

H11600

<p>NOAA FORM 76-35A</p> <p>U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY</p> <p>DESCRIPTIVE REPORT</p>	
Type of Survey:	Navigable Area
Registry Number:	H11600
<p>LOCALITY</p> <p>State: New York</p> <p>General Locality: New York Harbor</p> <p>Sub-locality: Upper Bay</p>	
<p>2006</p> <p>CHIEF OF PARTY CDR Raymond C. Slagle, NOAA</p>	
DATE	LIBRARY & ARCHIVES

NOAA FORM 77-28 (11-72)	U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	REGISTRY NUMBER: <h2 style="text-align: center; margin: 0;">H11600</h2>																																																							
<h1 style="margin: 0;">HYDROGRAPHIC TITLE SHEET</h1>																																																									
INSTRUCTIONS: The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.																																																									
<table style="width: 100%; border: none;"> <tr> <td style="width: 25%;">State:</td> <td colspan="3">New York</td> </tr> <tr> <td>General Locality:</td> <td colspan="3">New York Harbor</td> </tr> <tr> <td>Sub-Locality:</td> <td colspan="3">Upper Bay</td> </tr> <tr> <td>Scale:</td> <td>1:20,000</td> <td>Date of Survey:</td> <td>08/13/06 to 10/09/06</td> </tr> <tr> <td>Instructions Dated:</td> <td>07/06/06</td> <td>Project Number:</td> <td>OPR-B310-TJ-06</td> </tr> <tr> <td>Vessel:</td> <td colspan="3">NOAA Ship THOMAS JEFFERSON, S-222</td> </tr> <tr> <td>Chief of Party:</td> <td colspan="3">CDR Raymond C. Slagle</td> </tr> <tr> <td>Surveyed by:</td> <td colspan="3">THOMAS JEFFERSON Personnel</td> </tr> <tr> <td rowspan="2">Soundings by:</td> <td colspan="3">Reson SeaBat 8101 multibeam sonar</td> </tr> <tr> <td colspan="3">Reson SeaBat 8125 multibeam sonar</td> </tr> <tr> <td>Graphic record checked by:</td> <td colspan="3">N/A</td> </tr> <tr> <td>Protracted by:</td> <td>N/A</td> <td>Automated Plot:</td> <td>N/A</td> </tr> <tr> <td>Verification by:</td> <td colspan="3">Atlantic Hydrographic Branch Personnel</td> </tr> <tr> <td>Soundings in:</td> <td colspan="3">Meters <i>feet</i> at MLLW</td> </tr> </table>			State:	New York			General Locality:	New York Harbor			Sub-Locality:	Upper Bay			Scale:	1:20,000	Date of Survey:	08/13/06 to 10/09/06	Instructions Dated:	07/06/06	Project Number:	OPR-B310-TJ-06	Vessel:	NOAA Ship THOMAS JEFFERSON, S-222			Chief of Party:	CDR Raymond C. Slagle			Surveyed by:	THOMAS JEFFERSON Personnel			Soundings by:	Reson SeaBat 8101 multibeam sonar			Reson SeaBat 8125 multibeam sonar			Graphic record checked by:	N/A			Protracted by:	N/A	Automated Plot:	N/A	Verification by:	Atlantic Hydrographic Branch Personnel			Soundings in:	Meters <i>feet</i> at MLLW		
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Remarks: 1) <i>All Times are UTC.</i> 2) <i>This is a Navigable Area Hydrographic Survey.</i> 3) <i>Projection is UTM Zone 18.</i> <i>Red, Bold, Italic notes were made during office processing.</i>																																																									

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DESCRIPTIVE REPORT

to accompany
HYDROGRAPHIC SURVEY H11600

Scale of Survey: 1:20,000
Year of Survey: 2006
NOAA Ship THOMAS JEFFERSON
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, New York. The original instructions are dated July 6, 2006*.

This Descriptive Report pertains to sheet "A" of project OPR-B310-TJ-06, which includes New York Harbor. The assigned registry number for this sheet is H11600, 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. Most of the survey area in the project area is 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 and 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.

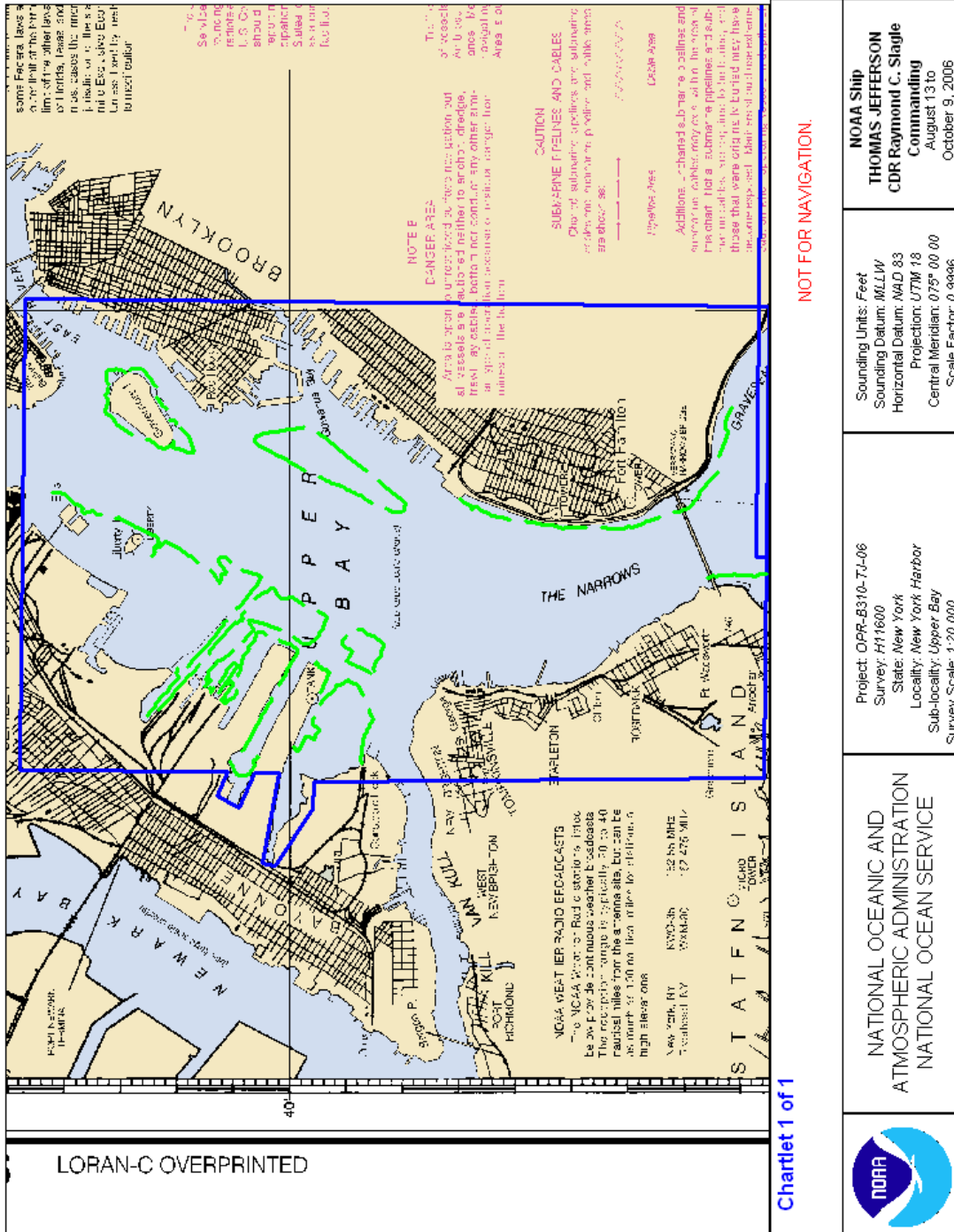
The Hydrographer set the inshore limit for survey at the 18-foot curve, except for instances where specific requests were made by various New York Harbor maritime organizations (i.e. Coast Guard Sector NY and NY Fireboat "FIREFIGHTER"). Additionally, any areas inside the sheet limits with no charted sounding data (mostly in the vicinity of piers) were not surveyed, with the exception of a specific request south of the Stapleton Pier. The Hydrographer recommends forwarding investigation of these unsurveyed areas to a Navigation Response Team.

** Included with original field submission.*

Statistics

- Lineal nautical miles of single beam only sounding lines – mainscheme only – 0
- Lineal nautical miles of multibeam only sounding lines – mainscheme only – 732.91
- Lineal nautical miles of side scan sonar only lines – mainscheme only – 295.83
- Lineal nautical miles of any combination of the above techniques (specify methods used) – 0
- Lineal nautical miles of crosslines – 35.08
- Lineal nautical miles of developments – 0.84
- Lineal nautical miles of shoreline/nearshore investigation – 0
- Specific dates of data acquisition – (August 13-18, 20-31; September 1, 15, and 18; October 9)
- Number of bottom samples collected – 0
- Number of items investigated either as a new development or from AWOIS – 33
- Number of square nautical miles – 12.77
- Number of items investigated that required additional time/effort in the field beyond the above survey operations – 0

The complete survey limits are shown in the chartlet below:



B.

DATA ACQUISITION AND PROCESSING

EQUIPMENT

Data were acquired by Hydrographic Survey Launches 3101 and 3102. Launches 3101 and 3102 are 9.5 meter Jensen aluminum vessels with transducer drafts of 0.8 meters.

Launch 3101 acquired shallow-water multibeam (SWMB) data with a Reson Seabat 8125 multibeam echosounder system. All positioning and attitude were determined with a TSS POS/MV 320 (version 4) GPS-aided internal navigation system.

Launch 3102 acquired shallow-water multibeam (SWMB) and side scan sonar data with a Reson Seabat 8101 multibeam echosounder system and Klein 5000 side scan sonar. All positioning and attitude were determined with a TSS POS/MV 320 (version 3) GPS-aided internal navigation system.

Refer to the Data Acquisition and Processing Report* (DAPR) dated 1 September 2006 for detailed equipment and vessel configuration information.

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. *Concur.*

Shallow Water Multibeam Quality Control

Precise timing latencies occurred on DN's 228, 230, 232, 233, 234, 235, and 261 in the Reson 8125 data. This dynamic latency was corrected appropriately in the CARIS hvf for Launch 3101 and as of the writing of this report was due to unknown causes. For more detailed information see section D.3.1 of the 2006 DAPR*.

The starboard outer beams (90-101) from the Reson 8101 MBES did not compare well with other MBES data. Data were closely examined and compared with surrounding data and the resulting BASE surfaces. Any MBES soundings found to adversely affect the surfaces or be unrepresentative of the actual bottom (outside the IHO Order 1 error specifications) were rejected. The Reson 8101 is scheduled to be calibrated during the 2006-2007 Winter Inport. *Concur. No systematic evidence of problem evident in field-submitted surfaces.*

** Included with original field submission.*

Crosslines

A total of 35.08 linear nautical miles (Inm) of cross lines were run, equivalent to 4.9% of the 732.19 linear nautical miles of main scheme data. Caris HIPS 6.0 Crossline-to-BASE Grid comparisons were performed to test if the crosslines compared to the BASE Surfaces met IHO Order I specification. The surfaces meet IHO Order I specifications 97.6% of the time. QC checks in the deeper sections of the sheet (mostly in the southern portion) show less than 95% confidence of IHO Order 1 in the starboard outer beams. This may be attributed to the Reson 8101 issue described previously. Results of all QC tests are included in Separate IV*. **Concur.**

Junctions

Hydrographic survey H11400 was conducted by NRT5 in 2006. This survey overlaps the current survey in the lower southeast corner. The difference in the soundings between the two surveys ranges from 1 to 3 feet. **Concur.**

Hydrographic survey H11601 was conducted by NOAA Ship THOMAS JEFFERSON in 2006. This survey overlaps the current survey in the lower southwest corner. Soundings between H11600 and H11601 compare within 1 foot. **Concur.**

Hydrographic survey H11353 was conducted by NOAA Ship THOMAS JEFFERSON in 2004. This survey overlaps the current survey in the upper northeast corner. Most of the soundings agree within 1 foot, except for a few discrete areas with differences between 1 to 2 feet. **Concur.**

Hydrographic survey H11395 was conducted by NRT5 in 2006. This survey overlaps the current survey in the upper northwest corner. The two surveys compare within 1 to 2 feet. **Concur.**

CORRECTIONS TO ECHO SOUNDING

All methods or instruments used were as described in the project DAPR*. A table detailing all sound velocity casts is located in Separate III*. **Do not concur. Separates III contains only the Hydrographic Letter of Instructions.**

DATA PROCESSING

Thirty - Seven CUBE surfaces cover the entire survey area. These were created with a resolution of 1 meter. One combined surface was created with a resolution of 2 meters. Two side scan mosaics were created. One for the 100% and another for the 200%. Both of these have a resolution of 1 meter. **Concur.**

*** Included with original field submission.**

Fieldsheet	Resolution
H11600_1	1 meter
H11600_2	1 meter
H11600_3	1 meter
H11600_4	1 meter
H11600_5	1 meter
H11600_6	1 meter
H11600_7	1 meter
H11600_8	1 meter
H11600_9	1 meter
H11600_10	1 meter
H11600_11	1 meter
H11600_12	1 meter
H11600_13	1 meter
H11600_14	1 meter
H11600_15	1 meter
H11600_16	1 meter
H11600_17	1 meter
H11600_18	1 meter
H11600_19	1 meter
H11600_20	1 meter
H11600_21	1 meter
H11600_22	1 meter
H11600_23	1 meter
H11600_24	1 meter
H11600_25	1 meter
H11600_26	1 meter
H11600_27	1 meter
H11600_28	1 meter
H11600_29	1 meter
H11600_30	1 meter
H11600_31	1 meter
H11600_32	1 meter
H11600_33	1 meter
H11600_34	1 meter
H11600_35	1 meter
H11600_36	1 meter
H11600_37	1 meter
H11600_combined	2 meter

Fieldsheet	Resolution
H11600_100SS_Mosaic	1meter
H11600_200SS_Mosaic	1meter

The following values were used for computing TPE.

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

C. VERTICAL AND HORIZONTAL CONTROL

VERTICAL CONTROL

The tidal datum for this project is Mean Lower Low Water (MLLW). The operating tide stations at The Battery, NY (851-8750) and Sandy Hook, NJ (853-1680) served as controls for datum determination. 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
NY3	-30	x1.04	851-8750
NY18	-18	x1.03	851-8750
NY19	-12	x1.03	851-8750
NY20	-6	x1.04	851-8750
NY21	0	x1.00	851-8750

A Request for Approved Tides letter was sent to N/OPS1 on September 22, 2006 (Appendix IV). Verified tides from the N/OPS1 CO-OPS website were downloaded on September 20, 2006 and October 18, 2006 and applied to all sounding data. Final tide zoning was received on February 21, 2007. *Concur.*

HORIZONTAL CONTROL

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 (286). No horizontal control stations were established 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

CHART COMPARISON

There are ~~seven~~ **four** charts and ~~three~~ **two** ENC's affected by this survey:

12334, 18th edition, April 2004, scale 1:10,000
12333, 34th edition, December 2005, scale 1:15,000
12402, 10th edition, May 2006, scale 1:15,000
~~12337~~, 23rd edition, October 2005, scale 1:20,000
12327, 98th edition, September 2005, scale 1:40,000
~~12326~~, 50th edition, May 2006, scale 1:80,000
~~12300~~, 45th edition, March 2005, scale 1:400,000
~~US3NY01M~~ 8th edition June 2006, scale 1:400,000
~~US5NY19M~~ 3rd edition March 2006, scale 1:15,000
~~US2EC03M~~ 5th edition June 2006, scale 1:200,000

The ENC's that encompass the area are US5NY1CM and US5NY1DM.

General Agreement with Charted soundings

The soundings were compared to those on charts 12335, 12334, and 12402. Most of the soundings have a difference of 1 to 2 feet. There are four areas that have significant shoaling. South of the Military Ocean Terminal there is a difference of up to 12 feet. The area around Stapleton Pier also has a difference of up to 12 feet. South of the 39th Street Pier there is a difference of up to 14 feet. North of Robbins Reef there is a difference of up to 6 feet. These areas are all described in Appendix *I. ***Concur.***

The soundings in Constable Hook Reach agree with the controlling depths. ***Concur.***

AWOIS Items and Significant Contacts

Fifty - seven AWOIS items were assigned to this project. Of these, twenty - eight were fully investigated and 5 were information only items. See Appendix II* for the applicable feature reports. ***Concur with clarification. Sixty-four AWOIS items are addressed in Pydro, seven of which were not assigned to the field unit.***

Dangers to Navigation

A total of forty - four Dangers to Navigation (DTONs) were reported by the Hydrographer to N/CS26 (MCD). For the complete DTON reports (sent August 14, August 26, September 25, October 12, and October 16, 2006), see Appendix I*. ***Concur.***

**** Included with original field submission.***

Charted Features

All charted point features are addressed in the Survey Feature Reports section (Appendix II*). *Concur.*

ADDITIONAL RESULTS

Aids to Navigation and Other Detached Positions

All of the aids to navigation are correctly charted except G C “9”, R N “8”, G “27”, and W Or C. Buoy G C “9” is located approximately 72 meters east of its charted position. Buoy R N “8” is located approximately 55 meters south of its charted position. Buoy G “27” is located approximately 52 meters south of its charted position. No block and chain was seen for buoy W Or C.

US Coast Guard Sector New York was notified of these buoys off position. A DTON report for these was not submitted. The Coast Guard will investigate or reposition these. Correspondence can be found in Appendix V*. *Concur.*

Detached positions were taken by a new pier and some charted ruins. The ruins are located on the west side of the Anchorage Channel. A new pier was built over ruins in the vicinity of Owls Head Park. *Concur.*

Bridges and Overhead Cables

The only bridge within the survey limits is the Verrazano - Narrows Bridge. No shoreline verification was conducted. Imagery and bathymetry acquired over the bridge supports show it is charted properly. No overhead cables were observed over this survey area. *Concur.*

Ferry Routes

The New York City Department of Transportation ferries follow a set route from St. George on Staten Island north up the northern portion of the Anchorage Channel to The Battery in southern Manhattan. Seastreak ferries follow three set routes. These go from: (1) Atlantic Highlands in Monmouth County, NJ, to Pier 11 at Wall Street and East 34th Street, Manhattan; (2) Highlands in Monmouth County, NJ, to Pier 11 at Wall Street and East 34th Street, Manhattan; and (3) Highlands, NJ, to Shea Stadium, Queens. There are many other public and private ferries that transit the Manhattan/Hudson River/East River areas. Sightseeing boats transit between Ellis Island, Liberty Island, and Manhattan. *Concur.*

** Included with original field submission.*

Submarine Cables and Pipelines

There are two visible pipelines within the survey limits. One extends from Red Hook to Governors Island. The other is visible east of Robbins Reef. There are seven other charted pipelines which are not visible. Retain all pipelines as charted. *Concur.*

E. APPROVAL SHEET

**OPR-B310-TJ-06
New York Harbor
New York**

**Upper Bay
Survey Registry No. H11600**

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.

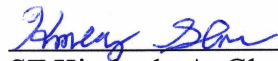
This survey is adequate to supersede all prior surveys in common areas, and for application to the relevant NOS nautical charts.

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:



ST Kimberly A. Glomb
Sheet Manager

Approved and Forwarded:

LT Christiaan VanWestendorp
Field Operations Officer

CDR Raymond C. Slagle, NOAA
Commanding Officer

APPENDIX I

DANGERS TO NAVIGATION REPORT

H11600 Dangers to Navigation

Registry Number: H11600
State: New York
Locality: New York Harbor
Sub-locality: Upper Bay
Project Number: OPR-B310-TJ-06
Survey Dates: 13 August 2006 - 09 October 2006

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
12334	67th	04/01/2004	1:10,000 (12334_1)	[L]NTM: ?
12335	40th	09/01/2003	1:10,000 (12335_1)	[L]NTM: ?
12333	34th	12/01/2005	1:15,000 (12333_1)	[L]NTM: ?
12337	23rd	10/01/2005	1:20,000 (12337_1)	[L]NTM: ?
12327	101st	04/01/2008	1:40,000 (12327_1)	USCG LNM: 04/22/2008 (04/22/2008) CHS NTM: None (01/25/2008) NGA NTM: 06/17/2006 (04/26/2008)
12363	40th	06/01/2005	1:80,000 (12363_1)	[L]NTM: ?
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

No.	Name	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	DTON1 Wreck - 1088/20	Wreck	8.69 m	40° 37' 40.7" N	074° 02' 36.0" W	---
1.2	DTON5 MOT Shoal 1589/145	Shoal	8.74 m	40° 39' 53.2" N	074° 04' 55.1" W	---
1.3	DTON5 MOT Shoal 2483/230	Shoal	9.82 m	40° 39' 49.7" N	074° 04' 47.3" W	---
1.4	DTON5 MOT Shoal 3810/212	Shoal	9.69 m	40° 39' 45.3" N	074° 04' 34.8" W	---

1.5	DTON5 MOT Shoal 4267/240	Shoal	10.30 m	40° 39' 43.5" N	074° 04' 31.0" W	---
1.6	DTON5 MOT Shoal 4750/204	Shoal	9.09 m	40° 39' 47.4" N	074° 04' 42.8" W	---
1.7	DTON4 9050/233 - obstn	Obstruction	5.43 m	40° 40' 32.8" N	074° 04' 30.3" W	---
1.8	DTON5 SP Shoal 1590/143	Shoal	6.81 m	40° 37' 45.4" N	074° 04' 19.3" W	---
1.9	DTON Obstruction - 1631/239	Obstruction	14.11 m	40° 41' 20.6" N	074° 01' 47.2" W	---
1.10	Obstruction - 2292/67	Obstruction	8.97 m	40° 41' 23.9" N	074° 00' 38.8" W	---
1.11	DTON4 Obstruction - 74/135	Shoal	10.71 m	40° 41' 45.1" N	074° 00' 30.3" W	---
1.12	DTON4 81/239 - obstn	Sounding	11.77 m	40° 40' 40.5" N	074° 01' 20.9" W	---
1.13	DTON2 1549/158 - obstn	Sounding	11.83 m	40° 40' 20.4" N	074° 01' 15.4" W	---
1.14	DTON2 2549/1 - obstn	Sounding	11.42 m	40° 40' 34.2" N	074° 01' 17.8" W	---
1.15	DTON4 Obstruction - 773/211	Sounding	11.07 m	40° 41' 08.2" N	074° 00' 47.6" W	---
1.16	DTON4 Obstruction - 120/218	Sounding	12.94 m	40° 41' 23.0" N	074° 00' 26.7" W	---
1.17	DTON4 Obstruction - 826/194	Sounding	15.17 m	40° 41' 11.6" N	074° 02' 11.5" W	---
1.18	DTON4 151/211 - Obstn	Obstruction	4.67 m	40° 41' 13.7" N	074° 02' 36.1" W	---
1.19	DTON5 39P Shoal 720/123	Sounding	5.90 m	40° 39' 31.4" N	074° 01' 01.2" W	---
1.20	DTON5 39P Shoal 1072/17	Sounding	6.60 m	40° 39' 29.7" N	074° 00' 57.7" W	---
1.21	DTON5 39P Shoal 1257/40	Sounding	6.47 m	40° 39' 28.6" N	074° 00' 56.1" W	---
1.22	DTON5 39P Shoal 906/226	Sounding	6.37 m	40° 39' 31.8" N	074° 00' 59.8" W	---
1.23	DTON5 39P Shoal 1041/235	Sounding	6.05 m	40° 39' 32.5" N	074° 01' 01.2" W	---
1.24	DTON5 MOT Shoal 111/143	Sounding	8.22 m	40° 39' 54.4" N	074° 05' 00.2" W	---
1.25	DTON5 MOT Shoal 540/9	Sounding	8.74 m	40° 39' 49.3" N	074° 04' 54.7" W	---
1.26	DTON5 MOT Shoal 965/232	Sounding	6.92 m	40° 39' 46.8" N	074° 04' 57.3" W	---
1.27	AWOIS #10654/DTON4 372/32 - Obstn	Sounding	13.88 m	40° 38' 16.1" N	074° 03' 01.4" W	---
1.28	DTON4 Obstruction - 906/7	Sounding	8.19 m	40° 37' 25.8" N	074° 02' 39.8" W	---
1.29	DTON4 Obstruction - 1021/49	Obstruction	15.76 m	40° 38' 43.6" N	074° 03' 43.2" W	---
1.30	DTON5 PH Shoal 614/33	Shoal	9.09 m	40° 39' 37.7" N	074° 03' 57.3" W	---
1.31	DTON5 PH Shoal 386/17	Shoal	8.66 m	40° 39' 36.9" N	074° 03' 53.7" W	---
1.32	DTON5 PH Shoal 449/6	Shoal	8.68 m	40° 39' 34.6" N	074° 03' 55.9" W	---
1.33	DTON5 PH Shoal 781/12	Shoal	8.10 m	40° 39' 33.8" N	074° 03' 49.5" W	---
1.34	DTON5 PH Shoal 908/44	Obstruction	8.53 m	40° 39' 35.5" N	074° 03' 51.6" W	---
1.35	DTON5 MOT Shoal 1622/75	Sounding	9.49 m	40° 39' 51.6" N	074° 04' 50.3" W	---
1.36	DTON5 MOT Shoal 2070/21	Sounding	8.36 m	40° 39' 53.7" N	074° 04' 57.7" W	---
1.37	DTON5 MOT Shoal 141/47	Shoal	7.75 m	40° 39' 56.7" N	074° 05' 03.1" W	---
1.38	DTON PH Shoal 520/8	Shoal	9.05 m	40° 39' 41.0" N	074° 03' 59.3" W	---
1.39	DTON4 3360/11	Obstruction	12.06 m	40° 39' 25.7" N	074° 02' 51.3" W	---
1.40	DTON4 943/47	Obstruction	9.25 m	40° 36' 51.8" N	074° 02' 33.2" W	---

1.41	DTON5 SP Shoal 205/46	Shoal	8.22 m	40° 37' 41.2" N	074° 04' 11.3" W	---
1.42	DTON5 SP Shoal427/2	Shoal	7.06 m	40° 37' 42.8" N	074° 04' 15.9" W	---
1.43	DTON5 SP Shoal 113/2	Shoal	6.47 m	40° 37' 44.2" N	074° 04' 19.9" W	---
1.44	Sounding on Shoal - 293/135	Shoal	11.51 m	40° 40' 54.8" N	074° 00' 57.7" W	---

1 - DR_DToN

1.1) DTON1 Wreck - 1088/20**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 40° 37' 40.7" N, 074° 02' 36.0" W
Least Depth: 8.69 m (= 28.50 ft = 4.751 fm = 4 fm 4.50 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.369 m
Timestamp: 2006-226.13:52:51.709 (08/14/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_226 / 103_1350
Profile/Beam: 1088/20
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted dangerous wreck acquired with Reson 8101 MBES and Klein 5000 SSS. Wreck appears to have an elongated mast and deep scour south of the hull. Wreck deemed a Danger to Navigation.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_reson8101/2006_226/103_1350	1088/20	0.00	000.0	Primary
h11600/tj_3101_reson8125/2006_241/201_1646	3436/164	0.93	140.8	Secondary
h11600/tj_3102_klein5000_sss100/2006-226/106_1309	0001	4.21	086.8	Secondary
h11600/tj_3102_klein5000_sss200/2006-236/223_1401	0004	14.78	110.5	Secondary
h11600/tj_3102_klein5000_sss200/2006-236/222_1416	0003	19.72	114.0	Secondary (grouped)
h11600/tj_3102_dp/2006-226/3102_08142006	2/1	25.66	101.8	Secondary (grouped)
h11600/tj_3102_klein5000_sss100/2006-226/103_1317	0001	28.43	126.1	Secondary (grouped)
h11600/tj_3102_klein5000_sss100/2006-226/105_1313	0001	29.94	120.4	Secondary (grouped)
h11600/tj_3102_klein5000_sss100/2006-235/124_1451	0003	30.34	130.9	Secondary (grouped)

Hydrographer Recommendations

Chart dangerous wreck with least depth 8.69 meters (28.5 feet).

Cartographically-Rounded Depth (Affected Charts):

28ft (12334_1, 12327_1, 12326_1)

4 $\frac{3}{4}$ fm (12300_1, 13006_1, 13003_1, 14500_1)

8.7m (5161_1)

S-57 Data

Geo object 1: Wreck (WRECKS)
Attributes: CATWRK - 2:dangerous wreck
CONVIS - 2:not visual conspicuous
TECSOU - 3:found by multi-beam
VALSOU - 8.688 m
VERDAT - 12:Mean lower low water
WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Obstrn is currently charted on the continual update raster as of 12/01/08.

1.2) DT0N5 MOT Shoal 1589/145

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 39' 53.2" N, 074° 04' 55.1" W
Least Depth: 8.74 m (= 28.69 ft = 4.782 fm = 4 fm 4.69 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) ± 0.980 m ; TVU (TPEv) ± 0.367 m
Timestamp: 2006-225.13:57:02.325 (08/13/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_225 / 370_1355
Profile/Beam: 1589/145
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Sounding data (Reson 8125 MBES) reveals this significantly shoal sounding over a charted sounding in the vicinity of Military Ocean Terminal. Soundings corrected to MLLW with verified water levels and final tide zoning. Other data suggest significant shoaling in the surrounding area.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_225/370_1355	1589/145	0.00	000.0	Primary

Hydrographer Recommendations

Update charted sounding to 28 ft.

Cartographically-Rounded Depth (Affected Charts):

28ft (12334_1, 12333_1, 12327_1, 12326_1)
 4 $\frac{3}{4}$ fm (12300_1, 13006_1, 13003_1, 14500_1)
 8.7m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: QUASOU - 1:depth known
 STATUS - 1:permanent
 TECSOU - 3:found by multi-beam

Office Notes

Do not concur. Chart current survey soundings.

1.3) DT0N5 MOT Shoal 2483/230

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 39' 49.7" N, 074° 04' 47.3" W
Least Depth: 9.82 m (= 32.22 ft = 5.370 fm = 5 fm 2.22 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.368 m
Timestamp: 2006-225.13:58:03.270 (08/13/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_225 / 370_1355
Profile/Beam: 2483/230
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Sounding data (Reson 8125 MBES) reveals this significantly shoal sounding over a charted sounding in the vicinity of Military Ocean Terminal. Soundings corrected to MLLW with verified water levels and final tide zoning. Other data suggest significant shoaling in the surrounding area.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_225/370_1355	2483/230	0.00	000.0	Primary

Hydrographer Recommendations

Update charted sounding to 32 ft.

Cartographically-Rounded Depth (Affected Charts):

32ft (12334_1, 12333_1, 12327_1, 12326_1)
 5 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)
 9.8m (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

Do not concur. Chart current survey soundings.

1.4) DT0N5 MOT Shoal 3810/212

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 39' 45.3" N, 074° 04' 34.8" W
Least Depth: 9.69 m (= 31.78 ft = 5.297 fm = 5 fm 1.78 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) ± 0.980 m ; TVU (TPEv) ± 0.367 m
Timestamp: 2006-225.13:59:38.743 (08/13/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_225 / 370_1355
Profile/Beam: 3810/212
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Sounding data (Reson 8125 MBES) reveals this significantly shoal sounding over a charted sounding in the vicinity of Military Ocean Terminal. Soundings corrected to MLLW with verified water levels and final tide zoning. Other data suggest significant shoaling in the surrounding area.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_225/370_1355	3810/212	0.00	000.0	Primary

Hydrographer Recommendations

Update charted sounding to 32 ft.

Cartographically-Rounded Depth (Affected Charts):

32ft (12334_1, 12333_1, 12327_1, 12326_1)
 5 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)
 9.7m (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

Do not concur. Chart current survey soundings.

1.5) DT0N5 MOT Shoal 4267/240

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 39' 43.5" N, 074° 04' 31.0" W
Least Depth: 10.30 m (= 33.78 ft = 5.630 fm = 5 fm 3.78 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.369 m
Timestamp: 2006-225.14:00:11.623 (08/13/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_225 / 370_1355
Profile/Beam: 4267/240
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Sounding data (Reson 8125 MBES) reveals this significantly shoal sounding over a charted sounding in the vicinity of Military Ocean Terminal. Soundings corrected to MLLW with verified water levels and final tide zoning. Other data suggest significant shoaling in the surrounding area.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_225/370_1355	4267/240	0.00	000.0	Primary

Hydrographer Recommendations

Update charted sounding to 34 ft.

Cartographically-Rounded Depth (Affected Charts):

34ft (12334_1, 12333_1, 12327_1, 12326_1)
 5 ½fm (12300_1, 13006_1, 13003_1, 14500_1)
 10.3m (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

Do not concur. Chart current survey soundings.

1.6) DT0N5 MOT Shoal 4750/204

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 39' 47.4" N, 074° 04' 42.8" W
Least Depth: 9.09 m (= 29.81 ft = 4.968 fm = 4 fm 5.81 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-225.13:51:26.623 (08/13/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_225 / 845_1346
Profile/Beam: 4750/204
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Sounding data (Reson 8125 MBES) reveals this significantly shoal sounding over a charted sounding in the vicinity of Military Ocean Terminal. Soundings corrected to MLLW with verified water levels and final tide zoning. Other data suggest significant shoaling in the surrounding area.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_225/845_1346	4750/204	0.00	000.0	Primary
h11600/tj_3102_reson8101/2006_240/367_1641	1250/15	6.73	257.5	Secondary

Hydrographer Recommendations

Update charted sounding to 30 ft.

Cartographically-Rounded Depth (Affected Charts):

30ft (12334_1, 12333_1, 12327_1, 12326_1)

5fm (12300_1, 13006_1, 13003_1, 14500_1)

9.1m (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

Do not concur. Chart current survey soundings.

1.7) DT0N4 9050/233 - obstn**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 40° 40' 32.8" N, 074° 04' 30.3" W
Least Depth: 5.43 m (= 17.82 ft = 2.971 fm = 2 fm 5.82 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-225.14:38:52.517 (08/13/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_225 / 872_1431
Profile/Beam: 9050/233
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted dangerous obstructions grouped acquired with Reson 8125 MBES and 200% Klein 5000 side scan. Soundings were corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_225/872_1431	9050/233	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-225/340_1511	0014	0.73	006.9	Secondary

Hydrographer Recommendations

Chart dangerous obstruction with least depth 5.43 meters (17.82 feet).

Cartographically-Rounded Depth (Affected Charts):

18ft (12334_1, 12333_1, 12327_1, 12326_1)

3fm (12300_1, 13006_1, 13003_1, 14500_1)

5.4m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam

VALSOU - 5.433 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Obstn is currently charted on the continual update raster as of 12/01/08 as a 17ft obstn, update LD to 18ft.

1.8) DT0N5 SP Shoal 1590/143

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 37' 45.4" N, 074° 04' 19.3" W
Least Depth: 6.81 m (= 22.35 ft = 3.724 fm = 3 fm 4.35 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) ± 0.980 m ; TVU (TPEv) ± 0.367 m
Timestamp: 2006-226.12:22:02.279 (08/14/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_226 / 151_1219
Profile/Beam: 1590/143
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Sounding data (Reson 8125 MBES) reveals this significantly shoal sounding over a charted sounding in the vicinity of Military Ocean Terminal. Soundings corrected to MLLW with verified water levels and final tide zoning. Other data suggest significant shoaling in the surrounding area.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_226/151_1219	1590/143	0.00	000.0	Primary

Hydrographer Recommendations

Update charted sounding to 22 ft.

Cartographically-Rounded Depth (Affected Charts):

22ft (12334_1, 12333_1, 12327_1, 12326_1)
 3 $\frac{3}{4}$ fm (12300_1, 13006_1, 13003_1, 14500_1)
 6.8m (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

Do not concur. Chart current survey soundings.

1.9) DT0N Obstruction - 1631/239

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 41' 20.6" N, 074° 01' 47.2" W
Least Depth: 14.11 m (= 46.30 ft = 7.716 fm = 7 fm 4.30 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) ± 0.981 m ; TVU (TPEv) ± 0.371 m
Timestamp: 2006-226.18:30:15.404 (08/14/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_226 / 283_1826
Profile/Beam: 1631/239
Charts Affected: 12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted dangerous obstruction acquired with Reson 8125 MBES and 200% Klein 5000 side scan. Soundings were corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_226/283_1826	1631/239	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-227/208_1451	0001	1.38	305.0	Secondary
h11600/tj_3102_klein5000_sss100/2006-226/109_1515	0002	5.55	195.1	Secondary

Hydrographer Recommendations

Chart dangerous obstruction with least depth 14.11 meters (46.3 feet).

Cartographically-Rounded Depth (Affected Charts):

46ft (12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1)

7 $\frac{3}{4}$ fm (12300_1, 13006_1, 13003_1, 14500_1)

14.1m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 6:least depth known

TECSOU - 3:found by multi-beam

VALSOU - 14.111 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Obstr is currently charted on the continual update raster as of 12/01/08.

1.10) Obstruction - 2292/67**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 40° 41' 23.9" N, 074° 00' 38.8" W
Least Depth: 8.97 m (= 29.42 ft = 4.903 fm = 4 fm 5.42 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-227.12:49:52.907 (08/15/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_227 / 123_1247
Profile/Beam: 2292/67
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted dangerous obstruction acquired with Reson 8125 MBES and 200% Klein 5000 side scan. Soundings were corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_227/123_1247	2292/67	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-226/116_1835	0001	2.98	358.3	Secondary
h11600/tj_3102_klein5000_sss100/2006-225/155_1714	0017	11.95	191.8	Secondary
h11600/tj_3101_reson8125/2006_227/123_1221	1648/158	14.57	204.5	Secondary
h11600/tj_3102_klein5000_sss200/2006-227/212_1734	0002	17.95	233.3	Secondary (grouped)
h11600/tj_3102_klein5000_sss100/2006-226/114_1823	0007	26.62	240.2	Secondary (grouped)
h11600/tj_3102_klein5000_sss200/2006-227/213_1758	0002	48.59	332.5	Secondary (grouped)

Hydrographer Recommendations

Chart dangerous obstruction with least depth 8.97 meters (29.42 feet).

Cartographically-Rounded Depth (Affected Charts):

29ft (12334_1, 12335_1, 12327_1, 12326_1, 12363_1)

4 $\frac{3}{4}$ fm (12300_1, 13006_1, 13003_1, 14500_1)

9.0m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
TECSOU - 3:found by multi-beam
VALSOU - 8.967 m
VERDAT - 12:Mean lower low water
WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Obstrn is currently charted on the continual update raster as of 12/01/08.

1.11) DT0N4 Obstruction - 74/135

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 41' 45.1" N, 074° 00' 30.3" W
Least Depth: 10.71 m (= 35.14 ft = 5.857 fm = 5 fm 5.14 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-227.13:05:02.705 (08/15/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_227 / 127_1304
Profile/Beam: 74/135
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted dangerous obstruction acquired with Reson 8125 MBES and 200% Klein 5000 side scan. Soundings were corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_227/127_1304	74/135	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-227/212_1734	0001	2.54	119.3	Secondary

Hydrographer Recommendations

Chart a dangerous obstruction with least depth 10.71 meters (35.14 feet).

Cartographically-Rounded Depth (Affected Charts):

35ft (12334_1, 12335_1, 12327_1, 12326_1, 12363_1)

5 $\frac{3}{4}$ fm (12300_1, 13006_1, 13003_1, 14500_1)

10.7m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam

VALSOU - 10.711 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Obstrn is currently charted on the continual update raster as of 12/01/08.

1.12) DT0N4 81/239 - obstn**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 40° 40' 40.5" N, 074° 01' 20.9" W
Least Depth: 11.77 m (= 38.63 ft = 6.438 fm = 6 fm 2.63 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.370 m
Timestamp: 2006-227.16:59:09.439 (08/15/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_227 / 139_1658
Profile/Beam: 81/239
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted dangerous obstruction acquired with Reson 8125 MBES and 200% Klein 5000 side scan. Soundings were corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_227/139_1658	81/239	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-227/228_1322	0003	23.30	024.4	Secondary (grouped)

Hydrographer Recommendations

Chart dangerous obstruction with least depth 11.77 meters (38.63 feet).

Cartographically-Rounded Depth (Affected Charts):

38ft (12334_1, 12335_1, 12327_1, 12326_1)
6 ½fm (12300_1, 13006_1, 13003_1, 14500_1)
11.8m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: VALSOU - 11.773 m
WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Obstn is currently charted on the continual update raster as of 12/01/08 as a 39ft OBSTN, update least depth to 38ft.

1.13) DT0N2 1549/158 - obstn**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 40° 40' 20.4" N, 074° 01' 15.4" W
Least Depth: 11.83 m (= 38.80 ft = 6.467 fm = 6 fm 2.80 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-227.18:19:22.228 (08/15/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_227 / 174_1816
Profile/Beam: 1549/158
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted dangerous obstruction acquired with Reson 8125 MBES and 200% Klein 5000 side scan. Soundings were corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_227/174_1816	1549/158	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-227/133_1245	0002	1.43	093.9	Secondary
h11600/tj_3102_klein5000_sss200/2006-227/229_1310	0004	2.10	253.8	Secondary

Hydrographer Recommendations

Chart dangerous obstruction with least depth 11.83 meters (38.8 feet).

Cartographically-Rounded Depth (Affected Charts):

39ft (12334_1, 12327_1, 12326_1)

6 ½fm (12300_1, 13006_1, 13003_1, 14500_1)

11.8m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: VALSOU - 11.827 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Obstrn is currently charted on the continual update raster as of 12/01/08.

1.14) DT0N2 2549/1 - obstn**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 40° 40' 34.2" N, 074° 01' 17.8" W
Least Depth: 11.42 m (= 37.48 ft = 6.246 fm = 6 fm 1.48 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.370 m
Timestamp: 2006-227.18:21:00.790 (08/15/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_227 / 174_1816
Profile/Beam: 2549/1
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted dangerous obstruction acquired with Reson 8125 MBES and 200% Klein 5000 side scan. Soundings were corrected to MLLW with observed water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_227/174_1816	2549/1	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-227/133_1245	0003	2.26	095.4	Secondary
h11600/tj_3102_klein5000_sss200/2006-227/229_1310	0002	2.44	339.8	Secondary

Hydrographer Recommendations

Chart dangerous obstruction with least depth 11.42 meters (37.48 feet).

Cartographically-Rounded Depth (Affected Charts):

37ft (12334_1, 12335_1, 12327_1, 12326_1)
 6 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)
 11.4m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: VALSOU - 11.423 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Obstrn is currently charted on the continual update raster as of 12/01/08.

1.15) DT0N4 Obstruction - 773/211

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 41' 08.2" N, 074° 00' 47.6" W
Least Depth: 11.07 m (= 36.32 ft = 6.054 fm = 6 fm 0.32 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.368 m
Timestamp: 2006-227.17:12:32.478 (08/15/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_227 / 387_1711
Profile/Beam: 773/211
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted dangerous obstruction acquired with Reson 8125 MBES and 200% Klein 5000 side scan. Soundings were corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_227/387_1711	773/211	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-226/122_1910	0001	1.59	240.0	Secondary
h11600/tj_3102_klein5000_sss200/2006-227/217_1754	0003	7.67	156.8	Secondary

Hydrographer Recommendations

Chart dangerous obstruction with least depth 11.07 meters (36.32 feet).

Cartographically-Rounded Depth (Affected Charts):

36ft (12334_1, 12335_1, 12327_1, 12326_1, 12363_1)

6fm (12300_1, 13006_1, 13003_1, 14500_1)

11.1m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: VALSOU - 11.071 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Obstrn is currently charted on the continual update raster as of 12/01/08.

1.16) DT0N4 Obstruction - 120/218**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 40° 41' 23.0" N, 074° 00' 26.7" W
Least Depth: 12.94 m (= 42.45 ft = 7.076 fm = 7 fm 0.45 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.368 m
Timestamp: 2006-227.13:55:40.980 (08/15/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_227 / 520_1355
Profile/Beam: 120/218
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted dangerous obstruction acquired with Reson 8125 MBES and 200% Klein 5000 side scan. Soundings were corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_227/520_1355	120/218	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-226/151_1903	0001	0.56	003.4	Secondary
h11600/tj_3102_klein5000_sss100/2006-226/117_1840	0002	2.41	077.2	Secondary

Hydrographer Recommendations

Chart dangerous obstruction with least depth 12.94 meters (42.45 feet).

Cartographically-Rounded Depth (Affected Charts):

42ft (12334_1, 12335_1, 12327_1, 12326_1, 12363_1)

7fm (12300_1, 13006_1, 13003_1, 14500_1)

12.9m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: VALSOU - 12.940 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Obstrn is currently charted on the continual update raster as of 12/01/08.

1.17) DT0N4 Obstruction - 826/194**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 40° 41' 11.6" N, 074° 02' 11.5" W
Least Depth: 15.17 m (= 49.78 ft = 8.297 fm = 8 fm 1.78 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-229.17:57:48.137 (08/17/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_229 / 347_1755
Profile/Beam: 826/194
Charts Affected: 12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted dangerous obstruction acquired with Reson 8125 MBES and 200% Klein 5000 side scan. Soundings were corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_229/347_1755	826/194	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-227/205_1523	0001	2.24	183.5	Secondary

Hydrographer Recommendations

Chart dangerous obstruction with least depth 15.17 meters (49.78 feet).

Cartographically-Rounded Depth (Affected Charts):

50ft (12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1)

8 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)

15.2m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: VALSOU - 15.173 m
WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Obstn is currently charted on the continual update raster as of 12/01/08.

1.18) DT0N4 151/211 - Obstrn**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 40° 41' 13.7" N, 074° 02' 36.1" W
Least Depth: 4.67 m (= 15.34 ft = 2.556 fm = 2 fm 3.34 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-234.19:03:43.622 (08/22/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_234 / 339_1903
Profile/Beam: 151/211
Charts Affected: 12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted dangerous obstruction acquired with Reson 8125 MBES and 200% Klein 5000 side scan. Soundings were corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_234/339_1903	151/211	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-225/159_1637	0001	3.21	291.5	Secondary

Hydrographer Recommendations

Chart dangerous obstruction with least depth 4.67 meters (15.34 feet).

Cartographically-Rounded Depth (Affected Charts):

15ft (12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_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
 TECSOU - 3:found by multi-beam

VALSOU - 4.675 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Obstrn is currently charted on the continual update raster as of 12/01/08.

1.19) DT0N5 39P Shoal 720/123**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 40° 39' 31.4" N, 074° 01' 01.2" W
Least Depth: 5.90 m (= 19.36 ft = 3.227 fm = 3 fm 1.36 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-239.17:35:43.336 (08/27/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_239 / 317_1734
Profile/Beam: 720/123
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Sounding data (Reson 8125 MBES) reveals this significantly shoal sounding over a charted sounding in the vicinity of the 39th Street Pier (Mitsui Terminal). Soundings corrected to MLLW with verified water levels and final tide zoning. Other data suggest significant shoaling in the surrounding area.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_239/317_1734	720/123	0.00	000.0	Primary

Hydrographer Recommendations

Update charted sounding to 19 ft.

Cartographically-Rounded Depth (Affected Charts):

19ft (12334_1, 12327_1, 12326_1)
 3 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)
 5.9m (5161_1)

S-57 Data

[None]

Office Notes

Do not concur. Chart current survey soundings.

1.20) DTON5 39P Shoal 1072/17**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 40° 39' 29.7" N, 074° 00' 57.7" W
Least Depth: 6.60 m (= 21.65 ft = 3.608 fm = 3 fm 3.65 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-239.17:36:18.116 (08/27/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_239 / 317_1734
Profile/Beam: 1072/17
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Sounding data (Reson 8125 MBES) reveals this significantly shoal sounding over a charted sounding in the vicinity of the 39th Street Pier (Mitsui Terminal). Soundings corrected to MLLW with verified water levels and final tide zoning. Other data suggest significant shoaling in the surrounding area.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_239/317_1734	1072/17	0.00	000.0	Primary

Hydrographer Recommendations

Update charted sounding to 21 ft.

Cartographically-Rounded Depth (Affected Charts):

21ft (12334_1, 12327_1, 12326_1)

3 ½fm (12300_1, 13006_1, 13003_1, 14500_1)

6.6m (5161_1)

S-57 Data

[None]

Office Notes

Do not concur. Chart current survey soundings.

1.21) DTON5 39P Shoal 1257/40**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 40° 39' 28.6" N, 074° 00' 56.1" W
Least Depth: 6.47 m (= 21.22 ft = 3.537 fm = 3 fm 3.22 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-239.17:36:36.394 (08/27/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_239 / 317_1734
Profile/Beam: 1257/40
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Sounding data (Reson 8125 MBES) reveals this significantly shoal sounding over a charted sounding in the vicinity of the 39th Street Pier (Mitsui Terminal). Soundings corrected to MLLW with verified water levels and final tide zoning. Other data suggest significant shoaling in the surrounding area.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_239/317_1734	1257/40	0.00	000.0	Primary

Hydrographer Recommendations

Update charted sounding to 21 ft.

Cartographically-Rounded Depth (Affected Charts):

21ft (12334_1, 12327_1, 12326_1)

3 ½fm (12300_1, 13006_1, 13003_1, 14500_1)

6.5m (5161_1)

S-57 Data

[None]

Office Notes

Do not concur. Chart current survey soundings.

1.22) DT0N5 39P Shoal 906/226**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 40° 39' 31.8" N, 074° 00' 59.8" W
Least Depth: 6.37 m (= 20.91 ft = 3.484 fm = 3 fm 2.91 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-239.17:38:15.946 (08/27/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_239 / 857_1736
Profile/Beam: 906/226
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Sounding data (Reson 8125 MBES) reveals this significantly shoal sounding over a charted sounding in the vicinity of the 39th Street Pier (Mitsui Terminal). Soundings corrected to MLLW with verified water levels and final tide zoning. Other data suggest significant shoaling in the surrounding area.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_239/857_1736	906/226	0.00	000.0	Primary

Hydrographer Recommendations

Update charted sounding to 21 ft.

Cartographically-Rounded Depth (Affected Charts):

21ft (12334_1, 12327_1, 12326_1)

3 ½fm (12300_1, 13006_1, 13003_1, 14500_1)

6.4m (5161_1)

S-57 Data

[None]

Office Notes

Do not concur. Chart current survey soundings.

1.23) DT0N5 39P Shoal 1041/235**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 40° 39' 32.5" N, 074° 01' 01.2" W
Least Depth: 6.05 m (= 19.86 ft = 3.309 fm = 3 fm 1.86 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-239.17:38:29.284 (08/27/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_239 / 857_1736
Profile/Beam: 1041/235
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Sounding data (Reson 8125 MBES) reveals this significantly shoal sounding over a charted sounding in the vicinity of the 39th Street Pier (Mitsui Terminal). Soundings corrected to MLLW with verified water levels and final tide zoning. Other data suggest significant shoaling in the surrounding area.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_239/857_1736	1041/235	0.00	000.0	Primary

Hydrographer Recommendations

Update charted sounding to 20 ft.

Cartographically-Rounded Depth (Affected Charts):

20ft (12334_1, 12327_1, 12326_1)

3 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)

6.1m (5161_1)

S-57 Data

[None]

Office Notes

Do not concur. Chart current survey soundings.

1.24) DT0N5 MOT Shoal 111/143

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 39' 54.4" N, 074° 05' 00.2" W
Least Depth: 8.22 m (= 26.96 ft = 4.494 fm = 4 fm 2.96 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) ± 0.980 m ; TVU (TPEv) ± 0.367 m
Timestamp: 2006-261.15:05:58.731 (09/18/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_261 / 150_1505
Profile/Beam: 111/143
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Sounding data (Reson 8125 MBES) reveals this significantly shoal sounding over a charted sounding in the vicinity of Military Ocean Terminal. Soundings corrected to MLLW with verified water levels and final tide zoning. Other data suggest significant shoaling in the surrounding area.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_261/150_1505	111/143	0.00	000.0	Primary

Hydrographer Recommendations

Update charted sounding to 27 ft.

Cartographically-Rounded Depth (Affected Charts):

27ft (12334_1, 12333_1, 12327_1, 12326_1)
 4 ½fm (12300_1, 13006_1, 13003_1, 14500_1)
 8.2m (5161_1)

S-57 Data

[None]

Office Notes

Do not concur. Chart current survey soundings.

1.25) DT0N5 MOT Shoal 540/9**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 40° 39' 49.3" N, 074° 04' 54.7" W
Least Depth: 8.74 m (= 28.67 ft = 4.779 fm = 4 fm 4.67 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.368 m
Timestamp: 2006-243.14:25:45.848 (08/31/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_243 / 318_1424
Profile/Beam: 540/9
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Sounding data (Reson 8125 MBES) reveals this significantly shoal sounding over a charted sounding in the vicinity of Military Ocean Terminal. Soundings corrected to MLLW with verified water levels and final tide zoning. Other data suggest significant shoaling in the surrounding area.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_243/318_1424	540/9	0.00	000.0	Primary

Hydrographer Recommendations

Update charted sounding to 28 ft.

Cartographically-Rounded Depth (Affected Charts):

28ft (12334_1, 12333_1, 12327_1, 12326_1)
 4 $\frac{3}{4}$ fm (12300_1, 13006_1, 13003_1, 14500_1)
 8.7m (5161_1)

S-57 Data

[None]

Office Notes

Do not concur. Chart current survey soundings.

1.26) DT0N5 MOT Shoal 965/232**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 40° 39' 46.8" N, 074° 04' 57.3" W
Least Depth: 6.92 m (= 22.70 ft = 3.783 fm = 3 fm 4.70 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-243.14:26:18.020 (08/31/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_243 / 318_1424
Profile/Beam: 965/232
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Sounding data (Reson 8125 MBES) reveals this significantly shoal sounding over a charted sounding in the vicinity of Military Ocean Terminal. Soundings corrected to MLLW with verified water levels and final tide zoning. Other data suggest significant shoaling in the surrounding area.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_243/318_1424	965/232	0.00	000.0	Primary

Hydrographer Recommendations

Update charted sounding to 22 ft.

Cartographically-Rounded Depth (Affected Charts):

22ft (12334_1, 12333_1, 12327_1, 12326_1)
 3 ¾fm (12300_1, 13006_1, 13003_1, 14500_1)
 6.9m (5161_1)

S-57 Data

[None]

Office Notes

Do not concur. Chart current survey soundings.

1.27) AWOIS #10654/DTON4 372/32 - Obstrn**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 40° 38' 16.1" N, 074° 03' 01.4" W
Least Depth: 13.88 m (= 45.54 ft = 7.590 fm = 7 fm 3.54 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.368 m
Timestamp: 2006-241.18:46:40.827 (08/29/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_241 / 184_1845
Profile/Beam: 372/32
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted dangerous obstruction acquired with Reson 8125 MBES and 200% Klein 5000 side scan. Soundings were corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_241/184_1845	372/32	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-236/226_1320	0001	2.19	272.1	Secondary
h11600/tj_3102_klein5000_sss100/2006-235/128_1437	0001	2.24	081.7	Secondary
h11600/tj_3102_klein5000_sss200/2006-236/227_1310	0001	3.72	131.5	Secondary

Hydrographer Recommendations

Chart dangerous obstruction with least depth 13.88 meters (45.54 feet).

Cartographically-Rounded Depth (Affected Charts):

45ft (12334_1, 12327_1, 12326_1)

7 ½fm (12300_1, 13006_1, 13003_1, 14500_1)

13.9m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: VALSOU - 13.881 m
WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. The item submitted as DT0N4 372/32 falls within the radius of a obstn PA. No other contacts fall within this AWOIS radius. It is therefore assumed that this Obstn is AWOIS 10654. Update depth and position of AWOIS item and remove PA text.

1.28) DT0N4 Obstruction - 906/7**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 40° 37' 25.8" N, 074° 02' 39.8" W
Least Depth: 8.19 m (= 26.88 ft = 4.479 fm = 4 fm 2.88 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.368 m
Timestamp: 2006-241.17:05:12.698 (08/29/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_241 / 199_1703
Profile/Beam: 906/7
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted dangerous obstruction acquired with Reson 8125 MBES and 200% Klein 5000 side scan. Soundings were corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_241/199_1703	906/7	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-235/124_1451	0005	4.61	144.7	Secondary
h11600/tj_3102_klein5000_sss200/2006-236/223_1401	0001	5.12	120.1	Secondary

Hydrographer Recommendations

Chart dangerous obstruction with least depth 8.19 meters (26.88 feet).

Cartographically-Rounded Depth (Affected Charts):

27ft (12334_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: Obstruction (OBSTRN)

Attributes: VALSOU - 8.192 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Obstrn is currently charted on the continual update raster as of 12/01/08.

1.29) DT0N4 Obstruction - 1021/49**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 40° 38' 43.6" N, 074° 03' 43.2" W
Least Depth: 15.76 m (= 51.70 ft = 8.617 fm = 8 fm 3.70 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-240.13:23:04.045 (08/28/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_240 / 739_1320
Profile/Beam: 1021/49
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted obstruction acquired with Reson 8125 MBES and 200% Klein 5000 side scan. Soundings were corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_240/739_1320	1021/49	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-236/207_1757	0001	0.89	247.2	Secondary
h11600/tj_3102_klein5000_sss200/2006-233/275_1203	0001	0.93	356.4	Secondary
h11600/tj_3102_klein5000_sss200/2006-234/276_1934	0002	2.47	312.1	Secondary

Hydrographer Recommendations

Chart obstruction with least depth 15.76 meters (51.70 feet).

Cartographically-Rounded Depth (Affected Charts):

51ft (12334_1, 12327_1, 12326_1)

8 ½fm (12300_1, 13006_1, 13003_1, 14500_1)

15.8m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 6:least depth known
TECSOU - 3:found by multi-beam
VALSOU - 15.758 m
VERDAT - 12:Mean lower low water
WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Obstrn is currently charted on the continual update raster as of 12/01/08.

1.30) DT0N5 PH Shoal 614/33**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 40° 39' 37.7" N, 074° 03' 57.3" W
Least Depth: 9.09 m (= 29.82 ft = 4.970 fm = 4 fm 5.82 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.369 m
Timestamp: 2006-239.15:54:32.203 (08/27/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_239 / 401_1553
Profile/Beam: 614/33
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Sounding data (Reson 8101 MBES) reveals this significantly shoal sounding over a charted sounding in the vicinity of Pierhead Channel. Soundings corrected to MLLW with verified water levels and final tide zoning. Other data suggest significant shoaling in the surrounding area.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_reson8101/2006_239/401_1553	614/33	0.00	000.0	Primary

Hydrographer Recommendations

Update charted sounding to 30 ft.

Cartographically-Rounded Depth (Affected Charts):

30ft (12334_1, 12333_1, 12327_1, 12326_1)

5fm (12300_1, 13006_1, 13003_1, 14500_1)

9.1m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: EXPSOU - 1:within the range of depth of the surrounding depth area
 QUASOU - 1:depth known
 STATUS - 1:permanent

TECSOU - 3:found by multi-beam

VERDAT - 12:Mean lower low water

Office Notes

Do not concur. Chart current survey soundings.

1.31) DT0N5 PH Shoal 386/17**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 40° 39' 36.9" N, 074° 03' 53.7" W
Least Depth: 8.66 m (= 28.42 ft = 4.736 fm = 4 fm 4.42 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.369 m
Timestamp: 2006-239.15:40:24.914 (08/27/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_239 / 405_1539
Profile/Beam: 386/17
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Sounding data (Reson 8101 MBES) reveals this significantly shoal sounding over a charted sounding in the vicinity of Pierhead Channel. Soundings corrected to MLLW with verified water levels and final tide zoning. Other data suggest significant shoaling in the surrounding area.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_reson8101/2006_239/405_1539	386/17	0.00	000.0	Primary

Hydrographer Recommendations

Update the charted sounding to 28 ft.

Cartographically-Rounded Depth (Affected Charts):

28ft (12334_1, 12333_1, 12327_1, 12326_1)
 4 $\frac{3}{4}$ fm (12300_1, 13006_1, 13003_1, 14500_1)
 8.7m (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

Office Notes

Do not concur. Chart current survey soundings.

1.32) DT0N5 PH Shoal 449/6**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 40° 39' 34.6" N, 074° 03' 55.9" W
Least Depth: 8.68 m (= 28.46 ft = 4.744 fm = 4 fm 4.46 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.369 m
Timestamp: 2006-239.15:37:08.594 (08/27/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_239 / 406_1536
Profile/Beam: 449/6
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Sounding data (Reson 8101 MBES) reveals this significantly shoal sounding over a charted sounding in the vicinity of Pierhead Channel. Soundings corrected to MLLW with verified water levels and final tide zoning. Other data suggest significant shoaling in the surrounding area.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_reson8101/2006_239/406_1536	449/6	0.00	000.0	Primary

Hydrographer Recommendations

Update the charted sounding to 28 ft.

Cartographically-Rounded Depth (Affected Charts):

28ft (12334_1, 12333_1, 12327_1, 12326_1)
 4 $\frac{3}{4}$ fm (12300_1, 13006_1, 13003_1, 14500_1)
 8.7m (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

Office Notes

Do not concur. Chart current survey soundings.

1.33) DT0N5 PH Shoal 781/12**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 40° 39' 33.8" N, 074° 03' 49.5" W
Least Depth: 8.10 m (= 26.57 ft = 4.429 fm = 4 fm 2.57 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.369 m
Timestamp: 2006-239.15:10:06.230 (08/27/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_239 / 663_1508
Profile/Beam: 781/12
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Sounding data (Reson 8101 MBES) reveals this significantly shoal sounding over a charted sounding in the vicinity of Pierhead Channel. Soundings corrected to MLLW with verified water levels and final tide zoning. Other data suggest significant shoaling in the surrounding area.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_reson8101/2006_239/663_1508	781/12	0.00	000.0	Primary

Hydrographer Recommendations

Update charted sounding to 26 ft.

Cartographically-Rounded Depth (Affected Charts):

26ft (12334_1, 12333_1, 12327_1, 12326_1)
 4 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)
 8.1m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: EXPSOU - 1:within the range of depth of the surrounding depth area
 QUASOU - 1:depth known
 STATUS - 1:permanent

TECSOU - 3:found by multi-beam

VERDAT - 12:Mean lower low water

Office Notes

Do not concur. Chart current survey soundings.

1.34) DT0N5 PH Shoal 908/44**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 40° 39' 35.5" N, 074° 03' 51.6" W
Least Depth: 8.53 m (= 28.00 ft = 4.666 fm = 4 fm 4.00 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.369 m
Timestamp: 2006-239.15:10:23.991 (08/27/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_239 / 663_1508
Profile/Beam: 908/44
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Sounding data (Reson 8101 MBES) reveals this significantly shoal sounding over a charted sounding in the vicinity of Pierhead Channel. Soundings corrected to MLLW with verified water levels and final tide zoning. Other data suggest significant shoaling in the surrounding area.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_reson8101/2006_239/663_1508	908/44	0.00	000.0	Primary

Hydrographer Recommendations

Update the charted sounding to 28 ft.

Cartographically-Rounded Depth (Affected Charts):

28ft (12334_1, 12333_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: 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

Office Notes

Do not concur. Chart current survey soundings.

1.35) DT0N5 MOT Shoal 1622/75**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 40° 39' 51.6" N, 074° 04' 50.3" W
Least Depth: 9.49 m (= 31.13 ft = 5.188 fm = 5 fm 1.13 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.369 m
Timestamp: 2006-240.16:59:05.670 (08/28/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_240 / 369_1655
Profile/Beam: 1622/75
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Sounding data (Reson 8101 MBES) reveals this significantly shoal sounding over a charted sounding in the vicinity of Military Ocean Terminal. Soundings corrected to MLLW with verified water levels and final tide zoning. Other data suggest significant shoaling in the surrounding area.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_reson8101/2006_240/369_1655	1622/75	0.00	000.0	Primary

Hydrographer Recommendations

Update charted sounding to 31 ft.

Cartographically-Rounded Depth (Affected Charts):

31ft (12334_1, 12333_1, 12327_1, 12326_1)
5 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)
9.5m (5161_1)

S-57 Data

[None]

Office Notes

Do not concur. Chart current survey soundings.

1.36) DT0N5 MOT Shoal 2070/21**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 40° 39' 53.7" N, 074° 04' 57.7" W
Least Depth: 8.36 m (= 27.43 ft = 4.572 fm = 4 fm 3.43 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.369 m
Timestamp: 2006-240.17:00:08.328 (08/28/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_240 / 369_1655
Profile/Beam: 2070/21
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Sounding data (Reson 8101 MBES) reveals this significantly shoal sounding over a charted sounding in the vicinity of Military Ocean Terminal. Soundings corrected to MLLW with verified water levels and final tide zoning. Other data suggest significant shoaling in the surrounding area.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_reson8101/2006_240/369_1655	2070/21	0.00	000.0	Primary

Hydrographer Recommendations

Update charted sounding to 27 ft.

Cartographically-Rounded Depth (Affected Charts):

27ft (12334_1, 12333_1, 12327_1, 12326_1)
 4 ½fm (12300_1, 13006_1, 13003_1, 14500_1)
 8.4m (5161_1)

S-57 Data

[None]

Office Notes

Do not concur. Chart current survey soundings.

1.37) DT0N5 MOT Shoal 141/47**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 40° 39' 56.7" N, 074° 05' 03.1" W
Least Depth: 7.75 m (= 25.42 ft = 4.236 fm = 4 fm 1.42 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.369 m
Timestamp: 2006-240.17:18:48.231 (08/28/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_240 / 370_1718
Profile/Beam: 141/47
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Sounding data (Reson 8101 MBES) reveals this significantly shoal sounding over a charted sounding in the vicinity of Military Ocean Terminal. Soundings corrected to MLLW with verified water levels and final tide zoning. Other data suggest significant shoaling in the surrounding area.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_reson8101/2006_240/370_1718	141/47	0.00	000.0	Primary

Hydrographer Recommendations

Update charted sounding to 25 ft.

Cartographically-Rounded Depth (Affected Charts):

25ft (12334_1, 12333_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: 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

Office Notes

Do not concur. Chart current survey soundings.

1.38) DT0N PH Shoal 520/8**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 40° 39' 41.0" N, 074° 03' 59.3" W
Least Depth: 9.05 m (= 29.70 ft = 4.950 fm = 4 fm 5.70 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.369 m
Timestamp: 2006-240.14:06:48.201 (08/28/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_240 / 396_1405
Profile/Beam: 520/8
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Sounding data (Reson 8101 MBES) reveals this significantly shoal sounding over a charted sounding in the vicinity of Pierhead Channel. Soundings corrected to MLLW with verified water levels and final tide zoning. Other data suggest significant shoaling in the surrounding area.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_reson8101/2006_240/396_1405	520/8	0.00	000.0	Primary

Hydrographer Recommendations

Update charted sounding to 29 ft.

Cartographically-Rounded Depth (Affected Charts):

29ft (12334_1, 12333_1, 12327_1, 12326_1)

5fm (12300_1, 13006_1, 13003_1, 14500_1)

9.1m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: EXPSOU - 1:within the range of depth of the surrounding depth area
 QUASOU - 1:depth known
 STATUS - 1:permanent

TECSOU - 3:found by multi-beam

VERDAT - 12:Mean lower low water

Office Notes

Do not concur. Chart current survey soundings.

1.39) DT0N4 3360/11**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 40° 39' 25.7" N, 074° 02' 51.3" W
Least Depth: 12.06 m (= 39.55 ft = 6.592 fm = 6 fm 3.55 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.370 m
Timestamp: 2006-241.17:45:41.655 (08/29/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_241 / 827_1739
Profile/Beam: 3360/11
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted dangerous obstruction acquired with Reson 8101 MBES and 200% Klein 5000 side scan. Soundings were corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_reson8101/2006_241/827_1739	3360/11	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-234/299_1509	0002	1.59	108.9	Secondary

Hydrographer Recommendations

Chart dangerous obstruction with least depth 12.06 meters (39.55 feet).

Cartographically-Rounded Depth (Affected Charts):

39ft (12334_1, 12327_1, 12326_1)

6 ½fm (12300_1, 13006_1, 13003_1, 14500_1)

12.1m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam

VALSOU - 12.056 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Obstrn is currently charted on the continual update raster as of 12/01/08.

1.40) DT0N4 943/47**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 40° 36' 51.8" N, 074° 02' 33.2" W
Least Depth: 9.25 m (= 30.36 ft = 5.060 fm = 5 fm 0.36 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.369 m
Timestamp: 2006-242.19:12:36.012 (08/30/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_242 / 295_1910
Profile/Beam: 943/47
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted dangerous obstruction acquired with Reson 8101 MBES and 200% Klein 5000 side scan. Soundings were corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_reson8101/2006_242/295_1910	943/47	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-235/120_1601	0001	1.24	321.5	Secondary
h11600/tj_3101_reson8125/2006_242/291_1821	1373/1	1.68	348.3	Secondary
h11600/tj_3102_klein5000_sss200/2006-236/219_1451	0001	2.43	355.4	Secondary
h11600/tj_3102_klein5000_sss200/2006-236/202_1423	0001	3.60	014.7	Secondary

Hydrographer Recommendations

Chart dangerous obstruction with least depth 9.25 meters (30.36 feet).

Cartographically-Rounded Depth (Affected Charts):

30ft (12334_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: QUASOU - 6:least depth known
TECSOU - 3:found by multi-beam
VALSOU - 9.254 m
VERDAT - 12:Mean lower low water
WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Obstrn is currently charted on the continual update raster as of 12/01/08.

1.41) DT0N5 SP Shoal 205/46**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 40° 37' 41.2" N, 074° 04' 11.3" W
Least Depth: 8.22 m (= 26.96 ft = 4.493 fm = 4 fm 2.96 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.982 m ; **TVU (TPEv)** ± 0.369 m
Timestamp: 2006-258.15:20:42.883 (09/15/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_258 / 214_1520
Profile/Beam: 205/46
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Sounding data (Reson 8101 MBES) reveals this significantly shoal sounding over a charted sounding in the vicinity of Military Ocean Terminal. Soundings corrected to MLLW with verified water levels and final tide zoning. Other data suggest significant shoaling in the surrounding area.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_reson8101/2006_258/214_1520	205/46	0.00	000.0	Primary

Hydrographer Recommendations

Update charted sounding to 27 ft.

Cartographically-Rounded Depth (Affected Charts):

27ft (12334_1, 12333_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: Sounding (SOUNDG)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 3:found by multi-beam

VERDAT - 12:Mean lower low water

Office Notes

Do not concur. Chart current survey soundings.

1.42) DT0N5 SP Shoal427/2**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 40° 37' 42.8" N, 074° 04' 15.9" W
Least Depth: 7.06 m (= 23.17 ft = 3.862 fm = 3 fm 5.17 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.368 m
Timestamp: 2006-258.15:23:48.171 (09/15/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_258 / 215_1523
Profile/Beam: 427/2
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Sounding data (Reson 8101 MBES) reveals this significantly shoal sounding over a charted sounding in the vicinity of Military Ocean Terminal. Soundings corrected to MLLW with verified water levels and final tide zoning. Other data suggest significant shoaling in the surrounding area.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_reson8101/2006_258/215_1523	427/2	0.00	000.0	Primary

Hydrographer Recommendations

Update charted sounding to 23 ft.

Cartographically-Rounded Depth (Affected Charts):

23ft (12334_1, 12333_1, 12327_1, 12326_1)
 3 $\frac{3}{4}$ fm (12300_1, 13006_1, 13003_1, 14500_1)
 7.1m (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

Do not concur. Chart current survey soundings.

1.43) DT0N5 SP Shoal 113/2**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 40° 37' 44.2" N, 074° 04' 19.9" W
Least Depth: 6.47 m (= 21.21 ft = 3.536 fm = 3 fm 3.21 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.368 m
Timestamp: 2006-258.15:21:58.659 (09/15/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_258 / 216_1521
Profile/Beam: 113/2
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Sounding data (Reson 8101 MBES) reveals this significantly shoal sounding over a charted sounding in the vicinity of Stapleton Pier. Soundings corrected to MLLW with verified water levels and final tide zoning. Other data suggest significant shoaling in the surrounding area.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_reson8101/2006_258/216_1521	113/2	0.00	000.0	Primary

Hydrographer Recommendations

Update charted sounding to 21 ft.

Cartographically-Rounded Depth (Affected Charts):

21ft (12334_1, 12333_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: Sounding (SOUNDG)
Attributes: QUASOU - 1:depth known
 STATUS - 1:permanent
 TECSOU - 3:found by multi-beam

VERDAT - 12:Mean lower low water

Office Notes

Do not concur. Chart current survey soundings.

1.44) Sounding on Shoal - 293/135

Survey Summary

Survey Position: 40° 40' 54.8" N, 074° 00' 57.7" W
Least Depth: 11.51 m (= 37.76 ft = 6.294 fm = 6 fm 1.76 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-225.18:36:51.159 (08/13/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_225 / 392_1836
Profile/Beam: 293/135
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Migration of Shoal

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_225/392_1836	293/135	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-225/105_1738	0007	7.32	076.8	Secondary

Hydrographer Recommendations

Chart 38 ft.

Cartographically-Rounded Depth (Affected Charts):

38ft (12334_1, 12335_1, 12327_1, 12326_1)

6 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)

11.5m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: QUASOU - 1:depth known
 TECSOU - 3:found by multi-beam
 VERDAT - 12:Mean lower low water

Office Notes

Do not concur. Chart soundings at normal selection.

APPENDIX II
SURVEY FEATURES REPORT

H11600 AWOIS Items

Registry Number: H11600
State: New York
Locality: New York Harbor
Sub-locality: Upper Bay
Project Number: OPR-B310-TJ-06
Survey Dates: 13 August 2006 - 09 October 2006

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
12334	67th	04/01/2004	1:10,000 (12334_1)	[L]NTM: ?
12335	40th	09/01/2003	1:10,000 (12335_1)	[L]NTM: ?
12402	10th	05/01/2006	1:15,000 (12402_1)	USCG LNM: 01/29/2008 (03/25/2008) CHS NTM: None (01/25/2008) NGA NTM: 11/15/1997 (03/22/2008)
12333	34th	12/01/2005	1:15,000 (12333_1)	[L]NTM: ?
12337	23rd	10/01/2005	1:20,000 (12337_1)	[L]NTM: ?
12327	101st	04/01/2008	1:40,000 (12327_1)	USCG LNM: 04/22/2008 (04/22/2008) CHS NTM: None (01/25/2008) NGA NTM: 06/17/2006 (04/26/2008)
12363	40th	06/01/2005	1:80,000 (12363_1)	[L]NTM: ?
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

No.	Name	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	AWOIS #13408 Subm. Pile - 0001	SSS	[None]	40° 40' 16.3" N	074° 03' 50.3" W	13408
1.2	AWOIS #13266 0003 - disproval	SSS	[None]	40° 40' 36.5" N	074° 03' 40.4" W	13266

1.3	AWOIS #13267 0004 - disproval	SSS	[None]	40° 40' 32.1" N	074° 03' 33.3" W	13267
1.4	AWOIS #13407 0001 - disproval	SSS	[None]	40° 40' 11.4" N	074° 03' 18.5" W	13407
1.5	AWOIS #743 - uncharted disproval	GP	[None]	40° 39' 08.8" N	074° 02' 52.0" W	743
1.6	AWOIS #1673 - uncharted disproval	GP	[None]	40° 41' 38.8" N	074° 00' 38.7" W	1673
1.7	AWOIS #10631 - not investigated	GP	[None]	40° 40' 31.9" N	074° 04' 38.1" W	10631
1.8	AWOIS #10632 - uncharted disprovals	GP	[None]	40° 39' 25.5" N	074° 04' 10.1" W	10632
1.9	AWOIS #10636 - uncharted disproval	GP	[None]	40° 38' 36.4" N	074° 04' 06.6" W	10636
1.10	AWOIS #10638 - not investigated	GP	[None]	40° 41' 05.7" N	074° 04' 32.2" W	10638
1.11	AWOIS #10653 - disproval	GP	[None]	40° 37' 24.4" N	074° 03' 35.5" W	10653
1.12	AWOIS #10655 - uncharted disproval	GP	[None]	40° 38' 38.0" N	074° 03' 10.0" W	10655
1.13	AWOIS #10668 - disproval	GP	[None]	40° 42' 10.5" N	074° 02' 01.5" W	10668
1.14	AWOIS #11925 - uncharted disproval	GP	[None]	40° 37' 59.8" N	074° 03' 32.6" W	11925
1.15	AWOIS #13236 - not investigated	GP	[None]	40° 40' 59.3" N	074° 01' 23.3" W	13236
1.16	AWOIS #13237 - not investigated	GP	[None]	40° 41' 46.0" N	074° 02' 28.5" W	13237
1.17	AWOIS #13269 - disproval	GP	[None]	40° 40' 10.6" N	074° 04' 33.4" W	13269
1.18	AWOIS #13401 - not investigated	GP	[None]	40° 39' 24.3" N	074° 04' 06.4" W	13401
1.19	AWOIS #13402 - not investigated.	Wreck	[None]	40° 39' 06.1" N	074° 01' 27.0" W	13402
1.20	AWOIS #13403 - not investigated	GP	[None]	40° 39' 06.6" N	074° 01' 27.7" W	13403
1.21	AWOIS #13405 - not investigated	GP	[None]	40° 40' 17.8" N	074° 03' 25.0" W	13405
1.22	AWOIS #13406 - not investigated	GP	[None]	40° 40' 15.1" N	074° 03' 31.1" W	13406
1.23	AWOIS #13410 - not investigated	GP	[None]	40° 36' 27.5" N	074° 02' 07.3" W	13410
1.24	AWOIS #13471 - retain as charted	GP	[None]	40° 42' 02.9" N	074° 02' 45.0" W	13471
1.25	AWOIS #13472 - not investigated	GP	[None]	40° 41' 48.4" N	074° 02' 59.8" W	13472
1.26	AWOIS #13474 - not investigated	GP	[None]	40° 41' 28.7" N	074° 03' 12.5" W	13474
1.27	AWOIS #13473 - not investigated	GP	[None]	40° 41' 39.7" N	074° 03' 00.9" W	13473
1.28	AWOIS #13475 - not investigated	GP	[None]	40° 41' 19.3" N	074° 03' 00.9" W	13475
1.29	AWOIS #13476 - not investigated	GP	[None]	40° 41' 47.5" N	074° 03' 57.3" W	13476
1.30	AWOIS #13477 - not investigated	GP	[None]	40° 41' 25.2" N	074° 03' 54.6" W	13477
1.31	AWOIS #13478 - not investigated	GP	[None]	40° 41' 03.2" N	074° 03' 45.5" W	13478
1.32	AWOIS #13479 - not investigated	GP	[None]	40° 40' 45.2" N	074° 04' 12.7" W	13479
1.33	AWOIS #13480 - not investigated	GP	[None]	40° 39' 57.0" N	074° 05' 09.6" W	13480
1.34	AWOIS #13481 - not investigated	GP	[None]	40° 39' 55.6" N	074° 05' 10.2" W	13481
1.35	AWOIS #13483 - not investigated	GP	[None]	40° 39' 54.4" N	074° 05' 18.3" W	13483
1.36	AWOIS #13484 - not investigated	GP	[None]	40° 39' 44.5" N	074° 05' 27.9" W	13484
1.37	AWOIS #13485 - not investigated	GP	[None]	40° 39' 38.9" N	074° 05' 25.2" W	13485
1.38	AWOIS #13486 - not investigated	GP	[None]	40° 39' 36.9" N	074° 05' 07.2" W	13486

1.39	AWOIS #13490 - not investigated	GP	[None]	40° 41' 01.0" N	074° 01' 29.3" W	13490
1.40	AWOIS #13534 - not investigated	GP	[None]	40° 37' 58.3" N	074° 04' 20.3" W	13534
1.41	AWOIS #2702 - not investigated	GP	[None]	40° 41' 57.1" N	074° 01' 37.7" W	2702
1.42	AWOIS #9717 - not investigated	GP	[None]	40° 35' 39.0" N	074° 02' 48.0" W	9717
1.43	AWOIS #13488 - retain as charted.	GP	[None]	40° 39' 57.4" N	074° 00' 23.5" W	13488
1.44	AWOIS #10660 - uncharted disproval	GP	[None]	40° 40' 48.0" N	074° 01' 18.0" W	10660
1.45	AWOIS #10667 Obstruction - 35/206	Sounding	6.18 m	40° 42' 03.1" N	074° 02' 07.1" W	10667
1.46	AWOIS #13535 883/127 - Wk	Sounding	9.02 m	40° 40' 49.0" N	074° 01' 07.2" W	13535
1.47	AWOIS #13262/#10666 603/146	Sounding	10.45 m	40° 41' 26.5" N	074° 01' 33.6" W	13262
1.48	AWOIS # 2706 3317/153 - obstn	Sounding	9.04 m	40° 40' 43.6" N	074° 01' 14.9" W	2706
1.49	AWOIS #1672 1776/48	Sounding	6.63 m	40° 40' 43.4" N	074° 02' 51.6" W	1672
1.50	AWOIS #13257 1588/1 - Obstn	Obstruction	7.62 m	40° 40' 15.7" N	074° 03' 03.0" W	13257
1.51	AWOIS #13259 4288/4 - obstn	Obstruction	10.45 m	40° 39' 36.4" N	074° 02' 49.3" W	13259
1.52	AWOIS #13489 299/203 - pier ruins	Sounding	4.10 m	40° 39' 55.5" N	074° 00' 37.7" W	13489
1.53	AWOIS #2695 84/84 - disproved	Sounding	7.38 m	40° 41' 21.3" N	074° 02' 27.2" W	2695
1.54	AWOIS #13250 204/124 - Obstn	Sounding	16.80 m	40° 36' 26.1" N	074° 02' 20.8" W	13250
1.55	AWOIS #10654 - 3349/219 - disproved	Sounding	14.62 m	40° 38' 21.6" N	074° 03' 06.3" W	10654
1.56	AWOIS #13404 2702/146 - Subm. Wk.	Wreck	7.54 m	40° 37' 48.2" N	074° 02' 31.1" W	13404
1.57	AWOIS #10637 - 447/97 - Obstruction	Sounding	3.27 m	40° 39' 26.5" N	074° 04' 08.3" W	10637
1.58	AWOIS #2705 1123/23 - disproval.	Sounding	6.46 m	40° 39' 19.2" N	074° 04' 33.7" W	2705
1.59	AWOIS # 13764 - disproved	GP	[None]	40° 39' 55.3" N	074° 04' 17.1" W	---
1.60	AWOIS #13765 - disproved	GP	[None]	40° 39' 51.5" N	074° 04' 08.1" W	---
1.61	AWOIS # 13734 - disproved	GP	[None]	40° 39' 17.8" N	074° 03' 06.9" W	---
1.62	AWOIS #13739 - disproved	GP	[None]	40° 39' 44.4" N	074° 03' 15.1" W	---
1.63	AWOIS # - 800/75 - disproved	Sounding	16.10 m	40° 41' 36.8" N	074° 01' 58.2" W	---
1.64	AWOIS # - 1561/97 - obstn	Sounding	14.22 m	40° 41' 48.3" N	074° 01' 48.6" W	---

1 - DR_AWOIS

1.1) AWOIS #13408 Subm. Pile - 0001

Primary Feature for AWOIS Item #13408

Search Position: 40° 40' 17.1" N, 074° 03' 50.1" W
Historical Depth: [None]
Search Radius: 50
Search Technique: S2, SWMB, DI
Technique Notes: SEARCH NOT REQUIRED IN DEPTHS SHOALER THAN 4 METERS

History Notes:

H09815/80 -- SUBMERGED PILE NOW CHARTED IN POSITION: 40°40'17.14" N 074°03'50.09" W (NAD 83).
 UPDATED 12/7/2005 JCM

Survey Summary

Survey Position: 40° 40' 16.3" N, 074° 03' 50.3" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-238.07:51:49 (08/26/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-233 / 147_1350
Contact/Point: 0001/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #13408 acquired with 200% Klein 5000 side scan. The multibeam coverage did not reach it.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-233/147_1350	0001	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 13408	26.93	189.6	Secondary
h11600/tj_3102_klein5000_sss100/2006-233/147_1350	0002	29.23	221.2	Secondary (grouped)
h11600/tj_3102_klein5000_sss100/2006-233/147_1350	0003	32.27	158.2	Secondary (grouped)

Hydrographer Recommendations

Move charted pile to current position. Update AWOIS item #13408 location.

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: WATLEV - 3:always under water/submerged

Office Notes

Concur. Update position of charted Subm Pile.

1.2) AWOIS #13266 0003 - disproval

Primary Feature for AWOIS Item #13266

Search Position: 40° 40' 36.4" N, 074° 03' 40.5" W
Historical Depth: [None]
Search Radius: 50
Search Technique: MB, S2
Technique Notes: [None]

History Notes:

LNM36/74 -- USACE REPORT A 116FT BARGE SUNK ADJACENT TO SOUTH SIDE OF CAVEN POINT PIER IN POSITION 40/40/36N 74/03/42W NAD27 APPROX 650FT IN FROM END OF THE PIER. BARGE EXTENDS APPROX 40FT OFF FROM PIER (ENT. 05/27/05, SME)

Survey Summary

Survey Position: 40° 40' 36.5" N, 074° 03' 40.4" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-238.06:26:28 (08/26/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-233 / 318_1253
Contact/Point: 0003/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #13266 search radius covered and investigated with 200% Klein 5000 side scan. The multibeam coverage did not completely cover search radius. AWOIS item #13266 not seen.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-233/318_1253	0003	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 13266	4.48	042.4	Secondary
h11600/tj_3102_klein5000_sss100/2006-225/234_1611	0003	17.81	185.1	Secondary (grouped)
h11600/tj_3102_klein5000_sss100/2006-225/234_1611	0002	32.04	295.7	Secondary (grouped)

Hydrographer Recommendations

Remove AWOIS item #13266 from the database. Delete charted wreck.

S-57 Data

[None]

Office Notes

Concur. Charted Wk was disproved.

1.3) AWOIS #13267 0004 - disproval

Primary Feature for AWOIS Item #13267

Search Position: 40° 40' 32.4" N, 074° 03' 33.5" W
Historical Depth: [None]
Search Radius: 50
Search Technique: MB, S2
Technique Notes: [None]

History Notes:

LNM49/73 -- A 130 FT BY 40FT BARGE IS REPORTED TO HAVE SUNK 40 FT OFF THE SOUTHERN TIP OF CAVEN POINT PIER IN POSITION 40/40/35N 74/03/35W NAD27 AND IS COVERED BY 8FT OF WATER. BARGE IS SECURED TO PIER (ENT. 05/27/05, SME)

Survey Summary

Survey Position: 40° 40' 32.1" N, 074° 03' 33.3" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-238.06:29:04 (08/26/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-233 / 318_1253
Contact/Point: 0004/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #13267 search radius covered and investigated with 200% Klein 5000 side scan. The multibeam coverage did not completely cover the search radius. AWOIS item #13267 not seen.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-233/318_1253	0004	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 13267	9.25	140.2	Secondary

Hydrographer Recommendations

Remove AWOIS item #13267 from the database. Delete wreck from chart.

S-57 Data

[None]

Office Notes

Concur. Charted Wk was disproved.

1.4) AWOIS #13407 0001 - disproval

Primary Feature for AWOIS Item #13407

Search Position: 40° 40' 12.0" N, 074° 03' 17.9" W
Historical Depth: [None]
Search Radius: 50
Search Technique: S2, SWMB, DI
Technique Notes: SEARCH NOT REQUIRED IN DEPTHS SHOALER THAN 4 METERS

History Notes:

H09815/80 -- SUBMERGED PILE NOW CHARTED IN POSITION: 40°40'11.96" N 074°03'17.91" W (NAD 83).
 UPDATED 12/7/2005 JCM

Survey Summary

Survey Position: 40° 40' 11.4" N, 074° 03' 18.5" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-243.10:37:16 (08/31/2006)
Survey Line: h11600 / tj_3102_klein5000_sss200 / 2006-233 / 408_1647
Contact/Point: 0001/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #13407 search radius covered and investigated with 200% Klein 5000 side scan. The multibeam coverage did not completely cover the search radius. AWOIS item #13407 not seen.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss200/2006-233/408_1647	0001	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 13407	22.11	221.9	Secondary
h11600/tj_3102_klein5000_sss100/2006-225/337_1546	0006	38.06	179.3	Secondary (grouped)

Hydrographer Recommendations

Remove AWOIS item #13407 from the database. Delete pile from chart.

S-57 Data

[None]

Office Notes

Concur. Charted Subm File was disproved.

1.5) AWOIS #743 - uncharted disproval

Primary Feature for AWOIS Item #743

Search Position: 40° 39' 08.9" N, 074° 02' 51.8" W
Historical Depth: [None]
Search Radius: 200
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

LN18/83(5/3/83)--3RD CGD; OBSTR REP (1983), 5FT BY 5FT CEMENT BUOY SINKER ■CONNECTED TO AN UNKNOWN AMOUNT OF CHAIN IN LAT 40-39-08.5N, LONG 74-02-53.3W ■(ENTERED 3/85 RWD) ■■DESCRIPTION■ ***** TELECON COE-NY, TOM CLARK AND JIM DAILEY, 3/26/85; MR. CLARK INDICATED ■ THE COE WAS TO INVESTIGATE THIS ITEM WITH A GRAPPLING HOOK IN THE NEAR ■ FUTURE.

Survey Summary

Survey Position: 40° 39' 08.8" N, 074° 02' 52.0" W
Least Depth: [None]
TPU (±1.96σ): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-300.14:35:04 (10/27/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #743 search radius covered and investigated with 100% MBES and 200% SSS. Item not found.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	1	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 743	4.19	253.5	Secondary (grouped)

Hydrographer Recommendations

Delete obstruction (rep 1983) from the chart. Remove AWOIS #743 from the database.

S-57 Data

[None]

Office Notes

Concur with clarification. Item is not currently charted. Retain as not charted.

1.6) AWOIS #1673 - uncharted disproval

Primary Feature for AWOIS Item #1673

Search Position: 40° 41' 38.8" N, 074° 00' 38.7" W
Historical Depth: [None]
Search Radius: 0
Search Technique: [None]
Technique Notes: [None]

History Notes:

LNM40/71--A 36-FT. WOOD HOUSEBOAT SANK 9/14/71. ■ R/H MONTHLY REPORT, SEPT. 1980, OPR-B645-R/H-80, ITEM 28. ■HYDROGRAPHER FOUND THAT CG RECOVERED LARGE PIECES OF DEBRIS INDICATING VESSEL■HAD BROKEN UP. COE FAILED TO LOCATE WRECK 7 DAYS LATER. ■R/H INVESTIGATION BY ECHO SOUNDER, SIDE-SCAN SONAR WITHIN 100-METER RADIUS ■AND WIRE DRAG TO EFF. DEPTHS 16-25 FT.(3-FT. BOTTOM CLEARANCE). CONTROL BY ■DEL NORTE R/R.

Survey Summary

Survey Position: 40° 41' 38.8" N, 074° 00' 38.7" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-300.15:04:01 (10/27/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 2
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #1673 investigated with 100% Reson 8125 MBES and 200% Klein 5000 SSS. Item not found.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	2	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 1673	2.46	346.8	Secondary (grouped)

Hydrographer Recommendations

Delete AWOIS #1673 from the database and chart present survey findings.

S-57 Data

[None]

Office Notes

Concur with clarification. Item is not currently charted. Retain as not charted.

1.7) AWOIS #10631 - not investigated

Primary Feature for AWOIS Item #10631

Search Position: 40° 40' 31.9" N, 074° 04' 38.0" W
Historical Depth: [None]
Search Radius: 0
Search Technique: [None]
Technique Notes: [None]

History Notes:

CHARTED SUBMERGED, DANGEROUS OBSTRUCTION ■ LNM19/82--GOWANUS TOWING REPORTS STRIKING A SUBMERSED OBSTRUCTION A APPROX. 8 FT. BELOW WATER 1/5/82 OFF MARGINAL DOCK, GREENVILLE CHANNEL, JERSEY CITY AT APPROX. POS. 40-40-31.5N, 74-04-39.5W, 50 YD. SOUTH OF DOCK SOUTHERNMOST CORNER. TUG SUNK AS A RESULT OF COLLISION AND WAS LATER RAISED. (ENT DAS 05/01/2000)

Survey Summary

Survey Position: 40° 40' 31.9" N, 074° 04' 38.1" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-300.16:41:49 (10/27/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 3
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #10631 was not investigated. The 18 foot curve was the limit for this survey.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	3	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 10631	1.07	255.1	Secondary (grouped)

Hydrographer Recommendations

Retain charted obstruction (8ft rep PA).

S-57 Data

[None]

Office Notes

Retain charted Obstn

1.8) AWOIS #10632 - uncharted disprovals

Primary Feature for AWOIS Item #10632

Search Position: 40° 39' 25.5" N, 074° 04' 10.1" W
Historical Depth: [None]
Search Radius: 0
Search Technique: [None]
Technique Notes: INVESTIAGTE AN AREA BOUNDED IN THE WEST BY A LINE DRAWN BETWEEN THE TWO POINTS GIVEN IN THE HISTORY AND THE 20FT CONTOUR TO THE EAST.

History Notes:

LNM43/80--SHOALING REPORTED TO 12 FT. IN VICINITY OF BAYONNE TERMINAL CHANNEL BUOY 3B(LLP247) ALONG CHANNEL LINE OF NJ PIERHEAD SOUTH CHANNEL FROM 40-39-25.1W, 74/04/11.6N NORTH TO 40-39/29.9N, 74-04-08W EXTENDING APPROX. 50 YD. WESTWARD INTO CHANNEL. (ENT DAS 05/01/2000)

Survey Summary

Survey Position: 40° 39' 25.5" N, 074° 04' 10.1" W
Least Depth: [None]
TPU (±1.96σ): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-300.17:33:36 (10/27/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 4
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

No evidence of shoaling seen with 100% Reson 8101 multibeam.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	4	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 10632	0.72	325.4	Secondary (grouped)

Hydrographer Recommendations

Delete AWOIS #10632 from the database and chart present survey findings.

S-57 Data

[None]

Office Notes

Concur with clarification. Item is not currently charted. Retain as not charted.

1.9) AWOIS #10636 - uncharted disproval

Primary Feature for AWOIS Item #10636

Search Position: 40° 38' 36.4" N, 074° 04' 06.5" W
Historical Depth: [None]
Search Radius: 200
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

LNM50/80--NY AND NJ-NY HARBOR, A 40 FT. BOAT REPORTED SUNKIN STAPLETON ANCHORAGE 23A IN APPROX. POS 40-38-36N, 74-04-08W, IN APPROX. 45 FT. OF WATER. (ENT DAS 05/01/2000)

Survey Summary

Survey Position: 40° 38' 36.4" N, 074° 04' 06.6" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-300.19:43:05 (10/27/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 5
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #10636 search radius covered and investigated with 100% Reson 8101/8125 MBES and 200% SSS. Item not found.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	5	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 10636	1.63	264.0	Secondary (grouped)

Hydrographer Recommendations

Remove charted submerged wreck PA from chart. Delete AWOIS #10636 from the database. Chart sounding data.

S-57 Data

[None]

Office Notes

Concur with clarification. Item is not currently charted. Retain as not charted.

1.10) AWOIS #10638 - not investigated

Primary Feature for AWOIS Item #10638

Search Position: 40° 41' 05.7" N, 074° 04' 32.1" W
Historical Depth: 5.18 m
Search Radius: 50
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

CHARTED SUBMERGED OBSTRUCTION■ LNM4/82 (CORRECTED POS. IN LNM7/82)--NY AND NJ-NY HARBOR-UPPER BAY- AN UNCHARTED OBSTRUCTION REPORTED IN CLAREMONT CHANNEL. LOCATED APPROX. 50 YD. OFF CLAREMONT TERMINAL DOCK 2 IN APPROX. 16 FT. OF WATER AT APPROX. POS. 40-41-06N, 74-04-33W. (ENT DAS 05/01/2000)■ F00463/00-- THE OBSTRUCTION WAS LOCATED AT 40/41/05.68N - 074/04/32.14W WITH A DEPTH OF 17 FEET. (UPDATED 4/05 CEH)

Survey Summary

Survey Position: 40° 41' 05.7" N, 074° 04' 32.2" W
Least Depth: [None]
TPU (±1.96σ): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-303.14:41:46 (10/30/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 6
Charts Affected: 12334_1, 12333_1, 12337_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #10638 was not fully investigated. Anchored barges were in the way.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	6	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 10638	1.27	241.2	Secondary (grouped)

Hydrographer Recommendations

Retain charted obstruction.

S-57 Data

[None]

Office Notes

Retain obstn as charted.

1.11) AWOIS #10653 - disproval

Primary Feature for AWOIS Item #10653

Search Position: 40° 37' 24.4" N, 074° 03' 35.5" W
Historical Depth: [None]
Search Radius: 250
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

LNM42/86--3RD CGD, 10-21-86; A VESSEL HAS REPORTED FOULING ITS TOWING HAWSER ON AN OBSTRUCTION ON THE BOTTOM IN APPROX. POS.40-37-24N, LONG.74-03-37 NAD 27. ENTERED 6/00 MCR■ NOTE: POSSIBLY COMPLETED ON S-B601-RU SURVOPS. (UP 8/27/03, SJV)■ F00463/00-- OBSTRUCTION PA (REP 1986) WAS NEITHER VERIFIED NOR DISPROVED BY THIS SURVEY. (UPDATED 5/05 CEH)

Survey Summary

Survey Position: 40° 37' 24.4" N, 074° 03' 35.5" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-303.15:34:19 (10/30/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 7
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #10653 seach radius covered and investigated with 100% MBES and 200% SSS. Item not found.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	7	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 10653	0.92	279.3	Secondary (grouped)

Hydrographer Recommendations

Remove obstruction from chart. Chart sounding data.

S-57 Data

[None]

Office Notes

Remove charted 55ft Obstn. Item was disproved.

1.12) AWOIS #10655 - uncharted disproval

Primary Feature for AWOIS Item #10655

Search Position: 40° 38' 38.0" N, 074° 03' 10.0" W
Historical Depth: [None]
Search Radius: 500
Search Technique: MB, S2
Technique Notes: [None]

History Notes:

LNM29/97--3RD CGD, 7/16/97: ADD SYMBOL FOR OBSTRUCTION, DEPTH UNKNOWN IN 40 38 38.0N 074 03 10.0W. NO OTHER INFORMATION GIVEN. ENTERED 6/00 MCR■■■ DESCRIPTION■
 ****CONVERSATION WITH 3RD CGD, JULY 2000-- NO OTHER INFORMATION ON THE ITEM WAS FOUND.

Survey Summary

Survey Position: 40° 38' 38.0" N, 074° 03' 10.0" W
Least Depth: [None]
TPU (±1.96σ): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-303.16:26:45 (10/30/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 8
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #10655 investigated with 100% Reson 8125 MBES and 200% Klein 5000 SSS. Item not found.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	8	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 10655	0.45	287.7	Secondary (grouped)

Hydrographer Recommendations

Remove obstruction PA from chart. Remove AWOIS #10655 from the database. Chart sounding data.

S-57 Data

[None]

Office Notes

Concur with clarification. Item is not currently charted. Retain as not charted.

1.13) AWOIS #10668 - disproval

Primary Feature for AWOIS Item #10668

Search Position: 40° 42' 10.5" N, 074° 02' 01.5" W
Historical Depth: [None]
Search Radius: 0
Search Technique: MB, S2
Technique Notes: [None]

History Notes:

LN47/74--10/30/75, 3RD CGD; TWO UNIDENTIFIED OBSTRUCTIONS HAVE BEEN REPORTED TO EXIST OFF ELLIS ISLAND, NY. ONE IS IN APPROX POSITION 40 42 10N, 074 02 03W NAD 27. SEE AWOIS 10667 FOR OTHER. ENTERED 6/00 MCR.

Survey Summary

Survey Position: 40° 42' 10.5" N, 074° 02' 01.5" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-303.17:26:06 (10/30/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 9
Charts Affected: 12335_1, 12337_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #10668 investigated with 200% Klein 5000 SSS. Item not found.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	9	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 10668	0.84	223.8	Secondary (grouped)

Hydrographer Recommendations

Remove AWOIS #10668 and chart present survey findings.

S-57 Data

[None]

Office Notes

Concur. Remove charted Obstn PA. Item was disproved.

1.14) AWOIS #11925 - uncharted disproval

Primary Feature for AWOIS Item #11925

Search Position: 40° 37' 59.7" N, 074° 03' 32.5" W
Historical Depth: 12.80 m
Search Radius: 50
Search Technique: MB, S2
Technique Notes: [None]

History Notes:

CL1262/02-- DTON FROM NOAA SHIP RUDE TO MCD.DTON@NOAA.GOV DATED JULY 9, 2002.
 UNCHARTED DANDEROUS SUBMERGED WRECK LOCATED DURING MAINSCHEME HYDRO. ON
 S-B601 SURVOPS. WRECK LOCATED IN LAT. 40-37-59.734N, LONG. 74-03-32.489W. LD OF 42 FEET. ■
 LNM29/02--(7/16/02); NY-NJ-NEW YORK HARBOR- UPPER BAY AND NARROWS-ANCHORAGE CHART;
 ADD 42-FOOT SOUNDING, DOTTED DANGER CURVE, BLUE TINT AND LABEL: WK CENTERED AT
 LAT. 40-57-59.700N, LONG. 74-03-32.500W. (ENT 8/27/03, SJV)

Survey Summary

Survey Position: 40° 37' 59.8" N, 074° 03' 32.6" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-303.17:48:34 (10/30/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 10
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #11925 search radius covered and investigated with 100% Reson 8125 multibeam and 200% SSS.
 Item not found.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	10	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 11925	3.02	315.9	Secondary (grouped)

Hydrographer Recommendations

Remove AWOIS #11925 from the database and chart present survey findings.

S-57 Data

[None]

Office Notes

Concur with clarification. Item is not currently charted. Retain as not charted.

1.15) AWOIS #13236 - not investigated

Primary Feature for AWOIS Item #13236

Search Position: 40° 40' 59.2" N, 074° 01' 23.2" W
Historical Depth: [None]
Search Radius: 0
Search Technique: [None]
Technique Notes: [None]

History Notes:

F00463/00--OPR-C410; OBSTRUCTION WITH A DEPTH OF 2 FT WAS FOUND AT 40/40/59.22N - 074/01/23.25W. (ENTERED 5/05 CEH)

Survey Summary

Survey Position: 40° 40' 59.3" N, 074° 01' 23.3" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-303.18:18:04 (10/30/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 11
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #13236 was not investigated due to shallow depth.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	11	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 13236	2.64	301.3	Secondary (grouped)

Hydrographer Recommendations

Retain charted obstruction.

S-57 Data

[None]

Office Notes

Concur. Retain Obsn as charted.

1.16) AWOIS #13237 - not investigated

Primary Feature for AWOIS Item #13237

Search Position: 40° 41' 45.9" N, 074° 02' 28.5" W
Historical Depth: [None]
Search Radius: 0
Search Technique: [None]
Technique Notes: [None]

History Notes:

****UNKOWN SOURCE-- A WRECK IN POSITION OF 40/41/46.7N - 74/02/29.5W, CHARTED AS "WK"
 NEXT TO A 3 FT SOUNDING.■ F00463/00--OPR-C410; A VISIBLE WRECK WAS LOCATED AT
 40/41/45.89N - 74/02/28.51W. (ENTERED 5/05 CEH)

Survey Summary

Survey Position: 40° 41' 46.0" N, 074° 02' 28.5" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-303.18:49:35 (10/30/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 12
Charts Affected: 12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1,
 13003_1, 14500_1

Remarks:

AWOIS item #13237 was not investigated due to shallow depth.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	12	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 13237	2.94	027.4	Secondary (grouped)

Hydrographer Recommendations

Retain charted wreck.

S-57 Data

[None]

Office Notes

Concur. Retain Vis. Wk.

1.17) AWOIS #13269 - disproval

Primary Feature for AWOIS Item #13269

Search Position: 40° 40' 11.4" N, 074° 04' 30.5" W
Historical Depth: [None]
Search Radius: 50
Search Technique: MB, S2
Technique Notes: [None]

History Notes:

LN16/79 -- A VESSEL LOST ITS ANCHOR AND 400FT OF CHAIN WHILE DOCKING AT EAST BERTH GLOBAL TERMINAL THE LOCATION OF THE ANCHOR IS APPROX 400 YDS NORTHWEST OF BAYONNE TERMINAL CHANNEL RED NORTH BUOY 6 (ENT. 05/27/05, SME)

Survey Summary

Survey Position: 40° 40' 10.6" N, 074° 04' 33.4" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-303.19:58:55 (10/30/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 13
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #13269 search radius covered and investigated with 200% Klein 5000 side scan. The multibeam coverage did not fully cover the search radius. AWOIS #13269 not seen.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	13	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 13269	71.91	251.9	Secondary (grouped)

Hydrographer Recommendations

Remove charted obstruction reported PA from the chart. Remove AWOIS #13269 from the database. Chart sounding data.

S-57 Data

[None]

Office Notes

Concur with clarification. No obstn was observed on SSS up to the shoreline and none was seen in the MBES. Item was disproved. Remove charted Obstn Rep PA.

1.18) AWOIS #13401 - not investigated

Primary Feature for AWOIS Item #13401

Search Position: 40° 39' 24.3" N, 074° 04' 06.4" W
Historical Depth: [None]
Search Radius: 0
Search Technique: S2, SWMB, DI
Technique Notes: [None]

History Notes:

UNDETERMINED CHARTING SOURCE -- "OBSTRUCTION REPORTED PA" NOW CHARTED IN POSITION 40°39'24.26" N 074°04'06.43" W (NAD 83). UPDATED 12/7/2005 JCM

Survey Summary

Survey Position: 40° 39' 24.3" N, 074° 04' 06.4" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-303.20:13:41 (10/30/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 14
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #13401 was not fully investigated.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	14	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 13401	0.70	108.4	Secondary (grouped)

Hydrographer Recommendations

Retain charted obstruction.

S-57 Data

[None]

Office Notes

Concur. Retain as charted.

1.19) AWOIS #13402 - not investigated.

Primary Feature for AWOIS Item #13402

Search Position: 40° 39' 06.1" N, 074° 01' 26.9" W
Historical Depth: [None]
Search Radius: 0
Search Technique: S2, SWMB, DI, SD
Technique Notes: [None]

History Notes:

NM 20/63 (MAY 18 1963)-- NEW YORK HARBOR SANITATION SCOW D.S. 45 HAS BEEN REPORTED SUNK ABOUT 200 YARDS 331 DEGREES 30 MINUTES FROM 40°38'59" N 074°01'24" W (NAD 27). SUBMERGED DANGEROUS WRECK NOW CHARTED IN POSITION 40°39'06.05" N 074°01'26.88" W (NAD 83). UPDATED 12/7/2005 JCM.

Survey Summary

Survey Position: 40° 39' 06.1" N, 074° 01' 27.0" W
Least Depth: [None]
TPU (±1.96σ): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-303.20:22:20 (10/30/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 15
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #13402 was not investigated due to unknown depth in vicinity of piers.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	15	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 13402	3.43	318.1	Secondary (grouped)

Hydrographer Recommendations

Retain charted wreck.

S-57 Data

[None]

Office Notes

Concur. Retain as charted.

1.20) AWOIS #13403 - not investigated

Primary Feature for AWOIS Item #13403

Search Position: 40° 39' 06.5" N, 074° 01' 27.7" W
Historical Depth: [None]
Search Radius: 0
Search Technique: S2, SWMB, DI
Technique Notes: [None]

History Notes:

NM 9/54 (FEB 27 1954) -- BAY RIDGE BARGE WRECK LIGHTED BUOY WR2 PAINTED RED SHOWING A AUICK FLASHING RED LIGHT OF 6 CANDLEPOWER 6 FEET ABOVE THE WATER HAS BEEN ESTABLISHED IN 20 FEET OF WATER ABOUT 285 YARDS 332 DEGREES 30 MINUTES FROM 40°38'59" N 074°01'24" W (NAD 27). SUBMERGED DANGEROUS WRECK NOW CHARTED IN POSITION 40°39'06.54" N 074°01'27.68" W (NAD 83). UPDATED 12/7/2005 JCM.

Survey Summary

Survey Position: 40° 39' 06.6" N, 074° 01' 27.7" W
Least Depth: [None]
TPU (±1.96σ): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-303.20:28:05 (10/30/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 16
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #13403 was not investigated due to unknown depth in vicinity of piers.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	16	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 13403	1.20	339.4	Secondary (grouped)

Hydrographer Recommendations

Retain charted wreck.

S-57 Data

[None]

Office Notes

Concur. Retain as charted.

1.21) AWOIS #13405 - not investigated

Primary Feature for AWOIS Item #13405

Search Position: 40° 40' 17.6" N, 074° 03' 24.9" W
Historical Depth: [None]
Search Radius: 50
Search Technique: S2, SWMB, DI
Technique Notes: SEARCH NOT REQUIRED IN DEPTHS SHOALER THAN 4 METERS

History Notes:

H09815/80 -- SUBMERGED PILE NOW CHARTED IN POSITION: 40°40'17.65" N 074°03'24.93" W (NAD 83).
 UPDATED 12/7/2005 JCM

Survey Summary

Survey Position: 40° 40' 17.8" N, 074° 03' 25.0" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-303.20:47:58 (10/30/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 17
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #13405 was not fully investigated due to shallow depth.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	17	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 13405	6.28	353.7	Secondary (grouped)
h11600/tj_3102_klein5000_sss100/2006-225/337_1547	0003	23.42	322.0	Secondary (grouped)

Hydrographer Recommendations

Retain charted submerged pile.

S-57 Data

[None]

Office Notes

Concur. Retain as charted.

1.22) AWOIS #13406 - not investigated

Primary Feature for AWOIS Item #13406

Search Position: 40° 40' 15.2" N, 074° 03' 31.1" W
Historical Depth: [None]
Search Radius: 0
Search Technique: S2, SWMB, DI
Technique Notes: SEARCH NOT REQUIRED IN DEPTHS SHOALER THAN 4 METERS

History Notes:

H09815/80 -- SUBMERGED PILE NOW CHARTED IN POSITION: 40°40'15.15" N 074°03'31.09" W (NAD 83).
 UPDATED 12/7/2005 JCM

Survey Summary

Survey Position: 40° 40' 15.1" N, 074° 03' 31.1" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-303.20:55:20 (10/30/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 18
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #13406 was not fully investigated.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	18	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 13406	1.46	184.7	Secondary (grouped)

Hydrographer Recommendations

Retain submerged pile.

S-57 Data

[None]

Office Notes

Concur. Retain as charted.

1.23) AWOIS #13410 - not investigated

Primary Feature for AWOIS Item #13410

Search Position: 40° 36' 27.5" N, 074° 02' 07.3" W
Historical Depth: [None]
Search Radius: 50
Search Technique: S2, SWMB, DI
Technique Notes: SEARCH NOT REQUIRED IN DEPTHS SHOALER THAN 4 METERS

History Notes:

UNKNOWN SOURCE -- SUBMERGED DANGEROUS WRECK NOW CHARTED IN POSITION 40°36'27.52" N 074°02'07.27" W (NAD 83). UPDATED 12/7/2005 JCM

Survey Summary

Survey Position: 40° 36' 27.5" N, 074° 02' 07.3" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-303.21:25:10 (10/30/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 19
Charts Affected: 12334_1, 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #13410 was not investigated due to shallow depth.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	19	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 13410	0.59	170.7	Secondary (grouped)

Hydrographer Recommendations

Retain charted wreck.

S-57 Data

[None]

Office Notes

Concur. Retain as charted.

1.24) AWOIS #13471 - retain as charted

Primary Feature for AWOIS Item #13471

Search Position: 40° 42' 02.9" N, 074° 02' 45.0" W
Historical Depth: [None]
Search Radius: 0
Search Technique: MB, S2
Technique Notes: [None]

History Notes:

L-1266/74-- THERE IS A SUNKEN BARGE OR A COLLAPSED PIERHEAD SECTION AT THE EASTERN TIP OF THE SOUTH PIER OF THE LIBERTY YACHT CLUB, FOOT OF BURMA ROAD AND CAVEN PT. ROAD, JERSEY CITY, NJ. THIS OBSTRUCTION WAS MARKED BY A 2 INCH BY 4 INCH UPRIGHT SPAR AT THE OUTBOARD QUARTERS OF SAME. THE SPARS HAD A RED PENNANT ON THE TOP AND EXTENDED APPROXIMATELY SIX FEET ABOVE THE WATER SURFACE. UPDATED 2/23/2006 JCM.

Survey Summary

Survey Position: 40° 42' 02.9" N, 074° 02' 45.0" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-304.17:14:47 (10/31/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 20
Charts Affected: 12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #13471 was not investigated due to shallow depth.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	20	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 13471	1.18	315.3	Secondary (grouped)

Hydrographer Recommendations

Retain AWOIS item #13471 as charted.

S-57 Data

[None]

Office Notes

[None]

1.25) AWOIS #13472 - not investigated

Primary Feature for AWOIS Item #13472

Search Position: 40° 41' 48.2" N, 074° 02' 59.6" W
Historical Depth: [None]
Search Radius: 0
Search Technique: MB, S2
Technique Notes: [None]

History Notes:

UNDETERMINED SOURCE (ANALYSIS OF HISTORICAL RECORDS INDICATES THAT IT WAS APPLIED TO THE CHARTS SOMETIME BETWEEN 1984 AND 1991).-- SUBM RUINS NOW CHARTED AROUND A CENTRAL POSITION OF: 40-41-48.25 N, 074-02-59.60 W (NAD 83). UPDATED 2/23/2006 JCM.

Survey Summary

Survey Position: 40° 41' 48.4" N, 074° 02' 59.8" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-304.17:21:53 (10/31/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 21
Charts Affected: 12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #13472 was not investigated.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	21	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 13472	5.28	312.9	Secondary (grouped)

Hydrographer Recommendations

Retain submerged ruins as charted.

S-57 Data

[None]

Office Notes

Concur. Retain as charted.

1.26) AWOIS #13474 - not investigated

Primary Feature for AWOIS Item #13474

Search Position: 40° 41' 28.7" N, 074° 03' 12.6" W
Historical Depth: [None]
Search Radius: 0
Search Technique: MB, S2
Technique Notes: [None]

History Notes:

TP-00740/74-- GROUP OF SUBMERGED PILES. MOST SEAWARD PILE NOW CHARTED IN POSITION: 40 41 28.70 N, 40 41 28.70 W (NAD 83). UPDATED 2/23/2006 JCM.

Survey Summary

Survey Position: 40° 41' 28.7" N, 074° 03' 12.5" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-304.17:26:45 (10/31/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 22
Charts Affected: 12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #13474 was not investigated.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	22	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 13474	0.91	085.3	Secondary (grouped)

Hydrographer Recommendations

Retain sumerged piles.

S-57 Data

[None]

Office Notes

Concur. Retain as charted.

1.27) AWOIS #13473 - not investigated**Primary Feature for AWOIS Item #13473**

Search Position: 40° 41' 39.7" N, 074° 03' 00.8" W
Historical Depth: [None]
Search Radius: 0
Search Technique: MB, S2
Technique Notes: [None]

History Notes:

H05607/34 -- SUBMERGED DANGEROUS WRECK AWASH AT HALF TIDE AND SURROUNDED BY PILES NOW CHARTED IN POSITION: 40 41 39.72 N, 074 03 00.80 W (NAD 83). UPDATED 2/23/2006 JCM.

Survey Summary

Survey Position: 40° 41' 39.7" N, 074° 03' 00.9" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-304.17:32:30 (10/31/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 23
Charts Affected: 12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #13473 was not investigated due to shallow depth.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	23	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 13473	1.90	248.9	Secondary (grouped)

Hydrographer Recommendations

Retain charted wreck.

S-57 Data

[None]

Office Notes

Concur. Retain as charted.

1.28) AWOIS #13475 - not investigated

Primary Feature for AWOIS Item #13475

Search Position: 40° 41' 19.3" N, 074° 03' 00.9" W
Historical Depth: [None]
Search Radius: 0
Search Technique: MB, S2
Technique Notes: [None]

History Notes:

UNDETERMINED SOURCE (ANALYSIS OF HISTORICAL RECORDS INDICATES THAT IT WAS APPLIED TO THE CHARTS SOMETIME BETWEEN 1975 AND 1979)-- OBSTRUCTION PA NOW CHARTED IN POSITION: 40 41 19.29 N, 074 03 00.90 W (NAD 83) . UPDATED 2/23/2006 JCM.

Survey Summary

Survey Position: 40° 41' 19.3" N, 074° 03' 00.9" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-304.17:38:52 (10/31/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 24
Charts Affected: 12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #13475 was not investigated,

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	24	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 13475	0.57	346.9	Secondary (grouped)

Hydrographer Recommendations

Retain Obstruction PA as charted.

S-57 Data

[None]

Office Notes

Concur. Retain as charted.

1.29) AWOIS #13476 - not investigated

Primary Feature for AWOIS Item #13476

Search Position: 40° 41' 47.5" N, 074° 03' 57.3" W
Historical Depth: [None]
Search Radius: 0
Search Technique: MB, S2
Technique Notes: [None]

History Notes:

L630/71-- SUNKEN WRECK WITH MAST SHOWING AT LOW WATER NOW CHARTED IN POSITION: 40 41 75.51 N, 40 41 75.51 W (NAD 83). UPDATED 2/23/2006 JCM.

Survey Summary

Survey Position: 40° 41' 47.5" N, 074° 03' 57.3" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-304.17:45:02 (10/31/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 25
Charts Affected: 12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #13476 was not investigated.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	25	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 13476	0.71	284.7	Secondary (grouped)

Hydrographer Recommendations

Retain charted wreck.

S-57 Data

[None]

Office Notes

Concur. Retain as charted.

1.30) AWOIS #13477 - not investigated

Primary Feature for AWOIS Item #13477

Search Position: 40° 41' 25.1" N, 074° 03' 54.5" W
Historical Depth: [None]
Search Radius: 0
Search Technique: MB, S2
Technique Notes: [None]

History Notes:

H05607/34 -- VISIBLE WRECK AWASH AT HALF TIDE AND SURROUNDED BY PILES NOW CHARTED IN POSITION: 40 41 25.14 N, 074 03 54.48 W (NAD 83). UPDATED 2/23/2006 JCM.

Survey Summary

Survey Position: 40° 41' 25.2" N, 074° 03' 54.6" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-304.17:52:44 (10/31/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 26
Charts Affected: 12334_1, 12333_1, 12337_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #13477 was not investigated due to shallow depth.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	26	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 13477	2.90	319.1	Secondary (grouped)

Hydrographer Recommendations

Retain charted visible wreck.

S-57 Data

[None]

Office Notes

Concur. Retain Vis. Wk.

1.31) AWOIS #13478 - not investigated

Primary Feature for AWOIS Item #13478

Search Position: 40° 41' 03.2" N, 074° 03' 45.4" W
Historical Depth: [None]
Search Radius: 0
Search Technique: MB, S2
Technique Notes: [None]

History Notes:

UNDETERMINED SOURCE THAT PREDATES THE FIRST STANDARD OF CHART 12234 FROM 1941--SUNKEN WRECK NOW CHARTED IN POSITION: 40 41 03.20 N, 074 03 45.45 W, (NAD 83). UPDATED 2/23/2006 JCM.

Survey Summary

Survey Position: 40° 41' 03.2" N, 074° 03' 45.5" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-304.17:59:11 (10/31/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 27
Charts Affected: 12334_1, 12337_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #13478 was not investigated due to shallow depth.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	27	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 13478	2.58	304.1	Secondary (grouped)

Hydrographer Recommendations

Retain charted wreck.

S-57 Data

[None]

Office Notes

Concur. Retain as charted.

1.32) AWOIS #13479 - not investigated

Primary Feature for AWOIS Item #13479

Search Position: 40° 40' 45.2" N, 074° 04' 12.6" W
Historical Depth: [None]
Search Radius: 0
Search Technique: MB, S2
Technique Notes: [None]

History Notes:

UNDETERMINED SOURCE (HISTORICAL RECORDS INDICATE THAT THIS WRECK WAS APPLIED TO THE CHARTS PRIOR TO 1969) -- SUNKEN WRECK NOW CHARTED IN POSITION: 40 40 45.20 N, 074 04 12.63 W, (NAD 83). UPDATED 2/23/2006 JCM.

Survey Summary

Survey Position: 40° 40' 45.2" N, 074° 04' 12.7" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-304.18:08:23 (10/31/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 28
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #13479 was not investigated due to shallow depth.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	28	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 13479	1.46	327.3	Secondary (grouped)

Hydrographer Recommendations

Retain charted wreck.

S-57 Data

[None]

Office Notes

Concur. Retain as charted.

1.33) AWOIS #13480 - not investigated

Primary Feature for AWOIS Item #13480

Search Position: 40° 39' 56.9" N, 074° 05' 09.6" W
Historical Depth: [None]
Search Radius: 0
Search Technique: MB, S2
Technique Notes: [None]

History Notes:

UNDETERMINED SOURCE (HISTORICAL RECORDS INDICATE THAT THIS WRECK WAS APPLIED TO THE CHARTS SOMETIME BETWEEN 1933 AND 1944) -- SUNKEN WRECK NOW CHARTED IN POSITION: 40 39 56.91 N, 074 05 09.58 W, (NAD 83). UPDATED 2/23/2006 JCM.

Survey Summary

Survey Position: 40° 39' 57.0" N, 074° 05' 09.6" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-304.18:15:13 (10/31/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 29
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #13480 was not investigated due to shallow depth.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	29	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 13480	1.40	333.9	Secondary (grouped)

Hydrographer Recommendations

Retain charted wreck.

S-57 Data

[None]

Office Notes

Concur. Retain as charted.

1.34) AWOIS #13481 - not investigated

Primary Feature for AWOIS Item #13481

Search Position: 40° 39' 55.5" N, 074° 05' 10.2" W
Historical Depth: [None]
Search Radius: 0
Search Technique: MB, S2
Technique Notes: [None]

History Notes:

UNDETERMINED SOURCE (HISTORICAL RECORDS INDICATE THAT THIS WRECK WAS APPLIED TO THE CHARTS SOMETIME BETWEEN 1933 AND 1944) -- SUNKEN WRECK NOW CHARTED IN POSITION: 40 40 45.20 N, 074 04 12.63 W, (NAD 83). UPDATED 2/23/2006 JCM.

Survey Summary

Survey Position: 40° 39' 55.6" N, 074° 05' 10.2" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-304.18:19:39 (10/31/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 30
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #13481 was not investigated due to shallow depth.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	30	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 13481	1.65	001.9	Secondary (grouped)

Hydrographer Recommendations

Retain charted wreck.

S-57 Data

[None]

Office Notes

Concur. Retain as charted.

1.35) AWOIS #13483 - not investigated

Primary Feature for AWOIS Item #13483

Search Position: 40° 39' 54.3" N, 074° 05' 18.2" W
Historical Depth: [None]
Search Radius: 0
Search Technique: MB, S2
Technique Notes: [None]

History Notes:

UNDETERMINED SOURCE (HISTORICAL RECORDS INDICATE THAT THIS WRECK WAS APPLIED TO THE CHARTS SOMETIME BETWEEN 1933 AND 1944) -- SUNKEN WRECK NOW CHARTED IN POSITION: 40 40 45.20 N, 074 04 12.63 W, (NAD 83). UPDATED 2/23/2006 JCM.

Survey Summary

Survey Position: 40° 39' 54.4" N, 074° 05' 18.3" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-304.18:24:46 (10/31/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 31
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #13483 was not investigated.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	31	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 13483	2.63	338.3	Secondary (grouped)

Hydrographer Recommendations

Retain charted wreck ED.

S-57 Data

[None]

Office Notes

Concur. Retain as charted.

1.36) AWOIS #13484 - not investigated

Primary Feature for AWOIS Item #13484

Search Position: 40° 39' 44.4" N, 074° 05' 27.9" W
Historical Depth: [None]
Search Radius: 0
Search Technique: MB, S2
Technique Notes: [None]

History Notes:

TP-00743/ 78 -- VISIBLE WRECK NOW CHARTED IN POSITION: 40 39 44.43 N, 40 39 44.43 W (NAD 83).
 UPDATED 2/23/2006 JCM.

Survey Summary

Survey Position: 40° 39' 44.5" N, 074° 05' 27.9" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-304.18:30:37 (10/31/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 32
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #13484 was not investigated due to shallow depth.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	32	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 13484	0.78	017.2	Secondary (grouped)

Hydrographer Recommendations

Retain charted visible wreck.

S-57 Data

[None]

Office Notes

Concur. Retain as charted.

1.37) AWOIS #13485 - not investigated

Primary Feature for AWOIS Item #13485

Search Position: 40° 39' 38.9" N, 074° 05' 25.2" W
Historical Depth: [None]
Search Radius: 0
Search Technique: MB, S2
Technique Notes: [None]

History Notes:

TP-00743/78-- GROUP OF SUNKEN WRECKS SCATTERED ALONG APPROXIMATELY 300 METERS OF THE SHORE EXTENDING AWAY FROM THE FOLLOWING CENTRAL POSITION: 40 39 38.86 N, 074 05 25.20 W (NAD 83). UPDATED 2/23/2006 JCM.

Survey Summary

Survey Position: 40° 39' 38.9" N, 074° 05' 25.2" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-304.18:35:59 (10/31/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 33
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #13485 was not investigated due to shallow depth.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	33	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 13485	1.60	334.7	Secondary (grouped)

Hydrographer Recommendations

Retain charted wrecks.

S-57 Data

[None]

Office Notes

Concur. Retain as charted.

1.38) AWOIS #13486 - not investigated

Primary Feature for AWOIS Item #13486

Search Position: 40° 39' 36.8" N, 074° 05' 07.1" W
Historical Depth: [None]
Search Radius: 0
Search Technique: MB, S2
Technique Notes: [None]

History Notes:

H05609/34 -- VISIBLE WRECK NOW CHARTED IN POSITION: 40 39 36.79 N, 074 05 07.07 W (NAD 83).
 UPDATED 2/23/2006 JCM.

Survey Summary

Survey Position: 40° 39' 36.9" N, 074° 05' 07.2" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-304.18:40:43 (10/31/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 34
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #13486 was not investigated due to shallow depth.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	34	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 13486	4.71	321.6	Secondary (grouped)

Hydrographer Recommendations

Retain charted visible wreck.

S-57 Data

[None]

Office Notes

[None]

1.39) AWOIS #13490 - not investigated

Primary Feature for AWOIS Item #13490

Search Position: 40° 41' 00.9" N, 074° 01' 29.3" W
Historical Depth: [None]
Search Radius: 0
Search Technique: MB, S2
Technique Notes: [None]

History Notes:

UNDETERMINED SOURCE-- SUBM DOL PA NOW CHARTED IN POSITION: 40 41 00.91 N, 074 01 29.34, W (NAD 83) UPDATED 2/23/2006 JCM.

Survey Summary

Survey Position: 40° 41' 01.0" N, 074° 01' 29.3" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-304.19:02:32 (10/31/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 35
Charts Affected: 12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #13490 was not investigated due to shallow depth.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	35	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 13490	2.00	035.3	Secondary (grouped)

Hydrographer Recommendations

Retain charted submerged dolphin PA.

S-57 Data

[None]

Office Notes

Concur. Retain as charted.

1.40) AWOIS #13534 - not investigated**Primary Feature for AWOIS Item #13534**

Search Position: 40° 37' 58.3" N, 074° 04' 20.2" W
Historical Depth: [None]
Search Radius: 0
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

UNDETERMINED SOURCE -- OBSTRUCTION REPORTED NOW CHARTED IN POSITION: 40 37 58.3 N, 40 37 58.3 W (NAD 83). UPDATED 3/9/2006 JCM.

Survey Summary

Survey Position: 40° 37' 58.3" N, 074° 04' 20.3" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-304.19:14:56 (10/31/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 36
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #13534 was not investigated.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	36	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 13534	2.98	296.0	Secondary (grouped)

Hydrographer Recommendations

Retain charted obstruction.

S-57 Data

[None]

Office Notes

Concur. Retain as charted.

1.41) AWOIS #2702 - not investigated

Primary Feature for AWOIS Item #2702

Search Position: 40° 41' 57.1" N, 074° 01' 37.7" W
Historical Depth: [None]
Search Radius: 200
Search Technique: SD, S2, SWMB, DI
Technique Notes: [None]

History Notes:

H9815/80--OPR-B139-WH-80; SPIKE FOUND WITH 46 FT LD, 10-METER DEVELOPMENT ■
 FE232/80WD--OPR-B645-RU/HE-80; HUNG AT 44 FT., CLEARED TO 43 FT; NO DIVER
 ■INVESTIGATION, FATHOGRAMS INDICATE OBSTR. MAY EXTEND ABOUT 6 FT OFF BOTTOM.

Survey Summary

Survey Position: 40° 41' 57.1" N, 074° 01' 37.7" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-333.19:12:42 (11/29/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 38
Charts Affected: 12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

The AWOIS radius for item #2702 was not fully covered by survey H11600. H11395 is the junctioning survey for this item. The DR mentions that there were no AWOIS items in that survey.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	38	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 2702	1.54	346.4	Secondary (grouped)

Hydrographer Recommendations

Retain charted 43 foot obstruction.

S-57 Data

[None]

Office Notes

Concur. Retain as charted.

1.42) AWOIS #9717 - not investigated

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' 39.0" N, 074° 02' 48.0" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-334.18:29:26 (11/30/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 39
Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

The AWOIS radius for item #9717 was not fully covered by survey H11600. H11601 is the junctioning survey for this item. Nothing was found on H11600 that matches the AWOIS description of this item. H11601 found an obstruction within the search radius for this item.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	39	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 9717	0.84	349.9	Secondary (grouped)

Hydrographer Recommendations

Use the charting recommendations of H11601.

S-57 Data

[None]

Office Notes

Defer to H116001 for charting recommendation.

1.43) AWOIS #13488 - retain as charted.

Primary Feature for AWOIS Item #13488

Search Position: 40° 39' 57.4" N, 074° 00' 23.5" W
Historical Depth: [None]
Search Radius: 200
Search Technique: MB, S2
Technique Notes: [None]

History Notes:

LNM 38/82, 3rd CGD -- PATCHOGUE OIL PIER IN POSITION APPROXIMATE: 40 39 57.00 N, 074 00 25.00 W (NAD 27) HAS BEEN KNOCKED DOWN. UNDERWATER DEBRIS EXISTS IN THE AREA. UPDATED 2/23/2006 JCM.

Survey Summary

Survey Position: 40° 39' 57.4" N, 074° 00' 23.5" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-334.18:44:18 (11/30/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 40
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #13488 is described as debris. Debris was acquired with 200% Klein 5000 side scan and 100% Reson 8125 multibeam. The entire radius for this item was not investigated. The debris in the area that was covered is not shoal enough when compared with surrounding bathymetry to be navigationally significant.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	40	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 13488	0.26	180.0	Secondary (grouped)

Hydrographer Recommendations

Update the AWOIS database to reflect the current survey findings and forward the incomplete area of the AWOIS circle to NRT for complete investigation.

S-57 Data

[None]

Office Notes

Concur. Retain as charted.

1.44) AWOIS #10660 - uncharted disproval

Primary Feature for AWOIS Item #10660

Search Position: 40° 40' 48.0" N, 074° 01' 18.0" W
Historical Depth: [None]
Search Radius: 200
Search Technique: MB, S2
Technique Notes: [None]

History Notes:

LNM7/1994--IST CGD, 2/16/94; THE 26-FOOT CENTER CONSOLE BOAT REPORTED IN BUTTERMILK CHANNEL REMAINS UNLOCATED. LAST KNOWN POSITION IS 40 40 48N, 74 01 18W NAD 83 . ENTERED 6/00 MCR■■■LNM 20/06 -- DELETE SYMBOL FOR WRECK (REP 1994).■ ****PERSONAL COMMUNICATION WITH JOHN TAVOLARO - John.F.Tavolaro@nan02.usace.army.mil- OF THE USACE REVEALED THAT THERE WAS NO INDICATION OF A WRECK ON CHANNEL CONDITION SURVEYS DONE BETETWEEN APRIL 1999 AND FEBRUARY 2005. UPDATED 7/3/2006 JCM.

Survey Summary

Survey Position: 40° 40' 48.0" N, 074° 01' 18.0" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-335.14:01:32 (12/01/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 41
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

The Current AWOIS description for item #10660 has this item being removed. Notice to Mariners dated 18 May 2006 shows DELETE symbol for wreck (rep 1994). This wreck no longer appears on chart 12334. No item matching the description exists in search radius after investigation with 200% SSS and 100% MBES.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	41	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 10660	0.77	172.7	Secondary (grouped)

Hydrographer Recommendations

Remove AWOIS item #10660 from the database.

S-57 Data

[None]

Office Notes

Concur with clarification. Item is not currently charted. Retain as not charted.

1.45) AWOIS #10667 Obstruction - 35/206

Primary Feature for AWOIS Item #10667

Search Position: 40° 42' 04.5" N, 074° 02' 07.5" W
Historical Depth: [None]
Search Radius: 50
Search Technique: MB, S2
Technique Notes: [None]

History Notes:

LN47/74--10/30/75, 3RD CGD; TWO UNIDENTIFIED OBSTRUCTIONS HAVE BEEN REPORTED TO EXIST OFF ELLIS ISLAND, NY. ONE IS IN APPROX POSITION 40 42 04N, 074 02 09W NAD 27. SEE AWOIS 10668 FOR SECOND. ENTERED 6/00 MCR.

Survey Summary

Survey Position: 40° 42' 03.1" N, 074° 02' 07.1" W
Least Depth: 6.18 m (= 20.29 ft = 3.381 fm = 3 fm 2.29 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) ± 0.980 m ; TVU (TPEv) ± 0.367 m
Timestamp: 2006-225.16:53:49.021 (08/13/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_225 / 235_1653
Profile/Beam: 35/206
Charts Affected: 12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #10667 acquired with Reson 8125 MBES and 200% Klein 5000 side scan. Soundings were corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_225/235_1653	35/206	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-225/100_1653	0001	6.98	062.8	Secondary
AWOIS_B310-TJ-06	AWOIS # 10667	42.92	168.4	Secondary

Hydrographer Recommendations

Move charted AWOIS item #10667 to current position with a least depth of 6.18 meters (20.29 feet).

Cartographically-Rounded Depth (Affected Charts):

20ft (12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1)

3 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)

6.2m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: VALSOU - 6.183 m

WATLEV - 3:always under water/submerged

Office Notes

Concur. Move charted AWOIS item #10667 to current position with a least depth of 6.18 meters (20.29 feet).

1.46) AWOIS #13535 883/127 - Wk**Primary Feature for AWOIS Item #13535**

Search Position: 40° 40' 48.4" N, 074° 01' 07.6" W
Historical Depth: [None]
Search Radius: 0
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

UNDETERMINED SOURCE THAT PREDATES THE EARLIEST STANDARD FOR CHART 12334 --
 SUNKEN WRECK NOW CHARTED IN POSITION: 40 40 48.41 N, 074 01 07.56 W (NAD 83). UPDATED
 3/9/2006 JCM.

Survey Summary

Survey Position: 40° 40' 49.0" N, 074° 01' 07.2" W
Least Depth: 9.02 m (= 29.58 ft = 4.930 fm = 4 fm 5.58 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-225.18:37:56.677 (08/13/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_225 / 392_1836
Profile/Beam: 883/127
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #13535 acquired with Reson 8125 MBES and 200% Klein 5000 side scan. Soundings were corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_225/392_1836	883/127	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-227/218_1826	0005	3.21	161.3	Secondary
h11600/tj_3102_klein5000_sss100/2006-225/148_1743	0006	7.07	168.0	Secondary
AWOIS_B310-TJ-06	AWOIS # 13535	20.65	026.9	Secondary (grouped)

Hydrographer Recommendations

Move charted AWOIS item #13535 to current position with a least depth of 9.02 meters (29.58 feet).

Cartographically-Rounded Depth (Affected Charts):

29ft (12334_1, 12335_1, 12327_1, 12326_1)

4 ¾fm (12300_1, 13006_1, 13003_1, 14500_1)

9.0m (5161_1)

S-57 Data

Geo object 1: Wreck (WRECKS)

Attributes: CATWRK - 2:dangerous wreck

QUASOU - 6:least depth known

VALSOU - 9.016 m

WATLEV - 3:always under water/submerged

Office Notes

Concur. Move charted AWOIS item #13535 to current position with a least depth of 9.02 meters (29.58 feet).

1.47) AWOIS #13262/#10666 603/146

Primary Feature for AWOIS Item #13262

Search Position: 40° 41' 26.5" N, 074° 01' 33.6" W
Historical Depth: 10.36 m
Search Radius: 50
Search Technique: MB, S2
Technique Notes: [None]

History Notes:

CL-54/03 -- S-B601-RU-02; FOUND WK AT 40/41/26.493N 74/01/33.576W WITH LEAST DEPTH OF 34 FT (ENT. 05/27/05, SME)

Survey Summary

Survey Position: 40° 41' 26.5" N, 074° 01' 33.6" W
Least Depth: 10.45 m (= 34.27 ft = 5.712 fm = 5 fm 4.27 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-226.18:47:12.153 (08/14/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_226 / 287_1845
Profile/Beam: 603/146
Charts Affected: 12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #13262 acquired with Reson 8125 MBES and 200% Klein 5000 side scan. Soundings were corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_226/287_1845	603/146	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 13262	0.77	202.7	Secondary
h11600/tj_3102_klein5000_sss100/2006-226/111_1603	0001	3.48	247.4	Secondary
h11600/tj_3102_klein5000_sss200/2006-227/209_1439	0001	6.70	115.4	Secondary
AWOIS_B310-TJ-06	AWOIS # 10666	383.45	008.4	Secondary

Hydrographer Recommendations

Retain charted AWOIS item #13262 with a least depth of 10.45 meters (34.27 feet).

Cartographically-Rounded Depth (Affected Charts):

34ft (12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1)

5 ¾fm (12300_1, 13006_1, 13003_1, 14500_1)

10.4m (5161_1)

S-57 Data

Geo object 1: Wreck (WRECKS)
Attributes: CATWRK - 2:dangerous wreck
QUASOU - 6:least depth known
VALSOU - 10.447 m
WATLEV - 3:always under water/submerged

Office Notes

Concur. Retain charted AWOIS item #13262 with a least depth of 10.45 meters (34.27 feet).

1.48) AWOIS # 2706 3317/153 - obstn**Primary Feature for AWOIS Item #2706**

Search Position: 40° 40' 43.8" N, 074° 01' 14.5" W
Historical Depth: 8.53 m
Search Radius: 50
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

BP69301/66--COE SURVEY ■ H9815/80--OPR-B139-WH-80, ITEM 21; FOUND BY SOUNDER, 31 FT. LD, NO DIVERS. ■ FE232/80--OPR-B645-RU/HE-80, ITEM 30; LOCATED BY SIDE SCAN SONAR AT POSITION ■40-40-43.4N, 74-01-16.0W, DIVERS DETERMINE 28 FT LD BY PNEUMATIC GAGE, ■AREA CLEARED TO 28 FT ED; DIVERS DESCRIBE AS LARGE PIECE OF CONSTRUCTION ■DEBRIS.

Survey Summary

Survey Position: 40° 40' 43.6" N, 074° 01' 14.9" W
Least Depth: 9.04 m (= 29.66 ft = 4.943 fm = 4 fm 5.66 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) ± 0.980 m ; TVU (TPEv) ± 0.367 m
Timestamp: 2006-227.18:08:22.373 (08/15/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_227 / 172_1802
Profile/Beam: 3317/153
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #2706 acquired with Reson 8125 MBES and 200% Klein 5000 side scan. Soundings were corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_227/172_1802	3317/153	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-225/148_1743	0003	6.74	049.0	Secondary
AWOIS_B310-TJ-06	AWOIS # 2706	10.56	249.2	Secondary

Hydrographer Recommendations

Retain charted AWOIS item #2706 with updated least depth of 9.04 meters (29.66 feet).

Cartographically-Rounded Depth (Affected Charts):

29ft (12334_1, 12335_1, 12327_1, 12326_1)

5fm (12300_1, 13006_1, 13003_1, 14500_1)

9.0m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: VALSOU - 9.040 m

WATLEV - 3:always under water/submerged

Office Notes

Concur. Retain charted AWOIS item #2706 with updated least depth of 9.04 meters (29.66 feet).

1.49) AWOIS #1672 1776/48**Primary Feature for AWOIS Item #1672**

Search Position: 40° 40' 40.0" N, 074° 02' 48.9" W
Historical Depth: [None]
Search Radius: 300
Search Technique: [None]
Technique Notes: [None]

History Notes:

LN9/73--SUBM OBJECT IN 20 FT OF WATER APPROX. 1400 YDS, 189 DEG FROM STATUE OF LIBERTY 50 YDS NE OF NJ PIERHEAD CHANNEL N ENTRANCE BUOY 1. FE221/78-79--OPR-C622, ITEM 14; NOT INVESTIGATED, LACK OF TIME; REQUIRED A 400-METER RADIUS VERIFICATION/DISPROVAL DRAG.

Survey Summary

Survey Position: 40° 40' 43.4" N, 074° 02' 51.6" W
Least Depth: 6.63 m (= 21.75 ft = 3.624 fm = 3 fm 3.75 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) ± 0.980 m ; TVU (TPEv) ± 0.367 m
Timestamp: 2006-230.15:09:07.445 (08/18/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_230 / 356_1507
Profile/Beam: 1776/48
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #1672 (obstruction) acquired with Reson 8125 MBES and 200% Klein 5000 side scan. Soundings were corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_230/356_1507	1776/48	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-226/138_1650	0001	1.52	300.6	Secondary
AWOIS_B310-TJ-06	AWOIS # 1672	122.44	329.0	Secondary

Hydrographer Recommendations

Chart obstruction with a least depth of 6.63 meters (21.75 feet).

Cartographically-Rounded Depth (Affected Charts):

21ft (12334_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: VALSOU - 6.628 m

WATLEV - 3:always under water/submerged

Office Notes

Concur. Re-chart AWOIS obstruction with a least depth of 6.63 meters (21.75 feet).

1.50) AWOIS #13257 1588/1 - Obstr**Primary Feature for AWOIS Item #13257**

Search Position: 40° 40' 15.9" N, 074° 03' 02.9" W
Historical Depth: 8.53 m
Search Radius: 50
Search Technique: MB, S2
Technique Notes: [None]

History Notes:

L-54/03 -- S-B601-RU/2002; OBST LOCATED AT 40/40/15.872N 74/03/02.942W WITH A LEAST DEPTH OF 28 FT (ENT. 05/26/05, SME)

Survey Summary

Survey Position: 40° 40' 15.7" N, 074° 03' 03.0" W
Least Depth: 7.62 m (= 24.98 ft = 4.164 fm = 4 fm 0.98 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.368 m
Timestamp: 2006-232.17:28:39.911 (08/20/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_232 / 423_1726
Profile/Beam: 1588/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #13257 acquired with Reson 8125 MBES and 200% Klein 5000 side scan. Soundings were corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_232/423_1726	1588/1	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-234/205_1358	0001	2.66	060.1	Secondary
h11600/tj_3102_klein5000_sss200/2006-234/205_1412	0001	2.79	076.5	Secondary
h11600/tj_3102_klein5000_sss100/2006-234/106_1420	0001	4.49	315.6	Secondary
AWOIS_B310-TJ-06	AWOIS # 13257	5.60	196.0	Secondary
h11600/tj_3102_klein5000_sss100/2006-225/234_1611	0008	8.13	199.2	Secondary

Hydrographer Recommendations

Retain charted AWOIS item #13257 with updated least depth of 7.62 meters (24.98 feet).

Cartographically-Rounded Depth (Affected Charts):

25ft (12334_1, 12327_1, 12326_1)

4fm (12300_1, 13006_1, 13003_1, 14500_1)

7.6m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: OBJNAM - AWOIS 13257
QUASOU - 6:least depth known
STATUS - 1:permanent
TECSOU - 3:found by multi-beam
VALSOU - 7.615 m
VERDAT - 12:Mean lower low water
WATLEV - 3:always under water/submerged

Office Notes

Concur. Retain charted AWOIS item #13257 with updated least depth of 7.62 meters (24.98 feet).

1.51) AWOIS #13259 4288/4 - obstn

Primary Feature for AWOIS Item #13259

Search Position: 40° 39' 35.9" N, 074° 02' 50.1" W
Historical Depth: 10.97 m
Search Radius: 50
Search Technique: MB, S2
Technique Notes: [None]

History Notes:

L-54/03 -- S-B601-RU/2002; OBST FOUND AT 40/39/35.881N 74/02/50.092W WITH A LEAST DEPTH OF 36 FT (ENT. 05/26/05, SME)

Survey Summary

Survey Position: 40° 39' 36.4" N, 074° 02' 49.3" W
Least Depth: 10.45 m (= 34.30 ft = 5.716 fm = 5 fm 4.30 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.369 m
Timestamp: 2006-232.18:07:13.285 (08/20/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_232 / 444_1800
Profile/Beam: 4288/4
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #13259 acquired with Reson 8125 MBES and 200% Klein 5000 side scan. Soundings were corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_232/444_1800	4288/4	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-232/310_1511	0003	1.77	077.2	Secondary
AWOIS_B310-TJ-06	AWOIS # 13259	24.73	047.5	Secondary

Hydrographer Recommendations

Move charted AWOIS item #13259 to current position with updated least depth of 10.45 meters (34.30 feet).

Cartographically-Rounded Depth (Affected Charts):

34ft (12334_1, 12327_1, 12326_1)

5 ¾fm (12300_1, 13006_1, 13003_1, 14500_1)

10.5m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: OBJNAM - AWOIS #13259
QUASOU - 6:least depth known
TECSOU - 3:found by multi-beam
VALSOU - 10.454 m
WATLEV - 3:always under water/submerged

Office Notes

Concur. Move charted AWOIS item #13259 to current position with updated least depth of 10.45 meters (34.30 feet).

1.52) AWOIS #13489 299/203 - pier ruins

Primary Feature for AWOIS Item #13489

Search Position: 40° 39' 55.0" N, 074° 00' 39.0" W
Historical Depth: [None]
Search Radius: 150
Search Technique: MB, S2
Technique Notes: [None]

History Notes:

L-185/88 -- PIER STRUCTURE RUNNING NE-SW TO THE NORTH SHORE OF GOWANUS BAY FROM THE ABOVE POSITION HAS BEEN REMOVED. THE PIER WAS FORMERLY CALLED THE "COLOMBIA STREET PIER" . ALL STRUCTURE BELOW THE LOW WATER MARK HAS BEEN REMOVED, BUT NOW AN UNMARKED HAZARD TO NAVIGATION EXISTS. SOUNDINGS IN THE SOUTHEAST CORNER ARE UNDER 11 FT ON A MUD SILT BOTTOM. UPDATED 2/23/2006 JCM.

Survey Summary

Survey Position: 40° 39' 55.5" N, 074° 00' 37.7" W
Least Depth: 4.10 m (= 13.44 ft = 2.240 fm = 2 fm 1.44 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-261.14:16:26.575 (09/18/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_261 / 924_1415
Profile/Beam: 299/203
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #13489 radius covered with Reson 8125 MBES and 200% Klein 5000 side scan except in areas shoaler than 4 meters. Soundings were corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_261/924_1415	299/203	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-225/334_1757	0003	10.16	010.7	Secondary
h11600/tj_3102_klein5000_sss100/2006-225/334_1757	0024	12.60	337.1	Secondary
AWOIS_B310-TJ-06	AWOIS # 13489	34.61	064.6	Secondary

Hydrographer Recommendations

Delete obstruction from chart. Chart ruins running from NE to SW up to the bulkhead.

Cartographically-Rounded Depth (Affected Charts):

13ft (12334_1, 12327_1, 12326_1)

2 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)

4.1m (5161_1)

S-57 Data

[None]

Office Notes

Defer to MCD for charting recommendation.

1.53) AWOIS #2695 84/84 - disproved

Primary Feature for AWOIS Item #2695

Search Position: 40° 41' 21.4" N, 074° 02' 28.5" W
Historical Depth: [None]
Search Radius: 50
Search Technique: MB, S2
Technique Notes: [None]

History Notes:

LNM36/79-- ■ H9815/80--OPR-B139-WH-80; NO SPECIFIC INVESTIGATION, NOTHING FOUND ON MAIN- ■SCHEME HYDROGRAPHY. ■ FE232/80WD--OPR-B645-RU/HE-80, ITEM 24; AREA CLEARED TO 20 FT WITHOUT HANG ■HYDROGRAPHER RECOMMENDS CHARTING OBSTR. ED, SWEEP CLEAR TO 20 FT ■HYDROGRAPHER FEELS THAT ORIGINAL REPORT WAS ERRONEOUS AND THAT NO OBSTR. ■EXISTS. CHECKS WITH USCG, COE AND LOCAL KNOWLEDGEABLE SOURCES REVEALS THAT ■THERE IS NO RECORD OF AN OBSTR. OTHER THAN IN THE LNM36/79.

Survey Summary

Survey Position: 40° 41' 21.3" N, 074° 02' 27.2" W
Least Depth: 7.38 m (= 24.20 ft = 4.033 fm = 4 fm 0.20 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) ± 0.980 m ; TVU (TPEv) ± 0.367 m
Timestamp: 2006-258.16:45:41.482 (09/15/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_258 / 901_1645
Profile/Beam: 84/84
Charts Affected: 12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Item not found.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_258/901_1645	84/84	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 2695	30.55	095.8	Secondary

Hydrographer Recommendations

Remove cleared 20 ft Obstn ED from chart. Remove AWOIS 2695 from database.

Cartographically-Rounded Depth (Affected Charts):

24ft (12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1)

4fm (12300_1, 13006_1, 13003_1, 14500_1)

7.4m (5161_1)

S-57 Data

[None]

Office Notes

Concur.Remove cleared 20 ft Obstn ED from chart.

1.54) AWOIS #13250 204/124 - Obstn

Primary Feature for AWOIS Item #13250

Search Position: 40° 36' 26.1" N, 074° 02' 20.8" W
Historical Depth: [None]
Search Radius: 50
Search Technique: MB, S2
Technique Notes: [None]

History Notes:

LNM 11/05 (3/15/05) -- NOS REINSTALLED A CURRENT METER AT 40/36/26.1N 74/02/20.82 LOCATED ON EAST SIDE OF THE NARROWS APPROX 120 YDS SOUTH OF THE BRIDGE (ENT 05/25/05, SME)

Survey Summary

Survey Position: 40° 36' 26.1" N, 074° 02' 20.8" W
Least Depth: 16.80 m (= 55.11 ft = 9.186 fm = 9 fm 1.11 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-242.18:38:48.645 (08/30/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_242 / 347_1838
Profile/Beam: 204/124
Charts Affected: 12334_1, 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #13250 acquired with Reson 8125 MBES and 200% Klein 5000 side scan. Soundings were corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_242/347_1838	204/124	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 13250	1.36	115.7	Secondary
h11600/tj_3102_klein5000_sss100/2006-226/102_1250	0001	5.09	140.2	Secondary
h11600/tj_3102_klein5000_sss100/2006-235/102_1605	0002	5.41	143.4	Secondary
h11600/tj_3102_klein5000_sss100/2006-235/103_1619	0002	8.70	116.2	Secondary

Hydrographer Recommendations

Retain AWOIS item #13250 as charted with a least depth of 16.80 meters (55.11 feet).

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: VALSOU - 16.799 m
WATLEV - 3:always under water/submerged

Office Notes

Concur.Retain AWOIS item #13250 as charted with a least depth of 16.80 meters (55.11 feet).

1.55) AWOIS #10654 - 3349/219 - disproved

Primary Feature for AWOIS Item #10654

Search Position: 40° 38' 22.0" N, 074° 03' 06.0" W
Historical Depth: [None]
Search Radius: 500
Search Technique: SD, S2, SWMB, DI
Technique Notes: [None]

History Notes:

LN23/97--3RD CGD, ADD SYMBOL FOR OBSTRUCTION, DEPTH UNKNOWN IN 40-38'22.8N 074-03'06.0W. NO OTHER INFORMATION GIVEN. ENTERED 6/00 MCR■■■ DESCRIPTION■ **** CONVERSATION WITH 1ST CGD -- RECORDS INDICATE THAT THE OBSTRUCTION IS A LOST ANCHOR .

Survey Summary

Survey Position: 40° 38' 21.6" N, 074° 03' 06.3" W
Least Depth: 14.62 m (= 47.96 ft = 7.993 fm = 7 fm 5.96 ft)
TPU (±1.96σ): THU (TPEh) ±0.981 m ; TVU (TPEv) ±0.368 m
Timestamp: 2006-241.19:12:23.905 (08/29/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_241 / 181_1906
Profile/Beam: 3349/219
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_241/181_1906	3349/219	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-236/227_1310	0002	1.56	277.1	Secondary
h11600/tj_3102_klein5000_sss100/2006-235/129_1426	0001	2.54	165.1	Secondary
AWOIS_B310-TJ-06	AWOIS # 10654	13.78	205.4	Secondary

Hydrographer Recommendations

[None]

S-57 Data

[None]

Office Notes

[None]

1.56) AWOIS #13404 2702/146 - Subm. Wk.**Primary Feature for AWOIS Item #13404**

Search Position: 40° 37' 47.8" N, 074° 02' 30.1" W
Historical Depth: [None]
Search Radius: 50
Search Technique: VS, SD
Technique Notes: [None]

History Notes:

UNDETERMINED SOURCE-- VISIBLE WRECK NOW CHARTED IN POSITION 40°37'47.85" N 074°02'30.16" W (NAD 83). UPDATED 12/7/2005 JCM

Survey Summary

Survey Position: 40° 37' 48.2" N, 074° 02' 31.1" W
Least Depth: 7.54 m (= 24.73 ft = 4.121 fm = 4 fm 0.73 ft)
TPU ($\pm 1.96\sigma$): **THU (TPE_h)** ± 0.980 m ; **TVU (TPE_v)** ± 0.367 m
Timestamp: 2006-241.15:44:17.564 (08/29/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_241 / 206_1540
Profile/Beam: 2702/146
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #13404 acquired with Reson 8125 MBES and 200% Klein 5000 side scan. Soundings were corrected to MLLW with verified water levels and final tide zoning. The wreck is submerged.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_241/206_1540	2702/146	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-236/222_1416	0002	1.70	086.2	Secondary
h11600/tj_3102_klein5000_sss100/2006-225/123_1908	0001	4.96	345.0	Secondary
AWOIS_B310-TJ-06	AWOIS # 13404	24.45	295.3	Secondary

Hydrographer Recommendations

Delete visible wreck from chart. Chart submerged wreck with a least depth of 7.54 meters (24.73 feet).

Cartographically-Rounded Depth (Affected Charts):

24ft (12334_1, 12327_1, 12326_1)

4fm (12300_1, 13006_1, 13003_1, 14500_1)

7.5m (5161_1)

S-57 Data

Geo object 1: Wreck (WRECKS)
Attributes: CATWRK - 2:dangerous wreck
QUASOU - 6:least depth known
VALSOU - 7.537 m
WATLEV - 3:always under water/submerged

Office Notes

Concur.Delete visible wreck from chart. Chart submerged wreck with a least depth of 7.54 meters (24.73 feet).

1.57) AWOIS #10637 - 447/97 - Obstruction

Primary Feature for AWOIS Item #10637

Search Position: 40° 39' 29.4" N, 074° 04' 10.5" W
Historical Depth: [None]
Search Radius: 200
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

LNM5/82--NY AND NJ-NY HARBOR-NJ PIERHEAD CHANNEL AND BAYONNE TERMINAL CHANNEL-TUG ENDEAVOR REPORTS HITTING SUBMERGED OBJECT CAUSING PROPELLOR TO FALL OFF IN APPROX. POS. 40-39-29N, 74-04-12W, APPROX. 400 YD. WEST OF ROBBIN'S REEF LIGHT. (ENT DAS 05/01/2000)

Survey Summary

Survey Position: 40° 39' 26.5" N, 074° 04' 08.3" W
Least Depth: 3.27 m (= 10.74 ft = 1.790 fm = 1 fm 4.74 ft)
TPU (±1.96σ): **THU (TPEh)** ±0.981 m ; **TVU (TPEv)** ±0.367 m
Timestamp: 2006-240.14:16:36.610 (08/28/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_240 / 397_1413
Profile/Beam: 1447/97
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_reson8101/2006_240/397_1413	1447/97	0.00	000.0	Primary
AWOIS_B310-TJ-06	AWOIS # 10637	103.93	149.9	Secondary

Hydrographer Recommendations

[None]

S-57 Data

[None]

Office Notes

Update position and depth for the Obstn rep PA. Remove the Rep PA text.

1.58) AWOIS #2705 1123/23 - disproval.**Primary Feature for AWOIS Item #2705**

Search Position: 40° 39' 19.0" N, 074° 04' 34.4" W
Historical Depth: 5.79 m
Search Radius: 100
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

FE232/80WD--OPR-B645-RU/HE-80; LARGE WOODEN BARGE, 19 FT LD DETERMINED BY ■DIVERS USING PNEUMATIC DEPTH GAGE.

Survey Summary

Survey Position: 40° 39' 19.2" N, 074° 04' 33.7" W
Least Depth: 6.46 m (= 21.18 ft = 3.530 fm = 3 fm 3.18 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) ± 0.981 m ; TVU (TPEv) ± 0.369 m
Timestamp: 2006-240.17:58:14.681 (08/28/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_240 / 850_1756
Profile/Beam: 1123/23
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #2705 radius covered with Reson 8125 MBES and 200% Klein 5000 side scan except in areas shoaler than 4 meters. Soundings were corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_reson8101/2006_240/850_1756	1123/23	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-225/159_1359	0003	7.95	054.8	Secondary
AWOIS_B310-TJ-06	AWOIS # 2705	17.13	072.2	Secondary

Hydrographer Recommendations

Delete wreck from chart. Chart sounding data.

Cartographically-Rounded Depth (Affected Charts):

21ft (12334_1, 12333_1, 12327_1, 12326_1)

3 ½fm (12300_1, 13006_1, 13003_1, 14500_1)

6.5m (5161_1)

S-57 Data

[None]

Office Notes

Concur with clarification. Remove Wk from chart but maintain database.

1.59) AWOIS # 13764 - disproved

Survey Summary

Survey Position: 40° 39' 55.3" N, 074° 04' 17.1" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2008-351.06:30:31 (12/16/2008)
GP Dataset: ChartGPs - Digitized
GP No.: 46
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	46	0.00	000.0	Primary

Hydrographer Recommendations

This AWOIS item was applied to the chart after the completion of H11600, but was sourced from a 2002/2003 NOAA Ship RUDE survey of the area. This item is disproved based on 200% MBES coverage and 100% SSS.

S-57 Data

[None]

Office Notes

Remove the charted 25ft Obstn.

1.60) AWOIS #13765 - disproved**Survey Summary**

Survey Position: 40° 39' 51.5" N, 074° 04' 08.1" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): **THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp: 2008-351.06:30:35 (12/16/2008)
GP Dataset: ChartGPs - Digitized
GP No.: 47
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	47	0.00	000.0	Primary

Hydrographer Recommendations

This AWOIS item was applied to the chart after the completion of H11600, but was sourced from a 2002/2003 NOAA Ship RUDE survey of the area. This item is disproved based on 200% MBES coverage and 100% SSS.

S-57 Data

[None]

Office Notes

Remove charted 20ft. Obstn.

1.61) AWOIS # 13734 - disproved**Survey Summary**

Survey Position: 40° 39' 17.8" N, 074° 03' 06.9" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): **THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp: 2008-351.06:52:53 (12/16/2008)
GP Dataset: ChartGPs - Digitized
GP No.: 48
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	48	0.00	000.0	Primary

Hydrographer Recommendations

This AWOIS item was applied to the chart after the completion of H11600, but was sourced from a 2002/2003 NOAA Ship RUDE survey of the area. This item is disproved based on 200% MBES coverage and 100% SSS.

S-57 Data

[None]

Office Notes

Remove charted 42ft. Obstn.

1.62) AWOIS #13739 - disproved

Survey Summary

Survey Position: 40° 39' 44.4" N, 074° 03' 15.1" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2008-351.06:54:33 (12/16/2008)
GP Dataset: ChartGPs - Digitized
GP No.: 49
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	49	0.00	000.0	Primary

Hydrographer Recommendations

This AWOIS item was applied to the chart after the completion of H11600, but was sourced from a 2002/2003 NOAA Ship RUDE survey of the area. This item is disproved based on 200% MBES coverage and 100% SSS.

S-57 Data

[None]

Office Notes

Remove charted 48ft Obstn.

1.63) AWOIS # - 800/75 - disproved

Survey Summary

Survey Position: 40° 41' 36.8" N, 074° 01' 58.2" W
Least Depth: 16.10 m (= 52.81 ft = 8.801 fm = 8 fm 4.81 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-226.17:09:33.661 (08/14/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_226 / 272_1707
Profile/Beam: 800/75
Charts Affected: 12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_226/272_1707	800/75	0.00	000.0	Primary

Hydrographer Recommendations

This AWOIS item was applied to the chart after the completion of H11600, but was sourced from a 2002/2003 NOAA Ship RUDE survey of the area. This item is disproved based on 200% MBES coverage and 100% SSS.

S-57 Data

[None]

Office Notes

Remove charted 53ft. Obstr. The 53ft. depth is consistent with surrounding depths.

1.64) AWOIS # - 1561/97 - obstn**Survey Summary**

Survey Position: 40° 41' 48.3" N, 074° 01' 48.6" W
Least Depth: 14.22 m (= 46.64 ft = 7.774 fm = 7 fm 4.64 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-226.17:11:19.468 (08/14/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_226 / 272_1707
Profile/Beam: 1561/97
Charts Affected: 12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_226/272_1707	1561/97	0.00	000.0	Primary

Hydrographer Recommendations

This AWOIS item was applied to the chart after the completion of H11600, but was sourced from a 2002/2003 NOAA Ship RUDE survey of the area. This item is disproved based on 200% MBES coverage and 100% SSS.

S-57 Data

[None]

Office Notes

Remove charted 47ft. Rock, modify position and depth of charted 47ft. Obstn.

H11600 Charted Items

Registry Number: H11600
State: New York
Locality: New York Harbor
Sub-locality: Upper Bay
Project Number: OPR-B310-TJ-06
Survey Dates: 13 August 2006 - 09 October 2006

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
12334	67th	04/01/2004	1:10,000 (12334_1)	[L]NTM: ?
12335	40th	09/01/2003	1:10,000 (12335_1)	[L]NTM: ?
12402	10th	05/01/2006	1:15,000 (12402_1)	USCG LNM: 01/29/2008 (03/25/2008) CHS NTM: None (01/25/2008) NGA NTM: 11/15/1997 (03/22/2008)
12333	34th	12/01/2005	1:15,000 (12333_1)	[L]NTM: ?
12337	23rd	10/01/2005	1:20,000 (12337_1)	[L]NTM: ?
12327	101st	04/01/2008	1:40,000 (12327_1)	USCG LNM: 04/22/2008 (04/22/2008) CHS NTM: None (01/25/2008) NGA NTM: 06/17/2006 (04/26/2008)
12363	40th	06/01/2005	1:80,000 (12363_1)	[L]NTM: ?
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

No.	Name	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	Rock - 121/31	Sounding	11.18 m	40° 40' 25.9" N	074° 05' 20.3" W	---
1.2	Rock - 3786/5	Sounding	11.01 m	40° 40' 23.0" N	074° 05' 14.1" W	---

1.3	Obstruction - 3293/203	Obstruction	6.43 m	40° 36' 36.1" N	074° 02' 23.5" W	---
1.4	Pier Ruins 0011 - Retain as charted	SSS	[None]	40° 41' 49.2" N	074° 00' 05.1" W	---
1.5	Dolphin 0018 - Retain as charted	Dolphin	[None]	40° 41' 51.9" N	074° 00' 02.9" W	---
1.6	Ruins 0010 - Retain as charted	SSS	[None]	40° 41' 11.0" N	074° 00' 30.0" W	---
1.7	Ruins 0005- retain as charted	SSS	[None]	40° 39' 43.8" N	074° 00' 46.1" W	---
1.8	Pier ruins 0010- retain as charted	SSS	[None]	40° 39' 44.9" N	074° 00' 40.9" W	---
1.9	Pier ruins 0002 - retain as charted	SSS	[None]	40° 39' 59.0" N	074° 00' 19.8" W	---
1.10	Ruins 0003- retain as charted	SSS	[None]	40° 39' 54.4" N	074° 00' 17.8" W	---
1.11	23rd St pier ruins 0005	SSS	[None]	40° 39' 57.5" N	074° 00' 15.6" W	---
1.12	Dolphin 0006 - retain as charted	Dolphin	[None]	40° 40' 03.2" N	074° 00' 00.9" W	---
1.13	Dolphin 0004 - Retain as charted	Dolphin	[None]	40° 39' 54.0" N	074° 00' 25.5" W	---
1.14	Dolphin 0003 - retain as charted	Dolphin	[None]	40° 39' 54.1" N	074° 00' 24.9" W	---
1.15	Dolphin 0005 - Retain as charted	Dolphin	[None]	40° 39' 53.8" N	074° 00' 26.3" W	---
1.16	Dolphin 0006 - Retain as charted	Dolphin	[None]	40° 39' 53.5" N	074° 00' 26.9" W	---
1.17	Pier ruins 0013- retain as charted	SSS	[None]	40° 40' 33.0" N	074° 01' 10.7" W	---
1.18	Pier ruins 0014- retain as charted	SSS	[None]	40° 40' 27.9" N	074° 01' 11.6" W	---
1.19	Pier ruins 0016 - retain as charted	SSS	[None]	40° 40' 25.8" N	074° 01' 09.9" W	---
1.20	Pier ruins 0017 - retain as charted	SSS	[None]	40° 40' 22.9" N	074° 01' 08.1" W	---
1.21	Pier Ruins 0018 - retain as charted	SSS	[None]	40° 40' 39.6" N	074° 01' 12.1" W	---
1.22	Dolphin 0039 - Retain as charted	Dolphin	[None]	40° 38' 33.6" N	074° 04' 14.0" W	---
1.23	Dolphin 0038 - Retain as charted	Dolphin	[None]	40° 38' 33.6" N	074° 04' 14.5" W	---
1.24	Dolphin 0049 - Retain as charted	Dolphin	[None]	40° 38' 33.7" N	074° 04' 13.5" W	---
1.25	Pier Ruins 0053 - Retain as charted	SSS	[None]	40° 38' 22.2" N	074° 04' 10.5" W	---
1.26	Submerged piling 0004 - retain as charted	Pile	[None]	40° 41' 19.8" N	074° 00' 44.0" W	---
1.27	Dolphin 0007- retain as charted	Dolphin	[None]	40° 41' 07.4" N	074° 01' 10.1" W	---
1.28	Ruins 0023- retain as charted	SSS	[None]	40° 41' 37.0" N	074° 00' 58.7" W	---
1.29	Pile 0018- retain as charted	Pile	[None]	40° 41' 27.7" N	074° 00' 42.5" W	---
1.30	Piles 0024 disproved 3 piles	SSS	[None]	40° 41' 32.9" N	074° 00' 41.8" W	---
1.31	Ruins 0002- retain as charted	SSS	[None]	40° 41' 36.1" N	074° 01' 01.4" W	---
1.32	Pier ruins 0003 - retain as charted	SSS	[None]	40° 41' 36.6" N	074° 01' 07.4" W	---
1.33	Dolphin 0002 - Retain as charted	Dolphin	[None]	40° 41' 04.6" N	074° 01' 16.5" W	---
1.34	Pier ruins 0001 - retain as charted	SSS	[None]	40° 41' 21.6" N	074° 02' 32.9" W	---
1.35	Dolphin 0001- retain as charted	Dolphin	[None]	40° 38' 59.4" N	074° 05' 31.8" W	---
1.36	Dolphin 0003- retain as charted	Dolphin	[None]	40° 39' 01.1" N	074° 05' 28.8" W	---
1.37	Dolphin 0007- retain as charted	Dolphin	[None]	40° 39' 04.8" N	074° 05' 22.1" W	---
1.38	Dolphin 0008- retain as charted	Dolphin	[None]	40° 39' 05.9" N	074° 05' 20.9" W	---

1.39	Dolphin 0021- retain as charted	Dolphin	[None]	40° 39' 19.6" N	074° 05' 08.7" W	---
1.40	Dolphin 0010- retain as charted	Dolphin	[None]	40° 39' 06.5" N	074° 05' 17.5" W	---
1.41	Dolphin 0020- retain as charted	Dolphin	[None]	40° 39' 19.5" N	074° 05' 07.3" W	---
1.42	Dolphin 0013 - retain as charted	Dolphin	[None]	40° 39' 07.8" N	074° 05' 14.8" W	---
1.43	Dolphin 0015 - retain as charted	Dolphin	[None]	40° 39' 10.1" N	074° 05' 10.8" W	---
1.44	Dolphin 0016 - retain as charted	Dolphin	[None]	40° 39' 09.8" N	074° 05' 12.7" W	---
1.45	Dolphin 0026 - retain as charted	SSS	[None]	40° 39' 21.2" N	074° 05' 10.1" W	---
1.46	Dolphin/ruins 0014 - retain as charted	Dolphin	[None]	40° 39' 09.2" N	074° 05' 14.0" W	---
1.47	Dolphin/ruins 0009 - retain as charted	Dolphin	[None]	40° 39' 06.5" N	074° 05' 19.7" W	---
1.48	Dolphins 0027 - retain as charted	SSS	[None]	40° 39' 23.0" N	074° 05' 04.2" W	---
1.49	Dolphin 0028 - retain as charted	SSS	[None]	40° 39' 23.1" N	074° 05' 02.2" W	---
1.50	Ruins ruins 0002 - retain as charted	SSS	[None]	40° 39' 51.6" N	074° 00' 30.0" W	---
1.51	Dolphin 0001 - retain as charted	Dolphin	[None]	40° 39' 53.2" N	074° 00' 28.2" W	---
1.52	Dolphin 0005 - retain as charted	SSS	[None]	40° 39' 52.9" N	074° 00' 29.3" W	---
1.53	Dolphin 0004 - retain as charted	Dolphin	[None]	40° 39' 52.7" N	074° 00' 28.2" W	---
1.54	Ruins 0006 - retain as charted	SSS	[None]	40° 39' 48.7" N	074° 00' 32.7" W	---
1.55	Ruins/pile 0002 - retain as charted	SSS	[None]	40° 41' 14.8" N	074° 04' 41.0" W	---
1.56	Ruins 0014 - retain as charted	SSS	[None]	40° 41' 00.9" N	074° 04' 09.6" W	---
1.57	Piles 0015 - retain as charted	SSS	[None]	40° 40' 59.1" N	074° 04' 07.2" W	---
1.58	Pier ruins 0016 - retain as charted	SSS	[None]	40° 41' 12.6" N	074° 04' 36.9" W	---
1.59	Pile 0001 - Retain as charted	Pile	[None]	40° 40' 08.1" N	074° 04' 47.1" W	---
1.60	Pile 0002 - Retain as charted	Pile	[None]	40° 40' 08.2" N	074° 04' 47.4" W	---
1.61	Pile 0003 - Retain as charted	Pile	[None]	40° 40' 08.6" N	074° 04' 48.7" W	---
1.62	Pile 0004 - Retain as charted	Pile	[None]	40° 40' 08.8" N	074° 04' 49.3" W	---
1.63	Pier ruins 0001 - Retain as charted	SSS	[None]	40° 39' 12.8" N	074° 01' 28.5" W	---
1.64	Pier ruins 0002 - Retain as charted	SSS	[None]	40° 39' 14.8" N	074° 01' 24.6" W	---
1.65	Pier ruins 0003 - Retain as charted	SSS	[None]	40° 39' 17.7" N	074° 01' 20.8" W	---
1.66	Pier ruins 0004 - Retain as charted	SSS	[None]	40° 39' 20.9" N	074° 01' 17.1" W	---
1.67	Pier ruins 0006 - Retain as charted	SSS	[None]	40° 39' 26.8" N	074° 01' 10.4" W	---
1.68	Pier ruins 0007 - Retain as charted	SSS	[None]	40° 39' 30.6" N	074° 01' 06.2" W	---
1.69	Pier ruins 0005 - retain as charted	SSS	[None]	40° 38' 56.6" N	074° 01' 43.6" W	---
1.70	Dolphin 0007 - disproved	SSS	[None]	40° 39' 04.2" N	074° 01' 34.2" W	---
1.71	Pier ruins 0004 - retain as charted	SSS	[None]	40° 39' 00.4" N	074° 01' 38.9" W	---
1.72	Pier ruins 0003 - retain as charted	SSS	[None]	40° 39' 01.4" N	074° 01' 36.4" W	---
1.73	Dolphin 0001 - retain as charted	Dolphin	[None]	40° 39' 06.0" N	074° 01' 32.6" W	---
1.74	Dolphins 0006 - retain as charted	Dolphin	[None]	40° 39' 02.9" N	074° 01' 34.8" W	---

1.75	Dolphin 0008 - retain as charted	SSS	[None]	40° 39' 05.3" N	074° 01' 34.6" W	---
1.76	Pier ruins 0009 - retain as charted	SSS	[None]	40° 38' 58.9" N	074° 01' 39.5" W	---
1.77	Pier ruins 0010 - retain as charted	SSS	[None]	40° 39' 06.2" N	074° 01' 31.0" W	---
1.78	Dolphin 0011 - retain as charted	SSS	[None]	40° 39' 03.7" N	074° 01' 35.6" W	---
1.79	Pier ruins 0003 - retain as charted	SSS	[None]	40° 38' 47.2" N	074° 01' 51.7" W	---
1.80	Pier ruins 0004 - retain as charted	SSS	[None]	40° 38' 45.8" N	074° 01' 53.7" W	---
1.81	Pier ruins 0005 - retain as charted	SSS	[None]	40° 38' 43.6" N	074° 01' 56.4" W	---
1.82	Pile 0007 - retain as charted	Pile	[None]	40° 38' 55.9" N	074° 01' 45.8" W	---
1.83	Pile 0006 - retain as charted	Pile	[None]	40° 38' 52.8" N	074° 01' 49.0" W	---
1.84	Pile 0008 - retain as charted	Pile	[None]	40° 38' 54.5" N	074° 01' 47.1" W	---
1.85	Pile 0009 - retain as charted	Pile	[None]	40° 38' 48.5" N	074° 01' 53.5" W	---
1.86	Pier ruins 0017 - retain as charted	SSS	[None]	40° 40' 04.5" N	074° 00' 06.0" W	---
1.87	Pier ruins 0018 - retain as charted	SSS	[None]	40° 40' 01.1" N	074° 00' 16.7" W	---
1.88	Pier ruins 0019 - retain as charted	SSS	[None]	40° 40' 02.2" N	074° 00' 14.4" W	---
1.89	Dolphin 0020 - retain as charted	Dolphin	[None]	40° 40' 06.2" N	074° 00' 06.4" W	---
1.90	Dolphin 0021 - retain as charted	Dolphin	[None]	40° 40' 06.0" N	074° 00' 05.9" W	---
1.91	Dolphin 0022 - retain as charted	Dolphin	[None]	40° 40' 05.8" N	074° 00' 05.2" W	---
1.92	Dolphin 0023 - retain as charted	Dolphin	[None]	40° 40' 06.2" N	074° 00' 06.6" W	---
1.93	Pile 0013 - disproved	SSS	[None]	40° 40' 36.3" N	074° 04' 21.0" W	---
1.94	Mooring platform 0012 - retain as charted	SSS	[None]	40° 40' 43.2" N	074° 04' 11.6" W	---
1.95	Mooring platform 0011 - retain as charted	SSS	[None]	40° 40' 43.8" N	074° 04' 12.7" W	---
1.96	Mooring platform 0013 - retain as charted	SSS	[None]	40° 40' 42.4" N	074° 04' 10.5" W	---
1.97	Mooring platform 0010 - retain as charted	SSS	[None]	40° 40' 44.6" N	074° 04' 13.8" W	---
1.98	Mooring platform 0014 - retain as charted	SSS	[None]	40° 40' 41.7" N	074° 04' 09.4" W	---
1.99	Mooring platform 0015 - retain as charted	SSS	[None]	40° 40' 41.0" N	074° 04' 08.3" W	---
1.100	Pier ruins 0017 - retain as charted	SSS	[None]	40° 40' 38.8" N	074° 04' 05.9" W	---
1.101	Mooring platform 0016 - retain as charted	Mooring buoy	[None]	40° 40' 40.3" N	074° 04' 07.3" W	---
1.102	Pier ruins 0004 - retain as charted	SSS	[None]	40° 40' 42.2" N	074° 04' 01.3" W	---
1.103	Pile 0005 A - disproved	SSS	[None]	40° 40' 48.4" N	074° 04' 09.6" W	---
1.104	Pile 0006 - disproved	SSS	[None]	40° 40' 49.2" N	074° 04' 10.3" W	---
1.105	Pile 0003 - disproved	SSS	[None]	40° 41' 13.1" N	074° 04' 37.9" W	---
1.106	Pier ruins 0008	SSS	[None]	40° 38' 52.5" N	074° 04' 32.5" W	---
1.107	Pier ruins 0007	SSS	[None]	40° 38' 50.8" N	074° 04' 29.8" W	---
1.108	Pier ruins 0006	SSS	[None]	40° 38' 46.2" N	074° 04' 26.2" W	---
1.109	Pier ruins 0009	SSS	[None]	40° 38' 52.6" N	074° 04' 35.4" W	---
1.110	Pier ruins 0011	SSS	[None]	40° 38' 56.2" N	074° 04' 44.4" W	---

1.111	Pier ruins 0014 - disproved dol	SSS	[None]	40° 38' 48.1" N	074° 04' 29.6" W	---
1.112	Piles 0015 - disproved 3 piles	SSS	[None]	40° 38' 53.5" N	074° 05' 16.2" W	---
1.113	Foul area 0016 - retain as charted	SSS	[None]	40° 38' 56.7" N	074° 04' 52.6" W	---
1.114	Pier ruins 0004 - Retain as charted	SSS	[None]	40° 37' 25.5" N	074° 04' 01.6" W	---
1.115	Ruins 0004 - retain as charted	Obstruction	[None]	40° 37' 04.9" N	074° 03' 47.1" W	---
1.116	Pier ruins 0003 - retain as charted	SSS	[None]	40° 37' 06.0" N	074° 03' 50.0" W	---
1.117	Pipes 0001 - retain as charted	SSS	[None]	40° 37' 15.8" N	074° 03' 54.3" W	---
1.118	Ruins 0002 - Retain as charted	SSS	[None]	40° 36' 23.4" N	074° 03' 16.9" W	---
1.119	Piles 0013 - disproved 4 piles	SSS	[None]	40° 36' 42.6" N	074° 03' 34.3" W	---
1.120	Dolphin 0007 - disproved	SSS	[None]	40° 39' 04.1" N	074° 01' 37.0" W	---
1.121	Pier ruins 0008 - retain as charted	SSS	[None]	40° 38' 52.4" N	074° 01' 48.5" W	---
1.122	Pier ruins 0016 - retain as charted	SSS	[None]	40° 39' 26.3" N	074° 01' 14.3" W	---
1.123	Foul area 0018 - retain as charted	SSS	[None]	40° 38' 37.0" N	074° 02' 05.0" W	---
1.124	Pile 0001 - retain as charted	Pile	[None]	40° 41' 10.3" N	074° 04' 25.0" W	---
1.125	Pile 0002 - retain as charted	Pile	[None]	40° 41' 10.0" N	074° 04' 24.6" W	---
1.126	Pile 0004 A - disproved	SSS	[None]	40° 41' 10.8" N	074° 04' 33.8" W	---
1.127	Pile 0005 - disproved	SSS	[None]	40° 40' 51.9" N	074° 04' 05.8" W	---
1.128	Ruins 0002 - Retain as charted	SSS	[None]	40° 40' 46.7" N	074° 03' 55.1" W	---
1.129	VIS ruins/Piles 18:25:42 - retain as charted	Sounding	[None]	40° 36' 24.6" N	074° 03' 17.5" W	---
1.130	Submerged ruins 18:57:38 - retain as charted	Sounding	[None]	40° 37' 28.4" N	074° 04' 04.2" W	---
1.131	Visible ruins 18:59:12 - retain as charted	Sounding	[None]	40° 37' 22.8" N	074° 03' 58.7" W	---
1.132	Charted pier 19:23:50 - retain as charted	Sounding	[None]	40° 38' 28.0" N	074° 04' 11.6" W	---
1.133	Visible ruins 19:24:08 - retain as charted	Sounding	[None]	40° 38' 26.2" N	074° 04' 11.7" W	---
1.134	Visible ruins 19:24:24 - retain as charted	Sounding	[None]	40° 38' 24.2" N	074° 04' 11.3" W	---
1.135	Visible ruins 19:24:45 - retain as charted	Sounding	[None]	40° 38' 21.7" N	074° 04' 11.0" W	---
1.136	Visible ruins 19:25:04 - retain as charted	Sounding	[None]	40° 38' 18.8" N	074° 04' 11.2" W	---
1.137	Charted pier 6 19:25:40 - retain as charted	Sounding	[None]	40° 38' 14.2" N	074° 04' 13.6" W	---
1.138	Visible ruins 19:26:13 - retain as charted	Sounding	[None]	40° 38' 10.1" N	074° 04' 10.6" W	---
1.139	48ft Rock	GP	[None]	40° 41' 42.6" N	074° 01' 53.1" W	---
1.140	Sewer 7795/125 - Retain as charted.	Sounding	11.57 m	40° 38' 31.9" N	074° 02' 13.7" W	---
1.141	Obstruction 655/240 - disproval	Sounding	7.86 m	40° 41' 32.8" N	074° 02' 12.1" W	---

1 - DR_Charted

1.1) Rock - 121/31

Survey Summary

Survey Position: 40° 40' 25.9" N, 074° 05' 20.3" W
Least Depth: 11.18 m (= 36.67 ft = 6.112 fm = 6 fm 0.67 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.370 m
Timestamp: 2006-239.16:23:31.226 (08/27/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_239 / 308_1623
Profile/Beam: 121/31
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_reson8101/2006_239/308_1623	121/31	0.00	000.0	Primary
ChartGPs - Digitized	45	3.35	295.0	Secondary (grouped)
h11600/tj_3102_klein5000_sss100/2006-233/151_1357	0003	4.17	084.2	Secondary
h11600/tj_3102_reson8101/2006_239/309_1612	4148/6	10.79	054.1	Secondary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: VALSOU - 11.177 m
 WATLEV - 3:always under water/submerged

Office Notes

Retain charted 36ft. Rk.

1.2) Rock - 3786/5

Survey Summary

Survey Position: 40° 40' 23.0" N, 074° 05' 14.1" W
Least Depth: 11.01 m (= 36.11 ft = 6.018 fm = 6 fm 0.11 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.370 m
Timestamp: 2006-239.16:21:52.481 (08/27/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_239 / 309_1612
Profile/Beam: 3786/5
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_reson8101/2006_239/309_1612	3786/5	0.00	000.0	Primary
h11600/tj_3102_reson8101/2006_239/308_1623	506/59	1.26	123.2	Secondary
ChartGPs - Digitized	44	1.50	302.4	Secondary (grouped)
h11600/tj_3102_klein5000_sss100/2006-233/151_1357	0001	1.92	055.4	Secondary
h11600/tj_3102_klein5000_sss200/2006-233/242_1417	0002	2.24	005.9	Secondary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: VALSOU - 11.006 m
 WATLEV - 3:always under water/submerged

Office Notes

Retain charted 36ft. Rock.

1.3) Obstruction - 3293/203

Survey Summary

Survey Position: 40° 36' 36.1" N, 074° 02' 23.5" W
Least Depth: 6.43 m (= 21.09 ft = 3.514 fm = 3 fm 3.09 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-225.19:34:36.616 (08/13/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_225 / 938_1912
Profile/Beam: 3293/203
Charts Affected: 12334_1, 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted 21 obstr

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_225/938_1912	3293/203	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-225/148_1914	0002	1.31	015.7	Secondary
h11600/tj_3102_klein5000_sss100/2006-226/102_1250	0003	3.23	143.6	Secondary
ChartGPs - Digitized	42	4.04	269.0	Secondary (grouped)

Hydrographer Recommendations

Retain as charted.

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 6.427 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.4) Pier Ruins 0011 - Retain as charted

Survey Summary

Survey Position: 40° 41' 49.2" N, 074° 00' 05.1" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-226.05:36:18 (08/14/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 104_1732
Contact/Point: 0011/1
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pier ruins acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/104_1732	0011	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-227/215_1815	0007	21.83	092.4	Secondary (grouped)

Hydrographer Recommendations

Retain charted ruins.

S-57 Data

[None]

Office Notes

Concur.

1.5) Dolphin 0018 - Retain as charted

Survey Summary

Survey Position: 40° 41' 51.9" N, 074° 00' 02.9" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-244.01:37:28 (09/01/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 104_1732
Contact/Point: 0018/1
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted dolphin acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/104_1732	0018	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted dolphin

S-57 Data

Geo object 1: Mooring/warping facility (MORFAC)
Attributes: BOYSHP - 1:conical (nun, ogival)
 CATMOR - 1:dolphin
 STATUS - 1:permanent
 VERDAT - 12:Mean lower low water
 WATLEV - 2:always dry

Office Notes

Concur.

1.6) Ruins 0010 - Retain as charted

Survey Summary

Survey Position: 40° 41' 11.0" N, 074° 00' 30.0" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-257.02:35:34 (09/14/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 105_1738
Contact/Point: 0010/1
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted ruins and pile acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/105_1738	0010	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-225/105_1738	0001	28.83	165.9	Secondary (grouped)

Hydrographer Recommendations

Revise charted pier ruins around shoal area to newly revised ruins limits. Retain charted pile.

S-57 Data

[None]

Office Notes

Do not concur. Not enough evidence to change area.

1.7) Ruins 0005- retain as charted

Survey Summary

Survey Position: 40° 39' 43.8" N, 074° 00' 46.1" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-228.12:33:47 (08/16/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 137_1814
Contact/Point: 0005/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted ruins acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/137_1814	0005	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-234/136_1656	0003	7.91	027.0	Secondary

Hydrographer Recommendations

Retain charted ruins.

S-57 Data

[None]

Office Notes

Concur.

1.8) Pier ruins 0010- retain as charted

Survey Summary

Survey Position: 40° 39' 44.9" N, 074° 00' 40.9" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-244.02:17:14 (09/01/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 137_1814
Contact/Point: 0010/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pier ruins acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/137_1814	0010	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-227/136_1902	0001	2.77	256.5	Secondary
h11600/tj_3102_klein5000_sss100/2006-234/136_1656	0002	13.14	264.9	Secondary
h11600/tj_3102_klein5000_sss200/2006-234/232_1708	0002	13.43	039.2	Secondary
h11600/tj_3102_klein5000_sss100/2006-225/137_1814	0004	25.87	295.8	Secondary (grouped)

Hydrographer Recommendations

Retain charted pier ruins.

S-57 Data

[None]

Office Notes

Concur.

1.9) Pier ruins 0002 - retain as charted

Survey Summary

Survey Position: 40° 39' 59.0" N, 074° 00' 19.8" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-228.01:03:54 (08/16/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 138_1806
Contact/Point: 0002/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Pier ruins acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/138_1806	0002	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-225/334_1757	0012	42.18	120.9	Secondary (grouped)

Hydrographer Recommendations

Retain charted pier ruins.

S-57 Data

[None]

Office Notes

Concur.

1.10) Ruins 0003- retain as charted

Survey Summary

Survey Position: 40° 39' 54.4" N, 074° 00' 17.8" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-228.01:08:07 (08/16/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 138_1806
Contact/Point: 0003/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Pier ruins acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/138_1806	0003	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted pier ruins.

S-57 Data

[None]

Office Notes

Concur.

1.11) 23rd St pier ruins 0005

Survey Summary

Survey Position: 40° 39' 57.5" N, 074° 00' 15.6" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-228.03:32:31 (08/16/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 139_1804
Contact/Point: 0005/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

The 23rd St pier has been removed. Ruins acquired with 200% klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/139_1804	0005	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-225/138_1806	0004	92.66	328.3	Secondary (grouped)
h11600/tj_3102_klein5000_sss100/2006-225/138_1806	0007	156.76	316.9	Secondary (grouped)
h11600/tj_3102_klein5000_sss100/2006-225/138_1806	0005	320.95	314.4	Secondary (grouped)

Hydrographer Recommendations

Remove charted pier and replace with ruins.

S-57 Data

[None]

Office Notes

Defer to MCD for charting recommendation.

1.12) Dolphin 0006 - retain as charted

Survey Summary

Survey Position: 40° 40' 03.2" N, 074° 00' 00.9" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-304.06:54:40 (10/31/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 139_1804
Contact/Point: 0006/1
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted dolphin acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/139_1804	0006	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted dolphin.

S-57 Data

Geo object 1: Mooring/warping facility (MORFAC)
Attributes: CATMOR - 1:dolphin

Office Notes

Concur.

1.13) Dolphin 0004 - Retain as charted

Survey Summary

Survey Position: 40° 39' 54.0" N, 074° 00' 25.5" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-244.02:11:06 (09/01/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 139_1812
Contact/Point: 0004/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted dolphin acquired with 200% Klein 5000 side scan

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/139_1812	0004	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted dolphin

S-57 Data

[None]

Office Notes

Concur.

1.14) Dolphin 0003 - retain as charted

Survey Summary

Survey Position: 40° 39' 54.1" N, 074° 00' 24.9" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-244.02:07:23 (09/01/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 139_1812
Contact/Point: 0003/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted dolphin acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/139_1812	0003	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted dolphin.

S-57 Data

[None]

Office Notes

Concur.

1.15) Dolphin 0005 - Retain as charted

Survey Summary

Survey Position: 40° 39' 53.8" N, 074° 00' 26.3" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-244.02:11:35 (09/01/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 139_1812
Contact/Point: 0005/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted dolphin acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/139_1812	0005	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted dolphin.

S-57 Data

[None]

Office Notes

Concur.

1.16) Dolphin 0006 - Retain as charted

Survey Summary

Survey Position: 40° 39' 53.5" N, 074° 00' 26.9" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-244.02:12:02 (09/01/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 139_1812
Contact/Point: 0006/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted dolphin acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/139_1812	0006	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted dolphin.

S-57 Data

[None]

Office Notes

Concur.

1.17) Pier ruins 0013- retain as charted

Survey Summary

Survey Position: 40° 40' 33.0" N, 074° 01' 10.7" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-228.05:37:09 (08/16/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 148_1743
Contact/Point: 0013/1
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Pier ruins acquired with 200% Klein 5000 side Scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/148_1743	0013	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted pier ruins.

S-57 Data

Geo object 1: Shoreline Construction (SLCONS)
Attributes: CATSLC - 4:pier (jetty)
 CONDTN - 2:ruined
 WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.18) Pier ruins 0014- retain as charted

Survey Summary

Survey Position: 40° 40' 27.9" N, 074° 01' 11.6" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-228.05:37:58 (08/16/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 148_1743
Contact/Point: 0014/1
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Pier ruins acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/148_1743	0014	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-227/134_1258	0002	22.07	264.4	Secondary (grouped)

Hydrographer Recommendations

Retain charted ruins

S-57 Data

[None]

Office Notes

Concur.

1.19) Pier ruins 0016 - retain as charted

Survey Summary

Survey Position: 40° 40' 25.8" N, 074° 01' 09.9" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-244.01:49:43 (09/01/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 148_1743
Contact/Point: 0016/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted ruins investigated with 200% Klein 5000 side scan. Charted ruins not seen.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/148_1743	0016	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted ruins to the limit of side scan.

S-57 Data

[None]

Office Notes

Do not concur. Not enough evidence to warrant removal.

1.20) Pier ruins 0017 - retain as charted

Survey Summary

Survey Position: 40° 40' 22.9" N, 074° 01' 08.1" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-244.01:50:21 (09/01/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 148_1743
Contact/Point: 0017/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Edge of charted ruins acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/148_1743	0017	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted ruins.

S-57 Data

[None]

Office Notes

Concur.

1.21) Pier Ruins 0018 - retain as charted

Survey Summary

Survey Position: 40° 40' 39.6" N, 074° 01' 12.1" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-257.02:23:42 (09/14/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 148_1743
Contact/Point: 0018/1
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted ruins acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/148_1743	0018	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted ruins.

S-57 Data

[None]

Office Notes

Concur.

1.22) Dolphin 0039 - Retain as charted

Survey Summary

Survey Position: 40° 38' 33.6" N, 074° 04' 14.0" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-233.09:20:32 (08/21/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 151_1305
Contact/Point: 0039/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted dolphin acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/151_1305	0039	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted dolphin.

S-57 Data

[None]

Office Notes

Concur.

1.23) Dolphin 0038 - Retain as charted

Survey Summary

Survey Position: 40° 38' 33.6" N, 074° 04' 14.5" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-233.09:20:26 (08/21/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 151_1305
Contact/Point: 0038/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted dolphin acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/151_1305	0038	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted dolphin.

S-57 Data

[None]

Office Notes

Concur.

1.24) Dolphin 0049 - Retain as charted

Survey Summary

Survey Position: 40° 38' 33.7" N, 074° 04' 13.5" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-233.10:22:25 (08/21/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 151_1305
Contact/Point: 0049/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted dolphin acquired with 100% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/151_1305	0049	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted dolphin.

S-57 Data

[None]

Office Notes

Concur.

1.25) Pier Ruins 0053 - Retain as charted

Survey Summary

Survey Position: 40° 38' 22.2" N, 074° 04' 10.5" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-237.08:48:28 (08/25/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 151_1305
Contact/Point: 0053/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted ruins acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_dp/2006-235/3102_08232006	7/1	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-235/138_1241	0001	13.89	274.3	Secondary
h11600/tj_3102_klein5000_sss100/2006-225/151_1305	0032	14.16	289.4	Secondary
h11600/tj_3102_klein5000_sss100/2006-225/151_1305	0053	19.18	212.2	Secondary (grouped)

Hydrographer Recommendations

Retain charted ruins.

S-57 Data

[None]

Office Notes

Concur.

1.26) Submerged piling 0004 - retain as charted

Survey Summary

Survey Position: 40° 41' 19.8" N, 074° 00' 44.0" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-226.06:30:18 (08/14/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 155_1714
Contact/Point: 0004/1
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted submerged piling acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/155_1714	0004	0.00	000.0	Primary

Hydrographer Recommendations

Retain suberged piling as charted.

S-57 Data

Geo object 1: Pile (PILPNT)

Office Notes

Concur.

1.27) Dolphin 0007- retain as charted

Survey Summary

Survey Position: 40° 41' 07.4" N, 074° 01' 10.1" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-228.06:50:35 (08/16/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 155_1714
Contact/Point: 0007/1
Charts Affected: 12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted dolphin acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/155_1714	0007	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted dolphin.

S-57 Data

[None]

Office Notes

Concur.

1.28) Ruins 0023- retain as charted

Survey Summary

Survey Position: 40° 41' 37.0" N, 074° 00' 58.7" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): **THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp: 2006-228.07:16:08 (08/16/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 155_1714
Contact/Point: 0023/1
Charts Affected: 12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pier ruins acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/155_1714	0023	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted ruins.

S-57 Data

[None]

Office Notes

Concur.

1.29) Pile 0018- retain as charted

Survey Summary

Survey Position: 40° 41' 27.7" N, 074° 00' 42.5" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-228.07:06:36 (08/16/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 155_1714
Contact/Point: 0018/1
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pile acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/155_1714	0018	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-226/114_1823	0003	2.42	019.1	Secondary

Hydrographer Recommendations

Retain charted pile.

S-57 Data

Geo object 1: Pile (PILPNT)

Office Notes

Concur.

1.30) Piles 0024 disproved 3 piles

Survey Summary

Survey Position: 40° 41' 32.9" N, 074° 00' 41.8" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-247.07:46:47 (09/04/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 155_1714
Contact/Point: 0024/1
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

All three charted piles not seen with 200% Klein 5000 side scan at or near charted positions.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/155_1714	0024	0.00	000.0	Primary

Hydrographer Recommendations

Remove the three charted piles.

S-57 Data

[None]

Office Notes

Concur.

1.31) Ruins 0002- retain as charted

Survey Summary

Survey Position: 40° 41' 36.1" N, 074° 01' 01.4" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-226.04:16:15 (08/14/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 155_1715
Contact/Point: 0002/1
Charts Affected: 12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted ruins acquired with 100% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/155_1715	0002	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted ruins.

S-57 Data

[None]

Office Notes

Concur.

1.32) Pier ruins 0003 - retain as charted

Survey Summary

Survey Position: 40° 41' 36.6" N, 074° 01' 07.4" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-226.04:18:00 (08/14/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 155_1715
Contact/Point: 0003/1
Charts Affected: 12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted ruins not seen with 100% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/155_1715	0003	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted ruins up to side scan limit.

S-57 Data

[None]

Office Notes

Do not concur. Significant debris found on 100% side scan. No 200% side scan provided. Retain as charted.

1.33) Dolphin 0002 - Retain as charted

Survey Summary

Survey Position: 40° 41' 04.6" N, 074° 01' 16.5" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-226.04:31:25 (08/14/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 156_1702
Contact/Point: 0002/1
Charts Affected: 12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted dolphin acquired with 200% Klein 5000 Side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/156_1702	0002	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted dolphin

S-57 Data

Geo object 1: Mooring/warping facility (MORFAC)
Attributes: CATMOR - 1:dolphin
 STATUS - 1:permanent
 VERDAT - 12:Mean lower low water
 WATLEV - 2:always dry

Office Notes

Concur.

1.34) Pier ruins 0001 - retain as charted

Survey Summary

Survey Position: 40° 41' 21.6" N, 074° 02' 32.9" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-226.05:05:12 (08/14/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 159_1638
Contact/Point: 0001/1
Charts Affected: 12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted ruins acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/159_1638	0001	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted ruins.

S-57 Data

[None]

Office Notes

Concur.

1.35) Dolphin 0001- retain as charted

Survey Summary

Survey Position: 40° 38' 59.4" N, 074° 05' 31.8" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-226.07:36:10 (08/14/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 175_1349
Contact/Point: 0001/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted dolphin acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/175_1349	0001	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-232/175_1733	0015	1.41	328.7	Secondary

Hydrographer Recommendations

Retain charted dolphin.

S-57 Data

[None]

Office Notes

Concur.

1.36) Dolphin 0003- retain as charted

Survey Summary

Survey Position: 40° 39' 01.1" N, 074° 05' 28.8" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-226.07:37:58 (08/14/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 175_1349
Contact/Point: 0003/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted dolphin acquired with 200% Klein 5000 side Scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/175_1349	0003	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-232/175_1733	0012	2.21	122.9	Secondary

Hydrographer Recommendations

Retain charted dolphin.

S-57 Data

[None]

Office Notes

Concur

1.37) Dolphin 0007- retain as charted

Survey Summary

Survey Position: 40° 39' 04.8" N, 074° 05' 22.1" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-226.07:49:28 (08/14/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 175_1349
Contact/Point: 0007/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted dolphin acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/175_1349	0007	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted dolphin.

S-57 Data

[None]

Office Notes

Concur.

1.38) Dolphin 0008- retain as charted

Survey Summary

Survey Position: 40° 39' 05.9" N, 074° 05' 20.9" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-226.07:50:00 (08/14/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 175_1349
Contact/Point: 0008/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted dolphin acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/175_1349	0008	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted dolphin.

S-57 Data

[None]

Office Notes

Concur

1.39) Dolphin 0021- retain as charted

Survey Summary

Survey Position: 40° 39' 19.6" N, 074° 05' 08.7" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-226.08:17:31 (08/14/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 175_1349
Contact/Point: 0021/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted dolphin acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/175_1349	0021	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted dolphin.

S-57 Data

[None]

Office Notes

Concur.

1.40) Dolphin 0010- retain as charted

Survey Summary

Survey Position: 40° 39' 06.5" N, 074° 05' 17.5" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-226.07:52:32 (08/14/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 175_1349
Contact/Point: 0010/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted dolphin acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/175_1349	0010	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted dolphin.

S-57 Data

[None]

Office Notes

Concur.

1.41) Dolphin 0020- retain as charted

Survey Summary

Survey Position: 40° 39' 19.5" N, 074° 05' 07.3" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-226.08:17:06 (08/14/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 175_1349
Contact/Point: 0020/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted dolphin acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/175_1349	0020	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted dolphin.

S-57 Data

[None]

Office Notes

Concur.

1.42) Dolphin 0013 - retain as charted

Survey Summary

Survey Position: 40° 39' 07.8" N, 074° 05' 14.8" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-226.07:55:49 (08/14/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 175_1349
Contact/Point: 0013/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted dolphin acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/175_1349	0013	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted dolphin.

S-57 Data

[None]

Office Notes

Concur.

1.43) Dolphin 0015 - retain as charted

Survey Summary

Survey Position: 40° 39' 10.1" N, 074° 05' 10.8" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-226.07:57:38 (08/14/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 175_1349
Contact/Point: 0015/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted dolphin acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/175_1349	0015	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-232/175_1733	0003	2.43	014.0	Secondary

Hydrographer Recommendations

Retain charted dolphin.

S-57 Data

[None]

Office Notes

Concur.

1.44) Dolphin 0016 - retain as charted

Survey Summary

Survey Position: 40° 39' 09.8" N, 074° 05' 12.7" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-226.07:58:12 (08/14/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 175_1349
Contact/Point: 0016/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted dolphin acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/175_1349	0016	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted dolphin.

S-57 Data

[None]

Office Notes

Concur.

1.45) Dolphin 0026 - retain as charted

Survey Summary

Survey Position: 40° 39' 21.2" N, 074° 05' 10.1" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-244.10:29:30 (09/01/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 175_1349
Contact/Point: 0026/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted dolphin not seen with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/175_1349	0026	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted dolphin.

S-57 Data

[None]

Office Notes

Do not concur. Poor quality side scan due to 180-degree turn. Item in image is the charted dolphin displayed 30m away. Retain as charted.

1.46) Dolphin/ruins 0014 - retain as charted

Survey Summary

Survey Position: 40° 39' 09.2" N, 074° 05' 14.0" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-226.07:56:57 (08/14/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 175_1349
Contact/Point: 0014/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted dolphin acquired with 200% Klein 5000 side scan. Charted ruins not seen in charted position with 200% side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/175_1349	0014	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted dolphin. Remove charted ruins up to side scan limits.

S-57 Data

[None]

Office Notes

Do not concur. Retain dolphin and ruins as charted.

1.47) Dolphin/ruins 0009 - retain as charted

Survey Summary

Survey Position: 40° 39' 06.5" N, 074° 05' 19.7" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-226.07:51:29 (08/14/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 175_1349
Contact/Point: 0009/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted dolphin acquired with 200% Klein 5000 side scan. Charted ruins not seen in charted position with 200% side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/175_1349	0009	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted dolphin. Remove charted ruins up to side scan limits.

S-57 Data

[None]

Office Notes

Do not concur. Retain charted dolphin and ruins.

1.48) Dolphins 0027 - retain as charted

Survey Summary

Survey Position: 40° 39' 23.0" N, 074° 05' 04.2" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-244.10:33:34 (09/01/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 175_1349
Contact/Point: 0027/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Eight charted dolphins not seen in charted postions with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/175_1349	0027	0.00	000.0	Primary

Hydrographer Recommendations

Remove all eight charted dolphins.

S-57 Data

[None]

Office Notes

Do not concur. Not enough evidence for removal. Retain as charted.

1.49) Dolphin 0028 - retain as charted

Survey Summary

Survey Position: 40° 39' 23.1" N, 074° 05' 02.2" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-244.10:34:43 (09/01/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 175_1349
Contact/Point: 0028/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted dolphin not seen in charted position with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/175_1349	0028	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted dolphin.

S-57 Data

[None]

Office Notes

Do not concur. Not enough evidence to warrant removal. Retain as charted.

1.50) Ruins ruins 0002 - retain as charted

Survey Summary

Survey Position: 40° 39' 51.6" N, 074° 00' 30.0" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-227.12:34:28 (08/15/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 232_1813
Contact/Point: 0002/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted ruins acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/232_1813	0002	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted ruins.

S-57 Data

[None]

Office Notes

Concur.

1.51) Dolphin 0001 - retain as charted

Survey Summary

Survey Position: 40° 39' 53.2" N, 074° 00' 28.2" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-227.12:31:30 (08/15/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 232_1813
Contact/Point: 0001/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted dolphin acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/232_1813	0001	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted dolphin.

S-57 Data

[None]

Office Notes

Concur.

1.52) Dolphin 0005 - retain as charted

Survey Summary

Survey Position: 40° 39' 52.9" N, 074° 00' 29.3" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-244.02:15:06 (09/01/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 232_1813
Contact/Point: 0005/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted dolphin not seen with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/232_1813	0005	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted dolphin.

S-57 Data

[None]

Office Notes

Do not concur. Retain as charted.

1.53) Dolphin 0004 - retain as charted

Survey Summary

Survey Position: 40° 39' 52.7" N, 074° 00' 28.2" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-244.02:13:40 (09/01/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 232_1813
Contact/Point: 0004/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted dolphin acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/232_1813	0004	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted dolphin.

S-57 Data

[None]

Office Notes

Concur.

1.54) Ruins 0006 - retain as charted

Survey Summary

Survey Position: 40° 39' 48.7" N, 074° 00' 32.7" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-244.02:16:05 (09/01/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 232_1813
Contact/Point: 0006/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted ruins acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/232_1813	0006	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-234/136_1656	0001	2.23	080.0	Secondary
h11600/tj_3102_klein5000_sss100/2006-225/232_1813	0003	12.53	240.2	Secondary (grouped)

Hydrographer Recommendations

Retain charted ruins.

S-57 Data

[None]

Office Notes

Concur.

1.55) Ruins/pile 0002 - retain as charted

Survey Summary

Survey Position: 40° 41' 14.8" N, 074° 04' 41.0" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-227.12:46:05 (08/15/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 234_1610
Contact/Point: 0002/1
Charts Affected: 12334_1, 12333_1, 12337_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted ruins acquired with 200% Klein 5000 side scan. Charted pile not seen in charted position.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/234_1610	0002	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted ruins. Remove charted pile.

S-57 Data

[None]

Office Notes

Do not Concur. One sidescan line with distorted image due to being run in a turn does not conclusively disprove this particular item. Retain as charted.

1.56) Ruins 0014 - retain as charted

Survey Summary

Survey Position: 40° 41' 00.9" N, 074° 04' 09.6" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-244.12:56:18 (09/01/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 234_1610
Contact/Point: 0014/1
Charts Affected: 12334_1, 12333_1, 12337_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted ruins not seen in charted position with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/234_1610	0014	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted ruins up to side scan limits.

S-57 Data

[None]

Office Notes

Do not Concur. Outer range of one sidescan line. Not enough evidence for disproval.

1.57) Piles 0015 - retain as charted

Survey Summary

Survey Position: 40° 40' 59.1" N, 074° 04' 07.2" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-244.12:57:11 (09/01/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 234_1610
Contact/Point: 0015/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted piles not seen in charted position with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/234_1610	0015	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted piles.

S-57 Data

[None]

Office Notes

Do not Concur. Not enough evidence to support disapproval. There is debris in the area as well, on the charted "15".

1.58) Pier ruins 0016 - retain as charted

Survey Summary

Survey Position: 40° 41' 12.6" N, 074° 04' 36.9" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-297.12:50:58 (10/24/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 234_1610
Contact/Point: 0016/1
Charts Affected: 12334_1, 12333_1, 12337_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted ruins acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/234_1610	0016	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-225/341_1559	0002	0.82	293.1	Secondary

Hydrographer Recommendations

Retain charted ruins.

S-57 Data

[None]

Office Notes

Concur.

1.59) Pile 0001 - Retain as charted

Survey Summary

Survey Position: 40° 40' 08.1" N, 074° 04' 47.1" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-244.11:30:33 (09/01/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 243_1445
Contact/Point: 0001/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pile acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/243_1445	0001	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted pile.

S-57 Data

Geo object 1: Pile (PILPNT)

Office Notes

Concur.

1.60) Pile 0002 - Retain as charted

Survey Summary

Survey Position: 40° 40' 08.2" N, 074° 04' 47.4" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-295.06:12:21 (10/22/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 243_1445
Contact/Point: 0002/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pile acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/243_1445	0002	0.00	000.0	Primary

Hydrographer Recommendations

Retain as charted.

S-57 Data

Geo object 1: Pile (PILPNT)

Office Notes

Concur.

1.61) Pile 0003 - Retain as charted

Survey Summary

Survey Position: 40° 40' 08.6" N, 074° 04' 48.7" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-295.06:14:12 (10/22/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 243_1445
Contact/Point: 0003/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pile acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/243_1445	0003	0.00	000.0	Primary

Hydrographer Recommendations

Retain as charted.

S-57 Data

Geo object 1: Pile (PILPNT)

Office Notes

Concur.

1.62) Pile 0004 - Retain as charted

Survey Summary

Survey Position: 40° 40' 08.8" N, 074° 04' 49.3" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-295.06:15:31 (10/22/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 243_1445
Contact/Point: 0004/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pile acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/243_1445	0004	0.00	000.0	Primary

Hydrographer Recommendations

Retain as charted.

S-57 Data

Geo object 1: Pile (PILPNT)

Office Notes

Concur.

1.63) Pier ruins 0001 - Retain as charted

Survey Summary

Survey Position: 40° 39' 12.8" N, 074° 01' 28.5" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-228.11:35:45 (08/16/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 262_1818
Contact/Point: 0001/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pier ruins acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/262_1818	0001	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-227/132_1912	0009	0.96	241.5	Secondary
h11600/tj_3102_klein5000_sss100/2006-232/132_1258	0012	2.63	012.9	Secondary

Hydrographer Recommendations

Retain charted pier ruins.

S-57 Data

[None]

Office Notes

Concur.

1.64) Pier ruins 0002 - Retain as charted

Survey Summary

Survey Position: 40° 39' 14.8" N, 074° 01' 24.6" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-228.11:36:13 (08/16/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 262_1818
Contact/Point: 0002/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pier ruins acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/262_1818	0002	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-227/132_1912	0010	1.51	269.6	Secondary
h11600/tj_3102_klein5000_sss100/2006-232/132_1258	0013	5.47	148.7	Secondary

Hydrographer Recommendations

Retain charted pier ruins.

S-57 Data

[None]

Office Notes

Concur.

1.65) Pier ruins 0003 - Retain as charted

Survey Summary

Survey Position: 40° 39' 17.7" N, 074° 01' 20.8" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-228.11:36:44 (08/16/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 262_1818
Contact/Point: 0003/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pier ruins acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/262_1818	0003	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-232/132_1258	0014	2.92	292.4	Secondary
h11600/tj_3102_klein5000_sss100/2006-227/132_1912	0011	6.72	306.7	Secondary

Hydrographer Recommendations

Retain charted pier ruins.

S-57 Data

[None]

Office Notes

Concur.

1.66) Pier ruins 0004 - Retain as charted

Survey Summary

Survey Position: 40° 39' 20.9" N, 074° 01' 17.1" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-228.11:37:06 (08/16/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 262_1818
Contact/Point: 0004/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pier ruins acquired with 200% klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/262_1818	0004	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-227/132_1912	0012	1.65	258.7	Secondary
h11600/tj_3102_klein5000_sss100/2006-232/132_1258	0015	5.48	273.4	Secondary

Hydrographer Recommendations

Retain charted pier ruins.

S-57 Data

[None]

Office Notes

Concur.

1.67) Pier ruins 0006 - Retain as charted

Survey Summary

Survey Position: 40° 39' 26.8" N, 074° 01' 10.4" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-228.11:39:59 (08/16/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 262_1818
Contact/Point: 0006/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pier ruins acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/262_1818	0006	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-232/132_1258	0017	1.61	155.3	Secondary
h11600/tj_3102_klein5000_sss100/2006-227/132_1912	0014	2.92	178.3	Secondary
h11600/tj_3102_klein5000_sss100/2006-227/132_1912	0015	3.18	208.6	Secondary

Hydrographer Recommendations

Retain charted pier ruins.

S-57 Data

[None]

Office Notes

Concur.

1.68) Pier ruins 0007 - Retain as charted

Survey Summary

Survey Position: 40° 39' 30.6" N, 074° 01' 06.2" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-228.11:40:25 (08/16/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 262_1818
Contact/Point: 0007/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pier ruins acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/262_1818	0007	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-234/232_1708	0003	5.14	258.8	Secondary
h11600/tj_3102_klein5000_sss100/2006-227/132_1912	0016	5.97	106.2	Secondary

Hydrographer Recommendations

Retain charted pier ruins.

S-57 Data

[None]

Office Notes

Concur.

1.69) Pier ruins 0005 - retain as charted

Survey Summary

Survey Position: 40° 38' 56.6" N, 074° 01' 43.6" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-228.11:45:43 (08/16/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 263_1822
Contact/Point: 0005/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pier ruins acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/263_1822	0005	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-227/132_1912	0005	6.19	188.6	Secondary
h11600/tj_3102_klein5000_sss100/2006-232/132_1258	0010	7.32	115.3	Secondary

Hydrographer Recommendations

Retain charted pier ruins.

S-57 Data

[None]

Office Notes

Concur.

1.70) Dolphin 0007 - disproved

Survey Summary

Survey Position: 40° 39' 04.2" N, 074° 01' 34.2" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-244.02:26:36 (09/01/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 263_1822
Contact/Point: 0007/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted dolphin not seen in charted position with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/263_1822	0007	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted dolphin.

S-57 Data

[None]

Office Notes

Concur.

1.71) Pier ruins 0004 - retain as charted

Survey Summary

Survey Position: 40° 39' 00.4" N, 074° 01' 38.9" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-228.11:45:17 (08/16/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 263_1822
Contact/Point: 0004/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pier ruins acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/263_1822	0004	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-227/132_1912	0006	7.60	291.6	Secondary

Hydrographer Recommendations

Retain charted pier ruins.

S-57 Data

[None]

Office Notes

Concur.

1.72) Pier ruins 0003 - retain as charted

Survey Summary

Survey Position: 40° 39' 01.4" N, 074° 01' 36.4" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-228.11:44:46 (08/16/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 263_1822
Contact/Point: 0003/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pier ruins acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/263_1822	0003	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted pier ruins.

S-57 Data

[None]

Office Notes

Concur.

1.73) Dolphin 0001 - retain as charted

Survey Summary

Survey Position: 40° 39' 06.0" N, 074° 01' 32.6" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-227.05:36:10 (08/15/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 263_1822
Contact/Point: 0001/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted dolphin acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/263_1822	0001	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted dolphin.

S-57 Data

[None]

Office Notes

Concur.

1.74) Dolphins 0006 - retain as charted

Survey Summary

Survey Position: 40° 39' 02.9" N, 074° 01' 34.8" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): **THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp: 2006-244.02:23:35 (09/01/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 263_1822
Contact/Point: 0006/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted dolphins acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/263_1822	0006	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted dolphins.

S-57 Data

[None]

Office Notes

Concur.

1.75) Dolphin 0008 - retain as charted

Survey Summary

Survey Position: 40° 39' 05.3" N, 074° 01' 34.6" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-244.02:27:23 (09/01/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 263_1822
Contact/Point: 0008/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted dolphin not seen with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/263_1822	0008	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted dolphin.

S-57 Data

[None]

Office Notes

Concur.

1.76) Pier ruins 0009 - retain as charted

Survey Summary

Survey Position: 40° 38' 58.9" N, 074° 01' 39.5" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-244.02:28:53 (09/01/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 263_1822
Contact/Point: 0009/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted ruins not seen in charted position with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/263_1822	0009	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted ruins up to side scan limits.

S-57 Data

[None]

Office Notes

Do not Concur. Some evidence of ruins although not as well-defined as other areas. Retain as charted.

1.77) Pier ruins 0010 - retain as charted

Survey Summary

Survey Position: 40° 39' 06.2" N, 074° 01' 31.0" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-245.08:52:19 (09/02/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 263_1822
Contact/Point: 0010/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted ruins acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/263_1822	0010	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted ruins.

S-57 Data

[None]

Office Notes

Concur.

1.78) Dolphin 0011 - retain as charted

Survey Summary

Survey Position: 40° 39' 03.7" N, 074° 01' 35.6" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-298.01:45:08 (10/25/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 263_1822
Contact/Point: 0011/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted dolphin not seen in charted position with 200% Klein 5000 Side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/263_1822	0011	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted dolphin.

S-57 Data

[None]

Office Notes

Do not concur. Not enough evidence to remove from chart.

1.79) Pier ruins 0003 - retain as charted

Survey Summary

Survey Position: 40° 38' 47.2" N, 074° 01' 51.7" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-228.11:49:35 (08/16/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 264_1824
Contact/Point: 0003/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pier ruins acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/264_1824	0003	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-232/132_1258	0007	2.10	105.1	Secondary
h11600/tj_3102_klein5000_sss100/2006-227/132_1912	0002	6.28	116.2	Secondary

Hydrographer Recommendations

Retain charted pier ruins.

S-57 Data

[None]

Office Notes

Concur.

1.80) Pier ruins 0004 - retain as charted

Survey Summary

Survey Position: 40° 38' 45.8" N, 074° 01' 53.7" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-228.11:50:04 (08/16/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 264_1824
Contact/Point: 0004/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pier ruins acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/264_1824	0004	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-232/132_1258	0006	3.99	114.8	Secondary
h11600/tj_3102_klein5000_sss100/2006-227/132_1913	0002	11.83	273.8	Secondary

Hydrographer Recommendations

Retain charted pier ruins.

S-57 Data

[None]

Office Notes

Concur.

1.81) Pier ruins 0005 - retain as charted

Survey Summary

Survey Position: 40° 38' 43.6" N, 074° 01' 56.4" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-228.11:50:28 (08/16/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 264_1824
Contact/Point: 0005/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pier ruins acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/264_1824	0005	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-227/132_1913	0001	3.47	044.9	Secondary
h11600/tj_3102_klein5000_sss100/2006-232/132_1258	0005	3.80	094.9	Secondary

Hydrographer Recommendations

Retain charted pier ruins.

S-57 Data

[None]

Office Notes

Concur.

1.82) Pile 0007 - retain as charted

Survey Summary

Survey Position: 40° 38' 55.9" N, 074° 01' 45.8" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-295.07:32:33 (10/22/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 264_1824
Contact/Point: 0007/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pile acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/264_1824	0007	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-232/132_1258	0009	5.86	025.1	Secondary

Hydrographer Recommendations

Retain charted pile.

S-57 Data

Geo object 1: Pile (PILPNT)

Office Notes

Concur.

1.83) Pile 0006 - retain as charted

Survey Summary

Survey Position: 40° 38' 52.8" N, 074° 01' 49.0" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-295.07:28:44 (10/22/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 264_1824
Contact/Point: 0006/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pile acquired with 200% Klein 5000 side scan. The pile is now submerged.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/264_1824	0006	0.00	000.0	Primary

Hydrographer Recommendations

Chart submerged pile.

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.84) Pile 0008 - retain as charted

Survey Summary

Survey Position: 40° 38' 54.5" N, 074° 01' 47.1" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-295.07:32:51 (10/22/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 264_1824
Contact/Point: 0008/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pile acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/264_1824	0008	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted pile.

S-57 Data

Geo object 1: Pile (PILPNT)

Office Notes

Concur.

1.85) Pile 0009 - retain as charted

Survey Summary

Survey Position: 40° 38' 48.5" N, 074° 01' 53.5" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-295.07:35:17 (10/22/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 264_1824
Contact/Point: 0009/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pile not seen in charted position with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/264_1824	0009	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted pile.

S-57 Data

[None]

Office Notes

Do not concur.

1.86) Pier ruins 0017 - retain as charted

Survey Summary

Survey Position: 40° 40' 04.5" N, 074° 00' 06.0" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-229.01:06:30 (08/17/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 334_1757
Contact/Point: 0017/1
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pier ruins acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/334_1757	0017	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted pier ruins.

S-57 Data

[None]

Office Notes

Concur.

1.87) Pier ruins 0018 - retain as charted

Survey Summary

Survey Position: 40° 40' 01.1" N, 074° 00' 16.7" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-244.01:54:03 (09/01/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 334_1757
Contact/Point: 0018/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted ruins not seen in charted position with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/334_1757	0018	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted ruins up to side scan limit.

S-57 Data

[None]

Office Notes

Do not concur. Distorted data due to turning while running side scan. Evidence of ruins present. Retain as charted.

1.88) Pier ruins 0019 - retain as charted

Survey Summary

Survey Position: 40° 40' 02.2" N, 074° 00' 14.4" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-244.01:54:56 (09/01/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 334_1757
Contact/Point: 0019/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted ruins not seen in charted position with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/334_1757	0019	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted ruins up to side scan limit.

S-57 Data

[None]

Office Notes

Do not concur. Some evidence in area of ruins. Recommend retaining as charted.

1.89) Dolphin 0020 - retain as charted

Survey Summary

Survey Position: 40° 40' 06.2" N, 074° 00' 06.4" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-244.01:55:49 (09/01/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 334_1757
Contact/Point: 0020/1
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted dolphin acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/334_1757	0020	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted dolphin.

S-57 Data

Geo object 1: Mooring/warping facility (MORFAC)
Attributes: CATMOR - 1:dolphin

Office Notes

Concur.

1.90) Dolphin 0021 - retain as charted

Survey Summary

Survey Position: 40° 40' 06.0" N, 074° 00' 05.9" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-244.01:56:21 (09/01/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 334_1757
Contact/Point: 0021/1
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted dolphin acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/334_1757	0021	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted dolphin.

S-57 Data

Geo object 1: Mooring/warping facility (MORFAC)
Attributes: CATMOR - 1:dolphin

Office Notes

Concur.

1.91) Dolphin 0022 - retain as charted

Survey Summary

Survey Position: 40° 40' 05.8" N, 074° 00' 05.2" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-244.01:56:41 (09/01/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 334_1757
Contact/Point: 0022/1
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted dolphin acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/334_1757	0022	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted dolphin.

S-57 Data

Geo object 1: Mooring/warping facility (MORFAC)
Attributes: CATMOR - 1:dolphin

Office Notes

Concur.

1.92) Dolphin 0023 - retain as charted

Survey Summary

Survey Position: 40° 40' 06.2" N, 074° 00' 06.6" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-295.08:24:13 (10/22/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 334_1757
Contact/Point: 0023/1
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted dolphin acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/334_1757	0023	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted dolphin.

S-57 Data

Geo object 1: Mooring/warping facility (MORFAC)
Attributes: CATMOR - 1:dolphin

Office Notes

Concur.

1.93) Pile 0013 - disproved

Survey Summary

Survey Position: 40° 40' 36.3" N, 074° 04' 21.0" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): **THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp: 2006-244.12:36:00 (09/01/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 340_1511
Contact/Point: 0013/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pile not seen in charted position with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/340_1511	0013	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted pile.

S-57 Data

[None]

Office Notes

Concur.

1.94) Mooring platform 0012 - retain as charted

Survey Summary

Survey Position: 40° 40' 43.2" N, 074° 04' 11.6" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-234.02:34:06 (08/22/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 340_1512
Contact/Point: 0012/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted mooring platform acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/340_1512	0012	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-233/235_1322	0005	5.04	034.3	Secondary

Hydrographer Recommendations

Retain charted mooring platform.

S-57 Data

[None]

Office Notes

Concur.

1.95) Mooring platform 0011 - retain as charted

Survey Summary

Survey Position: 40° 40' 43.8" N, 074° 04' 12.7" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-234.02:33:47 (08/22/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 340_1512
Contact/Point: 0011/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted mooring platform acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/340_1512	0011	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted mooring platform.

S-57 Data

[None]

Office Notes

Concur.

1.96) Mooring platform 0013 - retain as charted

Survey Summary

Survey Position: 40° 40' 42.4" N, 074° 04' 10.5" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-234.02:34:20 (08/22/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 340_1512
Contact/Point: 0013/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted mooring platform acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/340_1512	0013	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-233/235_1322	0004	2.63	033.1	Secondary

Hydrographer Recommendations

Retain charted mooring platform.

S-57 Data

[None]

Office Notes

Concur.

1.97) Mooring platform 0010 - retain as charted

Survey Summary

Survey Position: 40° 40' 44.6" N, 074° 04' 13.8" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-234.02:32:10 (08/22/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 340_1512
Contact/Point: 0010/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted mooring platform acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/340_1512	0010	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted mooring platform.

S-57 Data

[None]

Office Notes

Concur.

1.98) Mooring platform 0014 - retain as charted

Survey Summary

Survey Position: 40° 40' 41.7" N, 074° 04' 09.4" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-234.02:34:42 (08/22/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 340_1512
Contact/Point: 0014/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted mooring platform acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/340_1512	0014	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-233/235_1322	0003	2.99	048.2	Secondary

Hydrographer Recommendations

Retain charted mooring platform.

S-57 Data

[None]

Office Notes

Concur.

1.99) Mooring platform 0015 - retain as charted

Survey Summary

Survey Position: 40° 40' 41.0" N, 074° 04' 08.3" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-234.02:34:56 (08/22/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 340_1512
Contact/Point: 0015/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted mooring platform acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/340_1512	0015	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-233/235_1322	0002	2.60	024.2	Secondary

Hydrographer Recommendations

Retain charted mooring platform.

S-57 Data

[None]

Office Notes

Concur.

1.100) Pier ruins 0017 - retain as charted**Survey Summary**

Survey Position: 40° 40' 38.8" N, 074° 04' 05.9" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): **THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp: 2006-234.02:36:25 (08/22/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 340_1512
Contact/Point: 0017/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted Ruins acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/340_1512	0017	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted ruins.

S-57 Data

[None]

Office Notes

Concur.

1.101) Mooring platform 0016 - retain as charted

Survey Summary

Survey Position: 40° 40' 40.3" N, 074° 04' 07.3" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-234.02:35:06 (08/22/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 340_1512
Contact/Point: 0016/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted mooring platform acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/340_1512	0016	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-233/235_1322	0001	1.39	359.7	Secondary

Hydrographer Recommendations

Retain charted mooring platform.

S-57 Data

Geo object 1: Mooring/warping facility (MORFAC)

Office Notes

Concur.

1.102) Pier ruins 0004 - retain as charted

Survey Summary

Survey Position: 40° 40' 42.2" N, 074° 04' 01.3" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-234.02:47:50 (08/22/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 341_1558
Contact/Point: 0004/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted ruins not seen in charted position with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/341_1558	0004	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted ruins.

S-57 Data

[None]

Office Notes

Do not concur. Evidence of ruins present. Retain as charted.

1.103) Pile 0005 A - disproved**Survey Summary**

Survey Position: 40° 40' 48.4" N, 074° 04' 09.6" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): **THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp: 2006-247.07:36:21 (09/04/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 341_1558
Contact/Point: 0005/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pile not seen in charted position with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/341_1558	0005	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted pile.

S-57 Data

[None]

Office Notes

Concur.

1.104) Pile 0006 - disproved**Survey Summary**

Survey Position: 40° 40' 49.2" N, 074° 04' 10.3" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-247.07:37:01 (09/04/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 341_1558
Contact/Point: 0006/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pile not seen in charted position with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/341_1558	0006	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted pile.

S-57 Data

[None]

Office Notes

Concur.

1.105) Pile 0003 - disproved**Survey Summary**

Survey Position: 40° 41' 13.1" N, 074° 04' 37.9" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-244.12:51:16 (09/01/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 341_1559
Contact/Point: 0003/1
Charts Affected: 12334_1, 12333_1, 12337_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pile not seen in charted position with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/341_1559	0003	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted pile.

S-57 Data

[None]

Office Notes

Concur.

1.106) Pier ruins 0008**Survey Summary**

Survey Position: 40° 38' 52.5" N, 074° 04' 32.5" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-227.09:16:04 (08/15/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 345_1319
Contact/Point: 0008/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted ruins acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/345_1319	0008	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-232/180_1710	0003	46.52	302.4	Secondary (grouped)

Hydrographer Recommendations

Retain charted ruins.

S-57 Data

[None]

Office Notes

Concur.

1.107) Pier ruins 0007**Survey Summary**

Survey Position: 40° 38' 50.8" N, 074° 04' 29.8" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): **THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp: 2006-227.09:14:47 (08/15/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 345_1319
Contact/Point: 0007/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted ruins acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/345_1319	0007	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted ruins.

S-57 Data

[None]

Office Notes

Concur.

1.108) Pier ruins 0006**Survey Summary**

Survey Position: 40° 38' 46.2" N, 074° 04' 26.2" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-227.09:13:43 (08/15/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 345_1319
Contact/Point: 0006/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted ruins not seen in charted position with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/345_1319	0006	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-232/270_1714	0001	40.15	099.7	Secondary (grouped)

Hydrographer Recommendations

Remove charted ruins up to side scan limits.

S-57 Data

[None]

Office Notes

Concur on this particular ruins designation. The adjacent ruins should be retained as charted.

1.109) Pier ruins 0009**Survey Summary**

Survey Position: 40° 38' 52.6" N, 074° 04' 35.4" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): **THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp: 2006-227.09:17:33 (08/15/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 345_1319
Contact/Point: 0009/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted ruins not seen in charted position with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/345_1319	0009	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted ruins up to side scan limit.

S-57 Data

[None]

Office Notes

Do not concur. Although not as debris filled as other ruins, there are still ruins present and thus should be retained as charted.

1.110) Pier ruins 0011**Survey Summary**

Survey Position: 40° 38' 56.2" N, 074° 04' 44.4" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): **THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp: 2006-227.09:19:36 (08/15/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 345_1319
Contact/Point: 0011/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted ruins acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/345_1319	0011	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-232/179_1634	0002	2.16	211.9	Secondary

Hydrographer Recommendations

Retain charted ruins.

S-57 Data

[None]

Office Notes

Concur.

1.111) Pier ruins 0014 - disproved dol

Survey Summary

Survey Position: 40° 38' 48.1" N, 074° 04' 29.6" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-244.09:46:30 (09/01/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 345_1319
Contact/Point: 0014/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted ruins acquired with 200% Klein 5000 side scan. Dolphins not seen in charted positions.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/345_1319	0014	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-225/345_1319	0004	11.44	193.3	Secondary (grouped)

Hydrographer Recommendations

Retain charted ruins. Remove charted dolphins.

S-57 Data

[None]

Office Notes

Concur with clarification. Retain ruins and remove seawardmost dolphin only.

1.112) Piles 0015 - disproved 3 piles

Survey Summary

Survey Position: 40° 38' 53.5" N, 074° 05' 16.2" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-244.09:50:30 (09/01/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 345_1319
Contact/Point: 0015/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Three charted piles not seen in charted positions with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/345_1319	0015	0.00	000.0	Primary

Hydrographer Recommendations

Remove the three charted piles.

S-57 Data

[None]

Office Notes

Concur.

1.113) Foul area 0016 - retain as charted**Survey Summary**

Survey Position: 40° 38' 56.7" N, 074° 04' 52.6" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): **THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp: 2006-257.02:42:34 (09/14/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 345_1319
Contact/Point: 0016/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Foul area acquired with 200% Klein 5000 side scan. Foul area shows no apparent obstructing or fowling objects, just sediment.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/345_1319	0016	0.00	000.0	Primary

Hydrographer Recommendations

Retain foul area as charted due to lack of information on reason for classification.

S-57 Data

[None]

Office Notes

Concur.

1.114) Pier ruins 0004 - Retain as charted

Survey Summary

Survey Position: 40° 37' 25.5" N, 074° 04' 01.6" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-227.08:58:45 (08/15/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-226 / 099_1218
Contact/Point: 0004/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pier ruins acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-226/099_1218	0004	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-235/136_1246	0002	14.35	210.7	Secondary
h11600/tj_3102_klein5000_sss200/2006-235/235_1850	0002	18.46	295.0	Secondary (grouped)

Hydrographer Recommendations

Retain charted pier ruins.

S-57 Data

[None]

Office Notes

Concur.

1.115) Ruins 0004 - retain as charted

Survey Summary

Survey Position: 40° 37' 04.9" N, 074° 03' 47.1" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-227.09:32:59 (08/15/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-226 / 100_1223
Contact/Point: 0004/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted ruins not seen in charted position with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-226/100_1223	0004	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted ruins up to side scan limit.

S-57 Data

[None]

Office Notes

Do not concur. Some evidence of ruins present. Retain as charted.

1.116) Pier ruins 0003 - retain as charted

Survey Summary

Survey Position: 40° 37' 06.0" N, 074° 03' 50.0" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-227.09:31:42 (08/15/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-226 / 100_1223
Contact/Point: 0003/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pier ruins not seen in charted position with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-226/100_1223	0003	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted pier ruins up to side scan limits.

S-57 Data

[None]

Office Notes

Do not concur. Some evidence of ruins remain. Retain as charted.

1.117) Pipes 0001 - retain as charted**Survey Summary**

Survey Position: 40° 37' 15.8" N, 074° 03' 54.3" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-227.09:26:47 (08/15/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-226 / 100_1223
Contact/Point: 0001/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Location of charted pipes acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-226/100_1223	0001	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-235/135_1305	0002	15.20	348.4	Secondary (grouped)

Hydrographer Recommendations

Retain pipes as charted.

S-57 Data

[None]

Office Notes

Concur.

1.118) Ruins 0002 - Retain as charted

Survey Summary

Survey Position: 40° 36' 23.4" N, 074° 03' 16.9" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-297.06:14:55 (10/24/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-226 / 101_1233
Contact/Point: 0002/1
Charts Affected: 12334_1, 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted ruins not seen in charted position with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-226/101_1233	0002	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted ruins up to side scan limit.

S-57 Data

[None]

Office Notes

Do not concur. Some evidence present. Retain as charted.

1.119) Piles 0013 - disproved 4 piles

Survey Summary

Survey Position: 40° 36' 42.6" N, 074° 03' 34.3" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-244.09:38:53 (09/01/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-226 / 150_1226
Contact/Point: 0013/1
Charts Affected: 12334_1, 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Four charted piles not seen in charted positions with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-226/150_1226	0013	0.00	000.0	Primary

Hydrographer Recommendations

Remove the four charted piles.

S-57 Data

[None]

Office Notes

Concur.

1.120) Dolphin 0007 - disproved

Survey Summary

Survey Position: 40° 39' 04.1" N, 074° 01' 37.0" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-230.08:44:41 (08/18/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-227 / 132_1912
Contact/Point: 0007/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted dolphin not seen in charted position with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-227/132_1912	0007	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted dolphin.

S-57 Data

[None]

Office Notes

Concur.

1.121) Pier ruins 0008 - retain as charted**Survey Summary**

Survey Position: 40° 38' 52.4" N, 074° 01' 48.5" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): **THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp: 2006-234.08:04:23 (08/22/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-232 / 132_1258
Contact/Point: 0008/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pier ruins acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-232/132_1258	0008	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-227/132_1912	0003	1.70	203.3	Secondary

Hydrographer Recommendations

Retain charted pier ruins.

S-57 Data

[None]

Office Notes

Concur.

1.122) Pier ruins 0016 - retain as charted

Survey Summary

Survey Position: 40° 39' 26.3" N, 074° 01' 14.3" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-234.08:08:20 (08/22/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-232 / 132_1258
Contact/Point: 0016/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pier ruins acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-232/132_1258	0016	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-227/132_1912	0013	2.71	167.5	Secondary
h11600/tj_3102_klein5000_sss100/2006-225/262_1818	0005	3.57	140.9	Secondary

Hydrographer Recommendations

Retain charted pier ruins.

S-57 Data

[None]

Office Notes

Concur.

1.123) Foul area 0018 - retain as charted**Survey Summary**

Survey Position: 40° 38' 37.0" N, 074° 02' 05.0" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-257.02:17:25 (09/14/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-232 / 132_1258
Contact/Point: 0018/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Foul area acquired with 200% Klein 5000 side scan. Visually conspicuous foul debris area has changed extent when compared with charted position.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-232/132_1258	0018	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-232/132_1258	0004	13.12	151.3	Secondary (grouped)
h11600/tj_3102_klein5000_sss100/2006-227/133_1921	0001	14.00	297.9	Secondary
h11600/tj_3102_klein5000_sss100/2006-232/132_1258	0002	19.86	264.5	Secondary (grouped)

Hydrographer Recommendations

Retain as charted due to lack of knowledge regarding nature of the foul area.

S-57 Data

[None]

Office Notes

Concur.

1.124) Pile 0001 - retain as charted**Survey Summary**

Survey Position: 40° 41' 10.3" N, 074° 04' 25.0" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-234.08:43:49 (08/22/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-233 / 140_1246
Contact/Point: 0001/1
Charts Affected: 12334_1, 12333_1, 12337_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pile acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-233/140_1246	0001	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted pile.

S-57 Data

Geo object 1: Pile (PILPNT)

Office Notes

Concur.

1.125) Pile 0002 - retain as charted**Survey Summary**

Survey Position: 40° 41' 10.0" N, 074° 04' 24.6" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-234.08:44:21 (08/22/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-233 / 140_1246
Contact/Point: 0002/1
Charts Affected: 12334_1, 12333_1, 12337_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pile acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-233/140_1246	0002	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted pile.

S-57 Data

Geo object 1: Pile (PILPNT)

Office Notes

Concur.

1.126) Pile 0004 A - disproved**Survey Summary**

Survey Position: 40° 41' 10.8" N, 074° 04' 33.8" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-238.06:44:48 (08/26/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-233 / 142_1229
Contact/Point: 0004/1
Charts Affected: 12334_1, 12333_1, 12337_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pile not seen in charted area with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-233/142_1229	0004	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted pile.

S-57 Data

[None]

Office Notes

Concur.

1.127) Pile 0005 - disproved**Survey Summary**

Survey Position: 40° 40' 51.9" N, 074° 04' 05.8" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): **THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp: 2006-247.07:33:31 (09/04/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-233 / 142_1229
Contact/Point: 0005/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pile not seen in charted position with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-233/142_1229	0005	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted pile.

S-57 Data

[None]

Office Notes

Concur.

1.128) Ruins 0002 - Retain as charted**Survey Summary**

Survey Position: 40° 40' 46.7" N, 074° 03' 55.1" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-238.06:22:04 (08/26/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-233 / 318_1253
Contact/Point: 0002/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted ruins acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-233/318_1253	0002	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-225/234_1611	0004	15.96	297.3	Secondary (grouped)
h11600/tj_3102_klein5000_sss100/2006-225/234_1611	0001	17.46	289.7	Secondary (grouped)
h11600/tj_3102_klein5000_sss100/2006-225/234_1610	0012	35.70	140.4	Secondary (grouped)

Hydrographer Recommendations

Retain charted ruins.

S-57 Data

[None]

Office Notes

Concur.

1.129) VIS ruins/Piles 18:25:42 - retain as charted**Survey Summary**

Survey Position: 40° 36' 24.6" N, 074° 03' 17.5" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-235.18:25:42.000 (08/23/2006)
DP Dataset: h11600 / tj_3102_dp / 2006-235 / 3102_08232006
Profile/Beam: 1/1
Charts Affected: 12334_1, 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted ruins acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_dp/2006-235/3102_08232006	1/1	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-235/211_1823	0001	7.64	090.4	Secondary
h11600/tj_3102_klein5000_sss100/2006-226/101_1233	0001	17.88	040.7	Secondary (grouped)

Hydrographer Recommendations

Retain charted ruins.

S-57 Data

[None]

Office Notes

Concur.

1.130) Submerged ruins 18:57:38 - retain as charted

Survey Summary

Survey Position: 40° 37' 28.4" N, 074° 04' 04.2" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-235.18:57:38.000 (08/23/2006)
DP Dataset: h11600 / tj_3102_dp / 2006-235 / 3102_08232006
Profile/Beam: 2/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted ruins acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_dp/2006-235/3102_08232006	2/1	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-235/235_1850	0003	4.45	076.7	Secondary
h11600/tj_3102_klein5000_sss100/2006-226/099_1218	0003	15.86	172.2	Secondary (grouped)

Hydrographer Recommendations

Retain charted ruins.

S-57 Data

[None]

Office Notes

Concur.

1.131) Visible ruins 18:59:12 - retain as charted

Survey Summary

Survey Position: 40° 37' 22.8" N, 074° 03' 58.7" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-235.18:59:12.000 (08/23/2006)
DP Dataset: h11600 / tj_3102_dp / 2006-235 / 3102_08232006
Profile/Beam: 3/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pier ruins acquired with 200% Klein 5000 side scan. Some of the ruins are above the water as seen in the image.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_dp/2006-235/3102_08232006	3/1	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-226/099_1218	0005	8.17	106.7	Secondary
h11600/tj_3102_klein5000_sss100/2006-235/136_1246	0001	8.22	316.7	Secondary

Hydrographer Recommendations

Retain charted pier ruins.

S-57 Data

[None]

Office Notes

Concur.

Feature Images



Figure 1.131.1

1.132) Charted pier 19:23:50 - retain as charted

Survey Summary

Survey Position: 40° 38' 28.0" N, 074° 04' 11.6" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-235.19:23:50.000 (08/23/2006)
DP Dataset: h11600 / tj_3102_dp / 2006-235 / 3102_08232006
Profile/Beam: 4/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pier and dolphins acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_dp/2006-235/3102_08232006	4/1	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-225/151_1305	0035	5.75	018.5	Secondary
h11600/tj_3102_klein5000_sss100/2006-235/138_1241	0004	11.61	039.9	Secondary

Hydrographer Recommendations

Retain charted pier and dolphins.

S-57 Data

[None]

Office Notes

Concur.

Feature Images



Figure 1.132.1

1.133) Visible ruins 19:24:08 - retain as charted

Survey Summary

Survey Position: 40° 38' 26.2" N, 074° 04' 11.7" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-235.19:24:08.000 (08/23/2006)
DP Dataset: h11600 / tj_3102_dp / 2006-235 / 3102_08232006
Profile/Beam: 5/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pier ruins acquired with 200% Klein 5000 side scan. Some of the ruins are above the water as seen in the image.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_dp/2006-235/3102_08232006	5/1	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-225/151_1305	0034	3.31	017.2	Secondary
h11600/tj_3102_klein5000_sss100/2006-235/138_1241	0003	22.66	285.2	Secondary (grouped)

Hydrographer Recommendations

Retain charted pier ruins.

S-57 Data

[None]

Office Notes

Concur.

Feature Images



Figure 1.133.1

1.134) Visible ruins 19:24:24 - retain as charted

Survey Summary

Survey Position: 40° 38' 24.2" N, 074° 04' 11.3" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-235.19:24:24.000 (08/23/2006)
DP Dataset: h11600 / tj_3102_dp / 2006-235 / 3102_08232006
Profile/Beam: 6/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pier ruins acquired with 200% Klein 5000 side scan. Some of the ruins are above the water as seen in the image.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_dp/2006-235/3102_08232006	6/1	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-225/151_1305	0033	17.17	292.3	Secondary (grouped)
h11600/tj_3102_klein5000_sss100/2006-235/138_1241	0002	17.22	306.7	Secondary (grouped)

Hydrographer Recommendations

Retain charted pier ruins.

S-57 Data

[None]

Office Notes

Concur.

1.135) Visible ruins 19:24:45 - retain as charted

Survey Summary

Survey Position: 40° 38' 21.7" N, 074° 04' 11.0" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-235.19:24:45.000 (08/23/2006)
DP Dataset: h11600 / tj_3102_dp / 2006-235 / 3102_08232006
Profile/Beam: 7/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pier ruins acquired with 200% Klein 5000 side scan. Some of the ruins are above the water as seen in the image.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_dp/2006-235/3102_08232006	7/1	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-235/138_1241	0001	13.89	274.3	Secondary
h11600/tj_3102_klein5000_sss100/2006-225/151_1305	0032	14.16	289.4	Secondary
h11600/tj_3102_klein5000_sss100/2006-225/151_1305	0053	19.18	212.2	Secondary (grouped)

Hydrographer Recommendations

Retain charted pier ruins.

S-57 Data

[None]

Office Notes

Concur.

Feature Images



Figure 1.135.1

1.136) Visible ruins 19:25:04 - retain as charted

Survey Summary

Survey Position: 40° 38' 18.8" N, 074° 04' 11.2" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-235.19:25:04.000 (08/23/2006)
DP Dataset: h11600 / tj_3102_dp / 2006-235 / 3102_08232006
Profile/Beam: 8/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pier ruins acquired with 200% Klein 5000 side scan. Some of the ruins are above the water as seen in the image.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_dp/2006-235/3102_08232006	8/1	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-235/236_1922	0001	20.42	325.0	Secondary (grouped)
h11600/tj_3102_klein5000_sss100/2006-225/151_1305	0031	27.18	000.1	Secondary (grouped)

Hydrographer Recommendations

Retain charted pier ruins.

S-57 Data

[None]

Office Notes

Concur.

Feature Images



Figure 1.136.1

1.137) Charted pier 6 19:25:40 - retain as charted

Survey Summary

Survey Position: 40° 38' 14.2" N, 074° 04' 13.6" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-235.19:25:40.000 (08/23/2006)
DP Dataset: h11600 / tj_3102_dp / 2006-235 / 3102_08232006
Profile/Beam: 9/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pier with DP image.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_dp/2006-235/3102_08232006	9/1	0.00	000.0	Primary

Hydrographer Recommendations

Retain charted pier.

S-57 Data

[None]

Office Notes

Concur.

Feature Images



Figure 1.137.1

1.138) Visible ruins 19:26:13 - retain as charted

Survey Summary

Survey Position: 40° 38' 10.1" N, 074° 04' 10.6" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-235.19:26:13.000 (08/23/2006)
DP Dataset: h11600 / tj_3102_dp / 2006-235 / 3102_08232006
Profile/Beam: 10/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted pier ruins acquired with 200% Klein 5000 side scan. Some of the ruins are above the water as seen in the image.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_dp/2006-235/3102_08232006	10/1	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-235/236_1922	0002	15.59	032.2	Secondary (grouped)
h11600/tj_3102_klein5000_sss100/2006-225/151_1305	0051	31.41	052.0	Secondary (grouped)

Hydrographer Recommendations

Retain charted pier ruins.

S-57 Data

[None]

Office Notes

Concur.

Feature Images



Figure 1.138.1

1.139) 48ft Rock**Survey Summary**

Survey Position: 40° 41' 42.6" N, 074° 01' 53.1" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): **THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp: 2008-351.14:20:10 (12/16/2008)
GP Dataset: ChartGPs - Digitized
GP No.: 50
Charts Affected: 12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	50	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

[None]

Office Notes

Retain 48ft. Rock as charted

1.140) Sewer 7795/125 - Retain as charted.**Survey Summary**

Survey Position: 40° 38' 31.9" N, 074° 02' 13.7" W
Least Depth: 11.57 m (= 37.94 ft = 6.324 fm = 6 fm 1.94 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-225.19:20:59.877 (08/13/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_225 / 938_1910
Profile/Beam: 7795/125
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted sewer outfall acquired with 100% Reson 8125 MBES and 200% Klein 5000 Side scan. Soundings were corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_225/938_1910	7795/125	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-234/229_1725	0001	3.63	142.1	Secondary
h11600/tj_3102_klein5000_sss200/2006-234/288_1811	0002	39.99	018.4	Secondary (grouped)

Hydrographer Recommendations

Retain sewer outfall as charted.

S-57 Data

[None]

Office Notes

Concur.

1.141) Obstruction 655/240 - disproval**Survey Summary**

Survey Position: 40° 41' 32.8" N, 074° 02' 12.1" W
Least Depth: 7.86 m (= 25.80 ft = 4.300 fm = 4 fm 1.80 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.368 m
Timestamp: 2006-226.16:11:27.393 (08/14/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_226 / 264_1610
Profile/Beam: 655/240
Charts Affected: 12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Charted obstruction area acquired with Reson 8125 MBES and 200% Klein 5000 side scan. Soundings were corrected to MLLW with verified water levels and final tide zoning. Obstruction not seen.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_226/264_1610	655/240	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-226/104_1736	0002	6.33	240.3	Secondary

Hydrographer Recommendations

Remove charted obstruction.

S-57 Data

[None]

Office Notes

Concur.

H11600 Uncharted Items

Registry Number: H11600
State: New York
Locality: New York Harbor
Sub-locality: Upper Bay
Project Number: OPR-B310-TJ-06
Survey Dates: 13 August 2006 - 09 October 2006

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
12334	67th	04/01/2004	1:10,000 (12334_1)	[L]NTM: ?
12335	40th	09/01/2003	1:10,000 (12335_1)	[L]NTM: ?
12402	10th	05/01/2006	1:15,000 (12402_1)	USCG LNM: 01/29/2008 (03/25/2008) CHS NTM: None (01/25/2008) NGA NTM: 11/15/1997 (03/22/2008)
12333	34th	12/01/2005	1:15,000 (12333_1)	[L]NTM: ?
12337	23rd	10/01/2005	1:20,000 (12337_1)	[L]NTM: ?
12327	101st	04/01/2008	1:40,000 (12327_1)	USCG LNM: 04/22/2008 (04/22/2008) CHS NTM: None (01/25/2008) NGA NTM: 06/17/2006 (04/26/2008)
12363	40th	06/01/2005	1:80,000 (12363_1)	[L]NTM: ?
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

No.	Name	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	Dolphin 0012	Dolphin	[None]	40° 39' 07.5" N	074° 05' 15.3" W	---
1.2	Dolphin 0030	Dolphin	[None]	40° 39' 06.8" N	074° 05' 17.1" W	---

1.3	Pile 0003	Pile	[None]	40° 41' 15.8" N	074° 04' 41.1" W	---
1.4	Mooring platform 0008	SSS	[None]	40° 40' 24.3" N	074° 05' 07.2" W	---
1.5	Mooring platform 0009	Stationary structure, floating or fixed	[None]	40° 40' 15.4" N	074° 04' 46.9" W	---
1.6	Pile 0006	Pile	[None]	40° 40' 36.0" N	074° 04' 17.4" W	---
1.7	Pile 0003	Pile	[None]	40° 40' 36.4" N	074° 04' 18.1" W	---
1.8	Pile 0004	Pile	[None]	40° 40' 37.1" N	074° 04' 19.6" W	---
1.9	Pile 0002	Pile	[None]	40° 40' 37.4" N	074° 04' 20.3" W	---
1.10	uncharted pier ruins - 0006	SSS	[None]	40° 37' 19.3" N	074° 03' 56.3" W	---
1.11	Pile 0006	Pile	[None]	40° 36' 44.1" N	074° 03' 34.3" W	---
1.12	Pile 0011	Pile	[None]	40° 36' 56.3" N	074° 03' 43.0" W	---
1.13	Dolphin 0004	Dolphin	[None]	40° 39' 10.1" N	074° 05' 11.7" W	---
1.14	New Pier 0002	SSS	[None]	40° 38' 21.9" N	074° 02' 17.9" W	---
1.15	New pier face 0002	SSS	[None]	40° 40' 31.9" N	074° 04' 25.3" W	---
1.16	Pile 0006	Pile	[None]	40° 40' 05.9" N	074° 03' 53.6" W	---
1.17	Pile 0007	Pile	[None]	40° 40' 04.8" N	074° 03' 54.0" W	---
1.18	uncharted pier ruins - 0003	SSS	[None]	40° 37' 53.3" N	074° 04' 11.3" W	---
1.19	Uncharted ruins 924/32	Obstruction	3.56 m	40° 37' 38.5" N	074° 04' 09.6" W	---
1.20	Uncharted ruins 505/29	Sounding	1.88 m	40° 37' 35.3" N	074° 04' 08.6" W	---
1.21	Uncharted pier ruins 896/18	Sounding	2.75 m	40° 37' 31.7" N	074° 04' 06.9" W	---
1.22	Mooring bouy	Mooring buoy	[None]	40° 40' 54.0" N	074° 02' 44.1" W	---
1.23	AWOIS # 13764 - disproved	GP	[None]	40° 39' 55.3" N	074° 04' 17.1" W	---
1.24	AWOIS #13765 - disproved	GP	[None]	40° 39' 51.5" N	074° 04' 08.1" W	---
1.25	AWOIS # 13734 - disproved	GP	[None]	40° 39' 17.8" N	074° 03' 06.9" W	---
1.26	AWOIS #13739 - disproved	GP	[None]	40° 39' 44.4" N	074° 03' 15.1" W	---
1.27	Obstruction - 1262/209	Obstruction	13.22 m	40° 41' 02.3" N	074° 00' 46.2" W	---
1.28	Obstruction - 3184/207	Obstruction	6.23 m	40° 41' 53.9" N	074° 02' 10.3" W	---
1.29	Obstruction 1930/200	Sounding	5.88 m	40° 41' 16.2" N	074° 02' 34.8" W	---
1.30	Rock - 366/27	Rock	6.19 m	40° 41' 18.2" N	074° 02' 32.5" W	---
1.31	Obstruction - 636/149	Sounding	7.15 m	40° 41' 19.9" N	074° 02' 30.7" W	---
1.32	Rock 1447/165	Sounding	5.82 m	40° 41' 18.9" N	074° 02' 33.4" W	---
1.33	Obstruction - 167/60	Sounding	7.84 m	40° 39' 38.6" N	074° 04' 13.3" W	---
1.34	Obstruction - 338/76	Obstruction	11.35 m	40° 38' 18.6" N	074° 04' 06.8" W	---
1.35	Sounding on Shoal - 293/135	Shoal	11.51 m	40° 40' 54.8" N	074° 00' 57.7" W	---
1.36	Obstruction - 6557/236	Sounding	7.19 m	40° 41' 10.2" N	074° 01' 37.5" W	---
1.37	Obstruction 5891/35	Sounding	6.29 m	40° 39' 40.8" N	074° 00' 52.8" W	---
1.38	Obstruction 9635/60	Shoal	5.36 m	40° 40' 31.6" N	074° 04' 27.9" W	---

1.39	Obstruction - 8321/100	Obstruction	5.30 m	40° 40' 31.8" N	074° 04' 32.3" W	---
1.40	Obstruction - 8785/26	Obstruction	4.92 m	40° 40' 33.6" N	074° 04' 31.3" W	---
1.41	Obstruction - 9869/34	Obstruction	5.42 m	40° 40' 31.1" N	074° 04' 26.8" W	---
1.42	Obstruction - 9441/178	Obstruction	5.71 m	40° 40' 31.9" N	074° 04' 28.8" W	---
1.43	Obstruction - 2378/171	Sounding	5.03 m	40° 39' 20.9" N	074° 03' 45.1" W	---
1.44	Rock - 7176/1	Rock	6.70 m	40° 38' 55.9" N	074° 05' 14.6" W	---
1.45	Obstruction - 3636/238	Obstruction	7.04 m	40° 41' 54.4" N	074° 02' 03.5" W	---
1.46	Obstruction - 639/221	Obstruction	11.09 m	40° 41' 15.3" N	074° 00' 43.3" W	---
1.47	1478/225 Obstruction	Obstruction	10.55 m	40° 41' 22.5" N	074° 00' 37.9" W	---
1.48	Obstruction - 1551/202	Obstruction	10.57 m	40° 41' 23.3" N	074° 00' 38.2" W	---
1.49	Obstruction - 2236/238	Obstruction	9.93 m	40° 41' 24.3" N	074° 00' 37.8" W	---
1.50	Obstruction 2712/194	Obstruction	10.94 m	40° 41' 18.6" N	074° 00' 38.9" W	---
1.51	Obstruction - 955/120	Obstruction	12.34 m	40° 40' 50.3" N	074° 01' 10.6" W	---
1.52	Obstruction - 5922/235	Sounding	12.60 m	40° 40' 45.6" N	074° 01' 22.4" W	---
1.53	Obstruction - 305/168	Sounding	12.74 m	40° 40' 45.3" N	074° 01' 23.5" W	---
1.54	Obstruction - 1305/218	Sounding	10.68 m	40° 41' 10.3" N	074° 00' 49.9" W	---
1.55	Obstruction - 3355/84	Wreck	9.93 m	40° 41' 14.7" N	074° 00' 44.3" W	---
1.56	Obstruction - 601/192	Obstruction	10.41 m	40° 41' 16.2" N	074° 00' 44.4" W	---
1.57	Rock - 1588/6	Rock	11.61 m	40° 40' 25.3" N	074° 01' 13.7" W	---
1.58	Obstruction - 1911/75	Sounding	11.40 m	40° 40' 21.2" N	074° 01' 14.0" W	---
1.59	Obstruction - 3660/32	Sounding	12.41 m	40° 39' 59.7" N	074° 01' 11.5" W	---
1.60	Obstruction 2326/177	Obstruction	11.44 m	40° 40' 31.2" N	074° 01' 16.4" W	---
1.61	Obstruction - 2592/187	Sounding	11.82 m	40° 40' 36.4" N	074° 01' 19.8" W	---
1.62	Obstruction 1448/239	Obstruction	10.81 m	40° 40' 16.7" N	074° 01' 22.3" W	---
1.63	Rock - 882/240	Rock	12.77 m	40° 41' 40.9" N	074° 00' 17.4" W	---
1.64	Obstruction - 1492/239	Shoal	13.17 m	40° 41' 48.4" N	074° 00' 12.9" W	---
1.65	Rock - 169/226	Rock	11.34 m	40° 41' 47.9" N	074° 00' 18.9" W	---
1.66	Obstruction 2945/171	Obstruction	12.20 m	40° 40' 40.3" N	074° 01' 25.8" W	---
1.67	Obstruction 2102/233	Obstruction	17.46 m	40° 40' 52.7" N	074° 02' 21.6" W	---
1.68	Obstruction 1247/19	Obstruction	17.73 m	40° 41' 02.5" N	074° 02' 03.6" W	---
1.69	Obstruction 386/199	Obstruction	7.06 m	40° 41' 05.2" N	074° 01' 38.4" W	---
1.70	Mooring Buoy - 4610/1	Mooring buoy	6.10 m	40° 40' 54.0" N	074° 02' 44.0" W	---
1.71	Obstn - 24/146	Obstruction	7.42 m	40° 40' 29.5" N	074° 02' 55.1" W	---
1.72	Obstruction - 6221/230	Sounding	11.56 m	40° 40' 30.0" N	074° 01' 18.0" W	---
1.73	Wreck - 372/46	Wreck	13.91 m	40° 39' 26.6" N	074° 03' 03.1" W	---
1.74	Obstruction - 4419/8	Obstruction	13.72 m	40° 39' 35.0" N	074° 02' 50.3" W	---

1.75	Obstruction - 1050/187	Sounding	15.92 m	40° 40' 49.5" N	074° 02' 11.9" W	---
1.76	Obstruction - 1050/188	Sounding	15.86 m	40° 40' 49.5" N	074° 02' 11.9" W	---
1.77	Obstruction - 552/33	Sounding	14.22 m	40° 39' 41.9" N	074° 02' 56.8" W	---
1.78	Obstruction - 553/33	Obstruction	14.29 m	40° 39' 41.9" N	074° 02' 56.8" W	---
1.79	Submerged piling 38/171	Sounding	7.78 m	40° 41' 07.0" N	074° 01' 02.9" W	---
1.80	Obstruction - 482/11	Sounding	15.78 m	40° 41' 31.4" N	074° 01' 48.2" W	---
1.81	Obstruction - 1031/22	Obstruction	12.02 m	40° 39' 28.1" N	074° 02' 43.5" W	---
1.82	Obstruction - 1236/58	Obstruction	10.62 m	40° 39' 24.8" N	074° 02' 22.3" W	---
1.83	Rock - 7628/190	Rock	3.46 m	40° 39' 45.7" N	074° 01' 51.9" W	---
1.84	Obstruction - 475/4	Sounding	14.84 m	40° 38' 21.0" N	074° 02' 56.6" W	---
1.85	Obstruction - 4449/29	Obstruction	11.19 m	40° 38' 52.7" N	074° 02' 35.4" W	---
1.86	Obstruction 316/198	Obstruction	12.38 m	40° 38' 13.0" N	074° 02' 32.3" W	---
1.87	Obstruction - 1270/17	Sounding	12.75 m	40° 38' 55.7" N	074° 03' 08.8" W	---
1.88	Submerged piling 2116/18	Sounding	6.88 m	40° 39' 54.9" N	074° 00' 22.8" W	---
1.89	Obstruction - 1498/164	Obstruction	6.00 m	40° 39' 09.3" N	074° 04' 08.2" W	---
1.90	Obstruction - 1438/28	Sounding	19.36 m	40° 36' 52.0" N	074° 02' 56.3" W	---
1.91	Obstruction - 411/10	Obstruction	13.00 m	40° 36' 42.5" N	074° 02' 30.7" W	---
1.92	Obstruction - 2437/12	Sounding	15.57 m	40° 38' 18.2" N	074° 03' 49.6" W	---
1.93	Obstruction 1889/150	Obstruction	11.60 m	40° 37' 43.0" N	074° 02' 41.7" W	---
1.94	Obstruction - 1379/102	Sounding	11.17 m	40° 39' 03.0" N	074° 05' 22.4" W	---
1.95	Rock - 1917/227	Rock	11.70 m	40° 39' 10.5" N	074° 05' 05.9" W	---
1.96	Obstruction - 845/110	Sounding	5.69 m	40° 39' 21.2" N	074° 03' 43.1" W	---
1.97	Rock - 892/234	Rock	5.05 m	40° 39' 22.3" N	074° 03' 44.5" W	---
1.98	Obstruction - 3403/79	Sounding	14.94 m	40° 38' 44.9" N	074° 03' 35.7" W	---
1.99	Rock - 893/81	Rock	4.25 m	40° 40' 19.7" N	074° 03' 09.1" W	---
1.100	Sounding on shoal - 858/10	Shoal	4.01 m	40° 40' 20.9" N	074° 03' 06.8" W	---
1.101	Obstruction - 200/2	Sounding	4.37 m	40° 40' 27.9" N	074° 02' 59.8" W	---
1.102	AWOIS #10637 - 1899/9 - obstn	Sounding	6.49 m	40° 39' 28.6" N	074° 04' 14.4" W	---
1.103	Rock - 1726/90	Rock	6.07 m	40° 39' 16.6" N	074° 04' 39.5" W	---
1.104	Obstruction - 201/16	Obstruction	6.25 m	40° 39' 10.2" N	074° 04' 32.1" W	---
1.105	Obstruction 1432/9	Obstruction	15.20 m	40° 36' 09.1" N	074° 03' 01.4" W	---
1.106	Obstruction - 1521/11	Obstruction	16.11 m	40° 36' 10.9" N	074° 03' 02.4" W	---
1.107	Obstruction 2919/224	Obstruction	5.71 m	40° 41' 59.5" N	074° 02' 07.9" W	---
1.108	Obstruction 73/11	Obstruction	14.56 m	40° 37' 14.4" N	074° 03' 15.4" W	---
1.109	8161/101 obstruction	Obstruction	5.02 m	40° 37' 09.1" N	074° 02' 34.5" W	---
1.110	Obstruction - 1152/195	Obstruction	13.32 m	40° 41' 46.5" N	074° 00' 14.0" W	---

1.111	Obstruction - 3752/109	Obstruction	3.84 m	40° 37' 31.8" N	074° 02' 32.6" W	---
1.112	Obstruction - 7804/235	Obstruction	10.16 m	40° 38' 02.8" N	074° 02' 30.5" W	---
1.113	Obstruction - 3927/33	Obstruction	6.49 m	40° 36' 32.2" N	074° 02' 21.5" W	---
1.114	Obstruction - 990/7	Obstruction	8.26 m	40° 38' 54.6" N	074° 04' 30.7" W	---
1.115	Obstruction - 2626/120	Obstruction	12.32 m	40° 41' 23.2" N	074° 00' 23.1" W	---
1.116	Obstruction - 5548/210	Sounding	10.71 m	40° 39' 32.6" N	074° 02' 29.2" W	---
1.117	Obstruction - 854/64	Sounding	7.02 m	40° 38' 11.5" N	074° 02' 25.4" W	---
1.118	Wreck - 1458/4	Sounding	16.45 m	40° 37' 11.3" N	074° 03' 47.1" W	---
1.119	Obstruction - 883/25	Obstruction	11.20 m	40° 37' 05.2" N	074° 03' 45.2" W	---
1.120	Obstruction - 293/100	Obstruction	6.16 m	40° 39' 13.2" N	074° 04' 45.5" W	---
1.121	Obstruction - 608/5	Obstruction	5.79 m	40° 39' 57.9" N	074° 03' 20.1" W	---
1.122	Obstruction - 296/101	Obstruction	9.62 m	40° 35' 48.4" N	074° 02' 58.7" W	---
1.123	Obstruction - 503/50	Obstruction	15.36 m	40° 37' 32.9" N	074° 03' 52.6" W	---
1.124	Obstruction - 889/60	Obstruction	5.49 m	40° 39' 12.2" N	074° 04' 08.2" W	---
1.125	Obstruction - 4362/35	Obstruction	5.18 m	40° 40' 09.4" N	074° 03' 14.8" W	---
1.126	Obstruction - 1095/99	Sounding	10.13 m	40° 40' 24.1" N	074° 05' 23.2" W	---
1.127	AWOIS # - 800/75 - disproved	Sounding	16.10 m	40° 41' 36.8" N	074° 01' 58.2" W	---
1.128	AWOIS # - 1561/97 - obstn	Sounding	14.22 m	40° 41' 48.3" N	074° 01' 48.6" W	---

1 - DR_Uncharted

1.1) Dolphin 0012

Survey Summary

Survey Position: 40° 39' 07.5" N, 074° 05' 15.3" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-226.07:55:15 (08/14/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 175_1349
Contact/Point: 0012/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted dolphin acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/175_1349	0012	0.00	000.0	Primary

Hydrographer Recommendations

Chart dolphin.

S-57 Data

Geo object 1: Mooring/warping facility (MORFAC)
Attributes: CATMOR - 1:dolphin

Office Notes

Concur.

1.2) Dolphin 0030

Survey Summary

Survey Position: 40° 39' 06.8" N, 074° 05' 17.1" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-295.12:50:11 (10/22/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 175_1349
Contact/Point: 0030/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted dolphin acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/175_1349	0030	0.00	000.0	Primary

Hydrographer Recommendations

Chart dolphin.

S-57 Data

Geo object 1: Mooring/warping facility (MORFAC)
Attributes: CATMOR - 1:dolphin

Office Notes

Concur.

1.3) Pile 0003

Survey Summary

Survey Position: 40° 41' 15.8" N, 074° 04' 41.1" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-227.01:18:00 (08/15/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 234_1610
Contact/Point: 0003/1
Charts Affected: 12334_1, 12333_1, 12337_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted pile acquired with 100% Klein 5000 side scan. No least depth acquired.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/234_1610	0003	0.00	000.0	Primary

Hydrographer Recommendations

Chart pile.

S-57 Data

Geo object 1: Pile (PILPNT)

Office Notes

Concur.

1.4) Mooring platform 0008

Survey Summary

Survey Position: 40° 40' 24.3" N, 074° 05' 07.2" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-295.04:54:48 (10/22/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 241_1458
Contact/Point: 0008/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted mooring platform at the Global Marine Terminal. Supports acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/241_1458	0008	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-225/241_1458	0001	0.11	180.0	Secondary (grouped)
h11600/tj_3102_klein5000_sss100/2006-225/241_1458	0007	1.49	297.1	Secondary (grouped)

Hydrographer Recommendations

Chart mooring platform.

S-57 Data

Geo object 1: Mooring/warping facility (MORFAC)

Office Notes

Concur.

1.5) Mooring platform 0009

Survey Summary

Survey Position: 40° 40' 15.4" N, 074° 04' 46.9" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-295.04:56:03 (10/22/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 241_1458
Contact/Point: 0009/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted mooring platform at the Global Marine Terminal. Supports acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/241_1458	0009	0.00	000.0	Primary

Hydrographer Recommendations

Chart mooring platform.

S-57 Data

Geo object 1: Mooring/warping facility (MORFAC)
Attributes: STATUS - 1:permanent
 WATLEV - 2:always dry

Office Notes

Concur

1.6) Pile 0006

Survey Summary

Survey Position: 40° 40' 36.0" N, 074° 04' 17.4" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-227.09:40:39 (08/15/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 340_1511
Contact/Point: 0006/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted pile acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/340_1511	0006	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-233/236_1312	0001	1.24	074.4	Secondary
h11600/tj_3102_klein5000_sss100/2006-233/145_1325	0002	3.63	243.4	Secondary

Hydrographer Recommendations

Chart the pile.

S-57 Data

Geo object 1: Pile (PILPNT)

Office Notes

Concur.

1.7) Pile 0003

Survey Summary

Survey Position: 40° 40' 36.4" N, 074° 04' 18.1" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-233.07:29:59 (08/21/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 340_1512
Contact/Point: 0003/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted pile acquired with 200% Klein 5000 side scan. No least depth acquired.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/340_1512	0003	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-233/236_1312	0002	1.54	350.2	Secondary
h11600/tj_3102_klein5000_sss100/2006-233/145_1325	0001	2.24	250.3	Secondary

Hydrographer Recommendations

Chart the pile.

S-57 Data

Geo object 1: Pile (PILPNT)

Office Notes

Concur.

1.8) Pile 0004

Survey Summary

Survey Position: 40° 40' 37.1" N, 074° 04' 19.6" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-233.07:30:51 (08/21/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 340_1512
Contact/Point: 0004/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted pile acquired with 200% Klein 5000 side scan. No least depth acquired.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/340_1512	0004	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-233/236_1312	0003	0.09	000.0	Secondary

Hydrographer Recommendations

Chart the pile.

S-57 Data

Geo object 1: Pile (PILPNT)

Office Notes

Concur.

1.9) Pile 0002

Survey Summary

Survey Position: 40° 40' 37.4" N, 074° 04' 20.3" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-233.07:29:01 (08/21/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-225 / 340_1512
Contact/Point: 0002/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted pile acquired with 200% Klein 5000 side scan. No least depth acquired.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-225/340_1512	0002	0.00	000.0	Primary

Hydrographer Recommendations

Chart the pile.

S-57 Data

Geo object 1: Pile (PILPNT)

Office Notes

Concur.

1.10) uncharted pier ruins - 0006

Survey Summary

Survey Position: 40° 37' 19.3" N, 074° 03' 56.3" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-229.07:56:56 (08/17/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-226 / 099_1218
Contact/Point: 0006/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Un-charted pier ruins

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-226/099_1218	0006	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

[None]

Office Notes

Defer to MCD for charting recommendation.

1.11) Pile 0006**Survey Summary**

Survey Position: 40° 36' 44.1" N, 074° 03' 34.3" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): **THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp: 2006-228.02:19:33 (08/16/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-226 / 150_1226
Contact/Point: 0006/1
Charts Affected: 12334_1, 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted pile acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-226/150_1226	0006	0.00	000.0	Primary

Hydrographer Recommendations

Chart the pile.

S-57 Data

Geo object 1: Pile (PILPNT)

Office Notes

Concur.

1.12) Pile 0011

Survey Summary

Survey Position: 40° 36' 56.3" N, 074° 03' 43.0" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-230.07:40:50 (08/18/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-226 / 150_1226
Contact/Point: 0011/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted pile acquired with 200% Klein 5000 side scan. No least depth acquired.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-226/150_1226	0011	0.00	000.0	Primary

Hydrographer Recommendations

Chart the pile.

S-57 Data

Geo object 1: Pile (PILPNT)

Office Notes

Concur.

1.13) Dolphin 0004

Survey Summary

Survey Position: 40° 39' 10.1" N, 074° 05' 11.7" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-233.06:27:49 (08/21/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-232 / 175_1733
Contact/Point: 0004/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted dolphin acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-232/175_1733	0004	0.00	000.0	Primary

Hydrographer Recommendations

Chart the dolphin.

S-57 Data

Geo object 1: Mooring/warping facility (MORFAC)
Attributes: CATMOR - 1:dolphin

Office Notes

Concur.

1.14) New Pier 0002

Survey Summary

Survey Position: 40° 38' 21.9" N, 074° 02' 17.9" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-234.04:56:53 (08/22/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-232 / 199_1409
Contact/Point: 0002/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

New pier built on charted ruins acquired with 200% Klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-232/199_1409	0002	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-225/098_1904	0007	3.29	143.9	Secondary
h11600/tj_3102_klein5000_sss100/2006-225/098_1904	0008	8.00	081.3	Secondary

Hydrographer Recommendations

Chart new pier. Delete ruins from chart.

S-57 Data

[None]

Office Notes

Defer to MCD for charting recommendation.

1.15) New pier face 0002

Survey Summary

Survey Position: 40° 40' 31.9" N, 074° 04' 25.3" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-234.10:37:48 (08/22/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-233 / 148_1347
Contact/Point: 0002/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

New pier face acquired with 200% klein 5000 side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-233/148_1347	0002	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-233/148_1347	0003	17.21	311.2	Secondary (grouped)

Hydrographer Recommendations

Chart new pier face.

S-57 Data

[None]

Office Notes

Concur.

1.16) Pile 0006**Survey Summary**

Survey Position: 40° 40' 05.9" N, 074° 03' 53.6" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): **THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp: 2006-238.07:44:54 (08/26/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-233 / 324_1658
Contact/Point: 0006/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted pile acquired with 200% Klein 5000 side scan. No least depth acquired.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-233/324_1658	0006	0.00	000.0	Primary

Hydrographer Recommendations

Chart the pile.

S-57 Data

Geo object 1: Pile (PILPNT)

Office Notes

Concur.

1.17) Pile 0007**Survey Summary**

Survey Position: 40° 40' 04.8" N, 074° 03' 54.0" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): **THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp: 2006-299.01:11:40 (10/26/2006)
Survey Line: h11600 / tj_3102_klein5000_sss100 / 2006-233 / 324_1658
Contact/Point: 0007/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted pile acquired with 200% Klein 5000 side scan. No least depth acquired.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss100/2006-233/324_1658	0007	0.00	000.0	Primary

Hydrographer Recommendations

Chart the pile.

S-57 Data

Geo object 1: Pile (PILPNT)

Office Notes

Concur.

1.18) uncharted pier ruins - 0003

Survey Summary

Survey Position: 40° 37' 53.3" N, 074° 04' 11.3" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-239.08:34:42 (08/27/2006)
Survey Line: h11600 / tj_3102_klein5000_sss200 / 2006-235 / 236_1922
Contact/Point: 0003/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted pier ruins outside survey area.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_klein5000_sss200/2006-235/236_1922	0003	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-225/143_1257	0005	4.37	321.5	Secondary

Hydrographer Recommendations

S-57 Data

[None]

Office Notes

Defer to MCD for charting recommendation.

1.19) Uncharted ruins 924/32

Survey Summary

Survey Position: 40° 37' 38.5" N, 074° 04' 09.6" W
Least Depth: 3.56 m (= 11.68 ft = 1.946 fm = 1 fm 5.68 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.369 m
Timestamp: 2006-282.13:18:42.786 (10/09/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_282 / 201_1317
Profile/Beam: 924/32
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted pier ruins acquired with Reson 8101 MBES and 200% Klein 5000 side scan. Soundings were corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_reson8101/2006_282/201_1317	924/32	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-235/137_1228	0002	22.22	311.8	Secondary (grouped)
h11600/tj_3102_reson8101/2006_282/206_1335	167/2	45.08	081.3	Secondary (grouped)
h11600/tj_3102_reson8101/2006_282/209_1347	1175/26	89.12	083.6	Secondary (grouped)

Hydrographer Recommendations

Chart pier ruins from extent acquired with SSS to the charted shoreline.

Cartographically-Rounded Depth (Affected Charts):

11ft (12334_1, 12333_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: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam

VERDAT - 12:Mean lower low water

Office Notes

Concur.

1.20) Uncharted ruins 505/29

Survey Summary

Survey Position: 40° 37' 35.3" N, 074° 04' 08.6" W
Least Depth: 1.88 m (= 6.17 ft = 1.028 fm = 1 fm 0.17 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.369 m
Timestamp: 2006-282.13:21:20.720 (10/09/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_282 / 202_1320
Profile/Beam: 505/29
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted pier ruins acquired with Reson 8101 MBES and 200% Klein 5000 side scan. Soundings were corrected to MLLW with verified water levels and preliminary tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_reson8101/2006_282/202_1320	505/29	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-235/137_1228	0001	16.54	018.9	Secondary (grouped)
h11600/tj_3102_klein5000_sss100/2006-226/099_1218	0001	31.81	246.6	Secondary (grouped)
h11600/tj_3102_reson8101/2006_282/205_1331	664/7	44.82	075.4	Secondary (grouped)
h11600/tj_3102_reson8101/2006_282/209_1347	673/97	71.21	078.6	Secondary (grouped)

Hydrographer Recommendations

Chart pier ruins from extent acquired with SSS to the charted shoreline.

Cartographically-Rounded Depth (Affected Charts):

6ft (12334_1, 12333_1, 12327_1, 12326_1)

1fm (12300_1, 13006_1, 13003_1, 14500_1)

1.9m (5161_1)

S-57 Data

[None]

Office Notes

Defer to MCD for charting recommendation.

1.21) Uncharted pier ruins 896/18

Survey Summary

Survey Position: 40° 37' 31.7" N, 074° 04' 06.9" W
Least Depth: 2.75 m (= 9.01 ft = 1.501 fm = 1 fm 3.01 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.368 m
Timestamp: 2006-282.13:21:58.224 (10/09/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_282 / 202_1320
Profile/Beam: 896/18
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted pier ruins acquired with Reson 8101 MBES and 200% Klein 5000 side scan. Soundings were corrected to MLLW with verified water levels and preliminary tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_reson8101/2006_282/202_1320	896/18	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-226/099_1218	0002	28.06	231.2	Secondary (grouped)

Hydrographer Recommendations

Chart pier ruins from extent acquired with SSS to the charted shoreline

Cartographically-Rounded Depth (Affected Charts):

9ft (12334_1, 12333_1, 12327_1, 12326_1)

1 ½fm (12300_1, 13006_1, 13003_1, 14500_1)

2.7m (5161_1)

S-57 Data

[None]

Office Notes

Defer to MCD for charting recommendation.

1.22) Mooring bouy

Survey Summary

Survey Position: 40° 40' 54.0" N, 074° 02' 44.1" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-319.20:01:36 (11/15/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 37
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted mooring buoy acquired with Reson 8125 MBES and 200% Klein 5000 side scan. Soundings were corrected to MLLW with verified water levels and preliminary tide zoning. Evaluated by the hydrographer as not a DTON.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	37	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-226/137_1703	0001	1.14	339.2	Secondary (grouped)

Hydrographer Recommendations

Chart mooring buoy.

S-57 Data

Geo object 1: Mooring/warping facility (MORFAC)
Attributes: CATMOR - 7:mooring buoy

Office Notes

Concur.

1.23) AWOIS # 13764 - disproved

Survey Summary

Survey Position: 40° 39' 55.3" N, 074° 04' 17.1" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2008-351.06:30:31 (12/16/2008)
GP Dataset: ChartGPs - Digitized
GP No.: 46
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	46	0.00	000.0	Primary

Hydrographer Recommendations

This AWOIS item was applied to the chart after the completion of H11600, but was sourced from a 2002/2003 NOAA Ship RUDE survey of the area. This item is disproved based on 200% MBES coverage and 100% SSS.

S-57 Data

[None]

Office Notes

Remove the charted 25ft Obstn.

1.24) AWOIS #13765 - disproved

Survey Summary

Survey Position: 40° 39' 51.5" N, 074° 04' 08.1" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2008-351.06:30:35 (12/16/2008)
GP Dataset: ChartGPs - Digitized
GP No.: 47
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	47	0.00	000.0	Primary

Hydrographer Recommendations

This AWOIS item was applied to the chart after the completion of H11600, but was sourced from a 2002/2003 NOAA Ship RUDE survey of the area. This item is disproved based on 200% MBES coverage and 100% SSS.

S-57 Data

[None]

Office Notes

Remove charted 20ft. Obstn.

1.25) AWOIS # 13734 - disproved

Survey Summary

Survey Position: 40° 39' 17.8" N, 074° 03' 06.9" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2008-351.06:52:53 (12/16/2008)
GP Dataset: ChartGPs - Digitized
GP No.: 48
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	48	0.00	000.0	Primary

Hydrographer Recommendations

This AWOIS item was applied to the chart after the completion of H11600, but was sourced from a 2002/2003 NOAA Ship RUDE survey of the area. This item is disproved based on 200% MBES coverage and 100% SSS.

S-57 Data

[None]

Office Notes

Remove charted 42ft. Obstn.

1.26) AWOIS #13739 - disproved

Survey Summary

Survey Position: 40° 39' 44.4" N, 074° 03' 15.1" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2008-351.06:54:33 (12/16/2008)
GP Dataset: ChartGPs - Digitized
GP No.: 49
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	49	0.00	000.0	Primary

Hydrographer Recommendations

This AWOIS item was applied to the chart after the completion of H11600, but was sourced from a 2002/2003 NOAA Ship RUDE survey of the area. This item is disproved based on 200% MBES coverage and 100% SSS.

S-57 Data

[None]

Office Notes

Remove charted 48ft Obstn.

1.27) Obstruction - 1262/209

Survey Summary

Survey Position: 40° 41' 02.3" N, 074° 00' 46.2" W
Least Depth: 13.22 m (= 43.39 ft = 7.231 fm = 7 fm 1.39 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.368 m
Timestamp: 2006-225.18:35:26.943 (08/13/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_225 / 139_1832
Profile/Beam: 1262/209
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

A better representation of debris at entrance to Atlantic Basin by Pier 12.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_225/139_1832	1262/209	0.00	000.0	Primary

Hydrographer Recommendations

Chart obstruction least depth 43 ft.

Cartographically-Rounded Depth (Affected Charts):

43ft (12334_1, 12335_1, 12327_1, 12326_1, 12363_1)

7 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)

13.2m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 13.224 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.28) Obstruction - 3184/207

Survey Summary

Survey Position: 40° 41' 53.9" N, 074° 02' 10.3" W
Least Depth: 6.23 m (= 20.45 ft = 3.409 fm = 3 fm 2.45 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-225.17:25:36.641 (08/13/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_225 / 230_1722
Profile/Beam: 3184/207
Charts Affected: 12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Obstruction Least depth = 20 ft

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_225/230_1722	3184/207	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-226/102_1717	0002	0.93	143.0	Secondary

Hydrographer Recommendations

Chart Obstrn 20 ft

Cartographically-Rounded Depth (Affected Charts):

20ft (12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1)

3 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)

6.2m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 6.234 m
 VERDAT - 1:Mean low water springs

WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.29) Obstruction 1930/200

Survey Summary

Survey Position: 40° 41' 16.2" N, 074° 02' 34.8" W
Least Depth: 5.88 m (= 19.29 ft = 3.215 fm = 3 fm 1.29 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-225.16:39:28.264 (08/13/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_225 / 297_1637
Profile/Beam: 1930/200
Charts Affected: 12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted non-dangerous obstruction acquired with Reson 8101 MBES and 200% Klein 5000 side scan. Soundings were corrected to MLLW with verified water levels and final tide zoning. Evaluated by the hydrographer as not a DTON due to being located inside the security area.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_225/297_1637	1930/200	0.00	000.0	Primary
h11600/tj_3101_reson8125/2006_225/298_1627	1550/181	0.18	320.4	Secondary
h11600/tj_3102_klein5000_sss100/2006-225/159_1637	0002	4.56	192.0	Secondary

Hydrographer Recommendations

Chart obstruction.

Cartographically-Rounded Depth (Affected Charts):

19ft (12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1)

3 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)

5.9m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: VALSOU - 5.880 m
 WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.30) Rock - 366/27**Survey Summary**

Survey Position: 40° 41' 18.2" N, 074° 02' 32.5" W
Least Depth: 6.19 m (= 20.30 ft = 3.384 fm = 3 fm 2.30 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-225.16:35:51.443 (08/13/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_225 / 299_1635
Profile/Beam: 366/27
Charts Affected: 12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

rock

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_225/299_1635	366/27	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-226/103_1709	0001	6.91	205.8	Secondary

Hydrographer Recommendations

Chart Rk least depth 20 ft

Cartographically-Rounded Depth (Affected Charts):

20ft (12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1)

3 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)

6.2m (5161_1)

S-57 Data**Geo object 1:** Underwater rock / awash rock (UWTROC)**Attributes:** QUASOU - 6:least depth known

TECSOU - 3:found by multi-beam

VALSOU - 6.188 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.31) Obstruction - 636/149

Survey Summary

Survey Position: 40° 41' 19.9" N, 074° 02' 30.7" W
Least Depth: 7.15 m (= 23.46 ft = 3.910 fm = 3 fm 5.46 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-225.16:36:07.223 (08/13/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_225 / 299_1635
Profile/Beam: 636/149
Charts Affected: 12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Ostruction

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_225/299_1635	636/149	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-226/103_1709	0002	0.61	099.7	Secondary

Hydrographer Recommendations

Chart Obstrn 23 ft

Cartographically-Rounded Depth (Affected Charts):

23ft (12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1)

3 $\frac{3}{4}$ fm (12300_1, 13006_1, 13003_1, 14500_1)

7.2m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: VALSOU - 7.151 m
 WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.32) Rock 1447/165

Survey Summary

Survey Position: 40° 41' 18.9" N, 074° 02' 33.4" W
Least Depth: 5.82 m (= 19.10 ft = 3.184 fm = 3 fm 1.10 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-225.16:33:27.201 (08/13/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_225 / 310_1631
Profile/Beam: 1447/165
Charts Affected: 12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted non-dangerous obstruction acquired with Reson 8101 MBES and 200% Klein 5000 side scan. Soundings were corrected to MLLW with verified water levels and final tide zoning. Evaluated by the hydrographer as not a DTON due to being located inside the security area.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_225/310_1631	1447/165	0.00	000.0	Primary
h11600/tj_3101_reson8125/2006_225/298_1627	1962/132	0.07	000.0	Secondary
h11600/tj_3102_klein5000_sss100/2006-225/159_1637	0003	0.86	341.8	Secondary

Hydrographer Recommendations

Chart rock.

Cartographically-Rounded Depth (Affected Charts):

19ft (12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_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: VALSOU - 5.823 m
 WATLEV - 3:always under water/submerged

Office Notes

Do not concur. With other rocks in the surrounding area, this also looks to be a rock. Chart Rk, least depth 19 ft.

1.33) Obstruction - 167/60

Survey Summary

Survey Position: 40° 39' 38.6" N, 074° 04' 13.3" W
Least Depth: 7.84 m (= 25.72 ft = 4.287 fm = 4 fm 1.72 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-225.14:02:54.655 (08/13/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_225 / 368_1402
Profile/Beam: 167/60
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Obstruction

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_225/368_1402	167/60	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-233/166_1523	0001	0.25	226.0	Secondary
h11600/tj_3102_klein5000_sss100/2006-233/166_1530	0006	1.22	083.1	Secondary

Hydrographer Recommendations

Chart Dangerous Obsn 25 ft

Cartographically-Rounded Depth (Affected Charts):

25ft (12334_1, 12333_1, 12327_1, 12326_1)

4 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)

7.8m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: VALSOU - 7.840 m
 WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.34) Obstruction - 338/76

Survey Summary

Survey Position: 40° 38' 18.6" N, 074° 04' 06.8" W
Least Depth: 11.35 m (= 37.23 ft = 6.205 fm = 6 fm 1.23 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-225.12:52:51.749 (08/13/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_225 / 374_1252
Profile/Beam: 338/76
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Obstruction

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_225/374_1252	338/76	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-225/151_1305	0022	7.55	297.7	Secondary

Hydrographer Recommendations

Chart dangerous obstruction least depth 37 ft

Cartographically-Rounded Depth (Affected Charts):

37ft (12334_1, 12333_1, 12327_1, 12326_1)

6 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)

11.3m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 11.347 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.35) Sounding on Shoal - 293/135

Survey Summary

Survey Position: 40° 40' 54.8" N, 074° 00' 57.7" W
Least Depth: 11.51 m (= 37.76 ft = 6.294 fm = 6 fm 1.76 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-225.18:36:51.159 (08/13/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_225 / 392_1836
Profile/Beam: 293/135
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Migration of Shoal

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_225/392_1836	293/135	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-225/105_1738	0007	7.32	076.8	Secondary

Hydrographer Recommendations

Chart 38 ft.

Cartographically-Rounded Depth (Affected Charts):

38ft (12334_1, 12335_1, 12327_1, 12326_1)

6 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)

11.5m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: QUASOU - 1:depth known
 TECSOU - 3:found by multi-beam
 VERDAT - 12:Mean lower low water

Office Notes

Do not concur. Chart soundings at normal selection.

1.36) Obstruction - 6557/236**Survey Summary**

Survey Position: 40° 41' 10.2" N, 074° 01' 37.5" W
Least Depth: 7.19 m (= 23.60 ft = 3.934 fm = 3 fm 5.60 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.368 m
Timestamp: 2006-225.17:45:14.701 (08/13/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_225 / 420_1739
Profile/Beam: 6557/236
Charts Affected: 12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_225/420_1739	6557/236	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: VALSOU - 7.194 m
 WATLEV - 3:always under water/submerged

Office Notes

Chart 23ft. Obstn.

1.37) Obstruction 5891/35

Survey Summary

Survey Position: 40° 39' 40.8" N, 074° 00' 52.8" W
Least Depth: 6.29 m (= 20.62 ft = 3.437 fm = 3 fm 2.62 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-225.19:09:43.963 (08/13/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_225 / 869_1902
Profile/Beam: 5891/35
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted obstruction acquired with Reson 8125 MBES and 200% Klein 5000 side scan. Soundings were 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
h11600/tj_3101_reson8125/2006_225/869_1902	5891/35	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-234/232_1708	0006	2.84	097.6	Secondary

Hydrographer Recommendations

Chart obstruction with least depth 6.29 meters (20.64 feet).

Cartographically-Rounded Depth (Affected Charts):

20ft (12334_1, 12327_1, 12326_1)

3 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)

6.3m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: VALSOU - 6.286 m
 WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.38) Obstruction 9635/60

Survey Summary

Survey Position: 40° 40' 31.6" N, 074° 04' 27.9" W
Least Depth: 5.36 m (= 17.58 ft = 2.930 fm = 2 fm 5.58 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-225.14:39:18.869 (08/13/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_225 / 872_1431
Profile/Beam: 9635/60
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_225/872_1431	9635/60	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-233/240_1345	0001	1.85	091.5	Secondary

Hydrographer Recommendations

AHB -- Chart obstruction, least depth 17 ft.

Cartographically-Rounded Depth (Affected Charts):

17ft (12334_1, 12333_1, 12327_1, 12326_1)

2 $\frac{3}{4}$ fm (12300_1, 13006_1, 13003_1, 14500_1)

5.4m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 5.358 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.39) Obstruction - 8321/100

Survey Summary

Survey Position: 40° 40' 31.8" N, 074° 04' 32.3" W
Least Depth: 5.30 m (= 17.40 ft = 2.900 fm = 2 fm 5.40 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-225.14:38:19.654 (08/13/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_225 / 872_1431
Profile/Beam: 8321/100
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

obstruction

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_225/872_1431	8321/100	0.00	000.0	Primary

Hydrographer Recommendations

Chart dangerous obstrn least depth 17 ft.

Cartographically-Rounded Depth (Affected Charts):

17ft (12334_1, 12333_1, 12327_1, 12326_1)
 2 $\frac{3}{4}$ fm (12300_1, 13006_1, 13003_1, 14500_1)
 5.3m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 5.304 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.40) Obstruction - 8785/26

Survey Summary

Survey Position: 40° 40' 33.6" N, 074° 04' 31.3" W
Least Depth: 4.92 m (= 16.13 ft = 2.689 fm = 2 fm 4.13 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-225.14:38:40.571 (08/13/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_225 / 872_1431
Profile/Beam: 8785/26
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AHB Addition

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_225/872_1431	8785/26	0.00	000.0	Primary

Hydrographer Recommendations

chart dangerous obstrn least depth 16 ft

Cartographically-Rounded Depth (Affected Charts):

16ft (12334_1, 12333_1, 12327_1, 12326_1)
 2 $\frac{3}{4}$ fm (12300_1, 13006_1, 13003_1, 14500_1)
 4.9m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 4.917 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

WGK

1.41) Obstruction - 9869/34

Survey Summary

Survey Position: 40° 40' 31.1" N, 074° 04' 26.8" W
Least Depth: 5.42 m (= 17.78 ft = 2.964 fm = 2 fm 5.78 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-225.14:39:29.401 (08/13/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_225 / 872_1431
Profile/Beam: 9869/34
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

obstruction

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_225/872_1431	9869/34	0.00	000.0	Primary

Hydrographer Recommendations

Chart dangerous obstn least depth 18 ft.

Cartographically-Rounded Depth (Affected Charts):

18ft (12334_1, 12333_1, 12327_1, 12326_1)

3fm (12300_1, 13006_1, 13003_1, 14500_1)

5.4m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 5.420 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.42) Obstruction - 9441/178

Survey Summary

Survey Position: 40° 40' 31.9" N, 074° 04' 28.8" W
Least Depth: 5.71 m (= 18.73 ft = 3.122 fm = 3 fm 0.73 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-225.14:39:10.137 (08/13/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_225 / 872_1431
Profile/Beam: 9441/178
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

obstruction that matches side scan.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_225/872_1431	9441/178	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-233/240_1345	0002	0.66	331.6	Secondary

Hydrographer Recommendations

Chart dangerous obstrn, least depth 18 ft.

Cartographically-Rounded Depth (Affected Charts):

18ft (12334_1, 12333_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
 TECSOU - 3:found by multi-beam
 VALSOU - 5.710 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.43) Obstruction - 2378/171

Survey Summary

Survey Position: 40° 39' 20.9" N, 074° 03' 45.1" W
Least Depth: 5.03 m (= 16.50 ft = 2.750 fm = 2 fm 4.50 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-225.15:55:44.757 (08/13/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_225 / 878_1552
Profile/Beam: 2378/171
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_225/878_1552	2378/171	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: VALSOU - 5.029 m
 WATLEV - 3:always under water/submerged

Office Notes

Chart 16ft. Obstn.

1.44) Rock - 7176/1**Survey Summary**

Survey Position: 40° 38' 55.9" N, 074° 05' 14.6" W
Least Depth: 6.70 m (= 21.97 ft = 3.662 fm = 3 fm 3.97 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.368 m
Timestamp: 2006-225.13:16:35.308 (08/13/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_225 / 937_1307
Profile/Beam: 7176/1
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Rock

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_225/937_1307	7176/1	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-232/265_1738	0003	6.96	252.6	Secondary

Hydrographer Recommendations

Chart Rk 22 ft

Cartographically-Rounded Depth (Affected Charts):

22ft (12334_1, 12333_1, 12327_1, 12326_1)

3 ½fm (12300_1, 13006_1, 13003_1, 14500_1)

6.7m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 1:depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 6.697 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Least depth not obtained on rock.

1.45) Obstruction - 3636/238

Survey Summary

Survey Position: 40° 41' 54.4" N, 074° 02' 03.5" W
Least Depth: 7.04 m (= 23.09 ft = 3.848 fm = 3 fm 5.09 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.368 m
Timestamp: 2006-226.15:17:46.484 (08/14/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_226 / 256_1514
Profile/Beam: 3636/238
Charts Affected: 12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Obstruction

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_226/256_1514	3636/238	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-226/103_1709	0004	1.94	086.0	Secondary

Hydrographer Recommendations

Chart Obstrn 23 ft

Cartographically-Rounded Depth (Affected Charts):

23ft (12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1)

3 $\frac{3}{4}$ fm (12300_1, 13006_1, 13003_1, 14500_1)

7.0m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 7.038 m
 VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.46) Obstruction - 639/221

Survey Summary

Survey Position: 40° 41' 15.3" N, 074° 00' 43.3" W
Least Depth: 11.09 m (= 36.39 ft = 6.065 fm = 6 fm 0.39 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.368 m
Timestamp: 2006-227.12:22:36.308 (08/15/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_227 / 123_1221
Profile/Beam: 639/221
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AHB -- Obstruction

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_227/123_1221	639/221	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-226/116_1835	0002	10.51	327.7	Secondary

Hydrographer Recommendations

Chart obstruction, least depth 36 ft

Cartographically-Rounded Depth (Affected Charts):

36ft (12334_1, 12335_1, 12327_1, 12326_1, 12363_1)

6fm (12300_1, 13006_1, 13003_1, 14500_1)

11.1m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 11.091 m
 VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

WGK

1.47) 1478/225 Obstruction

Survey Summary

Survey Position: 40° 41' 22.5" N, 074° 00' 37.9" W
Least Depth: 10.55 m (= 34.63 ft = 5.771 fm = 5 fm 4.63 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.368 m
Timestamp: 2006-227.12:23:47.881 (08/15/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_227 / 123_1221
Profile/Beam: 1478/225
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Obstruction

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_227/123_1221	1478/225	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-227/212_1734	0003	12.62	137.2	Secondary

Hydrographer Recommendations

Chart dangerous obstruction, least depth = 34 ft

Cartographically-Rounded Depth (Affected Charts):

34ft (12334_1, 12335_1, 12327_1, 12326_1, 12363_1)

5 $\frac{3}{4}$ fm (12300_1, 13006_1, 13003_1, 14500_1)

10.6m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 10.554 m
 VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.48) Obstruction - 1551/202

Survey Summary

Survey Position: 40° 41' 23.3" N, 074° 00' 38.2" W
Least Depth: 10.57 m (= 34.66 ft = 5.777 fm = 5 fm 4.66 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-227.12:23:54.109 (08/15/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_227 / 123_1221
Profile/Beam: 1551/202
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

obstruction near shoaler obstruction

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_227/123_1221	1551/202	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-225/155_1714	0005	2.59	343.9	Secondary

Hydrographer Recommendations

chart dangerous obstrn least depth 34 ft

Cartographically-Rounded Depth (Affected Charts):

34ft (12334_1, 12335_1, 12327_1, 12326_1, 12363_1)

5 $\frac{3}{4}$ fm (12300_1, 13006_1, 13003_1, 14500_1)

10.6m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 10.565 m
 VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.49) Obstruction - 2236/238

Survey Summary

Survey Position: 40° 41' 24.3" N, 074° 00' 37.8" W
Least Depth: 9.93 m (= 32.59 ft = 5.431 fm = 5 fm 2.59 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.368 m
Timestamp: 2006-227.12:58:48.465 (08/15/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_227 / 125_1256
Profile/Beam: 2236/238
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

obstruction in vicinity of charted 29 obstn

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_227/125_1256	2236/238	0.00	000.0	Primary

Hydrographer Recommendations

chart dangerous obstn or designated sounding

Cartographically-Rounded Depth (Affected Charts):

32ft (12334_1, 12335_1, 12327_1, 12326_1, 12363_1)

5 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)

9.9m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 9.932 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.50) Obstruction 2712/194

Survey Summary

Survey Position: 40° 41' 18.6" N, 074° 00' 38.9" W
Least Depth: 10.94 m (= 35.89 ft = 5.982 fm = 5 fm 5.89 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) ± 0.980 m ; TVU (TPEv) ± 0.367 m
Timestamp: 2006-227.12:59:29.072 (08/15/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_227 / 125_1256
Profile/Beam: 2712/194
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted obstruction acquired with Reson 8125 MBES and 200% Klein 5000 side scan. Soundings were 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
h11600/tj_3101_reson8125/2006_227/125_1256	2712/194	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-227/212_1734	0008	1.75	173.2	Secondary
h11600/tj_3102_klein5000_sss200/2006-227/213_1758	0001	11.89	025.1	Secondary

Hydrographer Recommendations

Chart obstruction with least depth 10.94 meters (35.89 feet).

Cartographically-Rounded Depth (Affected Charts):

36ft (12334_1, 12335_1, 12327_1, 12326_1, 12363_1)

6fm (12300_1, 13006_1, 13003_1, 14500_1)

10.9m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 10.939 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.51) Obstruction - 955/120

Survey Summary

Survey Position: 40° 40' 50.3" N, 074° 01' 10.6" W
Least Depth: 12.34 m (= 40.49 ft = 6.749 fm = 6 fm 4.49 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) ± 0.981 m ; TVU (TPEv) ± 0.367 m
Timestamp: 2006-227.15:17:07.106 (08/15/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_227 / 141_1515
Profile/Beam: 955/120
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

obstruction

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_227/141_1515	955/120	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-227/226_1830	0001	8.24	100.7	Secondary

Hydrographer Recommendations

chart obstrn least depth 40 ft.

Cartographically-Rounded Depth (Affected Charts):

40ft (12334_1, 12335_1, 12327_1, 12326_1)

6 $\frac{3}{4}$ fm (12300_1, 13006_1, 13003_1, 14500_1)

12.3m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 12.342 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.52) Obstruction - 5922/235

Survey Summary

Survey Position: 40° 40' 45.6" N, 074° 01' 22.4" W
Least Depth: 12.60 m (= 41.34 ft = 6.889 fm = 6 fm 5.34 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.370 m
Timestamp: 2006-227.16:57:47.598 (08/15/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_227 / 142_1647
Profile/Beam: 5922/235
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_227/142_1647	5922/235	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-227/229_1310	0003	19.25	216.0	Secondary (grouped)
h11600/tj_3102_klein5000_sss200/2006-227/228_1322	0001	27.50	074.8	Secondary (grouped)

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: VALSOU - 12.599 m
 WATLEV - 3:always under water/submerged

Office Notes

Chart 41ft. Obstn.

1.53) Obstruction - 305/168

Survey Summary

Survey Position: 40° 40' 45.3" N, 074° 01' 23.5" W
Least Depth: 12.74 m (= 41.79 ft = 6.966 fm = 6 fm 5.79 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-227.16:29:15.254 (08/15/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_227 / 143_1628
Profile/Beam: 305/168
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_227/143_1628	305/168	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-227/133_1255	0001	2.77	254.1	Secondary

Hydrographer Recommendations

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: VALSOU - 12.739 m
 WATLEV - 3:always under water/submerged

Office Notes

Chart 42ft. Obstn.

1.54) Obstruction - 1305/218

Survey Summary

Survey Position: 40° 41' 10.3" N, 074° 00' 49.9" W
Least Depth: 10.68 m (= 35.02 ft = 5.837 fm = 5 fm 5.02 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.368 m
Timestamp: 2006-227.16:06:52.036 (08/15/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_227 / 146_1604
Profile/Beam: 1305/218
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Obstruction

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_227/146_1604	1305/218	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-226/121_1818	0004	0.86	185.8	Secondary
h11600/tj_3102_klein5000_sss200/2006-227/217_1754	0002	3.36	042.1	Secondary
h11600/tj_3102_klein5000_sss200/2006-227/216_1738	0004	11.03	078.1	Secondary

Hydrographer Recommendations

Chart Obstrn 35 ft

Cartographically-Rounded Depth (Affected Charts):

35ft (12334_1, 12335_1, 12327_1, 12326_1, 12363_1)

5 $\frac{3}{4}$ fm (12300_1, 13006_1, 13003_1, 14500_1)

10.7m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: VALSOU - 10.675 m
 WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.55) Obstruction - 3355/84

Survey Summary

Survey Position: 40° 41' 14.7" N, 074° 00' 44.3" W
Least Depth: 9.93 m (= 32.58 ft = 5.430 fm = 5 fm 2.58 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) ± 0.980 m ; TVU (TPEv) ± 0.367 m
Timestamp: 2006-227.16:03:13.275 (08/15/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_227 / 147_1557
Profile/Beam: 3355/84
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted wreck acquired with Reson 8125 MBES and 200% Klein 5000 side scan. Soundings were 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
h11600/tj_3101_reson8125/2006_227/147_1557	3355/84	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-227/216_1738	0001	3.29	316.5	Secondary
h11600/tj_3102_klein5000_sss200/2006-227/217_1754	0005	3.77	299.9	Secondary
h11600/tj_3102_klein5000_sss100/2006-225/155_1714	0002	9.93	113.7	Secondary

Hydrographer Recommendations

Chart wreck with least depth 9.93 meters (32.58 feet).

Cartographically-Rounded Depth (Affected Charts):

32ft (12334_1, 12335_1, 12327_1, 12326_1, 12363_1)

5 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)

9.9m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: VALSOU - 9.931 m
 WATLEV - 3:always under water/submerged

Office Notes

Do Not Concur that item is a wreck. Recommend charting Obstruction.

1.56) Obstruction - 601/192

Survey Summary

Survey Position: 40° 41' 16.2" N, 074° 00' 44.4" W
Least Depth: 10.41 m (= 34.17 ft = 5.694 fm = 5 fm 4.17 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-227.15:24:01.506 (08/15/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_227 / 148_1522
Profile/Beam: 601/192
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AHB - Obstruction

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_227/148_1522	601/192	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-226/121_1818	0003	0.11	254.8	Secondary
h11600/tj_3102_klein5000_sss200/2006-227/212_1734	0006	15.25	020.2	Secondary (grouped)

Hydrographer Recommendations

AHB - Chart obstruction, least depth 34 ft.

Cartographically-Rounded Depth (Affected Charts):

34ft (12334_1, 12335_1, 12327_1, 12326_1, 12363_1)

5 $\frac{3}{4}$ fm (12300_1, 13006_1, 13003_1, 14500_1)

10.4m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 10.414 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

WGK

1.57) Rock - 1588/6**Survey Summary**

Survey Position: 40° 40' 25.3" N, 074° 01' 13.7" W
Least Depth: 11.61 m (= 38.09 ft = 6.349 fm = 6 fm 2.09 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.369 m
Timestamp: 2006-227.18:12:24.851 (08/15/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_227 / 173_1809
Profile/Beam: 1588/6
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Rock

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_227/173_1809	1588/6	0.00	000.0	Primary
h11600/tj_3101_reson8125/2006_227/172_1802	1997/56	0.73	216.1	Secondary
h11600/tj_3102_klein5000_sss200/2006-227/229_1310	0005	1.71	130.6	Secondary
h11600/tj_3102_klein5000_sss100/2006-227/134_1258	0003	1.90	274.0	Secondary
h11600/tj_3102_klein5000_sss100/2006-225/148_1743	0004	7.00	349.8	Secondary

Hydrographer Recommendations

Chart Rk 38 ft

Cartographically-Rounded Depth (Affected Charts):

38ft (12334_1, 12327_1, 12326_1)

6 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)

11.6m (5161_1)

S-57 Data**Geo object 1:** Underwater rock / awash rock (UWTROC)

Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam

VALSOU - 11.611 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.58) Obstruction - 1911/75

Survey Summary

Survey Position: 40° 40' 21.2" N, 074° 01' 14.0" W
Least Depth: 11.40 m (= 37.41 ft = 6.236 fm = 6 fm 1.41 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-227.18:12:56.695 (08/15/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_227 / 173_1809
Profile/Beam: 1911/75
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_227/173_1809	1911/75	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-227/134_1258	0004	1.32	229.3	Secondary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: VALSOU - 11.404 m
 WATLEV - 3:always under water/submerged

Office Notes

Chart 37ft. Obstn.

1.59) Obstruction - 3660/32

Survey Summary

Survey Position: 40° 39' 59.7" N, 074° 01' 11.5" W
Least Depth: 12.41 m (= 40.73 ft = 6.788 fm = 6 fm 4.73 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.368 m
Timestamp: 2006-227.18:15:49.204 (08/15/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_227 / 173_1809
Profile/Beam: 3660/32
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_227/173_1809	3660/32	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-232/225_1312	0002	2.16	123.2	Secondary
h11600/tj_3102_klein5000_sss100/2006-227/127_1854	0001	3.15	181.5	Secondary
h11600/tj_3102_klein5000_sss100/2006-227/133_1245	0001	4.26	101.3	Secondary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: VALSOU - 12.414 m
 WATLEV - 3:always under water/submerged

Office Notes

Chart 40Ft. Obstrn.

1.60) Obstruction 2326/177

Survey Summary

Survey Position: 40° 40' 31.2" N, 074° 01' 16.4" W
Least Depth: 11.44 m (= 37.54 ft = 6.257 fm = 6 fm 1.54 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-227.18:20:38.803 (08/15/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_227 / 174_1816
Profile/Beam: 2326/177
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted obstruction acquired with Reson 8125 MBES. Soundings were corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_227/174_1816	2326/177	0.00	000.0	Primary

Hydrographer Recommendations

Chart obstruction with least depth 11.44 meters (37.54 feet).

Cartographically-Rounded Depth (Affected Charts):

37ft (12334_1, 12335_1, 12327_1, 12326_1)
 6 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)
 11.4m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 11.443 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.61) Obstruction - 2592/187**Survey Summary**

Survey Position: 40° 40' 36.4" N, 074° 01' 19.8" W
Least Depth: 11.82 m (= 38.79 ft = 6.465 fm = 6 fm 2.79 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-227.18:33:46.624 (08/15/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_227 / 176_1829
Profile/Beam: 2592/187
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Obstruction

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_227/176_1829	2592/187	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-227/229_1310	0006	1.24	002.0	Secondary
h11600/tj_3102_klein5000_sss100/2006-227/133_1255	0002	2.84	079.8	Secondary

Hydrographer Recommendations

Char Obsn 39 ft

Cartographically-Rounded Depth (Affected Charts):

39ft (12334_1, 12335_1, 12327_1, 12326_1)

6 ½fm (12300_1, 13006_1, 13003_1, 14500_1)

11.8m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: VALSOU - 11.824 m
WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.62) Obstruction 1448/239

Survey Summary

Survey Position: 40° 40' 16.7" N, 074° 01' 22.3" W
Least Depth: 10.81 m (= 35.48 ft = 5.913 fm = 5 fm 5.48 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.369 m
Timestamp: 2006-227.19:01:10.639 (08/15/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_227 / 369_1858
Profile/Beam: 1448/239
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted obstruction acquired with Reson 8125 MBES. Soundings were corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_227/369_1858	1448/239	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-227/228_1322	0004	21.98	202.2	Secondary (grouped)

Hydrographer Recommendations

Chart obstruction with least depth 10.81 meters (35.48 feet).

Cartographically-Rounded Depth (Affected Charts):

35ft (12334_1, 12327_1, 12326_1)

5 $\frac{3}{4}$ fm (12300_1, 13006_1, 13003_1, 14500_1)

10.8m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 3:found by multi-beam
 VALSOU - 10.814 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.63) Rock - 882/240**Survey Summary**

Survey Position: 40° 41' 40.9" N, 074° 00' 17.4" W
Least Depth: 12.77 m (= 41.91 ft = 6.984 fm = 6 fm 5.91 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.370 m
Timestamp: 2006-227.14:16:23.953 (08/15/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_227 / 522_1414
Profile/Beam: 882/240
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Largest of surrounding rocks

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_227/522_1414	882/240	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-227/214_1802	0002	0.71	084.7	Secondary

Hydrographer Recommendations

Chart Rk 42 ft.

Cartographically-Rounded Depth (Affected Charts):

42ft (12334_1, 12335_1, 12327_1, 12326_1, 12363_1)

7fm (12300_1, 13006_1, 13003_1, 14500_1)

12.8m (5161_1)

S-57 Data

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

Attributes: QUASOU - 6:least depth known

TECSOU - 3:found by multi-beam

VALSOU - 12.773 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.64) Obstruction - 1492/239

Survey Summary

Survey Position: 40° 41' 48.4" N, 074° 00' 12.9" W
Least Depth: 13.17 m (= 43.20 ft = 7.200 fm = 7 fm 1.20 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.370 m
Timestamp: 2006-227.14:17:24.190 (08/15/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_227 / 522_1414
Profile/Beam: 1492/239
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

obstruction

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_227/522_1414	1492/239	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-227/215_1815	0005	3.04	252.4	Secondary

Hydrographer Recommendations

chart obstrn least depth 43 ft

Cartographically-Rounded Depth (Affected Charts):

43ft (12334_1, 12335_1, 12327_1, 12326_1, 12363_1)

7 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)

13.2m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 13.167 m
 VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.65) Rock - 169/226**Survey Summary**

Survey Position: 40° 41' 47.9" N, 074° 00' 18.9" W
Least Depth: 11.34 m (= 37.21 ft = 6.202 fm = 6 fm 1.21 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.368 m
Timestamp: 2006-227.14:24:51.657 (08/15/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_227 / 525_1424
Profile/Beam: 169/226
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Group of 3 rocks.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_227/525_1424	169/226	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-227/214_1802	0001	3.95	291.0	Secondary

Hydrographer Recommendations

Chart Rk 37 ft

Cartographically-Rounded Depth (Affected Charts):

37ft (12334_1, 12335_1, 12327_1, 12326_1, 12363_1)

6 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)

11.3m (5161_1)

S-57 Data

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

Attributes: QUASOU - 6:least depth known
STATUS - 1:permanent
TECSOU - 3:found by multi-beam
VALSOU - 11.342 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.66) Obstruction 2945/171

Survey Summary

Survey Position: 40° 40' 40.3" N, 074° 01' 25.8" W
Least Depth: 12.20 m (= 40.02 ft = 6.669 fm = 6 fm 4.02 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-228.17:20:30.052 (08/16/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_228 / 496_1716
Profile/Beam: 2945/171
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted obstruction acquired with Reson 8125 MBES. Soundings were corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_228/496_1716	2945/171	0.00	000.0	Primary

Hydrographer Recommendations

Chart obstruction with least depth 12.20 meters (40.02 feet).

Cartographically-Rounded Depth (Affected Charts):

40ft (12334_1, 12335_1, 12327_1, 12326_1)
 6 ½fm (12300_1, 13006_1, 13003_1, 14500_1)
 12.2m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 12.197 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.67) Obstruction 2102/233

Survey Summary

Survey Position: 40° 40' 52.7" N, 074° 02' 21.6" W
Least Depth: 17.46 m (= 57.29 ft = 9.549 fm = 9 fm 3.29 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.371 m
Timestamp: 2006-229.17:50:25.575 (08/17/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_229 / 348_1746
Profile/Beam: 2102/233
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Sounding on an obstruction acquired with Reson 8125 MBES and 200% Klein 5000 side scan. Soundings were corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_229/348_1746	2102/233	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-227/206_1550	0002	6.56	319.1	Secondary
h11600/tj_3102_klein5000_sss100/2006-226/107_1542	0002	25.22	155.3	Secondary (grouped)

Hydrographer Recommendations

Chart obstruction with a least depth of 17.46 meters (57.29 feet).

Cartographically-Rounded Depth (Affected Charts):

57ft (12334_1, 12327_1, 12326_1)

9 ½fm (12300_1, 13006_1, 13003_1, 14500_1)

17.5m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 17.463 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.68) Obstruction 1247/19

Survey Summary

Survey Position: 40° 41' 02.5" N, 074° 02' 03.6" W
Least Depth: 17.73 m (= 58.16 ft = 9.693 fm = 9 fm 4.16 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.369 m
Timestamp: 2006-229.16:45:21.418 (08/17/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_229 / 353_1642
Profile/Beam: 1247/19
Charts Affected: 12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted obstruction possibly a wreck acquired with Reson 8125 MBES and 200% Klein 5000 side scan. Soundings were 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
h11600/tj_3101_reson8125/2006_229/353_1642	1247/19	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-226/109_1515	0001	1.35	246.0	Secondary
h11600/tj_3102_klein5000_sss200/2006-227/207_1506	0002	8.27	287.9	Secondary

Hydrographer Recommendations

Chart obstruction with least depth 17.73 meters (58.16 feet).

Cartographically-Rounded Depth (Affected Charts):

58ft (12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1)

9 $\frac{3}{4}$ fm (12300_1, 13006_1, 13003_1, 14500_1)

17.7m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam

VALSOU - 17.726 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.69) Obstruction 386/199

Survey Summary

Survey Position: 40° 41' 05.2" N, 074° 01' 38.4" W
Least Depth: 7.06 m (= 23.16 ft = 3.859 fm = 3 fm 5.16 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-230.17:53:20.789 (08/18/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_230 / 219_1752
Profile/Beam: 386/199
Charts Affected: 12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted non-dangerous wreck acquired with 100% Reson 8125 MBES and 200% Klein 5000 side scan. Soundings were corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_230/219_1752	386/199	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-227/219_1428	0001	1.78	129.9	Secondary

Hydrographer Recommendations

Chart non-dangerous wreck with least depth 7.06 meters (23.16 feet).

Cartographically-Rounded Depth (Affected Charts):

23ft (12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1)

3 $\frac{3}{4}$ fm (12300_1, 13006_1, 13003_1, 14500_1)

7.1m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 7.058 m
 VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Do not concur. Chart Obstruction, least depth 23 ft.

1.70) Mooring Buoy - 4610/1

Survey Summary

Survey Position: 40° 40' 54.0" N, 074° 02' 44.0" W
Least Depth: 6.10 m (= 20.01 ft = 3.335 fm = 3 fm 2.01 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-230.15:11:15.230 (08/18/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_230 / 356_1507
Profile/Beam: 4610/1
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted mooring buoy acquired with Reson 8125 MBES and 200% Klein 5000 side scan. Soundings were 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
h11600/tj_3101_reson8125/2006_230/356_1507	4610/1	0.00	000.0	Primary

Hydrographer Recommendations

Chart mooring buoy.

Cartographically-Rounded Depth (Affected Charts):

20ft (12334_1, 12327_1, 12326_1)

3 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)

6.1m (5161_1)

S-57 Data

Geo object 1: Mooring/warping facility (MORFAC)

Attributes: CATMOR - 7:mooring buoy

Office Notes

Chart mooring buoy

1.71) Obstn - 24/146**Survey Summary**

Survey Position: 40° 40' 29.5" N, 074° 02' 55.1" W
Least Depth: 7.42 m (= 24.36 ft = 4.059 fm = 4 fm 0.36 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-230.19:36:29.191 (08/18/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_230 / 364_1936
Profile/Beam: 24/146
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Obstruction

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_230/364_1936	24/146	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-227/204_1606	0001	2.39	176.4	Secondary
h11600/tj_3102_klein5000_sss200/2006-234/204_1405	0005	3.86	111.7	Secondary

Hydrographer Recommendations

Chart Obstn 24 ft

Cartographically-Rounded Depth (Affected Charts):

24ft (12334_1, 12327_1, 12326_1)

4fm (12300_1, 13006_1, 13003_1, 14500_1)

7.4m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 7.424 m
 VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.72) Obstruction - 6221/230**Survey Summary**

Survey Position: 40° 40' 30.0" N, 074° 01' 18.0" W
Least Depth: 11.56 m (= 37.91 ft = 6.318 fm = 6 fm 1.91 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.368 m
Timestamp: 2006-232.13:05:08.010 (08/20/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_232 / 388_1256
Profile/Beam: 6221/230
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_232/388_1256	6221/230	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-227/229_1310	0001	0.59	058.6	Secondary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: VALSOU - 11.555 m
 WATLEV - 3:always under water/submerged

Office Notes

Chart 38ft. Obstn.

1.73) Wreck - 372/46**Survey Summary**

Survey Position: 40° 39' 26.6" N, 074° 03' 03.1" W
Least Depth: 13.91 m (= 45.63 ft = 7.604 fm = 7 fm 3.63 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-232.14:36:32.198 (08/20/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_232 / 441_1435
Profile/Beam: 372/46
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Small wreck

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_232/441_1435	372/46	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-232/309_1818	0001	0.04	000.0	Secondary
h11600/tj_3102_klein5000_sss200/2006-234/298_1500	0001	1.27	290.6	Secondary

Hydrographer Recommendations

Chart Wreck 45 ft

Cartographically-Rounded Depth (Affected Charts):

45ft (12334_1, 12327_1, 12326_1)

7 ½fm (12300_1, 13006_1, 13003_1, 14500_1)

13.9m (5161_1)

S-57 Data

Geo object 1: Wreck (WRECKS)
Attributes: CATWRK - 1:non-dangerous wreck
 TECSOU - 3:found by multi-beam
 VALSOU - 13.907 m
 VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.74) Obstruction - 4419/8

Survey Summary

Survey Position: 40° 39' 35.0" N, 074° 02' 50.3" W
Least Depth: 13.72 m (= 45.01 ft = 7.502 fm = 7 fm 3.01 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.369 m
Timestamp: 2006-232.18:07:24.454 (08/20/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_232 / 444_1800
Profile/Beam: 4419/8
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

obstruction

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_232/444_1800	4419/8	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-234/299_1509	0001	0.63	098.5	Secondary
h11600/tj_3102_klein5000_sss100/2006-232/310_1511	0001	1.62	103.6	Secondary

Hydrographer Recommendations

chart dangerous obstn at surveyed position, least depth 45 ft.

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 13.720 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.75) Obstruction - 1050/187

Survey Summary

Survey Position: 40° 40' 49.5" N, 074° 02' 11.9" W
Least Depth: 15.92 m (= 52.23 ft = 8.706 fm = 8 fm 4.23 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-234.17:15:29.860 (08/22/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_234 / 326_1713
Profile/Beam: 1050/187
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_234/326_1713	1050/187	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: VALSOU - 15.921 m
 WATLEV - 3:always under water/submerged

Office Notes

Chart 52ft. Obstn.

1.76) Obstruction - 1050/188**Survey Summary**

Survey Position: 40° 40' 49.5" N, 074° 02' 11.9" W
Least Depth: 15.86 m (= 52.03 ft = 8.671 fm = 8 fm 4.03 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-234.17:15:29.860 (08/22/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_234 / 326_1713
Profile/Beam: 1050/188
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_234/326_1713	1050/188	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-227/207_1507	0001	3.19	070.5	Secondary

Hydrographer Recommendations

[None]

S-57 Data

[None]

Office Notes

Chart 52Ft. obstn.

1.77) Obstruction - 552/33**Survey Summary**

Survey Position: 40° 39' 41.9" N, 074° 02' 56.8" W
Least Depth: 14.22 m (= 46.66 ft = 7.777 fm = 7 fm 4.66 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.368 m
Timestamp: 2006-234.14:19:12.053 (08/22/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_234 / 404_1418
Profile/Beam: 552/33
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Obstruction

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_234/404_1418	552/33	0.00	000.0	Primary

Hydrographer Recommendations

Chart Obstrn 47 ft.

Cartographically-Rounded Depth (Affected Charts):

46ft (12334_1, 12327_1, 12326_1)

7 $\frac{3}{4}$ fm (12300_1, 13006_1, 13003_1, 14500_1)

14.2m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: VALSOU - 14.222 m
 WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.78) Obstruction - 553/33**Survey Summary**

Survey Position: 40° 39' 41.9" N, 074° 02' 56.8" W
Least Depth: 14.29 m (= 46.90 ft = 7.816 fm = 7 fm 4.90 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.368 m
Timestamp: 2006-234.14:19:12.151 (08/22/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_234 / 404_1418
Profile/Beam: 553/33
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Pair of Obstructions

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_234/404_1418	553/33	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-232/309_1818	0002	2.42	015.8	Secondary

Hydrographer Recommendations

Chart Obstn 47 ft

Cartographically-Rounded Depth (Affected Charts):

47ft (12334_1, 12327_1, 12326_1)

7 $\frac{3}{4}$ fm (12300_1, 13006_1, 13003_1, 14500_1)

14.3m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 14.294 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.79) Submerged piling 38/171

Survey Summary

Survey Position: 40° 41' 07.0" N, 074° 01' 02.9" W
Least Depth: 7.78 m (= 25.51 ft = 4.252 fm = 4 fm 1.51 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-235.14:40:45.327 (08/23/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_235 / 311_1440
Profile/Beam: 38/171
Charts Affected: 12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Submerged piling acquired with 100% Reson 8125 MBES and 200% Klein 5000 side scan. Soundings were corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_235/311_1440	38/171	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-227/216_1738	0007	1.10	127.5	Secondary
h11600/tj_3102_klein5000_sss200/2006-227/216_1738	0006	7.18	160.8	Secondary
h11600/tj_3102_klein5000_sss100/2006-225/155_1714	0009	9.17	165.9	Secondary
h11600/tj_3102_klein5000_sss100/2006-226/121_1818	0001	9.37	250.4	Secondary

Hydrographer Recommendations

Chart submerged piling with a least depth of 7.78 meters (25.51 feet).

Cartographically-Rounded Depth (Affected Charts):

25ft (12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1)

4 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)

7.8m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: CATOBS - 1:snag / stump

QUASOU - 6:least depth known

TECSOU - 3:found by multi-beam

VALSOU - 7.776 m

WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.80) Obstruction - 482/11**Survey Summary**

Survey Position: 40° 41' 31.4" N, 074° 01' 48.2" W
Least Depth: 15.78 m (= 51.76 ft = 8.626 fm = 8 fm 3.76 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.370 m
Timestamp: 2006-235.13:58:35.139 (08/23/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_235 / 355_1357
Profile/Beam: 482/11
Charts Affected: 12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_235/355_1357	482/11	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-226/108_1458	0001	14.08	277.6	Secondary
h11600/tj_3101_reson8125/2006_226/279_1801	1644/236	15.44	273.4	Secondary
h11600/tj_3101_reson8125/2006_236/355_1357	417/2	26.47	018.6	Secondary

Hydrographer Recommendations

[None]

S-57 Data

[None]

Office Notes

Chart 53ft Obstn.

1.81) Obstruction - 1031/22

Survey Summary

Survey Position: 40° 39' 28.1" N, 074° 02' 43.5" W
Least Depth: 12.02 m (= 39.45 ft = 6.575 fm = 6 fm 3.45 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.368 m
Timestamp: 2006-235.15:36:22.435 (08/23/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_235 / 453_1534
Profile/Beam: 1031/22
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Obstruction (pair)

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_235/453_1534	1031/22	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-236/101_1743	0004	1.62	254.4	Secondary

Hydrographer Recommendations

Chart Obstn 39 ft

Cartographically-Rounded Depth (Affected Charts):

39ft (12334_1, 12327_1, 12326_1)

6 ½fm (12300_1, 13006_1, 13003_1, 14500_1)

12.0m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 3:found by multi-beam
 VALSOU - 12.024 m
 VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.82) Obstruction - 1236/58

Survey Summary

Survey Position: 40° 39' 24.8" N, 074° 02' 22.3" W
Least Depth: 10.62 m (= 34.84 ft = 5.807 fm = 5 fm 4.84 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-235.18:20:43.454 (08/23/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_235 / 468_1818
Profile/Beam: 1236/58
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Obstruction

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_235/468_1818	1236/58	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-234/403_1551	0001	0.80	057.0	Secondary

Hydrographer Recommendations

Chart Obstrn 35 ft

Cartographically-Rounded Depth (Affected Charts):

35ft (12334_1, 12327_1, 12326_1)

5 $\frac{3}{4}$ fm (12300_1, 13006_1, 13003_1, 14500_1)

10.6m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 10.619 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.83) Rock - 7628/190**Survey Summary**

Survey Position: 40° 39' 45.7" N, 074° 01' 51.9" W
Least Depth: 3.46 m (= 11.36 ft = 1.894 fm = 1 fm 5.36 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-236.14:35:08.625 (08/24/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_236 / 503_1429
Profile/Beam: 7628/190
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Debris or rocks

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_236/503_1429	7628/190	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-237/204_1352	0001	6.51	222.0	Secondary
h11600/tj_3102_klein5000_sss200/2006-240/200_1242	0001	7.06	183.3	Secondary
h11600/tj_3102_klein5000_sss100/2006-236/109_1856	0001	9.98	151.1	Secondary

Hydrographer Recommendations

Chart Rk 11 ft

Cartographically-Rounded Depth (Affected Charts):

11ft (12334_1, 12327_1, 12326_1)

1 $\frac{3}{4}$ fm (12300_1, 13006_1, 13003_1, 14500_1)

3.5m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
STATUS - 1:permanent
TECSOU - 3:found by multi-beam

VALSOU - 3.464 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.84) Obstruction - 475/4

Survey Summary

Survey Position: 40° 38' 21.0" N, 074° 02' 56.6" W
Least Depth: 14.84 m (= 48.69 ft = 8.115 fm = 8 fm 0.69 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.370 m
Timestamp: 2006-237.18:58:59.578 (08/25/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_237 / 774_1857
Profile/Beam: 475/4
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_237/774_1857	475/4	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: VALSOU - 14.840 m
 WATLEV - 3:always under water/submerged

Office Notes

Chart 48ft. Obstn.

1.85) Obstruction - 4449/29**Survey Summary**

Survey Position: 40° 38' 52.7" N, 074° 02' 35.4" W
Least Depth: 11.19 m (= 36.71 ft = 6.118 fm = 6 fm 0.71 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-237.19:05:13.379 (08/25/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_237 / 774_1857
Profile/Beam: 4449/29
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Obstruction

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_237/774_1857	4449/29	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-232/316_1859	0002	1.87	326.2	Secondary

Hydrographer Recommendations

Chart Obstn 36 ft

Cartographically-Rounded Depth (Affected Charts):

36ft (12334_1, 12327_1, 12326_1)

6fm (12300_1, 13006_1, 13003_1, 14500_1)

11.2m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 11.188 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.86) Obstruction 316/198

Survey Summary

Survey Position: 40° 38' 13.0" N, 074° 02' 32.3" W
Least Depth: 12.38 m (= 40.61 ft = 6.768 fm = 6 fm 4.61 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-237.18:06:34.439 (08/25/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_237 / 807_1805
Profile/Beam: 316/198
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Sounding on an obstruction acquired with Reson 8125 MBES and 200% Klein 5000 side scan. Soundings were corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_237/807_1805	316/198	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-232/198_1414	0001	1.10	245.1	Secondary
h11600/tj_3102_klein5000_sss100/2006-235/124_1452	0001	14.59	073.9	Secondary
h11600/tj_3102_klein5000_sss100/2006-232/197_1420	0001	24.02	083.6	Secondary (grouped)
h11600/tj_3102_klein5000_sss200/2006-236/241_1413	0001	26.42	113.2	Secondary (grouped)
h11600/tj_3102_klein5000_sss200/2006-234/286_1823	0002	32.15	100.9	Secondary (grouped)

Hydrographer Recommendations

Chart obstruction with a least depth of 12.38 meters (40.61 feet).

Cartographically-Rounded Depth (Affected Charts):

40ft (12334_1, 12327_1, 12326_1)

6 $\frac{3}{4}$ fm (12300_1, 13006_1, 13003_1, 14500_1)

12.4m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 6:least depth known
TECSOU - 3:found by multi-beam
VALSOU - 12.377 m
VERDAT - 12:Mean lower low water
WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.87) Obstruction - 1270/17

Survey Summary

Survey Position: 40° 38' 55.7" N, 074° 03' 08.8" W
Least Depth: 12.75 m (= 41.84 ft = 6.973 fm = 6 fm 5.84 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.368 m
Timestamp: 2006-238.17:38:54.558 (08/26/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_238 / 752_1736
Profile/Beam: 1270/17
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_238/752_1736	1270/17	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: VALSOU - 12.753 m
 WATLEV - 3:always under water/submerged

Office Notes

Chart 42ft. Obstn

1.88) Submerged piling 2116/18

Survey Summary

Survey Position: 40° 39' 54.9" N, 074° 00' 22.8" W
Least Depth: 6.88 m (= 22.58 ft = 3.763 fm = 3 fm 4.58 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-239.16:50:33.121 (08/27/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_239 / 869_1646
Profile/Beam: 2116/18
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Submerged piling acquired with Reson 8125 MBES and 200% Klein 5000 side scan. Soundings were corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_239/869_1646	2116/18	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-225/334_1757	0010	10.97	105.7	Secondary

Hydrographer Recommendations

Chart submerged piling with a least depth of 6.88 meters (22.58 feet).

Cartographically-Rounded Depth (Affected Charts):

22ft (12334_1, 12327_1, 12326_1)

3 $\frac{3}{4}$ fm (12300_1, 13006_1, 13003_1, 14500_1)

6.9m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: VALSOU - 6.882 m
 WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.89) Obstruction - 1498/164

Survey Summary

Survey Position: 40° 39' 09.3" N, 074° 04' 08.2" W
Least Depth: 6.00 m (= 19.69 ft = 3.282 fm = 3 fm 1.69 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-243.13:25:46.121 (08/31/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_243 / 306_1323
Profile/Beam: 1498/164
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Obstruction

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_243/306_1323	1498/164	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-233/262_1615	0002	0.98	099.0	Secondary
h11600/tj_3102_klein5000_sss200/2006-236/208_1821	0002	1.40	325.0	Secondary
h11600/tj_3102_klein5000_sss100/2006-233/173_1603	0001	1.73	320.9	Secondary

Hydrographer Recommendations

Chart Obstn 19 ft at current surveyed position.

Cartographically-Rounded Depth (Affected Charts):

19ft (12334_1, 12333_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 - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 6.003 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.90) Obstruction - 1438/28

Survey Summary

Survey Position: 40° 36' 52.0" N, 074° 02' 56.3" W
Least Depth: 19.36 m (= 63.52 ft = 10.587 fm = 10 fm 3.52 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.369 m
Timestamp: 2006-242.17:12:35.938 (08/30/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_242 / 282_1708
Profile/Beam: 1438/28
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted obstruction acquired with Reson 8125 MBES and 200% Klein 5000 side scan. Soundings were 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
h11600/tj_3101_reson8125/2006_242/282_1708	1438/28	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-235/117_1648	0001	2.33	237.7	Secondary

Hydrographer Recommendations

Chart obstruction with least depth 19.36 meters (63.52 feet).

Cartographically-Rounded Depth (Affected Charts):

63ft (12334_1, 12327_1, 12326_1)

10 ½fm (12300_1, 13006_1, 13003_1, 14500_1)

19.4m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: VALSOU - 19.361 m
 WATLEV - 3:always under water/submerged

Office Notes

Concur. Chart 63ft Obstn

1.91) Obstruction - 411/10

Survey Summary

Survey Position: 40° 36' 42.5" N, 074° 02' 30.7" W
Least Depth: 13.00 m (= 42.65 ft = 7.108 fm = 7 fm 0.65 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.369 m
Timestamp: 2006-242.17:40:15.764 (08/30/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_242 / 289_1739
Profile/Beam: 411/10
Charts Affected: 12334_1, 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AHB Corrected

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_242/289_1739	411/10	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-236/218_1445	0001	12.58	353.8	Secondary

Hydrographer Recommendations

Chart obstrn least depth 42 ft

Cartographically-Rounded Depth (Affected Charts):

42ft (12334_1, 12402_1, 12327_1, 12326_1)

7fm (12300_1, 13006_1, 13003_1, 14500_1)

13.0m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 12.999 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Chart Obstn.

1.92) Obstruction - 2437/12

Survey Summary

Survey Position: 40° 38' 18.2" N, 074° 03' 49.6" W
Least Depth: 15.57 m (= 51.08 ft = 8.514 fm = 8 fm 3.08 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.370 m
Timestamp: 2006-241.14:35:42.345 (08/29/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_241 / 159_1430
Profile/Beam: 2437/12
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_241/159_1430	2437/12	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-236/233_1217	0002	3.07	268.0	Secondary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: VALSOU - 15.570 m
 WATLEV - 3:always under water/submerged

Office Notes

Chart 51ft Obstn.

1.93) Obstruction 1889/150

Survey Summary

Survey Position: 40° 37' 43.0" N, 074° 02' 41.7" W
Least Depth: 11.60 m (= 38.05 ft = 6.342 fm = 6 fm 2.05 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-241.17:22:56.339 (08/29/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_241 / 197_1720
Profile/Beam: 1889/150
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted obstruction acquired with 100% Reson 8125 MBES and 200% Klein 5000 side scan. Soundings were corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_241/197_1720	1889/150	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-236/223_1401	0002	4.32	356.1	Secondary
h11600/tj_3102_klein5000_sss100/2006-235/125_1550	0001	6.66	014.0	Secondary

Hydrographer Recommendations

Chart obstruction with least depth 11.60 meters (38.05 feet).

Cartographically-Rounded Depth (Affected Charts):

38ft (12334_1, 12327_1, 12326_1)

6 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)

11.6m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: VALSOU - 11.599 m
 WATLEV - 3:always under water/submerged

Office Notes

Concur. Chart 38ft Obstn.

1.94) Obstruction - 1379/102

Survey Summary

Survey Position: 40° 39' 03.0" N, 074° 05' 22.4" W
Least Depth: 11.17 m (= 36.64 ft = 6.107 fm = 6 fm 0.64 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-240.18:37:53.872 (08/28/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_240 / 591_1835
Profile/Beam: 1379/102
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_240/591_1835	1379/102	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-232/264_1749	0007	3.78	241.8	Secondary
h11600/tj_3102_klein5000_sss100/2006-225/175_1349	0006	3.94	292.5	Secondary
h11600/tj_3102_klein5000_sss100/2006-232/175_1733	0007	5.68	309.6	Secondary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: VALSOU - 11.168 m
 WATLEV - 3:always under water/submerged

Office Notes

Chart 36ft. Obstn.

1.95) Rock - 1917/227**Survey Summary**

Survey Position: 40° 39' 10.5" N, 074° 05' 05.9" W
Least Depth: 11.70 m (= 38.39 ft = 6.399 fm = 6 fm 2.39 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.368 m
Timestamp: 2006-240.18:33:53.398 (08/28/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_240 / 653_1830
Profile/Beam: 1917/227
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Rock

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_240/653_1830	1917/227	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-232/264_1749	0002	2.92	308.9	Secondary

Hydrographer Recommendations

Chart Rk 38 ft

Cartographically-Rounded Depth (Affected Charts):

38ft (12334_1, 12333_1, 12327_1, 12326_1)

6 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)

11.7m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 11.702 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.96) Obstruction - 845/110

Survey Summary

Survey Position: 40° 39' 21.2" N, 074° 03' 43.1" W
Least Depth: 5.69 m (= 18.67 ft = 3.112 fm = 3 fm 0.67 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-240.15:48:31.189 (08/28/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_240 / 709_1547
Profile/Beam: 845/110
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_240/709_1547	845/110	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-225/336_1424	0005	2.69	147.9	Secondary
h11600/tj_3102_klein5000_sss200/2006-233/293_1634	0002	4.60	013.8	Secondary
h11600/tj_3102_klein5000_sss100/2006-233/304_1619	0005	8.13	237.2	Secondary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: VALSOU - 5.691 m
 WATLEV - 3:always under water/submerged

Office Notes

Chart 18ft Obstn.

1.97) Rock - 892/234**Survey Summary**

Survey Position: 40° 39' 22.3" N, 074° 03' 44.5" W
Least Depth: 5.05 m (= 16.57 ft = 2.762 fm = 2 fm 4.57 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-240.15:55:57.638 (08/28/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_240 / 711_1554
Profile/Beam: 892/234
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Rocky Area

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_240/711_1554	892/234	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-225/336_1424	0004	10.21	111.2	Secondary
h11600/tj_3102_klein5000_sss100/2006-233/304_1619	0003	12.77	046.4	Secondary
h11600/tj_3102_klein5000_sss200/2006-233/292_1212	0002	25.32	305.1	Secondary (grouped)

Hydrographer Recommendations

Chart as Rk 16 ft

Cartographically-Rounded Depth (Affected Charts):

16ft (12334_1, 12327_1, 12326_1)

2 ¾fm (12300_1, 13006_1, 13003_1, 14500_1)

5.1m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 3:found by multi-beam

VALSOU - 5.051 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.98) Obstruction - 3403/79

Survey Summary

Survey Position: 40° 38' 44.9" N, 074° 03' 35.7" W
Least Depth: 14.94 m (= 49.02 ft = 8.169 fm = 8 fm 1.02 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-240.12:57:02.352 (08/28/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_240 / 742_1251
Profile/Beam: 3403/79
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_240/742_1251	3403/79	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-234/277_1928	0001	4.10	126.9	Secondary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: VALSOU - 14.940 m
 WATLEV - 3:always under water/submerged

Office Notes

Chart 49ft Obstn.

1.99) Rock - 893/81**Survey Summary**

Survey Position: 40° 40' 19.7" N, 074° 03' 09.1" W
Least Depth: 4.25 m (= 13.95 ft = 2.324 fm = 2 fm 1.95 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.368 m
Timestamp: 2006-238.16:11:48.865 (08/26/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_238 / 148_1611
Profile/Beam: 893/81
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Rocks

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_reson8101/2006_238/148_1611	893/81	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-234/204_1405	0006	0.46	322.0	Secondary

Hydrographer Recommendations

Chart Rk 14 ft

Cartographically-Rounded Depth (Affected Charts):

14ft (12334_1, 12327_1, 12326_1)

2 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)

4.3m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 4.251 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.100) Sounding on shoal - 858/10**Survey Summary**

Survey Position: 40° 40' 20.9" N, 074° 03' 06.8" W
Least Depth: 4.01 m (= 13.16 ft = 2.194 fm = 2 fm 1.16 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.368 m
Timestamp: 2006-238.16:06:15.369 (08/26/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_238 / 150_1605
Profile/Beam: 858/10
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Slight shoaling

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_reson8101/2006_238/150_1605	858/10	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-234/204_1405	0003	6.18	256.4	Secondary

Hydrographer Recommendations

Sounding is honored in the grid. Chart current surveyed soundings.

Cartographically-Rounded Depth (Affected Charts):

13ft (12334_1, 12327_1, 12326_1)

2 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)

4.0m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: EXPSOU - 2:shoaler than 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

Office Notes

Concur.

1.101) Obstruction - 200/2**Survey Summary**

Survey Position: 40° 40' 27.9" N, 074° 02' 59.8" W
Least Depth: 4.37 m (= 14.32 ft = 2.387 fm = 2 fm 2.32 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.368 m
Timestamp: 2006-239.13:08:24.612 (08/27/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_239 / 163_1308
Profile/Beam: 200/2
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_reson8101/2006_239/163_1308	200/2	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-234/204_1405	0004	9.90	047.6	Secondary
h11600/tj_3102_klein5000_sss100/2006-225/234_1611	0010	10.22	056.2	Secondary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: VALSOU - 4.365 m
 WATLEV - 3:always under water/submerged

Office Notes

Chart 14ft Obstn.

1.102) AWOIS #10637 - 1899/9 - obstn**Survey Summary**

Survey Position: 40° 39' 28.6" N, 074° 04' 14.4" W
Least Depth: 6.49 m (= 21.28 ft = 3.547 fm = 3 fm 3.28 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.368 m
Timestamp: 2006-240.15:28:53.247 (08/28/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_240 / 389_1524
Profile/Beam: 1899/9
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AWOIS item #10637 investigated with Reson 8101 MBES and 200% Klein 5000 side scan. Soundings were corrected to MLLW with verified water levels and final tide zoning. There are a lot of rocks across the channel in this area.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_reson8101/2006_240/389_1524	1899/9	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-233/167_1543	0002	1.33	065.0	Secondary

Hydrographer Recommendations

[None]

S-57 Data

[None]

Office Notes

Delete charted 26ft Obstn. Chart 21ft Obstn.

1.103) Rock - 1726/90**Survey Summary**

Survey Position: 40° 39' 16.6" N, 074° 04' 39.5" W
Least Depth: 6.07 m (= 19.91 ft = 3.319 fm = 3 fm 1.91 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.368 m
Timestamp: 2006-240.17:59:14.177 (08/28/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_240 / 850_1756
Profile/Beam: 1726/90
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Rocky Area

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_reson8101/2006_240/850_1756	1726/90	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-225/159_1359	0010	7.35	010.2	Secondary
h11600/tj_3102_klein5000_sss200/2006-233/248_1459	0002	19.55	027.9	Secondary (grouped)
h11600/tj_3102_reson8101/2006_241/615_1405	1630/65	20.07	033.1	Secondary
h11600/tj_3102_klein5000_sss200/2006-233/250_1453	0003	33.15	050.9	Secondary (grouped)

Hydrographer Recommendations

Chart Rk 20 ft

Cartographically-Rounded Depth (Affected Charts):

20ft (12334_1, 12333_1, 12327_1, 12326_1)

3 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)

6.1m (5161_1)

S-57 Data

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

Attributes: QUASOU - 6:least depth known

STATUS - 1:permanent

TECSOU - 3:found by multi-beam

VALSOU - 6.069 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.104) Obstruction - 201/16

Survey Summary

Survey Position: 40° 39' 10.2" N, 074° 04' 32.1" W
Least Depth: 6.25 m (= 20.52 ft = 3.420 fm = 3 fm 2.52 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.369 m
Timestamp: 2006-258.15:53:26.000 (09/15/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_258 / 345_1553
Profile/Beam: 201/16
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted obstruction acquired with Reson 8101 MBES and 200% Klein 5000 side scan. Soundings were 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
h11600/tj_3102_reson8101/2006_258/345_1553	201/16	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-233/166_1523	0005	2.08	337.0	Secondary
h11600/tj_3102_klein5000_sss100/2006-233/166_1521	0001	3.57	317.2	Secondary
h11600/tj_3102_klein5000_sss200/2006-236/209_1815	0002	3.73	024.9	Secondary

Hydrographer Recommendations

Chart obstruction with least depth 6.25 meters (20.52 feet).

Cartographically-Rounded Depth (Affected Charts):

20ft (12334_1, 12333_1, 12327_1, 12326_1)
 3 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)
 6.3m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam

VALSOU - 6.254 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.105) Obstruction 1432/9**Survey Summary**

Survey Position: 40° 36' 09.1" N, 074° 03' 01.4" W
Least Depth: 15.20 m (= 49.85 ft = 8.309 fm = 8 fm 1.85 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.371 m
Timestamp: 2006-243.13:12:46.668 (08/31/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_243 / 341_1308
Profile/Beam: 1432/9
Charts Affected: 12334_1, 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted non-dangerous obstruction or shoaling rocky outcrop acquired with Reson 8101 MBES and 200% Klein 5000 side scan. Soundings were 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
h11600/tj_3102_reson8101/2006_243/341_1308	1432/9	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-226/210_1237	0001	37.53	108.9	Secondary (grouped)

Hydrographer Recommendations

Chart the obstruction with a least depth of 15.20 meters (49.85 feet).

Cartographically-Rounded Depth (Affected Charts):

50ft (12334_1, 12402_1, 12327_1, 12326_1)
8 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)
15.2m (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 - 15.195 m
VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.106) Obstruction - 1521/11**Survey Summary**

Survey Position: 40° 36' 10.9" N, 074° 03' 02.4" W
Least Depth: 16.11 m (= 52.84 ft = 8.807 fm = 8 fm 4.84 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.371 m
Timestamp: 2006-243.13:13:05.246 (08/31/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_243 / 341_1308
Profile/Beam: 1521/11
Charts Affected: 12334_1, 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

obstruction

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_reson8101/2006_243/341_1308	1521/11	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-235/111_1821	0001	0.08	000.0	Secondary
h11600/tj_3102_klein5000_sss100/2006-235/109_1748	0003	3.01	252.3	Secondary

Hydrographer Recommendations

Chart obstn least depth 53 ft

Cartographically-Rounded Depth (Affected Charts):

53ft (12334_1, 12402_1, 12327_1, 12326_1)

8 $\frac{3}{4}$ fm (12300_1, 13006_1, 13003_1, 14500_1)

16.1m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 16.106 m
 VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.107) Obstruction 2919/224**Survey Summary**

Survey Position: 40° 41' 59.5" N, 074° 02' 07.9" W
Least Depth: 5.71 m (= 18.75 ft = 3.125 fm = 3 fm 0.75 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-225.17:08:46.743 (08/13/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_225 / 233_1705
Profile/Beam: 2919/224
Charts Affected: 12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Uncharted non-dangerous obstruction acquired with Reson 8101 MBES and 200% Klein 5000 side scan. Soundings were corrected to MLLW with verified water levels and final tide zoning. Evaluated by the hydrographer as not a DTON due to proximity to the security area and shoal area.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_225/233_1705	2919/224	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-227/200_1716	0002	2.03	111.0	Secondary
h11600/tj_3102_klein5000_sss100/2006-225/159_1638	0005	3.26	068.7	Secondary

Hydrographer Recommendations

Chart the obstruction with a least depth of 5.71 meters (18.75 feet).

Cartographically-Rounded Depth (Affected Charts):

19ft (12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_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
 TECSOU - 3:found by multi-beam

VALSOU - 5.715 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.108) Obstruction 73/11

Survey Summary

Survey Position: 40° 37' 14.4" N, 074° 03' 15.4" W
Least Depth: 14.56 m (= 47.78 ft = 7.964 fm = 7 fm 5.78 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.370 m
Timestamp: 2006-236.16:59:37.389 (08/24/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_236 / 120_1659
Profile/Beam: 73/11
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Sounding on an obstruction acquired with Reson 8125 MBES and 200% Klein 5000 side scan. Soundings were corrected to MLLW with verified water levels and final tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_reson8101/2006_236/120_1659	73/11	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-235/130_1413	0001	9.58	085.4	Secondary

Hydrographer Recommendations

Chart obstruction with a least depth of 14.56 meters (47.78 feet).

Cartographically-Rounded Depth (Affected Charts):

48ft (12334_1, 12327_1, 12326_1)

8fm (12300_1, 13006_1, 13003_1, 14500_1)

14.6m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 14.564 m
 VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.109) 8161/101 obstruction**Survey Summary**

Survey Position: 40° 37' 09.1" N, 074° 02' 34.5" W
Least Depth: 5.02 m (= 16.47 ft = 2.745 fm = 2 fm 4.47 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-241.16:25:56.359 (08/29/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_241 / 204_1616
Profile/Beam: 8161/101
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

obstruction seen

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_241/204_1616	8161/101	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-225/123_1908	0009	1.65	259.1	Secondary
h11600/tj_3102_klein5000_sss200/2006-236/221_1421	0001	1.88	252.8	Secondary
h11600/tj_3102_klein5000_sss100/2006-235/151_1447	0001	3.53	010.5	Secondary

Hydrographer Recommendations

Chart obstruction with least depth 16 ft.

Cartographically-Rounded Depth (Affected Charts):

16ft (12334_1, 12327_1, 12326_1)

2 $\frac{3}{4}$ fm (12300_1, 13006_1, 13003_1, 14500_1)

5.0m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 5.020 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.110) Obstruction - 1152/195

Survey Summary

Survey Position: 40° 41' 46.5" N, 074° 00' 14.0" W
Least Depth: 13.32 m (= 43.70 ft = 7.284 fm = 7 fm 1.70 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-227.14:08:13.596 (08/15/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_227 / 521_1406
Profile/Beam: 1152/195
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

obstruction

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_227/521_1406	1152/195	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-227/215_1815	0004	4.76	238.3	Secondary

Hydrographer Recommendations

chart obstrn least depth 43 ft

Cartographically-Rounded Depth (Affected Charts):

43ft (12334_1, 12335_1, 12327_1, 12326_1, 12363_1)

7 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)

13.3m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 13.321 m
 VERDAT - 12:Mean lower low water

Office Notes

Concur.

1.111) Obstruction - 3752/109**Survey Summary**

Survey Position: 40° 37' 31.8" N, 074° 02' 32.6" W
Least Depth: 3.84 m (= 12.61 ft = 2.102 fm = 2 fm 0.61 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-241.15:54:51.477 (08/29/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_241 / 205_1551
Profile/Beam: 3752/109
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Obstruction found at AHB

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_241/205_1551	3752/109	0.00	000.0	Primary

Hydrographer Recommendations

chart dangerous obstrn least depth 12 ft

Cartographically-Rounded Depth (Affected Charts):

12ft (12334_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: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 3.844 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.112) Obstruction - 7804/235**Survey Summary**

Survey Position: 40° 38' 02.8" N, 074° 02' 30.5" W
Least Depth: 10.16 m (= 33.33 ft = 5.555 fm = 5 fm 3.33 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.369 m
Timestamp: 2006-241.15:59:09.805 (08/29/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_241 / 205_1551
Profile/Beam: 7804/235
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

obstruction

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_241/205_1551	7804/235	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-235/145_1505	0002	1.51	304.8	Secondary

Hydrographer Recommendations

chart dangerous obstrn least depth 33 ft.

Cartographically-Rounded Depth (Affected Charts):

33ft (12334_1, 12327_1, 12326_1)

5 ½fm (12300_1, 13006_1, 13003_1, 14500_1)

10.2m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 10.159 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.113) Obstruction - 3927/33**Survey Summary**

Survey Position: 40° 36' 32.2" N, 074° 02' 21.5" W
Least Depth: 6.49 m (= 21.29 ft = 3.548 fm = 3 fm 3.29 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-225.19:35:05.108 (08/13/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_225 / 938_1912
Profile/Beam: 3927/33
Charts Affected: 12334_1, 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

AHB Corrected

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_225/938_1912	3927/33	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-235/120_1601	0002	4.66	057.6	Secondary

Hydrographer Recommendations

Chart dangerous obstrn least depth 21 ft.

Cartographically-Rounded Depth (Affected Charts):

21ft (12334_1, 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
 TECSOU - 3:found by multi-beam
 VALSOU - 6.488 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

AHB corrected.

1.114) Obstruction - 990/7**Survey Summary**

Survey Position: 40° 38' 54.6" N, 074° 04' 30.7" W
Least Depth: 8.26 m (= 27.08 ft = 4.514 fm = 4 fm 3.08 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.369 m
Timestamp: 2006-241.14:37:38.639 (08/29/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_241 / 897_1436
Profile/Beam: 990/7
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Obstruction

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_reson8101/2006_241/897_1436	990/7	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-232/414_1718	0002	0.78	319.8	Secondary
h11600/tj_3102_klein5000_sss100/2006-232/179_1634	0008	2.26	204.5	Secondary
h11600/tj_3102_klein5000_sss100/2006-232/180_1710	0004	2.54	354.6	Secondary

Hydrographer Recommendations

Chart Obstrn 27 ft

Cartographically-Rounded Depth (Affected Charts):

27ft (12334_1, 12333_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: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 8.255 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur. Chart 27ft Obstn.

1.115) Obstruction - 2626/120**Survey Summary**

Survey Position: 40° 41' 23.2" N, 074° 00' 23.1" W
Least Depth: 12.32 m (= 40.42 ft = 6.736 fm = 6 fm 4.42 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-225.18:31:54.264 (08/13/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_225 / 516_1827
Profile/Beam: 2626/120
Charts Affected: 12334_1, 12335_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Obstructions

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_225/516_1827	2626/120	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-226/151_1903	0003	1.32	137.9	Secondary
h11600/tj_3102_klein5000_sss100/2006-226/118_1847	0003	19.38	273.7	Secondary (grouped)
h11600/tj_3102_klein5000_sss100/2006-226/151_1903	0002	33.84	028.6	Secondary (grouped)

Hydrographer Recommendations

Chart Obstrn 40 ft

Cartographically-Rounded Depth (Affected Charts):

40ft (12334_1, 12335_1, 12327_1, 12326_1, 12363_1)

6 $\frac{3}{4}$ fm (12300_1, 13006_1, 13003_1, 14500_1)

12.3m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam

VALSOU - 12.319 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.116) Obstruction - 5548/210**Survey Summary**

Survey Position: 40° 39' 32.6" N, 074° 02' 29.2" W
Least Depth: 10.71 m (= 35.14 ft = 5.857 fm = 5 fm 5.14 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-235.17:14:25.805 (08/23/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_235 / 460_1707
Profile/Beam: 5548/210
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Obstruction

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_235/460_1707	5548/210	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-232/313_1836	0003	0.53	016.2	Secondary
h11600/tj_3102_klein5000_sss200/2006-234/402_1542	0002	0.75	247.4	Secondary

Hydrographer Recommendations

Chart Obstrn 35 ft

Cartographically-Rounded Depth (Affected Charts):

35ft (12334_1, 12327_1, 12326_1)

5 $\frac{3}{4}$ fm (12300_1, 13006_1, 13003_1, 14500_1)

10.7m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: VALSOU - 10.712 m
WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.117) Obstruction - 854/64**Survey Summary**

Survey Position: 40° 38' 11.5" N, 074° 02' 25.4" W
Least Depth: 7.02 m (= 23.02 ft = 3.836 fm = 3 fm 5.02 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.369 m
Timestamp: 2006-241.16:40:01.269 (08/29/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_241 / 816_1638
Profile/Beam: 854/64
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Obstruction

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_reson8101/2006_241/816_1638	854/64	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-225/243_1906	0001	0.44	305.7	Secondary
h11600/tj_3102_klein5000_sss200/2006-234/287_1816	0001	0.92	264.3	Secondary
h11600/tj_3102_klein5000_sss100/2006-232/198_1414	0003	1.86	093.5	Secondary
h11600/tj_3102_klein5000_sss100/2006-235/145_1505	0001	2.63	019.6	Secondary

Hydrographer Recommendations

Chart Obstrn 23 ft

Cartographically-Rounded Depth (Affected Charts):

23ft (12334_1, 12327_1, 12326_1)

3 $\frac{3}{4}$ fm (12300_1, 13006_1, 13003_1, 14500_1)

7.0m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: VALSOU - 7.016 m
 WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.118) Wreck - 1458/4**Survey Summary**

Survey Position: 40° 37' 11.3" N, 074° 03' 47.1" W
Least Depth: 16.45 m (= 53.97 ft = 8.996 fm = 8 fm 5.97 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.982 m ; **TVU (TPEv)** ± 0.372 m
Timestamp: 2006-241.19:23:24.507 (08/29/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_241 / 220_1919
Profile/Beam: 1458/4
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Insignificant obstruction

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_reson8101/2006_241/220_1919	1458/4	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-235/134_1317	0001	2.42	232.8	Secondary
h11600/tj_3102_klein5000_sss100/2006-226/100_1223	0002	2.56	145.7	Secondary

Hydrographer Recommendations

Chart current surveyed soundings.

S-57 Data

Geo object 1: Wreck (WRECKS)
Attributes: CATWRK - 2:dangerous wreck
 QUASOU - 6:least depth known
 VALSOU - 16.451 m
 WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.119) Obstruction - 883/25**Survey Summary**

Survey Position: 40° 37' 05.2" N, 074° 03' 45.2" W
Least Depth: 11.20 m (= 36.76 ft = 6.126 fm = 6 fm 0.76 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.370 m
Timestamp: 2006-241.19:30:57.635 (08/29/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_241 / 219_1928
Profile/Beam: 883/25
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Obstruction

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_reson8101/2006_241/219_1928	883/25	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-226/100_1223	0005	1.05	185.1	Secondary
h11600/tj_3102_klein5000_sss200/2006-235/232_1831	0001	2.83	292.7	Secondary

Hydrographer Recommendations

Chart Obstrn 37 ft.

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 11.204 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Concur. Chart 37ft Obstn.

1.120) Obstruction - 293/100**Survey Summary**

Survey Position: 40° 39' 13.2" N, 074° 04' 45.5" W
Least Depth: 6.16 m (= 20.20 ft = 3.367 fm = 3 fm 2.20 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.369 m
Timestamp: 2006-241.13:31:59.365 (08/29/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_241 / 608_1331
Profile/Beam: 293/100
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Obstruction

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_reson8101/2006_241/608_1331	293/100	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-233/250_1453	0001	1.84	308.5	Secondary

Hydrographer Recommendations

Chart Obstrn 20 ft

Cartographically-Rounded Depth (Affected Charts):

20ft (12334_1, 12333_1, 12327_1, 12326_1)

3 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)

6.2m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 6.158 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.121) Obstruction - 608/5**Survey Summary**

Survey Position: 40° 39' 57.9" N, 074° 03' 20.1" W
Least Depth: 5.79 m (= 18.98 ft = 3.164 fm = 3 fm 0.98 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.368 m
Timestamp: 2006-241.17:52:58.093 (08/29/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_241 / 834_1752
Profile/Beam: 608/5
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Obstruction

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_reson8101/2006_241/834_1752	608/5	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-233/323_1643	0001	2.04	113.4	Secondary
h11600/tj_3102_klein5000_sss100/2006-234/106_1420	0003	2.30	300.6	Secondary
h11600/tj_3102_klein5000_sss200/2006-234/205_1358	0004	4.14	333.1	Secondary

Hydrographer Recommendations

Chart Obstrn 19 ft

Cartographically-Rounded Depth (Affected Charts):

19ft (12334_1, 12327_1, 12326_1)

3fm (12300_1, 13006_1, 13003_1, 14500_1)

5.8m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 5.786 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.122) Obstruction - 296/101**Survey Summary**

Survey Position: 40° 35' 48.4" N, 074° 02' 58.7" W
Least Depth: 9.62 m (= 31.56 ft = 5.261 fm = 5 fm 1.56 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.371 m
Timestamp: 2006-243.14:27:02.675 (08/31/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_243 / 351_1426
Profile/Beam: 296/101
Charts Affected: 12402_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Obstruction

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_reson8101/2006_243/351_1426	296/101	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-235/110_1811	0001	3.73	087.4	Secondary

Hydrographer Recommendations

Chart Obstn 31 ft

Cartographically-Rounded Depth (Affected Charts):

31ft (12402_1, 12327_1, 12326_1)

5 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)

9.6m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 9.621 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.123) Obstruction - 503/50

Survey Summary

Survey Position: 40° 37' 32.9" N, 074° 03' 52.6" W
Least Depth: 15.36 m (= 50.39 ft = 8.398 fm = 8 fm 2.39 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.984 m ; **TVU (TPEv)** ± 0.369 m
Timestamp: 2006-242.13:45:30.962 (08/30/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_242 / 228_1344
Profile/Beam: 503/50
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Obstruction

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_reson8101/2006_242/228_1344	503/50	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss100/2006-235/135_1305	0001	0.99	342.5	Secondary
h11600/tj_3102_klein5000_sss200/2006-235/234_1910	0002	1.10	084.7	Secondary

Hydrographer Recommendations

Chart Obstrn 50 ft

Cartographically-Rounded Depth (Affected Charts):

50ft (12334_1, 12333_1, 12327_1, 12326_1)

8 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)

15.4m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 15.359 m
 VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.124) Obstruction - 889/60**Survey Summary**

Survey Position: 40° 39' 12.2" N, 074° 04' 08.2" W
Least Depth: 5.49 m (= 18.00 ft = 3.000 fm = 3 fm 0.00 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.369 m
Timestamp: 2006-241.13:05:41.584 (08/29/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_241 / 704_1303
Profile/Beam: 889/60
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Obstruction

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_reson8101/2006_241/704_1303	889/60	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-233/262_1615	0001	1.03	121.8	Secondary
h11600/tj_3102_klein5000_sss200/2006-236/208_1821	0001	3.80	326.1	Secondary

Hydrographer Recommendations

Chart Obstrn 18 ft

Cartographically-Rounded Depth (Affected Charts):

18ft (12334_1, 12333_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
 TECSOU - 3:found by multi-beam
 VALSOU - 5.487 m
 VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.125) Obstruction - 4362/35**Survey Summary**

Survey Position: 40° 40' 09.4" N, 074° 03' 14.8" W
Least Depth: 5.18 m (= 16.98 ft = 2.830 fm = 2 fm 4.98 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.980 m ; **TVU (TPEv)** ± 0.369 m
Timestamp: 2006-241.18:20:33.892 (08/29/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_241 / 828_1811
Profile/Beam: 4362/35
Charts Affected: 12334_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

Obstruction

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_reson8101/2006_241/828_1811	4362/35	0.00	000.0	Primary
h11600/tj_3102_klein5000_sss200/2006-234/204_1405	0001	10.53	201.7	Secondary

Hydrographer Recommendations

Chart Obstrn 17 ft

Cartographically-Rounded Depth (Affected Charts):

17ft (12334_1, 12327_1, 12326_1)

2 ¾fm (12300_1, 13006_1, 13003_1, 14500_1)

5.2m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 3:found by multi-beam
 VALSOU - 5.176 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Concur.

1.126) Obstruction - 1095/99**Survey Summary**

Survey Position: 40° 40' 24.1" N, 074° 05' 23.2" W
Least Depth: 10.13 m (= 33.23 ft = 5.538 fm = 5 fm 3.23 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.370 m
Timestamp: 2006-239.17:15:11.917 (08/27/2006)
Survey Line: h11600 / tj_3102_reson8101 / 2006_239 / 303_1712
Profile/Beam: 1095/99
Charts Affected: 12334_1, 12333_1, 12327_1, 12326_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3102_reson8101/2006_239/303_1712	1095/99	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: VALSOU - 10.127 m
 WATLEV - 3:always under water/submerged

Office Notes

Chart 33Ft Obstn.

1.127) AWOIS # - 800/75 - disproved**Survey Summary**

Survey Position: 40° 41' 36.8" N, 074° 01' 58.2" W
Least Depth: 16.10 m (= 52.81 ft = 8.801 fm = 8 fm 4.81 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-226.17:09:33.661 (08/14/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_226 / 272_1707
Profile/Beam: 800/75
Charts Affected: 12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_226/272_1707	800/75	0.00	000.0	Primary

Hydrographer Recommendations

This AWOIS item was applied to the chart after the completion of H11600, but was sourced from a 2002/2003 NOAA Ship RUDE survey of the area. This item is disproved based on 200% MBES coverage and 100% SSS.

S-57 Data

[None]

Office Notes

Remove charted 53ft. Obstr. The 53ft. depth is consistant with surrounding depths.

1.128) AWOIS # - 1561/97 - obstn**Survey Summary**

Survey Position: 40° 41' 48.3" N, 074° 01' 48.6" W
Least Depth: 14.22 m (= 46.64 ft = 7.774 fm = 7 fm 4.64 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 0.981 m ; **TVU (TPEv)** ± 0.367 m
Timestamp: 2006-226.17:11:19.468 (08/14/2006)
Survey Line: h11600 / tj_3101_reson8125 / 2006_226 / 272_1707
Profile/Beam: 1561/97
Charts Affected: 12334_1, 12335_1, 12337_1, 12327_1, 12326_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11600/tj_3101_reson8125/2006_226/272_1707	1561/97	0.00	000.0	Primary

Hydrographer Recommendations

This AWOIS item was applied to the chart after the completion of H11600, but was sourced from a 2002/2003 NOAA Ship RUDE survey of the area. This item is disproved based on 200% MBES coverage and 100% SSS.

S-57 Data

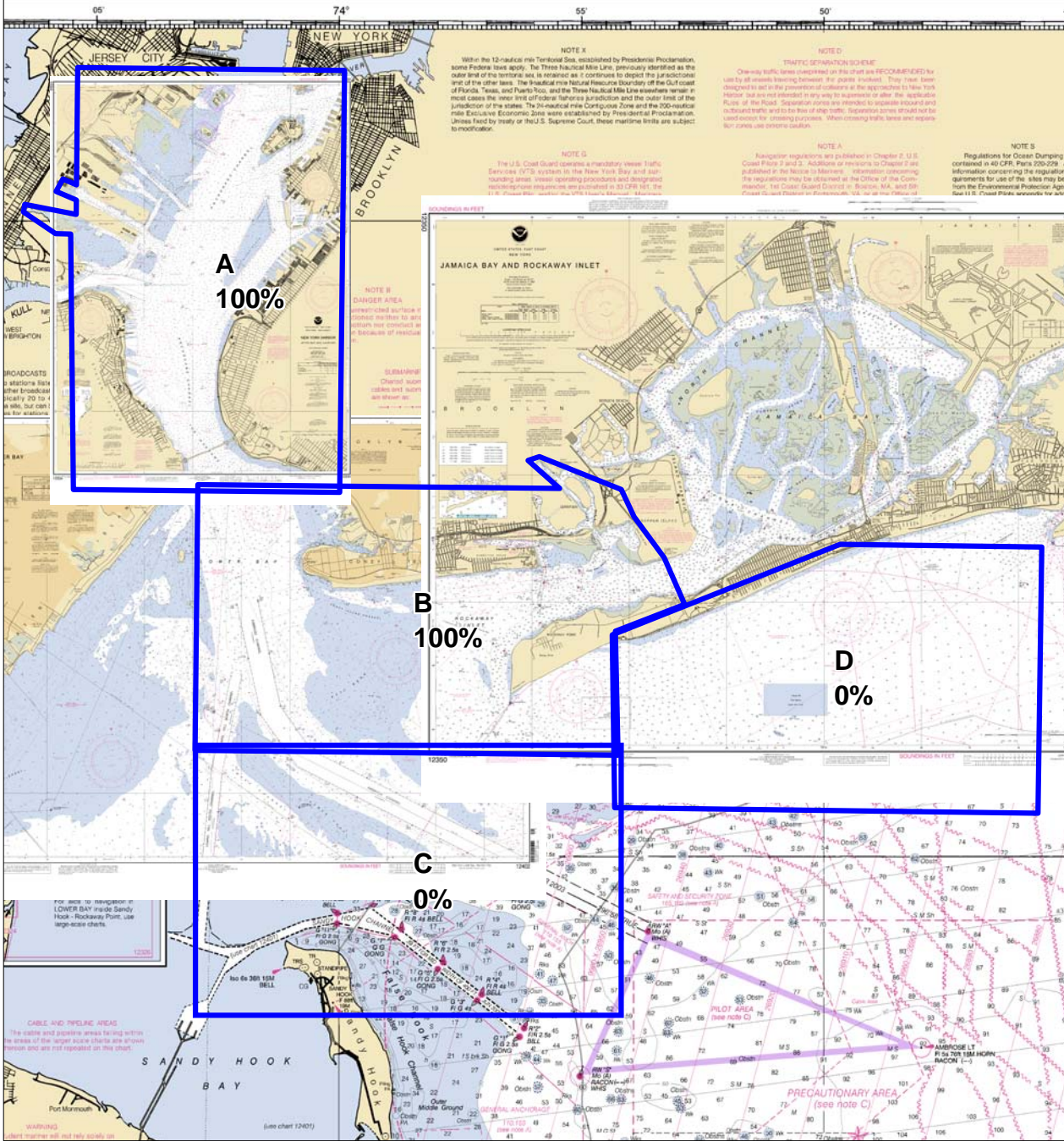
[None]

Office Notes

Remove charted 47ft. Rock, modify position and depth of charted 47ft. Obstn.

APPENDIX III
FINAL PROGRESS SKETCH AND SURVEY

IN FEET



Project	Sheet_Letter	H_num	HQ_Est_SNM	CumIPercCompPrev	CumIPercCompCui	SNM_CompCurH	CumSNMcom
B310	B	11601	15	60	100	8	17
B310	C		0	0	0	0	0
B310	D		0	0	0	0	0
B310	A	11600	14	98	100	0	13

Project	Month	LNM_VBE	LNM_MB	LNM_SSS	SV_Casts	Bottom_Sam	AWOIS_Items	Tide_Guage_Inst	DAS	DTime equip_H	DTime_Weather	D_Time_other_I
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	OCT	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**

APPENDIX IV
TIDES AND WATER LEVELS

September 22, 2006

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

FROM: CDR Raymond C. Slagle, THOMAS JEFFERSON

SUBJECT: Request for Approved Tides/Water Levels

Please provide the following data:

1. Tide Note
2. Final zoning in MapInfo and .MIX format
3. Six Minute Water Level data (Co-ops web site)

Transmit data to:

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

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

Project No.: OPR-B310-TJ-06
Registry No.: H11600
State: New York
Locality: New York Harbor
Sublocality: Upper Bay

Attachments containing:

- 1) an Abstract of Times of Hydrography,
- 2) digital MID MIF files of the track lines from pydro on CD/diskette

cc: N/CS33

Year_DOY	Min Time	Max Time
2006_225	12:40:18	19:38:45
2006_226	12:19:49	19:35:22
2006_227	12:21:42	19:28:30
2006_228	15:31:48	19:34:22
2006_229	13:39:46	19:33:24
2006_230	12:47:29	19:40:18
2006_232	12:29:21	19:26:56
2006_233	12:31:51	19:42:26
2006_234	12:39:44	19:35:29
2006_235	12:51:13	19:29:56
2006_236	12:43:16	19:08:31
2006_237	13:01:30	19:40:17
2006_238	12:42:34	19:33:07
2006_239	12:48:26	19:25:17
2006_240	12:22:14	19:33:02
2006_241	12:23:51	19:42:21
2006_242	13:00:18	19:21:28
2006_243	12:38:12	17:38:33
2006_244	13:26:42	16:44:33
2006_258	12:23:32	19:15:56
2006_261	13:01:22	15:17:34



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

TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE : February 06, 2007

HYDROGRAPHIC BRANCH: Atlantic
HYDROGRAPHIC PROJECT: OPR-B310-TJ-2006
HYDROGRAPHIC SHEET: H11600

LOCALITY: Upper Bay, New York Harbor, NY
TIME PERIOD: August 13, 2006 - September 18, 2006

TIDE STATION USED: 853-9483 Bergen Point, NY
Lat.40° 38.20'N Long. 74° 08.5' W


PLANE OF REFERENCE (MEAN LOWER LOW WATER): 0.000 meters
HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 1.582 meters

REMARKS: RECOMMENDED ZONING

Use zone(s) identified as: NY3, NY17, NY18, NY19, NY20 and NY21.

Refer to attachments for zoning information.

Note 1: Provided time series data are tabulated in metric units (meters), relative to MLLW and on Greenwich Mean Time on the 1983-2001 National Tidal Datum Epoch (NTDE).

For 

CHIEF, PRODUCTS AND SERVICES DIVISION



APPENDIX V
SUPPLEMENTAL SURVEY AND
CORRESPONDENCE

Subject: Gowanus 27

From: "Florentino, Amy LT" <AFlorentino@CGCKWALKER.uscg.mil>

Date: Wed, 13 Dec 2006 07:51:09 -0500

To: "Christiaan VanWestendorp" <christiaan.vanwestendorp@NOAA.GOV>, "Barthel, Curtis BOSN2" <Curtis.J.Barthel@uscg.mil>, "McBrady, Mike LCDR" <Mike.T.McBrady@uscg.mil>

CC: "Smith, Eric BMC" <EPSmith@CGCKWALKER.USCG.mil>

Good Morning-

Based on NOAA's survey we did a position check for Gowanus LB 27. We did find it about 60 yards off station. KATHERINE WALKER serviced aid and reset on station. It is watching properly.

r/

LT Amy Florentino

Commanding Officer

CGC KATHERINE WALKER (WLM 552)

Subject: RE: Buoys out of position - New York Harbor
From: "Barthel, Curtis BOSN2" <Curtis.J.Barthel@uscg.mil>
Date: Wed, 6 Dec 2006 09:54:58 -0500
To: <christiaan.vanwestendorp@NOAA.GOV>
CC: "McBrady, Mike LCDR" <Mike.T.McBrady@uscg.mil>, "Smith, Eric BMC" <EPSmith@CGCKWALKER.uscg.mil>

Chris, just to follow up;

NO 1.1, Buoy 9 was position checked and found to be on station.

NO 1.3, OR/W can has been removed. This aid was disestablished soon after you did your survey work in the area.

The only one we are still waiting on is NO 1.2 Buoy 27. KATHERINE WALKER will be checking that one next week.

Let me know if you have any questions.

Thanks
Curt

CWO Curtis Barthel
AtoN Officer
Sector New York
Bus: 718-354-4117
Cell: 347-242-6612

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

From: christiaan.vanwestendorp@noaa.gov [<mailto:christiaan.vanwestendorp@noaa.gov>]
Sent: Tuesday, December 05, 2006 11:18 AM
To: Barthel, Curtis BOSN2
Subject: Re: Buoys out of position - New York Harbor

Hi, Curt,

I have attached the proposed DTON report to this e-mail. The non-charted buoy you are speaking of is feature number 1.3 of the list at the bottom of the page. Also, I know you and I spoke of the two out-of-position buoys at Rockaway Channel. I assume you will either move those back to their assigned charted positions or send out a NTM for them, correct? I just need to know so that we can justify not sending out DTONs on them for our final survey reports to the Atlantic Hydrographic Branch.

Thanks much,
Chris

Barthel, Curtis BOSN2 wrote:

Chris, The 9 buoy is going to be removed in January, will verify it's position though.

Can you give me the position and info you have on the Orange/White can. We will look into it and find the owner.

Thanks
Curt

CWO Curtis Barthel
AtoN Officer
Sector New York
Bus: 718-354-4117
Cell: 347-242-6612

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

From: AFlorentino@CGCKWALKER.uscg.mil [<mailto:AFlorentino@CGCKWALKER.uscg.mil>]

Subject: RE: Buoys out of position - New York Harbor
From: "Barthel, Curtis BOSN2" <Curtis.J.Barthel@uscg.mil>
Date: Tue, 5 Dec 2006 09:19:52 -0500
To: <christiaan.vanwestendorp@NOAA.GOV>
CC: "Smith, Eric BMC" <EPSmith@CGCKWALKER.uscg.mil>, "McBrady, Mike LCDR" <Mike.T.McBrady@uscg.mil>

Chris, will look into the White and orange can.

The Rockaway buoys were put back on station. LNM 44/06 verifies the move

Red Number 8, new position is 40-39-22.29N / 074-04-13.01W. This buoy was temporarily moved, but this is its new permanent position. It should be coming out in the next LNM.

Will get back to you on 9 and 27.

Thanks
Curt

CWO Curtis Barthel
AtoN Officer
Sector New York
Bus: 718-354-4117
Cell: 347-242-6612

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

From: christiaan.vanwestendorp@noaa.gov [<mailto:christiaan.vanwestendorp@noaa.gov>]
Sent: Tuesday, December 05, 2006 11:18 AM
To: Barthel, Curtis BOSN2
Subject: Re: Buoys out of position - New York Harbor

Hi, Curt,

I have attached the proposed DTON report to this e-mail. The non-charted buoy you are speaking of is feature number 1.3 of the list at the bottom of the page. Also, I know you and I spoke of the two out-of-position buoys at Rockaway Channel. I assume you will either move those back to their assigned charted positions or send out a NTM for them, correct? I just need to know so that we can justify not sending out DTONs on them for our final survey reports to the Atlantic Hydrographic Branch.

Thanks much,
Chris

Barthel, Curtis BOSN2 wrote:

Chris, The 9 buoy is going to be removed in January, will verify it's position though.

Can you give me the position and info you have on the Orange/White can. We will look into it and find the owner.

Thanks
Curt

CWO Curtis Barthel
AtoN Officer
Sector New York
Bus: 718-354-4117
Cell: 347-242-6612

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

From: AFlorentino@CGCKWALKER.uscg.mil [<mailto:AFlorentino@CGCKWALKER.uscg.mil>]
Sent: Monday, December 04, 2006 1:37 PM
To: McBrady, Mike LCDR; 'Christiaan VanWestendorp'
Cc: Barthel, Curtis BOSN2; Casey, Thomas BML; Smith, Eric BMC

Subject: RE: Buoys out of position - New York Harbor

LCDR/Chris-

Concur with LCDR McBrady's comments. Also be advised of the status of the below AtoN.

- * "9" - ANT New York Aid. In turning basin by golf course. Possibly on list to be disestablished (CWO Barthel)???
- * "27" - KATHERINE WALKER. Will position check next week during course of normal operations and put back on station as needed.
- * Orange/White Can - Private AtoN (POC - CWO Barthel)
- * "8" - Bayonne Ocean Terminal aid. Was found offstation during servicing in October. Relocated for Intrepid move. BNM/LNM issued.

v/r
Amy

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

From: McBrady, Mike LCDR [<mailto:Mike.T.McBrady@uscg.mil>
<<mailto:Mike.T.McBrady@uscg.mil>> <<mailto:Mike.T.McBrady@uscg.mil>>]
Sent: Monday, December 04, 2006 1:16 PM
To: christiaan.vanwestendorp@NOAA.GOV; Florentino, Amy LT
Cc: Barthel, Curtis BOSN2; Casey, Thomas BM1
Subject: RE: Buoys out of position - New York Harbor

Amy/Chris,

It would be my preference NOT to submit a DTON for any AtoN that is off station (OFFSTA). Traditionally, the USCG has not handled OFFSTA aids in that manner (i.e. publishing them as chart corrections) since it is our policy to simply put them back whenever we find out that they are OFFSTA. When we are notified, we will advertise the aid as OFFSTA or missing depending on the distance it's off

Another reason a DTON report is overkill here is that there are a number of aids that are in temporary positions due to dredging. Over the past few months, we have discovered several aids that were put in temporary positions to accommodate dredging work and then "the USCG" forgot to move them back.

I think the best policy will be for NOAA to let the SECNY AtoN officer (CWO2 Barthel) know when they find our AtoN "not on charted position" and we will follow-up from there.

On the subject of the white can w/ orange band, over by the Bayonne Ocean Terminal (MOTBY). Is this aid directly off the end of the pier? There used to be as many as three over there, for reasons I don't know, but most likely a Private AtoN (PATON) customer (perhaps the dry-dock operator) who used to maintain those aids has redeployed them w/o notifying the CG. SECNY is a good fit to run this down as well, and for this reason we are working with CGD1 to take over the PATON administration program for the aids in our AOR.

Bottom line is we have not always maintained good enough situational awareness of both CG maintained and PatoN. We are working to improve that and appreciate the help from NOAA in finding these errors. But as a rule, our preference will always be to put OFFSTA AtoN back and skip the DTON process. Notifying CWO Barthel and BM1 Casey (PATON manager) - so that we can engage the servicing units - is the best bet from my perspective.

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 [<mailto:christiaan.vanwestendorp@noaa.gov>
<mailto:christiaan.vanwestendorp@noaa.gov> <<mailto:christiaan.vanwestendorp@noaa.gov>> <<mailto:christiaan.vanwestendorp@noaa.gov>>]
Sent: Monday, December 04, 2006 1:43 PM
To: Florentino, Amy LT
Cc: McBrady, Mike LCDR
Subject: Buoys out of position - New York Harbor

Sorry. Here's the attachment

christiaan.vanwestendorp@noaa.gov wrote:

Hi, Amy,

I have attached the first page of a report that we may or may not put out as a Danger to Navigation report, based on your assessment. We found three buoys out of position by at least 50 meters and one buoy (a white and orange can) that was uncharted around Military Ocean Terminal. I already notified LCDR McBrady of one or two of these via a chartlet I sent him a while back in preparation for the INTREPID moving over there. If you can confirm that these buoys are where we say they are, then we will submit a DTON report for them. However, if they have since been moved back to their charted positions (and/or the W Or C buoy has been removed), then please let me know, and the DTON report will not be sent out. The uncharted buoy is feature number 1.3 in the list at the bottom of the attached page. Please let me know if you have any questions, and I promise I will have chartlets ready for you soon, as you requested a month or two ago.

Thanks,
Chris van Westendorp

Subject: Crosslines

From: "kimberly.glomb" <kimberly.glomb@noaa.gov>

Date: Tue, 07 Nov 2006 18:31:16 +0000

To: Christiaan VanWestendorp <christiaan.vanwestendorp@noaa.gov>

Chris, Fieldsheets 10,11,16,20,21,27,28,30,31,34,35, 36, and 37 all had problems with the outer beams. The trouble beam numbers were 90-101 for the Reson 8101. I will have to mention something about those beams.

All of the crossline comparisons can be found at

H:\H11600\Descriptive Report\Separates\IV_Crossline_Comparisons.

Kimberly

Subject: 8101 outer beam problems & suggestions for correction

From: "Bryan Chauveau" <Bryan.C Chauveau@noaa.gov>

Date: Thu, 28 Sep 2006 10:53:21 -0400

To: Christiaan VanWestendorp <Christiaan.VanWestendorp@noaa.gov>, Castle E Parker <Castle.E.Parker@noaa.gov>, Tod Schattgen <Tod.Schattgen@noaa.gov>

Hi Chris (Helen says Hi also)

Got the data today. The problem is still there and distinctive. From beam 82 on out to 101 the quality and accuracy severely degrades. You can see this in the excel sheet attached, in data and graph form.

Here is what Gene, Helen and I think may be the cause of these outer beam problems:

Helen and I double checked to ensure this is not a roll issue or systematic error and did not see anything to suggest it is caused by roll.

1) Is the 8101 out of calibration? - Re-calibrate the instrument and do a small patch test (complete, as per procedures) and check that data with this core set of data, see if there is any change. This also allows you to double check the settings to ensure there has not been any drift since the last patch test.

2) It may be hull interference? - check the mounting, check the bolts (we doubt this is the problem but it is worth double checking), and check with Reson for any way of determining if it is a mounting issue. The rep that was there when I was there did question whether it might be hull interference or interference from the pole. Run the BITE check he suggested to rule out any internal problems.

But if it is not either of these, it may be damage:

3) Transducer damage or internal fault? - Did the transducer take a bit of damage that may be causing these outer beam problems, or is it an internal system fault.

This error really showed up only as you got deeper in depth, because with depth comes a larger swath width.

The error this problem creates is upwards of 40-50 cm, a half meter error is too great. This is evident when using all the beams. If you filter the data 60-60, you remove beams 1-9 and 95-101, reducing your error value to approx. 20-30cm. This falls within specs. However, as you can see in the file attached, your CARIS computed accuracy still drops below 95% at beam 82. When using the Jack Riley Absolute Error values, you rise to nearly 100% accuracy. If you choose to use the absolute error values, you must detail that in the DR. I would suggest quoting Jack Riley as I did from his email (which I can send to you if you need it).

A method to resolve this error is to filter all the 8101 data at 60-60 degrees of nadir. This keeps your error rate to an acceptable 20-30 cm. (You might even consider filtering 65 degrees to port and 55 degrees to starboard. This should remove beams 90 on out and let you keep the beams 5-9 that were within Order 1 95% quality.)

I would suggest you do a CARIS QC Report first, using both CARIS Order 1 and the Riley Absolute Error values, document it, then filter the data, re-run the QC report and document the results. Be sure to include the report with the DAPR and detail this issue in the survey DRs.

Also, notice the dip in the data at nadir beams 51-56 on chart 1. I believe this may be a sediment related issue, perhaps in this area due to the power the 8101 was set at the nadir beams were penetrating deeper and thus you had blowout that affected the accuracy %. The 2nd chart does not show this dip, as I had cleaned out the nadir blowouts and filtered at 60 degrees.

I have saved this QC report in the TJ DAPR folder here at the branch. I would suggest you do the same, and submit it with the New York surveys.

Hope you are making good progress despite this issue, take care. Write if you have any further questions.

Bryan Chauveau
Physical Scientist
Atlantic Hydrographic Branch

TJ_8101_QC.xls	Content-Type: application/msexcel Content-Encoding: base64
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Subject: Shoaling near fire boat

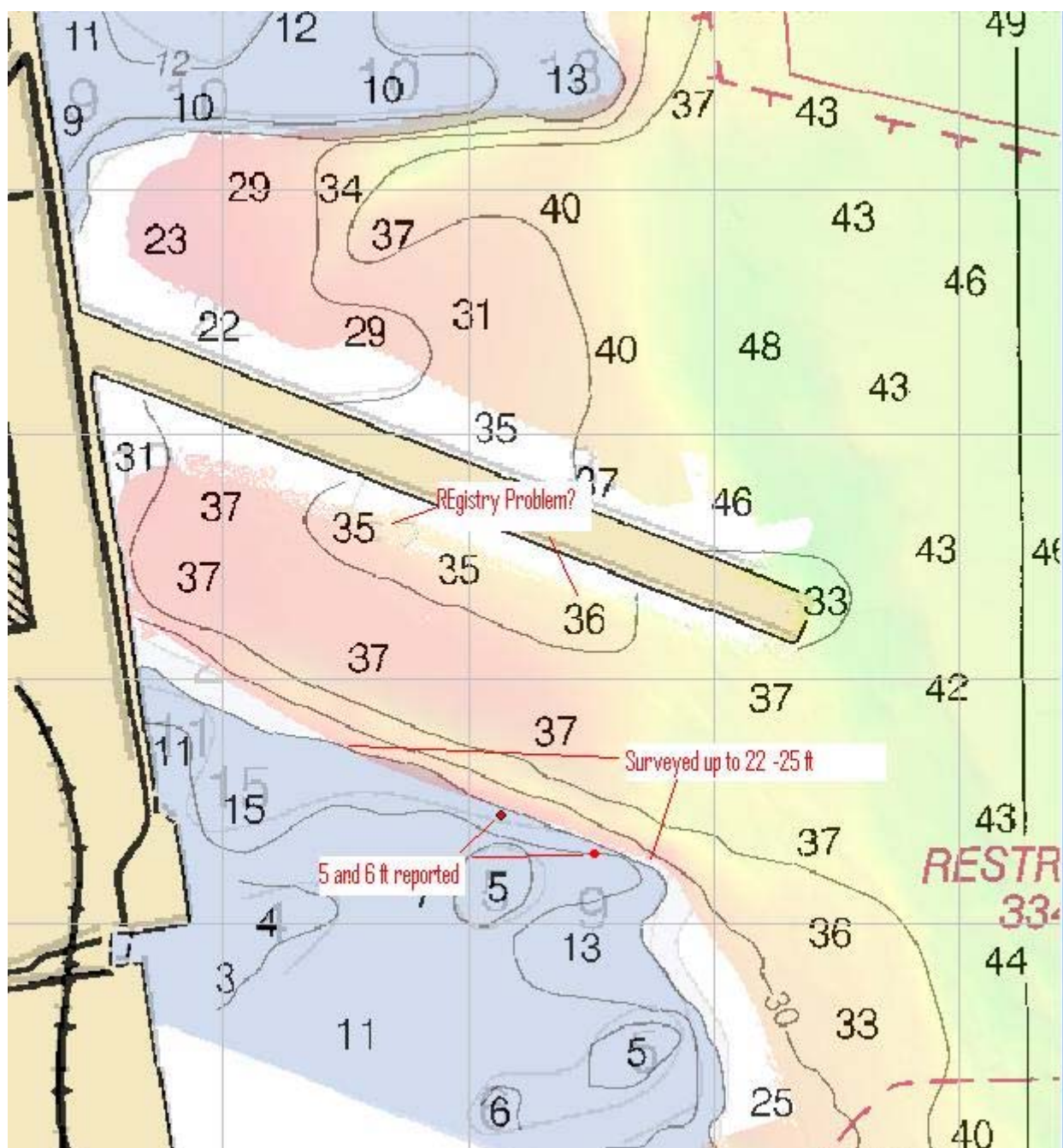
From: "peter.lewit" <peter.lewit@noaa.gov>

Date: Tue, 26 Sep 2006 12:35:34 +0000

To: Raymond C Slagle <Raymond.C.Slagle@noaa.gov>, Christiaan VanWestendorp <christiaan.vanwestendorp@noaa.gov>, Kimberly Glomb <Kimberly.Glomb@noaa.gov>

While we over at the fireboat this morning the Pilot Joe Giuardi (check spelling) pointed out a shoal he was concerned about.

His boat has twin transducers on each side and he picked up a 5-6 ft shoal that was in between contours of the 12 and 18 foot curve. This is 40 meters north of the charted 5 ft . I looked at our depths and it looks like we have only coverage up to 22 -25 feet. I am also puzzled as to whether we have a registry problem too! He was nice enough to let us aboard maybe we could resolve this chart discrepancy. Included is an image. Peter



Subject: H11601 Presice Timing Latencies

From: "william.winner" <william.winner@noaa.gov>

Date: Tue, 19 Sep 2006 20:09:56 +0000

To: Kimberly Glomb <Kimberly.Glomb@noaa.gov>

CC: Christiaan VanWestendorp <Christiaan.VanWestendorp@noaa.gov>

Kim,

I believe we have found all of the areas where there is a precise timing latency in the data for H11600. The days are DN's 228,230,232,233,234,235, and 261.

There is a file that will be included with the surveys that explains the reasoning behind these errors. For more info on the file or on how to explain it in the DR, contact the FOO.

Bill

Subject: H11600 DN233 Precise Timing Latency

From: "william.winner" <william.winner@noaa.gov>

Date: Thu, 24 Aug 2006 10:39:29 -0400

To: Christiaan VanWestendorp <christiaan.vanwestendorp@noaa.gov>

FOO,

While cleaning on DN233, I noticed a precise timing error on a few of the lines. I have updated the HVF to reflect this change, however, I am not sure who is in charge of this sheet. Who else do I need to email about this to let them know this was there?

V/R,

ENS Winner

ENS William Winner, NOAA <william.winner@noaa.gov>

Junior Officer

NOAA Ship Thomas Jefferson

Subject: H11600 Precise Timing

From: "william.winner" <william.winner@noaa.gov>

Date: Thu, 24 Aug 2006 15:11:31 -0400

To: Christiaan VanWestendorp <christiaan.vanwestendorp@noaa.gov>

FOO,

Through the rest of my looking at the data today, I found areas in days 230, 233, 234, and 235 that showed changes in the precise timing latency. For each day, there were areas in the data that would have busted the error budget. As such, I have analyzed the data and applied the appropriate values in the HVF. I have re-SVP corrected the data and remerged the data. All days show marked improvement with regards to precise timing after the new offsets have been applied.

V/R,

ENS Winner

ENS William Winner, NOAA <william.winner@noaa.gov>

Junior Officer

NOAA Ship Thomas Jefferson

Subject: Strumming on Klein

From: "douglas.wood" <douglas.wood@noaa.gov>

Date: Sun, 20 Aug 2006 21:26:03 +0000

To: Christiaan VanWestendorp <christiaan.vanwestendorp@noaa.gov>

Hi FOO,

I did notice on a few occasions that there was some strumming on the outside of the SSS swath today. On those occasions I asked the driver to slow down a knot and the problem went away. We had been driving into a strong current and were traveling over 10kts through the water with speed over ground about 7 1/2 kts.

I don't have any evidence that suggests that the fish is loose.

Doug

Subject: Re: Revising NY Harbor sheet A

From: "Jeremy McHugh" <Jeremy.McHugh@noaa.gov>

Date: Wed, 09 Aug 2006 17:00:17 -0400

To: Christiaan VanWestendorp <Christiaan.VanWestendorp@noaa.gov>

Hi Chris,

Breaking the sheet into sections for ease of data acquisition and processing is fine. Whatever is easiest and most efficient for you is fine by us.

In terms of submitting the survey to AHB, we want to maintain it as one sheet (i.e., one survey with a single descriptive report). I am not sure how breaking the sheet up into three areas would get the data to the branch quicker, but I may not have thought that through as thoroughly as you all have- Let me know what your thinking is on that point.
-Jeremy

Christiaan VanWestendorp wrote:

Hi, Jeremy,

I was talking with my CO and CDR Schattgen this afternoon, and it seems like it would be much easier to complete Sheet A of NY Harbor if it were broken up into multiple sections. I would like to see it broken up into three sections. This way, the survey becomes a little more of a manageable ordeal for my sheet managers (since in all likelihood there will be a million contacts out there to deal with), and we can get the data out to the branch faster. What do you think?

The lines that we would use to break up the sheet into three sections fall between the following lat/long's:

Line between Sheet A-1 (north) and A-2 (middle):

40-40'37.56" N 074-03'16.92" W

40-39'56.16" N 074-01'04.08" W

Line between Sheet A-2 (middle) and A-3 (south):

40-38'36.96" N 074-04'12.00" W

40-38'09.24" N 074-02'22.20" W

- Chris

--

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

Subject: Re: [Fwd: Re: [Fwd: D304-TJ-06 project instruction]]

From: "scientist1.thomas.jefferson" <scientist1.thomas.jefferson@noaa.gov>

Date: Tue, 25 Jul 2006 16:49:03 +0000

To: Shepard Smith <shep.smith@noaa.gov>, doug.baird@noaa.gov, caleb.gostnell@noaa.gov, michael.riddle@noaa.gov, jeremy.mchugh@noaa.gov, tod.schattgen@noaa.gov, shawn.maddock@noaa.gov, foo.thomas.jefferson@noaa.gov

Good afternoon all,

From instructions for OPR-B310-TJ-06:

"Navigable area hydrographic surveys with a combination of 100% multibeam (MB) coverage and 200% side scan sonar (SSS) coverage are required for this project.

...

At the Commanding Officer's discretion, extremely rocky areas, or where SSS are impractical due to entanglement hazards can be examined with 100% multibeam only."

My interpretation of this is that areas where the chance of getting good SSS coverage is poor will be surveyed with ODMBES, whilst other areas will have the OD requirement met by SSS and should thus go for Complete MBES. Again, however, I can see how a field unit accustomed to using OD MBES consistently would interpret this instruction to mean OD MBES across the board. The TJ STs are busy struggling with how, exactly, to draw line plans for B310 as I type this. On this end, I have spoken to both outgoing and oncoming FOOs on the TJ and the FOO on the RU, encouraging them to get in touch with HSD if they feel their letter instructions are vague, excessively onerous, or potentially excessively time-consuming.

Cheers,
Helen

The points you brought were discussed this morning - and we have noted that the lack of specifically identifying the survey standard (object detection vs. complete coverage) is something we should include in the Letter Instructions, and we will include a statement to that effect in future LI's. In fact, this fall Ops Branch intends to ream out the LI template and reduce the verbage so that relict terms, and confusing directions are eliminated - references to the FPM and HSSD will replace substantial parts of the current LI's.

There is however guidance to the field in the current FPM in regards to the survey standards expected - section 2.5.2. of the FPM states: "Unless otherwise specified by the LI, both SSS and MBES data acquisition shall be conducted to meet object detection criteria set forth in the HSSD." Ops Branch will include a clarification, that object detection standard does not require both SSS & MBES acquisition to object detection standards, but can be either or a combination of both sensors (hopefully in a more clear sentence that this).

Doug

Subject: Re: [Fwd: Re: [Fwd: D304-TJ-06 project instruction]]

From: "Jeremy McHugh" <Jeremy.McHugh@noaa.gov>

Date: Tue, 25 Jul 2006 13:49:00 -0400

To: Raymond C Slagle <Raymond.C.Slagle@noaa.gov>, Marc S Moser <Marc.S.Moser@noaa.gov>, Christiaan VanWestendorp <Christiaan.VanWestendorp@noaa.gov>, James M Crocker <James.M.Crocker@noaa.gov>

CC: "scientist1.thomas.jefferson" <Scientist1.Thomas.Jefferson@noaa.gov>, Shepard Smith <Shep.Smith@noaa.gov>, Doug.Baird@noaa.gov, Caleb.Gostnell@noaa.gov, Michael.Riddle@noaa.gov, Tod.Schattgen@noaa.gov, Shawn.Maddock@noaa.gov

TJ Officers,

Helen's interpretation of coverage requirements for the NY Harbor project (below) is correct. For clarity, I have copied her quotes from our instructions and inserted the terms Object Detection multibeam and Complete multibeam where appropriate:

"Navigable area hydrographic surveys with a combination of Complete multibeam (MB) coverage and 200% side scan sonar (SSS) coverage are required for this project.

...

At the Commanding Officer's discretion, extremely rocky areas, or areas where SSS are impractical due to entanglement hazards can be examined with Object Detection multibeam only."

As always, please contact Operations Branch directly if you have any questions about project instructions.

-Jeremy

scientist1.thomas.jefferson wrote:

Good afternoon all,

>From instructions for OPR-B310-TJ-06:

"Navigable area hydrographic surveys with a combination of 100% multibeam (MB) coverage and 200% side scan sonar (SSS) coverage are required for this project.

...

At the Commanding Officer's discretion, extremely rocky areas, or where SSS are impractical due to entanglement hazards can be examined with 100% multibeam only."

My interpretation of this is that areas where the chance of getting good SSS coverage is poor will be surveyed with ODMBES, whilst other areas will have the OD requirement met by SSS and should thus go for Complete MBES. Again, however, I can see how a field unit accustomed to using OD MBES consistently would interpret this instruction to mean OD MBES across the board. The TJ STs are busy struggling with how, exactly, to draw line plans for B310 as I type this. On this end, I have spoken to both outgoing and oncoming FOOs on the TJ and the FOO on the RU, encouraging them to get in touch with HSD if they feel their letter instructions are vague, excessively onerous, or potentially excessively time-consuming.

Cheers,
Helen

The points you brought were discussed this morning - and we have noted that the lack of specifically identifying the survey standard (object detection vs. complete coverage) is something we should include in the Letter Instructions, and we will include a statement to that effect in future LI's. In fact, this fall Ops Branch intends to ream out the LI template and reduce the verbage so that relict terms, and confusing directions are eliminated - references to the FPM and HSSD will replace substantial parts of the current LI's.

There is however guidance to the field in the current FPM in regards to the survey standards expected - section 2.5.2. of the FPM states: "Unless otherwise specified by the LI, both SSS and MBES data acquisition shall be conducted to meet object detection criteria set forth in the HSSD." Ops Branch will include a clarification, that object detection standard does not require both SSS & MBES acquisition to object detection standards, but can be either or a combination of both sensors (hopefully in a more clear sentence that this).

Doug

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

Subject: [Fwd: Please Review NY Harbor Project Instructions]

From: "marc.s.moser" <marc.s.moser@noaa.gov>

Date: Sun, 25 Jun 2006 17:58:24 -0400

To: Raymond C Slagle <Raymond.C.Slagle@noaa.gov>

CC: Christiaan VanWestendorp <christiaan.vanwestendorp@noaa.gov>, James M Crocker <James.M.Crocker@noaa.gov>

CO,

I recommend that the ship come to an understanding with HSD about the 200%SSS requirement for this project. If the ship is not used, you guys will not have any way to acquire SSS data in depths deeper than 20 meters (unless you tow a Klein 3000 from a launch) and meet NOS requirements.

HSD could change the default wording for SSS operations from "At the Commanding Officer's discretion, extremely rocky areas, or where SSS operations are impractical due to entanglement hazards can be examined with 100% multibeam only. "

to "At the Commanding Officer's discretion, extremely rocky areas where SSS operations are impractical due to entanglement hazards or areas of high traffic congestion can be examined with 100% multibeam only."

Also, they show TJ having completed an area on Sheet B (H11400), but TJ did no work down there in 2004 (they may have mislabeled NRT work).

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

Ray, Jim, Marc and Chris:

Preliminary instructions for your New York Harbor and Approaches project are attached. Please review the document carefully and let me know if you have any questions or concerns by Friday June 30th. I plan to send out the final instructions on or slightly before July 7th.

Here are the project instruction highlights:

- four prioritized sheets that require 100% MB and 200% SSS coverage where possible
- three separate junction surveys; 2 completed by NRT-5 (Jasper Schaer is your point of contact for getting that data) and 1 completed by TJ in 2004 in the East River (H11353)- Marc, do you have H11353's data on board TJ?
- 99 AWOIS items assigned for full investigation
- 97 AWOIS items provided for background information only

-Jeremy

--

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

**ATLANTIC HYDROGRAPHIC BRANCH
EVALUATION REPORT to ACCOMPANY
SURVEY H11600 (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 data at the Atlantic Hydrographic Branch:

HSTP PYDRO version 8.7 r2537
CARIS HIPS/SIPS version 6.1 SP2 HF 1-4
CARIS Bathy Manager version 2.1 HF 1-10
DKART INSPECTOR, version 5.0 Build 732 SP1
CARIS HOM version 3.3
CARIS S57 Composer version 2.0 HF 1-2

B.2. QUALITY CONTROL

B.2.1. H-Cell

The AHB source depth grid for the survey's nautical chart update product entailed the field's original 1m grids, combined at 2 meter resolution. The survey scale selected soundings were extracted from this combined surface. The selected sounding set is approximately 10 to 20 times the number of charted depths. The chart scale selected soundings are a subset of the survey scale selected soundings. The surface model was referenced when selecting the chart scale soundings, to ensure that the selected soundings portrayed the bathymetry within the common area.

The pre-compilation products or components (Stand Alone HOB files (SAHOB)) included sounding selections (SOUNDG), features (SBDARE, UWTRC, WRECKS, OBSTRN, PILPNT, MORFAC), Meta objects (M_COVR, M_QUAL, M_NSYS), and cartographic Blue Notes. The individual SAHOB files were inserted into one BASE Manager feature layer and exported to S57 format in order to create the H-Cell deliverable.

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_CU.000) with all values measured in feet following NOAA sounding rounding rules.

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

The H11600 CARIS H-Cell final deliverables include the following products:

US511600_CS.000	1:10,000 Scale	H11600 H-Cell with Chart Scale Selected Soundings and Cartographic Notes
US511600_SS.000	1:10,000 Scale	H11600 Selected Soundings (Survey Scale)

B.22. Junctions

Survey H11600 (2006) junctions with surveys H11601 (2006) to the south and H11400 (2006) to the southeast. Present survey soundings compare within 1 foot with junctioning surveys. Present survey depths are in harmony with the charted hydrography to the north.

D. RESULTS AND RECOMMENDATIONS

D.1 CHART COMPARISON 12334 (69th Edition, Aug./08)

Corrected through NM 8/30/2008
Corrected through LNM 2/26/2008
Scale 1:10,000

12402 (10th Edition, May/06)

Corrected through NM 5/06/2006
Corrected through LNM 5/02/2006
Scale 1:15,000

ENC Comparison US5NY1CM

New York Harbor Upper Bay and Narrows Anchorage
Edition 18
Application Date 2008-02-21
Issue Date 2008-02-26
Chart 12334

US5NY1DM

Hudson and East Rivers - Governors Island to 67th Street
Edition 11
Application Date 2008-11-20
Issue Date 2008-11-20
Chart 12335

D.1.1 Hydrography

The charted hydrography originates with prior surveys and requires no further consideration. The hydrographer makes adequate chart comparisons in section "D" and Appendix 1&2 of the Descriptive Report.

D.3. 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.

D.4. 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 BASE Cell File or the Blue Notes should be retained as charted. Shoal areas with only crossline coverage were excluded from the Meta coverage areas. Refer to the Descriptive Report for further recommendations by the hydrographer.

APPROVAL SHEET
H11600

Initial Approvals:

The completed survey has been inspected with regard to survey coverage, delineation of depth curves, representation 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 National Ocean Service and Office of Coast Survey requirements except where noted in the Descriptive Report and the Evaluation Report.

All final products have undergone a comprehensive reviews per the Hydrographic surveys Division Office Processing Manual and are verified to be accurate and complete except where noted.

Sarah M. Eggleston
Physical Scientist
Atlantic Hydrographic Branch

I have reviewed the H-Cell files, accompanying data, and reports. This survey and accompanying Marine Chart Division deliverables meet National Ocean Service requirements and standards for products in support of nautical charting except where noted.

Approved: _____
Shepard Smith
Commander, NOAA
Chief, Atlantic Hydrographic Branch