

Timestamp: 2006-254.15:58:14.329 (09/11/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-254 / 759_1556

Profile/Beam: 914/53

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous obstruction was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings are corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

	Address	Feature	Range	Azimuth	Status
	h11601/tj_3101_reson8125/2006-254/759_1556	914/53	0.00	0.000	Primary
h.	11601/tj_3102_klein5000_sss100/2006-251/164_1312	0006	1.60	005.2	Secondary
	h11601/tj_3101_reson8125/2006-254/759_1556	920/218	8.06	360.0	Secondary (grouped)
h	11601/tj_3102_klein5000_sss100/2006-251/101_1356	0001	10.30	344.9	Secondary

Hydrographer Recommendations

Chart a dangerous obstruction with least depth 2.83 meters (9.27 feet).

Cartographically-Rounded Depth (Affected Charts):

9ft (12402_1, 12327_1, 12326_1) 1 ½fm (12300_1, 13006_1, 13003_1, 14500_1) 2.8m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 2:depth unknown

H11601 DR DtoNs 1 - DToNs

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 2.826 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

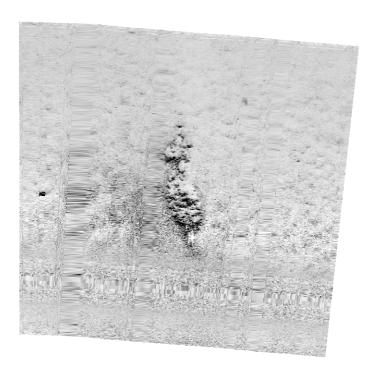


Figure 1.16.1

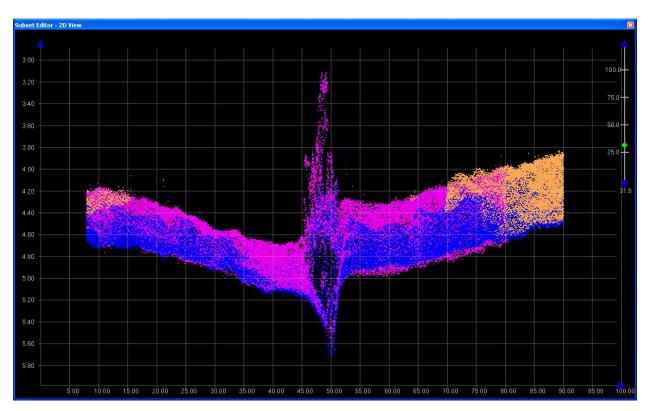


Figure 1.16.2

1.17) DTON3 Rock 2075/240

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 31′ 56.963″ N, 074° 02′ 28.293″ W

Least Depth: 6.89 m

Timestamp: 2006-266.17:33:46.636 (09/23/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-266 / 119_1730

Profile/Beam: 2075/240

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous rock was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings were corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-266/119_1730	2075/240	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-272/127_1336	0001	0.64	288.9	Secondary
h11601/tj_3102_klein5000_sss200/2006-254/224_1428	0002	4.65	078.2	Secondary
h11601/tj_3102_klein5000_sss100/2006-254/187_1720	0004	5.06	287.2	Secondary

Hydrographer Recommendations

Chart a dangerous rock with least depth of 6.89 meters (22.6 feet).

Cartographically-Rounded Depth (Affected Charts):

22ft (12402_1, 12327_1, 12326_1) 3 ³4fm (12300_1, 13006_1, 13003_1, 14500_1) 6.9m (5161_1)

S-57 Data

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

Attributes: QUASOU - 1:depth known

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 6.886 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

[Image file H:/H11601/CARIS/Fieldsheets/H11601/H11601_35/obstruction.JPG does not exist.]

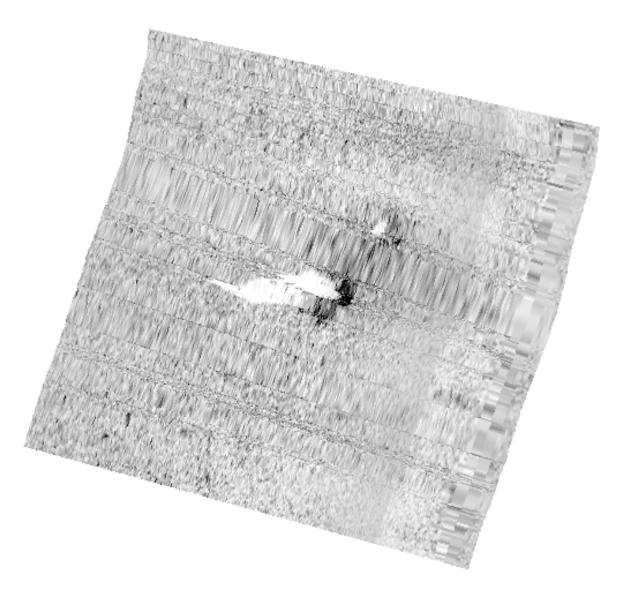


Figure 1.17.1

H11601 DR DtoNs 1 - DToNs

1.18) DTON3 Wreck 2418/4

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 32′ 03.957″ N, 074° 02′ 25.641″ W

Least Depth: 8.27 m

Timestamp: 2006-266.17:07:56.165 (09/23/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-266 / 121_1703

Profile/Beam: 2418/4

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous wreck was found in Chapel Hill North Channel with 200% Klein 5000 SSS and 100% Reson 8125 MBES. The wreck rises approximately 2 feet above the channel controlling depth. Soundings were corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-266/121_1703	2418/4	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-254/187_1720	0001	10.98	330.1	Secondary
h11601/tj_3102_klein5000_sss100/2006-272/128_1339	0002	11.05	323.3	Secondary
h11601/tj_3102_klein5000_sss200/2006-252/286_1451	0002	12.70	326.5	Secondary

Hydrographer Recommendations

Chart a dangerous wreck with least depth of 8.27 meters (27.1 feet).

Cartographically-Rounded Depth (Affected Charts):

27ft (12402_1, 12327_1, 12326_1)
4 ½fm (12300_1, 13006_1, 13003_1, 14500_1)
8.2m (5161_1)

S-57 Data

Geo object 1: Wreck (WRECKS)

Attributes: CATWRK - 2:dangerous wreck

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 8.265 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

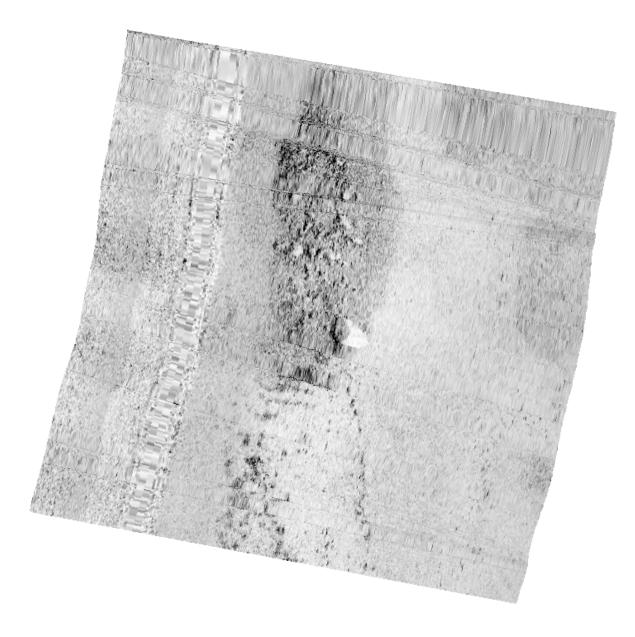


Figure 1.18.1

1.19) DTON3 Wreck 1490/44

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 31′ 54.980″ N, 074° 02′ 23.573″ W

Least Depth: 8.31 m

Timestamp: 2006-266.16:18:36.482 (09/23/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-266 / 125_1615

Profile/Beam: 1490/44

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous wreck was found in Chapel Hill North Channel with 200% Klein 5000 SSS and 100% Reson 8125 MBES. The wreck rises approximately 2 feet above the channel controlling depth. Soundings were corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-266/125_1615	1490/44	0.00	0.000	Primary
h11601/tj_3101_reson8125/2006-266/125_1615	1490/43	0.12	180.0	Secondary (grouped)
h11601/tj_3102_klein5000_sss200/2006-252/286_1451	0003	2.77	093.6	Secondary
h11601/tj_3102_klein5000_sss100/2006-251/153_1519	0002	15.81	188.2	Secondary
h11601/tj_3102_klein5000_sss100/2006-272/129_1342	0001	20.66	190.7	Secondary

Hydrographer Recommendations

Chart a dangerous wreck with least depth of 8.31 meters (27.3 feet).

Cartographically-Rounded Depth (Affected Charts):

```
27ft (12402_1, 12327_1, 12326_1)
4 ½fm (12300_1, 13006_1, 13003_1, 14500_1)
8.3m (5161_1)
```

S-57 Data

Geo object 1: Wreck (WRECKS)

Attributes: CATWRK - 2:dangerous wreck

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 8.313 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged



Figure 1.19.1

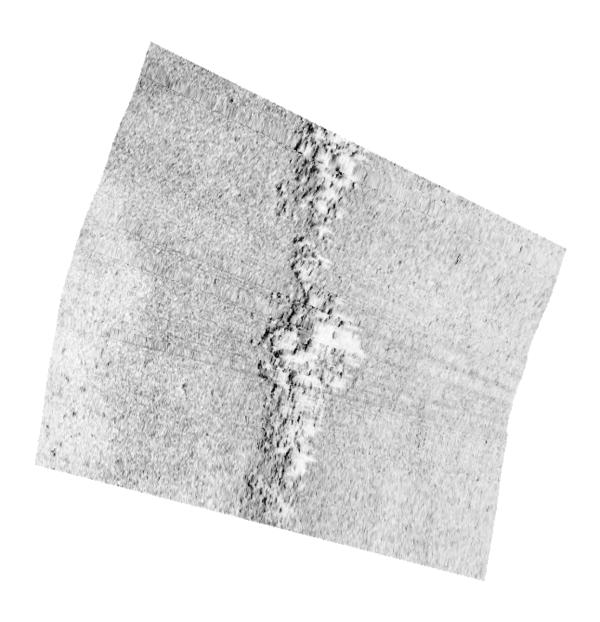


Figure 1.19.2

H11601 DR DtoNs 1 - DToNs

1.20) DTON8 Obstruction 6866/226

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 31' 44.162" N, 074° 02' 25.735" W

Least Depth: 8.52 m

Timestamp: 2006-266.16:14:53.761 (09/23/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-266 / 126_1604

Profile/Beam: 6866/226

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This dangerous obstruction was found in Chapel Hill North Channel with 200% Klein 5000 SSS and 100% Reson 8125 MBES. The obstruction rises 1 foot above the controlling depth of the channel (29 ft); US Army Corps of Engineers has been notified. Soundings are corrected to MLLW using verified tides and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-266/126_1604	6866/226	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss200/2006-252/286_1451	0004	1.15	007.6	Secondary
h11601/tj_3102_klein5000_sss100/2006-251/153_1519	0003	3.03	356.0	Secondary

Hydrographer Recommendations

Chart a dangerous obstruction with least depth 8.52 meters (27.9 feet).

Cartographically-Rounded Depth (Affected Charts):

28ft (12402_1, 12327_1, 12326_1) 4 ½fm (12300_1, 13006_1, 13003_1, 14500_1) 8.5m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 1:depth known

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 8.515 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

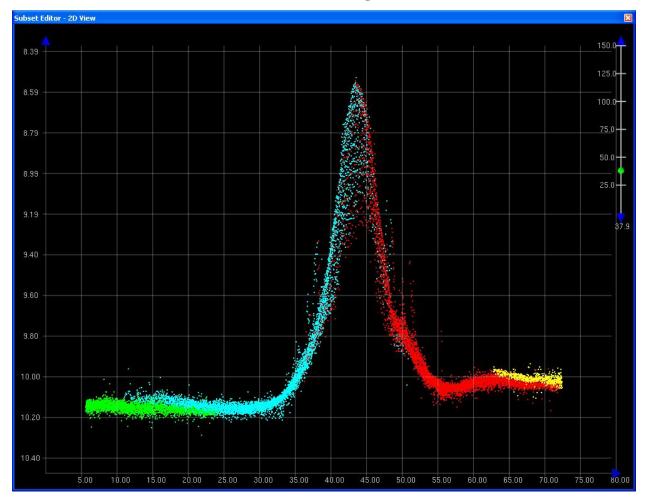


Figure 1.20.1

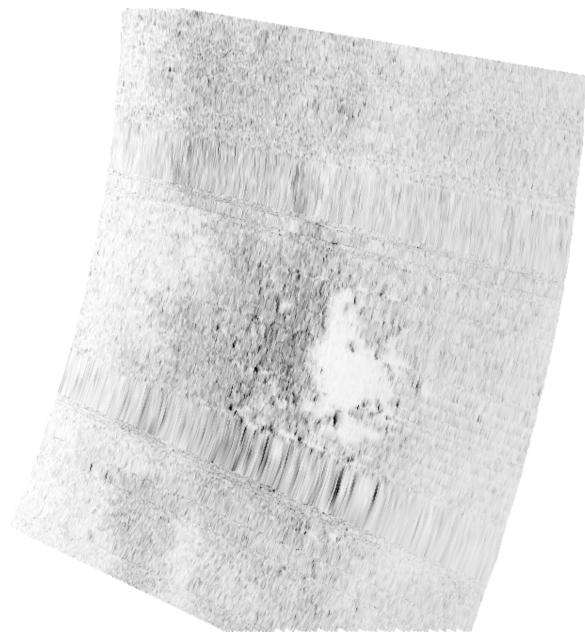


Figure 1.20.2

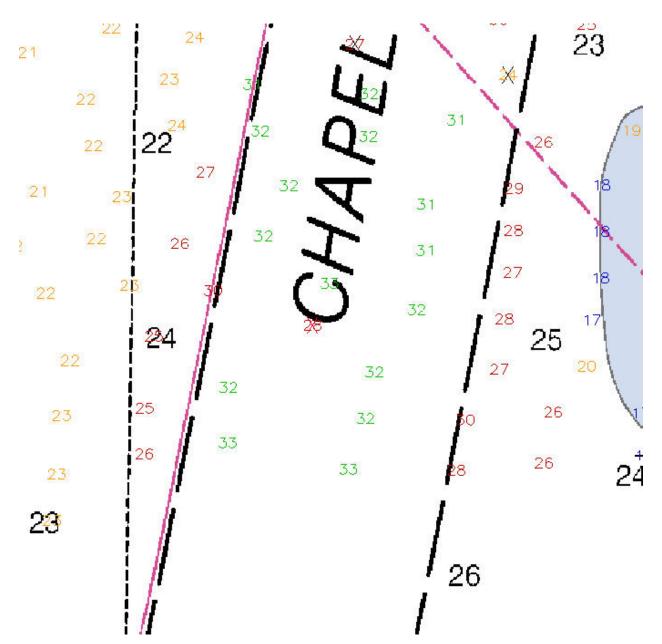


Figure 1.20.3

H11601 DR DtoNs 1 - DToNs

1.21) DTON5 7861/236

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 31′ 53.790″ N, 074° 02′ 15.768″ W

Least Depth: 7.24 m

Timestamp: 2006-266.14:34:39.973 (09/23/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-266 / 133_1422

Profile/Beam: 7861/236

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous obstruction was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings are corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-266/133_1422	7861/236	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-251/142_1535	0002	2.05	116.1	Secondary
h11601/tj_3102_klein5000_sss200/2006-252/268_1506	0001	2.39	080.4	Secondary
h11601/tj_3102_klein5000_sss100/2006-272/130_1346	0001	5.09	147.4	Secondary

Hydrographer Recommendations

Chart a dangerous obstruction with least depth 7.24 meters (23.8 feet).

Cartographically-Rounded Depth (Affected Charts):

24ft (12402_1, 12327_1, 12326_1) 4fm (12300_1, 13006_1, 13003_1, 14500_1) 7.2m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 1:depth known

H11601 DR DtoNs 1 - DToNs

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 7.244 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

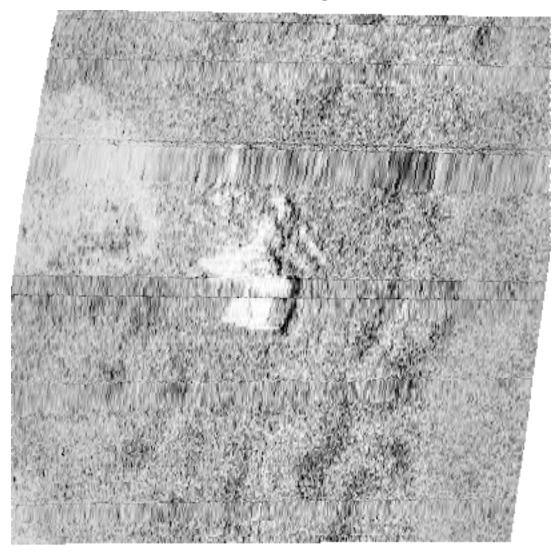


Figure 1.21.1

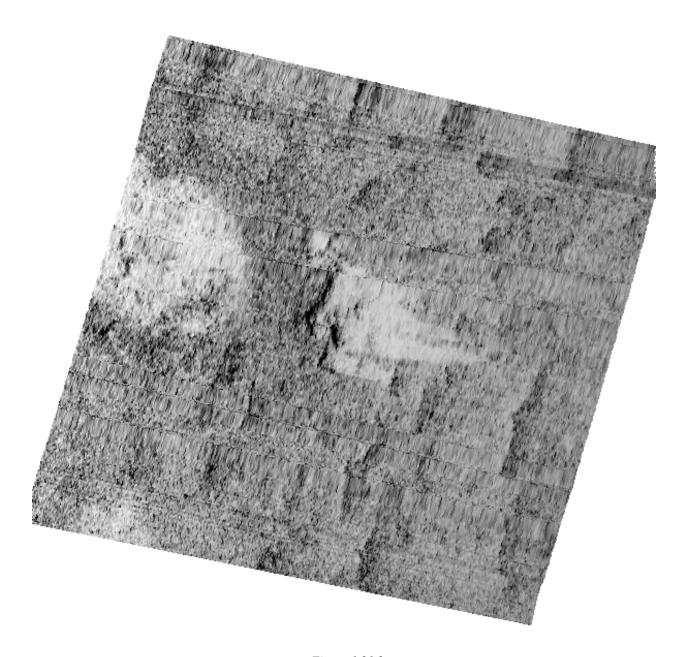


Figure 1.21.2

1.22) DTON4 Obstn 1752/33

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 33′ 45.428″ N, 074° 02′ 20.311″ W

Least Depth: 7.22 m

Timestamp: 2006-255.13:37:45.665 (09/12/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-255 / 494_1335

Profile/Beam: 1752/33

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous obstruction was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings are corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-255/494_1335	1752/33	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-248/163_1803	0001	1.32	235.8	Secondary
h11601/tj_3102_klein5000_sss200/2006-250/264_1525	0002	3.58	077.9	Secondary

Hydrographer Recommendations

Chart a dangerous obstruction with least depth 7.22 meters (23.7 feet).

Cartographically-Rounded Depth (Affected Charts):

23ft (12402_1, 12327_1, 12326_1) 4fm (12300_1, 13006_1, 13003_1, 14500_1) 7.2m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 1:depth known

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 7.221 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

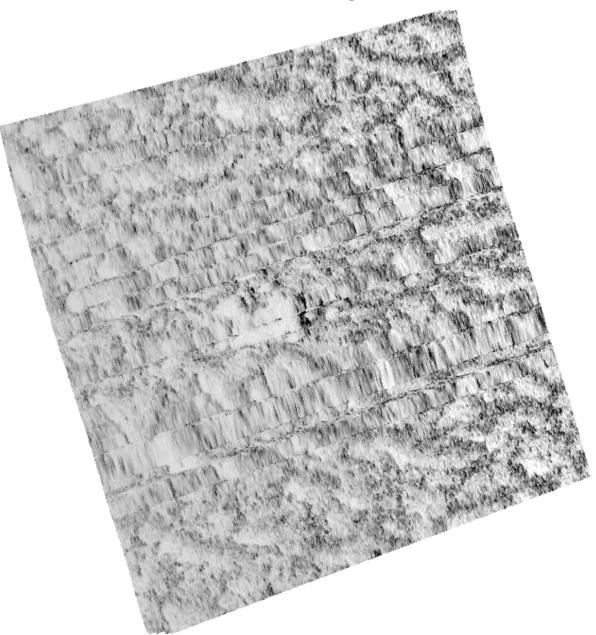


Figure 1.22.1

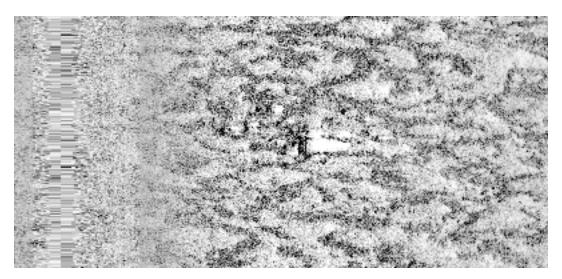


Figure 1.22.2

1.23) DTON4 Obstn 1872/148

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 33′ 03.156″ N, 074° 02′ 29.538″ W

Least Depth: 4.16 m

Timestamp: 2006-261.17:26:29.253 (09/18/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-261 / 434_1724

Profile/Beam: 1872/148

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous obstruction was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings are corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-261/434_1724	1872/148	0.00	000.0	Primary
h11601/tj_3102_klein5000_sss100/2006-254/166_1630	0001	0.27	111.3	Secondary
h11601/tj_3102_klein5000_sss100/2006-254/190_1640	0001	1.67	232.3	Secondary

Hydrographer Recommendations

Chart a dangerous obstruction with least depth 4.16 meters (13.7 feet).

Cartographically-Rounded Depth (Affected Charts):

13ft (12402_1, 12327_1, 12326_1) 2 ¼fm (12300_1, 13006_1, 13003_1, 14500_1) 4.1m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 1:depth known

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 4.159 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

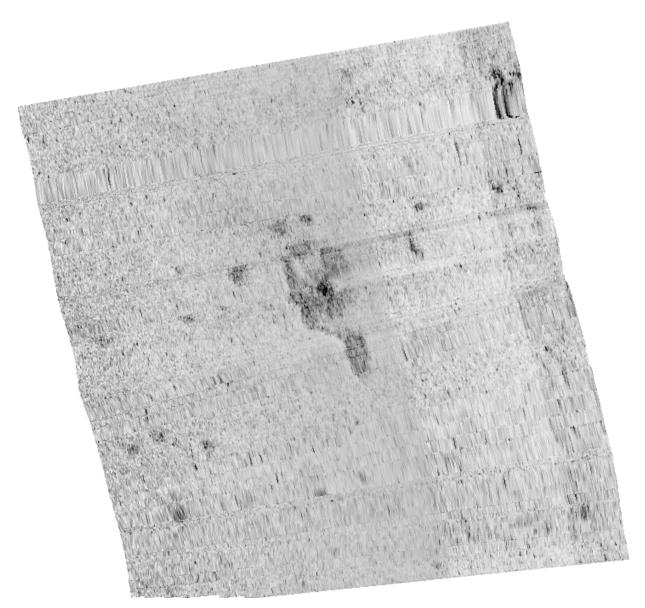


Figure 1.23.1

1.24) DTON4 Obstn 143/239

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 33′ 57.717″ N, 074° 02′ 19.735″ W

Least Depth: 7.29 m

Timestamp: 2006-255.12:43:23.655 (09/12/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-255 / 536_1242

Profile/Beam: 143/239

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous obstruction was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings are corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-255/536_1242	143/239	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-248/124_1750	0005	0.92	030.7	Secondary
h11601/tj_3101_reson8125/2006-249/376_1748	6337/3	4.95	341.8	Secondary

Hydrographer Recommendations

Chart a dangerous obstruction with least depth 7.29 meters (23.9 feet).

Cartographically-Rounded Depth (Affected Charts):

24ft (12402_1, 12327_1, 12326_1) 4fm (12300_1, 13006_1, 13003_1, 14500_1) 7.3m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 1:depth known

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 7.289 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

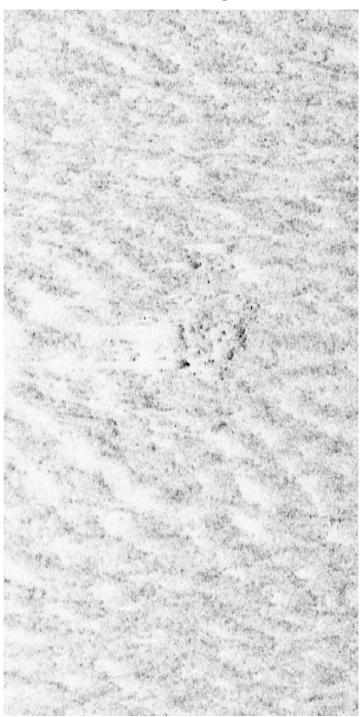


Figure 1.24.1



Figure 1.24.2

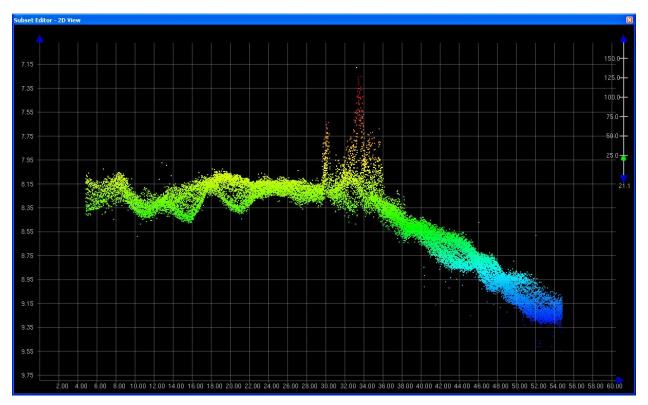


Figure 1.24.3

1.25) DTON6 Obstn 4988/121

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 31′ 44.637″ N, 073° 56′ 58.057″ W

Least Depth: 5.90 m

Timestamp: 2006-288.17:49:39.337 (10/15/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-288 / 193_1742

Profile/Beam: 4988/121

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous obstruction was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings are corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-288/193_1742	4988/121	0.00	000.0	Primary
h11601/tj_3102_klein5000_sss100/2006-264/123_1439	0003	3.72	202.3	Secondary
h11601/tj_3102_klein5000_sss200/2006-264/205_1445	0002	4.02	127.4	Secondary

Hydrographer Recommendations

Chart dangerous obstruction with least depth 5.90 meters (19.3 ft).

Cartographically-Rounded Depth (Affected Charts):

19ft (12402_1, 12327_1, 12326_1)
3 ¹/₄fm (12300_1, 13006_1, 13003_1, 14500_1)
5.9m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 1:depth known

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 5.896 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Feature Images

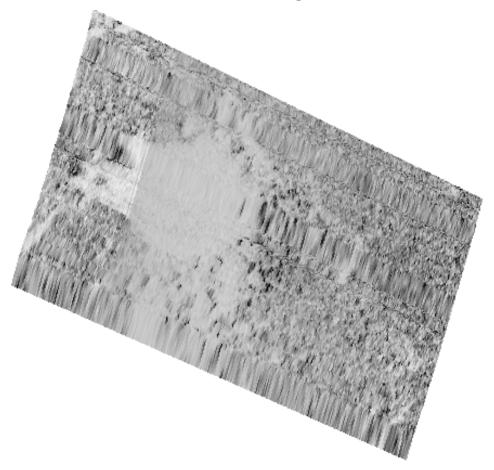


Figure 1.25.1

 $[Image\ file\ h:/h11601/public_relation_constituent_products/field_plots/rockaway_obs_40-31-45_073-56-58.jpg\ does\ not\ exist.]$

1.26) DTON6 Obstn 7784/105

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 32′ 27.177″ N, 073° 57′ 08.462″ W

Least Depth: 3.98 m

Timestamp: 2006-289.15:16:58.991 (10/16/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-289 / 354_1508

Profile/Beam: 7784/105

Charts Affected: 12402_1, 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous obstruction was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings are corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-289/354_1508	7784/105	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-262/126_1523	0002	1.38	166.4	Secondary
h11601/tj_3102_klein5000_sss200/2006-262/204_1532	0006	1.52	166.4	Secondary
h11601/tj_3102_klein5000_sss100/2006-262/126_1523	0003	49.21	185.5	Secondary (grouped)
h11601/tj_3101_reson8125/2006-289/356_1418	6927/42	49.27	185.1	Secondary (grouped)
h11601/tj_3102_klein5000_sss200/2006-262/204_1532	0002	50.80	185.6	Secondary (grouped)

Hydrographer Recommendations

Chart dangerous obstruction with least depth 3.98 meters (13.1 ft).

Cartographically-Rounded Depth (Affected Charts):

```
13ft (12402_1, 12350_1, 12327_1, 12326_1)
2fm (12300_1, 13006_1, 13003_1, 14500_1)
4.0m (5161_1)
```

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 1:depth known

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 3.981 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Feature Images

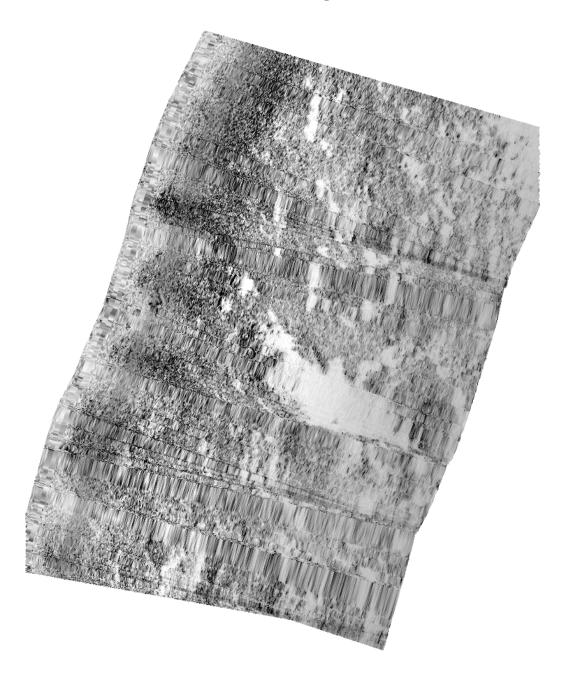


Figure 1.26.1



Figure 1.26.2

 $[Image\ file\ h:/h11601/public_relation_constituent_products/field_plots/rockaway_obs_40-32-29_073-57-08.jpg\ does\ not\ exist.]$

1.27) DTON6 Obstn 11763/223

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 32′ 01.405″ N, 073° 56′ 27.771″ W

Least Depth: 5.91 m

Timestamp: 2006-289.12:57:06.163 (10/16/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-289 / 362_1246

Profile/Beam: 11763/223

Charts Affected: 12402_1, 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous obstruction was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings are corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-289/362_1246	11763/223	0.00	000.0	Primary
h11601/tj_3102_klein5000_sss100/2006-268/145_1518	0001	4.68	174.2	Secondary
h11601/tj_3101_reson8125/2006-289/362_1246	11663/29	27.05	167.8	Secondary (grouped)

Hydrographer Recommendations

Chart dangerous obstruction with least depth 5.91 meters (19.4 ft).

Cartographically-Rounded Depth (Affected Charts):

19ft (12402_1, 12350_1, 12327_1, 12326_1)
3 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)
5.9m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 1:depth known

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 5.910 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

[Image file

H:/H11601/CARIS/HDCS_Data/H11601/TJ_3102_Klein5000_SSS100/2006-268/145_1518/145_15180001_u.tif does not exist.]

[Image file h:/h11601/public_relation_constituent_products/field_plots/rockaway_obs_40-32-02_073-56-28.jpg does not exist.]

1.28) DTON6 Obstn 5126/190

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 32′ 32.135″ N, 073° 57′ 08.122″ W

Least Depth: 3.98 m

Timestamp: 2006-289.19:37:19.110 (10/16/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-289 / 513_1931

Profile/Beam: 5126/190

Charts Affected: 12402_1, 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous obstruction was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings are corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-289/513_1931	5126/190	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss200/2006-262/204_1532	0003	1.91	145.1	Secondary

Hydrographer Recommendations

Chart dangerous obstruction with least depth 3.98 meters (13.1 ft).

Cartographically-Rounded Depth (Affected Charts):

13ft (12402_1, 12350_1, 12327_1, 12326_1) 2fm (12300_1, 13006_1, 13003_1, 14500_1) 4.0m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 1:depth known

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 3.980 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

[Image file h:/h11601/public_relation_constituent_products/field_plots/rockaway_obs_40-32-32_073-57-08.jpg does not exist.]

1.29) DTON6 SNDG 436/240

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 34′ 29.101″ N, 073° 55′ 47.190″ W

Least Depth: 1.80 m

Timestamp: 2006-291.15:13:29.395 (10/18/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-291 / 518_1512

Profile/Beam: 436/240

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted shoal sounding area was found with 100% Reson 8125 Reson MBES. Soundings are corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-291/518_1512	436/240	0.00	0.000	Primary
h11601/tj_3101_reson8125/2006-291/518_1512	450/200	2.45	014.8	Secondary (grouped)
h11601/tj_3101_reson8125/2006-291/518_1512	394/240	6.56	230.8	Secondary (grouped)
h11601/tj_3101_reson8125/2006-291/518_1512	480/204	6.69	036.9	Secondary (grouped)
h11601/tj_3101_reson8125/2006-291/519_1509	398/240	6.97	047.2	Secondary
h11601/tj_3101_reson8125/2006-291/515_1502	278/3	26.15	211.8	Secondary

Hydrographer Recommendations

Replace the current sounding (32) with a new sounding with least depth 1.80 meters (5.9 feet).

Cartographically-Rounded Depth (Affected Charts):

```
6ft (12350_1, 12327_1, 12326_1)
1fm (12300_1, 13006_1, 13003_1, 14500_1)
1.8m (5161_1)
```

S-57 Data

Geo object 1: Sounding (SOUNDG)

Attributes: QUASOU - 1:depth known

STATUS - 1:permanent

TECSOU - 3:found by multi-beam VERDAT - 12:Mean lower low water

1.30) DTON7 SNDG 1608/72

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 31' 56.790" N, 073° 55' 58.116" W

Least Depth: 2.56 m

Timestamp: 2006-270.15:17:58.116 (09/27/2006)

Survey Line: h11601 / tj_3102_reson8101 / 2006-270 / 396_1516

Profile/Beam: 1608/72

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted shoal sounding area was found with 100% Reson 8101 Reson MBES. Soundings are corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3102_reson8101/2006-270/396_1516	1608/72	0.00	000.0	Primary

Hydrographer Recommendations

Chart a new sounding with least depth 2.56 meters (8.4 feet).

Cartographically-Rounded Depth (Affected Charts):

8ft (12350_1, 12327_1, 12326_1) 1 ¹/₄fm (12300_1, 13006_1, 13003_1, 14500_1) 2.5m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)

Attributes: QUASOU - 1:depth known

STATUS - 1:permanent

TECSOU - 3: found by multi-beam VERDAT - 12:Mean lower low water

See Descriptive Report, Appendix 2, Survey Features Report for final charting recommendation.

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1.31) DTON7 SNDG 1338/27

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 31′ 58.182″ N, 073° 55′ 59.466″ W

Least Depth: 2.77 m

Timestamp: 2006-270.15:17:42.600 (09/27/2006)

Survey Line: h11601 / tj_3102_reson8101 / 2006-270 / 396_1516

Profile/Beam: 1338/27

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted shoal area was found with 100% Reson 8101 MBES. Soundings are corrected to MLLW using verified tides and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3102_reson8101/2006-270/396_1516	1338/27	0.00	000.0	Primary

Hydrographer Recommendations

Chart a new sounding with least depth 2.77 meters (9.1 feet).

Cartographically-Rounded Depth (Affected Charts):

9ft (12350_1, 12327_1, 12326_1) 1 ½fm (12300_1, 13006_1, 13003_1, 14500_1) 2.7m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)

Attributes: EXPSOU - 1:within the range of depth of the surrounding depth area

QUASOU - 1:depth known STATUS - 1:permanent

TECSOU - 3: found by multi-beam

VERDAT - 12:Mean lower low water

1.32) DTON7 SNDG 2376/98

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 31′ 53.146″ N, 073° 55′ 53.894″ W

Least Depth: 2.57 m

Timestamp: 2006-270.15:18:42.250 (09/27/2006)

Survey Line: h11601 / tj_3102_reson8101 / 2006-270 / 396_1516

Profile/Beam: 2376/98

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted shoal area was found with 100% Reson 8101 MBES. Soundings are corrected to MLLW using verified tides and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3102_reson8101/2006-270/396_1516	2376/98	0.00	0.000	Primary

Hydrographer Recommendations

Chart a new sounding with least depth 2.57 meters (8.4 feet).

Cartographically-Rounded Depth (Affected Charts):

8ft (12350_1, 12327_1, 12326_1) 1 ¹/₄fm (12300_1, 13006_1, 13003_1, 14500_1) 2.5m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)

Attributes: EXPSOU - 1:within the range of depth of the surrounding depth area

QUASOU - 1:depth known STATUS - 1:permanent

TECSOU - 3: found by multi-beam

VERDAT - 12:Mean lower low water

1.33) DTON7 SNDG 2726/96

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 31′ 51.610″ N, 073° 55′ 51.848″ W

Least Depth: 3.20 m

Timestamp: 2006-270.15:19:02.362 (09/27/2006)

Survey Line: h11601 / tj_3102_reson8101 / 2006-270 / 396_1516

Profile/Beam: 2726/96

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted shoal area was found with 100% Reson 8101 MBES. Soundings are corrected to MLLW using verified tides and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3102_reson8101/2006-270/396_1516	2726/96	0.00	0.000	Primary

Hydrographer Recommendations

Chart a new sounding with least depth 3.20 meters (10.5 feet).

Cartographically-Rounded Depth (Affected Charts):

10ft (12350_1, 12327_1, 12326_1) 1 ³4fm (12300_1, 13006_1, 13003_1, 14500_1) 3.2m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)

Attributes: EXPSOU - 1:within the range of depth of the surrounding depth area

QUASOU - 1:depth known STATUS - 1:permanent

TECSOU - 3: found by multi-beam

VERDAT - 12:Mean lower low water

1.34) DTON6 Obstn 1282/41

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 34′ 33.592″ N, 074° 02′ 33.414″ W

Least Depth: 5.58 m

Timestamp: 2006-285.16:13:07.394 (10/12/2006)

Survey Line: h11601 / tj_3102_reson8101 / 2006-285 / 173_1611

Profile/Beam: 1282/41

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous obstruction was found with 200% Klein 5000 SSS and 100% Reson 8101 MBES. Soundings are corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3102_reson8101/2006-285/173_1611	1282/41	0.00	000.0	Primary
h11601/tj_3101_reson8125/2006-249/428_1731	2134/240	2.31	284.8	Secondary
h11601/tj_3102_klein5000_sss100/2006-248/124_1749	0004	2.46	327.3	Secondary

Hydrographer Recommendations

Chart a dangerous obstruction with least depth 5.58 meters (18.3 feet).

Cartographically-Rounded Depth (Affected Charts):

18ft (12402_1, 12327_1, 12326_1) 3fm (12300_1, 13006_1, 13003_1, 14500_1) 5.6m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 1:depth known

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 5.581 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Feature Images

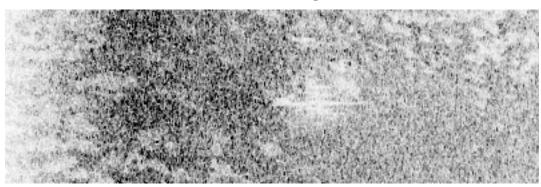


Figure 1.34.1

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1.35) DTON6 Obstn 3172/27

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 34′ 47.586″ N, 073° 55′ 50.711″ W

Least Depth: 3.54 m

Timestamp: 2006-292.13:09:22.315 (10/19/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-292 / 137_1305

Profile/Beam: 3172/27

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous obstruction was found with 100% Reson 8125 MBES. Soundings are corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-292/137_1305	3172/27	0.00	0.000	Primary

Hydrographer Recommendations

Chart a dangerous obstruction with least depth 3.54 meters (11.6 feet).

Cartographically-Rounded Depth (Affected Charts):

11ft (12350_1, 12327_1, 12326_1) 2fm (12300_1, 13006_1, 13003_1, 14500_1) 3.5m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 1:depth known

STATUS - 1:permanent

TECSOU - 3: found by multi-beam

VALSOU - 3.545 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

 $[Image\ file\ h:/h11601/public_relation_constituent_products/field_plots/sheepshead_obs_40-34-48_073-55-51.jpg\ does\ not\ exist.]$

1.36) DTON4 Sndg 5289/41

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 34′ 38.172″ N, 073° 54′ 43.874″ W

Least Depth: 0.66 m

Timestamp: 2006-292.20:19:29.935 (10/19/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-292 / 430_2015

Profile/Beam: 5289/41

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted shoal sounding area was found with 100% Reson 8125 MBES. Soundings are corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-292/430_2015	5289/41	0.00	000.0	Primary

Hydrographer Recommendations

Chart a new sounding with least depth 0.66 meters (2.2 feet).

Cartographically-Rounded Depth (Affected Charts):

2ft (12350_1, 12327_1, 12326_1) 0 ½fm (12300_1, 13006_1, 13003_1, 14500_1) .6m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)

Attributes: QUASOU - 1:depth known

STATUS - 1:permanent

TECSOU - 3: found by multi-beam

1.37) DTON4 Wreck 509/33

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 35′ 08.407″ N, 073° 54′ 13.639″ W

Least Depth: 2.47 m

Timestamp: 2006-292.17:59:22.949 (10/19/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-292 / 494_1758

Profile/Beam: 509/33

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous wreck (approximately 47 ft long) was found with 100% Reson 8125 MBES. Soundings are corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-292/494_1758	509/33	0.00	000.0	Primary

Hydrographer Recommendations

Chart a dangerous wreck with least depth 2.47 meters (8.1 feet).

Cartographically-Rounded Depth (Affected Charts):

8ft (12350_1, 12327_1, 12326_1) 1 ¹/₄fm (12300_1, 13006_1, 13003_1, 14500_1) 2.4m (5161_1)

S-57 Data

Geo object 1: Wreck (WRECKS)

Attributes: CATWRK - 2:dangerous wreck

STATUS - 1:permanent

TECSOU - 3: found by multi-beam

VALSOU - 2.467 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

[Image file h:/h11601/public_relation_constituent_products/field_plots/wreck2_gerritsen_inlet.jpg does not exist.]

1.38) DTON4 Wreck 759/35

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 34′ 33.376″ N, 073° 54′ 13.450″ W

Least Depth: 3.11 m

Timestamp: 2006-293.15:16:08.291 (10/20/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-293 / 963_1514

Profile/Beam: 759/35

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous wreck (approximately 40 ft long) was found with 100% Reson 8125 MBES. Soundings are corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-293/963_1514	759/35	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss200/2006-267/210_1450	0002	0.68	273.7	Secondary
h11601/tj_3102_klein5000_sss100/2006-267/119_1433	0002	3.26	204.5	Secondary
h11601/tj_3102_klein5000_sss100/2006-267/120_1438	0001	7.44	311.4	Secondary

Hydrographer Recommendations

Chart a dangerous wreck with least depth 3.11 meters (10.2 feet).

Cartographically-Rounded Depth (Affected Charts):

10ft (12350_1, 12327_1, 12326_1) 1 ³4fm (12300_1, 13006_1, 13003_1, 14500_1) 3.1m (5161_1)

S-57 Data

Geo object 1: Wreck (WRECKS)

Attributes: CATWRK - 2:dangerous wreck

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 3.109 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

[Image file h:/h11601/public_relation_constituent_products/field_plots/wreck3_gerritsent_inlet.jpg does not exist.]

Feature Images

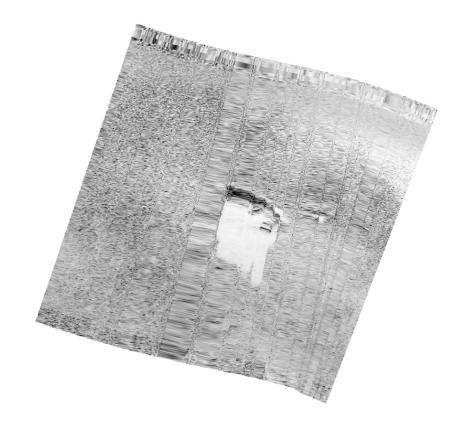


Figure 1.38.1

1.39) DTON6 Obstn 133/18

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 31′ 36.946″ N, 073° 57′ 29.380″ W

Least Depth: 5.95 m

Timestamp: 2006-289.17:02:43.671 (10/16/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-289 / 157_1701

Profile/Beam: 133/18

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This dangerous obstruction was found with 100% Reson 8125 MBES. Soundings are corrected to MLLW using verified tides and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-289/157_1701	133/18	0.00	0.000	Primary

Hydrographer Recommendations

Chart a dangerous obstruction with least depth 5.95 meters (19.5 feet).

Cartographically-Rounded Depth (Affected Charts):

```
19ft (12402_1, 12327_1, 12326_1)
3 <sup>1</sup>/<sub>4</sub>fm (12300_1, 13006_1, 13003_1, 14500_1)
5.9m (5161_1)
```

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 1:depth known

STATUS - 1:permanent

TECSOU - 3: found by multi-beam

VALSOU - 5.952 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Feature Images

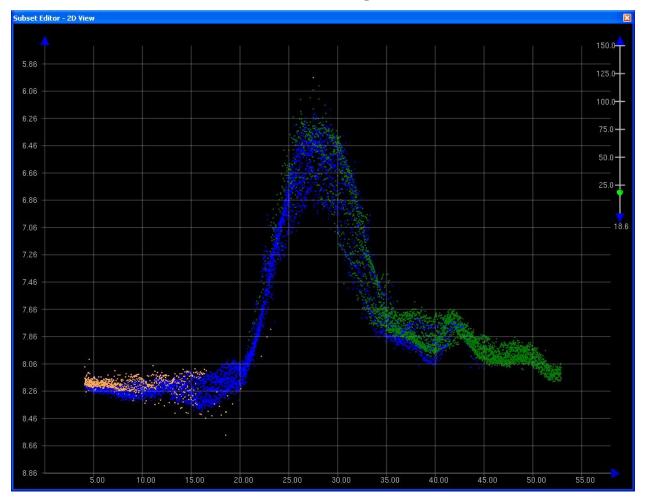


Figure 1.39.1

1.40) DTON7 SNDG 1527/79

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 31′ 54.383″ N, 073° 55′ 56.703″ W

Least Depth: 2.75 m

Timestamp: 2006-270.15:14:22.102 (09/27/2006)

Survey Line: h11601 / tj_3102_reson8101 / 2006-270 / 394_1513

Profile/Beam: 1527/79

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted shoal area was found with 100% Reson 8101 MBES. Soundings are corrected to MLLW using verified tides and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3102_reson8101/2006-270/394_1513	1527/79	0.00	0.000	Primary

Hydrographer Recommendations

Chart a new sounding with least depth 2.75 meters (9.0 feet).

Cartographically-Rounded Depth (Affected Charts):

9ft (12350_1, 12327_1, 12326_1) 1 ½fm (12300_1, 13006_1, 13003_1, 14500_1) 2.7m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)

Attributes: EXPSOU - 1:within the range of depth of the surrounding depth area

QUASOU - 1:depth known STATUS - 1:permanent

TECSOU - 3: found by multi-beam

VERDAT - 12:Mean lower low water

H11601 DR DtoNs 1 - DToNs

1.41) DTON7 SNDG 1709/67

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 32′ 00.144″ N, 073° 56′ 01.409″ W

Least Depth: 3.06 m

Timestamp: 2006-270.15:09:42.531 (09/27/2006)

Survey Line: h11601 / tj_3102_reson8101 / 2006-270 / 397_1508

Profile/Beam: 1709/67

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted shoal area was found with 100% Reson 8101 MBES. Soundings are corrected to MLLW using verified tides and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3102_reson8101/2006-270/397_1508	1709/67	0.00	000.0	Primary

Hydrographer Recommendations

Chart a new sounding with least depth 3.06 meters (10.0 feet).

Cartographically-Rounded Depth (Affected Charts):

10ft (12350_1, 12327_1, 12326_1) 1 ½fm (12300_1, 13006_1, 13003_1, 14500_1) 3.0m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)

Attributes: EXPSOU - 1:within the range of depth of the surrounding depth area

QUASOU - 1:depth known STATUS - 1:permanent

TECSOU - 3: found by multi-beam

VERDAT - 12:Mean lower low water

H11601 DR DtoNs 1 - DToNs

1.42) DTON7 SNDG 4026/38

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 31' 49.731" N, 073° 55' 47.825" W

Least Depth: 3.50 m

Timestamp: 2006-270.15:11:55.679 (09/27/2006)

Survey Line: h11601 / tj_3102_reson8101 / 2006-270 / 397_1508

Profile/Beam: 4026/38

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted shoal area was found with 100% Reson 8101 MBES. Soundings are corrected to MLLW using verified tides and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3102_reson8101/2006-270/397_1508	4026/38	0.00	000.0	Primary

Hydrographer Recommendations

Chart a new sounding with least depth 3.5 meters (11.5 feet).

Cartographically-Rounded Depth (Affected Charts):

11ft (12350_1, 12327_1, 12326_1) 1 ³4fm (12300_1, 13006_1, 13003_1, 14500_1) 3.5m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)

Attributes: EXPSOU - 1:within the range of depth of the surrounding depth area

QUASOU - 1:depth known STATUS - 1:permanent

TECSOU - 3: found by multi-beam

VERDAT - 12:Mean lower low water

1.43) DTON7 SNDG 1211/23

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 32′ 01.886″ N, 073° 56′ 00.286″ W

Least Depth: 3.60 m

Timestamp: 2006-270.15:51:36.597 (09/27/2006)

Survey Line: h11601 / tj_3102_reson8101 / 2006-270 / 400_1550

Profile/Beam: 1211/23

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted shoal area was found with 100% Reson 8101 MBES. Soundings are corrected to MLLW using verified tides and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3102_reson8101/2006-270/400_1550	1211/23	0.00	0.000	Primary

Hydrographer Recommendations

Chart a new sounding with least depth 3.60 meters (11.8 feet).

Cartographically-Rounded Depth (Affected Charts):

12ft (12350_1, 12327_1, 12326_1) 2fm (12300_1, 13006_1, 13003_1, 14500_1) 3.6m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)

Attributes: EXPSOU - 1:within the range of depth of the surrounding depth area

QUASOU - 1:depth known STATUS - 1:permanent

TECSOU - 3: found by multi-beam

VERDAT - 12:Mean lower low water

H11601 DR DtoNs 1 - DToNs

1.44) DTON7 SNDG 3210/4

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 31′ 50.232″ N, 073° 55′ 43.869″ W

Least Depth: 3.32 m

Timestamp: 2006-270.15:40:38.755 (09/27/2006)

Survey Line: h11601 / tj_3102_reson8101 / 2006-270 / 401_1536

Profile/Beam: 3210/4

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted shoal area was found with 100% Reson 8101 MBES. Soundings are corrected to MLLW using verified tides and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3102_reson8101/2006-270/401_1536	3210/4	0.00	0.000	Primary

Hydrographer Recommendations

Chart a new sounding with least depth 3.32 meters (10.9 feet).

Cartographically-Rounded Depth (Affected Charts):

```
11ft (12350_1, 12327_1, 12326_1)
1 <sup>3</sup>4fm (12300_1, 13006_1, 13003_1, 14500_1)
3.3m (5161_1)
```

S-57 Data

Geo object 1: Sounding (SOUNDG)

Attributes: EXPSOU - 1:within the range of depth of the surrounding depth area

QUASOU - 1:depth known STATUS - 1:permanent

TECSOU - 3: found by multi-beam

VERDAT - 12:Mean lower low water

H11601 DR DtoNs 1 - DToNs

1.45) DTON8 Sounding 1332/188

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 34′ 19.734″ N, 073° 54′ 58.434″ W

Least Depth: 1.49 m

Timestamp: 2006-293.18:37:29.302 (10/20/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-293 / 336_1835

Profile/Beam: 1332/188

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous shoal area was found south of Plumb Beach Channel with 100% Reson MBES. Soundings are corrected to MLLW using verified tides and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-293/336_1835	1332/188	0.00	0.000	Primary

Hydrographer Recommendations

Chart a sounding with least depth 1.49 meters (4.9 feet).

Cartographically-Rounded Depth (Affected Charts):

5ft (12350_1, 12327_1, 12326_1) 0 34fm (12300_1, 13006_1, 13003_1, 14500_1) 1.5m (5161_1)

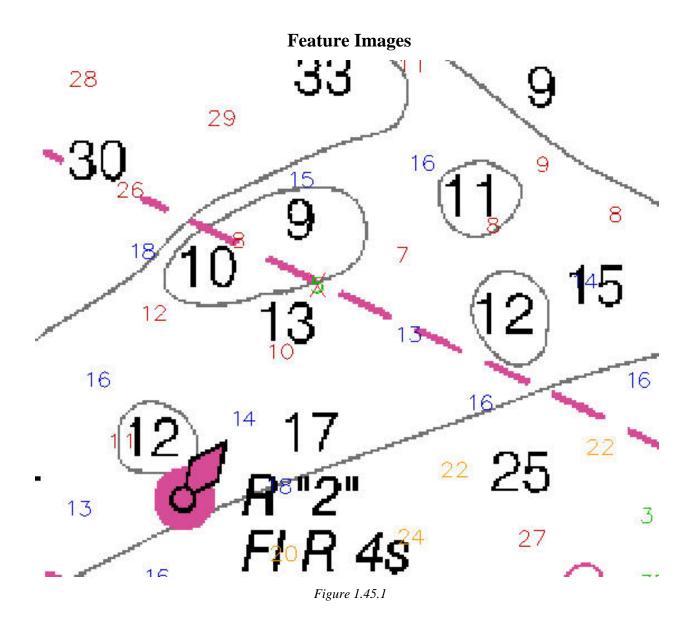
S-57 Data

Geo object 1: Sounding (SOUNDG)

Attributes: QUASOU - 1:depth known

STATUS - 1:permanent

TECSOU - 3:found by multi-beam VERDAT - 12:Mean lower low water



H11601 DTON Report #9

Registry Number: H11601 **State:** New York

Locality: New York Harbor

Sub-locality: Lower Bay to Rockaway Inlet

Project Number: OPR-B310-TJ-06

Survey Dates: 09/23/2006 - 10/21/2006

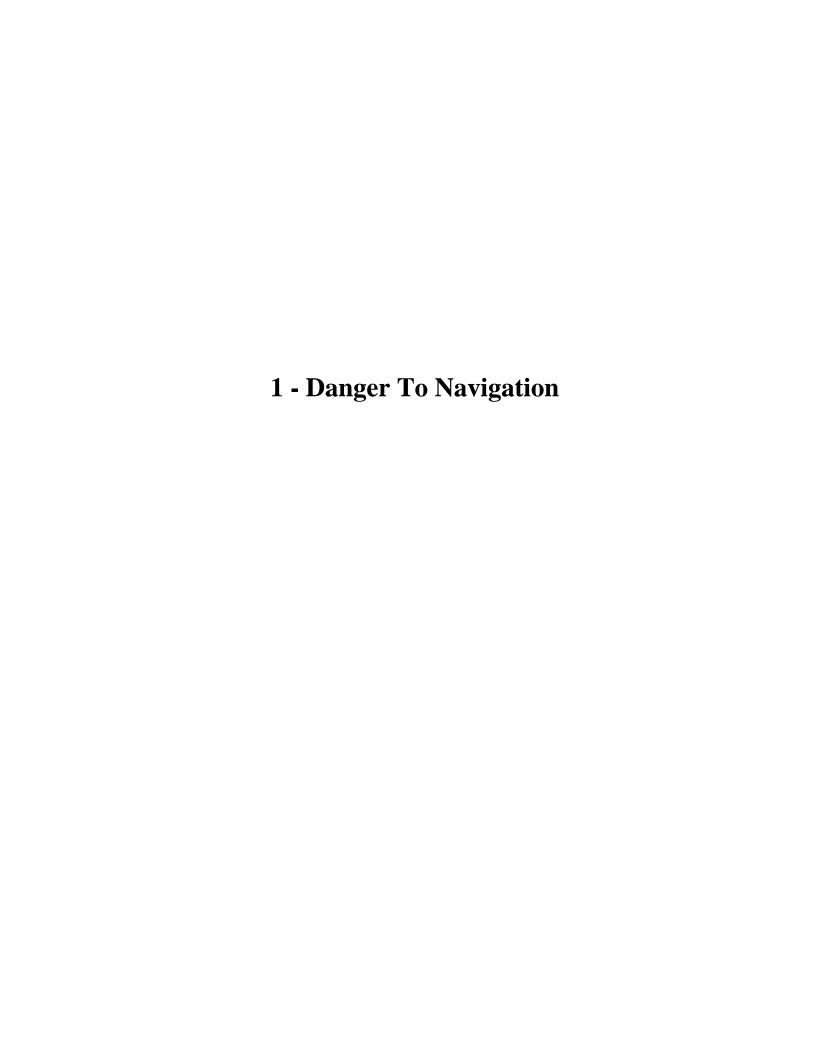
The following details three obstructions one rock and one uncharted sounding deemed dangers to navigation found during routine survey operations for OPR-B310-TJ-06 in NY Harbor Lower Bay.

Charts Affected

Number	Version	Date	Scale
12402	9th Ed.	10/01/2004	1:15000
12350	59th Ed.	03/01/2006	1:20000
12327	98th Ed.	09/01/2005	1:40000
12326	49th Ed.	06/01/2003	1:80000
12300	45th Ed.	03/01/2005	1:400000
13006	32nd Ed.	02/01/2005	1:675000
5161	13th Ed.	10/01/2003	1:1058400
13003	48th Ed.	10/01/2004	1:1200000
14500	27th Ed.	10/01/2002	1:1500000

Features

No.	Name	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	DTON9 21ft Sounding 6889/185	Obstruction	6.35 m	40° 34' 29.849" N	073° 55' 43.563" W	
1.2	DTON9 21 ft Obstruction 2399/69	Obstruction	6.46 m	40° 32' 27.092" N	074° 02' 22.825" W	
1.3	DToN9 9 ft Obstruction 207/227	Obstruction	2.84 m	40° 33' 57.531" N	073° 54' 39.684" W	
1.4	DTON9 19 ft ROCK 526/167	Rock	5.80 m	40° 31' 56.883" N	074° 02' 28.401" W	
1.5	DTON9 2 ft Sounding 765/157	Shoal	0.82 m	40° 34' 30.972" N	073° 55' 46.412" W	



1.1) DTON9 21ft Sounding 6889/185

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 34′ 29.849″ N, 073° 55′ 43.563″ W

Least Depth: 6.35 m

Timestamp: 2006-291.14:34:03.460 (10/18/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-291 / 121_1426

Profile/Beam: 6889/185

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1,

14500_1

Remarks:

Item was found during review process at AHB. Sounding is 6ft shoaler than charted depth. Chart as a new sounding at the surveyed location.

Feature Correlation

Address	Feature	Range	Azimuth	Status	
h11601/tj_3101_reson8125/2006-291/121_1426	6889/185	0.00	0.000	Primary	

Hydrographer Recommendations

Chart as a 21 ft sounding at the surveyed location. Remove 27 ft sounding at same location.

Cartographically-Rounded Depth (Affected Charts):

21ft (12350_1, 12327_1, 12326_1) 3 ½fm (12300_1, 13006_1, 13003_1, 14500_1) 6.3m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)

Attributes: EXPSOU - 1:within the range of depth of the surrounding depth area

QUASOU - 6:least depth known

SORDAT - 20061018

SORIND - US, US, survy, H11601

TECSOU - 3:found by multi-beam VERDAT - 12:Mean lower low water

Office Notes

Concur. Chart---- 21 ft sounding at surveyed location.

Feature Images

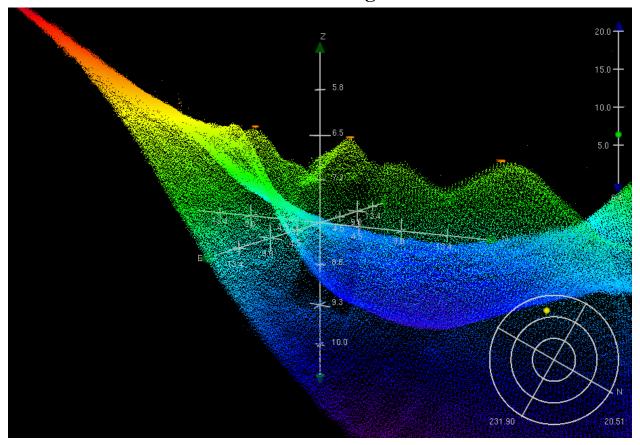


Figure 1.1.1

1.2) DTON9 21 ft Obstruction 2399/69

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 32′ 27.092″ N, 074° 02′ 22.825″ W

Least Depth: 6.46 m

Timestamp: 2006-266.18:13:18.496 (09/23/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-266 / 552_1809

Profile/Beam: 2399/69

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1,

14500 1

Remarks:

Object investigated with 100% MBES and 200% SSS. Significant object with a height of 1.06m found within search radius. This object is located near a channel thus is navigationally significant.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-266/552_1809	2399/69	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss200/2006-254/267_1603	0001	12.43	166.6	Secondary

Hydrographer Recommendations

Replace charted obstruction 22 ft with a charted obstruction 21 ft at surveyed location.

Cartographically-Rounded Depth (Affected Charts):

21ft (12402_1, 12327_1, 12326_1) 3 ½fm (12300_1, 13006_1, 13003_1, 14500_1) 6.4m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 6:least depth known

SORDAT - 20060923

SORIND - US, US, surve, H11601

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 6.461 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur. Delete charted 22 ft and add 21ft obstruction Chart---- 21 ft Obstn w/danger curve at surveyed location

Feature Images

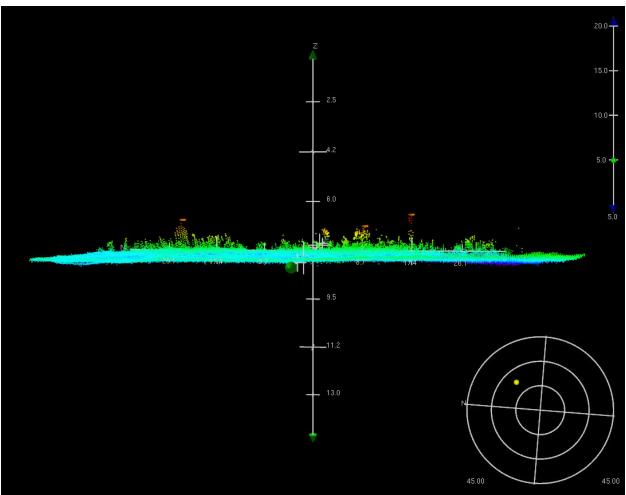


Figure 1.2.1

1.3) DToN9 9 ft Obstruction 207/227

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 33′ 57.531″ N, 073° 54′ 39.684″ W

Least Depth: 2.84 m

Timestamp: 2006-285.14:41:49.854 (10/12/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-285 / 351_1440

Profile/Beam: 207/227

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1,

14500 1

Remarks:

This obstruction was found with 50 meter line spacing using a Reson 8125 MBES. Soundings are corrected to MLLW using verified tides and preliminary tide zoning. This obstruction is significant based upon height and could cause a danger to navigation.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-285/351_1440	207/227	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss200/2006-262/222_1728	0003	1.78	149.4	Secondary

Hydrographer Recommendations

Chart dangerous obstruction in surveyed position.

Cartographically-Rounded Depth (Affected Charts):

9ft (12350_1, 12327_1, 12326_1) 1 ½fm (12300_1, 13006_1, 13003_1, 14500_1) 2.8m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN) **Attributes:** VALSOU - 2.839 m

Office Notes

Concur. Chart as reported.

Chart----- 9ft Obstn w/danger curve at surveyed location.

Feature Images

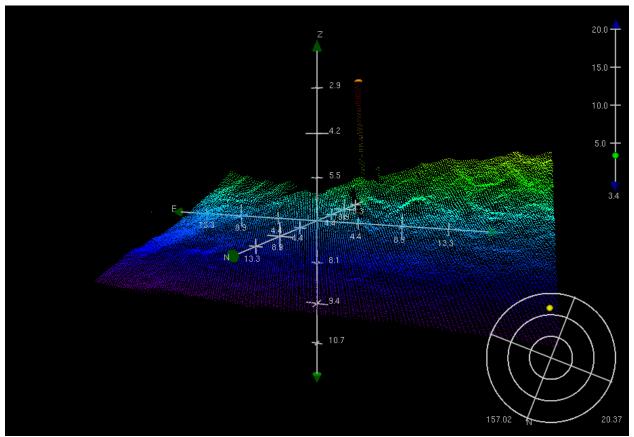


Figure 1.3.1

1.4) DTON9 19 ft ROCK 526/167

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 31′ 56.883″ N, 074° 02′ 28.401″ W

Least Depth: 5.80 m

Timestamp: 2006-293.13:32:38.163 (10/20/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-293 / 100_1331

Profile/Beam: 526/167

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1,

14500 1

Remarks:

This uncharted dangerous rock was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings were corrected to MLLW with observed water levels and final tide zoning. This is the same item as DTON3 Rock 2075/240, however a shoaler depth was determined for the object.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-293/100_1331	526/167	0.00	0.000	Primary

Hydrographer Recommendations

Chart a dangerous rock with least depth of 5.80 meters (19.0 feet).

Cartographically-Rounded Depth (Affected Charts):

19ft (12402_1, 12327_1, 12326_1) 3fm (12300_1, 13006_1, 13003_1, 14500_1) 5.8m (5161_1)

S-57 Data

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

Attributes: QUASOU - 6:least depth known

SORDAT - 2006091019

SORIND - US, US, surve, H11601

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 5.804 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur. Recommend removal of 22 ft rock and replace with 19 ft rock. Delete 22ft Rk w/danger curve Chart----- 19ft Rk w/danger curve

Feature Images

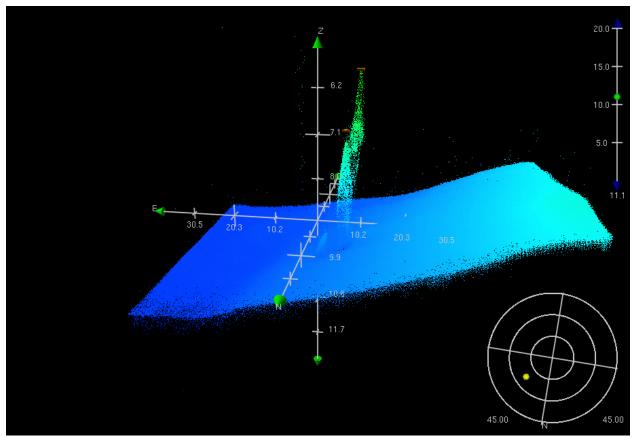


Figure 1.4.1

1.5) DTON9 2 ft Sounding 765/157

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 34′ 30.972″ N, 073° 55′ 46.412″ W

Least Depth: 0.82 m

Timestamp: 2006-294.13:14:47.901 (10/21/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-294 / 370_1313

Profile/Beam: 765/157

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1,

14500_1

Remarks:

This uncharted shoal sounding area was found with 100% Reson 8125 Reson MBES. Soundings are corrected to MLLW with verified water levels and final tide zoning.

This sounding was not addressed by the field and was revealed during office QC.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-294/370_1313	765/157	0.00	0.000	Primary
h11601/tj_3101_reson8125/2006-291/513_1450	337/190	2.03	054.1	Secondary
h11601/tj_3101_reson8125/2006-291/515_1502	530/28	4.47	271.9	Secondary
h11601/tj_3101_reson8125/2006-291/513_1450	504/179	7.14	011.6	Secondary
h11601/tj_3101_reson8125/2006-291/515_1502	577/43	8.63	223.3	Secondary
h11601/tj_3101_reson8125/2006-291/516_1459	873/30	9.29	230.6	Secondary
h11601/tj_3101_reson8125/2006-291/515_1502	525/230	9.90	281.9	Secondary
h11601/tj_3101_reson8125/2006-291/513_1450	725/5	10.37	323.1	Secondary
h11601/tj_3101_reson8125/2006-291/513_1450	556/208	10.47	004.1	Secondary
h11601/tj_3101_reson8125/2006-291/515_1502	612/38	13.10	210.8	Secondary
h11601/tj_3101_reson8125/2006-291/520_1549	242/240	13.30	250.3	Secondary
h11601/tj_3101_reson8125/2006-291/513_1450	125/42	15.10	176.4	Secondary
h11601/tj_3101_reson8125/2006-291/517_1455	709/160	15.21	256.2	Secondary
h11601/tj_3101_reson8125/2006-291/515_1502	631/1	15.54	202.1	Secondary
h11601/tj_3101_reson8125/2006-291/513_1450	616/240	16.96	354.9	Secondary

h11601/tj_3101_reson8125/2006-291/515_1502	660/1	20.08	197.3	Secondary
h11601/tj_3101_reson8125/2006-291/513_1450	78/184	21.05	182.0	Secondary
h11601/tj_3101_reson8125/2006-291/515_1502	363/2	23.94	006.6	Secondary
h11601/tj_3101_reson8125/2006-291/513_1450	25/168	27.71	188.6	Secondary

Hydrographer Recommendations

Replace the current area with a new shoaler sounding with least depth 0.82 meters (2.7 feet) and adjust the associated contours in the immediate area to reflect this change.

Cartographically-Rounded Depth (Affected Charts):

```
2ft (12350_1, 12327_1, 12326_1)
0 ½fm (12300_1, 13006_1, 13003_1, 14500_1)
.8m (5161_1)
```

S-57 Data

Geo object 1: Sounding (SOUNDG)

Attributes: QUASOU - 6:least depth known

SORDAT - 20061021

SORIND - US,US,surve,H11601 TECSOU - 3:found by multi-beam VERDAT - 12:Mean lower low water

Office Notes

Concur. Replace the current area with a new shoaler sounding with least depth 0.82 meters (2.7 feet) and adjust the associated contours in the immediate area to reflect this change.

Chart---- 2 ft sounding at surveyed location

Feature Images

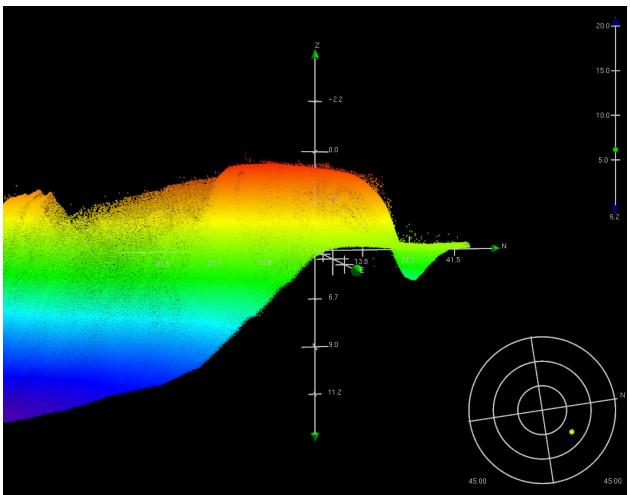


Figure 1.5.1

APPENDIX II

ITEM INVESTIGATIONS AND CHARTED FEATURES

Following are item investigation reports detailing three groups of features:

- 1. AWOIS Items
- 2. Charted Features and Notes
- 3. Significant Uncharted Features

H11601 FEATURE REPORT

Registry Number: H11601

State: New York

Locality: New York Harbor

Sub-locality: Lower Bay to Rockaway Inlet

Project Number: OPR-B310-TJ-06

Survey Dates: 09/05/2006 - 12/18/2006

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
12402	10th	05/01/2006	1:15,000 (12402_1)	USCG LNM: 08/07/2007 (12/18/2007) CHS NTM: None (12/28/2007) NGA NTM: 11/15/1997 (12/22/2007)
12350	59th	03/01/2006	1:20,000 (12350_1)	USCG LNM: 10/02/2007 (12/11/2007) CHS NTM: None (11/30/2007) NGA NTM: 11/08/1997 (12/22/2007)
12327	100th	07/01/2007	1:40,000 (12327_1)	USCG LNM: 11/20/2007 (12/18/2007) CHS NTM: None (12/28/2007) NGA NTM: 06/17/2006 (12/22/2007)
12326	49th	06/01/2003	1:80,000 (12326_1)	[L]NTM: ?
12300	45th	03/01/2005	1:400,000 (12300_1)	[L]NTM: ?
13006	32nd	02/01/2005	1:675,000 (13006_1)	[L]NTM: ?
5161	13th	10/01/2003	1:1,058,400 (5161_1)	[L]NTM: ?
13003	48th	10/01/2004	1:1,200,000 (13003_1)	[L]NTM: ?
14500	27th	10/01/2002	1:1,500,000 (14500_1)	[L]NTM: ?

^{*} Correction(s) - source: last correction applied (last correction reviewed--"cleared date")

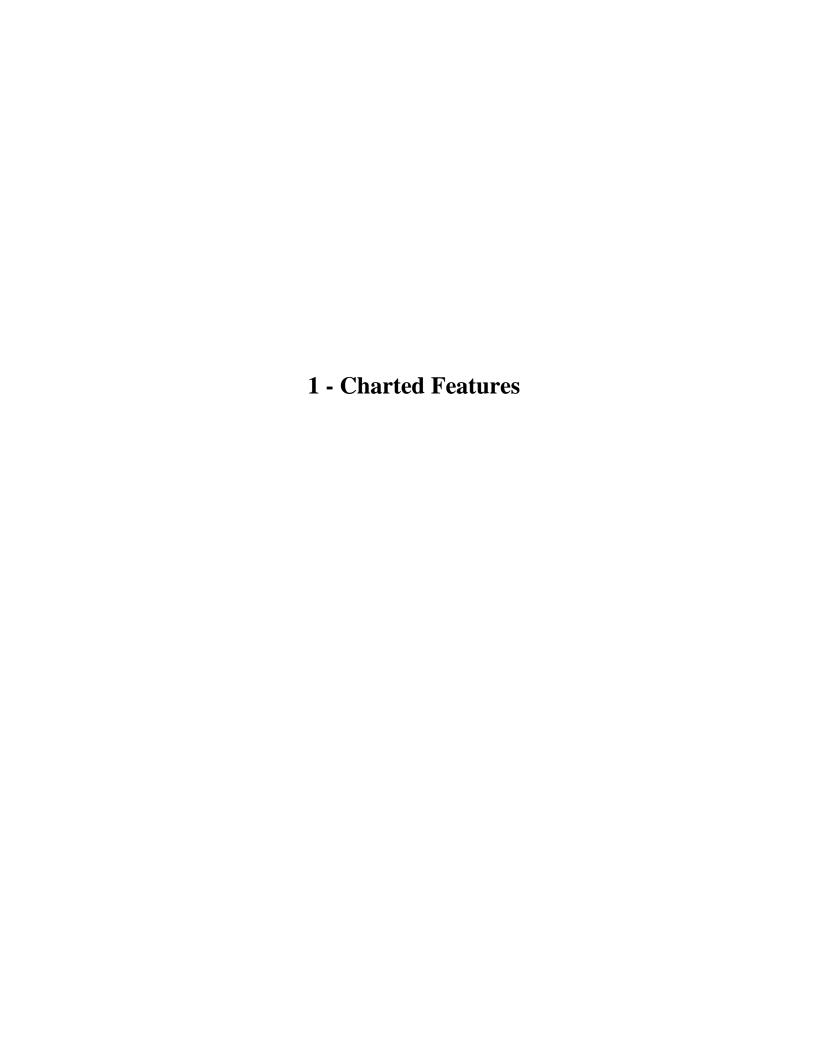
Features

		Feature	Survey	Survey	Survey	AWOIS
No.	Name	Type	Depth	Latitude	Longitude	Item
1.1	Jetty - retain	Stationary structure, floating or fixed	[None]	40° 34' 12.9" N	073° 59' 26.7" W	
1.2	Jetty - retain	Stationary structure, floating or fixed	[None]	40° 34' 12.8" N	073° 59' 34.7" W	
1.3	Jetty - retain	Stationary structure, floating or fixed	[None]	40° 34' 12.2" N	073° 59' 42.6" W	
1.4	Jetty - retain	Stationary structure, floating or fixed	[None]	40° 34' 12.6" N	073° 59' 50.7" W	
1.5	Pier - retain	Stationary structure, floating or fixed	[None]	40° 33' 57.2" N	073° 54' 43.3" W	

1.6	Marina/Piles - Redesigned Marina	Stationary structure, floating or fixed	3.79 m	40° 35' 08.5" N	073° 54' 13.5" W	
1.7	Sewer 4588/82 - Revise location	Pipe	2.52 m	40° 34' 00.7" N	073° 55' 50.3" W	
1.8	Shl to 3 ft rep (1980) - Retain	GP	[None]	40° 34' 22.7" N	073° 55' 27.1" W	
1.9	Shoaling rep (1990) - Disproved	GP	[None]	40° 33' 34.1" N	073° 57' 02.7" W	
1.10	Shoaling rep (1990)- Disproved	GP	[None]	40° 33' 40.7" N	073° 57' 41.4" W	
1.11	CG Station_Disproved	Stationary structure, floating or fixed	[None]	40° 34' 04.0" N	073° 53' 06.8" W	
2.1	59 Obstn	Obstruction	17.98 m	40° 34' 59.5" N	074° 02' 15.8" W	
2.2	26 Obstn	Sounding	8.00 m	40° 34' 53.0" N	074° 02' 28.9" W	
2.3	29 Obstn	Obstruction	8.85 m	40° 35' 04.9" N	074° 02' 29.2" W	
2.4	22 Obstn	Obstruction	6.87 m	40° 35' 06.6" N	074° 02' 47.3" W	
2.5	20 Obstn	Obstruction	6.19 m	40° 33' 47.7" N	074° 00' 53.8" W	
2.6	13 Obstn	Obstruction	4.14 m	40° 33' 58.5" N	073° 59' 42.5" W	
2.7	15 Obstn	Sounding	4.72 m	40° 33' 56.8" N	073° 59' 32.7" W	
2.8	30 Obstn	Obstruction	9.11 m	40° 33' 26.1" N	074° 02' 00.4" W	
2.9	DTON3 22 RK - Disproved	Rock	6.89 m	40° 31' 57.0" N	074° 02' 28.3" W	
2.10	28 Obstn	Sounding	8.52 m	40° 32' 25.7" N	074° 02' 18.9" W	
2.11	Pile	Pile	[None]	40° 33' 55.1" N	073° 54' 48.8" W	
2.12	23 Wk	Wreck	7.05 m	40° 33' 10.3" N	074° 01' 03.8" W	
2.13	25 WK	Wreck	7.68 m	40° 32' 58.7" N	074° 02' 47.5" W	
2.14	14 Wk	Sounding	4.32 m	40° 31' 52.2" N	073° 59' 21.7" W	
2.15	23 Obstn	Obstruction	7.14 m	40° 32' 10.9" N	073° 57' 11.6" W	
2.16	20 Obstn	Obstruction	6.18 m	40° 31' 46.1" N	073° 56' 33.3" W	
2.17	25 Obstn	Obstruction	7.69 m	40° 33' 02.8" N	073° 56' 42.1" W	
2.18	22 Wk	Wreck	6.84 m	40° 34' 18.9" N	073° 54' 26.9" W	
2.19	26 Wk	Wreck	8.12 m	40° 34' 18.8" N	073° 54' 31.6" W	
2.20	30 Obstn	Obstruction	9.35 m	40° 33' 46.1" N	073° 55' 37.0" W	
2.21	20 Wk	Wreck	6.18 m	40° 33' 59.8" N	073° 54' 09.6" W	
2.22	12 Obstn	Pile	3.76 m	40° 34' 57.8" N	073° 54' 24.6" W	
2.23	13 Wk	Wreck	4.08 m	40° 35' 05.3" N	073° 54' 21.8" W	
2.24	New Pipeline	Pipe	2.85 m	40° 34' 14.4" N	073° 58' 22.5" W	
2.25	76 Wk	Wreck	23.18 m	40° 35' 30.6" N	074° 02' 10.2" W	
3.1	- Disproved	AWOIS	[no data]	[no data]	[no data]	
3.2	AWOIS 11500 - Disproved	Obstruction	15.47 m	40° 34' 22.9" N	074° 02' 06.8" W	11500
3.3	AWOIS 13507- Subm pilling - Retain	SSS	[None]	40° 34' 11.0" N	073° 58' 59.8" W	13507
3.4	AWOIS 13469 - 26 Obstn	Obstruction	7.89 m	40° 32' 24.1" N	074° 02' 11.5" W	13469
3.5	AWOIS 13470 - 28 Obstn	Obstruction	8.55 m	40° 32' 16.5" N	074° 02' 13.4" W	13470

3.6	AWOIS 9712 - 14 Wk	Wreck	4.23 m	40° 32' 47.9" N	074° 02' 37.3" W	9712
3.7	AWOIS 2698 - Disproved	Obstruction	6.77 m	40° 32' 15.5" N	073° 56' 48.3" W	2698
3.8	AWOIS 2704 - Disproved	Sounding	8.01 m	40° 31' 52.5" N	073° 56' 08.9" W	2704
3.9	AWOIS 1647- 20 Obstns	Obstruction	6.18 m	40° 31' 55.6" N	073° 56' 11.2" W	1647
3.10	AWOIS 13260 - 19 Obstn	Obstruction	5.74 m	40° 32' 08.1" N	073° 56' 27.6" W	13260
3.11	AWOIS-2696 - 21 Obstn	Obstruction	6.60 m	40° 31' 55.7" N	073° 57' 01.2" W	2696
3.12	AWOIS 13529 - Delete Subm pile PA	Pile	4.06 m	40° 35' 02.6" N	073° 54' 15.5" W	13529
3.13	AWOIS 9758 - 10 Obstn	Obstruction	3.06 m	40° 34' 01.5" N	074° 00' 26.3" W	9758
3.14	AWOIS 9722- Disproved	Obstruction	4.57 m	40° 33' 24.8" N	073° 57' 29.9" W	9722
3.15	AWOIS 9717 - 30 Obstn	Obstruction	9.34 m	40° 35' 48.4" N	074° 02' 58.6" W	9717
3.16	AWOIS - 9915 Disproved	Shoal	5.54 m	40° 33' 53.0" N	073° 59' 01.4" W	9915
3.17	AWOIS 9723 - Disproved	Wreck	6.74 m	40° 33' 18.2" N	073° 56' 44.1" W	9723
3.18	AWOIS 9721 - Disproved	Wreck	4.56 m	40° 34' 00.4" N	073° 57' 28.7" W	9721
3.19	AWOIS 2624- Disproved	Wreck	5.45 m	40° 34' 11.3" N	073° 55' 58.8" W	2624
3.20	AWOIS 9713- Disproved	Obstruction	3.55 m	40° 34' 00.0" N	073° 57' 58.4" W	9713
3.21	AWOIS 13271-Disproved	Obstruction	4.24 m	40° 31' 55.5" N	073° 55' 59.9" W	13271
3.22	AWOIS 13261- Disproved	Obstruction	5.40 m	40° 34' 39.4" N	073° 54' 18.0" W	13261
3.23	AWOIS 9709- Retain	Wreck	3.91 m	40° 32' 01.1" N	073° 59' 38.8" W	9709
3.24	AWOIS 13265 - Disproved	Wreck	9.24 m	40° 34' 10.9" N	073° 53' 57.2" W	13265
4.1	DTON1 20 Wk	Wreck	6.11 m	40° 34' 34.6" N	074° 02' 34.5" W	
4.2	DTON2 26 Rk	Rock	7.92 m	40° 35' 02.3" N	074° 02' 35.7" W	
4.3	DTON2 23 Rk	Rock	7.23 m	40° 34' 36.8" N	074° 02' 26.1" W	
4.4	DTON2 27 Rk	Rock	8.30 m	40° 34' 48.8" N	074° 02' 24.4" W	
4.5	DTON2 28 Rk	Rock	8.67 m	40° 35' 14.8" N	074° 02' 32.6" W	
4.6	DTON2 22 Obstn	Obstruction	6.90 m	40° 34' 55.8" N	074° 02' 36.5" W	
4.7	DTON2 25 Rk	Rock	7.64 m	40° 34' 04.6" N	074° 02' 20.0" W	
4.8	DTON2 20 Rk	Rock	6.23 m	40° 34' 50.3" N	074° 02' 39.2" W	
4.9	DTON2 38 Rk	Rock	11.71 m	40° 34' 43.7" N	074° 01' 43.0" W	
4.10	DTON2 23 Rk	Rock	7.00 m	40° 34' 20.6" N	074° 01' 20.8" W	
4.11	DTON2 15 Obstn	Obstruction	4.80 m	40° 33' 46.8" N	074° 00' 44.9" W	
4.12	DTON2 19 Rk	Rock	5.88 m	40° 34' 00.9" N	074° 00' 42.6" W	
4.13	DTON2 20 ft depth	Shoal	6.21 m	40° 33' 56.8" N	074° 00' 51.9" W	
4.14	DTON6 6 ft depth	Shoal	1.79 m	40° 33' 50.7" N	073° 58' 34.3" W	
4.15	DTON6 28 Obstn	Obstruction	8.48 m	40° 33' 37.3" N	074° 02' 09.1" W	
4.16	DTON4 9 Obstn	Obstruction	2.83 m	40° 34' 10.3" N	073° 59' 51.4" W	
4.17	DTON3 27 Wk	Wreck	8.27 m	40° 32' 04.0" N	074° 02' 25.6" W	

4.18	DTON3 27 Wk	Wreck	8.31 m	40° 31' 55.0" N	074° 02' 23.6" W	
4.19	DTON8 28 Obstn	Obstruction	8.52 m	40° 31' 44.2" N	074° 02' 25.7" W	
4.20	DTON5 24 Obstn	Obstruction	7.24 m	40° 31' 53.8" N	074° 02' 15.8" W	
4.21	DTON4 23 Obstn	Obstruction	7.13 m	40° 33' 45.4" N	074° 02' 20.3" W	
4.22	DTON4 13 Obstn	Obstruction	4.16 m	40° 33' 03.2" N	074° 02' 29.5" W	
4.23	DTON4 24 Obstn	Obstruction	7.29 m	40° 33' 57.7" N	074° 02' 19.7" W	
4.24	DTON6 19 Obstn	Obstruction	5.90 m	40° 31' 44.6" N	073° 56' 58.1" W	
4.25	DTON6 13 Obstn	Obstruction	3.98 m	40° 32' 27.2" N	073° 57' 08.5" W	
4.26	DTON6 19 Obstn	Obstruction	5.91 m	40° 32' 01.4" N	073° 56' 27.8" W	
4.27	DTON6 13 Obstn	Obstruction	3.98 m	40° 32' 32.1" N	073° 57' 08.1" W	
4.28	DTON6 6 ft depth	Shoal	1.80 m	40° 34' 29.1" N	073° 55' 47.2" W	
4.29	DTON7 8 ft depth	Shoal	2.56 m	40° 31' 56.8" N	073° 55' 58.1" W	
4.30	DTON7 9 ft depth - Shoaler depth	Shoal	2.77 m	40° 31' 58.2" N	073° 55' 59.5" W	
4.31	DTON7 8 ft depth	Shoal	2.57 m	40° 31' 53.1" N	073° 55' 53.9" W	
4.32	DTON7 10 ft depth - Shoaler depth	Shoal	3.20 m	40° 31' 51.6" N	073° 55' 51.8" W	
4.33	DTON6 18 Obstn	Obstruction	5.53 m	40° 34' 33.6" N	074° 02' 33.4" W	
4.34	DTON9 21 ft depth	Obstruction	6.35 m	40° 34' 29.8" N	073° 55' 43.6" W	
4.35	DTON6 11 Obstn	Obstruction	3.54 m	40° 34' 47.6" N	073° 55' 50.7" W	
4.36	DTON4 2 ft depth	Shoal	0.66 m	40° 34' 38.2" N	073° 54' 43.9" W	
4.37	DTON4 8 Wk	Wreck	2.47 m	40° 35' 08.4" N	073° 54' 13.6" W	
4.38	DTON4 10 Wk	Wreck	3.11 m	40° 34' 33.4" N	073° 54' 13.5" W	
4.39	DTON9 21 Obstn	Obstruction	6.46 m	40° 32' 27.1" N	074° 02' 22.8" W	
4.40	DTON6 19 Obstn	Obstruction	5.95 m	40° 31' 36.9" N	073° 57' 29.4" W	
4.41	DToN9 9 Obstn	Obstruction	2.84 m	40° 33' 57.5" N	073° 54' 39.7" W	
4.42	DTON7 9 ft depth - Shoaler depth	Shoal	2.75 m	40° 31' 54.4" N	073° 55' 56.7" W	
4.43	DTON7 10 ft depth	Shoal	3.06 m	40° 32' 00.1" N	073° 56' 01.4" W	
4.44	DTON7 11 ft depth	Shoal	3.50 m	40° 31' 49.7" N	073° 55' 47.8" W	
4.45	DTON7 12 ft depth - Shoaler depth	Shoal	3.60 m	40° 32' 01.9" N	073° 56' 00.3" W	
4.46	DTON7 11ft depth	Shoal	3.32 m	40° 31' 50.2" N	073° 55' 43.9" W	
4.47	DTON8 5 ft depth	Shoal	1.49 m	40° 34' 19.7" N	073° 54' 58.4" W	
4.48	DTON9 19 Rk	Rock	5.80 m	40° 31' 56.9" N	074° 02' 28.4" W	
4.49	DTON9 2 ft depth	Shoal	0.82 m	40° 34' 31.0" N	073° 55' 46.4" W	



H11601 FEATURE REPORT 1 - Charted Features

1.1) Jetty - retain

Survey Summary

Survey Position: 40° 34′ 12.9″ N, 073° 59′ 26.7″ W

Least Depth: [None]

TPU ($\pm 1.96\sigma$): THU (TPEh) [None]; TVU (TPEv) [None]

Timestamp: 2006-252.12:55:45 (09/09/2006)

Survey Line: h11601 / tj_3102_klein5000_sss100 / 2006-251 / 164_1312

Contact/Point: 0002/1

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This SSS imagery identifies the extent of a jetty on the south end of Coney Island.

Feature Correlation

Address	Feature	Range	Azimuth	Status	
h11601/tj_3102_klein5000_sss100/2006-251/164_1312	0002	0.00	0.000	Primary	

Hydrographer Recommendations

Retain as charted.

S-57 Data

Geo object 1: Shoreline Construction (SLCONS)

Attributes: CATSLC - 1:breakwater

NATCON - 3:loose boulders

STATUS - 1:permanent

WATLEV - 1:partly submerged at high water

Office Notes

Concur. Retain as charted.

H11601 FEATURE REPORT 1 - Charted Features

Feature Images

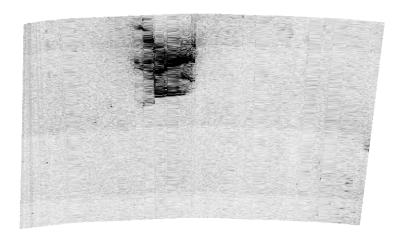


Figure 1.1.1

H11601 FEATURE REPORT 1 - Charted Features

1.2) Jetty - retain

Survey Summary

Survey Position: 40° 34′ 12.8″ N, 073° 59′ 34.7″ W

Least Depth: [None]

TPU ($\pm 1.96\sigma$): THU (TPEh) [None]; TVU (TPEv) [None]

Timestamp: 2006-252.12:55:52 (09/09/2006)

Survey Line: h11601 / tj_3102_klein5000_sss100 / 2006-251 / 164_1312

Contact/Point: 0003/1

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This SSS imagery identifies the extent of a jetty on the south end of Coney Island.

Feature Correlation

Address	Feature	Range	Azimuth	Status	
h11601/tj_3102_klein5000_sss100/2006-251/164_1312	0003	0.00	0.000	Primary	ı

Hydrographer Recommendations

Retain as charted

S-57 Data

Geo object 1: Shoreline Construction (SLCONS)

Attributes: CATSLC - 1:breakwater

NATCON - 3:loose boulders

STATUS - 1:permanent

WATLEV - 1:partly submerged at high water

Office Notes

Concur. Retain as charted.

Feature Images

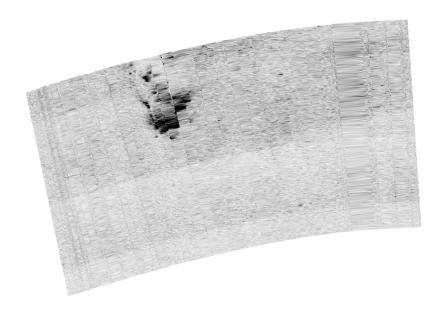


Figure 1.2.1

1.3) Jetty - retain

Survey Summary

Survey Position: 40° 34′ 12.2″ N, 073° 59′ 42.6″ W

Least Depth: [None]

TPU ($\pm 1.96\sigma$): THU (TPEh) [None]; TVU (TPEv) [None]

Timestamp: 2006-252.12:56:26 (09/09/2006)

Survey Line: h11601 / tj_3102_klein5000_sss100 / 2006-251 / 164_1312

Contact/Point: 0005/1

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This SSS imagery identifies the extent of a jetty on the south end of Coney Island.

Feature Correlation

Address		Feature	Range	Azimuth	Status	
	h11601/tj_3102_klein5000_sss100/2006-251/164_1312	0005	0.00	0.000	Primary	

Hydrographer Recommendations

Retain as charted

S-57 Data

Geo object 1: Shoreline Construction (SLCONS)

Attributes: CATSLC - 1:breakwater

NATCON - 3:loose boulders

STATUS - 1:permanent

WATLEV - 1:partly submerged at high water

Office Notes

Concur. Retain as charted.

Feature Images

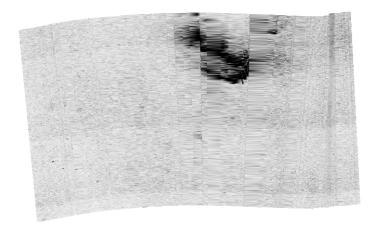


Figure 1.3.1

1.4) Jetty - retain

Survey Summary

Survey Position: 40° 34′ 12.6″ N, 073° 59′ 50.7″ W

Least Depth: [None]

TPU ($\pm 1.96\sigma$): THU (TPEh) [None]; TVU (TPEv) [None]

Timestamp: 2006-252.12:56:55 (09/09/2006)

Survey Line: h11601 / tj_3102_klein5000_sss100 / 2006-251 / 164_1312

Contact/Point: 0007/1

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This SSS imagery identifies the extent of a jetty on the south end of Coney Island.

Feature Correlation

Address		Feature	Range	Azimuth	Status	
	h11601/tj_3102_klein5000_sss100/2006-251/164_1312	0007	0.00	0.000	Primary	

Hydrographer Recommendations

Retain as charted

S-57 Data

Geo object 1: Shoreline Construction (SLCONS)

Attributes: CATSLC - 1:breakwater

NATCON - 3:loose boulders STATUS - 1:permanent

WATLEV - 1:partly submerged at high water

Office Notes

Concur. Retain as charted.

Feature Images

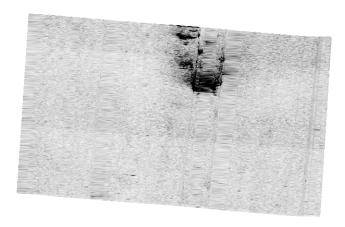


Figure 1.4.1

1.5) Pier - retain

Survey Summary

Survey Position: 40° 33′ 57.2″ N, 073° 54′ 43.3″ W

Least Depth: [None]

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) [None]; **TVU** (**TPEv**) [None]

Timestamp: 2006-266.02:54:39 (09/23/2006)

Survey Line: h11601 / tj_3102_klein5000_sss200 / 2006-262 / 222_1728

Contact/Point: 0002/1

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This SSS imagery outlines the extent of a pier on the north end of Rockaway Island.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3102_klein5000_sss200/2006-262/222_1728	0002	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-272/111_1624	0002	3.16	058.1	Secondary

Hydrographer Recommendations

Pier appears to be extending an additional 10 ft beyond charted extents. Updated shoreline is recommended to obtain precise position of the charted pier.

S-57 Data

Geo object 1: Shoreline Construction (SLCONS)

Attributes: CATSLC - 4:pier (jetty)

NATCON - 6:wooden STATUS - 1:permanent WATLEV - 2:always dry

Office Notes

Concur with clarification. Defer to MCD Source Data Branch for final charting recommendation.

Feature Images

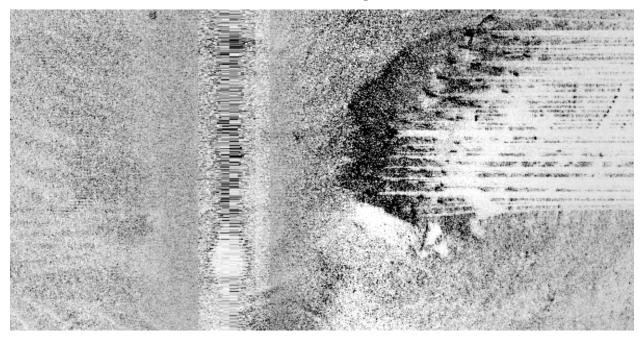


Figure 1.5.1

1.6) Marina/Piles - Redesigned Marina

Survey Summary

Survey Position: 40° 35′ 08.5″ N, 073° 54′ 13.5″ W

Least Depth: 3.79 m (= 12.42 ft = 2.071 fm = 2 fm 0.42 ft)

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) ± 0.980 m; **TVU** (**TPEv**) ± 0.367 m

Timestamp: 2006-292.17:59:23.085 (10/19/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-292 / 494_1758

Profile/Beam: 512/1

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Each of these items represent a piling at the edge of a pier. These were found with Reson 8125 MBES. Soundings do not reflect the top of the objects.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-292/494_1758	512/1	0.00	0.000	Primary
h11601/tj_3101_reson8125/2006-292/494_1758	575/1	7.50	320.0	Secondary (grouped)
h11601/tj_3101_reson8125/2006-292/494_1758	639/1	15.07	319.4	Secondary (grouped)
h11601/tj_3101_reson8125/2006-292/494_1758	703/1	22.44	319.6	Secondary (grouped)
h11601/tj_3101_reson8125/2006-292/494_1758	767/1	29.78	319.5	Secondary (grouped)
h11601/tj_3101_reson8125/2006-292/494_1758	831/1	37.32	319.6	Secondary (grouped)
h11601/tj_3101_reson8125/2006-292/494_1758	893/1	44.61	319.6	Secondary (grouped)
h11601/tj_3101_reson8125/2006-292/494_1758	959/1	52.18	319.6	Secondary (grouped)
h11601/tj_3101_reson8125/2006-292/494_1758	1021/1	59.50	319.7	Secondary (grouped)
h11601/tj_3101_reson8125/2006-292/494_1758	1084/1	67.06	319.8	Secondary (grouped)
h11601/tj_3101_reson8125/2006-292/494_1758	1146/1	74.40	319.8	Secondary (grouped)
h11601/tj_3101_reson8125/2006-292/494_1758	1228/1	83.84	319.7	Secondary (grouped)
h11601/tj_3101_reson8125/2006-292/494_1758	1278/1	89.86	319.8	Secondary (grouped)
h11601/tj_3101_reson8125/2006-292/494_1758	1326/1	95.62	319.8	Secondary (grouped)
h11601/tj_3101_reson8125/2006-292/494_1758	1389/1	102.82	319.8	Secondary (grouped)
h11601/tj_3101_reson8125/2006-292/494_1758	1452/1	110.29	319.9	Secondary (grouped)
h11601/tj_3101_reson8125/2006-292/494_1758	1506/1	117.61	319.9	Secondary (grouped)

Hydrographer Recommendations

Move the charted extent of the marina to correlate with current sounding data. Recommend conducting shoreline verification of marina floating/fixed pier.

Cartographically-Rounded Depth (Affected Charts):

```
12ft (12350_1, 12327_1, 12326_1)
2fm (12300_1, 13006_1, 13003_1, 14500_1)
3.8m (5161_1)
```

S-57 Data

Geo object 1: Mooring/warping facility (MORFAC)

Attributes: CATMOR - 4:tie-up wall

SORDAT - 20061019

SORIND - US, US, surve, H11601

STATUS - 1:permanent

VERDAT - 12:Mean lower low water

Office Notes

Concur with clarification. Marina has been completely redesigned. Defer to MCD Source Data Branch for final charting recommendation.

1.7) Sewer 4588/82 - Revise location

Survey Summary

Survey Position: 40° 34′ 00.7″ N, 073° 55′ 50.3″ W

Least Depth: 2.52 m = 1.377 fm = 1 fm 2.26 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) ± 0.980 m; **TVU** (**TPEv**) ± 0.366 m

Timestamp: 2006-293.16:49:39.874 (10/20/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-293 / 326_1645

Profile/Beam: 4588/82

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This charted sewer line was found with 200% SSS and 100% Reson 8125. Soundings are corrected to MLLW using verified tides and preliminary tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-293/326_1645	4588/82	0.00	0.000	Primary
h11601/tj_3101_reson8125/2006-293/325_1652	3412/155	61.37	191.1	Secondary (grouped)
h11601/tj_3101_reson8125/2006-293/324_1659	4451/74	130.87	190.4	Secondary (grouped)
h11601/tj_3101_reson8125/2006-293/323_1706	3537/153	204.44	190.3	Secondary (grouped)
h11601/tj_3101_reson8125/2006-293/316_1713	3524/104	263.38	190.0	Secondary (grouped)
h11601/tj_3101_reson8125/2006-293/318_1719	2210/236	323.22	190.0	Secondary (grouped)
h11601/tj_3102_klein5000_sss100/2006-267/107_1516	0002	401.93	192.3	Secondary (grouped)
h11601/tj_3101_reson8125/2006-293/322_1738	824/239	455.33	190.2	Secondary (grouped)
h11601/tj_3101_reson8125/2006-294/374_1330	2816/149	523.40	190.4	Secondary (grouped)
h11601/tj_3101_reson8125/2006-294/374_1330	3349/151	586.71	190.2	Secondary (grouped)
h11601/tj_3101_reson8125/2006-291/132_1336	2390/221	630.27	189.9	Secondary (grouped)

Hydrographer Recommendations

Move charted eastern sewer line to updated position.

Cartographically-Rounded Depth (Affected Charts):

8ft (12350_1, 12327_1, 12326_1) 1 ½fm (12300_1, 13006_1, 13003_1, 14500_1)

2.5m (5161_1)

S-57 Data

Geo object 1: Pipeline, submarine/on land (PIPSOL)

Attributes: CATPIP - 4:sewer

PRODCT - 7:chemicals SORDAT - 20061020

SORIND - US,US,surve,H11601

STATUS - 1:permanent

Office Notes

do not concur - Area not adequately investigated. No change in charting is recommended.

Feature Images

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/sewer_pipes_40-33-51_073-55-59.JPG does not exist.]

1.8) Shl to 3 ft rep (1980) - Retain

Survey Summary

Survey Position: 40° 34′ 22.7″ N, 073° 55′ 27.1″ W

Least Depth: [None]

TPU ($\pm 1.96\sigma$): THU (TPEh) [None]; TVU (TPEv) [None]

Timestamp: 2006-341.19:51:57 (12/07/2006)

GP Dataset: ChartGPs - Digitized

GP No.: 1

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

In 1980, shoaling was reported in this area to 3 feet. Current survey depths do not exceed 9 feet in the surrounding vicinity. MBES was collected in the area using 60m line spacing.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	1	0.00	0.000	Primary

Hydrographer Recommendations

Remove "Shl to 3ft rep (1980)" from chart and chart current soundings.

S-57 Data

[None]

Office Notes

Do not concur. Area of reported shoal must be fully developed to determine least depth. Retain as charted.

1.9) Shoaling rep (1990) - Disproved

Survey Summary

Survey Position: 40° 33′ 34.1″ N, 073° 57′ 02.7″ W

Least Depth: [None]

TPU ($\pm 1.96\sigma$): THU (TPEh) [None]; TVU (TPEv) [None]

Timestamp: 2006-341.19:54:18 (12/07/2006)

GP Dataset: ChartGPs - Digitized

GP No.: 2

Charts Affected: 12402_1, 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

In 1990, shoaling was reported in this area. 100% MBES coverage was collected in this area during this survey.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	2	0.00	0.000	Primary

Hydrographer Recommendations

Remove "Shoaling rp (1990)" from chart and chart current soundings.

S-57 Data

[None]

Office Notes

Concur. Delete notation "Shoaling rep (1990)". Chart present survey soundings.

1.10) Shoaling rep (1990)- Disproved

Survey Summary

Survey Position: 40° 33′ 40.7″ N, 073° 57′ 41.4″ W

Least Depth: [None]

TPU ($\pm 1.96\sigma$): THU (TPEh) [None]; TVU (TPEv) [None]

Timestamp: 2006-341.19:55:52 (12/07/2006)

GP Dataset: ChartGPs - Digitized

GP No.: 3

Charts Affected: 12402_1, 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

In 1990, shoaling was reported in this area. 100% MBES coverage was collected in this area during this survey.

Feature Correlation

Address	Address Feature Range			Status
ChartGPs - Digitized	3	0.00	0.000	Primary

Hydrographer Recommendations

Remove "Shoaling rep (1990)" from this chart and chart current soundings.

S-57 Data

[None]

Office Notes

Concur. Delete notation "Shoaling rep (1990)". Chart present survey soundings.

1.11) CG Station_Disproved

Survey Summary

Survey Position: 40° 34′ 04.0″ N, 073° 53′ 06.8″ W

Least Depth: [None]

TPU ($\pm 1.96\sigma$): THU (TPEh) [None]; TVU (TPEv) [None]

Timestamp: 2006-352.13:41:55 (12/18/2006)

GP Dataset: ChartGPs - Digitized

GP No.: 4

Charts Affected: 12350_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

As per US Coast Guard Sector New York Command Center, USCG Station Rockaway is no longer an active coast guard station. See correspondence in Appendix V.

Feature Correlation

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

Hydrographer Recommendations

Remove "Rockaway PT CG" from chart.

S-57 Data

Geo object 1: Landmark (LNDMRK)

Attributes: CATLMK - 17:tower

CONVIS - 1:visual conspicuous FUNCTN - 18:administrative STATUS - 1:permanent

Office Notes

Concur. Remove feature from affected charts.



2.1) 59 Obstn

Survey Summary

Survey Position: 40° 34′ 59.5″ N, 074° 02′ 15.8″ W

Least Depth: 17.98 m = 58.99 ft = 9.831 fm = 9 fm = 4.99 ft

TPU (\pm **1.96** σ): THU (TPEh) \pm 0.981 m; TVU (TPEv) \pm 0.369 m

Timestamp: 2006-248.16:50:39.660 (09/05/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-248 / 120_1643

Profile/Beam: 2933/24

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This obstruction was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings are corrected to MLLW using verified tides and final tide zoning. Obstruction is significant based upon height (1.07m) but is not navigationally significant.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-248/120_1643	2933/24	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-248/126_1439		1.84	139.2	Secondary
h11601/tj_3102_klein5000_sss200/2006-250/254_1260	0001	5.72	268.7	Secondary

Hydrographer Recommendations

Chart an obstruction with least depth 17.99 meters (59 feet).

Cartographically-Rounded Depth (Affected Charts):

59ft (12402_1, 12327_1, 12326_1) 9 34fm (12300_1, 13006_1, 13003_1, 14500_1) 18.0m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 1:depth known

SORDAT - 20060905

SORIND - US, US, surve, H11601

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 17.979 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur - Chart an obstruction with a depth of 59 feet in latitude 40°34'59.47"N, longitude 74°02'15.85"W. Add 59 Obstn and danger curve.

Feature Images

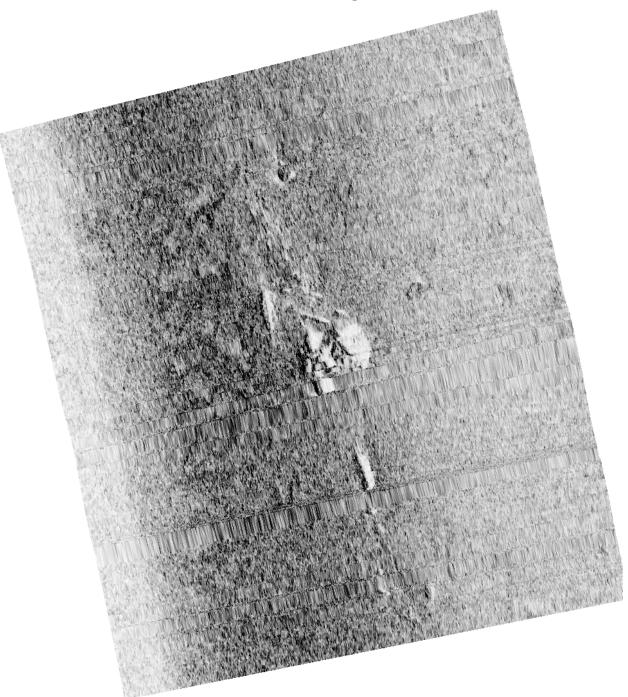


Figure 2.1.1

2.2) 26 Obstn

Survey Summary

Survey Position: 40° 34′ 53.0″ N, 074° 02′ 28.9″ W

Least Depth: 8.00 m = 26.24 ft = 4.373 fm = 4 fm 2.24 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) $\pm 0.980 \text{ m}$; **TVU** (**TPEv**) $\pm 0.367 \text{ m}$

Timestamp: 2006-248.14:54:02.253 (09/05/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-248 / 387_1446

Profile/Beam: 4898/62

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Field flagged this item as pending. Field unresolved. Office review has determined that this item is significant. Side scan images indicate a 1m obstruction. Feature rises of the seafloor 1m (3.28 ft). This feature is 220m west of traffic pattern limit.

Feature Correlation

Address		Feature	Range	Azimuth	Status	
	h11601/tj_3101_reson8125/2006-248/387_1446	4898/62	0.00	0.000	Primary	

Hydrographer Recommendations

Recommend to chart 26 ft obstruction at given position.

Cartographically-Rounded Depth (Affected Charts):

```
26ft (12402_1, 12327_1, 12326_1)
4 ½fm (12300_1, 13006_1, 13003_1, 14500_1)
8.0m (5161_1)
```

S-57 Data

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

Attributes: QUASOU - 6:least depth known

SORDAT - 20060905

SORIND - US, US, survy, H11601

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 7.998 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur - Chart an obstruction with a depth of 26 feet in latitude $40^{\circ}34'52.96"N$, longitude $74^{\circ}02'28.91"W$. Add 26 Obstn and danger curve.

Feature Images

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/26ftobs_248_387_1446.jpg does not exist.]

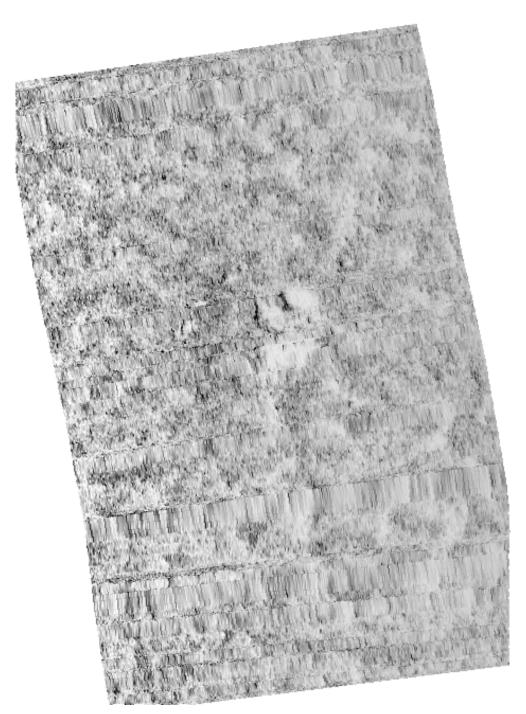


Figure 2.2.1

2.3) 29 Obstn

Survey Summary

Survey Position: 40° 35′ 04.9″ N, 074° 02′ 29.2″ W

Least Depth: 8.85 m = 29.04 ft = 4.839 fm = 4 fm 5.04 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) ± 0.980 m; **TVU** (**TPEv**) ± 0.367 m

Timestamp: 2006-248.15:19:54.408 (09/05/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-248 / 393_1516

Profile/Beam: 2409/220

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This obstruction (approximately 4.5 meters by 2.5 meters x 1.3 meters) was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings are corrected to MLLW with verified tides and final tide zoning. Obstruction is significant based upon height (1.30m) but is not navigationally significant.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-248/393_1516	2409/220	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-248/129_1405	0001	2.28	219.5	Secondary (grouped)
h11601/tj_3102_klein5000_sss100/2006-248/140_1832	0002	2.85	178.2	Secondary (grouped)

Hydrographer Recommendations

Chart an obstruction with least depth 8.85 meters (29 feet).

Cartographically-Rounded Depth (Affected Charts):

29ft (12402_1, 12327_1, 12326_1) 4 34fm (12300_1, 13006_1, 13003_1, 14500_1) 8.9m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 1:depth known

SORDAT - 20060905

SORIND - US, US, surve, H11601

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 8.850 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur - Chart an obstruction with a depth of 29 feet in latitude $40^{\circ}35'04.94"N$, longitude $74^{\circ}02'29.20"W$. Add 29 Obstn and danger curve.

Feature Images

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/2409-220.JPG does not exist.]

2.4) 22 Obstn

Survey Summary

Survey Position: 40° 35′ 06.6″ N, 074° 02′ 47.3″ W

Least Depth: $6.87 \text{ m} = 22.55 \text{ ft} = 3.758 \text{ fm} = 3 \text{ f$

TPU (\pm **1.96** σ): THU (TPEh) \pm 0.980 m; TVU (TPEv) \pm 0.367 m

Timestamp: 2006-249.13:59:44.969 (09/06/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-249 / 419_1356

Profile/Beam: 3183/25

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This obstruction was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Sounding are corrected to MLLW with verified tides and final tide zoning. Obstruction is significant based upon height (approximately 1m) but is not navigationally significant.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-249/419_1356	3183/25	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss200/2006-250/230_1535	0001	3.30	215.3	Secondary
h11601/tj_3102_klein5000_sss200/2006-250/233_1552	0003	3.84	069.0	Secondary
h11601/tj_3102_klein5000_sss100/2006-248/131_1734	0001	4.29	049.6	Secondary

Hydrographer Recommendations

Chart an obstruction with least depth 6.84 meters (22.4 feet).

Cartographically-Rounded Depth (Affected Charts):

22ft (12402_1, 12327_1, 12326_1) 3 ³/₄fm (12300_1, 13006_1, 13003_1, 14500_1) 6.9m (5161_1)

S-57 Data

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

Attributes: QUASOU - 6:least depth known

SORDAT - 20061016

SORIND - US, US, survy, H11601

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 6.872 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur - Chart an obstruction with a depth of 22 feet in latitude 40°35'06.59"N, longitude 74°02'47.26"W. Add 22 Obstn and danger curve.

Feature Images

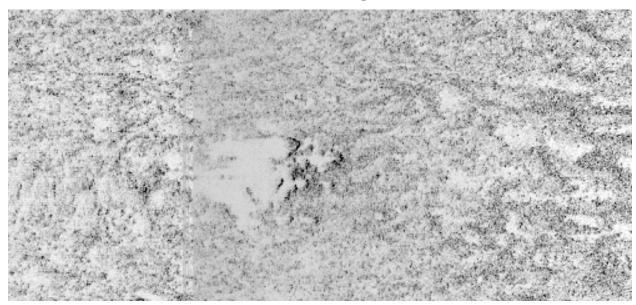


Figure 2.4.1

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/3138-25.JPG does not exist.]

2.5) 20 Obstn

Survey Summary

Survey Position: 40° 33′ 47.7″ N, 074° 00′ 53.8″ W

Least Depth: 6.19 m = 20.32 ft = 3.386 fm = 3 fm 2.32 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) $\pm 0.980 \text{ m}$; **TVU** (**TPEv**) $\pm 0.367 \text{ m}$

Timestamp: 2006-251.16:50:07.917 (09/08/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-251 / 457_1646

Profile/Beam: 3978/92

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted obstruction was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings are corrected to MLLW with verified water levels and final tide zoning. Evaluated by the hydrographer as not a DTON.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-251/457_1646	3978/92	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss200/2006-249/277_1707	0001	2.09	182.1	Secondary (grouped)
h11601/tj_3102_klein5000_sss100/2006-249/175_1406	0001	2.89	183.2	Secondary (grouped)
h11601/tj_3102_klein5000_sss100/2006-249/175_1406	0003	4.16	231.2	Secondary

Hydrographer Recommendations

Chart obstruction with least depth 6.19 meters (20.3 ft).

Cartographically-Rounded Depth (Affected Charts):

20ft (12402_1, 12327_1, 12326_1) 3 ¹/₄fm (12300_1, 13006_1, 13003_1, 14500_1) 6.2m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 1:depth known

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 6.193 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur - Chart an obstruction with a depth of 20 feet in latitude $40^{\circ}33'47.70"N$, longitude $74^{\circ}00'53.82"W$. Add 20 Obstn and danger curve.

Feature Images

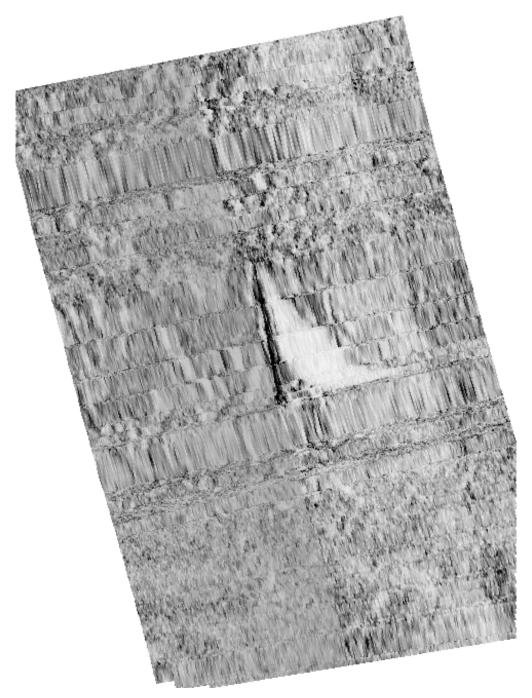


Figure 2.5.1

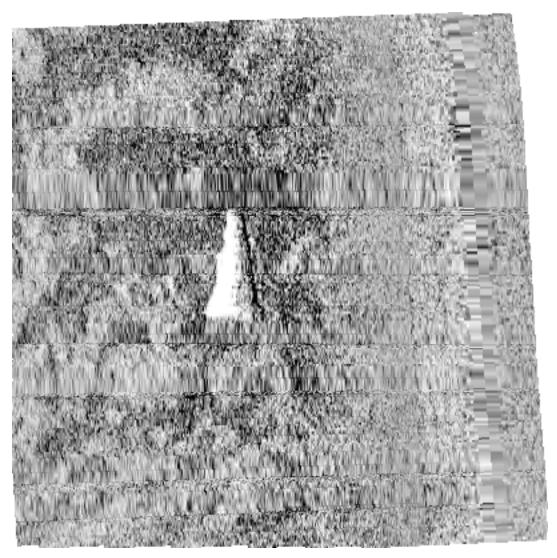


Figure 2.5.2

 $[Image\ file\ h:/h11601/public_relation_constituent_products/field_plots/ambrose_obs_40-33-48_074-00-54.jpg\ does\ not\ exist.]$

2.6) 13 Obstn

Survey Summary

Survey Position: 40° 33′ 58.5″ N, 073° 59′ 42.5″ W

Least Depth: 4.14 m = 13.57 ft = 2.262 fm = 2 fm = 1.57 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) ± 0.980 m; **TVU** (**TPEv**) ± 0.367 m

Timestamp: 2006-252.15:23:10.800 (09/09/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-252 / 591_1520

Profile/Beam: 3611/236

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted obstruction was found wth 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings are corrected to MLLW with verified tides and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-252/591_1520	3611/236	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-251/163_1247	0004	4.32	235.7	Secondary
h11601/tj_3102_klein5000_sss200/2006-252/201_1247	0001	6.71	249.4	Secondary
h11601/tj_3102_klein5000_sss100/2006-250/113_1706	0002	6.74	256.3	Secondary
h11601/tj_3102_klein5000_sss100/2006-272/121_1548	0001	18.94	234.1	Secondary

Hydrographer Recommendations

Chart obstruction with least depth 4.14 meters (13.6 feet).

Cartographically-Rounded Depth (Affected Charts):

13ft (12402_1, 12327_1, 12326_1) 2 ½fm (12300_1, 13006_1, 13003_1, 14500_1) 4.1m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 1:depth known

SORDAT - 20060909

SORIND - US, US, surve, H11601

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 4.136 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur - Chart an obstruction with a depth of 13 feet in latitude 40°33'58.47"N, longitude 73°59'42.47"W. Add 13 Obstn and danger curve.

Feature Images

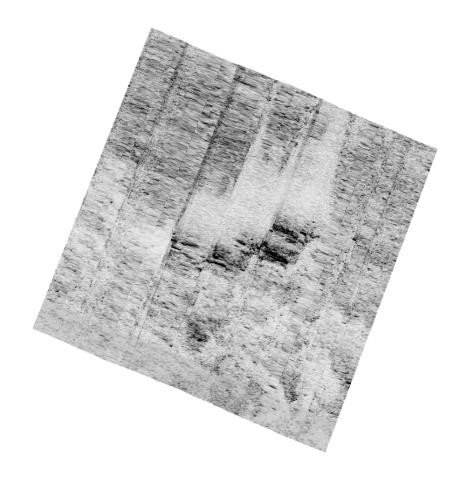


Figure 2.6.1

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/Obstruction 3611,236.jpg does not exist.]

2.7) 15 Obstn

Survey Summary

Survey Position: 40° 33′ 56.8″ N, 073° 59′ 32.7″ W

Least Depth: 4.72 m = 15.50 ft = 2.583 fm = 2 fm = 2.583 fm =

TPU (\pm **1.96** σ): THU (TPEh) \pm 0.980 m; TVU (TPEv) \pm 0.367 m

Timestamp: 2006-252.15:24:13.359 (09/09/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-252 / 591_1520

Profile/Beam: 5003/227

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This item was found with 200% Klein 5000 SSS and 100% Reson 8125 Reson MBES. Soundings are corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status	
h11601/tj_3101_reson8125/2006-252/591_1520	5003/227	0.00	0.000	Primary	

Hydrographer Recommendations

Chart the item as a 15 ft obstruction at the given location.

Cartographically-Rounded Depth (Affected Charts):

```
15ft (12402_1, 12327_1, 12326_1)
2 ½fm (12300_1, 13006_1, 13003_1, 14500_1)
4.7m (5161_1)
```

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 6:least depth known

RECDAT - 20080107 SORDAT - 20060908

SORIND - US, US, surve, H11601

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 4.724 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur - Chart an obstruction with a depth of 15 feet in latitude $40^{\circ}33'56.75"N$, longitude $73^{\circ}59'32.69"W$. Add 15 Obstn and danger curve.

2.8) 30 Obstn

Survey Summary

Survey Position: 40° 33′ 26.1″ N, 074° 02′ 00.4″ W

Least Depth: 9.11 m (= 29.88 ft = 4.980 fm = 4 fm 5.88 ft)

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) ± 0.980 m; **TVU** (**TPEv**) ± 0.367 m

Timestamp: 2006-254.18:16:48.720 (09/11/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-254 / 524_1814

Profile/Beam: 855/50

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This obstruction was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings are corrected to MLLW using verified tides and preliminary tide zoning. Obstruction is significant based upon height (1.09m) but is not navigationally significant.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-254/524_1814	855/50	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-248/162_1622	0001	1.51	263.1	Secondary
h11601/tj_3102_klein5000_sss200/2006-250/257_1433	0001	5.46	263.6	Secondary

Hydrographer Recommendations

Chart an obstruction with least depth 9.11 meters (30 feet).

Cartographically-Rounded Depth (Affected Charts):

30ft (12402_1, 12327_1, 12326_1) 5fm (12300_1, 13006_1, 13003_1, 14500_1) 9.1m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 6:least depth known

SORDAT - 20060911

SORIND - US, US, surve, H11601

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 9.107 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur - Chart an obstruction with a depth of 30 feet in latitude $40^{\circ}33'26.12"N$, longitude $74^{\circ}02'00.39"W$. Add 30 Obstn and danger curve.

Feature Images

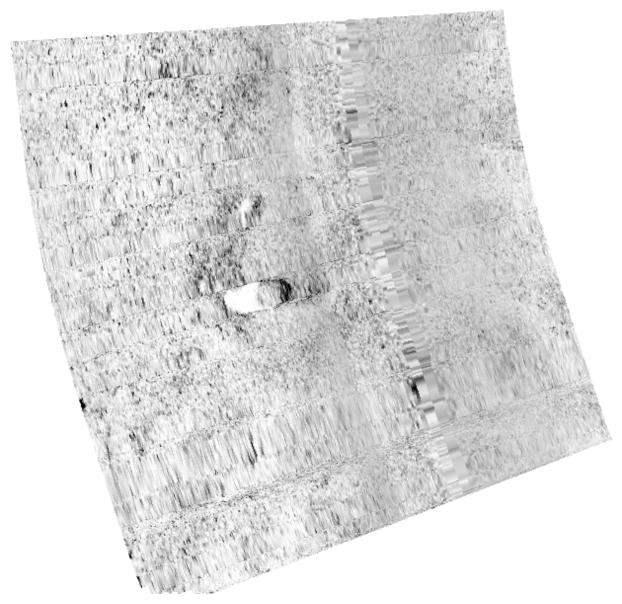


Figure 2.8.1

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/855-50.JPG does not exist.]

2.9) DTON3 22 RK - Disproved

Survey Summary

Survey Position: 40° 31′ 57.0″ N, 074° 02′ 28.3″ W

Least Depth: 6.89 m = 22.59 ft = 3.765 fm = 3 fm = 4.59 ft

TPU (\pm **1.96** σ): THU (TPEh) \pm 0.980 m; TVU (TPEv) \pm 0.368 m

Timestamp: 2006-266.17:33:46.636 (09/23/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-266 / 119_1730

Profile/Beam: 2075/240

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-266/119_1730	2075/240	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-272/127_1336	0001	0.64	288.9	Secondary
h11601/tj_3102_klein5000_sss200/2006-254/224_1428	0002	4.65	078.2	Secondary
h11601/tj_3102_klein5000_sss100/2006-254/187_1720	0004	5.06	287.2	Secondary

Hydrographer Recommendations

Shoaler rock found in vicinity of 22 Rk. Delete 22 Rk.

S-57 Data

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

Attributes: QUASOU - 1:depth known

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 6.886 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur - Delete 22 Rk and danger curve.

Feature Images

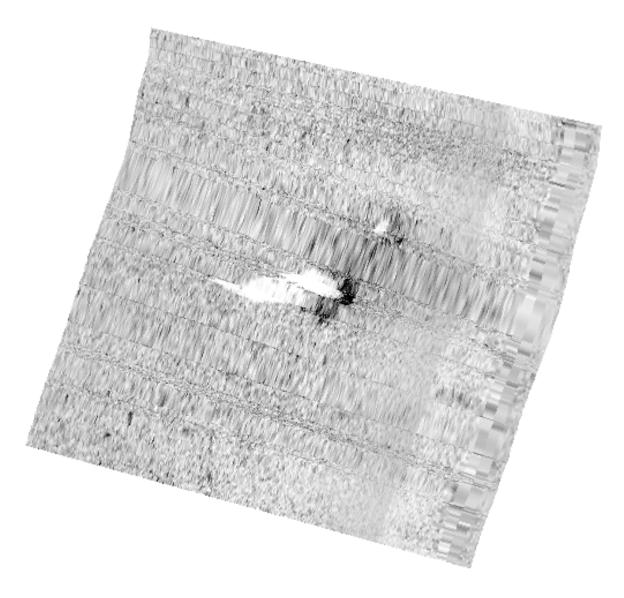


Figure 2.9.1

2.10) 28 Obstn

Survey Summary

Survey Position: 40° 32′ 25.7″ N, 074° 02′ 18.9″ W

Least Depth: 8.52 m = 4.661 fm = 4 fm =

TPU (\pm **1.96** σ): THU (TPEh) \pm 0.980 m; TVU (TPEv) \pm 0.367 m

Timestamp: 2006-266.17:11:00.421 (09/23/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-266 / 121_1703

Profile/Beam: 4569/222

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted obstruction was found in Chapel Hill North Channel with 200% Klein 5000 SSS and 100% Reson 8125 MBES. The obstruction rises approximately 2 feet above the channel controlling depth. Soundings were corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-266/121_1703	4569/222	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-254/187_1719	0002	2.33	072.9	Secondary
h11601/tj_3102_klein5000_sss200/2006-252/286_1450	0002	3.42	324.0	Secondary

Hydrographer Recommendations

Chart a 28 ft obstruction at the given location.

Cartographically-Rounded Depth (Affected Charts):

28ft (12402_1, 12327_1, 12326_1) 4 ½fm (12300_1, 13006_1, 13003_1, 14500_1) 8.5m (5161_1)

S-57 Data

[None]

Office Notes

Concur - Chart an obstruction with a depth of 28 feet in latitude $40^{\circ}32'25.74"N$, longitude $74^{\circ}02'18.85"W$. Add 28 Obstn and danger curve.

Feature Images

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/DTON7-AHB 28 ft Obstruction 4569,222.jpg does not exist.]

2.11) Pile

Survey Summary

Survey Position: 40° 33′ 55.1″ N, 073° 54′ 48.8″ W

Least Depth: [None]

TPU ($\pm 1.96\sigma$): THU (TPEh) [None]; TVU (TPEv) [None]

Timestamp: 2006-277.02:01:31 (10/04/2006)

Survey Line: h11601 / tj_3102_klein5000_sss100 / 2006-272 / 111_1624

Contact/Point: 0007/1

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This SSS imagery outlines an uncharted piling on the north end of Rockaway Island. No MBES was acquired over piling due to proximity to shore.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3102_klein5000_sss100/2006-272/111_1624	0007	0.00	000.0	Primary

Hydrographer Recommendations

Chart a pile circle.

S-57 Data

Geo object 1: Pile (PILPNT)

Office Notes

Concur - Chart a pile in latitude 40°33'55.10"N, longitude 73°54'48.87"W.

Feature Images

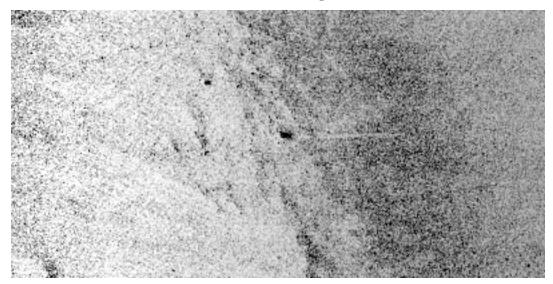


Figure 2.11.1

2.12) 23 Wk

Survey Summary

Survey Position: 40° 33′ 10.3″ N, 074° 01′ 03.8″ W

Least Depth: 7.05 m = 23.14 ft = 3.856 fm = 3 fm = 3.14 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) $\pm 0.980 \text{ m}$; **TVU** (**TPEv**) $\pm 0.367 \text{ m}$

Timestamp: 2006-263.14:45:57.383 (09/20/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-263 / 343_1443

Profile/Beam: 1851/27

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This non-dangerous wreck was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings are corrected to MLLW using verified tides and final tide zoning. This wreck is significant based upon height (approximately 1.4m) but is not navigationally significant.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-263/343_1443	1851/27	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-256/177_1805	0005	5.83	064.1	Secondary
h11601/tj_3102_klein5000_sss200/2006-256/256_1546	0002	8.12	246.4	Secondary
h11601/tj_3102_klein5000_sss200/2006-256/283_1522	0007	9.38	056.8	Secondary

Hydrographer Recommendations

Chart a non-dangerous wreck with least depth 7.05 meters (23.1 feet).

Cartographically-Rounded Depth (Affected Charts):

23ft (12402_1, 12327_1, 12326_1) 3 ³/₄fm (12300_1, 13006_1, 13003_1, 14500_1) 7.1m (5161_1)

S-57 Data

Geo object 1: Wreck (WRECKS)

Attributes: CATWRK - 1:non-dangerous wreck

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 7.052 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification - Chart a wreck with a depth of 23 feet in latitude 40°33'10.26"N, longitude 74°01'03.85"W. Add 23 Wk and danger curve.

Feature Images



Figure 2.12.1

2.13) 25 WK

Survey Summary

Survey Position: 40° 32′ 58.7″ N, 074° 02′ 47.5″ W

Least Depth: 7.68 m = 25.20 ft = 4.199 fm = 4 fm = 1.20 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) $\pm 0.980 \text{ m}$; **TVU** (**TPEv**) $\pm 0.367 \text{ m}$

Timestamp: 2006-267.18:31:12.852 (09/24/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-267 / 497_1828

Profile/Beam: 1725/236

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This wreck was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings are corrected to MLLW using verified tides and final tide zoning. Wreck is significant based upon height (1.65m) but is not navigationally significant.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-267/497_1828	1725/236	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-272/123_1314	0001	1.30	087.0	Secondary
h11601/tj_3102_klein5000_sss100/2006-254/160_1503	0001	3.24	225.2	Secondary
h11601/tj_3102_klein5000_sss200/2006-254/276_1440	0001	4.04	114.5	Secondary
h11601/tj_3102_klein5000_sss100/2006-272/122_1319	0002	6.39	176.7	Secondary

Hydrographer Recommendations

Chart a non-dangerous wreck with least depth 7.68 meters (25 feet).

Cartographically-Rounded Depth (Affected Charts):

25ft (12402_1, 12327_1, 12326_1) 4 ½fm (12300_1, 13006_1, 13003_1, 14500_1) 7.7m (5161_1)

S-57 Data

Geo object 1: Wreck (WRECKS)

Attributes: CATWRK - 1:non-dangerous wreck

SORDAT - 20060924

SORIND - US, US, surve, H11601

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 7.680 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification - Chart a wreck with a depth of 25 feet in latitude $40^{\circ}32'58.72"N$, longitude $74^{\circ}02'47.50"W$. Add 25 Wk and danger curve.

Feature Images

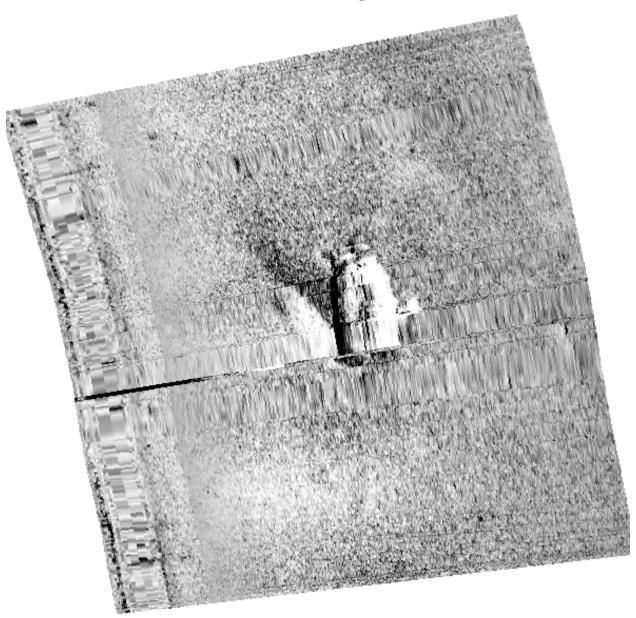


Figure 2.13.1

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/1725-236.JPG does not exist.]

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/chapel_hill_north_wreck_40-32-59_074-02-47.JPG does not exist.]

2.14) 14 Wk

Survey Summary

Survey Position: 40° 31′ 52.2″ N, 073° 59′ 21.7″ W

Least Depth: 4.32 m = 14.17 ft = 2.361 fm = 2 fm 2.17 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) $\pm 0.980 \text{ m}$; **TVU** (**TPEv**) $\pm 0.367 \text{ m}$

Timestamp: 2006-270.15:23:45.163 (09/27/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-270 / 248_1519

Profile/Beam: 4740/173

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This wreck was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings are corrected to MLLW using verified tides and final zoning. This wreck is significant based upon height (approximately 1.2m) but is not navigationally significant.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-270/248_1519	4740/173	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-272/116_1448	0001	2.70	229.9	Secondary
h11601/tj_3102_klein5000_sss100/2006-272/117_1451	0001	2.91	327.0	Secondary
h11601/tj_3101_reson8125/2006-270/249_1525	1334/205	18.72	349.2	Secondary
h11601/tj_3102_klein5000_sss100/2006-250/188_1820	0001	26.40	350.2	Secondary

Hydrographer Recommendations

Chart a wreck symbol at the given location.

Cartographically-Rounded Depth (Affected Charts):

14ft (12402_1, 12327_1, 12326_1) 2 ½fm (12300_1, 13006_1, 13003_1, 14500_1) 4.3m (5161_1)

S-57 Data

Geo object 1: Wreck (WRECKS)

Attributes: CATWRK - 1:non-dangerous wreck

CONVIS - 2:not visual conspicuous

SORDAT - 20060927

SORIND - US, US, surve, H11601

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 4.318 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification - Chart a wreck with a depth of 14 feet in latitude 40°31'52.16"N, longitude 73°59'21.72"W. Add 14 Wk and danger curve.

Feature Images



Figure 2.14.1

 $[Image\ file\ T:/SAR/H11601_B310-TJ/AHB\ Template/PSS/Images/14_ft_wreck_40-31-52_073-59-22.JPG\ does\ not\ exist.]$

2.15) 23 Obstn

Survey Summary

Survey Position: 40° 32′ 10.9″ N, 073° 57′ 11.6″ W

Least Depth: 7.14 m = 23.44 ft = 3.907 fm = 3 fm = 5.44 ft

TPU (\pm **1.96** σ): THU (TPEh) \pm 0.980 m; TVU (TPEv) \pm 0.367 m

Timestamp: 2006-277.18:10:48.884 (10/04/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-277 / 591_1803

Profile/Beam: 6300/174

Charts Affected: 12402_1, 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted obstruction was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings are corrected to MLLW with verified tides and final tide zoning. Evaluated by the hydrographer as not a DTON.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-277/591_1803	6300/174	0.00	000.0	Primary
h11601/tj_3102_klein5000_sss200/2006-262/204_1532	0001	1.50	113.1	Secondary
h11601/tj_3102_klein5000_sss200/2006-262/237_1556	0002	2.31	007.6	Secondary

Hydrographer Recommendations

Chart obstruction with least depth 7.14 meters (23.5 feet).

Cartographically-Rounded Depth (Affected Charts):

23ft (12402_1, 12350_1, 12327_1, 12326_1) 3 ³/₄fm (12300_1, 13006_1, 13003_1, 14500_1) 7.1m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 1:depth known

SORDAT - 20061004

SORIND - US, US, surve, H11601

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 7.145 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur - Chart an obstruction with a depth of 23 feet in latitude 40°32'10.91"N, longitude 73°57'11.58"W. Add 23 Obstn and danger curve.

Feature Images

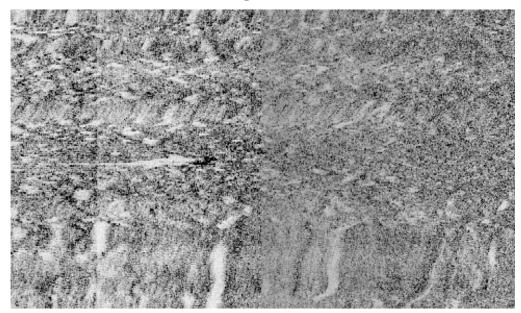


Figure 2.15.1

 $[Image\ file\ T:/SAR/H11601_B310-TJ/AHB\ Template/PSS/Images/off_rockaway_obs_40-32-11_073-57-12.JPG\ does\ not\ exist.]$

2.16) 20 Obstn

Survey Summary

Survey Position: 40° 31′ 46.1″ N, 073° 56′ 33.3″ W

Least Depth: 6.18 m = 20.27 ft = 3.378 fm = 3 fm 2.27 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) ± 0.980 m; **TVU** (**TPEv**) ± 0.367 m

Timestamp: 2006-278.15:26:33.110 (10/05/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-278 / 122_1523

Profile/Beam: 2650/61

Charts Affected: 12402_1, 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This sunken buoy was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings are corrected to MLLW with observed water levels and final tide zoning. Evaluated by the hydrographer as not a DTON due to proximity to buoy R "2".

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-278/122_1523	2650/61	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-264/107_1511	0001	0.18	063.4	Secondary

Hydrographer Recommendations

Chart obstruction with least depth 6.18 meters (20.2 feet).

Cartographically-Rounded Depth (Affected Charts):

20ft (12402_1, 12350_1, 12327_1, 12326_1) 3 ½fm (12300_1, 13006_1, 13003_1, 14500_1) 6.2m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: OBJNAM - Sunken Buoy 20 ft

QUASOU - 1:depth known

SORDAT - 20061005

SORIND - US, US, surve, H11601

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 6.177 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur - Chart an obstruction with a depth of 20 feet in latitude 40°31'46.07"N, longitude 73°56'33.30"W. Add 20 Obstn and danger curve.

Feature Images

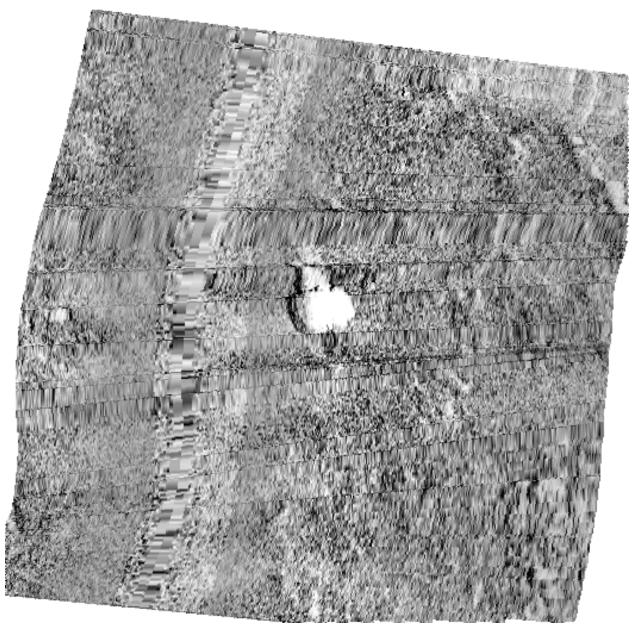


Figure 2.16.1

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/2650-61.JPG does not exist.]

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/2650-61-2.JPG does not exist.]

2.17) 25 Obstn

Survey Summary

Survey Position: 40° 33′ 02.8″ N, 073° 56′ 42.1″ W

Least Depth: 7.69 m = 25.23 ft = 4.204 fm = 4 fm = 1.23 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) ± 0.980 m; **TVU** (**TPEv**) ± 0.367 m

Timestamp: 2006-279.14:58:30.911 (10/06/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-279 / 545_1449

Profile/Beam: 8403/134

Charts Affected: 12402_1, 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This sunken bouy was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings are corrected to MLLW using verified tides and preliminary tide zoning. This obstruction is significant based upon height (approximately 1m) but is not navigationally significant.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-279/545_1449	8403/134	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-269/115_1832	0001	2.05	312.2	Secondary

Hydrographer Recommendations

Chart an obstruction with least depth 7.69 meters (25 feet).

Cartographically-Rounded Depth (Affected Charts):

25ft (12402_1, 12350_1, 12327_1, 12326_1) 4 ¼fm (12300_1, 13006_1, 13003_1, 14500_1) 7.7m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: NATCON - 7,9:metal,painted

QUASOU - 1:depth known

SORDAT - 20061006

SORIND - US, US, surve, H11601

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 7.689 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur - Chart an obstruction with a depth of 25 feet in latitude 40°33'02.84"N, longitude 73°56'42.06"W. Add 25 Obstn and danger curve.

Feature Images

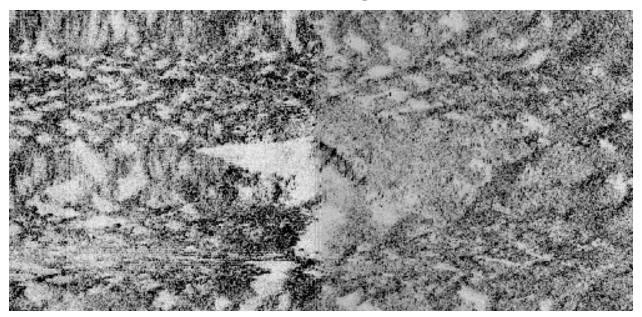


Figure 2.17.1

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/8403-134_side.JPG does not exist.]

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/8403-134_top.JPG does not exist.]

2.18) 22 Wk

Survey Summary

Survey Position: 40° 34′ 18.9″ N, 073° 54′ 26.9″ W

Least Depth: 6.84 m = 22.44 ft = 3.740 fm = 3 fm = 4.44 ft

TPU (\pm **1.96** σ): THU (TPEh) \pm 0.980 m; TVU (TPEv) \pm 0.368 m

Timestamp: 2006-282.15:31:13.969 (10/09/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-282 / 314_1528

Profile/Beam: 1780/3

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This wreck was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings are corrected to MLLW using verified tides and final tide zoning. This obstruction is significant based upon height (1.24m) but is not navigationally significant.

Feature Correlation

Address	Feature	Range	Azimuth	Status	
h11601/tj_3101_reson8125/2006-282/314_1528	1780/3	0.00	0.000	Primary	
h11601/tj_3102_klein5000_sss200/2006-266/204_1651	0001	2.03	328.3	Secondary	
h11601/tj_3102_klein5000_sss200/2006-266/205_1709	0001	3.67	103.8	Secondary	

Hydrographer Recommendations

Chart a non-dangerous wreck with least depth 6.84 meters (22 feet).

Cartographically-Rounded Depth (Affected Charts):

22ft (12350_1, 12327_1, 12326_1) 3 34fm (12300_1, 13006_1, 13003_1, 14500_1) 6.8m (5161_1)

S-57 Data

Geo object 1: Wreck (WRECKS)

Attributes: CATWRK - 1:non-dangerous wreck

SORDAT - 20061009

SORIND - US, US, surve, H11601

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 6.840 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification - Chart a wreck with a depth of 22 feet in latitude $40^{\circ}34'18.88"N$, longitude $73^{\circ}54'26.864"W$. Add 22 Wk and danger curve.

Feature Images



Figure 2.18.1

 $[Image\ file\ T:/SAR/H11601_B310-TJ/AHB\ Template/PSS/Images/wreck_rockaway_40-34-19_073-54-27.JPG\ does\ not\ exist.]$

2.19) 26 Wk

Survey Summary

Survey Position: 40° 34′ 18.8″ N, 073° 54′ 31.6″ W

Least Depth: 8.12 m = 26.63 ft = 4.438 fm = 4 fm 2.63 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) ± 0.980 m; **TVU** (**TPEv**) ± 0.367 m

Timestamp: 2006-282.15:46:50.173 (10/09/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-282 / 315_1540

Profile/Beam: 4259/177

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This non-dangerous wreck was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings are corrected to MLLW using verified tides and final tide zoning. This wreck is significant based upon height (1.22m) but is not navigationally significant.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-282/315_1540	4259/177	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss200/2006-266/205_1708	0002	1.81	179.5	Secondary
h11601/tj_3102_klein5000_sss100/2006-266/105_1549	0001	2.38	292.0	Secondary

Hydrographer Recommendations

Chart a non-dangerous wreck with least depth 8.12 meters (26 feet).

Cartographically-Rounded Depth (Affected Charts):

26ft (12350_1, 12327_1, 12326_1) 4 ½fm (12300_1, 13006_1, 13003_1, 14500_1) 8.1m (5161_1)

S-57 Data

Geo object 1: Wreck (WRECKS)

Attributes: CATWRK - 1:non-dangerous wreck

SORDAT - 20061009

SORIND - US, US, surve, H11601

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 8.117 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification - Chart a wreck with a depth of 26 feet in latitude $40^{\circ}34'18.77''$, $-073^{\circ}54'31.64''W$. Add 26 Wk and danger curve.

Feature Images

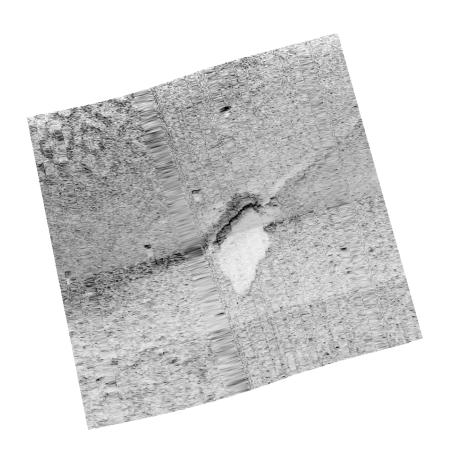


Figure 2.19.1

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/wreck_rockaway_40-34-16_073-54-37.JPG does not exist.]

2.20) 30 Obstn

Survey Summary

Survey Position: 40° 33′ 46.1″ N, 073° 55′ 37.0″ W

Least Depth: 9.35 m (= 30.69 ft = 5.115 fm = 5 fm 0.69 ft)

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) $\pm 0.980 \text{ m}$; **TVU** (**TPEv**) $\pm 0.367 \text{ m}$

Timestamp: 2006-284.19:35:09.141 (10/11/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-284 / 571_1930

Profile/Beam: 2346/147

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This obstruction was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings are corrected to MLLW using verified tides and final tide zoning. This obstruction is significant based upon height (1.04m) but is not navigationally significant.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-284/571_1930	2346/147	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss200/2006-267/220_1359	0001	3.45	249.1	Secondary
h11601/tj_3102_klein5000_sss100/2006-269/117_1742	0001	4.67	262.4	Secondary
h11601/tj_3102_klein5000_sss200/2006-262/220_1706	0001	5.80	334.8	Secondary
h11601/tj_3102_klein5000_sss100/2006-262/123_1711	0001	18.73	194.8	Secondary

Hydrographer Recommendations

Chart as an obstruction.

Cartographically-Rounded Depth (Affected Charts):

30ft (12350_1, 12327_1, 12326_1) 5fm (12300_1, 13006_1, 13003_1, 14500_1) 9.4m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 1:depth known

SORDAT - 20061022

SORIND - US, US, surve, H11601

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 9.354 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification - Chart an obstruction with a depth of 30 feet in latitude 40°33'46.07"N, longitude 73°55'37.03"W Add 30 Obstn and danger curve.

Feature Images

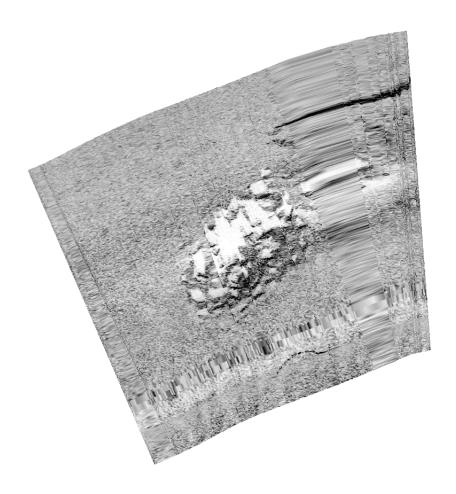


Figure 2.20.1

 $[Image\ file\ T:/SAR/H11601_B310-TJ/AHB\ Template/PSS/Images/2346-147.JPG\ does\ not\ exist.]$

2.21) 20 Wk

Survey Summary

Survey Position: 40° 33′ 59.8″ N, 073° 54′ 09.6″ W

Least Depth: 6.18 m = 20.29 ft = 3.381 fm = 3 fm = 2.29 ft

TPU (\pm **1.96** σ): THU (TPEh) \pm 0.980 m; TVU (TPEv) \pm 0.367 m

Timestamp: 2006-285.15:52:34.189 (10/12/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-285 / 363_1551

Profile/Beam: 265/19

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This non-dangerous wreck was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings are corrected to MLLW using verified tides and final tide zoning. This wreck is significant based upon height but is not navigationally significant.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-285/363_1551	265/19	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-267/122_1412	0001	2.69	225.5	Secondary
h11601/tj_3102_klein5000_sss200/2006-272/201_1635	0001	10.76	074.9	Secondary
h11601/tj_3101_reson8125/2006-285/363_1551	169/3	21.29	080.4	Secondary (grouped)

Hydrographer Recommendations

Chart a non-dangerous wreck with least depth 6.18 meters (20 feet).

Cartographically-Rounded Depth (Affected Charts):

20ft (12350_1, 12327_1, 12326_1) 3 ½fm (12300_1, 13006_1, 13003_1, 14500_1) 6.2m (5161_1)

S-57 Data

Geo object 1: Wreck (WRECKS)

Attributes: CATWRK - 1:non-dangerous wreck

SORDAT - 20061012

SORIND - US,US,surve,H11601

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 6.183 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification - Chart a wreck with a depth of 20 feet in latitude $40^{\circ}33'59.77"N$, longitude $73^{\circ}54'09.59"W$. Add 20 Wk and danger curve.

Feature Images

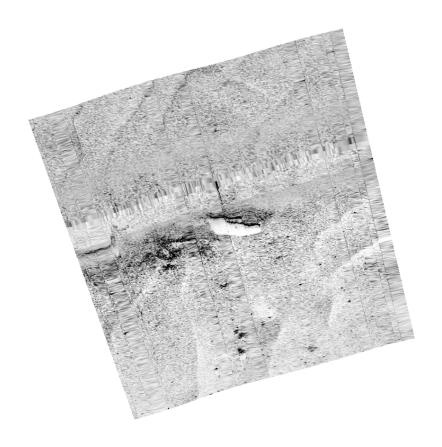


Figure 2.21.1

 $[Image\ file\ T:/SAR/H11601_B310-TJ/AHB\ Template/PSS/Images/rockaway_wreck2_40-33-60_073-54-10.JPG\ does\ not\ exist.]$

2.22) 12 Obstn

Survey Summary

Survey Position: 40° 34′ 57.8″ N, 073° 54′ 24.6″ W

Least Depth: 3.76 m = 12.35 ft = 2.058 fm = 2 fm 0.35 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) $\pm 0.980 \text{ m}$; **TVU** (**TPEv**) $\pm 0.367 \text{ m}$

Timestamp: 2006-292.17:48:13.447 (10/19/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-292 / 492_1747

Profile/Beam: 615/164

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous pile was found with 100% Reson 8125 MBES. Soundings are corrected to MLLW with verified tides and final tide zoning. Evaluated as not a DTON by the hydrographer due to the controlling depth of the channel entrance.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-292/492_1747	615/164	0.00	0.000	Primary

Hydrographer Recommendations

Chart a submerged pile with least depth 3.76 meters (12.4 feet).

Cartographically-Rounded Depth (Affected Charts):

```
12ft (12350_1, 12327_1, 12326_1)
2fm (12300_1, 13006_1, 13003_1, 14500_1)
3.8m (5161_1)
```

S-57 Data

Geo object 1: Obstruction (OBSTRN) **Attributes:** SORDAT - 20061022

SORIND - US, US, SURVY, H11601

VALSOU - 3.763 m

WATLEV - 3:always under water/submerged

Office Notes

Do not concur - Chart an obstruction with a depth of 12 feet in latitude $40^{\circ}34'57.79"N$, longitude $73^{\circ}54'24.62"W$. Add 12 Obstn and danger curve.

Feature Images

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/post_Gerritsen_inlet.JPG does not exist.]

2.23) 13 Wk

Survey Summary

Survey Position: 40° 35′ 05.3″ N, 073° 54′ 21.8″ W

Least Depth: $4.08 \text{ m} = 13.38 \text{ ft} = 2.230 \text{ fm} = 2 \text{ f$

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) $\pm 0.980 \text{ m}$; **TVU** (**TPEv**) $\pm 0.367 \text{ m}$

Timestamp: 2006-292.16:35:31.407 (10/19/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-292 / 500_1632

Profile/Beam: 2729/212

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted non-dangerous wreck (approximately 28 ft long and 1.18m tall) was found with 100% Reson 8125 MBES. Soundings are corrected to MLLW with verified tides and preliminary tide zoning. Evaluated by the hydrographer as not a DTON.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-292/500_1632	2729/212	0.00	0.000	Primary

Hydrographer Recommendations

Chart a non-dangerous wreck with least depth 4.08 meters (13.4 feet).

Cartographically-Rounded Depth (Affected Charts):

```
13ft (12350_1, 12327_1, 12326_1)
2 ½fm (12300_1, 13006_1, 13003_1, 14500_1)
4.1m (5161_1)
```

S-57 Data

Geo object 1: Wreck (WRECKS)

Attributes: CATWRK - 2:dangerous wreck

STATUS - 1:permanent

TECSOU - 3: found by multi-beam

VALSOU - 4.078 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification - Chart a wreck with a depth of 13 ft in latitude $40^{\circ}35'05.33"N$, longitude $73^{\circ}54'21.82"W$. Add 13 Wk and danger curve.

Feature Images

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/wreck1_Gerritsen_inlet.JPG does not exist.]

2.24) New Pipeline

Survey Summary

Survey Position: 40° 34′ 14.4″ N, 073° 58′ 22.5″ W

Least Depth: 2.85 m = 9.36 ft = 1.561 fm = 1 fm = 3.36 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) ± 0.980 m; **TVU** (**TPEv**) ± 0.367 m

Timestamp: 2006-295.20:53:32.431 (10/22/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-295 / 292_2049

Profile/Beam: 6885/239

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted pipeline was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings are corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-295/292_2049	6885/239	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-251/164_1311	0001	1.09	035.5	Secondary
h11601/tj_3102_klein5000_sss100/2006-252/106_1344	0002	1.73	288.6	Secondary
h11601/tj_3102_klein5000_sss200/2006-252/209_1339	0001	7.15	033.1	Secondary
h11601/tj_3101_reson8125/2006-295/293_1251	6233/1	60.23	002.4	Secondary (grouped)
h11601/tj_3101_reson8125/2006-295/293_1251	6311/174	67.37	350.8	Secondary (grouped)
h11601/tj_3102_klein5000_sss100/2006-252/105_1349	0001	91.10	350.5	Secondary (grouped)
h11601/tj_3102_klein5000_sss100/2006-252/106_1344	0003	93.16	349.8	Secondary (grouped)

Hydrographer Recommendations

Chart a new pipeline with least depth of 2.85 meters (9.4 feet).

Cartographically-Rounded Depth (Affected Charts):

```
9ft (12402_1, 12327_1, 12326_1)
1 ½fm (12300_1, 13006_1, 13003_1, 14500_1)
2.9m (5161_1)
```

S-57 Data

Geo object 1: Pipeline, submarine/on land (PIPSOL)

Attributes: CATPIP - 2:outfall pipe

SORDAT - 20061022

SORIND - US, US, surve, H11601

STATUS - 1:permanent

Office Notes

Concur with clarification - Defer to MCD Source Data Branch for charting recommendation.

Feature Images

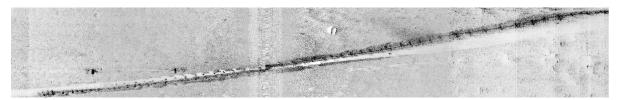


Figure 2.24.1

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/Pipe 6885,239.jpg does not exist.]

2.25) 76 Wk

Survey Summary

Survey Position: 40° 35′ 30.6″ N, 074° 02′ 10.2″ W

Least Depth: 23.18 m (= 76.03 ft = 12.672 fm = 12 fm 4.03 ft) **TPU** ($\pm 1.96\sigma$): **THU** (**TPEh**) ± 0.986 m; **TVU** (**TPEv**) ± 0.370 m

Timestamp: 2006-288.12:53:11.783 (10/15/2006)

Survey Line: h11601 / tj_3102_reson8101 / 2006-288 / 923_1253

Profile/Beam: 69/43

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This sunken barge (reported by NRT5) was found with 100% Reson 8101. Soundings are corrected to MLLW using verified tides and preliminary tide zoning. The wreck is significant based upon height (approximately 3.5m) but is not navigationally significant.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3102_reson8101/2006-288/923_1253	69/43	0.00	0.000	Primary

Hydrographer Recommendations

Chart sounding data with Wk notation at given location.

Cartographically-Rounded Depth (Affected Charts):

```
76ft (12402_1, 12327_1, 12326_1)
12fm (12300_1, 13006_1, 13003_1, 14500_1)
23m (5161_1)
```

S-57 Data

Geo object 1: Wreck (WRECKS)

Attributes: CATWRK - 1:non-dangerous wreck

STATUS - 1:permanent

TECSOU - 3: found by multi-beam

VALSOU - 23.175 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

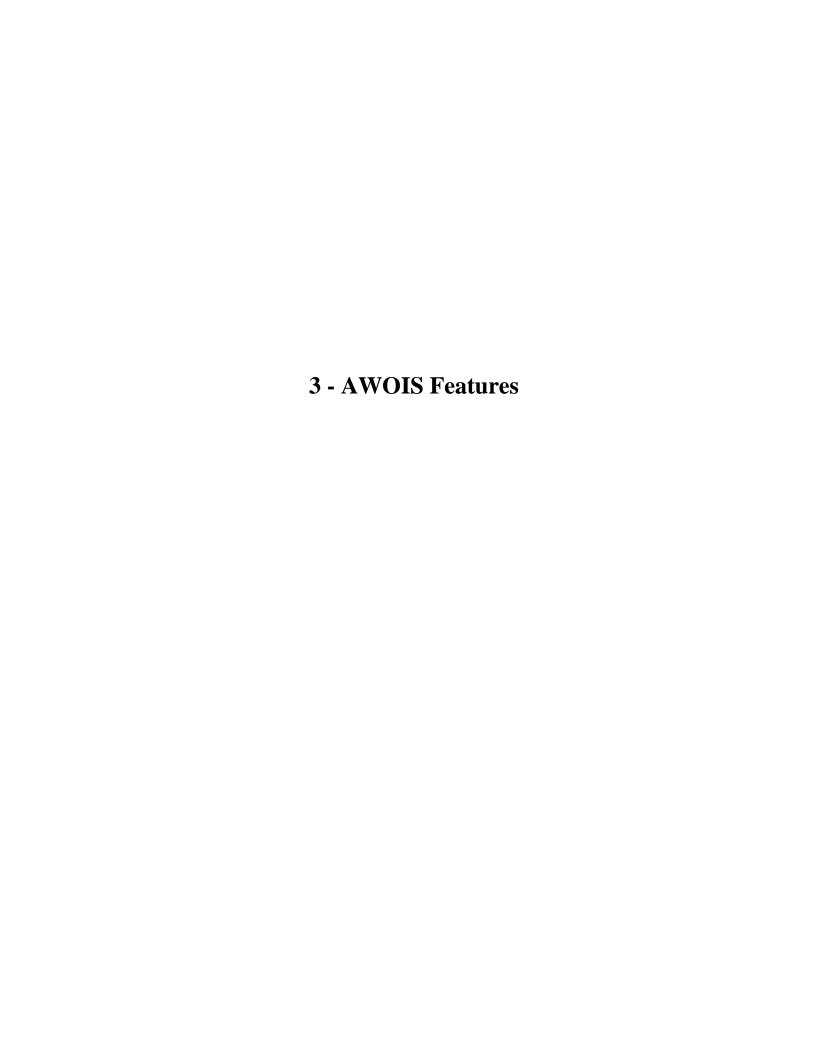
Office Notes

Concur with clarification - Delete 76 Wk. CHart a wrreck with a depth of 76 feet in latitude $40^{\circ}35'30.58"N$, longitude $74^{\circ}02'10.19"W$. Add 76 Wk.

Feature Images

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/69-43.JPG does not exist.]

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/69-43_2.JPG does not exist.]



3 - AWOIS Features

3.1) AWOIS #744 - - Disproved

No Primary Survey Feature for this AWOIS Item

Search Position: 40° 34′ 17.7″ N, 074° 02′ 01.0″ W

Historical Depth: 14.94 m

Search Radius: 50

H11601 FEATURE REPORT

Search Technique: MB, S2 **Technique Notes:** [None]

History Notes:

CL827/56-- COE; OBSTR. LOCATED 109 DEG. TRUE, 1875 YDS. FROM STACK ON HOFFMAN ISLAND IN LAT. 40-34-24N, LONG. 74-02-08W, COVERED 37 FEET AT MLW. ■ H8330/56WD-- OBSTR. 39-FOOT HANG; CLEARED BY 37 FEET AT MLLW IN LAT. 40-34-24.6N, LONG. 74-02-05.4W. ■ CL744/57-- COE; WRECK (HULL OF OLD SHIP) FOUND BY DIVER. AREA DRAGGED BY 9-TON BAR, THEN SWEPT AND FOUND CLEAR TO 47 FEET AT MLW. ■ H9820/79-- OPR-B139-WH-79; WRECK NOT LOCATED; 50 METER LINE SPACING, NOT DEVELOPED. RECOMMENDS RETAIN CHARTED 47-FOOT CLEARED DEPTH. (ENT 3/85, RWD) ■ FE00434/97-- OPR-C399-RU; 2 "DEBRIS PILES" DETECTED AND DEVELOPED WITH SHALLOW WATER MULTIBEAM SONAR. EVALUATOR RECOMMENDS DELETING CHARTED 47-FOOT CLEARED DEPTH AND CHARTING A 49 OBSTN IN LAT. 40-34-17.659N, LONG. 74-02-01.006W AND A 51 OBSTN IN LAT. 40-34-22.991N, LONG. 74-02-06.681W. 49-FOOT LD OBTAINED WITH ECHO SOUNDER; 51-FOOT LD OBTAINED WITH SEABAT SYSTEM. SEE ALSO AWOIS #11500. (UP 12/17/98, SJV)

Survey Summary

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Insignificant object with a height of 0.38m found within search radius; found by 100% Reson 8125 MBES and 200% Klein 5000 SSS. Soundings are corrected to MLLW using verified tides and final zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS_B310-TJ-06	AWOIS # 744	0.00	0.000	Primary

Hydrographer Recommendations

Remove charted obstruction and replace with a sounding of 14.85 meters (48 feet). Remove AWOIS 744 from database.

S-57 Data

[None]

Office Notes

Concur - Delete 49 Obstn and danger curve.

3.2) AWOIS 11500 - Disproved

Primary Feature for AWOIS Item #11500

Search Position: 40° 34′ 23.0″ N, 074° 02′ 06.7″ W

Historical Depth: 15.54 m

Search Radius: 50

Search Technique: MB, S2 **Technique Notes:** [None]

History Notes:

F00434/97-- OPR-C399-RU; 2 "DEBRIS PILES" DETECTED AND DEVELOPED WITH SHALLOW WATER MULTIBEAM SONAR. EVALUATOR RECOMMENDS DELETING CHARTED 47-FOOT CLEARED DEPTH AND CHARTING A 51 OBSTN IN LAT. 40-34-22.991N, LONG. 74-02-06.681W AND A 49 OBSTN IN LAT. 40-34-17.659N, LONG. 74-02-01.006W. 51-FOOT LD OBTAINED WITH SEABAT SYSTEM; 49-FOOT LD OBTAINED WITH ECHO SOUNDER. SEE ALSO AWOIS #744. (ENT 6/28/02, SJV)

Survey Summary

Survey Position: 40° 34′ 22.9″ N, 074° 02′ 06.8″ W

Least Depth: 15.47 m = 50.76 ft = 8.460 fm = 8 fm 2.76 ft

TPU (\pm **1.96** σ): THU (**TPEh**) \pm 0.981 m; TVU (**TPEv**) \pm 0.367 m

Timestamp: 2006-249.19:17:19.821 (09/06/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-249 / 103_1913

Profile/Beam: 1876/139

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Insignificant object with a height of 0.94m found within search radius; found by 100% Reson 8125 MBES and 200% Klein 5000 SSS. Corrected to MLLW, verified tides preliminary zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-249/103_1913	1876/139	0.00	000.0	Primary
ChartGPs - ENC US5NY19M	Danger 9	3.29	246.8	Secondary (grouped)
AWOIS_B310-TJ-06	AWOIS # 11500	3.40	246.1	Secondary (grouped)
h11601/tj_3102_klein5000_sss100/2006-248/126_1438	0002	19.88	224.5	Secondary

Hydrographer Recommendations

Remove obstruction from chart and remove AWOIS 11500 from database. Chart as a sounding with least depth 15.55 meters (51 feet).

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: VALSOU - 15.471 m

Geo object 2: Sounding (SOUNDG)

Attributes: QUASOU - 6:least depth known

SORDAT - 20060906

SORIND - US, US, surve, H11601

STATUS - 1:permanent

TECSOU - 3:found by multi-beam VERDAT - 12:Mean lower low water

Office Notes

Concur - Delete 51 Obstn and danger curve.

3.3) AWOIS 13507- Subm pilling - Retain

Primary Feature for AWOIS Item #13507

Search Position: 40° 34′ 09.9″ N, 073° 58′ 60.0″ W

Historical Depth: [None]
Search Radius: 50
Search Technique: MR S3

Search Technique: MB, S2 **Technique Notes:** [None]

History Notes:

H09820/79 -- SUBM PILING NOW CHARTED IN POSITION: 40 34 09.90 N, 073 59 00.09 W (NAD 83). UPDATED 2/23/2006 JCM.

Survey Summary

Survey Position: 40° 34′ 11.0″ N, 073° 58′ 59.8″ W

Least Depth: [None]

TPU ($\pm 1.96\sigma$): THU (TPEh) [None]; TVU (TPEv) [None]

Timestamp: 2006-252.12:53:48 (09/09/2006)

Survey Line: h11601 / tj_3102_klein5000_sss100 / 2006-251 / 164_1311

Contact/Point: 0002/1

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

SSS appears to confirm an object in the vicinity. MBES was not collected over the area.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3102_klein5000_sss100/2006-251/164_1311	0002	0.00	0.000	Primary
AWOIS_B310-TJ-06	AWOIS # 13507	35.66	009.3	Secondary

Hydrographer Recommendations

Retain as charted.

S-57 Data

[None]

Office Notes

Concur.

Feature Images

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/AWOIS13507.JPG does not exist.]

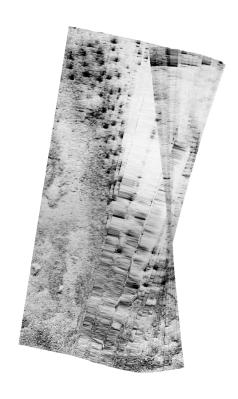


Figure 3.3.1

3.4) AWOIS 13469 - 26 Obstn

Primary Feature for AWOIS Item #13469

Search Position: 40° 32′ 24.3″ N, 074° 02′ 11.5″ W

Historical Depth: 8.23 m

Search Radius: 50

Search Technique: MB, S2 **Technique Notes:** [None]

History Notes:

CL1219/94-- LETTER, USACE, OPS DIVISION, TO N/CG2211 DATED JULY 28, 1994. COE INVESTIGATION LOCATED AN AREA OF RIP RAP SIZED STONE APPROXIMATELY 100 FT. X 50 FT. IN APPROX. POSITION LAT. 40-32-22N, LONG. 74-02-17W (LORAN TD'S = 27021.6; 43762.5. DEPTH OVER ITEM WAS 30 - 32 FEET AT MLW AND IS LOCATED IN THE MAIN SHIP CHANNEL/CHAPEL HILL FEDERAL NAVIGATION PROJECT. SINCE DEEPEST DRAFTS USING AREA ARE MAINLY BARGES THERE IS NO PLAN TO REMOVE THE OBSTRUCTION IN THE IMMEDIATE FUTURE. CONTACT CONCERNING THIS MATTER IS HAL HAWKINS, CHIEF, TECHNICAL SUPPORT SECTION AT 212-264-0164. (ENT 3/26/96, SJV)■ FE00434/97-- OPR-C399-RU; 6 SIGNIFICANT CONTACTS DETECTED AND DEVELOPED WITH SHALLOW WATER MULTIBEAM SONAR. WESTERN 60 METERS OF AWOIS CIRCLE NOT ADDRESSED DUE TO PRESENCE OF WEST BANK LIGHT HOUSE. EVALUATOR RECOMMENDS DELETING CHARTED 30-FOOT OBSTRUCTION AND NOTE "RKS REP, 1994" AND CHART THE FOLLOWING OBSTRUCTIONS: 220BSTN (6.8 METERS) IN LAT. 40-32-27.03N, LONG. 74-02-11.47W; 270BSTN (8.2 METERS) IN LAT. 40-32-24.32N, LONG. 74-02-11.47W; AND 270BSTN (8.3 METERS) IN LAT. 40-32-16.49N, LONG. 74-02-13.34W. (UP 12/17/98, SJV)

Survey Summary

Survey Position: 40° 32′ 24.1″ N, 074° 02′ 11.5″ W

Least Depth: 7.89 m = 25.87 ft = 4.312 fm = 4 fm = 1.87 ft

TPU (\pm **1.96** σ): THU (**TPEh**) \pm 0.980 m; TVU (**TPEv**) \pm 0.367 m

Timestamp: 2006-266.15:30:07.073 (09/23/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-266 / 129_1523

Profile/Beam: 4150/54

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Object within search radius of AWOIS 13469 rising approximately 81cm off bottom, found by 100% Reson 8125 MBES and 200% Klein 5000 SSS. Corrected to MLLW, final tides preliminary zoning.

Feature Correlation

	Address	Feature	Range	Azimuth	Status
h11601/tj_3101_re	eson8125/2006-266/129_1523	4150/54	0.00	0.000	Primary
h11601/tj_3102_klein:	5000_sss100/2006-251/153_1518	0002	1.80	160.6	Secondary
AWO	DIS_B310-TJ-06	AWOIS # 13469	5.92	180.8	Secondary
ChartGPs	s - ENC US5NY19M	Danger 3	6.05	150.4	Secondary (grouped)
h11601/tj_3102_klein:	5000_sss200/2006-252/268_1506	0006	9.06	190.8	Secondary
h11601/tj_3102_klein	5000_sss100/2006-251/142_1535	0007	24.78	269.3	Secondary

Hydrographer Recommendations

Change charted depth from 27 feet to 26 feet. Retain in AWOIS database.

Cartographically-Rounded Depth (Affected Charts):

```
26ft (12402_1, 12327_1, 12326_1)
4 <sup>1</sup>/<sub>4</sub>fm (12300_1, 13006_1, 13003_1, 14500_1)
7.9m (5161_1)
```

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 1:depth known

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 7.886 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Geo object 2: Sounding (SOUNDG)

Office Notes

Concur with clarification - Delete 27 Obstn and danger curve. Chart an obstruction with a depth of 26 feet in latitude 40°32'24.13"N, longitude 74°02'11.47"W. Add 26 Obstn and danger curve.

Feature Images

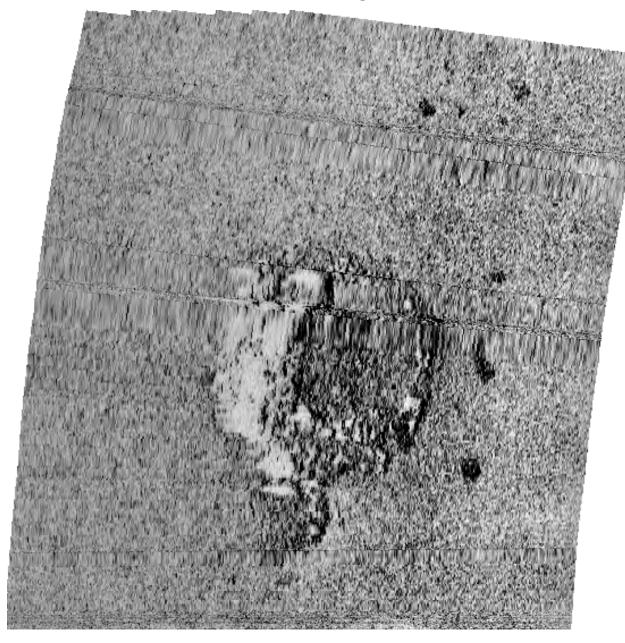


Figure 3.4.1

3.5) AWOIS 13470 - 28 Obstn

Primary Feature for AWOIS Item #13470

Search Position: 40° 32′ 16.5″ N, 074° 02′ 13.3″ W

Historical Depth: 8.23 m

Search Radius: 50

Search Technique: MB, S2 **Technique Notes:** [None]

History Notes:

CL1219/94-- LETTER, USACE, OPS DIVISION, TO N/CG2211 DATED JULY 28, 1994. COE INVESTIGATION LOCATED AN AREA OF RIP RAP SIZED STONE APPROXIMATELY 100 FT. X 50 FT. IN APPROX. POSITION LAT. 40-32-22N, LONG. 74-02-17W (LORAN TD'S = 27021.6; 43762.5. DEPTH OVER ITEM WAS 30 - 32 FEET AT MLW AND IS LOCATED IN THE MAIN SHIP CHANNEL/CHAPEL HILL FEDERAL NAVIGATION PROJECT. SINCE DEEPEST DRAFTS USING AREA ARE MAINLY BARGES THERE IS NO PLAN TO REMOVE THE OBSTRUCTION IN THE IMMEDIATE FUTURE. CONTACT CONCERNING THIS MATTER IS HAL HAWKINS, CHIEF, TECHNICAL SUPPORT SECTION AT 212-264-0164. (ENT 3/26/96, SJV)■ FE00434/97-- OPR-C399-RU; 6 SIGNIFICANT CONTACTS DETECTED AND DEVELOPED WITH SHALLOW WATER MULTIBEAM SONAR. WESTERN 60 METERS OF AWOIS CIRCLE NOT ADDRESSED DUE TO PRESENCE OF WEST BANK LIGHT HOUSE. EVALUATOR RECOMMENDS DELETING CHARTED 30-FOOT OBSTRUCTION AND NOTE "RKS REP, 1994" AND CHART THE FOLLOWING OBSTRUCTIONS: 220BSTN (6.8 METERS) IN LAT. 40-32-27.03N, LONG. 74-02-11.47W; 270BSTN (8.2 METERS) IN LAT. 40-32-24.32N, LONG. 74-02-11.47W; AND 270BSTN (8.3 METERS) IN LAT. 40-32-16.49N, LONG. 74-02-13.34W. (UP 12/17/98, SJV)

Survey Summary

Survey Position: 40° 32′ 16.5″ N, 074° 02′ 13.4″ W

Least Depth: 8.55 m = 28.06 ft = 4.676 fm = 4 fm = 4.06 ft

TPU (\pm **1.96** σ): THU (**TPEh**) \pm 0.980 m; TVU (**TPEv**) \pm 0.367 m

Timestamp: 2006-266.15:29:05.741 (09/23/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-266 / 129_1523

Profile/Beam: 3434/100

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Object within search radius of AWOIS 13470 rising approximately 46cm off the bottom, found by 100% Reson 8125 MBES and 200% Klein 5000 SSS. Soundings are corrected to MLLW using verified tides and final zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-266/129_1523	3434/100	0.00	0.000	Primary
AWOIS_B310-TJ-06	AWOIS # 13470	0.81	306.3	Secondary
ChartGPs - ENC US5NY19M	Danger 4	3.06	087.6	Secondary (grouped)
h11601/tj_3102_klein5000_sss100/2006-251/153_1519	0004	4.14	150.0	Secondary
h11601/tj_3102_klein5000_sss200/2006-252/268_1506	0005	14.83	350.7	Secondary
h11601/tj_3102_klein5000_sss100/2006-251/142_1535	0006	35.37	273.2	Secondary

Hydrographer Recommendations

Change charted depth from 27 feet to 28 feet. Retain in AWOIS database.

Cartographically-Rounded Depth (Affected Charts):

```
28ft (12402_1, 12327_1, 12326_1)
4 ½fm (12300_1, 13006_1, 13003_1, 14500_1)
8.6m (5161_1)
```

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 1:depth known

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 8.552 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Geo object 2: Sounding (SOUNDG)

Office Notes

Concur with clarification - Delete 27 Obstn and danger curve. Chart an obstruction with a depth of 28 feet in latitude 40°32'16.51"N, longitude 74°02'13.37"W. Add 28 Obstn and danger curve.

Feature Images

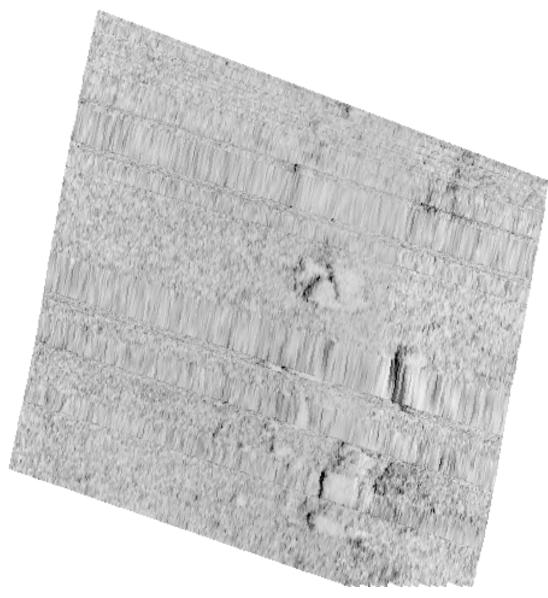


Figure 3.5.1

 $[Image\ file\ T:/SAR/H11601_B310-TJ/AHB\ Template/PSS/Images/AWOIS13470.JPG\ does\ not\ exist.]$

3 - AWOIS Features

3.6) AWOIS 9712 - 14 Wk

H11601 FEATURE REPORT

Primary Feature for AWOIS Item #9712

Search Position: 40° 32′ 48.0″ N, 074° 02′ 35.9″ W

Historical Depth: [None]
Search Radius: 100
Search Technique: MB, S2
Technique Notes: [None]

History Notes:

NM31/70-- CHAPEL HILL NORTH CHANNEL - BUOY - WRECK INFORMATION; BUOY ESTABLISHED TO MARK SUBMERGED WRECK; WRECK COVERED 1/2 FOOT. ■ LNM10/71-- CORRECTION; LIGHT BUOY 15A ESTABLISHED IN 18 FEET, 1,050 YARDS, 359 DEG. FROM WEST BANK LIGHT. BUOY IS 20 YARDS 090 DEG. FROM SUBMERGED DRY DOCK COVERED 1/2 FOOT. POSITION OF WRECK SCALED FROM CHART 12327 IN APPROX. LAT. 40-32-48.8N, LONG. 74-02-35.9W. (ENT 3/26/96, SJV)

Survey Summary

Survey Position: 40° 32′ 47.9″ N, 074° 02′ 37.3″ W

Least Depth: $4.23 \text{ m} = 13.89 \text{ ft} = 2.315 \text{ fm} = 2 \text{ f$

TPU ($\pm 1.96\sigma$): THU (TPEh) $\pm 0.980 \text{ m}$; TVU (TPEv) $\pm 0.367 \text{ m}$

Timestamp: 2006-267.15:20:36.890 (09/24/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-267 / 470_1518

Profile/Beam: 1242/221

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Object within search radius of AWOIS 9712 rising approximately 1.17m off bottom, found by 100% Reson 8125 MBES and 200% Klein 5000 SSS. Corrected to MLLW, final tides preliminary zoning.

Feature Correlation

Address		Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-	-267/470_1518	1242/221	0.00	0.000	Primary
AWOIS_B310-TJ-0	6	AWOIS # 9712	33.11	266.2	Secondary

Hydrographer Recommendations

Add least depth of 4.23 meters (13.9 feet) and update charted position. Retain in database.

Cartographically-Rounded Depth (Affected Charts):

```
14ft (12402_1, 12327_1, 12326_1)
2 <sup>1</sup>/<sub>4</sub>fm (12300_1, 13006_1, 13003_1, 14500_1)
4.2m (5161_1)
```

S-57 Data

Geo object 1: Sounding (SOUNDG)
Geo object 2: Wreck (WRECKS)

Attributes: CATWRK - 1:non-dangerous wreck

SORDAT - 20060924

SORIND - US, US, surve, H11601

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 4.234 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification - Delete dangerous sunken wreck, Wk. Chart a wreck with a depth of 14 feet in latitude 40°32'47.93"N, logitude 74°02'37.32"W. Add 14 Wk and danger curve.

3 - AWOIS Features

3.7) AWOIS 2698 - Disproved

Primary Feature for AWOIS Item #2698

Search Position: 40° 32′ 15.6″ N, 073° 56′ 48.4″ W

Historical Depth: 4.57 m

Search Radius: 50

Search Technique: SD, S2, DI

Technique Notes: [None]

History Notes:

NM44/68--SLOOP, 24 FEET LONG, SUNK ABOUT .5NM, 225 DEG. FROM ROCKAWAY POINT BREAKWATER LIGHT. ■ CL118/75-- REVISED TO EXISTENCE DOUBTFUL. ■ FE 232/80WD--OPR-B645-RU/HE-80; ITEM 18; WRECK NOT FOUND BUT CHARTED POSITION LAT. 40-32-01.2N, LONG. 73-56-56.4W CLEARED BY 22 FT ED. NOT CONSIDERED DISPROVED. ■ FE00434/97--OPR-C399-RU; 19 SIGNIFICANT CONTACTS DETECTED AND DEVELOPED WITH SHALLOW WATER MULTIBEAM SONAR. MAN-MADE OBJECT FOUND WITH A LD (SWMB) OF 15 FEET IN ABOUT 26 FEET OF WATER. EVALUATOR RECOMMENDS DELETING 22-FOOT CLEARED WRECK, ED ON CHARTS 12350 AND 12402 AND DELETING DANGEROUS SUBMERGED WREK, ED, (CLEARED TO 22 FEET) ON CHART 12327. ALSO RECOMMENDS REVISING 16 OBSTN TO 15 OBSTN (CHARTS 12327 AND 12402) AND ADDING A 15 OBSTN IN LAT. 40-32-15.578N, LONG. 73-56-48.379W (CHART 12350). (UP 12/17/98, SJV)

Survey Summary

Survey Position: 40° 32′ 15.5″ N, 073° 56′ 48.3″ W

Least Depth: 6.77 m = 22.22 ft = 3.704 fm = 3 fm = 4.22 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) $\pm 0.980 \text{ m}$; **TVU** (**TPEv**) $\pm 0.367 \text{ m}$

Timestamp: 2006-289.13:23:24.203 (10/16/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-289 / 359_1315

Profile/Beam: 9184/133

Charts Affected: 12402_1, 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Object within search radius of AWOIS 2698 rising approximately 60cm off the bottom, found by 100% Reson 8125 MBES and 200% Klein 5000 SSS. Soundings are corrected to MLLW using verified tides and final zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-289/359_1315	9184/133	0.00	0.000	Primary

h11601/tj_3102_klein5000_sss200/2006-262/211_1342	0001	1.47	156.4	Secondary
ChartGPs - ENC US5NY19M	Danger 7	4.46	148.7	Secondary (grouped)
AWOIS_B310-TJ-06	AWOIS # 2698	4.64	146.0	Secondary

Hydrographer Recommendations

Remove AWOIS 2698 from database and delete charted obstruction.

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 1:depth known

SORDAT - 20061016

SORIND - US, US, surve, H11601

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 6.773 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Geo object 2: Sounding (SOUNDG)

Office Notes

Concur with clarification - Delete 15 Obstn and dnager curve.

3.8) AWOIS 2704 - Disproved

Primary Feature for AWOIS Item #2704

Search Position: 40° 31′ 52.7″ N, 073° 56′ 09.5″ W

Historical Depth: [None]
Search Radius: 100
Search Technique: MB. S2
Technique Notes: [None]

History Notes:

ORIGIN AS SUNK WRECK NOT DETERMINED. ■FE232/80WD--OPR-B645-RU/HE-80, ITEM 31; DREDGE REPORTED SALVAGED. OBSTR. HUNG ■ AT 21 FT BUT NOT LOCATED SINCE WIRE SLIPPED OFF. NO CLEARANCE STRIPS. ■ RECOMMENDS CHARTING OBST. WITH 20 FT REPORTED. (SEE AWOIS NO.■ 1647)

Survey Summary

Survey Position: 40° 31′ 52.5″ N, 073° 56′ 08.9″ W

Least Depth: 8.01 m (= 26.26 ft = 4.377 fm = 4 fm 2.26 ft)

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) ± 0.981 m; **TVU** (**TPEv**) ± 0.369 m

Timestamp: 2006-270.13:10:18.291 (09/27/2006)

Survey Line: h11601 / tj_3102_reson8101 / 2006-270 / 100_1308

Profile/Beam: 1105/101

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Object investigated with 100% MBES and 200% SSS. Nothing found within search radius.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3102_reson8101/2006-270/100_1308	1105/101	0.00	0.000	Primary
AWOIS_B310-TJ-06	AWOIS # 2704	16.71	116.1	Secondary

Hydrographer Recommendations

Remove AWOIS 2704 from database. Chart sounding data.

S-57 Data

Geo object 1: Obstruction (OBSTRN) **Attributes:** VALSOU - 8.005 m

Office Notes

Concur with clarification - Item not shown on chart 12402, 10th., edition, May/06. No change in charting is recommended.

3 - AWOIS Features

3.9) AWOIS 1647- 20 Obstns

Primary Feature for AWOIS Item #1647

Search Position: 40° 31′ 55.5″ N, 073° 56′ 11.1″ W

Historical Depth: 6.10 m

Search Radius: 50

Search Technique: SD, S2, DI

Technique Notes: [None]

History Notes:

OPR-B645-RU/HE-80, ITEM 31, CHG.1, PROJECT INSTRUCTIONS DATED 12/5/80-■VISIBLE WK AT LAT.40-31-55.93N, LONG.73-56-13.0W SUBMERGED PER USCG, HOWEVER■USCG NEEDS WD SURVEY TO ENSURE NO HAZARDS EXIST IN AREA. ■ OPR-B645-RU/HE-80 MONTHLY REPORT 11/28/80, UNIDENTIFIED OBSTR. FOUND WITH ■20 FT LD AT PREDICTED MLW IN 28 FT OF WATER BEARING 158 DEG T, 0.52 NM FROM ■ROCKAWAY POINT BREAKWATER LIGHT(LLN 1532); OBSTR. DISCOVERED DURING SEARCH ■FOR DREDGE PENNSYLVANIA WHICH WAS REPORTED REMOVED THRU USCG; OBSTR, NOT ■CLEARED BY WD, LD BY ECHO SOUNDER. (SEE AWOIS NO. 2704)■ FE00434/97-- OPR-C399-RU; 6 SIGNIFICANT CONTACTS DETECTED AND DEVELOPED BY SHALLOW WATER MULTIBEAM SONAR. TWO LARGE, MAN-MADE OBJECTS WERE FOUND ABOUT 40 METERS APART IN 27 FEET OF WATER. SOUTHERNMOST APPEARS TO BE A 14-METER LONG PART OF A WRECK. EVALUATOR RECOMMENDS DELETING CHARTED SUBMERGED OBSTRUCTION (25 FT REP 1980) AND CHARTING A 20 OBSTN IN LAT. 40-31-55.521N, LONG. 73-56-11.072W (SWMB DEPTH). UP 12/17/98, SJV)

Survey Summary

Survey Position: 40° 31′ 55.6″ N, 073° 56′ 11.2″ W

Least Depth: 6.18 m = 20.29 ft = 3.382 fm = 3 fm 2.29 ft

TPU ($\pm 1.96\sigma$): THU (TPEh) ± 0.981 m; TVU (TPEv) ± 0.369 m

Timestamp: 2006-270.13:29:05.458 (09/27/2006)

Survey Line: h11601 / tj 3102 reson8101 / 2006-270 / 102 1321

Profile/Beam: 3327/1

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Object within search radius of AWOIS 1647 rising approximately 1.34m off the bottom, found by 100% Reson 8101 MBES and 200% Klein 5000 SSS. Soundings are corrected to MLLW using verified tides and final zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3102_reson8101/2006-270/102_1321	3327/1	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-268/153_1427	0001	1.54	321.6	Secondary
AWOIS_B310-TJ-06	AWOIS # 1647	3.79	298.9	Secondary
h11601/tj_3102_klein5000_sss200/2006-268/253_1734	0003	3.96	131.9	Secondary

Hydrographer Recommendations

Retain as charted and retain in AWOIS database.

Cartographically-Rounded Depth (Affected Charts):

20ft (12350_1, 12327_1, 12326_1) 3 ¹/₄fm (12300_1, 13006_1, 13003_1, 14500_1) 6.2m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 1:depth known

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 6.185 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Geo object 2: Sounding (SOUNDG)

Office Notes

Concur with clarification - Delete 20 Obstns and danger curve. Chart an obstructions with a depth of 20 feet in laltitude 40°31'55.58"N, longitude 73°56'11.21"W. Extend danger curve to the north-west. Add 20 Obstns and danger curve.

Feature Images

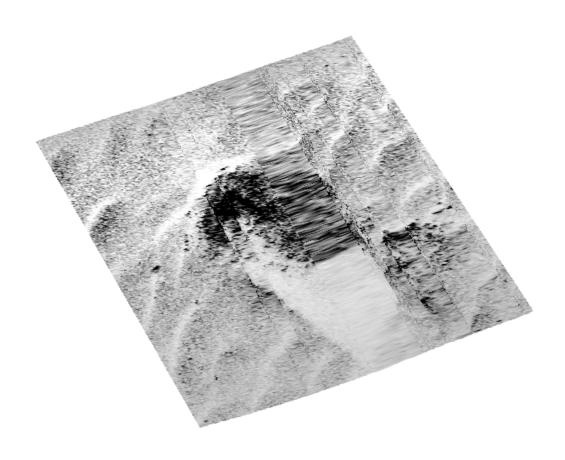


Figure 3.9.1

 $[Image\ file\ T:/SAR/H11601_B310-TJ/AHB\ Template/PSS/Images/obstn_40-31-55_073-56-11.JPG\ does\ not\ exist.]$

3.10) AWOIS 13260 - 19 Obstn

Primary Feature for AWOIS Item #13260

Search Position: 40° 32′ 07.9″ N, 073° 56′ 27.3″ W

Historical Depth: 5.79 m

Search Radius: 50

Search Technique: MB, S2 **Technique Notes:** [None]

History Notes:

F00434/96 -- OPR-C399-RU-97; OBSTR FOUND 40/32/07.94N 73/56/27.34W WITH A LEAST DEPTH OF 19FT(ENT. 05/26/05, SME)

Survey Summary

Survey Position: 40° 32′ 08.1″ N, 073° 56′ 27.6″ W

Least Depth: $5.74 \text{ m} = 18.83 \text{ ft} = 3.139 \text{ fm} = 3 \text{ f$

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) $\pm 0.980 \text{ m}$; **TVU** (**TPEv**) $\pm 0.369 \text{ m}$

Timestamp: 2006-271.13:51:13.923 (09/28/2006)

Survey Line: h11601 / tj_3102_reson8101 / 2006-271 / 103_1347

Profile/Beam: 2342/28

Charts Affected: 12402_1, 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Object within search radius of AWOIS 13260 rising approximately 1.16m off bottom, found by 100% Reson 8101 MBES and 200% Klein 5000 SSS. Corrected to MLLW, verified tides final zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3102_reson8101/2006-271/103_1347	2342/28	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-268/139_1551	0001	3.59	104.1	Secondary
ChartGPs - ENC US5NY19M	Danger 8	4.81	303.3	Secondary (grouped)
h11601/tj_3102_klein5000_sss200/2006-268/242_1625	0001	5.09	061.2	Secondary
AWOIS_B310-TJ-06	AWOIS # 13260	7.12	310.9	Secondary (grouped)
h11601/tj_3102_klein5000_sss100/2006-264/119_1531	0003	15.84	096.3	Secondary

Hydrographer Recommendations

Retain as charted and retain in AWOIS database.

Cartographically-Rounded Depth (Affected Charts):

```
19ft (12402_1, 12350_1, 12327_1, 12326_1)
3fm (12300_1, 13006_1, 13003_1, 14500_1)
5.7m (5161_1)
```

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 6:least depth known

SORDAT - 20060928

SORIND - US, US, surve, H11601

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 5.740 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Geo object 2: Sounding (SOUNDG)

Office Notes

Concur with clarification - Delete 19 Obstn and danger curve. Chart an obstruction with a depth of 19 feet in latitude 40°32'08.09"N, longitude 73°56'27.57" W. Add 19 Obstn and danger curve.

Feature Images

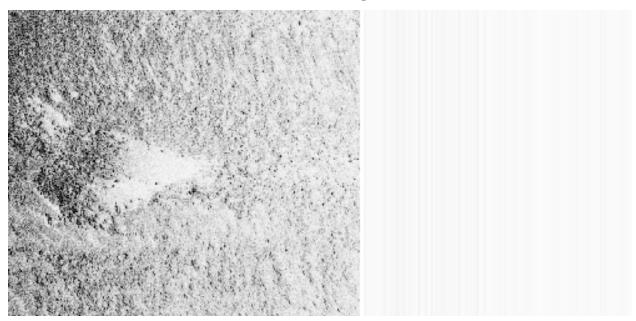


Figure 3.10.1

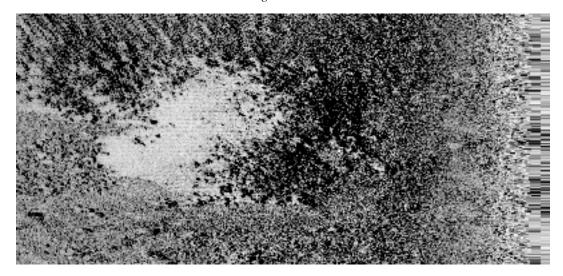


Figure 3.10.2

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/AWOIS13260.JPG does not exist.]

3.11) AWOIS-2696 - 21 Obstn

Primary Feature for AWOIS Item #2696

Search Position: 40° 31′ 55.1″ N, 073° 57′ 01.1″ W

Historical Depth: 6.71 m

Search Radius: 50

Search Technique: MB, S2 **Technique Notes:** [None]

History Notes:

FE232/80-- OPR-B645-RU/HE-80; UNIDENTIFIED OBSTRUCTION HUNG AT 22 FEET, CLEARED TO 20 FEET ED. HANG NOT INVESTIGATED. ENTIRE 300-METER RADIUS CIRCLE NOT COVERED, 90% COMPLETE. HYDROGRAPHER REPORTS STRONG TIDAL CURRENTS AND WIND (NOVEMBER) HAMPERED OPERATIONS.■ FE00434/97-- OPR-C399-RU; ONE SIGNIFICANT CONTACT. EVALUATOR RECOMMENDS DELETING CHARTED 20 OBSTN AND CHARTING A 22 OBSTN IN LAT. 40-31-55.101N, LONG. 73-57-01.129W (SWMB LD). (UP 12/17/98, SJV)

Survey Summary

Survey Position: 40° 31′ 55.7″ N, 073° 57′ 01.2″ W

Least Depth: 6.60 m = 21.64 ft = 3.607 fm = 3 fm = 3.64 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) ± 0.981 m; **TVU** (**TPEv**) ± 0.369 m

Timestamp: 2006-291.16:10:55.958 (10/18/2006)

Survey Line: h11601 / tj_3102_reson8101 / 2006-291 / 413_1610

Profile/Beam: 200/82

Charts Affected: 12402_1, 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Object within search radius of AWOIS 2696 rising approximately 1.08m off the bottom, found by 100% Reson 8101 MBES and 200% Klein 5000 SSS. Soundings are corrected to MLLW using verified tides and final zoning.

Address	Feature	Range	Azimuth	Status
h11601/tj_3102_reson8101/2006-291/413_1610	200/82	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-262/113_1349	0002	2.82	191.3	Secondary
ChartGPs - ENC US5NY19M	Danger 6	4.01	104.3	Secondary (grouped)
h11601/tj_3102_klein5000_sss200/2006-262/211_1342	0005	4.39	127.9	Secondary
AWOIS_B310-TJ-06	AWOIS # 2696	18.58	358.2	Secondary

Hydrographer Recommendations

Retain charted obstruction with new depth (21 ft). Retain in database.

Cartographically-Rounded Depth (Affected Charts):

```
21ft (12402_1, 12350_1, 12327_1, 12326_1)
3 ½fm (12300_1, 13006_1, 13003_1, 14500_1)
6.6m (5161_1)
```

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 1:depth known

SORDAT - 20061018

SORIND - US, US, surve, H11601

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 6.597 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Geo object 2: Sounding (SOUNDG)

Office Notes

Concur with clarification - Delete 22 Obstn and danger curve. Chart an obstruction with a depth of 21 feet in latitude 40°31'55.70"N, longitude 73°57'01.15"W. Add 21 Obstn and danger curve.

Feature Images

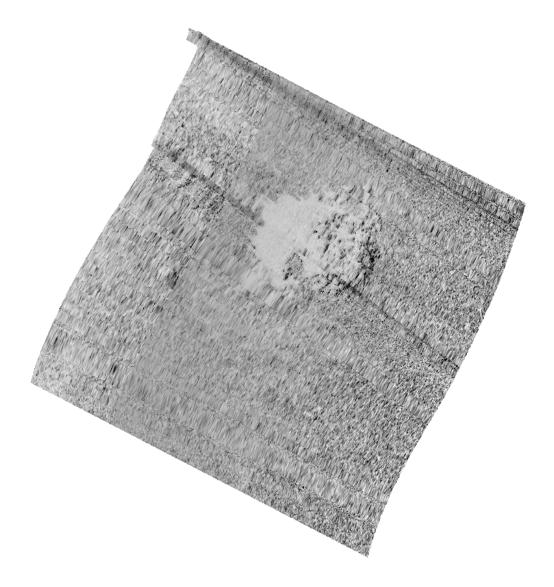


Figure 3.11.1

 $[Image\ file\ T:/SAR/H11601_B310-TJ/AHB\ Template/PSS/Images/AWOIS2696.JPG\ does\ not\ exist.]$

3.12) AWOIS 13529 - Delete Subm pile PA

Primary Feature for AWOIS Item #13529

Search Position: 40° 35′ 02.7″ N, 073° 54′ 15.4″ W

Historical Depth: [None]

Search Radius: 0

Search Technique: MB, S2 **Technique Notes:** [None]

History Notes:

UNDETERMINED -- SUBM PILE PA NOW CHARTED IN POSITION: 40 35 02.69 N, 073 54 15.42 W (NAD 83).UPDATED 2/23/2006 JCM.

Survey Summary

Survey Position: 40° 35′ 02.6″ N, 073° 54′ 15.5″ W

Least Depth: 4.06 m = 13.31 ft = 2.218 fm = 2 fm = 1.31 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) $\pm 0.980 \text{ m}$; **TVU** (**TPEv**) $\pm 0.367 \text{ m}$

Timestamp: 2006-292.17:49:22.022 (10/19/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-292 / 492_1747

Profile/Beam: 2672/200

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

No search radius specified and no object detected in current location. Area searched with 100% MBES coverage.

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-292/492_1747	2672/200	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 13529	2.31	236.4	Secondary

Hydrographer Recommendations

Remove AWOIS 13529 from chart and AWOIS Database

Cartographically-Rounded Depth (Affected Charts):

```
13ft (12350_1, 12327_1, 12326_1)
2 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)
4.1m (5161_1)
```

S-57 Data

Geo object 1: Pile (PILPNT)

Attributes: CONVIS - 2:not visual conspicuous

SORDAT - 20061019

SORIND - US, US, surve, H11601

Office Notes

Concur - Delete Subm Pile, PA.

3.13) AWOIS 9758 - 10 Obstn

Primary Feature for AWOIS Item #9758

Search Position: 40° 34′ 01.7″ N, 074° 00′ 27.5″ W

Historical Depth: [None]

Search Radius: 50

Search Technique: MB, S2, S4

Technique Notes: [None]

History Notes:

H-5734/34-- 12-13-FOOT DEPTHS IN AREA OF 9-FOOT SOUNDING BELOW. ■ H-7864/50-- 9-FOOT SOUNDING PLOTTED ON SMOOTH SHEET. ■ H-9820/79-- OPR-B139-WH; CHARTED 9-FOOT SOUNDING CONSIDERED BY EVALUATOR TO BE LD ON A WRECK AND NOT ON A SHOAL. THE WRECK WAS CONSIDERED LOCATED AND IDENTIFIED BY THE PRESENT SURVEY ACCORDING ITO THE QUALITY CONTROL COMMENTS. HOWEVER, THE HYDROGRAPHER PROVIDED NO INFORMATION IN THE DESCRIPTIVE REPORT TO SUBSTANTIATE THIS CLAIM. IN ADDITION, A 12-FOOT SOUNDING IS PLOTTED ON THE SMOOTH SHEET WITH "WK" AT THE PRIOR 9-FOOT POSITION. CHARTED AS A 9 WK ON CHART 12402, 5TH EDITION. THE 9-FOOT DEPTH IS CONTAINED WITHIN A 12-FOOT DEPTH CURVE AND NOT A DANGER CURVE. (ENT 5/21/96, SJV)

Survey Summary

Survey Position: 40° 34′ 01.5″ N, 074° 00′ 26.3″ W

Least Depth: 3.06 m = 1.671 fm = 1 fm = 1.671 fm = 1.67

TPU ($\pm 1.96\sigma$): THU (TPEh) $\pm 0.981 \text{ m}$; TVU (TPEv) $\pm 0.367 \text{ m}$

Timestamp: 2006-291.12:56:57.728 (10/18/2006)

Survey Line: h11601 / tj_3102_reson8101 / 2006-291 / 110_1256

Profile/Beam: 390/1

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Objects (two debris mounds) found within search radius of AWOIS 9758 rising approximately 1.19m off bottom, found by 100% Reson 8101 MBES and 200% Klein 5000 SSS. Corrected to MLLW, verified tides final zoning.

Address	Feature	Range	Azimuth	Status
h11601/tj_3102_reson8101/2006-291/110_1256	390/1	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-249/162_1452	0002	2.37	177.1	Secondary
h11601/tj_3102_klein5000_sss200/2006-272/207_1521	0001	2.96	118.6	Secondary

h11601/tj_3102_klein5000_sss100/2006-251/163_1247	0002	4.49	111.0	Secondary	
h11601/tj_3102_klein5000_sss100/2006-251/163_1247	0001	16.20	127.5	Secondary	
ChartGPs - ENC US5NY19M	Danger 45	18.80	116.5	Secondary (grouped)	
h11601/tj_3102_klein5000_sss100/2006-249/162_1452	0004	20.53	077.1	Secondary	
h11601/tj_3102_klein5000_sss100/2006-252/162_1428	0001	22.44	106.0	Secondary	
h11601/tj_3102_reson8101/2006-291/105_1249	346/9	22.59	100.5	Secondary	
h11601/tj_3102_reson8101/2006-291/103_1241	415/101	22.92	103.5	Secondary	
h11601/tj_3102_klein5000_sss100/2006-249/162_1452	0001	23.74	103.6	Secondary	
AWOIS_B310-TJ-06	AWOIS # 9758	28.89	106.5	Secondary	

Hydrographer Recommendations

Delete charted wreck and replace with obstruction symbol with updated least depth (10 ft). Update/retain item in database.

Cartographically-Rounded Depth (Affected Charts):

```
10ft (12402_1, 12327_1, 12326_1)
1 ½fm (12300_1, 13006_1, 13003_1, 14500_1)
3.1m (5161_1)
```

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 6:least depth known

SORDAT - 20061018

SORIND - US, US, surve, H11601

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 3.056 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Geo object 2: Sounding (SOUNDG)

Office Notes

Concur. Delete 9 Wk and danger curve. Chart an obstruction with a depth of 10 feet in latitude 40°34'01.46"N, logitude 74°00'26.34"W. Add 10 Obstn and danger curve.

Feature Images

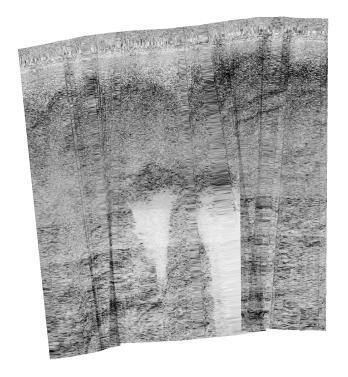


Figure 3.13.1

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/AWOIS9758.JPG does not exist.]

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/Awois9758-2.JPG does not exist.]

3.14) AWOIS 9722- Disproved

Primary Feature for AWOIS Item #9722

Search Position: 40° 33′ 25.4″ N, 073° 57′ 36.5″ W

Historical Depth: [None]
Search Radius: 500
Search Technique: MB, S2
Technique Notes: [None]

History Notes:

NM14/59-- ROCKAWAY INLET - OBSTRUCTION REPORTED; AN UNIDENTIFIED SUBMERGED OBSTRUCTION HAS BEEN REPORTED IN APPROX. POSITION LAT. 40-33-25N, LONG. 73-57-38W. NOTE: ORIGINALLY CHARTED WITH LEGEND (REP 1959). ALSO, CHARTED POSITION NOW 8 SECONDS OF LONGITUDE EAST OF ORIGINAL GP. (ENT 4/3/96, SJV)

Survey Summary

Survey Position: 40° 33′ 24.8″ N, 073° 57′ 29.9″ W

Least Depth: 4.57 m = 15.01 ft = 2.501 fm = 2 fm = 3.01 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) $\pm 0.980 \text{ m}$; **TVU** (**TPEv**) $\pm 0.367 \text{ m}$

Timestamp: 2006-283.14:02:31.750 (10/10/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-283 / 211_1400

Profile/Beam: 1561/229

Charts Affected: 12402_1, 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Insignificant object with a height of 0.50m found within search radius; found with 100% MBES and 200% SSS. Soundings are corrected to MLLW with verified tides and final zoning.

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-283/211_1400	1561/229	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss200/2006-253/246_1741	0002	5.79	332.3	Secondary
ChartGPs - ENC US5NY19M	Danger 33	15.40	068.6	Secondary (grouped)
AWOIS_B310-TJ-06	AWOIS # 9722	153.61	096.1	Secondary

Hydrographer Recommendations

Remove obstruction from chart and remove AWOIS 9722 from database.

Cartographically-Rounded Depth (Affected Charts):

```
15ft (12402_1, 12350_1, 12327_1, 12326_1)
2 ½fm (12300_1, 13006_1, 13003_1, 14500_1)
4.6m (5161_1)
```

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 6:least depth known

SORDAT - 20061010

SORIND - US, US, surve, H11601

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 4.574 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification - Item not shown on chart 12402, 10th., edition, May/06. No change in charting isrecommended.

3.15) AWOIS 9717 - 30 Obstn

Primary Feature for AWOIS Item #9717

Search Position: 40° 35′ 39.0″ N, 074° 02′ 48.0″ W

Historical Depth: [None]
Search Radius: 500

Search Technique: SD, S2, MB

Technique Notes: [None]

History Notes:

UNKNOWN SOURCE-- CHARTED SINCE 1941 AS WRECKAGE CLEARED TO 36 FEET. POSITION SCALED FROM CHART 12327 IN APPROX. LAT. 40-35-39N, LONG. 74-02-48W. (ENT 4/2/96, SJV)

Survey Summary

Survey Position: 40° 35′ 48.4″ N, 074° 02′ 58.6″ W

Least Depth: 9.34 m (= 30.63 ft = 5.105 fm = 5 fm 0.63 ft)

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) ± 0.981 m; **TVU** (**TPEv**) ± 0.370 m

Timestamp: 2006-294.17:39:44.327 (10/21/2006)

Survey Line: h11601 / tj_3102_reson8101 / 2006-294 / 255_1736

Profile/Beam: 1244/101

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This object was found within the AWOIS radius approximately 436m away from the charted obstruction. The object was found with 100% Reson 8101 MBES and 200% Klein 5000 SSS; soundings are corrected to MLLW with verified tides and final zoning.

Address	Feature	Range	Azimuth	Status
h11601/tj_3102_reson8101/2006-294/255_1736	1244/101	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 9717	381.55	319.7	Secondary
h11601/tj_3102_klein5000_sss100/2006-248/121_1816	0007	420.12	314.9	Secondary (grouped)
ChartGPs - ENC US5NY19M	Danger 64	425.85	320.6	Secondary (grouped)
h11601/tj_3102_klein5000_sss200/2006-250/227_1507	0002	477.92	323.5	Secondary (grouped)
h11601/tj_3102_klein5000_sss200/2006-250/224_1451	0003	589.63	318.5	Secondary (grouped)
h11601/tj_3102_klein5000_sss100/2006-248/140_1832	0006	602.61	317.7	Secondary (grouped)

06289122.T2Q	1	657.77	299.3	Secondary (grouped)
h11601/tj_3102_klein5000_sss200/2006-250/222_1421	0003	664.40	315.1	Secondary (grouped)

Hydrographer Recommendations

Delete charted Wreckage and wire hang symbol. Chart new Obstruction with least depth of 30 ft in new position. The hydrographer believes this is a new object, therefore remove AWOIS 9717 from database.

Cartographically-Rounded Depth (Affected Charts):

```
30ft (12402_1, 12327_1, 12326_1)
5fm (12300_1, 13006_1, 13003_1, 14500_1)
9.3m (5161_1)
```

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: VALSOU - 9.336 m

Geo object 2: Sounding (SOUNDG)

Geo object 3: Wreck (WRECKS)

Attributes: CATWRK - 2:dangerous wreck

SORDAT - 20061021

SORIND - US, US, surve, H11601

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 9.336 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification - Delete the charted 36 Wreckage wire drag clearance depth. Chart an obstruction with a depth of 30 ft in latitude 40°35'48.41"N, longitude 74°02'58.58"W. Add 30 Obstn and danger curve

3.16) AWOIS - 9915 Disproved

Primary Feature for AWOIS Item #9915

Search Position: 40° 33′ 53.0″ N, 073° 59′ 02.0″ W

Historical Depth: [None]

Search Radius: 0

Search Technique: MB, S2 **Technique Notes:** [None]

History Notes:

LNM6/97-- NEW YORK-CONEY ISLAND CHANNEL; SHOALING TO 12 FEET REPORTED APPROX. 75 YDS., 000 DEG. FROM CONEY ISLAND CHANNEL BUOY 5 (LLNR 35295). MARINERS ARE ADVISED TO PROCEED WITH CAUTION WIHEN TRANSITING THE AREA. (ENT 2/19/97, SJV)

Survey Summary

Survey Position: 40° 33′ 53.0″ N, 073° 59′ 01.4″ W

Least Depth: 5.54 m = 18.17 ft = 3.028 fm = 3 fm 0.17 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) $\pm 0.980 \text{ m}$; **TVU** (**TPEv**) $\pm 0.367 \text{ m}$

Timestamp: 2006-255.15:44:20.559 (09/12/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-255 / 150_1541

Profile/Beam: 2612/165

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Bathymetry in the area indicates depths concurrent with the chart. No search radius specified. Area covered with 200% SSS and 100% MBES.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-255/150_1541	2612/165	0.00	0.000	Primary
AWOIS_B310-TJ-06	AWOIS # 9915	13.31	090.8	Secondary

Hydrographer Recommendations

Remove AWOIS 9915 from database. Chart sounding data.

S-57 Data

Geo object 1: Sounding (SOUNDG)

Office Notes

Concur - Not shown on chart 12402, 10th. Edition, May/06. No change in charting recommended.

3 - AWOIS Features

3.17) AWOIS 9723 - Disproved

Primary Feature for AWOIS Item #9723

Search Position: 40° 33′ 18.4″ N, 073° 56′ 46.5″ W

Historical Depth: [None]
Search Radius: 250
Search Technique: MB, S2
Technique Notes: [None]

History Notes:

LNM41/73-- 20-FOOT CATALINA SLOOP, REG. NO. NY 4361 DU, IS REPORTED SUNK IN 18 FEET OF WATER. "RECOMMEND CHARTING". APPROX. POSITION LAT. 40-33-18N, LONG. 73-56-48W.■ CL118/75-- MR. RANDY ANDRONICA TO NOS (BOAT SHOW REPORT); COULD NOT LOCATE WRECK. "PA" REVISED TO "ED". ADDRESS: 1130-44TH STREET, BROOKLYN, NEW YORK 11219. (ENT 4/4/96, SJV)

Survey Summary

Survey Position: 40° 33′ 18.2″ N, 073° 56′ 44.1″ W

Least Depth: 6.74 m = 22.10 ft = 3.683 fm = 3 fm = 4.10 ft

TPU ($\pm 1.96\sigma$): THU (TPEh) $\pm 0.980 \text{ m}$; TVU (TPEv) $\pm 0.368 \text{ m}$

Timestamp: 2006-279.17:32:31.183 (10/06/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-279 / 219_1724

Profile/Beam: 6031/3

Charts Affected: 12402_1, 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Nothing found within AWOIS radius using 100% MBES and 200% SSS.

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-279/219_1724	6031/3	0.00	0.000	Primary
ChartGPs - ENC US5NY19M	Danger 71	2.68	073.4	Secondary (grouped)
AWOIS_B310-TJ-06	AWOIS # 9723	55.79	094.8	Secondary
h11601/tj_3101_reson8125/2006-279/209_1848	6126/179	203.16	322.6	Secondary (grouped)

Hydrographer Recommendations

Remove AWOIS 9723 from database and Wreck ED symbol from chart. Chart sounding data.

S-57 Data

Geo object 1: Wreck (WRECKS)

Attributes: CATWRK - 1:non-dangerous wreck

CONVIS - 2:not visual conspicuous

SORDAT - 20061006

SORIND - US, US surve, H11601

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 6.735 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur. Delete dangerous sunken wreck, ED.

3.18) AWOIS 9721 - Disproved

Primary Feature for AWOIS Item #9721

Search Position: 40° 34′ 00.4″ N, 073° 57′ 28.5″ W

Historical Depth: [None]
Search Radius: 400
Search Technique: MB, S2
Technique Notes: [None]

History Notes:

LNM 44/71-- A 30-FOOT CABIN CRUISER IS REPORTED SUNK IN 10-15 FEET OF WATER IN APPROX. LAT. 40-34-00N, LONG. 73-57-30W. MARINERS ARE ADVISED TO NAVIGATE WITH CAUTION IN THE VICINITY.

Survey Summary

Survey Position: 40° 34′ 00.4″ N, 073° 57′ 28.7″ W

Least Depth: 4.56 m = 14.96 ft = 2.493 fm = 2 fm 2.96 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) $\pm 0.980 \text{ m}$; **TVU** (**TPEv**) $\pm 0.367 \text{ m}$

Timestamp: 2006-281.14:02:29.033 (10/08/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-281 / 600_1359

Profile/Beam: 2732/54

Charts Affected: 12402_1, 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Entire radius covered with 200% SSS and 100% MBES. No significant object found.

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-281/600_1359	2732/54	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 9721	5.94	277.3	Secondary
ChartGPs - ENC US5NY19M	Danger 72	7.86	074.2	Secondary (grouped)
h11601/tj_3102_klein5000_sss100/2006-253/107_1336	0002	221.60	067.7	Secondary (grouped)
h11601/tj_3101_reson8125/2006-257/612_1703	7023/201	225.45	067.2	Secondary (grouped)
h11601/tj_3102_klein5000_sss100/2006-253/144_1601	0001	225.46	067.0	Secondary (grouped)
h11601/tj_3101_reson8125/2006-281/556_1514	4031/110	239.73	260.0	Secondary (grouped)

h11601/tj_3102_klein5000_sss200/2006-253/246_1741	0001	314.52	292.7	Secondary (grouped)
h11601/tj_3102_klein5000_sss100/2006-253/149_1701	0001	314.73	292.6	Secondary (grouped)

Hydrographer Recommendations

Delete Wreck from chart and remove AWOIS 9721 from database.

S-57 Data

Geo object 1: Sounding (SOUNDG)
Geo object 2: Wreck (WRECKS)
Attributes: VALSOU - 4.560 m

Office Notes

Concur. Delete 10 Wk w/danger curve (wire drag) Chart present survey depths.

3.19) AWOIS 2624- Disproved

Primary Feature for AWOIS Item #2624

Search Position: 40° 34′ 11.4″ N, 073° 55′ 59.5″ W

Historical Depth: [None]

Search Radius: 0

Search Technique: [None] **Technique Notes:** [None]

History Notes:

LNM42/70--MOTORBOAT, 20 FT L, REPORTED SUNK 490 YDS 335 DEG FROM OUTFALL ■ GATE HOUSE LIGHT (LL1540); 26 FT LD (MLW) ■CL1120/72--OPR-506-HFP-745-72, APRIL-JULY 1972, ITEM 6; NEGATIVE BOTTOM DRAG.

Survey Summary

Survey Position: 40° 34′ 11.3″ N, 073° 55′ 58.8″ W

Least Depth: $5.45 \text{ m} = 17.88 \text{ ft} = 2.980 \text{ fm} = 2 \text{ f$

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) $\pm 0.980 \text{ m}$; **TVU** (**TPEv**) $\pm 0.367 \text{ m}$

Timestamp: 2006-291.13:56:44.458 (10/18/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-291 / 126_1352

Profile/Beam: 2781/1

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

No search radius specified. Object investigated with 100% MBES and 200% SSS. No significant object found within immediate vicinity of charted wreck.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-291/126_1352	2781/1	0.00	0.000	Primary
AWOIS_B310-TJ-06	AWOIS # 2624	16.24	096.0	Secondary

Hydrographer Recommendations

Delete Wreck ED from chart and remove AWOIS 2624 from database.

S-57 Data

Geo object 1: Wreck (WRECKS)

Attributes: CATWRK - 1:non-dangerous wreck

CONVIS - 2:not visual conspicuous

SORDAT - 20061018

SORIND - US, US, surve, H11601

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 5.450 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur. Delete-- Dangerous sunen wreck ED. Chart present surevy depths.

3.20) AWOIS 9713- Disproved

Primary Feature for AWOIS Item #9713

Search Position: 40° 34′ 00.4″ N, 073° 57′ 58.5″ W

Historical Depth: [None]
Search Radius: 200
Search Technique: MB, S2
Technique Notes: [None]

History Notes:

LNM14/72-- BRIGHTON BEACH APPROACH; BROKEN PILE VISIBLE AT MLW REPORTED TO EXIST IN APPROX. POSITION LAT. 40-34N, LONG. 73-58. MARINERS ADVISED TO USE CAUTION UNTIL REMOVAL. (ENT 3/27/96, SJV)■ LNM3/83-- SUBSTITUTE LEGEND SUBM PILE (CLEARED TO 10 FEET) FOR LEGEND PILE PA IN LAT. 40-34-00N, LONG. 73-58-00W (SOURCE OF LNM IS H-9820). (ENT 4/3/96, SJV)

Survey Summary

Survey Position: 40° 34′ 00.0″ N, 073° 57′ 58.4″ W

Least Depth: 3.55 m = 1.65 ft = 1.941 fm = 1 fm = 1.65 ft

TPU ($\pm 1.96\sigma$): THU (TPEh) $\pm 0.980 \text{ m}$; TVU (TPEv) $\pm 0.368 \text{ m}$

Timestamp: 2006-261.16:24:42.576 (09/18/2006)

Survey Line: h11601 / tj_3102_reson8101 / 2006-261 / 617_1622

Profile/Beam: 2442/23

Charts Affected: 12402_1, 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Entire search radius investigated with 100% MBES and 200% SSS. No significant object found.

Address	Feature	Range	Azimuth	Status
h11601/tj_3102_reson8101/2006-261/617_1622	2442/23	0.00	0.000	Primary
ChartGPs - ENC US5NY19M	Danger 34	4.62	044.8	Secondary (grouped)
AWOIS_B310-TJ-06	AWOIS # 9713	10.40	166.9	Secondary

Hydrographer Recommendations

Delete charted Pile ED with wire hang symbol and remove AWOIS 9713 from database. Chart sounding data.

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: VALSOU - 3.550 m

Geo object 2: Pile (PILPNT)

Attributes: SORDAT - 20060918

SORIND - US, US, surve, H11601

Geo object 3: Sounding (SOUNDG)

Office Notes

Concur.

Delete 10 Obstn pile ED w/danger curve (wire drag). Chart present survey depths.

3.21) AWOIS 13271-Disproved

Primary Feature for AWOIS Item #13271

Search Position: 40° 31′ 55.5″ N, 073° 56′ 00.2″ W

Historical Depth: 5.79 m **Search Radius:** 50

Search Technique: MB, S2 **Technique Notes:** [None]

History Notes:

F00434/96 -- OPR-C399-RU-97; OBSTR FOUND AT 40/31/55.52N 73/56/00.2W WITH A LEAST DEPTH OF 19FT■(ENT. 06/02/05, SME)

Survey Summary

Survey Position: 40° 31′ 55.5″ N, 073° 55′ 59.9″ W

Least Depth: 4.24 m = 13.90 ft = 2.317 fm = 2 fm = 1.90 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) $\pm 0.980 \text{ m}$; **TVU** (**TPEv**) $\pm 0.369 \text{ m}$

Timestamp: 2006-288.20:42:30.621 (10/15/2006)

Survey Line: h11601 / tj_3102_reson8101 / 2006-288 / 449_2041

Profile/Beam: 707/33

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

No significant object found within search radius. Entire search radius investigated with 100% MBES and 200% SSS.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3102_reson8101/2006-288/449_2041	707/33	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 13271	6.98	099.4	Secondary

Hydrographer Recommendations

Delete Obstruction symbol from chart. Remove AWOIS 13271 from database. Chart sounding data.

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 6:least depth known

SORDAT - 20061015

SORIND - US, US, surve, H11601

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 4.237 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Geo object 2: Sounding (SOUNDG)

Office Notes

Concur - Delete 19 Obstn and danger curve.

3.22) AWOIS 13261- Disproved

Primary Feature for AWOIS Item #13261

Search Position: 40° 34′ 39.4″ N, 073° 54′ 18.5″ W

Historical Depth: 6.10 m
Search Radius: 100
Search Technique: MB, S2
Technique Notes: [None]

History Notes:

L-1120/72 -- OPR-506-HFP-745-72; OBSTRUCTION WAS DREDGED FOR AND FOUND TO BE AT LOCATION CHARTED 40/34/39N 73/54/20W NAD27 LEAST DEPTH OVER OBSTRUCTION WAS 20 FT (ENT. 05/26/05, SME)

Survey Summary

Survey Position: 40° 34′ 39.4″ N, 073° 54′ 18.0″ W

Least Depth: 5.40 m = 17.72 ft = 2.953 fm = 2 fm = 5.72 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) ± 0.981 m; **TVU** (**TPEv**) ± 0.368 m

Timestamp: 2006-291.18:44:40.695 (10/18/2006)

Survey Line: h11601 / tj_3102_reson8101 / 2006-291 / 473_1843

Profile/Beam: 1690/92

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

No significant object found within search radius of AWOIS 13261. Searched using 100% MBES and 200% SSS.

Feature Correlation

Address		Feature	Range	Azimuth	Status	
h11601/tj_3102_reson8101/2006-291/473_1843 AWOIS_B310-TJ-06		1690/92	0.00	0.000	Primary	
		AWOIS # 13261	11.24	093.7	Secondary	

Hydrographer Recommendations

Delete Obstruction symbol from chart and remove AWOIS 13261 from database. Chart sounding data.

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 6:least depth known

SORDAT - 20061018

SORIND - US, US, surve, H11601

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 5.401 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Geo object 2: Sounding (SOUNDG)

Office Notes

Concur. Delete 20 Obstn w/danger curve.

3 - AWOIS Features

3.23) AWOIS 9709- Retain

Primary Feature for AWOIS Item #9709

Search Position: 40° 32′ 01.4″ N, 073° 59′ 39.5″ W

Historical Depth: [None]

Search Radius: 0

Search Technique: [None] **Technique Notes:** [None]

History Notes:

CL881/83-- LTR. FROM COE (OPS DIVISION) TO NOS (JIM DAILEY) DATED 9/21/83; DERELICT TUG WAS FOUND IN LOWER NEW YORK BAY ON JUNE 28, 1982. COE SALVAGE EFFORTS UNSUCCESSFUL. TUG SUNK EAST OF AMBROSE CHANNEL ON THE EAST BANK IN APPROX. 18 FEET OF WATER. DIVER LOCATED THE TUG ON JULY 22, 1982 AND ATTACHED AN ANCHOR TO THE FORWARD BOW BITT AND A MARKER BUOY TO THE STERN MAIN BITT WITH A STEEL CABLE. "RECENT" ATTEMPTS TO LOCATE TUG UNSUCCESSFUL (DATES UNKNOWN). THE SEARCH CENTERED ON THE CURRENT CHARTED POSITION AND COVERED A 1 X 1.5 MILE AREA (APPROX.). METHODS AND EQUIPMENT NOT SPECIFIED IN THIS LETTER. LAST KNOWN LOCATION OF SUNKEN TUG WAS LAT. 40-32-01N, LONG. 73-59-41W. (ENT 3/26/96, SJV)

Survey Summary

Survey Position: 40° 32′ 01.1″ N, 073° 59′ 38.8″ W

Least Depth: 3.91 m (= 12.82 ft = 2.137 fm = 2 fm 0.82 ft)

TPU ($\pm 1.96\sigma$): THU (TPEh) $\pm 0.980 \text{ m}$; TVU (TPEv) $\pm 0.369 \text{ m}$

Timestamp: 2006-295.15:27:02.780 (10/22/2006)

Survey Line: h11601 / tj_3102_reson8101 / 2006-295 / 019_1512

Profile/Beam: 13594/65

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Object not fully investigated.

Address	Feature	Range	Azimuth	Status
h11601/tj_3102_reson8101/2006-295/019_1512	13594/65	0.00	0.000	Primary
ChartGPs - ENC US5NY19M	Danger 40	4.09	002.9	Secondary (grouped)
AWOIS_B310-TJ-06	AWOIS # 9709	17.89	117.4	Secondary

Hydrographer Recommendations

Retain as charted.

S-57 Data

[None]

Office Notes

Concur. Retain as charted dangerous sunken wreck.

3.24) AWOIS 13265 - Disproved

Primary Feature for AWOIS Item #13265

Search Position: 40° 34′ 09.4″ N, 073° 53′ 54.5″ W

Historical Depth: [None]
Search Radius: 150
Search Technique: MB, S2
Technique Notes: [None]

History Notes:

NM30/75 -- SUBMERGED WK PA AT 40/34/09N 73/53/56W NAD27 ADDED TO CHART (ENT. 05/27/05, SME)

Survey Summary

Survey Position: 40° 34′ 10.9″ N, 073° 53′ 57.2″ W

Least Depth: 9.24 m = 30.33 ft = 5.055 fm = 5 fm 0.33 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) $\pm 0.980 \text{ m}$; **TVU** (**TPEv**) $\pm 0.367 \text{ m}$

Timestamp: 2006-285.14:46:12.424 (10/12/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-285 / 351_1440

Profile/Beam: 3484/141

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Small object rising approximately 8cm off the seafloor within AWOIS 13265 radius, found by 100% Reson 8125 MBES and 200% Klein 5000 SSS. Sounding corrected to MLLW with verified tides and final zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-285/351_1440	3484/141	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-266/111_1446	0002	3.86	173.5	Secondary
AWOIS_B310-TJ-06	AWOIS # 13265	78.45	306.7	Secondary

Hydrographer Recommendations

Delete Wreck symbol from chart and remove AWOIS 13265 from database.

S-57 Data

Geo object 1: Wreck (WRECKS)

Attributes: CATWRK - 1:non-dangerous wreck

SORDAT - 20061012

SORIND - US, US, surve, H11601

TECSOU - 2,3:found by side scan sonar,found by multi-beam

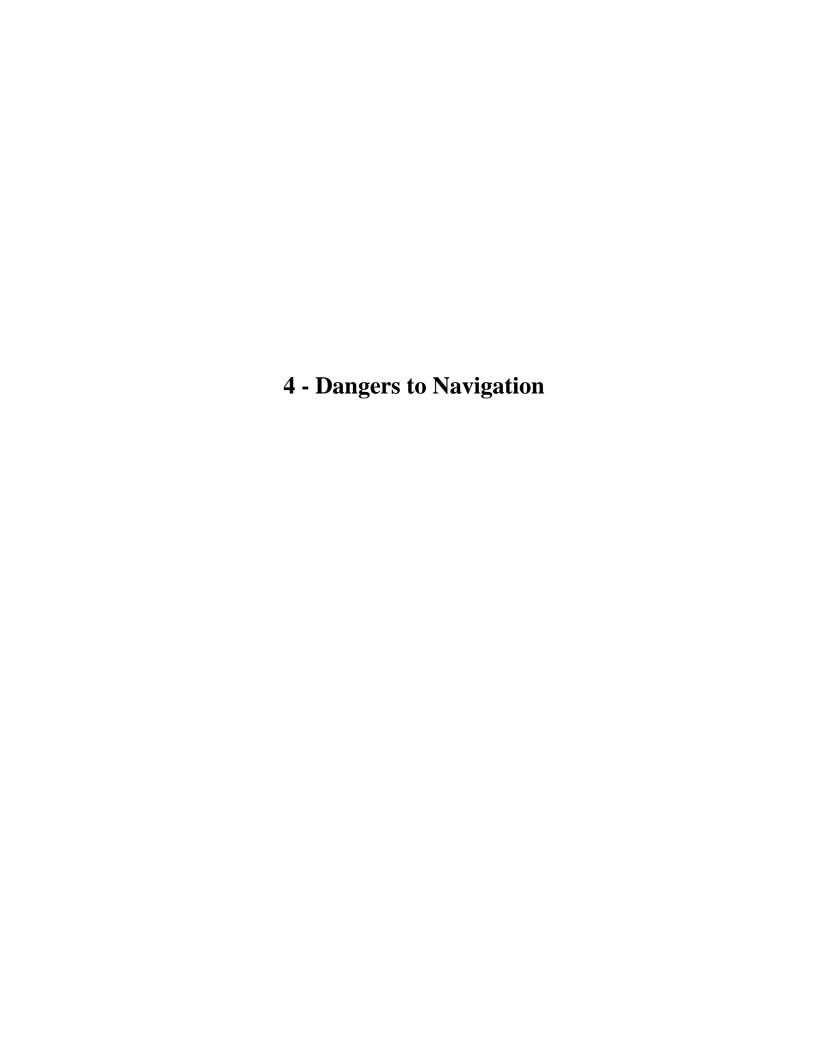
VALSOU - 9.244 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur. Delete dangerous sunken wreck.



4.1) DTON1 20 Wk

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 34′ 34.6″ N, 074° 02′ 34.5″ W

Least Depth: 6.11 m = 20.05 ft = 3.342 fm = 3 fm 2.05 ft

TPU ($\pm 1.96\sigma$): THU (TPEh) $\pm 0.980 \text{ m}$; TVU (TPEv) $\pm 0.367 \text{ m}$

Timestamp: 2006-249.17:28:35.446 (09/06/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-249 / 426_1721

Profile/Beam: 7642/170

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This dangerous wreck was found with 200% Klein SSS and 100% Reson 8125 MBES. Soundings were corrected to MLLW using observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-249/426_1721	7642/170	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-248/124_1749	0003	0.65	082.7	Secondary (grouped)
h11601/tj_3102_klein5000_sss200/2006-250/230_1534	0001	2.96	049.0	Secondary (grouped)

Hydrographer Recommendations

Chart a dangerous wreck with least depth of 6.11 m (20 ft).

Cartographically-Rounded Depth (Affected Charts):

20ft (12402_1, 12327_1, 12326_1) 3 ¹/₄fm (12300_1, 13006_1, 13003_1, 14500_1) 6.1m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Geo object 2: Wreck (WRECKS)

Attributes: CATWRK - 2:dangerous wreck

SORDAT - 20060906

SORIND - US, US, surve, H11601

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 6.111 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification - Submitted as a DTON. Shown on chart 12402, 10th., Edition May/06. No change in charting recommended.

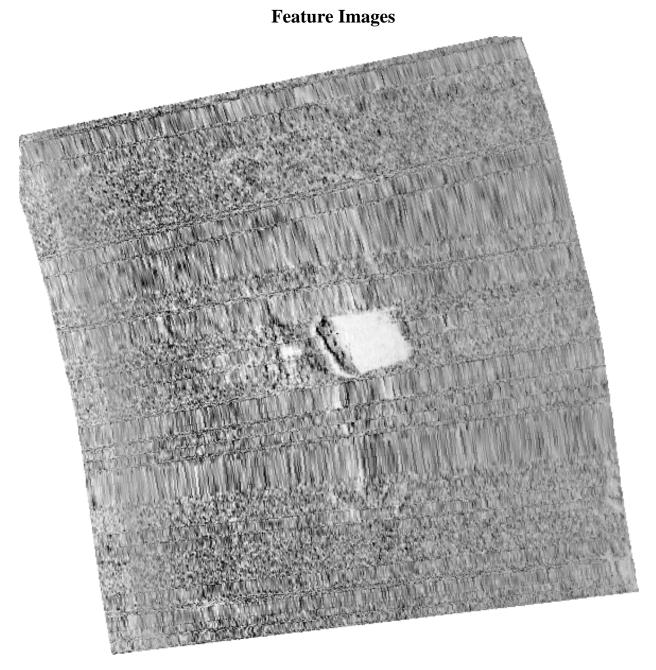


Figure 4.1.1

 $[Image\ file\ T:/SAR/H11601_B310-TJ/AHB\ Template/PSS/Images/Dton_1_1.JPG\ does\ not\ exist.]$

4.2) DTON2 26 Rk

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 35′ 02.3″ N, 074° 02′ 35.7″ W

Least Depth: 7.92 m = 25.99 ft = 4.331 fm = 4 fm 1.99 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) $\pm 0.980 \text{ m}$; **TVU** (**TPEv**) $\pm 0.367 \text{ m}$

Timestamp: 2006-248.14:12:07.719 (09/05/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-248 / 381_1408

Profile/Beam: 2316/18

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous rock was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings were corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-248/381_1408	2316/18	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-248/121_1816	0002	1.56	044.2	Secondary (grouped)
h11601/tj_3102_klein5000_sss200/2006-250/227_1507	0004	1.88	046.0	Secondary
h11601/tj_3102_klein5000_sss200/2006-250/224_1450	0002	1.98	289.2	Secondary (grouped)

Hydrographer Recommendations

Chart a dangerous rock with least depth of 7.92 meters (26 feet).

Cartographically-Rounded Depth (Affected Charts):

26ft (12402_1, 12327_1, 12326_1) 4 ½fm (12300_1, 13006_1, 13003_1, 14500_1) 7.9m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)

Geo object 2: Underwater rock / awash rock (UWTROC)

Attributes: QUASOU - 6:least depth known

SORDAT - 20060905

SORIND - US, US, surve, H11601

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 7.921 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

4.3) DTON2 23 Rk

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 34′ 36.8″ N, 074° 02′ 26.1″ W

Least Depth: 7.23 m = 3.951 fm = 3 fm 5.71 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) $\pm 0.980 \text{ m}$; **TVU** (**TPEv**) $\pm 0.368 \text{ m}$

Timestamp: 2006-248.18:51:40.363 (09/05/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-248 / 386_1849

Profile/Beam: 1449/238

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous rock was acquired with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings are corrected to MLLW using observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-248/386_1849	1449/238	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-248/121_1815	0005	0.96	327.3	Secondary
h11601/tj_3102_klein5000_sss100/2006-248/140_1832	0004	2.90	210.5	Secondary

Hydrographer Recommendations

Chart a dangerous rock with least depth 7.23 meters (23.7 feet).

Cartographically-Rounded Depth (Affected Charts):

23ft (12402_1, 12327_1, 12326_1) 4fm (12300_1, 13006_1, 13003_1, 14500_1) 7.2m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)

Geo object 2: Underwater rock / awash rock (UWTROC)

Attributes: SORDAT - 20060905

SORIND - US, US, surve, H11601

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 7.226 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification - Submitted as a DTON. Shown on chart 12402, 10th., Edition May/06. No change in charting recommended.

Feature Images

[Image file T:/SAR/H11601_B310-TJ/PSS/Images/DTON_1449,238.jpg does not exist.]

4.4) DTON2 27 Rk

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 34′ 48.8″ N, 074° 02′ 24.4″ W

Least Depth: 8.30 m (= 27.23 ft = 4.538 fm = 4 fm 3.23 ft)

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) $\pm 0.980 \text{ m}$; **TVU** (**TPEv**) $\pm 0.368 \text{ m}$

Timestamp: 2006-248.15:17:00.850 (09/05/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-248 / 393_1516

Profile/Beam: 4/236

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous rock cluster was found with 200% Klein 5000 SSS and 100% Reson 8125 Reson MBES. Soundings are corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-248/393_1516	4/236	0.00	0.000	Primary
h11601/tj_3101_reson8125/2006-248/396_1807	4979/21	1.16	144.1	Secondary
h11601/tj_3102_klein5000_sss100/2006-248/129_1405	0003	2.52	233.2	Secondary (grouped)
h11601/tj_3102_klein5000_sss100/2006-248/140_1832	0003	5.47	254.2	Secondary (grouped)

Hydrographer Recommendations

Chart a dangerous rock with least depth 8.30 meters (27.2 feet).

Cartographically-Rounded Depth (Affected Charts):

27ft (12402_1, 12327_1, 12326_1) 4 ½fm (12300_1, 13006_1, 13003_1, 14500_1) 8.3m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)

Geo object 2: Underwater rock / awash rock (UWTROC)

Attributes: SORDAT - 20060905

SORIND - US, US, surve, H11601

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 8.300 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

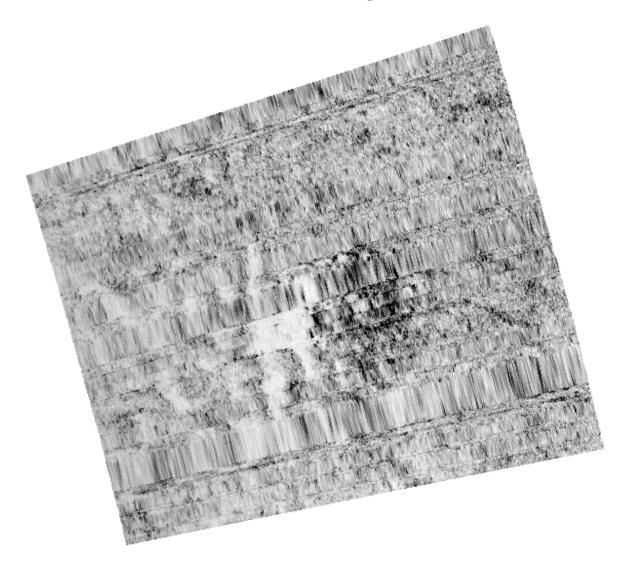


Figure 4.4.1

[Image file T:/SAR/H11601_B310-TJ/PSS/Images/DTON_4,236.jpg does not exist.]

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/DTON_4,236.jpg does not exist.]

4.5) DTON2 28 Rk

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 35′ 14.8″ N, 074° 02′ 32.6″ W

Least Depth: 8.67 m = 28.46 ft = 4.743 fm = 4 fm = 4.46 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) $\pm 0.980 \text{ m}$; **TVU** (**TPEv**) $\pm 0.367 \text{ m}$

Timestamp: 2006-248.15:21:42.226 (09/05/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-248 / 393_1516

Profile/Beam: 3874/80

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous rock cluster was found with 200% Klein 5000 SSS and 100% Reson 8125 Reson MBES. Soundings are corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-248/393_1516	3874/80	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-248/129_1405	0004	0.65	234.6	Secondary (grouped)
h11601/tj_3102_klein5000_sss100/2006-248/140_1832	0001	1.24	050.8	Secondary (grouped)
h11601/tj_3102_klein5000_sss200/2006-250/222_1421	0001	4.01	274.0	Secondary (grouped)

Hydrographer Recommendations

Chart a dangerous rock with least depth of 8.67 meters (28.4 feet).

Cartographically-Rounded Depth (Affected Charts):

28ft (12402_1, 12327_1, 12326_1) 4 ³4fm (12300_1, 13006_1, 13003_1, 14500_1) 8.7m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)

Geo object 2: Underwater rock / awash rock (UWTROC)

Attributes: SORDAT - 20060905

SORIND - US, US, surve, H11601

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 8.674 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

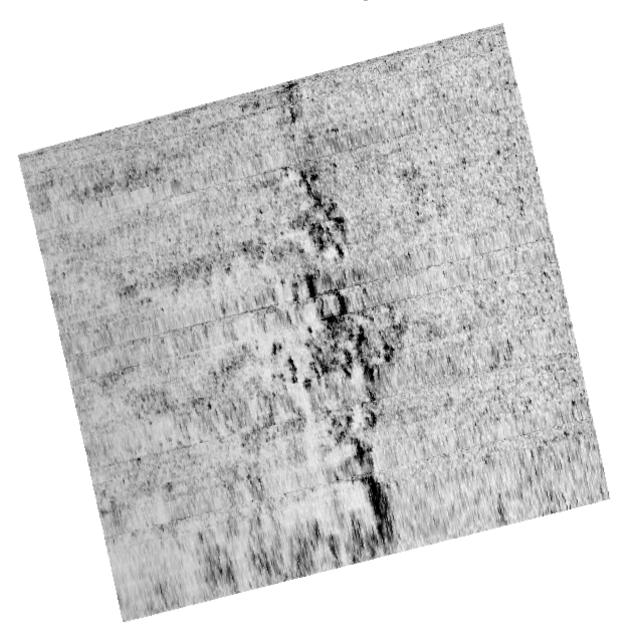


Figure 4.5.1

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/DTON_3874,80.jpg does not exist.]

4.6) DTON2 22 Obstn

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 34′ 55.8″ N, 074° 02′ 36.5″ W

Least Depth: 6.90 m = 22.62 ft = 3.771 fm = 3 fm = 4.62 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) $\pm 0.980 \text{ m}$; **TVU** (**TPEv**) $\pm 0.367 \text{ m}$

Timestamp: 2006-248.17:54:27.718 (09/05/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-248 / 553_1751

Profile/Beam: 2113/182

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous obstruction was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings are corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-248/553_1751	2113/182	0.00	000.0	Primary
h11601/tj_3102_klein5000_sss100/2006-248/121_1815	0006	0.54	273.3	Secondary
h11601/tj_3102_klein5000_sss200/2006-250/227_1507	0005	1.70	055.8	Secondary

Hydrographer Recommendations

Chart a dangerous obstruction with least depth 6.90 meters (22.6 feet).

Cartographically-Rounded Depth (Affected Charts):

22ft (12402_1, 12327_1, 12326_1)
3 3/4fm (12300_1, 13006_1, 13003_1, 14500_1)
6.9m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: SORDAT - 20060905

SORIND - US, US, surve, H11601

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 6.896 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Geo object 2: Sounding (SOUNDG)

Office Notes

Concur with clarification - Submitted as a DTON. Shown on chart 12402, 10th., Edition May/06. No change in charting recommended.

Feature Images

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/DTON_2113,182.jpg does not exist.]

4.7) DTON2 25 Rk

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 34′ 04.6″ N, 074° 02′ 20.0″ W

Least Depth: 7.64 m = 25.07 ft = 4.178 fm = 4 fm = 1.07 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) ± 0.980 m; **TVU** (**TPEv**) ± 0.367 m

Timestamp: 2006-249.18:09:50.520 (09/06/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-249 / 380_1803

Profile/Beam: 5580/223

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous rock was found with 200% Klein 5000 SSS and 100% Reson 8125 Reson MBES. Soundings are corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-249/380_1803	5580/223	0.00	000.0	Primary
h11601/tj_3102_klein5000_sss200/2006-250/227_1508	0001	1.74	110.1	Secondary
h11601/tj_3102_klein5000_sss100/2006-248/121_1815	0001	2.14	203.1	Secondary

Hydrographer Recommendations

Chart a dangerous rock with least depth 7.68 meters (25.2 feet).

Cartographically-Rounded Depth (Affected Charts):

25ft (12402_1, 12327_1, 12326_1) 4fm (12300_1, 13006_1, 13003_1, 14500_1) 7.6m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)

Geo object 2: Underwater rock / awash rock (UWTROC)

Attributes: SORDAT - 20060906

SORIND - US, US, surve, H11601

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 7.640 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification - Submitted as a DTON. Shown on chart 12402, 10th., Edition May/06. No change in charting recommended.

Feature Images

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/DTON2Rock5580,223.jpg does not exist.]

4.8) DTON2 20 Rk

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 34′ 50.3″ N, 074° 02′ 39.2″ W

Least Depth: 6.23 m = 20.43 ft = 3.406 fm = 3 fm 2.43 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) $\pm 0.980 \text{ m}$; **TVU** (**TPEv**) $\pm 0.367 \text{ m}$

Timestamp: 2006-249.13:35:04.457 (09/06/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-249 / 425_1327

Profile/Beam: 6814/234

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous rock was found with 200% Klein 5000 SSS and 100% Reson 8125 Reson MBES. Soundings are corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-249/425_1327	6814/234	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-248/124_1749	0002	0.99	346.8	Secondary
h11601/tj_3102_klein5000_sss200/2006-250/230_1534	0002	2.34	094.7	Secondary

Hydrographer Recommendations

Chart a dangerous rock with least depth 6.23 meters (20.4 feet).

Cartographically-Rounded Depth (Affected Charts):

20ft (12402_1, 12327_1, 12326_1) 3 ¹/₄fm (12300_1, 13006_1, 13003_1, 14500_1) 6.2m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)

Geo object 2: Underwater rock / awash rock (UWTROC)

Attributes: TECSOU - 2,3: found by side scan sonar, found by multi-beam

VALSOU - 6.228 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification - Submitted as a DTON. Shown on chart 12402, 10th., Edition May/06. No change in charting recommended.

Feature Images

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/DTON_6814,234.jpg does not exist.]

4.9) DTON2 38 Rk

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 34′ 43.7″ N, 074° 01′ 43.0″ W

Least Depth: 11.71 m = 38.43 ft = 6.405 fm = 6 fm 2.43 ft**TPU** (±1.96 σ): **THU** (**TPEh**) ±0.980 m; **TVU** (**TPEv**) ±0.367 m

Timestamp: 2006-250.16:16:35.849 (09/07/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-250 / 331_1615

Profile/Beam: 218/180

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous rock was found with 200% Klein 5000 SSS and 100% Reson 8125 Reson MBES. Soundings are corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-250/331_1615	218/180	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss200/2006-249/228_1823	0001	2.23	148.0	Secondary (grouped)
h11601/tj_3102_klein5000_sss100/2006-248/135_1907	0001	2.54	161.1	Secondary (grouped)

Hydrographer Recommendations

Chart a dangerous rock with least depth 11.72 meters (38.4 feet).

Cartographically-Rounded Depth (Affected Charts):

38ft (12402_1, 12327_1, 12326_1) 6 ½fm (12300_1, 13006_1, 13003_1, 14500_1) 11.7m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)

Geo object 2: Underwater rock / awash rock (UWTROC)

Attributes: TECSOU - 2,3: found by side scan sonar, found by multi-beam

VALSOU - 11.713 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

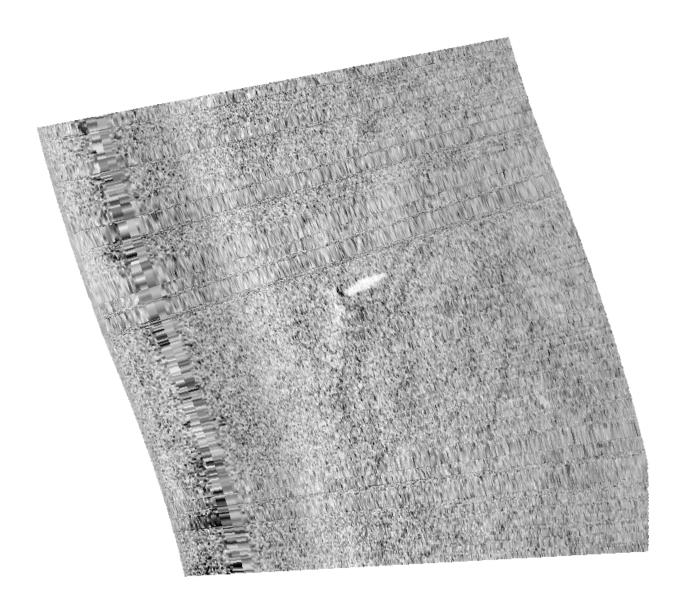


Figure 4.9.1

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/DTON_218,180.jpg does not exist.]

4.10) DTON2 23 Rk

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 34′ 20.6″ N, 074° 01′ 20.8″ W

Least Depth: 7.00 m = 22.97 ft = 3.829 fm = 3 fm = 4.97 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) $\pm 0.980 \text{ m}$; **TVU** (**TPEv**) $\pm 0.367 \text{ m}$

Timestamp: 2006-250.17:22:26.913 (09/07/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-250 / 356_1719

Profile/Beam: 2215/48

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous rock was found with 200% Klein 5000 SSS and 100% Reson 8125 Reson MBES. Soundings are corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-250/356_1719	2215/48	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-249/127_1332	0001	0.35	147.7	Secondary

Hydrographer Recommendations

Chart a dangerous rock with least depth 7.03 meters (23.1 feet).

Cartographically-Rounded Depth (Affected Charts):

23ft (12402_1, 12327_1, 12326_1) 3 ³4fm (12300_1, 13006_1, 13003_1, 14500_1) 7.0m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)

Geo object 2: Underwater rock / awash rock (UWTROC)

Attributes: TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 7.002 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

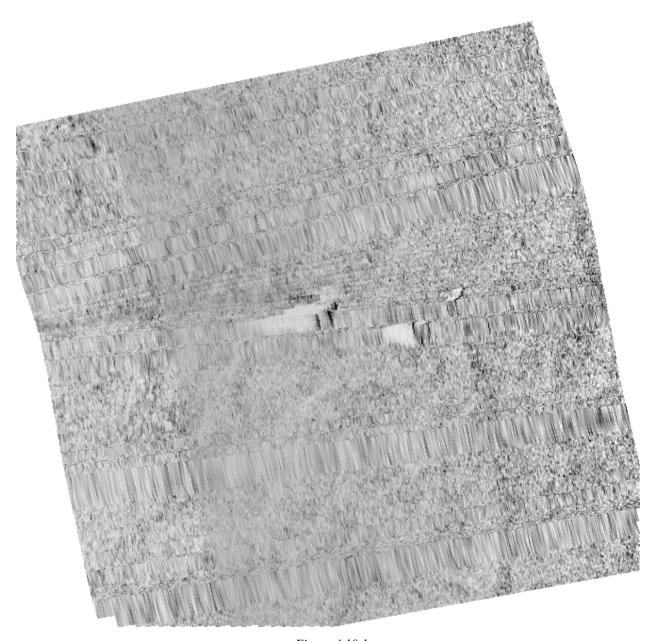


Figure 4.10.1

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/DTON_2215,48.jpg does not exist.]

4.11) DTON2 15 Obstn

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 33′ 46.8″ N, 074° 00′ 44.9″ W

Least Depth: 4.80 m (= 15.75 ft = 2.626 fm = 2 fm 3.75 ft)

TPU ($\pm 1.96\sigma$): THU (TPEh) $\pm 0.980 \text{ m}$; TVU (TPEv) $\pm 0.367 \text{ m}$

Timestamp: 2006-251.17:40:28.905 (09/08/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-251 / 447_1737

Profile/Beam: 2846/183

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous obstruction (a possible barge or barrel) was found with 200% Klein 5000 SSS and 100% Reson 8125 Reson MBES. Soundings are corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-251/447_1737	2846/183	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-249/179_1414	0001	2.23	345.6	Secondary (grouped)
h11601/tj_3102_klein5000_sss100/2006-249/181_1431	0001	3.45	303.2	Secondary (grouped)
h11601/tj_3102_klein5000_sss100/2006-249/179_1414	0004	3.61	070.9	Secondary
h11601/tj_3102_klein5000_sss100/2006-249/181_1431	0003	4.81	273.6	Secondary

Hydrographer Recommendations

Chart a dangerous obstruction with least depth 4.80 meters (15.7 feet).

Cartographically-Rounded Depth (Affected Charts):

```
16ft (12402_1, 12327_1, 12326_1)
2 ½fm (12300_1, 13006_1, 13003_1, 14500_1)
4.8m (5161_1)
```

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 6:least depth known

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 4.802 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Geo object 2: Sounding (SOUNDG)

Office Notes

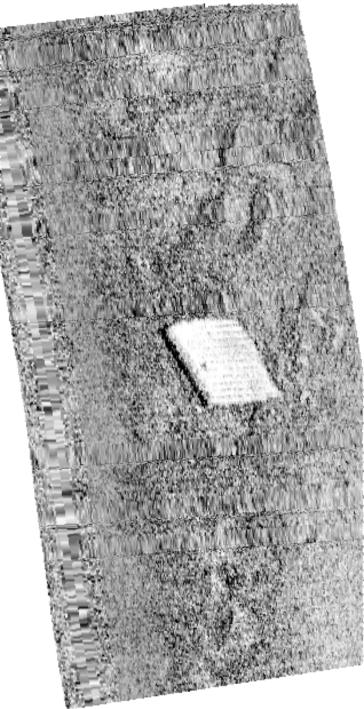


Figure 4.11.1

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/DTON_2846,183.jpg does not exist.]

4.12) DTON2 19 Rk

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 34′ 00.9″ N, 074° 00′ 42.6″ W

Least Depth: 5.88 m = 19.30 ft = 3.217 fm = 3 fm = 1.30 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) ± 0.980 m; **TVU** (**TPEv**) ± 0.367 m

Timestamp: 2006-251.16:24:05.480 (09/08/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-251 / 463_1623

Profile/Beam: 867/236

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous rock was found with 200% Klein 5000 SSS and 100% Reson 8125 Reson MBES. Soundings are corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-251/463_1623	867/236	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-249/172_1527	0001	1.39	156.0	Secondary (grouped)
h11601/tj_3102_klein5000_sss200/2006-249/269_1629	0001	2.18	027.3	Secondary (grouped)

Hydrographer Recommendations

Chart a dangerous rock with least depth 5.88 meters (19.3 feet).

Cartographically-Rounded Depth (Affected Charts):

19ft (12402_1, 12327_1, 12326_1)
3 ¹/₄fm (12300_1, 13006_1, 13003_1, 14500_1)
5.9m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)

Geo object 2: Underwater rock / awash rock (UWTROC)

Attributes: TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 5.884 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

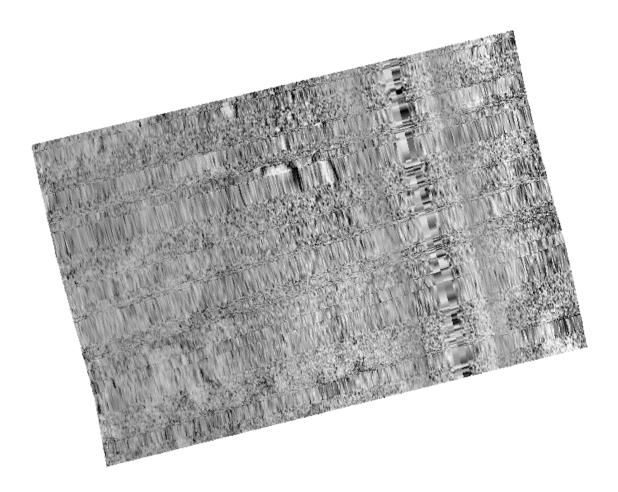


Figure 4.12.1

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/DTON_867,236.jpg does not exist.]

4.13) DTON2 20 ft depth

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 33′ 56.8″ N, 074° 00′ 51.9″ W

Least Depth: 6.21 m (= 20.37 ft = 3.396 fm = 3 fm 2.37 ft)

TPU ($\pm 1.96\sigma$): THU (TPEh) $\pm 0.980 \text{ m}$; TVU (TPEv) $\pm 0.367 \text{ m}$

Timestamp: 2006-251.15:57:43.043 (09/08/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-251 / 467_1555

Profile/Beam: 1335/49

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted shoal sounding area (possible debris or rock mound) was found with 200% Klein 5000 SSS and 100% Reson 8125 Reson MBES. Soundings are corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-251/467_1555	1335/49	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-249/179_1414	0002	0.53	303.9	Secondary (grouped)
h11601/tj_3102_klein5000_sss200/2006-249/263_1650	0002	3.08	006.1	Secondary (grouped)

Hydrographer Recommendations

Chart a new sounding with least depth 6.21 meters (20.4 feet).

Cartographically-Rounded Depth (Affected Charts):

20ft (12402_1, 12327_1, 12326_1) 3 ¹/₄fm (12300_1, 13006_1, 13003_1, 14500_1) 6.2m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)

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

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VERDAT - 12:Mean lower low water

Office Notes

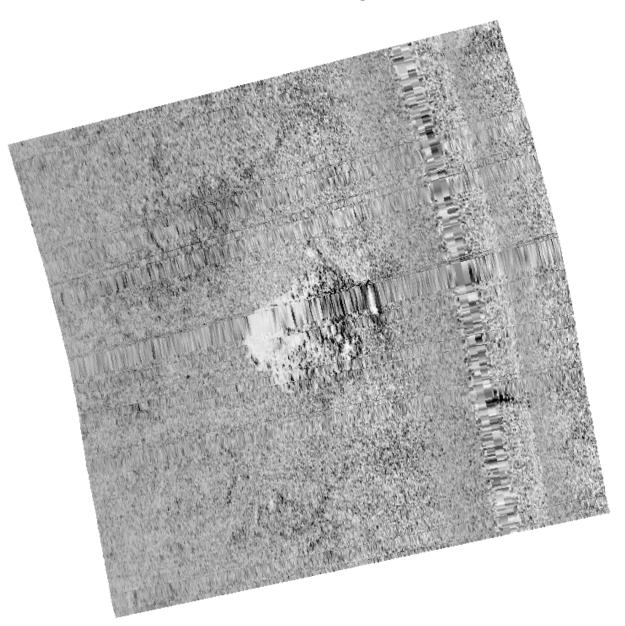


Figure 4.13.1

4.14) DTON6 6 ft depth

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 33′ 50.7″ N, 073° 58′ 34.3″ W

Least Depth: 1.79 m = 5.87 ft = 0.979 fm = 0 fm = 0.87 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) ± 0.980 m; **TVU** (**TPEv**) ± 0.367 m

Timestamp: 2006-254.15:31:00.255 (09/11/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-254 / 185_1530

Profile/Beam: 30/2

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted shoal sounding area was found with 100% Reson 8125 Reson MBES. Six-foot sounding contour extends from this position to G C "3" buoy. Soundings are corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-254/185_1530	30/2	0.00	000.0	Primary
h11601/tj_3101_reson8125/2006-254/185_1530	12/182	7.62	159.2	Secondary (grouped)

Hydrographer Recommendations

Chart a new sounding with depth 1.79 meters (5.9 feet).

Cartographically-Rounded Depth (Affected Charts):

6ft (12402_1, 12327_1, 12326_1) 1fm (12300_1, 13006_1, 13003_1, 14500_1) 1.8m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)

Attributes: QUASOU - 1:depth known

STATUS - 1:permanent

TECSOU - 3: found by multi-beam

VERDAT - 12:Mean lower low water

Office Notes

4.15) DTON6 28 Obstn

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 33′ 37.3″ N, 074° 02′ 09.1″ W

Least Depth: 8.48 m = 27.81 ft = 4.635 fm = 4 fm 3.81 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) ± 0.980 m; **TVU** (**TPEv**) ± 0.367 m

Timestamp: 2006-254.18:53:03.117 (09/11/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-254 / 532_1851

Profile/Beam: 800/150

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous obstruction was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings are corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-254/532_1851	800/150	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-248/159_1808	0002	0.35	162.1	Secondary
h11601/tj_3102_klein5000_sss200/2006-250/253_1440	0002	3.10	304.2	Secondary
h11601/tj_3101_reson8125/2006-254/532_1851	860/209	26.95	001.7	Secondary (grouped)
h11601/tj_3102_klein5000_sss100/2006-248/159_1808	0003	28.38	358.4	Secondary

Hydrographer Recommendations

Chart dangerous obstruction with least depth 8.48 meters (27.8 ft).

Cartographically-Rounded Depth (Affected Charts):

```
28ft (12402_1, 12327_1, 12326_1)
4 ½fm (12300_1, 13006_1, 13003_1, 14500_1)
8.5m (5161_1)
```

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 1:depth known

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 8.477 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Geo object 2: Sounding (SOUNDG)

Office Notes

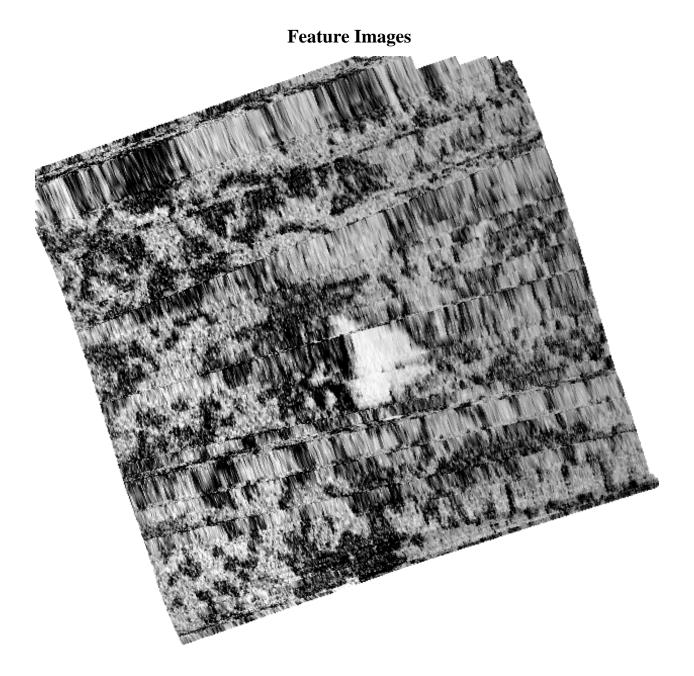


Figure 4.15.1

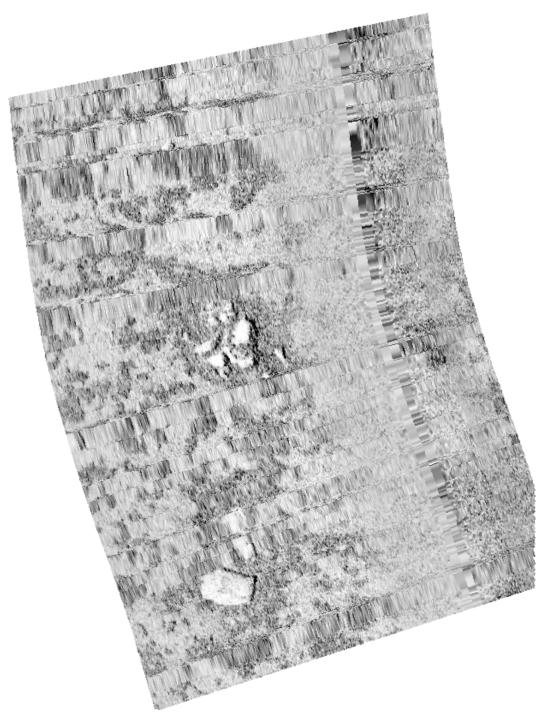


Figure 4.15.2

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/DTON6 Obstn 800,150.jpg does not exist.]

4.16) DTON4 9 Obstn

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 34′ 10.3″ N, 073° 59′ 51.4″ W

Least Depth: 2.83 m (= 9.27 ft = 1.545 fm = 1 fm 3.27 ft)

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) ± 0.980 m; **TVU** (**TPEv**) ± 0.367 m

Timestamp: 2006-254.15:58:14.329 (09/11/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-254 / 759_1556

Profile/Beam: 914/53

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous obstruction was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings are corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-254/759_1556	914/53	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-251/164_1312	0006	1.60	005.2	Secondary
h11601/tj_3101_reson8125/2006-254/759_1556	920/218	8.06	360.0	Secondary (grouped)
h11601/tj_3102_klein5000_sss100/2006-251/101_1356	0001	10.30	344.9	Secondary

Hydrographer Recommendations

Chart a dangerous obstruction with least depth 2.83 meters (9.27 feet).

Cartographically-Rounded Depth (Affected Charts):

9ft (12402_1, 12327_1, 12326_1) 1 ½fm (12300_1, 13006_1, 13003_1, 14500_1) 2.8m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 2:depth unknown

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 2.826 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Geo object 2: Sounding (SOUNDG)

Office Notes

Concur with clarification - Submitted as a DTON. Shown on chart 12402, 10th., Edition May/06. No change in charting recommended.

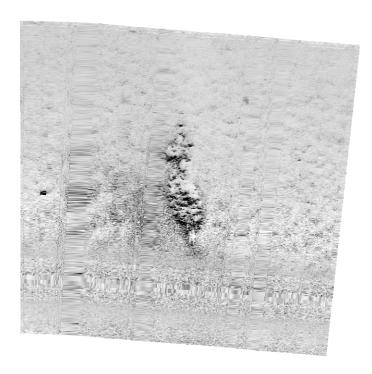


Figure 4.16.1

4.17) DTON3 27 Wk

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 32′ 04.0″ N, 074° 02′ 25.6″ W

Least Depth: 8.27 m = 27.12 ft = 4.519 fm = 4 fm 3.12 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) $\pm 0.980 \text{ m}$; **TVU** (**TPEv**) $\pm 0.368 \text{ m}$

Timestamp: 2006-266.17:07:56.165 (09/23/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-266 / 121_1703

Profile/Beam: 2418/4

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous wreck was found in Chapel Hill North Channel with 200% Klein 5000 SSS and 100% Reson 8125 MBES. The wreck rises approximately 2 feet above the channel controlling depth. Soundings were corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-266/121_1703	2418/4	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-254/187_1720	0001	10.98	330.1	Secondary
h11601/tj_3102_klein5000_sss100/2006-272/128_1339	0002	11.05	323.3	Secondary
h11601/tj_3102_klein5000_sss200/2006-252/286_1451	0002	12.70	326.5	Secondary

Hydrographer Recommendations

Chart a dangerous wreck with least depth of 8.27 meters (27.1 feet).

Cartographically-Rounded Depth (Affected Charts):

```
27ft (12402_1, 12327_1, 12326_1)
4 ½fm (12300_1, 13006_1, 13003_1, 14500_1)
8.3m (5161_1)
```

S-57 Data

Geo object 1: Sounding (SOUNDG)

Geo object 2: Wreck (WRECKS)

Attributes: CATWRK - 2:dangerous wreck

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 8.265 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification - Submitted as a DTON. Shown on chart 12402, 10th., Edition May/06. No change in charting recommended.

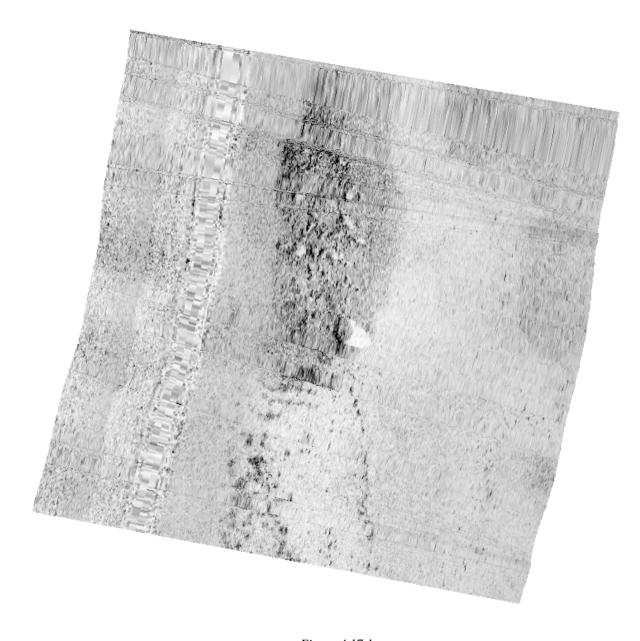


Figure 4.17.1

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/DTON3 Wreck 2418,4.jpg does not exist.]

4.18) DTON3 27 Wk

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 31′ 55.0″ N, 074° 02′ 23.6″ W

Least Depth: 8.31 m (= 27.27 ft = 4.546 fm = 4 fm 3.27 ft)

TPU ($\pm 1.96\sigma$): THU (TPEh) $\pm 0.980 \text{ m}$; TVU (TPEv) $\pm 0.367 \text{ m}$

Timestamp: 2006-266.16:18:36.482 (09/23/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-266 / 125_1615

Profile/Beam: 1490/44

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous wreck was found in Chapel Hill North Channel with 200% Klein 5000 SSS and 100% Reson 8125 MBES. The wreck rises approximately 2 feet above the channel controlling depth. Soundings were corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-266/125_1615	1490/44	0.00	0.000	Primary
h11601/tj_3101_reson8125/2006-266/125_1615	1490/43	0.12	180.0	Secondary (grouped)
h11601/tj_3102_klein5000_sss200/2006-252/286_1451	0003	2.77	093.6	Secondary
h11601/tj_3102_klein5000_sss100/2006-251/153_1519	0002	15.81	188.2	Secondary
h11601/tj_3102_klein5000_sss100/2006-272/129_1342	0001	20.66	190.7	Secondary

Hydrographer Recommendations

Chart a dangerous wreck with least depth of 8.31 meters (27.3 feet).

Cartographically-Rounded Depth (Affected Charts):

```
27ft (12402_1, 12327_1, 12326_1)
4 ½fm (12300_1, 13006_1, 13003_1, 14500_1)
8.3m (5161_1)
```

S-57 Data

Geo object 1: Sounding (SOUNDG)
Geo object 2: Wreck (WRECKS)

Attributes: CATWRK - 2:dangerous wreck

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 8.313 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification - Submitted as a DTON. Shown on chart 12402, 10th., Edition May/06. No change in charting recommended. curve

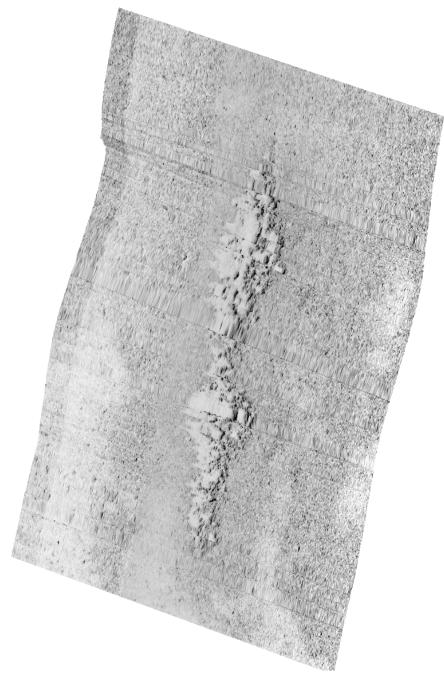


Figure 4.18.1

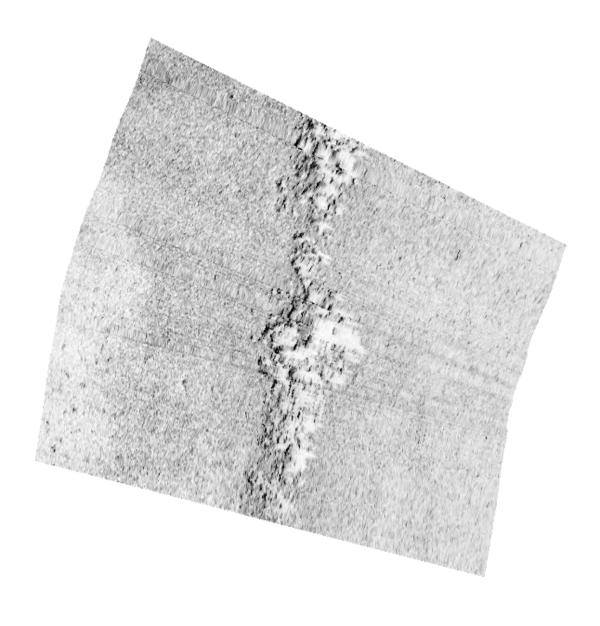


Figure 4.18.2

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/DTON3 Wreck 1490,44.jpg does not exist.]

4.19) DTON8 28 Obstn

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 31′ 44.2″ N, 074° 02′ 25.7″ W

Least Depth: 8.52 m = 27.94 ft = 4.656 fm = 4 fm 3.94 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) $\pm 0.980 \text{ m}$; **TVU** (**TPEv**) $\pm 0.368 \text{ m}$

Timestamp: 2006-266.16:14:53.761 (09/23/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-266 / 126_1604

Profile/Beam: 6866/226

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This dangerous obstruction was found in Chapel Hill North Channel with 200% Klein 5000 SSS and 100% Reson 8125 MBES. The obstruction rises 1 foot above the controlling depth of the channel (29 ft); US Army Corps of Engineers has been notified. Soundings are corrected to MLLW using verified tides and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-266/126_1604	6866/226	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss200/2006-252/286_1451	0004	1.15	007.6	Secondary
h11601/tj_3102_klein5000_sss100/2006-251/153_1519	0003	3.03	356.0	Secondary

Hydrographer Recommendations

Chart a dangerous obstruction with least depth 8.52 meters (27.9 feet).

Cartographically-Rounded Depth (Affected Charts):

28ft (12402_1, 12327_1, 12326_1) 4 ½fm (12300_1, 13006_1, 13003_1, 14500_1) 8.5m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 1:depth known

SORDAT - 20060922

SORIND - US, US, surve, H11601

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 8.515 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification - Submitted as a DTON. Shown on chart 12402, 10th., Edition May/06. No change in charting recommended.

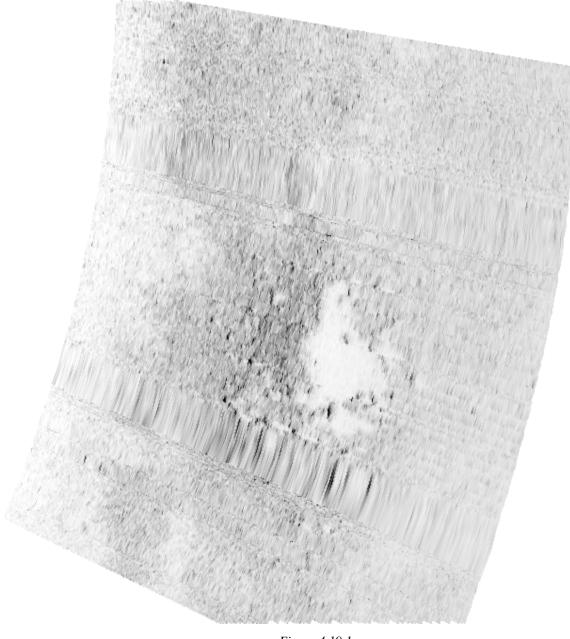


Figure 4.19.1

 $[Image\ file\ T:/SAR/H11601_B310-TJ/AHB\ Template/PSS/Images/6866-226.JPG\ does\ not\ exist.]$

4.20) DTON5 24 Obstn

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 31′ 53.8″ N, 074° 02′ 15.8″ W

Least Depth: 7.24 m = 3.961 fm = 3 fm 5.77 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) $\pm 0.980 \text{ m}$; **TVU** (**TPEv**) $\pm 0.368 \text{ m}$

Timestamp: 2006-266.14:34:39.973 (09/23/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-266 / 133_1422

Profile/Beam: 7861/236

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous obstruction was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings are corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-266/133_1422	7861/236	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-251/142_1535	0002	2.05	116.1	Secondary
h11601/tj_3102_klein5000_sss200/2006-252/268_1506	0001	2.39	080.4	Secondary
h11601/tj_3102_klein5000_sss100/2006-272/130_1346	0001	5.09	147.4	Secondary

Hydrographer Recommendations

Chart a dangerous obstruction with least depth 7.24 meters (23.8 feet).

Cartographically-Rounded Depth (Affected Charts):

24ft (12402_1, 12327_1, 12326_1) 4fm (12300_1, 13006_1, 13003_1, 14500_1) 7.2m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 1:depth known

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 7.244 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Geo object 2: Sounding (SOUNDG)

Office Notes

Concur with clarification - Submitted as a DTON. Shown on chart 12402, 10th., Edition May/06. No change in charting recommended.

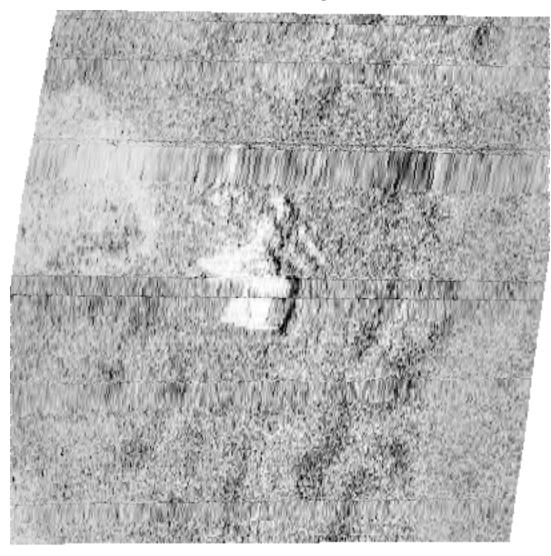


Figure 4.20.1

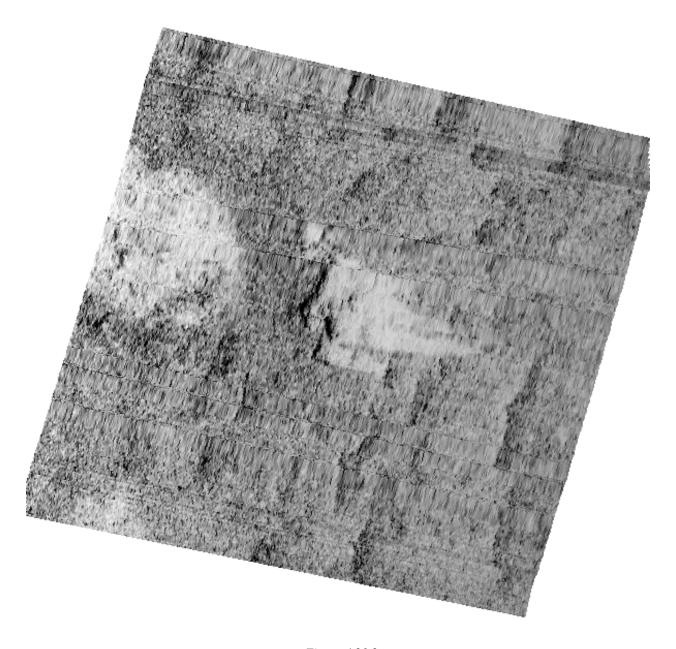


Figure 4.20.2

4.21) DTON4 23 Obstn

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 33′ 45.4″ N, 074° 02′ 20.3″ W

Least Depth: 7.13 m = 23.40 ft = 3.900 fm = 3 fm 5.40 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) $\pm 0.980 \text{ m}$; **TVU** (**TPEv**) $\pm 0.367 \text{ m}$

Timestamp: 2006-255.13:37:45.665 (09/12/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-255 / 494_1335

Profile/Beam: 1752/33

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous obstruction was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings are corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-255/494_1335	1752/33	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-248/163_1803	0001	1.32	235.8	Secondary
h11601/tj_3102_klein5000_sss200/2006-250/264_1525	0002	3.58	077.9	Secondary

Hydrographer Recommendations

Chart a dangerous obstruction with least depth 7.22 meters (23.7 feet).

Cartographically-Rounded Depth (Affected Charts):

23ft (12402_1, 12327_1, 12326_1) 3 ³4fm (12300_1, 13006_1, 13003_1, 14500_1) 7.1m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 1:depth known

SORDAT - 20060911

SORIND - US, US, surve, H11601

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 7.133 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Geo object 2: Sounding (SOUNDG)

Office Notes

Concur with clarification - Submitted as a DTON. Shown on chart 12402, 10th., Edition May/06. No change in charting recommended.n.

Figure 4.21.1

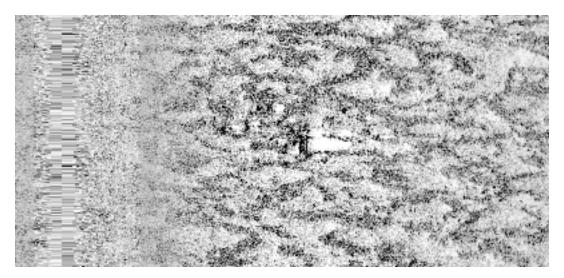


Figure 4.21.2

 $[Image\ file\ T:/SAR/H11601_B310-TJ/AHB\ Template/PSS/Images/ambrose_obs1.JPG\ does\ not\ exist.]$

4.22) DTON4 13 Obstn

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 33′ 03.2″ N, 074° 02′ 29.5″ W

Least Depth: 4.16 m (= 13.65 ft = 2.274 fm = 2 fm 1.65 ft)

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) $\pm 0.980 \text{ m}$; **TVU** (**TPEv**) $\pm 0.367 \text{ m}$

Timestamp: 2006-261.17:26:29.253 (09/18/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-261 / 434_1724

Profile/Beam: 1872/148

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous obstruction was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings are corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-261/434_1724	1872/148	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-254/166_1630	0001	0.27	111.3	Secondary
h11601/tj_3102_klein5000_sss100/2006-254/190_1640	0001	1.67	232.3	Secondary

Hydrographer Recommendations

Chart a dangerous obstruction with least depth 4.16 meters (13.7 feet).

Cartographically-Rounded Depth (Affected Charts):

13ft (12402_1, 12327_1, 12326_1) 2 ½fm (12300_1, 13006_1, 13003_1, 14500_1) 4.2m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 1:depth known

SORDAT - 20060919

SORIND - US, US, surve, H11601

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 4.159 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Geo object 2: Sounding (SOUNDG)

Office Notes

Concur with clarification - Submitted as a DTON. Shown on chart 12402, 10th., Edition May/06. No change in charting recommended.

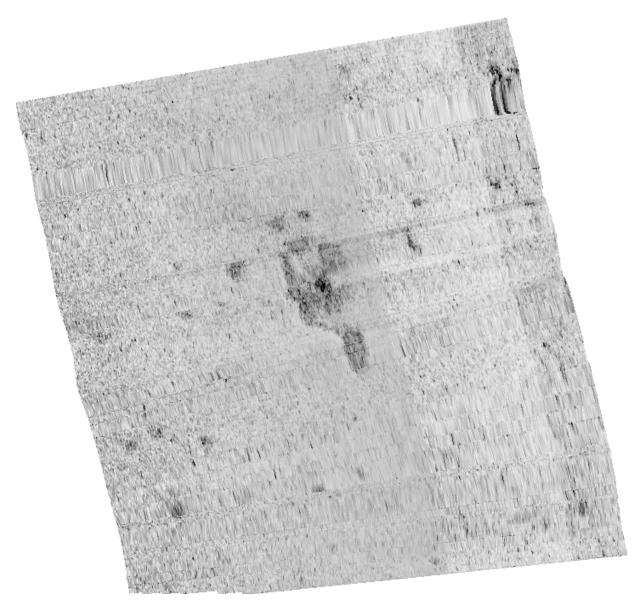


Figure 4.22.1

 $[Image\ file\ T:/SAR/H11601_B310-TJ/AHB\ Template/PSS/Images/ambrose_obs2.JPG\ does\ not\ exist.]$

4.23) DTON4 24 Obstn

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 33′ 57.7″ N, 074° 02′ 19.7″ W

Least Depth: 7.29 m (= 23.91 ft = 3.986 fm = 3 fm 5.91 ft)

TPU ($\pm 1.96\sigma$): THU (TPEh) ± 0.980 m; TVU (TPEv) ± 0.368 m

Timestamp: 2006-255.12:43:23.655 (09/12/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-255 / 536_1242

Profile/Beam: 143/239

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous obstruction was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings are corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-255/536_1242	143/239	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-248/124_1750	0005	0.92	030.7	Secondary
h11601/tj_3101_reson8125/2006-249/376_1748	6337/3	4.95	341.8	Secondary

Hydrographer Recommendations

Chart a dangerous obstruction with least depth 7.29 meters (23.9 feet).

Cartographically-Rounded Depth (Affected Charts):

24ft (12402_1, 12327_1, 12326_1) 4fm (12300_1, 13006_1, 13003_1, 14500_1) 7.3m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 1:depth known

SORDAT - 2006912

SORIND - US, US, surve, H11601

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 7.289 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Geo object 2: Sounding (SOUNDG)

Office Notes

Concur with clarification - Delete 23 Obstn and danger curve. Chart an obstruction with a depth of 24 feet in latitude 40°33'57.72"N, longitude 74°02'19.74"W. Add 24 Obstn w/danger curve.

Feature Images

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/ambrose_obs_40-33-58_074-02-20.JPG does not exist.]

4.24) DTON6 19 Obstn

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 31′ 44.6″ N, 073° 56′ 58.1″ W

Least Depth: 5.90 m (= 19.34 ft = 3.224 fm = 3 fm 1.34 ft)

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) $\pm 0.980 \text{ m}$; **TVU** (**TPEv**) $\pm 0.367 \text{ m}$

Timestamp: 2006-288.17:49:39.337 (10/15/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-288 / 193_1742

Profile/Beam: 4988/121

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous obstruction was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings are corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-288/193_1742	4988/121	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-264/123_1439	0003	3.72	202.3	Secondary
h11601/tj_3102_klein5000_sss200/2006-264/205_1445	0002	4.02	127.4	Secondary

Hydrographer Recommendations

Chart dangerous obstruction with least depth 5.90 meters (19.3 ft).

Cartographically-Rounded Depth (Affected Charts):

19ft (12402_1, 12327_1, 12326_1)
3 ¹/₄fm (12300_1, 13006_1, 13003_1, 14500_1)
5.9m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 1:depth known

SORDAT - 20061015

SORIND - US, US, surve, H11601

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 5.896 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Geo object 2: Sounding (SOUNDG)

Office Notes

Concur with clarification - Submitted as a DTON. Shown on chart 12402, 10th., Edition May/06. No change in charting recommended.

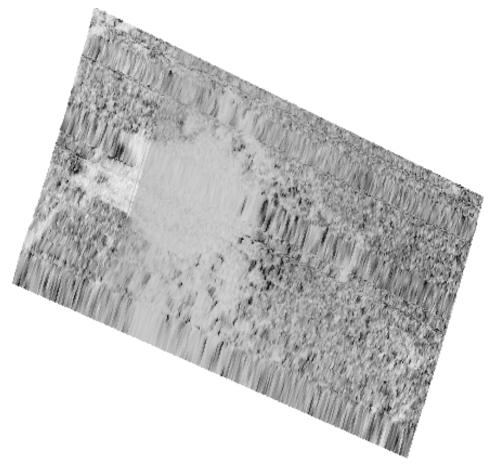


Figure 4.24.1

 $[Image\ file\ T:/SAR/H11601_B310-TJ/AHB\ Template/PSS/Images/rockaway_obs_40-31-45_073-56-58.JPG\ does\ not\ exist.]$

4.25) DTON6 13 Obstn

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 32' 27.2" N, 073° 57' 08.5" W

Least Depth: 3.98 m = 13.06 ft = 2.177 fm = 2 fm 1.06 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) $\pm 0.980 \text{ m}$; **TVU** (**TPEv**) $\pm 0.367 \text{ m}$

Timestamp: 2006-289.15:16:58.991 (10/16/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-289 / 354_1508

Profile/Beam: 7784/105

Charts Affected: 12402_1, 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous obstruction was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings are corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-289/354_1508	7784/105	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss100/2006-262/126_1523	0002	1.38	166.4	Secondary
h11601/tj_3102_klein5000_sss200/2006-262/204_1532	0006	1.52	166.4	Secondary
h11601/tj_3102_klein5000_sss100/2006-262/126_1523	0003	49.21	185.5	Secondary (grouped)
h11601/tj_3101_reson8125/2006-289/356_1418	6927/42	49.27	185.1	Secondary (grouped)
h11601/tj_3102_klein5000_sss200/2006-262/204_1532	0002	50.80	185.6	Secondary (grouped)

Hydrographer Recommendations

Chart dangerous obstruction with least depth 3.98 meters (13.1 ft).

Cartographically-Rounded Depth (Affected Charts):

13ft (12402_1, 12350_1, 12327_1, 12326_1) 2fm (12300_1, 13006_1, 13003_1, 14500_1) 4.0m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 1:depth known

SORDAT - 20061016

SORIND - US, US, surve, H11601

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 3.981 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Geo object 2: Sounding (SOUNDG)

Office Notes

Concur with clarification - Submitted as a DTON. Shown on chart 12350, 59th., Edition Mar./06. No change in charting recommended.

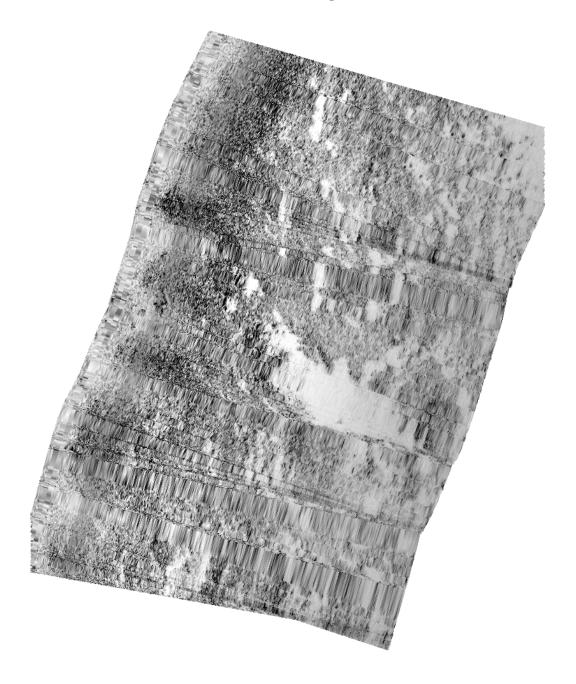


Figure 4.25.1



Figure 4.25.2

 $[Image\ file\ T:/SAR/H11601_B310-TJ/AHB\ Template/PSS/Images/rockaway_obs_40-32-29_073-57-08.JPG\ does\ not\ exist.]$

4.26) DTON6 19 Obstn

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 32′ 01.4″ N, 073° 56′ 27.8″ W

Least Depth: 5.91 m (= 19.39 ft = 3.232 fm = 3 fm 1.39 ft)

TPU ($\pm 1.96\sigma$): THU (TPEh) $\pm 0.980 \text{ m}$; TVU (TPEv) $\pm 0.367 \text{ m}$

Timestamp: 2006-289.12:57:06.163 (10/16/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-289 / 362_1246

Profile/Beam: 11763/223

Charts Affected: 12402_1, 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous obstruction was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings are corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-289/362_1246	11763/223	0.00	000.0	Primary
h11601/tj_3102_klein5000_sss100/2006-268/145_1518	0001	4.68	174.2	Secondary
h11601/tj_3101_reson8125/2006-289/362_1246	11663/29	27.05	167.8	Secondary (grouped)

Hydrographer Recommendations

Chart dangerous obstruction with least depth 5.91 meters (19.4 ft).

Cartographically-Rounded Depth (Affected Charts):

19ft (12402_1, 12350_1, 12327_1, 12326_1) 3 ¼fm (12300_1, 13006_1, 13003_1, 14500_1) 5.9m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 1:depth known

SORDAT - 20061016

SORIND - US, US, surve, H11601

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar, found by multi-beam

VALSOU - 5.910 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

See Descriptive Report, Appendix 2, Survey Features Report for final charting recommendation.

Feature Images



Figure 4.26.1

 $[Image\ file\ T:/SAR/H11601_B310-TJ/AHB\ Template/PSS/Images/rockaway_obs_40-32-02_073-56-28.JPG\ does\ not\ exist.]$

4.27) DTON6 13 Obstn

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 32′ 32.1″ N, 073° 57′ 08.1″ W

Least Depth: 3.98 m = 13.06 ft = 2.176 fm = 2 fm = 1.06 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) ± 0.980 m; **TVU** (**TPEv**) ± 0.367 m

Timestamp: 2006-289.19:37:19.110 (10/16/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-289 / 513_1931

Profile/Beam: 5126/190

Charts Affected: 12402_1, 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous obstruction was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings are corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-289/513_1931	5126/190	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss200/2006-262/204_1532	0003	1.91	145.1	Secondary

Hydrographer Recommendations

Chart dangerous obstruction with least depth 3.98 meters (13.1 ft).

Cartographically-Rounded Depth (Affected Charts):

13ft (12402_1, 12350_1, 12327_1, 12326_1) 2fm (12300_1, 13006_1, 13003_1, 14500_1) 4.0m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 1:depth known

SORDAT - 20061016

SORIND - US, US, surve, H11601

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 3.980 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification - Submitted as a DTON. Shown on chart 12350, 59th., Edition Mar./06. No change in charting recommended.

Feature Images

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/rockaway_obs_40-32-32_073-57-08.JPG does not exist.]

4.28) DTON6 6 ft depth

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 34′ 29.1″ N, 073° 55′ 47.2″ W

Least Depth: 1.80 m = 5.92 ft = 0.987 fm = 0 fm = 0.92 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) ± 0.980 m; **TVU** (**TPEv**) ± 0.367 m

Timestamp: 2006-291.15:13:29.395 (10/18/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-291 / 518_1512

Profile/Beam: 436/240

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted shoal sounding area was found with 100% Reson 8125 Reson MBES. Soundings are corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-291/518_1512	436/240	0.00	0.000	Primary
h11601/tj_3101_reson8125/2006-291/518_1512	450/200	2.45	014.8	Secondary (grouped)
h11601/tj_3101_reson8125/2006-291/518_1512	394/240	6.56	230.8	Secondary (grouped)
h11601/tj_3101_reson8125/2006-291/518_1512	480/204	6.69	036.9	Secondary (grouped)
h11601/tj_3101_reson8125/2006-291/519_1509	398/240	6.97	047.2	Secondary
h11601/tj_3101_reson8125/2006-291/515_1502	278/3	26.15	211.8	Secondary

Hydrographer Recommendations

Replace the current sounding (32) with a new sounding with least depth 1.80 meters (5.9 feet).

Cartographically-Rounded Depth (Affected Charts):

```
6ft (12350_1, 12327_1, 12326_1)
1fm (12300_1, 13006_1, 13003_1, 14500_1)
1.8m (5161_1)
```

S-57 Data

Geo object 1: Sounding (SOUNDG)

Attributes: QUASOU - 1:depth known

SORDAT - 20061018

SORIND - US, US, surve, H11601

STATUS - 1:permanent

TECSOU - 3:found by multi-beam

VERDAT - 12:Mean lower low water

Office Notes

Concur with clarification - Submitted as a DTON. Shown on chart 12350, 59th., Edition Mar./06. No change in charting recommended.

4.29) DTON7 8 ft depth

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 31′ 56.8″ N, 073° 55′ 58.1″ W

Least Depth: 2.56 m = 1.400 fm = 1 fm 2.40 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) ± 0.980 m; **TVU** (**TPEv**) ± 0.369 m

Timestamp: 2006-270.15:17:58.160 (09/27/2006)

Survey Line: h11601 / tj_3102_reson8101 / 2006-270 / 396_1516

Profile/Beam: 1608/72

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted shoal sounding area was found with 100% Reson 8101 Reson MBES. Soundings are corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3102_reson8101/2006-270/396_1516	1608/72	0.00	000.0	Primary

Hydrographer Recommendations

Chart a new sounding with least depth 2.56 meters (8.4 feet).

Cartographically-Rounded Depth (Affected Charts):

8ft (12350_1, 12327_1, 12326_1) 1 ¹/₄fm (12300_1, 13006_1, 13003_1, 14500_1) 2.6m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)

Attributes: QUASOU - 6:least depth known

SORDAT - 20060927

SORIND - US, US, surve, H11601

STATUS - 1:permanent

TECSOU - 3: found by multi-beam

VERDAT - 12:Mean lower low water

Office Notes

Concur with clarification - Submitted as a DTON. Shown on chart 12350, 59th., Edition Mar./06. No change in charting recommended.

4.30) DTON7 9 ft depth - Shoaler depth

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 31′ 58.2″ N, 073° 55′ 59.5″ W

Least Depth: 2.77 m (= 9.09 ft = 1.515 fm = 1 fm 3.09 ft)

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) ± 0.980 m; **TVU** (**TPEv**) ± 0.369 m

Timestamp: 2006-270.15:17:42.644 (09/27/2006)

Survey Line: h11601 / tj_3102_reson8101 / 2006-270 / 396_1516

Profile/Beam: 1338/27

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted shoal area was found with 100% Reson 8101 MBES. Soundings are corrected to MLLW using verified tides and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3102_reson8101/2006-270/396_1516	1338/27	0.00	000.0	Primary

Hydrographer Recommendations

Chart a new sounding with least depth 2.77 meters (9.1 feet).

Cartographically-Rounded Depth (Affected Charts):

9ft (12350_1, 12327_1, 12326_1) 1 ½fm (12300_1, 13006_1, 13003_1, 14500_1) 2.8m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)

Attributes: EXPSOU - 1:within the range of depth of the surrounding depth area

QUASOU - 1:depth known

SORDAT - 2060927

SORIND - US,US,surve,H11601

STATUS - 1:permanent

TECSOU - 3: found by multi-beam

VERDAT - 12:Mean lower low water

Office Notes

Do not concur.

Shoaler depths in the vicinity. Do not chart.

4.31) DTON7 8 ft depth

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 31′ 53.1″ N, 073° 55′ 53.9″ W

Least Depth: 2.57 m = 8.43 ft = 1.405 fm = 1 fm 2.43 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) ± 0.981 m; **TVU** (**TPEv**) ± 0.367 m

Timestamp: 2006-270.15:18:42.294 (09/27/2006)

Survey Line: h11601 / tj_3102_reson8101 / 2006-270 / 396_1516

Profile/Beam: 2376/98

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted shoal area was found with 100% Reson 8101 MBES. Soundings are corrected to MLLW using verified tides and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3102_reson8101/2006-270/396_1516	2376/98	0.00	0.000	Primary

Hydrographer Recommendations

Chart a new sounding with least depth 2.57 meters (8.4 feet).

Cartographically-Rounded Depth (Affected Charts):

8ft (12350_1, 12327_1, 12326_1) 1 ¹/₄fm (12300_1, 13006_1, 13003_1, 14500_1) 2.6m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)

Attributes: EXPSOU - 1:within the range of depth of the surrounding depth area

QUASOU - 1:depth known

SORDAT - 20060927

SORIND - US,US,surve,H11601

STATUS - 1:permanent

TECSOU - 3: found by multi-beam

VERDAT - 12:Mean lower low water

Office Notes

Concur with clarification - Submitted as a DTON. Shown on chart 12350, 59th., Edition Mar./06. No change in charting recommended.

4.32) DTON7 10 ft depth - Shoaler depth

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 31′ 51.6″ N, 073° 55′ 51.8″ W

Least Depth: 3.20 m = 10.50 ft = 1.749 fm = 1 fm 4.50 ft**TPU** ($\pm 1.96\sigma$): **THU** (**TPEh**) $\pm 0.981 \text{ m}$; **TVU** (**TPEv**) $\pm 0.367 \text{ m}$

Timestamp: 2006-270.15:19:02.406 (09/27/2006)

Survey Line: h11601 / tj_3102_reson8101 / 2006-270 / 396_1516

Profile/Beam: 2726/96

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted shoal area was found with 100% Reson 8101 MBES. Soundings are corrected to MLLW using verified tides and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3102_reson8101/2006-270/396_1516	2726/96	0.00	0.000	Primary

Hydrographer Recommendations

Chart a new sounding with least depth 3.20 meters (10.5 feet).

Cartographically-Rounded Depth (Affected Charts):

10ft (12350_1, 12327_1, 12326_1) 1 ³/₄fm (12300_1, 13006_1, 13003_1, 14500_1) 3.2m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)

Attributes: EXPSOU - 1:within the range of depth of the surrounding depth area

QUASOU - 1:depth known SORDAT - 20060927 SORIND - US,US,surve,H11601

STATUS - 1:permanent

TECSOU - 3: found by multi-beam

VERDAT - 12:Mean lower low water

Office Notes

Concur with clarification - Shaoler depths in vcinity. Do not chart.

4.33) DTON6 18 Obstn

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 34′ 33.6″ N, 074° 02′ 33.4″ W

Least Depth: 5.53 m (= 18.14 ft = 3.024 fm = 3 fm 0.14 ft)

TPU ($\pm 1.96\sigma$): THU (TPEh) $\pm 0.980 \text{ m}$; TVU (TPEv) $\pm 0.369 \text{ m}$

Timestamp: 2006-285.16:13:07.438 (10/12/2006)

Survey Line: h11601 / tj_3102_reson8101 / 2006-285 / 173_1611

Profile/Beam: 1282/41

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous obstruction was found with 200% Klein 5000 SSS and 100% Reson 8101 MBES. Soundings are corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3102_reson8101/2006-285/173_1611	1282/41	0.00	000.0	Primary
h11601/tj_3101_reson8125/2006-249/428_1731	2134/240	2.31	284.8	Secondary
h11601/tj_3102_klein5000_sss100/2006-248/124_1749	0004	2.46	327.3	Secondary

Hydrographer Recommendations

Chart a dangerous obstruction with least depth 5.58 meters (18.3 feet).

Cartographically-Rounded Depth (Affected Charts):

18ft (12402_1, 12327_1, 12326_1) 3fm (12300_1, 13006_1, 13003_1, 14500_1) 5.5m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 6:least depth known

SORDAT - 20061012

SORIND - US, US, surve, H11601

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 5.530 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Geo object 2: Sounding (SOUNDG)

Office Notes

Concur with clarification - Submitted as a DTON. Shown on chart 12402, 10th., Edition May/06. No change in charting recommended.

4.34) DTON9 21 ft depth

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 34′ 29.8″ N, 073° 55′ 43.6″ W

Least Depth: 6.35 m = 20.85 ft = 3.474 fm = 3 fm 2.85 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) $\pm 0.980 \text{ m}$; **TVU** (**TPEv**) $\pm 0.367 \text{ m}$

Timestamp: 2006-291.14:34:03.460 (10/18/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-291 / 121_1426

Profile/Beam: 6889/185

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Item was found during review process at AHB. Sounding is 6ft shoaler than charted depth. Chart as a new sounding at the surveyed location.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-291/121_1426	6889/185	0.00	000.0	Primary

Hydrographer Recommendations

Chart as a 21 ft sounding at the surveyed location. Remove 27 ft sounding at same location.

Cartographically-Rounded Depth (Affected Charts):

```
21ft (12350_1, 12327_1, 12326_1)
3 ½fm (12300_1, 13006_1, 13003_1, 14500_1)
6.4m (5161_1)
```

S-57 Data

Geo object 1: Sounding (SOUNDG)

Attributes: EXPSOU - 1:within the range of depth of the surrounding depth area

QUASOU - 6:least depth known

SORDAT - 20061018

SORIND - US, US, survy, H11601

TECSOU - 3: found by multi-beam

VERDAT - 12:Mean lower low water

Office Notes

Feature Images

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/DTON9 Obstruction 6889,185.jpg does not exist.]

Shoaler depth in vicinity. Delete 21 ft depth.

4.35) DTON6 11 Obstn

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 34′ 47.6″ N, 073° 55′ 50.7″ W

Least Depth: 3.54 m (= 11.63 ft = 1.938 fm = 1 fm 5.63 ft)

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) $\pm 0.980 \text{ m}$; **TVU** (**TPEv**) $\pm 0.367 \text{ m}$

Timestamp: 2006-292.13:09:22.315 (10/19/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-292 / 137_1305

Profile/Beam: 3172/27

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous obstruction was found with 100% Reson 8125 MBES. Soundings are corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-292/137_1305	3172/27	0.00	0.000	Primary

Hydrographer Recommendations

Chart a dangerous obstruction with least depth 3.54 meters (11.6 feet).

Cartographically-Rounded Depth (Affected Charts):

11ft (12350_1, 12327_1, 12326_1) 2fm (12300_1, 13006_1, 13003_1, 14500_1) 3.5m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 1:depth known

SORDAT - 20061019

SORIND - US, US, surve, H11601

STATUS - 1:permanent

TECSOU - 3: found by multi-beam

VALSOU - 3.545 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Geo object 2: Sounding (SOUNDG)

Office Notes

Concur with clarification - Submitted as a DTON. Shown on chart 12350, 59th., Edition Mar./06. No change in charting recommended.

Feature Images

 $[Image\ file\ T:/SAR/H11601_B310-TJ/AHB\ Template/PSS/Images/sheepshead_obs_40-34-48_073-55-51.JPG\ does\ not\ exist.]$

4.36) DTON4 2 ft depth

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 34′ 38.2″ N, 073° 54′ 43.9″ W

Least Depth: 0.66 m = 2.15 ft = 0.358 fm = 0 fm 2.15 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) ± 0.980 m; **TVU** (**TPEv**) ± 0.366 m

Timestamp: 2006-292.20:19:29.935 (10/19/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-292 / 430_2015

Profile/Beam: 5289/41

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted shoal sounding area was found with 100% Reson 8125 MBES. Soundings are corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-292/430_2015	5289/41	0.00	000.0	Primary

Hydrographer Recommendations

Chart a new sounding with least depth 0.66 meters (2.2 feet).

Cartographically-Rounded Depth (Affected Charts):

2ft (12350_1, 12327_1, 12326_1) 0 ½fm (12300_1, 13006_1, 13003_1, 14500_1) .7m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)

Attributes: QUASOU - 1:depth known

SORDAT - 20061019

SORIND - US, US, surve, H11601

STATUS - 1:permanent

TECSOU - 3: found by multi-beam

VERDAT - 12:Mean lower low water

Office Notes

Concur with clarification - Submitted as a DTON. Shown on chart 12350, 59th., Edition Mar./06. No change in charting recommended.

4.37) **DTON4 8 Wk**

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 35′ 08.4″ N, 073° 54′ 13.6″ W

Least Depth: 2.47 m (= 8.09 ft = 1.349 fm = 1 fm 2.09 ft)

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) ± 0.980 m; **TVU** (**TPEv**) ± 0.366 m

Timestamp: 2006-292.17:59:22.949 (10/19/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-292 / 494_1758

Profile/Beam: 509/33

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous wreck (approximately 47 ft long) was found with 100% Reson 8125 MBES. Soundings are corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-292/494_1758	509/33	0.00	000.0	Primary

Hydrographer Recommendations

Chart a dangerous wreck with least depth 2.47 meters (8.1 feet).

Cartographically-Rounded Depth (Affected Charts):

8ft (12350_1, 12327_1, 12326_1) 1 ¹/₄fm (12300_1, 13006_1, 13003_1, 14500_1) 2.5m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Geo object 2: Wreck (WRECKS)

Attributes: CATWRK - 2:dangerous wreck

CONVIS - 2:not visual conspicuous

SORDAT - 20061019

SORIND - US, US, surve, H11601

STATUS - 1:permanent

TECSOU - 3: found by multi-beam

VALSOU - 2.467 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification - Submitted as a DTON. Shown on chart 12402, 10th., Edition May/06. No change in charting recommended.

Feature Images

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/wreck2_Gerritsen_inlet.JPG does not exist.]

4.38) DTON4 10 Wk

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 34′ 33.4″ N, 073° 54′ 13.5″ W

Least Depth: 3.11 m (= 10.20 ft = 1.700 fm = 1 fm 4.20 ft)

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) $\pm 0.980 \text{ m}$; **TVU** (**TPEv**) $\pm 0.367 \text{ m}$

Timestamp: 2006-293.15:16:08.291 (10/20/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-293 / 963_1514

Profile/Beam: 759/35

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous wreck (approximately 40 ft long) was found with 100% Reson 8125 MBES. Soundings are corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-293/963_1514	759/35	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss200/2006-267/210_1450	0002	0.68	273.7	Secondary
h11601/tj_3102_klein5000_sss100/2006-267/119_1433	0002	3.26	204.5	Secondary
h11601/tj_3102_klein5000_sss100/2006-267/120_1438	0001	7.44	311.4	Secondary

Hydrographer Recommendations

Chart a dangerous wreck with least depth 3.11 meters (10.2 feet).

Cartographically-Rounded Depth (Affected Charts):

10ft (12350_1, 12327_1, 12326_1) 1 ³4fm (12300_1, 13006_1, 13003_1, 14500_1) 3.1m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)

Geo object 2: Wreck (WRECKS)

Attributes: CATWRK - 2:dangerous wreck

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 3.109 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification - Submitted as a DTON. Shown on chart 12402, 10th., Edition May/06. No change in charting recommended.

Feature Images

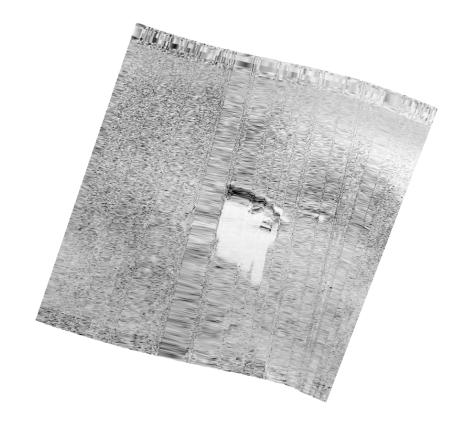


Figure 4.38.1

 $[Image\ file\ T:/SAR/H11601_B310-TJ/AHB\ Template/PSS/Images/wreck3_Gerritsent_inlet.JPG\ does\ not\ exist.]$

4.39) DTON9 21 Obstn

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 32′ 27.1″ N, 074° 02′ 22.8″ W

Least Depth: 6.46 m = 21.20 ft = 3.533 fm = 3 fm 3.20 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) $\pm 0.980 \text{ m}$; **TVU** (**TPEv**) $\pm 0.367 \text{ m}$

Timestamp: 2006-266.18:13:18.496 (09/23/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-266 / 552_1809

Profile/Beam: 2399/69

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Object investigated with 100% MBES and 200% SSS. Significant object with a height of 1.06m found within search radius. This object is located near a channel thus is navigationally significant.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-266/552_1809	2399/69	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss200/2006-254/267_1603	0001	12.43	166.6	Secondary

Hydrographer Recommendations

Replace charted obstruction 22 ft with a charted obstruction 21 ft at surveyed location.

Cartographically-Rounded Depth (Affected Charts):

21ft (12402_1, 12327_1, 12326_1)
3 ½fm (12300_1, 13006_1, 13003_1, 14500_1)
6.5m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 6:least depth known

SORDAT - 20060923

SORIND - US,US,surve,H11601

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 6.461 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur - Delete 22 Obstn and danger curve. Chart an obstruction with a depth of 21 feet in latitude 40°32'27.092"N, longitude 74°02'22.825"W. Add 21 Obstn w/danger curve.

Feature Images

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/DTON9_2399,69.jpg does not exist.]

4.40) DTON6 19 Obstn

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 31′ 36.9″ N, 073° 57′ 29.4″ W

Least Depth: 5.95 m = 19.53 ft = 3.255 fm = 3 fm = 1.53 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) $\pm 0.980 \text{ m}$; **TVU** (**TPEv**) $\pm 0.367 \text{ m}$

Timestamp: 2006-289.17:02:43.671 (10/16/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-289 / 157_1701

Profile/Beam: 133/18

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This dangerous obstruction was found with 100% Reson 8125 MBES. Soundings are corrected to MLLW using verified tides and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-289/157_1701	133/18	0.00	000.0	Primary

Hydrographer Recommendations

Chart a dangerous obstruction with least depth 5.95 meters (19.5 feet).

Cartographically-Rounded Depth (Affected Charts):

19ft (12402_1, 12327_1, 12326_1)
3 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)
6.0m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 1:depth known

SORDAT - 20061016

SORIND - US, US, surve, H11601

STATUS - 1:permanent

TECSOU - 3: found by multi-beam

VALSOU - 5.952 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Geo object 2: Sounding (SOUNDG)

Office Notes

Concur with clarification - Submitted as a DTON. Shown on chart 12402, 10th., Edition May/06. No change in charting recommended.

Feature Images

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/133-18.JPG does not exist.]

4.41) DToN9 9 Obstn

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 33′ 57.5″ N, 073° 54′ 39.7″ W

Least Depth: 2.84 m (= 9.31 ft = 1.552 fm = 1 fm 3.31 ft)

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) ± 0.980 m; **TVU** (**TPEv**) ± 0.367 m

Timestamp: 2006-285.14:41:49.854 (10/12/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-285 / 351_1440

Profile/Beam: 207/227

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This obstruction was found with 50 meter line spacing using a Reson 8125 MBES. Soundings are corrected to MLLW using verified tides and preliminary tide zoning. This obstruction is significant based upon height and could cause a danger to navigation.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-285/351_1440	207/227	0.00	0.000	Primary
h11601/tj_3102_klein5000_sss200/2006-262/222_1728	0003	1.78	149.4	Secondary

Hydrographer Recommendations

Chart dangerous obstruction in surveyed position.

Cartographically-Rounded Depth (Affected Charts):

9ft (12350_1, 12327_1, 12326_1) 1 ½fm (12300_1, 13006_1, 13003_1, 14500_1) 2.8m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN) **Attributes:** VALSOU - 2.839 m

Office Notes

Concur - Chart and obstruction with a depth of 9 feet in latitude $40^{\circ}33'57.53"N$, longitude $73^{\circ}54'39.68"W$. Add 9 Obstn w/danger curve. Submitted as a DTON.

Feature Images

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/DTON9 Obstruction 207,227.jpg does not exist.]

4.42) DTON7 9 ft depth - Shoaler depth

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 31′ 54.4″ N, 073° 55′ 56.7″ W

Least Depth: 2.75 m = 9.04 ft = 1.506 fm = 1 fm 3.04 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) ± 0.980 m; **TVU** (**TPEv**) ± 0.368 m

Timestamp: 2006-270.15:14:22.146 (09/27/2006)

Survey Line: h11601 / tj_3102_reson8101 / 2006-270 / 394_1513

Profile/Beam: 1527/79

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted shoal area was found with 100% Reson 8101 MBES. Soundings are corrected to MLLW using verified tides and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3102_reson8101/2006-270/394_1513	1527/79	0.00	000.0	Primary

Hydrographer Recommendations

Chart a new sounding with least depth 2.75 meters (9.0 feet).

Cartographically-Rounded Depth (Affected Charts):

9ft (12350_1, 12327_1, 12326_1) 1 ½fm (12300_1, 13006_1, 13003_1, 14500_1) 2.8m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)

Attributes: EXPSOU - 1:within the range of depth of the surrounding depth area

QUASOU - 6:least depth known

SORDAT - 20060927

SORIND - US,US,surve,H11601

STATUS - 1:permanent

TECSOU - 3: found by multi-beam

VERDAT - 12:Mean lower low water

Office Notes

Do not concur - Shoaler soundings in vicinity. Do not chart.

4.43) DTON7 10 ft depth

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 32′ 00.1″ N, 073° 56′ 01.4″ W

Least Depth: 3.06 m = 10.03 ft = 1.671 fm = 1 fm = 4.03 ft**TPU** ($\pm 1.96 \sigma$): **THU** (**TPEh**) $\pm 0.980 \text{ m}$; **TVU** (**TPEv**) $\pm 0.369 \text{ m}$

Timestamp: 2006-270.15:09:42.575 (09/27/2006)

Survey Line: h11601 / tj_3102_reson8101 / 2006-270 / 397_1508

Profile/Beam: 1709/67

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted shoal area was found with 100% Reson 8101 MBES. Soundings are corrected to MLLW using verified tides and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3102_reson8101/2006-270/397_1508	1709/67	0.00	000.0	Primary

Hydrographer Recommendations

Chart a new sounding with least depth 3.06 meters (10.0 feet).

Cartographically-Rounded Depth (Affected Charts):

10ft (12350_1, 12327_1, 12326_1) 1 ½fm (12300_1, 13006_1, 13003_1, 14500_1) 3.1m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)

Attributes: EXPSOU - 1:within the range of depth of the surrounding depth area

QUASOU - 6:least depth known

SORDAT - 20060927

SORIND - US,US,surve,H11601

STATUS - 1:permanent

TECSOU - 3: found by multi-beam

VERDAT - 12:Mean lower low water

Office Notes

Concur with clarification - Submitted as a DTON. Shown on chart 12350, 59th., Edition Mar./06. No change in charting recommended.

4.44) DTON7 11 ft depth

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 31′ 49.7″ N, 073° 55′ 47.8″ W

Least Depth: 3.50 m = 11.47 ft = 1.911 fm = 1 fm 5.47 ft

TPU ($\pm 1.96\sigma$): THU (TPEh) $\pm 0.980 \text{ m}$; TVU (TPEv) $\pm 0.369 \text{ m}$

Timestamp: 2006-270.15:11:55.723 (09/27/2006)

Survey Line: h11601 / tj_3102_reson8101 / 2006-270 / 397_1508

Profile/Beam: 4026/38

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted shoal area was found with 100% Reson 8101 MBES. Soundings are corrected to MLLW using verified tides and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3102_reson8101/2006-270/397_1508	4026/38	0.00	0.000	Primary

Hydrographer Recommendations

Chart a new sounding with least depth 3.5 meters (11.5 feet).

Cartographically-Rounded Depth (Affected Charts):

11ft (12350_1, 12327_1, 12326_1) 1 ³/₄fm (12300_1, 13006_1, 13003_1, 14500_1) 3.5m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)

Attributes: EXPSOU - 1:within the range of depth of the surrounding depth area

QUASOU - 1:depth known SORDAT - 20060928 SORIND - US,US,surve,H11601

STATUS - 1:permanent

TECSOU - 3: found by multi-beam

VERDAT - 12:Mean lower low water

Office Notes

Concur with clarification - Submitted as a DTON. Shown on chart 12350, 59th., Edition Mar./06. No change in charting recommended.

4.45) DTON7 12 ft depth - Shoaler depth

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 32′ 01.9″ N, 073° 56′ 00.3″ W

Least Depth: 3.60 m = 11.81 ft = 1.969 fm = 1 fm = 1.81 ft

TPU ($\pm 1.96\sigma$): THU (TPEh) $\pm 0.980 \text{ m}$; TVU (TPEv) $\pm 0.368 \text{ m}$

Timestamp: 2006-270.15:51:36.641 (09/27/2006)

Survey Line: h11601 / tj_3102_reson8101 / 2006-270 / 400_1550

Profile/Beam: 1211/23

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted shoal area was found with 100% Reson 8101 MBES. Soundings are corrected to MLLW using verified tides and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3102_reson8101/2006-270/400_1550	1211/23	0.00	000.0	Primary

Hydrographer Recommendations

Chart a new sounding with least depth 3.60 meters (11.8 feet).

Cartographically-Rounded Depth (Affected Charts):

12ft (12350_1, 12327_1, 12326_1) 2fm (12300_1, 13006_1, 13003_1, 14500_1) 3.6m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)

Attributes: EXPSOU - 1:within the range of depth of the surrounding depth area

QUASOU - 1:depth known SORDAT - 20060928 SORIND - US,US,surve,H11601

STATUS - 1:permanent

TECSOU - 3: found by multi-beam

VERDAT - 12:Mean lower low water

Office Notes

Concur with clarification - Shaoler depths in vcinity. Do not chart.

4.46) DTON7 11ft depth

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 31′ 50.2″ N, 073° 55′ 43.9″ W

Least Depth: 3.32 m (= 10.88 ft = 1.814 fm = 1 fm 4.88 ft)

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) ± 0.981 m; **TVU** (**TPEv**) ± 0.367 m

Timestamp: 2006-270.15:40:38.799 (09/27/2006)

Survey Line: h11601 / tj_3102_reson8101 / 2006-270 / 401_1536

Profile/Beam: 3210/4

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted shoal area was found with 100% Reson 8101 MBES. Soundings are corrected to MLLW using verified tides and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3102_reson8101/2006-270/401_1536	3210/4	0.00	000.0	Primary

Hydrographer Recommendations

Chart a new sounding with least depth 3.32 meters (10.9 feet).

Cartographically-Rounded Depth (Affected Charts):

11ft (12350_1, 12327_1, 12326_1) 1 ³/₄fm (12300_1, 13006_1, 13003_1, 14500_1) 3.3m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)

Attributes: EXPSOU - 1:within the range of depth of the surrounding depth area

QUASOU - 1:depth known SORDAT - 20060928 SORIND - US,US,surve,H11601

STATUS - 1:permanent

TECSOU - 3: found by multi-beam

VERDAT - 12:Mean lower low water

Office Notes

Concur with clarification - Submitted as a DTON. Shown on chart 12350, 59th., Edition Mar./06. No change in charting recommended.

4.47) DTON8 5 ft depth

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 34′ 19.7″ N, 073° 54′ 58.4″ W

Least Depth: 1.49 m = 4.90 ft = 0.816 fm = 0 fm = 0.90 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) ± 0.980 m; **TVU** (**TPEv**) ± 0.366 m

Timestamp: 2006-293.18:37:29.302 (10/20/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-293 / 336_1835

Profile/Beam: 1332/188

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous shoal area was found south of Plumb Beach Channel with 100% Reson MBES. Soundings are corrected to MLLW using verified tides and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-293/336_1835	1332/188	0.00	000.0	Primary

Hydrographer Recommendations

Chart a sounding with least depth 1.49 meters (4.9 feet).

Cartographically-Rounded Depth (Affected Charts):

5ft (12350_1, 12327_1, 12326_1) 0 34fm (12300_1, 13006_1, 13003_1, 14500_1) 1.5m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)

Attributes: QUASOU - 1:depth known

SORDAT - 20061020

SORIND - US, US, surve, H11601

STATUS - 1:permanent

TECSOU - 3: found by multi-beam

VERDAT - 12:Mean lower low water

Office Notes

Concur with clarification - Submitted as a DTON. Shown on chart 12350, 59th., Edition Mar./06. No change in charting recommended.

4.48) DTON9 19 Rk

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 31′ 56.9″ N, 074° 02′ 28.4″ W

Least Depth: 5.80 m (= 19.04 ft = 3.174 fm = 3 fm 1.04 ft)

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) $\pm 0.980 \text{ m}$; **TVU** (**TPEv**) $\pm 0.367 \text{ m}$

Timestamp: 2006-293.13:32:38.163 (10/20/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-293 / 100_1331

Profile/Beam: 526/167

Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted dangerous rock was found with 200% Klein 5000 SSS and 100% Reson 8125 MBES. Soundings were corrected to MLLW with observed water levels and final tide zoning.

This is the same item as DTON3 Rock 2075/240, however a shoaler depth was determined for the object.

Feature Correlation

Address	Feature	Range	Azimuth	Status	
h11601/tj_3101_reson8125/2006-293/100_1331	526/167	0.00	0.000	Primary	

Hydrographer Recommendations

Chart a dangerous rock with least depth of 5.80 meters (19.0 feet).

Cartographically-Rounded Depth (Affected Charts):

19ft (12402_1, 12327_1, 12326_1) 3fm (12300_1, 13006_1, 13003_1, 14500_1) 5.8m (5161_1)

S-57 Data

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

Attributes: QUASOU - 6:least depth known

SORDAT - 2006091019

SORIND - US,US,surve,H11601

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 5.804 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification - Chart a rock with a depth of 19 feet in latitude 40°31'56.88"N, longitude 74°02'28.40"W. Add 19 Rk w/danger curve.

Feature Images

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/DTON7 ROCK 526,167.jpg does not exist.]

4.49) DTON9 2 ft depth

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 34′ 31.0″ N, 073° 55′ 46.4″ W

Least Depth: 0.82 m = 2.70 ft = 0.451 fm = 0 fm 2.70 ft

TPU ($\pm 1.96\sigma$): **THU** (**TPEh**) ± 0.980 m; **TVU** (**TPEv**) ± 0.366 m

Timestamp: 2006-294.13:14:47.901 (10/21/2006)

Survey Line: h11601 / tj_3101_reson8125 / 2006-294 / 370_1313

Profile/Beam: 765/157

Charts Affected: 12350_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

This uncharted shoal sounding area was found with 100% Reson 8125 Reson MBES. Soundings are corrected to MLLW with verified water levels and final tide zoning.

This sounding was not addressed by the field and was revealed during office QC.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11601/tj_3101_reson8125/2006-294/370_1313	765/157	0.00	0.000	Primary
h11601/tj_3101_reson8125/2006-291/513_1450	337/190	2.03	054.1	Secondary
h11601/tj_3101_reson8125/2006-291/515_1502	530/28	4.47	271.9	Secondary
h11601/tj_3101_reson8125/2006-291/513_1450	504/179	7.14	011.6	Secondary
h11601/tj_3101_reson8125/2006-291/515_1502	577/43	8.63	223.3	Secondary
h11601/tj_3101_reson8125/2006-291/516_1459	873/30	9.29	230.6	Secondary
h11601/tj_3101_reson8125/2006-291/515_1502	525/230	9.90	281.9	Secondary
h11601/tj_3101_reson8125/2006-291/513_1450	725/5	10.37	323.1	Secondary
h11601/tj_3101_reson8125/2006-291/513_1450	556/208	10.47	004.1	Secondary
h11601/tj_3101_reson8125/2006-291/515_1502	612/38	13.10	210.8	Secondary
h11601/tj_3101_reson8125/2006-291/520_1549	242/240	13.30	250.3	Secondary
h11601/tj_3101_reson8125/2006-291/513_1450	125/42	15.10	176.4	Secondary
h11601/tj_3101_reson8125/2006-291/517_1455	709/160	15.21	256.2	Secondary
h11601/tj_3101_reson8125/2006-291/515_1502	631/1	15.54	202.1	Secondary
h11601/tj_3101_reson8125/2006-291/513_1450	616/240	16.96	354.9	Secondary

h11601/tj_3101_reson8125/2006-291/515_1502	660/1	20.08	197.3	Secondary
h11601/tj_3101_reson8125/2006-291/513_1450	78/184	21.05	182.0	Secondary
h11601/tj_3101_reson8125/2006-291/515_1502	363/2	23.94	006.6	Secondary
h11601/tj_3101_reson8125/2006-291/513_1450	25/168	27.71	188.6	Secondary

Hydrographer Recommendations

Replace the current area with a new shoaler sounding with least depth 0.82 meters (2.7 feet) and adjust the associated contours in the immediate area to reflect this change.

Cartographically-Rounded Depth (Affected Charts):

```
2ft (12350_1, 12327_1, 12326_1)
0 ½fm (12300_1, 13006_1, 13003_1, 14500_1)
.8m (5161_1)
```

S-57 Data

Geo object 1: Sounding (SOUNDG)

Attributes: QUASOU - 6:least depth known

SORDAT - 20061021

SORIND - US,US,surve,H11601
TECSOU - 3:found by multi-beam
VERDAT - 12:Mean lower low water

Office Notes

Concur - Chart 2 ft depth.

Feature Images

[Image file T:/SAR/H11601_B310-TJ/AHB Template/PSS/Images/DTON9_765,157.jpg does not exist.]

APPENDIX III

PROGRESS SKETCH

APPENDIX IV

TIDES AND WATER LEVELS



UNITED STATES DEPARMENT OF COMMERCE National Oceanic and Atmospheric Administration

National Ocean Service Silver Spring, Maryland 20910



Final tide zone node point locations for OPR-B310-TJ-2006, H11601

Format: Tide Station (in recommended order of use)

Average Time Correction (in minutes)

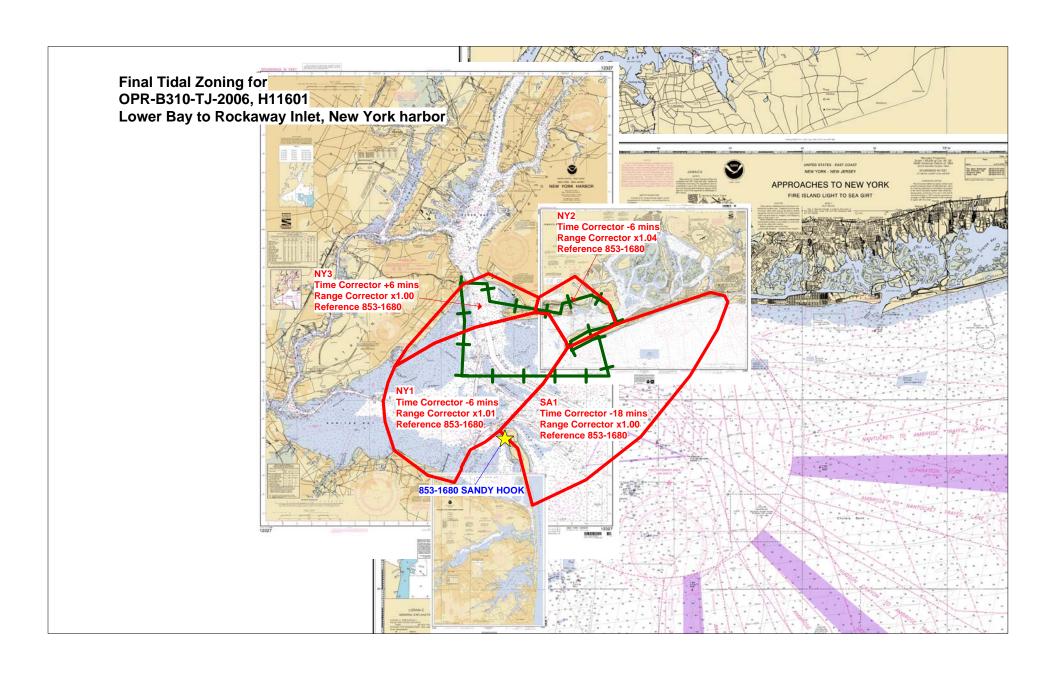
Range Correction

Longitude in decimal degrees (negative value denotes Longitude West),

Latitude in decimal degrees

	Tide Station Order	AVG Time Correction	Range Correction
Zone NY1 -74.016239 40.473136 -73.965662 40.514852 -73.937553 40.546296 -73.939303 40.55134 -73.95001 40.564645 -73.959509 40.577268 -74.044537 40.564241 -74.091041 40.55038 -74.137169 40.529907 -74.145073 40.51556 -74.150627 40.498927 -74.148493 40.481148 -74.137816 40.455695 -74.099092 40.433716 -74.068333 40.42742 -74.060282 40.439103 -74.0605 40.440685 -74.050034 40.456233 -74.033051 40.463117 -74.016239 40.473136	853-1680	-6	1.01
Zone NY2 -73.937553 40.546296 -73.881708 40.566897 -73.890948 40.585808 -73.92912 40.60916 -73.971093 40.590532 -73.975509 40.577268 -73.959509 40.576103 -73.939303 40.55134 -73.937553 40.546296	853-1680	-6	1.04

Zone NY3	853-1680	+6	1.00
-73.975509 40.577268			
-74.044537 40.564241			
-74.091041 40.55038			
-74.137169 40.529907			
-74.122783 40.546514			
-74.058393 40.601962			
-74.028921 40.611519			
-73.971093 40.590532			
-73.975509 40.577268			
Zone SA1	853-1680	-18	1.00
-73.752548 40.586515			
-73.764429 40.562339			
-73.796226 40.521614			
-73.853008 40.467853			
-73.916604 40.429673			
-73.978336 40.407314			
-73.982156 40.418361			
-73.995069 40.457241			
-74.016239 40.473136			
-73.965662 40.514852			
-73.937553 40.546296			
-73.881708 40.566897			
-73.77267 40.595012			
-73.756442 40.592008			
-73.752548 40.586515			



APPENDIX V

SUPPLEMENTAL SURVEY RECORDS AND CORRESPONDENCES

Subject: RE: USCG Station Rockaway

From: "Yunker, Jeff" <Jeff.M.Yunker@uscg.mil>

Date: Tue, 19 Dec 2006 05:58:47 -0500 **To:** christiaan.vanwestendorp@noaa.gov

CC: "McBrady, Mike LCDR" <Mike.T.McBrady@uscg.mil>

Chris,

The chart correction was published in the D1 LNM 46/06 (attachment). The LNM also corrects discrepancies for Airsta Brooklyn no longer in service, Sta Fort Totten moving to Sta Kings Point, etc.

They no longer appear on the NOAA Raster charts I downloaded yesterday (dated 12/09) but I just checked the on-line chart viewer and they are back on it.

Jeff Yunker, Waterways Mgmt Coordinator PH: 718.354.4176 FX: 718.354.4190

http://homeport.uscg.mil/mycg/portal/ep/portDirectory.do?tabId=1&cotpId=2

----Original Message---From: McBrady, Mike LCDR

Sent: Monday, December 18, 2006 4:58 PM To: christiaan.vanwestendorp@noaa.gov

Cc: Yunker, Jeff

Subject: RE: USCG Station Rockaway

Chris,

Station Rockaway is no longer in service. You can take it off the chart(s). It has not been a CG station for several years and will not be one ever again.

There are several others as well(CG Air Station Brooklyn went OOC in late 1980's) that Jeff Yunker submitted chart corrections on.

Will this email suffice or do you need more info?

regards,

LCDR Mike McBrady Sector New York Waterways Management work: 718 354 2353 cell: 347 682 0518 mike.t.mcbrady@uscg.mil

----Original Message----

From: christiaan.vanwestendorp@noaa.gov]

Sent: Monday, December 18, 2006 4:17 PM

To: McBrady, Mike LCDR

Subject: USCG Station Rockaway

LCDR McBrady,

After inquiring through CG Sector NY channels (specifically the Command Center), it looks as though USCG Station Rockaway is no longer in service. However, to have it removed (or re-labeled) on the chart, I would need some sort of documentation (e-mail, memo, or otherwise) that says so. Can you help me out with this?

V/R,

LT Chris van Westendorp

lnm0146.pdf
Content-Description: lnm0146.pdf
Content-Type: application/octet-stream

Content-Encoding: base64

2 of 2

NOAA Form 77-6 (Rev. 8/95)

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

COAST PILOT REPORT

SUBMIT TO:

NATIONAL OCEAN SERVICE, NOAA (N/CS261) 1315 EAST-WEST HIGHWAY, STATION 7317

SILVER SPRING, MD 20910-3282 FAX: 301-713-4516

INTERNET: <u>Lyn.Preston@noaa.gov</u>

This record of your experience and observations when traversing the coast, entering port, and/or navigating inside waters will be used to update the Coast Pilot.

OBSERVER: NAME AND ADDRESS

Commanding Officer

NOAA Ship Thomas Jefferson

439 West York Street Norfolk, VA 23510

TEL. (daytime) (757) 441-6322

DATE(s) OF OBSERVATION: Sept-Oct 2006 DATE OF SUBMISSION: 26 February 2007

VESSEL NAME AND ADDRESS

NOAA Ship Thomas Jefferson

439 West York Street Norfolk, VA 23510

GEOGRAPHIC LOCATION

(Refer to charted objects by distance and bearing and/or include latitude/longitude, as applicable)

CHART NUMBER

12326,12327,12350,12402

COAST PILOT NUMBER and EDITION NUMBER $2,37^{\text{th}}$ Ed., 2007

CHANGES TO EXISTING COAST PILOT TEXT

Give recommended revised language for the book. Identify affected text by page, paragraph(s), and line number(s). State the source of the information if other that personal; observation.

Pg. 378 Paragraph 93

Change paragraph to read:

"Sandy Hook Channel, project depth 35 feet, provides a secondary route from the sea to deep water in Lower Bay; it connects with **Raritan Bay Channel** to the westward, **Chapel Hill** Channel to the north, and **Terminal Channel** to the south. Chapel Hill Channel has a project depth of 30 feet. Obstruction within the channel are:"

Add the following paragraphs:

"(new)

covered 27 feet about 0.25 mile southeast of West Bank Light in about 40°32'03"N., 074°02'25"W.;

(new)

covered 27 feet about 0.1 mile southeast of buoy 15 in about 40°31'55"N., 074°02'23"W.;"

(Continue on plain paper)

Pg. 378 Paragraph 93 (cont.)

"(new)

covered 24 feet about 0.1 mile west-southwest of buoy 14 in about 40°31'54"N., 074°02'16"W.; (new)

covered 28 feet about 0.3 mile east of West Bank Light in about 40°32'16"N., 074°02'13"W.; (new)

covered 26 feet about 0.3 mile east-northeast of West Bank Light in about 40°32'24"N., 074°02'11"W. (new)

The entrance to Sandy Hook Channel is marked by Scotland Lighted Whistle Buoy S, equipped with a radar beacon (Racon). The channels are well marked with navigational aids. (See Notice to Mariners and the latest editions of charts for controlling depths.)"

Pg. 378 Paragraph 96, Line 3

Change "13" to "16". Add "Mariners are advised that a shoal area exists with a least depth of 6 feet to the north of the channel in 40°31'55"N., 073°59'00.5"W.

Pg. 379 Paragraph 105, Line 11 Change "6 to 15" to "5 to 40".

Pg. 383 Paragraph 154

Change paragraph to read: "Rockaway Inlet, the entrance to Jamaica Bay, is between Rockaway Point on the southeast side and Manhattan Beach and Barren Island on the north side. The inlet is obstructed by a shifting sandbar located 0.6 mile east-southeast of the light with depths of 8 to 12 feet in about 40°31′56"N., 073°55′58"W. A jetty, marked near the outer end by a light, extends south from Rockaway Point. The entrance channel extends westward of the jetty and is marked by lighted and unlighted buoys. The channel has depths of about 18 feet or more at midchannel. Mariners are advised that the area immediately surrounding buoy C"5" has a least depth of 13 feet. A shoal with depths of less than 1 foot and marked by breakers is west of the entrance channel. Obstructions at the entrance to the inlet are:"

Pg. 384 Paragraph 155, Line 1 Change "22" to "21".

Paragraph 163

Remove entire paragraph.

Paragraph 158

Remove entire paragraph.

Paragraph 159, Line 2

Add ";" to the end of the line.

Add three new paragraphs to read:

"(new)

covered 19 feet about 0.8 mile south-southwest of the jetty light in about 40°31'45"N., 073°56'58"W.; (new)

covered 13 feet about 0.5 mile west of the jetty light in about 40°32'29"N., 073°57'08"W.; (new)

covered 19 feet about 0.4 mile south of the jetty light in about 40°32'02"N., 073°56'28"W."

Pg. 384 Paragraph 160

Change paragraph to read:

"There is one sunken dangerous wreck farther inside the inlet in 40°34'30"N., 73°52'30"W., about 0.4 mile eastward of the bridge."

Paragraph 161

Remove entire paragraph.

Paragraph 170, Lines 6-7

Change lines to read:

"had a depth of 10 feet except for shoaling to 2 feet between buoy 7 and 7A. In"

Add to the end of the paragraph:

"There is one obstruction within the inlet covered 11 feet midchannel between buoys 8 and 12 in about 40°34'48"N., 073°55'51"W."

Pg. 385 Paragraph 173, Lines 5- 12

Change lines to read:

"inlet. The channel is marked by buoys. The channel is limited to 9 feet between buoys 9 and 10. Mariners are advised that a shoal area with a least depth of 2 feet exists in the immediate vicinity of buoy 7. This shoal area extends to midchannel near buoy 7 where the least depth is 5 feet. There is also a wreck with a least depth of 10 feet 0.4 mile east-southeast of buoy 7 with surrounding depths of 9 feet to the west of the wreck in about 40°34'33"N., 073°54'13"W."

Paragraph 176

Add to the end of the paragraph:

"Mariners are advised that a wreck with a least depth of 8 feet exists at the southwest corner of the marina in about 40°35'08"N., 073°54'14"W."

Pg. 387 Paragraph 205

Add to the end of the paragraph:

"Mariners are advised that a shoal area exists with a least depth of 6 feet about 0.1 mile west of buoy 3 in about 40°33′51"N., 073°58′34"W."

REQUEST FOR SURVEYS OR CHART CHANGE
List area for which surveys and/or changes in chart format, scale, or layout are needed. Include the name and geographic position of the area, the chart number of the largest scale chart that covers the area, and the reason for the request.
None.
(Continue on plain paper)
ADDITIONAL INFORMATION FOR THE COAST PILOT
We are particularly interested in information about unusually strong currents; prominent landmarks; objects which provide particularly good radar return; sheltered anchorages (be explicit on direction of weather and type of bottom observed); drawbridge operation changes (e.g., drawbridge remains permanently in open position); change in pilot pick-up points; changes in radio frequencies monitored by pilots, marine exchanges, harbor masters, or drawbridges.
None.
(Continue on plain paper)
Public reporting burden for this collection is estimated to average thirty minutes per response, including the time for reviewing instructions, searching existing data sources,

Public reporting burden for this collection is estimated to average thirty minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the National Ocean Service (N/CS261), 1315 East-West Highway, Silver Spring, MD 20910-3282; and to the Office of management and Budget, Paperwork Reduction Project (0648-0007), Washington, DC 20503.

ATLANTIC HYDROGRAPHIC BRANCH EVALUATION REPORT to Accompany Surveys H11601 (2006)

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

B.1 DATA PROCESSING

The following software was used to process and review data at the Atlantic Hydrographic Branch (AHB):

CARIS HIPS/SIPS version 6.1 CARIS BASE Manager 2.1 CARIS HOM ENC 3.3 PYDRO, version 8.7 CARIS S-57 Composer 2.0

B.2 QUALITY CONTROL

H-Cells

The AHB source depth grid was generated as a 5m resolution BASE surface. Survey scale soundings were extracted from AHB generated 5m Base surface at a 1:20000 scale using a radius of 1.75m. Soundings were selected for charting by hand using the latest raster charts 12327, 12350 and 12402, and smooth contours as background for sounding placement. Soundings were then checked for conflicts, corrected to remove conflicts, and edited to allow for proper sounding compilation placement with respect to existing charted depths outside the survey area. The BASE surface was referenced when selecting the chart scale soundings, to ensure that the selected soundings portrayed the bathymetry within the common area.

The depth contours were generated from an interpolated surface. Some contours were drawn by hand from the product surface. The chart soundings were then selected from the sounding selection using AHB best practices and with the aid of the contours.

The compilation products and Stand Alone HOB Files (SAHOB) are detailed in the Compilation Process Log of this document. All individual SAHOB files were assembled in BASE Editor during H-Cell compilation.

The completed H-Cell was exported as a Base Cell File (ENC.000) in S-57 format with all values in metric units. The metric equivalent ENC.000 file was then converted to NOAA chart units (ENC_CS.000) with all values measured in feet following NOAA sounding rounding rules.

The H11601 CARIS H-Cell final deliverables include the following products:

US511601_CS.000	1:15,000 Scale	H11601 Selected Soundings (Chart Scale)
US511601_SS.000	1:20,000 Scale	H11601 Selected Soundings (Survey Scale)

JUNCTIONS

H11400	(2006)	to	the	east
Н11600	(2006)	to	the	north
H11709	(2007)	to	the	south

Survey $\rm H11400~(2006)$ junctions with the present survey to the east. Present survey soundings are 1 foot shoaler than survey $\rm H11400~(2006)$.

Survey H11600 (2006) junctions with the present survey to the east. Present survey soundings are 1 foot shoaler than survey H11600 (2006).

Survey H11709 (2007) junctions with the present survey to the south. Present survey soundings are 1 foot shoaler than survey H11709 (2007).

Present survey depths are in harmony with the charted hydrography. There are no contemporary surveys to the north south or west. Present survey depths are in harmony with the charted hydrography to the north, south and west.

C. VERTICAL AND HORIZONTAL CONTROL

Final vertical correction processing was completed by the field unit with no additional corrections required by Atlantic Hydrographic Branch personnel. The field unit applied verified water levels in conjunction with the preliminary tidal zoning which was accepted and approved by N/OPSI CO-OPS as the final zoning for H11601. Sounding datum is Mean Lower Low Water (MLLW). Vertical datum is Mean High Water (MHW).

Horizontal control used for this survey during data acquisition is based upon the North American Datum of 1983 (NAD83), UTM projection zone 18. Office ENC processing of this survey required translating the datum to meet S-57 ENC requirements. The horizontal geodetic datum was translated to Latitude and Longitude (LLDG) World Geodetic System-84 (WGS-84) during CARIS Base Manager processing.

D. RESULTS AND RECOMMENDATIONS

Chart Comparison

12327 (101 st. Edition, Apr./08
Corrected through NM, Apr. 26/08
Corrected through LNM, Apr. 15/08
Scale 1:40,000

12350 (59th. Edition, Mar. /06)
Corrected through NM Mar. 11/06
Corrected through LNM Mar. 28/06
Scale 1:20,000

12402 (10 the Edition, May /06)
Corrected through NM May 06/06
Corrected through LNM May 02/06
Scale 1:15,000

ENC Comparison

US5NY1BM

New York Harbor
Edition 17
Update Application Date 2008-11-18
Issue Date 2008-11-18
References: Charts 12327

US5NY50M

Jamaica Bay and Rockaway Inlet Edition 7 Update Application Date 2008-02-07 Issue Date 2008-10-31 References: Charts 12350

H11601

ENC Comparison

US5NY19M

New York Lower Bay - Northern Part Edition 11
Update Application Date 2008-11-14
Issue Date 2008-11-14
References: Charts 11402

Hydrography

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

- 1) Automated Wreck Obstruction Information System (AWOIS) Item #2744, a charted <u>dangerous sunken wreck, PD</u> in Latitude 40°34'11.17"N, Longitude 74°00'48.90"W was disproved by the present survey with 200% side scan. Present survey depths are 25 to 26 feet in the vicinity of the <u>dangerous sunken wreck, PD</u>. It is recommended that the <u>dangerous sunken wreck, PD</u> be deleted from the chart and present survey depths be charted.
- 2) A charted <u>dangerous sunken wreck, PA (rep 2005)</u> in Latitude 40°33'41.40"N, Longitude 74°00'15.60"W was neither verified nor disproved during present survey operations. It is recommended that the <u>dangerous sunken</u> wreck, PA (rep 2005) be retained as charted.
- 3) AWOIS Item #9752, a charted <u>Obstn 9 ft wire drag</u> <u>clearance depth</u> in Latitude 40°32′30.38″N, Longitude 73°59′16.49″W was neither verified nor disproved during present survey operations. It is recommended that the <u>Obstn 9 ft wire drag clearance depth</u> be retained as charted.
- 4) AWOIS Item #9753, a charted <u>Wk 9 ft wire drag</u> <u>clearance depth</u> in Latitude 40°32′30.00″N, Longitude 73°59′12.00″W was neither verified nor disproved during present survey operations. It is recommended that the **Wk 9 ft wire drag clearance depth** be retained as charted.

H11601

5) A charted <u>41 Obstn</u> in Latitude 40°33′58.9″N, Longitude 73°54′45.8″W was charted subsequent to the present survey. However present survey depths are 25 to 37 feet in the vicinity of the <u>41 Obstn</u>. It is recommended that the item be deferred to MCD Nautical Data Branch for research and final charting recommendation.

6) A charted <u>MARINA</u> in the vicinity of Latitude 40°35′10″N, Longitude 73°54′00″W was researched during office processing and determined to be charted incorrectly. The MARINA was digitized from United States Geological Survey (USGS), National Maps Seamless Server #60923186. It is recommended that the item be deferred to MCD Nautical Data Branch for research and final charting recommendation.

Adequacy of Survey

The present survey is adequate to supersede the charted bathymetry within the common area. Any features not specifically addressed either in the H-Cell File or the Blue Notes should be retained as charted. Refer to the Descriptive Report for further survey requirements recommended by the hydrographer.

Miscellaneous

Chart compilation was done by Atlantic Hydrographic Branch personnel, in Norfolk, Virginia. Compilation data will be forwarded to Marine Chart Division, Silver Spring, Maryland. See Section D.1. of this report for a list of the Raster Charts and Electronic Navigation Charts (ENC) used for compiling the present survey.

H11601

Norris A. Wike

Cartographer Verification of Data Evaluation and Analysis Report

AHB PRE-COMPILATION PROCESS H11601

Components	File Names
Contour Layer	H11601_CONTOURS
Survey Scale Soundings	H11601_SS_5M.hob
Chart Scale Soundings	H11601_CS_5M.hob
Feature Layer	H11601_Features.hob
Meta-Objects Layer	H11601_MCOVR.hob
	H11601_MQUAL.hob
Blue Notes	H11601_BlueNotes.hob

META-OBJECTS:

a. M_COV attributes

Acronym	Value
INFORM	H11601, OPR-B310-TJ-06, NOAA
SORDAT	20061022
CATCOV	1-coverage available
SORIND	US,US,SURVY,H11601

b. M_QUAL attributes

o. W_QOTE attributes	
Acronym	Value
CATZOC	Zone of confidence A2
INFORM	H11601, OPR-B310-TJ-06, NOAA
POSACC	10
SORDAT	20061022
SORIND	US,US,SURVY,H16019
SUREND	20061022
SURSTA	20060905

 ≅ H11601_combined_deep_5m_Final
 62 KB XML Document
 6/3/2008 3:49 PM

 ☎ H11601_combined_deep_5m_Final.hns
 70,755 KB HNS File
 6/3/2008 3:48 PM

APPROVAL SHEET H11601

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.

Norris A. Wike Cartographer,

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.

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:	
	Commander Shep Smith, NOAA
	Chief, Atlantic Hydrographic Branch