

F00584

NOAA FORM 76-35A

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

DESCRIPTIVE REPORT

Type of Survey: Field Examination

Registry Number: F00584

LOCALITY

State: New York

General Locality: North Atlantic Ocean

Sub-locality: 28 NM Southeast of Shinnecock Inlet, NY

2009

CHIEF OF PARTY
CDR Shepard M. Smith
NOAA

LIBRARY & ARCHIVES

DATE

HYDROGRAPHIC TITLE SHEET

F00584

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

State: **New York**

General Locality: **North Atlantic Ocean**

Sub-Locality: **28 NM Southeast of Shinnecock Inlet, NY**

Scale: **1:5000** Date of Survey: **11/10/2009**

Instructions Dated: **11/13/2009** Project Number: **S-C944-TJ-09**

Vessel: **NOAA Ship THOMAS JEFFERSON**

Chief of Party: **CDR Shepard M. Smith, NOAA**

Surveyed by: **Thomas Jefferson Personnel**

Soundings by: **Reson 7125 Multibeam Echosounder**

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

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

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

Verification by: ***Atlantic Hydrographic Branch (bold, red, italic font)***

Soundings in: **Meters at MLLW *H-Cell Compilation Units in Feet at MLLW***

Remarks:
1) All Times are in UTC.
2) This is a Field Examination Survey.
3) Projection is NAD83, UTM Zone 18.

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Descriptive Report to Accompany Hydrographic Survey F00584

Project S-C944-TJ-09
 28 NM Southeast of Shinnecock Inlet
 Field Investigation of Wreck "Coimbra"
 Scale 1:5,000
 November 10, 2009
NOAA Ship THOMAS JEFFERSON

A. AREA SURVEYED

This hydrographic survey was completed as specified by Hydrographic Survey Letter Instructions S-C944-TJ-09, dated November 13th, 2009. The survey area includes is located 28 NM Southeast of Shinnecock Inlet, NY. *Concur.*

Northern Limit	Southern Limit	Western Limit	Eastern Limit
40°24'17.84" N 072°22'22.15" W	40°23'52.99" N 072°22'00.4" W	40°24'00.89" N 072°22'40.84" W	40°24'07.86" N 072°21'51.16" W

The purposes of this survey is to locate the Coimbra wreck and update the chart with the true position and provide the USCG with high resolution multibeam bathymetry and side scan sonar imagery of the COIMBRA wreck. *Concur.*

NOAA Ship <i>Thomas Jefferson</i> , Sheet F00584	
LNM Multibeam mainscheme only	2.969189
LNM Side Scan Sonar mainscheme only	0.9288861
Linear nautical miles of any combination of the above techniques (SSS w/ concurrent MB)	N/A
LNM Crosslines singlebeam and multibeam combined	N/A
LNM Lidar Crosslines	N/A
LNM development lines non mainscheme	N/A
LNM shoreline/nearshore investigations	0
Number of Bottom Samples	0
Number of items investigated that required additional time/effort in the field beyond the above survey operations	0
Total number of square nautical miles	0.1225

Table 1. Hydrographic Survey Statistics

Survey limits of F00584 are shown on the following page, figure1.

Calendar Date	Julian Day
11/10/2009	314

Table 2. Dates of Multibeam Data Acquisition in Calendar and Julian Days

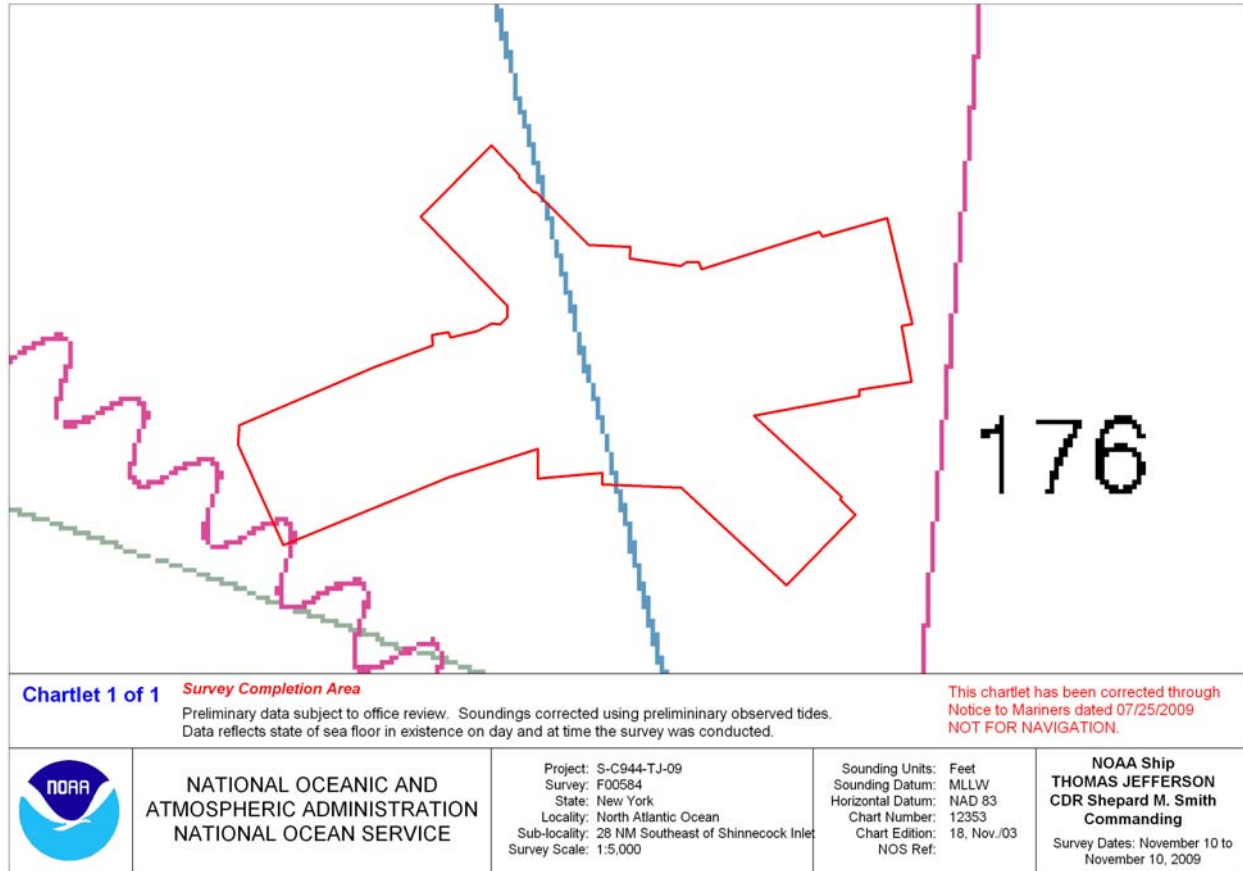


Fig. 1: Survey Limits

B. DATA ACQUISITION AND PROCESSING

Refer to *S-C944-TJ-09 Data Acquisition and Processing Report (DAPR)** for a complete description of data acquisition and processing systems, survey vessel, quality control procedures and data processing methods. Additional information to supplement sounding and survey data, and any deviations from the DAPR* are included in this descriptive report. *Concur. *Included with survey deliverables.*

B 1. EQUIPMENT AND VESSELS

Multibeam echosounder, side-scan sonar, and sound speed data were acquired by NOAA Ship *Thomas Jefferson*. Vessel configurations, equipment operation and data acquisition and processing were consistent with specifications described in the DAPR. *Concur.*

B 2. QUALITY CONTROL* **See also H-Cell Report*

B 2.1 System Certification and Calibration

Refer to NOAA Ship *Thomas Jefferson*'s DAPR* and Hydrographic Systems Readiness Report 2009 (HSRR)** for a complete description of system integration and initial calibration results for equipment and sensors used for this survey. *Concur. *Included with survey deliverables. **Filed with original field records.*

B.2.2 Sounding Coverage

As per the Letter Instructions, this survey used side scan sonar and object detection multibeam. The wreck was located approximately 2.65 NM North West of the charted wreck PA and 1NM North West of the AWOIS coordinates. Ten multibeam lines were acquired over the wreck, providing coverage from all angles. As the wreck was located on the first pass, it was deemed unnecessary to survey the assigned radius around the AWOIS location. *Concur.*

B 2.3 Crosslines

Crosslines were not collected during the course of the survey since multiple lines from different angles were acquired over the wreck. As per email dated 10 Sept 2009 from AHB and included in Appendix V*, quality control was performed using the standard deviation layer of the survey's CUBE surface. Areas of unusually high standard deviation were investigated and resolved in processing, except where caused by areas of high bathymetric relief or as described in Section 2.5 Systematic Errors. *Concur. *Included with survey deliverables.*

B 2.4 Junctions and Prior Surveys* **See also H-Cell Report*

No contemporary surveys junction with F00584. *Concur.*

B 2.5 Systematic Errors

No significant systematic errors were observed in the Multibeam data. Positioning of the selected Side Scan contacts shows high variability, and could not be resolved in processing. However, this error does not affect the multibeam positioning of the least depth on the wreck, selected as the primary feature location. *Concur.*

B 3. CORRECTIONS TO ECHO SOUNDING

HDCS sounding data were reduced to mean lower-low water (MLLW) using verified water levels from station Atlantic City, NJ (853-4720) approximately 150NM South West from the survey area. Verified water levels were applied on 12/9/2009 using final zoning as provided by CO-OPS and illustrated in Figure 2. *Concur.*

All other datum reduction procedures conform to those outlined in the DAPR*. *Concur. *Included with survey deliverables.*

All methods and instruments used for sound velocity correction were as described in the DAPR*. A table detailing all sound velocity casts is located in Separate II** of this Descriptive Report.

Sound velocity corrections for this survey were applied using only data from the SeaBird 19+ CTD. Application in CARIS HIPS was nearest in time. *Concur. *Included with survey deliverables. **Filed with original field records.*

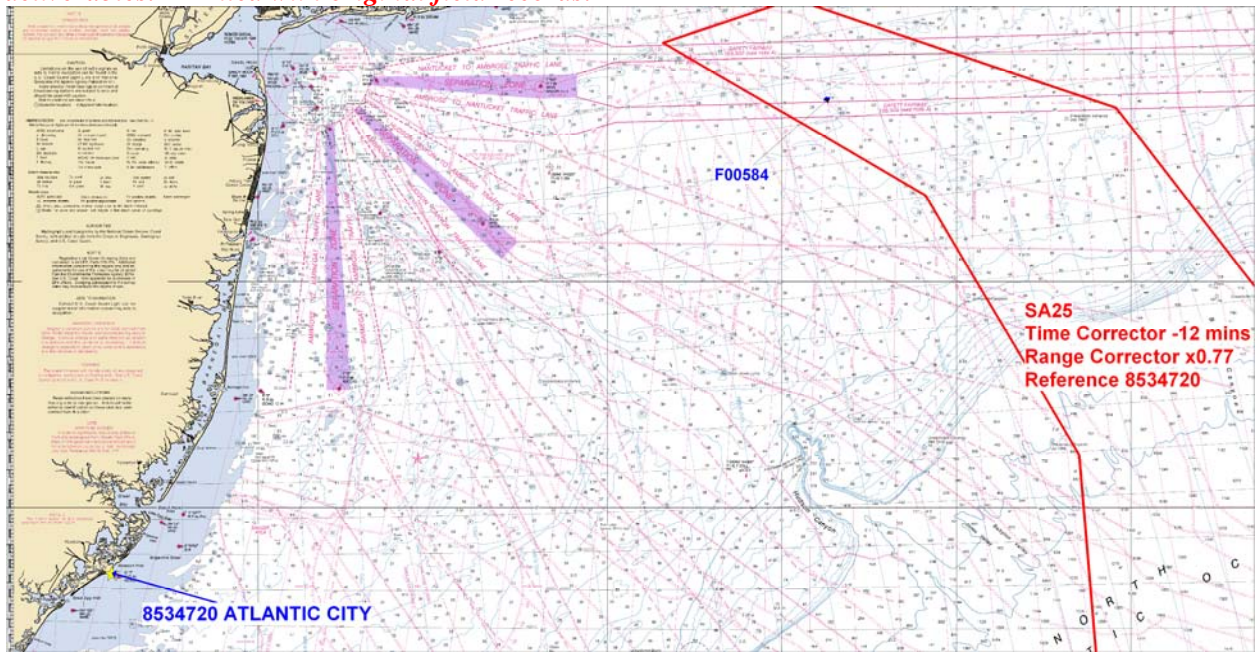


Figure 2: Tide Zone

B 4. DATA PROCESSING* **See also H-Cell Report*

B 4.1 Total Propagated Error

TPE values for Sound Speed were estimated to be 4 m/s for water column measurements and 0.21 m/s for the Surface Sound Velocimeter. The estimated tidal error contribution to the total survey error budget in the survey area was .20 meters as estimated at the at the 95% confidence level, and includes the estimated gauge measurement error and tidal zoning error. See Appendix IV*, F00584_Tide_Range_Analysis.xls for tide values and analysis. These values were calculated for all MBES data immediately following CARIS Merge. *Concur. *Included with survey deliverables.*

B 4.2 BASE Surfaces and Mosaics

Table 4 describes all BASE surfaces and mosaics submitted as part of Survey F00584. The projection used for cartographic products and grids is UTM Zone 18 North. *Concur*

<i>Name of Fieldsheet</i>	<i>Resolution</i>	<i>Type</i>	<i>Purpose</i>
F00584_Cube_NOAA_1m_Final	1m	CUBE	General Bathymetry

F00584_Mosaic_100	1m	SS Mosaic	Coverage
-------------------	----	-----------	----------

Table 3: Base surfaces/Mosaics

The Cube surface was computed using the Combined Uncertainty and Bathymetry Estimator (CUBE) algorithm. The CUBE configuration was set to NOAA_1m for the general bathymetry surface, providing object detection resolution. Refer to the 2009 Data Acquisition and Processing Report*, 2009 Field Procedures Manual, and CARIS HIPS and SIPS User Guide** for further discussion. *Concur. *Included with survey deliverables. **Document published by CARIS, not included with survey deliverables.*

B 4.3 Data cleaning

The survey data was cleaned using the swath and subset editor tools in CARIS. All areas of the BASE surface that indicated a high standard deviation were examined and cleaned as required such that no residual errors exist in the surface that exceed the IHO order 1 depth accuracy requirements. *Concur.*

C. VERTICAL AND HORIZONTAL CONTROL* *See also H-Cell Report

As Per FPM section 5.2.3.2.3 guidance a HVCR report was not filed as no horizontal control stations were established by the field party for this survey. A summary of horizontal and vertical control for this survey follows. *Concur.*

C 1.1 Horizontal Control

The horizontal datum for this project is the North American Datum of 1983 (NAD83). Differential GPS (DGPS) was the sole method of positioning. Differential corrections from the U.S. Coast Guard beacon at Moriches, NY (293 kHz) were used during this survey. *Concur.*

No horizontal control stations were established by the field party for this survey. *Concur.*

C 1.2 Vertical Control

The vertical datum for this project is Mean Lower-Low Water (MLLW). The operating National Water Level Observation Network (NWLON) station at Atlantic City, NJ will serve as datum control for F00584. Verified water levels were applied to all sounding data. *Concur.*

A request for delivery of final approved (verified) tides for this survey was forwarded to N/OPS1 on November 17, 2009. *Concur.*

D. RESULTS AND RECOMMENDATIONS* *See also H-Cell Report

D.1 Chart and ENC Comparison

Sounding data were compared to chart 12300, 47th Ed., May/08 and corrected to USCG LNM through May 20/08, and NTM through May 31/08 and Chart ~~42335~~**12353**, 18th Ed., Nov/03 and

corrected to USCG LNM through Oct 28/03, and NTM through Nov 08/03. No significant changes were noted in the common areas. As the ENC is digitized from the raster, no further comparison was made to the ENC. *Concur.*

D.2 Additional Results

D.2.1 Automated Wreck and Obstruction Information Service (AWOIS) Items

AWOIS # 1579 “Shipwreck-Coimbra” was the assigned target within the survey area, and was found. See Appendix II* for complete feature information. *Concur. *Included with survey deliverables. *See also Appendix V: Supplemental Survey Records and Correspondence.*

D.2.4 Shoreline

There is no shoreline within the sheet limits of F00584. *Concur.*

D.2.5 Charted Features

There is one charted features in the vicinity of the survey area, which is addressed by the survey. *Concur.*

D.2.6 Charted Pipelines and Cables

A charted cable crosses the survey area, but was not observed in the multibeam data. The hydrographer has no recommendations regarding this cable. *Concur.*

D.2.7 Bridges, Ferry Routes, and Overhead Cables

There are no ferry routes, bridges, or overhead cable crossings within the limits of the survey. *Concur.*

D.3 Dangers to Navigation and Shoals

D 3.1 Dangers to Navigation

No dangers to navigation were found or reported to the NOAA’s Office of Coast Survey. *Concur.*

D 3.2 Shoals

No shoals were observed in this survey. *Concur.*

D.4 Aids to Navigation

There were no aids to navigation in the survey area. *Concur.*

D.5 Coast Pilot Information

The Hydrographer has no recommendations for changes or addenda to the Coast Pilot. *Concur.*

D.6 Miscellaneous

Bottom Samples

No bottom samples were collected during this survey. *Concur.*

Environmental Conditions and Notes

No unusual environmental conditions were observed during this survey. *Concur.*

D.7 Adequacy of Survey

This survey is considered complete and adequate to supersede charted depths within the common area as per requirements specified in the Project Letter Instructions.

Summary and Recommendations for Additional Work

Overall, the mission was accomplished and wreck was found. A wreck location (chartlet, see Appendix V*) was provided to the NOAA Navigation Manager, Northeast as well as the Scientific Coordinator, NOAA's Office of Response and Restoration, and no further deliverables have been requested. As per the Project instructions, Special data handling requirements, AHB shall notify mellissa.madrigal@noaa.gov when the data is available on NGDC's website. *Do not concur, chartlet not included in Appendix V.*

E. APPROVAL


As Lead Hydrographer, I have ensured that standard field surveying and processing procedures were followed in producing this examination in accordance with the Office of Coast Survey Hydrographic Surveys Division's *Field Procedures Manual*, and NOS *Hydrographic Surveys Specifications and Deliverables*. 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. All records are forwarded for final review and processing to N/CS33, Atlantic Hydrographic Branch.


Survey F00584 is adequate to supersede charted soundings in their common areas. This is a survey that requires special handling protocol. Providing preliminary data and products as requested from USCG personnel. Without authorization from the USCG data shall not be released to the public.

The Data Acquisition and Processing Report for S-C944-TJ-09 is submitted separately and contains additional information relevant to this survey.

Approved and Forwarded:


 Mark Blankenship
2009.12.11 09:03:58
-05'00'

LT Mark Blankenship, NOAA
Field Operations Officer

 Digitally signed by Shepard
Smith
Date: 2009.12.11 09:48:55
-05'00'

CDR Shepard M. Smith, NOAA
Commanding Officer

In addition, the following individuals were also responsible for overseeing data acquisition and processing of this survey:

Survey Manager:  daniel wright
2009.12.11
09:03:07 -05'00'

Daniel Wright
Chief Hydrographic Survey Tech, NOAA

Appendix I

Dangers to Navigation

None

Appendix II

Survey Features Report

1. AWOIS Items

-one

2. Charted Features

-one

3. Uncharted Features

-none

F00584 Survey Features Report

Registry Number: F00584
State: New York
Locality: North Atlantic Ocean
Sub-locality: 28 NM Southeast of Shinnecock Inlet
Project Number: S-C944-TJ-09
Survey Date: 11/10/2009

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
12353	18th	11/01/2003	1:80,000 (12353_1)	USCG LNM: 06/24/2008 (07/14/2009) CHS NTM: None (04/24/2009) NGA NTM: 02/27/1999 (07/25/2009)
12300	47th	05/01/2008	1:400,000 (12300_1)	USCG LNM: 07/14/2009 (07/14/2009) CHS NTM: None (05/29/2009) NGA NTM: 05/21/2005 (07/25/2009)
13006	34th	05/01/2007	1:675,000 (13006_1)	[L]NTM: ?
5161	13th	10/01/2003	1:1,058,400 (5161_1)	[L]NTM: ?
13003	49th	04/01/2007	1:1,200,000 (13003_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	Wreck "Coimbra"	Wreck	40.50 m	40° 24' 04.9" N	072° 22' 14.1" W	---

1 - DR_Charted

1.1) Wreck "Coimbra"

Survey Summary

Survey Position: 40° 24' 04.9" N, 072° 22' 14.1" W
Least Depth: 40.50 m (= 132.87 ft = 22.146 fm = 22 fm 0.87 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) ± 1.086 m ; TVU (TPEv) ± 0.612 m
Timestamp: 2009-314.01:20:49.382 (11/10/2009)
Survey Line: f00584 / tj_s222_reson7125_stbd / 2009-314 / 048_0119
Profile/Beam: 361/37
Charts Affected: 12353_1, 12300_1, 13006_1, 5161_1, 13003_1

Remarks:

Wreck "Coimbra" found with MB and SSS.

Feature Correlation

Address	Feature	Range	Azimuth	Status
f00584/tj_s222_reson7125_stbd/2009-314/048_0119	361/37	0.00	000.0	Primary
f00584/tj_s222_klein5000_sss100/2009-314/41_091110022300	0001	32.67	099.3	Secondary (grouped)
f00584/tj_s222_klein5000_sss100/2009-314/48_091110023500	0001	74.73	253.5	Secondary (grouped)
f00584/tj_s222_klein5000_sss100/2009-314/40_091110021200	0001	119.77	280.2	Secondary (grouped)
ChartGPs - Digitized	2	1941.13	327.4	Secondary (grouped)
ChartGPs - Digitized	1	4973.28	313.8	Secondary (grouped)

Hydrographer Recommendations

Revise charted wreck.

Cartographically-Rounded Depth (Affected Charts):

133ft (12353_1)

22fm (12300_1, 13006_1, 13003_1)

41m (5161_1)

S-57 Data

Geo object 1: Wreck (WRECKS)

Attributes: CATWRK - 1:non-dangerous wreck

QUASOU - 6:least depth known

SORDAT - 20091110

SORIND - US,US,graph,F00584

TECSOU - 3:found by multi-beam

VALSOU - 40.500 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Delete charted wreck PA at 40-22-11.10N, 072-19-42.85W. Add non-dangerous wreck, least depth 133 ft, at the survey position.

Feature Images

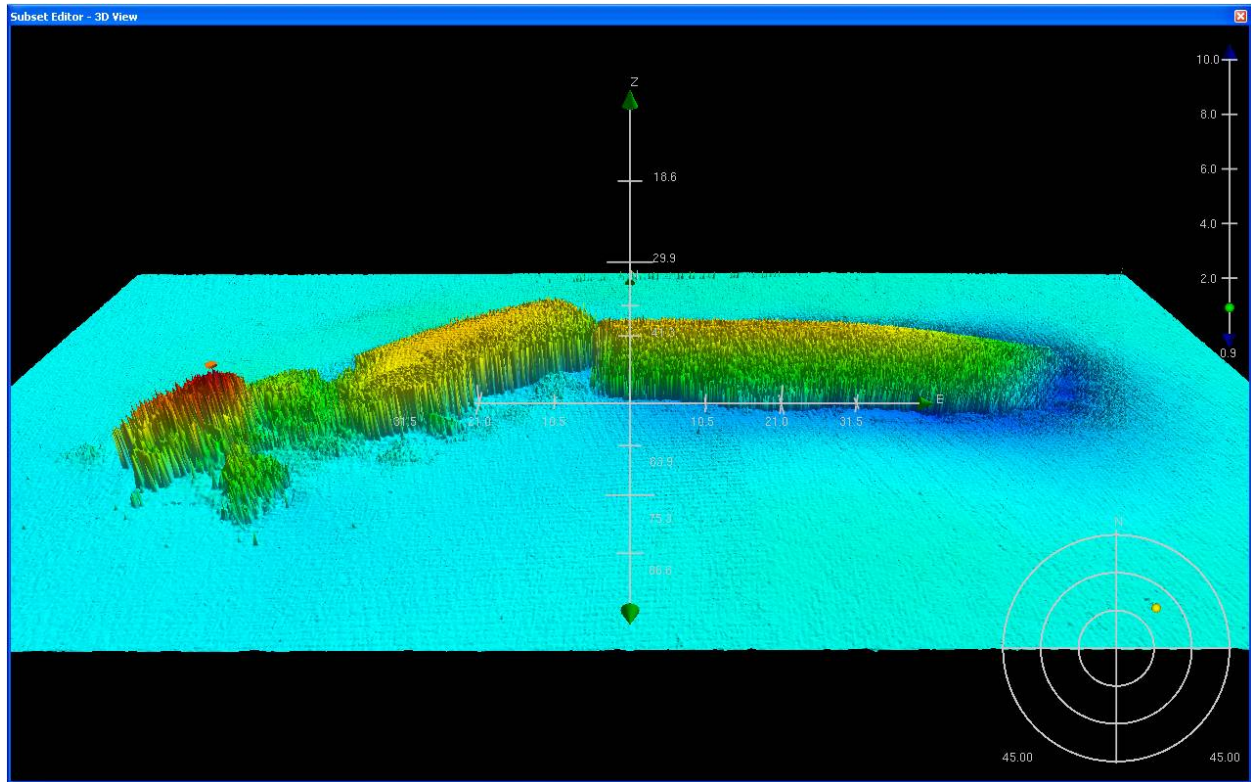


Figure 1.1.1



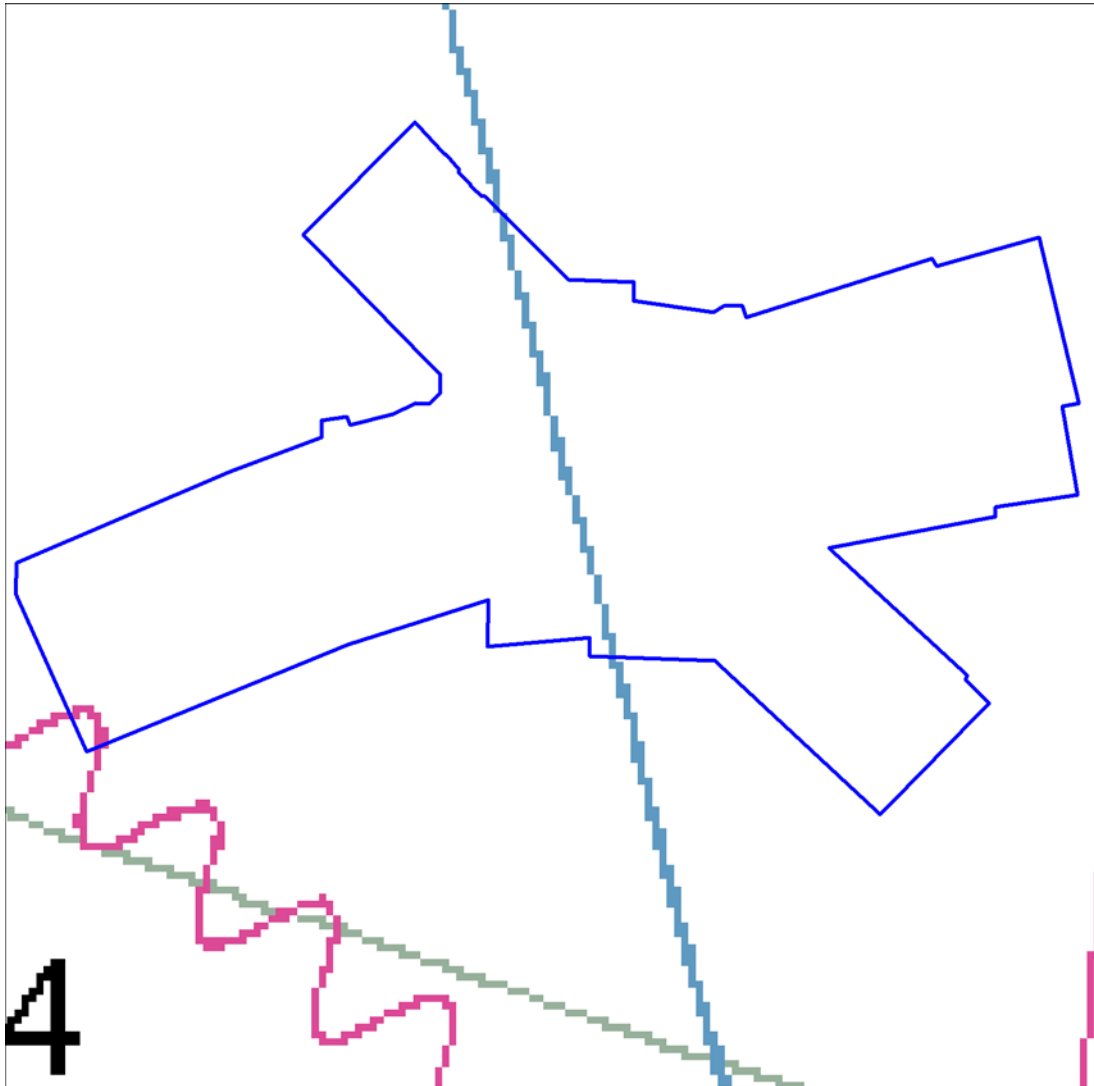
Figure 1.1.2



Figure 1.1.3

Appendix III

Progress Sketch



NOAA Ship THOMAS JEFFERSON															
FY 2009 Project Statistics															
Project	Location	Month/Year	LNM YBES		LNM MB		LNM SSS		LNM Combo ^A		Combo Type ^A		Items Investigated	Tide Gauges Installed / Removed	Bottom Samples
			Ship	Launch	Ship	Launch	Ship	Launch	Ship	Launch	Ship	Launch			
CY 2009															
S-D947	Thimble Shoals, Va	Nov-09	0	0	122	18	0	0	0	57	0	0	0	0	0

Appendix IV

Tides and Water Levels

1. Request for Approved Tides

2. Final Tide Notes



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NOAA Ship THOMAS JEFFERSON (MOA-TJ)
439 West York St
Norfolk, VA 23510-1145

November 17, 2009

MEMORANDUM FOR: Chief, Requirements and Development Division, N/OPS1

FROM: CDR Shepard M. Smith, NOAA Ship THOMAS JEFFERSON (MOA-TJ)

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 the following:

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.: S-C944-TJ-09
Registry No.: F00584
State: New York
Locality: North Atlantic Ocean
Sublocality: 28 NM Southeast of Shinnecock Inlet

Attachments containing:

- 1) an Abstract of Times of Hydrography,
- 2) digital MID MIF files of the track lines from Pydro

cc: N/CS33



Year_DOY	Min Time	Max Time
2009_313	23:53:22	23:57:32
2009_314	00:04:30	02:16:02



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Ocean Service
Silver Spring, Maryland 20910

TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE : December 4, 2009

HYDROGRAPHIC BRANCH: Atlantic
HYDROGRAPHIC PROJECT: S-C944-TJ-2009
HYDROGRAPHIC SHEET: F00584

LOCALITY: Atlantic Ocean
TIME PERIOD: November 9 -10, 2009

TIDE STATION USED: 853-4720 Atlantic City
Lat. 39° 21.3'N Long. 74° 25.1' W

PLANE OF REFERENCE (MEAN LOWER LOW WATER): 0.000 meters
HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 1.276 meters

REMARKS: RECOMMENDED ZONING

Preliminary zoning is accepted as the final zoning for project S-C944-TJ-2009, F00584, during the time period between November 9 and 10, 2009.

Please use the zoning file "C944TJ2009CORP" submitted with the project instructions for S-C944-TJ-2009. Zone SA25 is the applicable zone for F00584.

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).

Peter J. Stone

Digitally signed by Peter J. Stone
DN: cn=Peter J. Stone, o=Oceanographic Division,
ou=NOAA/NOS/CO-OPS, email=peter.stone@noaa.gov,
c=US
Date: 2009.12.07 18:04:25 -05'00'

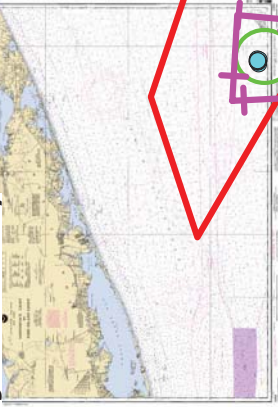
CHIEF, OCEANOGRAPHIC DIVISION





UNITED STATES - EAST COAST
APPROACHES TO NEW YORK
NANTUCKET SHOALS TO FIVE FATHOM BANK

**Final Tidal Zoning for
S-C944-TJ-2009, F00584 Atlantic Ocean
(Preliminary as Final)**



SA25
Time Corrector -12 mins
Range Corrector x0.77
Reference 8534720

8534720 ATLANTIC CITY

Appendix V

Supplemental Survey Records & Correspondence

Subject: Re: [Fwd: [Fwd: NOAA survey assistance]]

From: "james.m.crocker" <James.M.Crocker@noaa.gov>

Date: Mon, 09 Nov 2009 10:39:37 -0500

To: _NMAO MOA CO Thomas Jefferson <CO.Thomas.Jefferson@noaa.gov>, _NMAO MOA FOO Thomas Jefferson <FOO.Thomas.Jefferson@noaa.gov>, Jeremy McHugh <Jeremy.McHugh@noaa.gov>

CO, FOO,

We heard back from the USCG and they only have two positions on the wreck:
- from the diver that recently came up covered in oil (40 22 N, 072 20 W), which is the position in the request email
- from the last time that the USCG was on the scene in 1967 (40 23 N, 072 21.5 W). They don't know the position with any more precision or accuracy than that.

From this information the USCG reported may be the best position to start. I attached a copy of the initial incident report that started this.

Only to confuse the matter, there is one more historical position reported even further to the north at 40° 25' , 72° 20'. Most dive sites that discuss this wreck state it was found by locating the sheen on the surface. Not the best thing to find at night.

Wish I could give you more information and good luck with the search.

Regards,
Jim

james.m.crocker wrote:

CO, FOO,

Below is the original USCG request. We are currently trying to get a better position from them. The position in the email is the original AWOIS position and plots next to the wreck PA.

The AWOIS position is the best position we have. I attached the MS Access AWOIS info file for your reference and place history below. The best position is 40/23/12.37N, 72/21/28.3W

I found this from a web search (http://www.marinebasin.com/?doc=fishing_spots.html):
coimbra wreck 40-24.08 72-20.32 1938.0 43576.0

There is a bit of a discrepancy between the AWOIS position and the web position. I recommend you start at the AWOIS position then try the fishing position before trying the other AWOIS positions listed in the history. We'll send you any new information we get and PI on Monday.

Regards,
Jim

HISTORY NM4/42
NM49/42

DESCRIPTION
24 NO.310; TANKER, 6768 GT,SUNK 1/15/42 BY SUBMARINE; POS. ACCURACY 1-3 ì
MILES; POS. LAT. 40-20-00N, LONG. 72-20-00W. 27 NO.199;
TKR 3976 NT, SUNK 1/15/42 AT LAT.40-22N, LONG.72-20W. **** POLYTECNIC INSTITUTE OF
NY--PROPOSAL FOR RECOVERY OF OIL, 1975; ì
REPORTS WK. IN 3 SECTIONS, STERN HEELED AT 80 DEG, MIDSHIPS SECTION INCLINED ì
AT 75 DEG TO PORT AND PARTIALLY BURIED, BOW STANDING UPRIGHT.ì
VESSEL 6798 GT, 433 FT L, 33 FT D, BUILT 1937, OWNED BY SOCONY-VACUUM ì
COMPANY LTD. **** USCG,
SUNKEN TANKER PROJECT REPORT, 1967--LOCATED AT POS.40-23-12N ì
72-21-30W, DIVERS OBSERVE VESSEL IN 3 SECTIONS AT 182 FT DEPTH, METAL ì
IN EXCELLENT CONDITION W/LITTLE DETERIORATION (CG POS. NOT CONSIDERED ì
RELIABLE DUE TO LARGE DIFFERENCES BETWEEN CG AND OTHER SOURCES OF POS. ì
FOR OTHER WKS. IN REPORT. 1967 POS MAY BE BASED ON EARLIER AND LESS ì

ACCURATE LORAN-C CHARTS)
RATES PROVIDED BY MR. RICHARD TARACKA, GREENWICH, ì
CT. POLICE DEPARTMENT, TEL NO 203-622-8020; 9960-X 26204.0, ì
9960-Y 43576.3. (ENTERED MSM 4/90)

195 LORAN C

----- Original Message -----

Subject: NOAA survey assistance
Date: Fri, 23 Oct 2009 16:08:11 -0400
From: Burke, Kevin CAPT <Kevin.C.Burke@uscg.mil>
To: Steven.Barnum@noaa.gov, John.Lowell@noaa.gov
CC: Jeffrey.Ferguson@noaa.gov, James.M.Crocker@noaa.gov, "Santiago, Nelson LT" <Nelson.R.Santiago@uscg.mil>, "Moser, David LTJG" <David.P.Moser@uscg.mil>, "Doucette, Eric CDR" <Eric.J.Doucette@uscg.mil>

Greetings CAPT Barnum and CAPT Lowell,

Per conversations with Mr. Ed Levine, it is understood that the R/V Thomas Jefferson is out of NYC performing a survey until mid-November. At the present time, USCG Sector Long Island Sound is carrying out an initial assessment of the potential environmental impact that the M/T Coimbra, an oil tanker sunk during WWII, could have in our Area of Responsibility. The ship was sunk by a German U-boat at Latitude: 40° 22' N; Longitude: 072° 20' W; 33 miles south of Shinnecock Inlet. If possible, could your ship perform a high resolution multi-beam side scan sonar survey of the SS Coimbra wreck during its mission work? It will help us in determining our next step forward. If you have any questions please feel free to contact me or my project officer, LT Santiago 203 468 4433.

R/

CAPT Kevin Burke
Deputy Sector Commander
Sector Long Island Sound

CDR James Crocker, NOAA <James.m.crocker@noaa.gov>
Chief, Operations Branch
Hydrographic Surveys Division
NOAA

Coimbra Incident Report.pdf

Content-Type: application/adobe
Content-Encoding: base64

Subject: Re: Coimbra

From: Ed Levine <Ed.Levine@noaa.gov>

Date: Tue, 10 Nov 2009 06:45:05 -0500

To: "co.thomas.jefferson" <CO.Thomas.Jefferson@noaa.gov>

CC: James Crocker <James.M.Crocker@noaa.gov>, Jeffrey Ferguson <Jeffrey.Ferguson@noaa.gov>, FOO.Thomas.Jefferson@noaa.gov, daniel wright <Daniel.Wright@noaa.gov>, Joeckel John MST2 <John.R.Joeckel@uscg.mil>, Eric CDR Doucette <Eric.J.Doucette@uscg.mil>, glen Watabayashi <Glen.Watabayashi@noaa.gov>, John Tarpley <john.tarpley@noaa.gov>, Doug Helton <Doug.Helton@noaa.gov>, Scott Lundgren <Scott.R.Lundgren@uscg.mil>

Thankx for the detective work. As I had suspected, the position was not "on target." The diver said he would go out tot he area and look for the sheen. Congratulations to the OO for the excellent horse trading.

Any chance you saw or smelled any oil in the area?

Will be looking forward to viewing the fruits of your labors.

Regards and much thankx -- ED

On Nov 10, 2009, at 6:37 AM, co.thomas.jefferson wrote:

All,

We found Coimbra on the first pass last night, but not at any of the positions provided by NOAA or USCG. Our Operations Officer, LT Blankenship, got in touch with a dive site, promised them high res sonar images in exchange for a good position, and we nailed it. I will send images later this morning after watch and drills. We would not have found it in the time allotted otherwise, since it was in a low probability area based on the other positions.

Best,

Shep

CDR Shepard Smith, NOAA
Commanding Officer
NOAA Ship Thomas Jefferson
439 West York St
Norfolk, VA 23510
757-647-0187

Ed Levine wrote:

Great news. Glad that you were able to accomplish your assigned tasks and had room on your plate for an extra helping.

I have copied the USCG to solicit their input on the data products. To be honest, I am not sure what the best format will be. The PDFs sound great. Additionally, if you can get accurate positions of the pieces of the wreck that would be fantastic. You might also want to corroborate that the wreck is correct on the chart. There seemed to be some discrepancy with what the diver stated and the chart.

Additionally, if you can make any surface observations on oil sheens or slicks over the site that would be helpful. Specifically, how far off the wreck are they surfacing, what direction is it tending, length and width, and any observational characteristics of the oil plume.

Thank you VERY MUCH and good luck with the surveying and a smooth sail home.

Regards -- ED

On Nov 8, 2009, at 5:21 PM, co.thomas.jefferson wrote:

Ed,

It looks good for us to go to Coimbra tomorrow. We will finish up our surveys here at about noon and will be on site at Coimbra by about 1900. We plan to locate the wreck first with multibeam, and map out the wreck site and related debris with both multibeam and towed side scan sonar.

Do you have any idea of how the USCG would like to receive the data? We will make some pdf plots for ready reference, and can provide some 3D perspectives and a digital terrain model. Can you think of anything else they might want? We have found that if we identify the deliverables up front it helps to avoid an endless do loop later.

Best,

Shep

--

CDR Shepard Smith, NOAA
Commanding Officer
NOAA Ship Thomas Jefferson
439 West York St
Norfolk, VA 23510
757-647-0187

NATIONAL RESPONSE CENTER 1-800-424-8802

*** For Public Use ***

Information released to a third party shall comply with any applicable federal and/or state Freedom of Information and Privacy Laws

Incident Report # 921309

INCIDENT DESCRIPTION

**** THIS IS A POTENTIAL RELEASE ****

*Report taken at 10:44 on 22-OCT-09

Incident Type: VESSEL

Incident Cause: VESSEL SINKING

Affected Area:

The incident was discovered on 19-OCT-09 at 12:00 local time.

Affected Medium: UNKNOWN

SUSPECTED RESPONSIBLE PARTY

XX

Type of Organization: UNKNOWN

INCIDENT LOCATION

33 MILES SOUTH OF SHINNECOCK INLET County: SUFFOLK

State: NY

Latitude: 40 Degrees 22' " N

Longitude: 72 Degrees 20' " W

33 MILES SOUTH OF SHINNECOCK INLET

POTENTIALLY RELEASED MATERIAL(S)

CHRIS Code: OUN Official Material Name: UNKNOWN OIL

Also Known As:

Qty Released: 0 GALLON(S)

DESCRIPTION OF INCIDENT

UNITED STATES COAST GUARD SECTOR LONG ISLAND SOUND RECEIVED A REPORT FROM A DIVE CHARTER CAPTAIN OF AN OIL DISCHARGE IN THE GENERAL VICINITY OF A SUNKEN VESSEL APPROXIMATELY 33 MILES SOUTH OF SHINNECOCK INLET. THE LOCATION REPORTED IS CONSISTENT WITH A KNOWN WWII ERA WRECK, M/T COIMBRA, WHICH WAS SUNK IN 1942 BY A GERMAN SUBMARINE. CG SECTOR LONG ISLAND SOUND REQUESTED AN OVERFLIGHT FROM CG DISTRICT 1 WHICH SPOTTED A 650X10 YARD PATCHY AREA OF LIGHT SHEENING APPROXIMATELY 2.5 NM NORTH OF THE VESSEL'S POSITION. A SUBSEQUENT SURFACE SEARCH BY MSD CORAM AND STA SHINNECOCK TO OBTAIN A SAMPLE OF THE OIL FOUND NO SHEEN AT THE VESSEL LOCATION OR THE AERIAL OBSERVED SHEEN LOCATION. CG SECTOR LONG ISLAND SOUND HAS GATHERED INFORMATION ON THE VESSEL AND IS CURRENTLY DISCUSSING ASSESSMENT OPTIONS WITH CG D1 INCIDENT MANAGEMENT, NOAA AND OTHER PARTNER AGENCY PERSONNEL TO DETERMINE THE BEST COURSE OF ACTION TO ASSESS THE INTEGRITY OF THE VESSEL AND ITS POTENTIAL THREAT TO THE ENVIRONMENT.

INCIDENT DETAILS

Platform Rig Name:

Platform Letter:

Location Area ID:

Location Block ID:

OCSG Number:

OCSF Number:

State Lease Number:

Pier Dock Number:

Berth Slip Number:

---VESSEL INFORMATION---

Name: COIMBRA Number: Aground: NO

Flag: UNITED KINGDOM

Length: 423 Breadth: 60 Draught:

Type: TANKER
 Hull Construction:
 Fuel Capacity:
 Fuel on Board:
 Cargo Capacity:
 Cargo on Board:

DAMAGES

Fire Involved: NO Fire Extinguished: UNKNOWN
 INJURIES: NO Hospitalized: Empl/Crew: Passenger:
 FATALITIES: NO Empl/Crew: Passenger: Occupant:
 EVACUATIONS: NO Who Evacuated: Radius/Area:

Damages: NO

<u>Closure Type</u>	<u>Description of Closure</u>	<u>Length of Closure</u>	<u>Direction of Closure</u>
Air:	N		
Road:	N		Major Artery: N
Waterway:	N		
Track:	N		

Passengers Transferred: NO
 Environmental Impact: UNKNOWN
 Media Interest: NONE Community Impact due to Material:

REMEDIAL ACTIONS

CG AIRCRAFT OVERFLIGHT ASSESSMENT FOUND A FAINT SHEEN 2.5 NM FROM WRECK SITE.
 SUBSEQUENT CG SURFACE SEARCH COULD NOT LOCATE THE SHEEN AT THE WRECK SITE OF THE
 PREVIOUSLY REPORTED SHEEN SITE.
 Release Secured: UNKNOWN
 Release Rate:
 Estimated Release Duration:

WEATHER

ADDITIONAL AGENCIES NOTIFIED

Federal:
 State/Local:
 State/Local On Scene:
 State Agency Number:

NOTIFICATIONS BY NRC

ATLANTIC STRIKE TEAM (MAIN OFFICE)
 22-OCT-09 11:14
 BRADLEY INTNL AIRPORT TSA/DHS (BIA TSA/DHS SECURITY)
 22-OCT-09 11:14
 VESSEL RESPONSE PLAN PROGRAM (CG-3PCV-1)
 22-OCT-09 11:14
 DHS NOC (NOC)
 22-OCT-09 11:14
 USCG ICC (ICC ONI)
 22-OCT-09 11:14
 CG INVESTIGATIVE SERVICE HQ (WFO)
 22-OCT-09 11:14
 CT DEPT OF EMERGENCY MGMT (COMMISSIONER)
 22-OCT-09 11:14
 DOT CRISIS MANAGEMENT CENTER (MAIN OFFICE)
 22-OCT-09 11:14
 NATIONAL INFRASTRUCTURE COORD CTR (MAIN OFFICE)
 22-OCT-09 11:14
 NJ OFC HMLND SECURITY & PREPAREDNES (COMMAND CENTER)

22-OCT-09 11:14
NJ STATE POLICE (MARINE SERVICES BUREAU)
22-OCT-09 11:14
NOAA RPTS FOR NY (MAIN OFFICE)
22-OCT-09 11:14
BUREAU TOXIC SUBSTANCE R. WILBURN (MAIN OFFICE)
22-OCT-09 11:14
NY STATE DEC SPILL HOTLINE (MAIN OFFICE)
22-OCT-09 11:14
RHODE ISLAND FUSION CENTER (COMMAND CENTER)
22-OCT-09 11:14
SECTOR LONG ISLAND SOUND (COMMAND CENTER)
22-OCT-09 11:17
USCG DISTRICT 1 (COMMAND CENTER)
22-OCT-09 11:14
WEB REPORT (WEB REPORT SUBMITTER)
22-OCT-09 11:14

ADDITIONAL INFORMATION

*** END INCIDENT REPORT # 921309 ***

Subject: Re: Crossline comparison

From: Chris van Westendorp <Christiaan.VanWestendorp@noaa.gov>

Date: Thu, 10 Sep 2009 13:00:35 -0400

To: "mark.blankenship" <Mark.Blankenship@noaa.gov>

CC: LCDR Rick Brennan <Richard.T.Brennan@noaa.gov>, Castle Parker <Castle.E.Parker@noaa.gov>, Edward Owens <Edward.Owens@noaa.gov>, LT Jasper Schaer <jasper.schaer@noaa.gov>, CDR Shep Smith <Shep.Smith@noaa.gov>, Daniel Wright <Daniel.Wright@noaa.gov>

Mark,

Per 5.1.4.3 of the HSSD, AHB authorizes TJ to use the Standard Deviation layer to conduct surface difference comparison and analysis on future survey submissions of multibeam data. This meets the crossline comparison requirement laid out in HSSD.

Please let me know if you have any questions or need for further clarification.

R/

LCDR Chris van Westendorp, NOAA

mark.blankenship wrote:

Chris,

You mentioned in the meeting today that AHB was not going to require the multiple CUBE surface comparison, instead allowing us to use a single surface standard deviation layer to do our checks with. Is there any memo coming out for that?

Mark

LCDR Chris van Westendorp <christiaan.vanwestendorp@noaa.gov>

Atlantic Hydrographic Branch

NOAA OCS

AHB COMPILATION LOG

General Survey Information	
REGISTRY No.	F00584
PROJECT No.	S-C944-TJ-09
FIELD UNIT	NOAA SHIP THOMAS JEFFERSON
DATE OF SURVEY	20091110
LARGEST SCALE CHART	<i>12353_1, edition 18, 20031101, 1:80,000</i>
ADDITIONAL CHARTS	<i>12300_1, edition 48, 20100601, 1:400,000</i>
SOUNDING UNITS	FEET
COMPILER	Matthew J. Wilson

Source Grids	File Name
	H:\Compilation\F00584_C944_TJ\AHB_F00584\SAR Final Products\GRIDS F00584_Cube_NOAA_1m_Final.csar
Surfaces	File Name
	H:\Compilation\F00584_C944_TJ\AHB_F00584\COMPILE\Working
<i>Combined</i>	N/A
<i>Interpolated TIN</i>	N/A
<i>Shifted Interpolated TIN</i>	N/A
Final HOBs	File Name
	H:\Compilation\F00584_C944_TJ\AHB_F00584\COMPILE\Final_Hobs
<i>Survey Scale Soundings</i>	F00584_SS.hob
<i>Chart Scale Soundings</i>	N/A
<i>Contour Layer</i>	N/A
<i>Feature Layer</i>	F00584_Features.hob
<i>Meta-Objects Layer</i>	F00584_MetaObjects.hob
<i>Blue Notes</i>	F00584_BlueNotes.hob
<i>ENC Retain Soundings</i>	N/A

Meta-Objects Attribution	
Acronym	Value
M_COVR	
CATCOV	1 – coverage available
SORDAT	20091110
SORIND	US,US,graph,F00584
M_QUAL	
CATZOC	6 – zone of confidence U (data not assessed)
INFORM	NOAA Ship Thomas Jefferson
POSACC	10.0 m
SORDAT	20091110
SORIND	US,US,graph,F00584
SUREND	20091110
SURSTA	20091110
DEPARE	
DRVALV 1	131.234 ft
DRVALV2	190.289 ft
SORDAT	20091110
SORIND	US,US,graph,F00584

M_CSCL	
CSCALE	N/A
SORDAT	N/A
SORIND	N/A

SPECIFICATIONS:

- I. COMBINED SURFACE:
 - a. Number of SAR Final Grids: 1
 - b. Resolution of Combined (m): N/A

- II. SURVEY SCALE SOUNDINGS (SS):
 - a. Attribute Name: Depth
 - b. Selection criteria: Radius, Shoal bias
 - c. Radius value is: 1mm at chart scale
 - i. Use single-defined radius: 80.0m
 - ii. And/Or use radius table file:
 - d. Queried Depth of All Soundings
 - i. Minimum: 40.5 m
 - ii. Maximum: 53.354 m

- III. INTERPOLATED TIN SURFACE:
 - a. Resolution (m): N/A
 - b. Interpolation method:
 - c. Shift value: *[only include applicable shift values]*
[-0.75 feet (And/Or) -0.75 fathoms]

- IV. CONTOURS:
 - a. Attribute Name: N/A
 - b. Use a Depth List:
 - c. Output Options:
 - i. Line Object:
 - ii. Value Attribute:

- V. FEATURES:
 - a. Number of Chart Features: 1 *[all features included in H-Cell]*
 - b. Number of Non-Chart Features: 0 *[all features submitted by field & not included in H-Cell]*

- VI. CHART SURVEY SOUNDINGS (CS):
 - a. Number of ENC CS Soundings: 0
 - b. Attribute Name:
 - c. Selection criteria:
 - d. Radius value is:
 - i. Use single-defined radius: X.XX m
 - ii. And/Or use radius table file:
 - iii. Enable Filter: Interpolated !=1
 - e. Number Survey CS Soundings: 0

- VII. NOTES:

[Type text]

**ATLANTIC HYDROGRAPHIC BRANCH
H-CELL REPORT to ACCOMPANY
SURVEY F00584 (2009)**

This H-Cell Report has been written to supplement and/or clarify the original Descriptive Report (DR) and pass critical compilation information to the cartographers in the Marine Chart Division. Sections in this report refer to the corresponding sections of the Descriptive Report.

B. DATA ACQUISITION AND PROCESSING

B.2 QUALITY CONTROL

The AHB source depth grid for the survey’s nautical chart update product was a 1m resolution BASE surface (*.CSAR). The survey scale soundings were created from the surface at a single defined radius of 1mm at the largest scale chart covering the respective area of the survey (Chart 12353 ~ 1:80,000). It was determined from the observed soundings that it was not necessary to update the chart with any of the sounding data—the chart will only be updated with the surveyed position of the wreck. Hence it was not necessary to create a chart sounding selection, or any of the preliminary products from which it is derived. Furthermore, it was determined that none of the existing charted contours in this area are affected by this survey, hence no depth contours were generated for this survey.

The compilation products (Final *.HOB files) for this survey are detailed in the F00584 AHB Compilation Log contained within this document. The Final HOB files include depth areas (DEPARE), soundings (SOUNDG), meta-objects (M_COVR, and M_QUAL), cartographic Blue Notes (\$CSYMB), and features (WRECKS).

As dictated by Hydrographic Technical Directive 2008-8, the Final HOB files were combined into two separate H-Cell files in S-57 format. Both S-57 files were exported from CARIS Bathy DataBASE in meters, and then converted from metric units into feet using CARIS HOM ENC 3.3. Quality assurance and topology checks were conducted using CARIS S-57 Composer 2.1 and DKART Inspector 5.1 validation tests.

The final H-Cell products are two S-57 files, in Lat/Long NAD-83. The contents of these two H-Cell deliverables are listed in the table below:

<u>TABLE 1</u> - Contents of H-Cell Files			
F00584_CS.000		Scale 1:80,000	
Object Class Types	Geographic	Cartographic	Meta
S-57 Object Acronyms	DEPARE	\$CSYMB	M_COVR
	WRECKS		M_QUAL
F00584_SS.000			
F00584_SS.000		Scale 1:5,000	
Object Class Types	Geographic		
S-57 Object Acronyms	SOUNDG		

B.2.4 Junctions and Prior Surveys

Survey F00584 (2009) does not junction with any recent or contemporary surveys. All survey depths compare within 2-3 feet of the charted soundings in closest proximity.

B.4 DATA PROCESSING

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

CARIS Bathy DataBase version 3.0/HF9
CARIS HIPS/SIPS version 7.0/SP2/HF5
CARIS S-57 Composer version 2.2
CARIS HOM ENC version 3.3/SP3/HF8
DKART Inspector version 5.1
HSTP Pydro version 10.11 (r3191)

C. HORIZONTAL AND VERTICAL CONTROL

The hydrographer makes adequate mention of horizontal and vertical control used for this survey in section C of the DR. The sounding datum for this survey is Mean Lower Low Water (MLLW), and the vertical datum is Mean High Water (MHW). Horizontal control used for this survey during data acquisition is based upon the North American Datum of 1983 (NAD83), UTM projection zone 18 North.

D. RESULTS AND RECOMMENDATIONS

D.1 CHART COMPARISON

12353 (18th Edition, Nov/03)

Shinnecock Light to Fire island Light
Corrected through NM 01/22/2011
Corrected through LNM 01/18/2011
Scale 1:80,000

12300 (48th Edition, Jun/10)

NY Approaches – Nantucket Shoals to Five Fathom Bank
Corrected through NM 01/22/2011
Corrected through LNM 01/18/2011
Scale 1:400,000

ENC COMPARISON

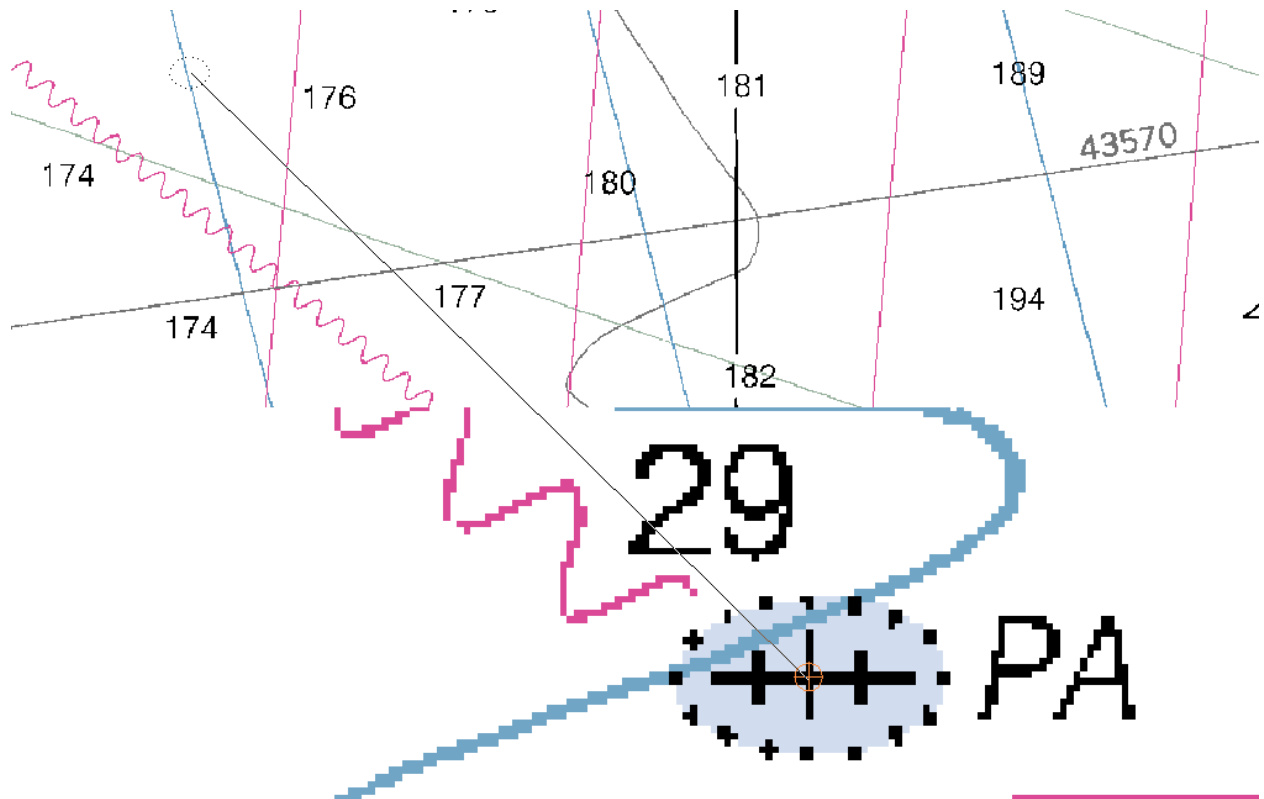
US4NY53M

Shinnecock Light to Fire Island Light
Edition 4
Application Date 2010/03/29
Issue Date 2010/03/29
Chart 12353

D.2 ADDITIONAL RESULTS

The charted hydrography originates with prior surveys and requires no further consideration. The hydrographer makes adequate chart comparisons in section D and Appendix I and II of the DR. The hydrographer recommends that any charted features not specifically addressed either in the H-Cell files or the Blue Notes should be retained as charted. The following is provided as additional clarification:

The COIMBRA wreck is currently charted only on Chart 12300. The updated position of this charted wreck was found during this survey is to be approximately 3nm to the northwest of its charted position, within the extents of Chart 12353.



Recommend to update the position of the charted wreck on Chart 12300, and to add the charted wreck to Chart 12353.

D.6 MISCELLANEOUS

Chart compilation was completed by Atlantic Hydrographic Branch personnel in Norfolk, Virginia. Compilation data will be forwarded to the Marine Chart Division in 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.7 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 files or the Blue Notes should be retained as charted. Refer to section D and Appendix I and II of the DR for further recommendations by the hydrographer.

APPROVAL SHEET
F00584

Initial Approvals:

The completed survey has been inspected with regard to survey coverage, delineation of depth contours, disposition of critical depths, cartographic symbolization, and verification or disapproval 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 H-Cell Report.

All final products have undergone a comprehensive review per the Hydrographic Surveys Division Office Processing Manual and are verified to be accurate and complete except where noted.

Matthew J. Wilson
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: _____
CDR Richard T. Brennan, NOAA
Chief, Atlantic Hydrographic Branch