

H12597

U.S. Department of Commerce
National Oceanic and Atmospheric Administration
National Ocean Survey

DESCRIPTIVE REPORT

Type of Survey: Basic Hydrographic Survey

Registry Number: H12597

LOCALITY

State(s): New Jersey

General Locality: New Jersey Coast and Vicinity, NJ

Sub-locality: Vicinity of Little Egg Inlet

2013

CHIEF OF PARTY
Jonathan L. Dasler, PE, PLS, CH

LIBRARY & ARCHIVES

Date:

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

REGISTRY NUMBER:

HYDROGRAPHIC TITLE SHEET

H12597

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(s): **New Jersey**

General Locality: **New Jersey Coast and Vicinity, NJ**

Sub-Locality: **Vicinity of Little Egg Inlet**

Scale: **40000**

Dates of Survey: **08/24/2013 to 04/02/2014**

Instructions Dated: **07/27/2013**

Project Number: **OPR-C308-KR-13**

Field Unit: **David Evans & Associates, Inc.**

Chief of Party: **Jonathan L. Dasler, PE, PLS, CH**

Soundings by: **ODOM CV-100 and RESON 8101**

Imagery by: **EdgeTech 4200-HF**

Verification by: **Atlantic Hydrographic Branch**

Soundings Acquired in: **meters at Mean Lower Low Water**

Remarks:

NAD83, UTM Zone 18, Meters, Times are UTC. The purpose of this contract is to provide NOAA with modern, accurate hydrographic survey data with which to update nautical charts of the assigned area.

The purpose of this survey is to provide contemporary surveys to update National Ocean Service (NOS) nautical charts. All separates are filed with the hydrographic data. Any revisions to the Descriptive Report (DR) generated during office processing are shown in bold red italic text. The processing branch maintains the DR as a field unit product, therefore, all information and recommendations within the body of the DR are considered preliminary unless otherwise noted. The final disposition of surveyed features is represented in the OCS nautical chart update products. All pertinent records for this survey, including the DR, are archived at the National Geophysical Data Center (NGDC) and can be retrieved via <http://www.ngdc.noaa.gov/>.

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Descriptive Report to Accompany Survey H12597

Project: OPR-C308-KR-13

Locality: New Jersey Coast and Vicinity, NJ

Sublocality: Vicinity of Little Egg Inlet

Scale: 1:40000

August 2013 - April 2014

David Evans & Associates, Inc.

Chief of Party: Jonathan L. Dasler, PE, PLS, CH

A. Area Surveyed

David Evans and Associates, Inc. (DEA) conducted hydrographic survey operations in the vicinity of Little Egg Inlet, New Jersey. Survey H12597 was conducted in accordance with the Statement of Work (June 20, 2013) and Hydrographic Survey Project Instructions (June 27, 2013).

The Hydrographic Survey Project Instructions reference the 2012 Hydrographic Surveys Specifications and Deliverables (HSSD) as the technical requirements for this project. To better align with the Hydrographic Surveys Division (HSD) advancements in standards, project OPR-C308-KR-13 surveys were performed using the 2013 HSSD. This modification was approved by HSD staff.

A.1 Survey Limits

Data were acquired within the following survey limits:

Northwest Limit	Southeast Limit
39° 33" 35.61' N 74° 21" 53.33' W	39° 22" 33.06' N 74° 13" 15.77' W

Table 1: Survey Limits

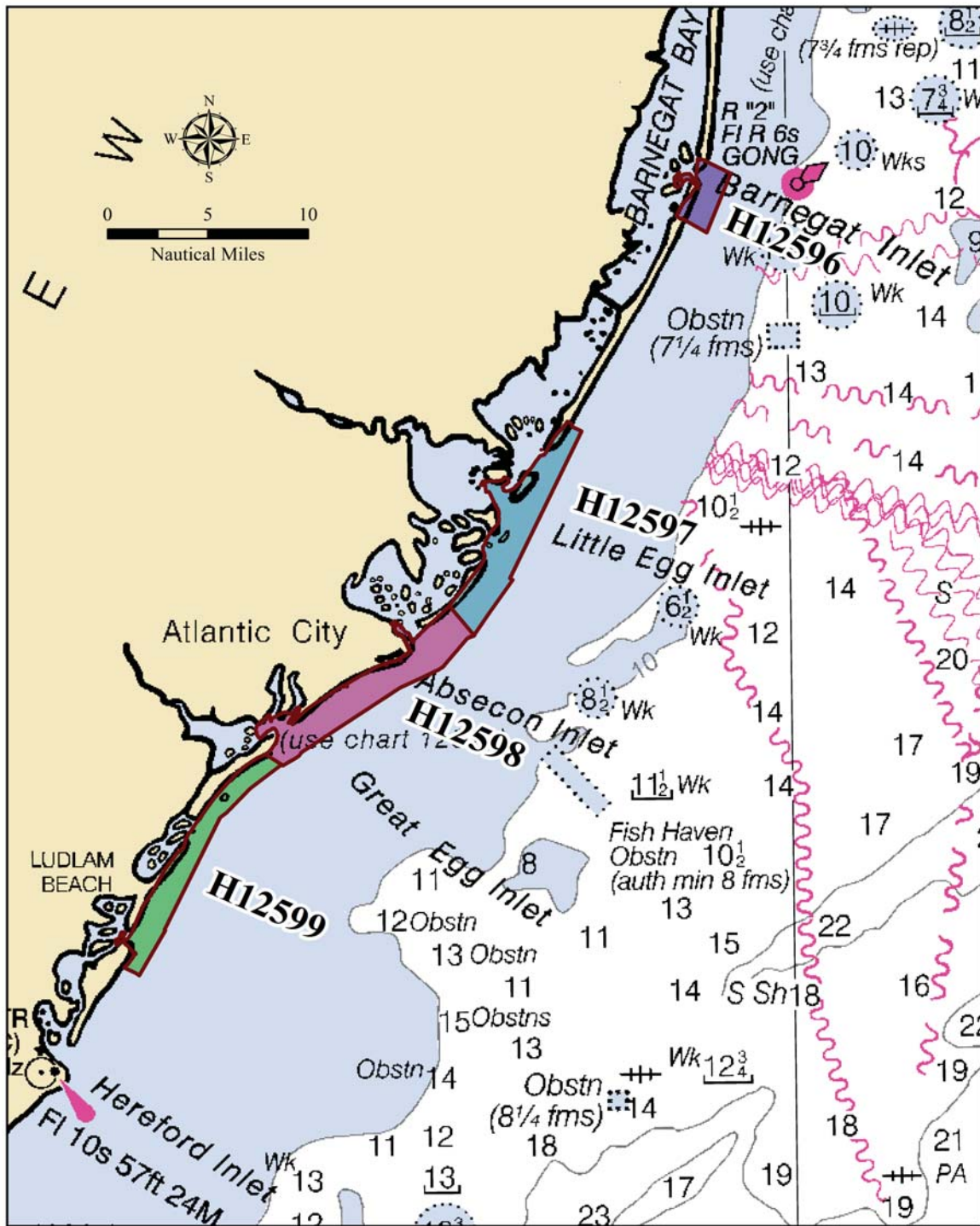


Figure 1: OPR-C308-KR-13 Assigned Survey Areas

Survey Limits were acquired in accordance with the requirements in the Project Instructions and the HSSD.

A.2 Survey Purpose

The purpose of this survey is to provide National Oceanic Atmospheric Administration (NOAA) with modern, accurate hydrographic survey data with which to update nautical charts of the assigned area.

A.3 Survey Quality

The entire survey is adequate to supersede previous data.

A.4 Survey Coverage

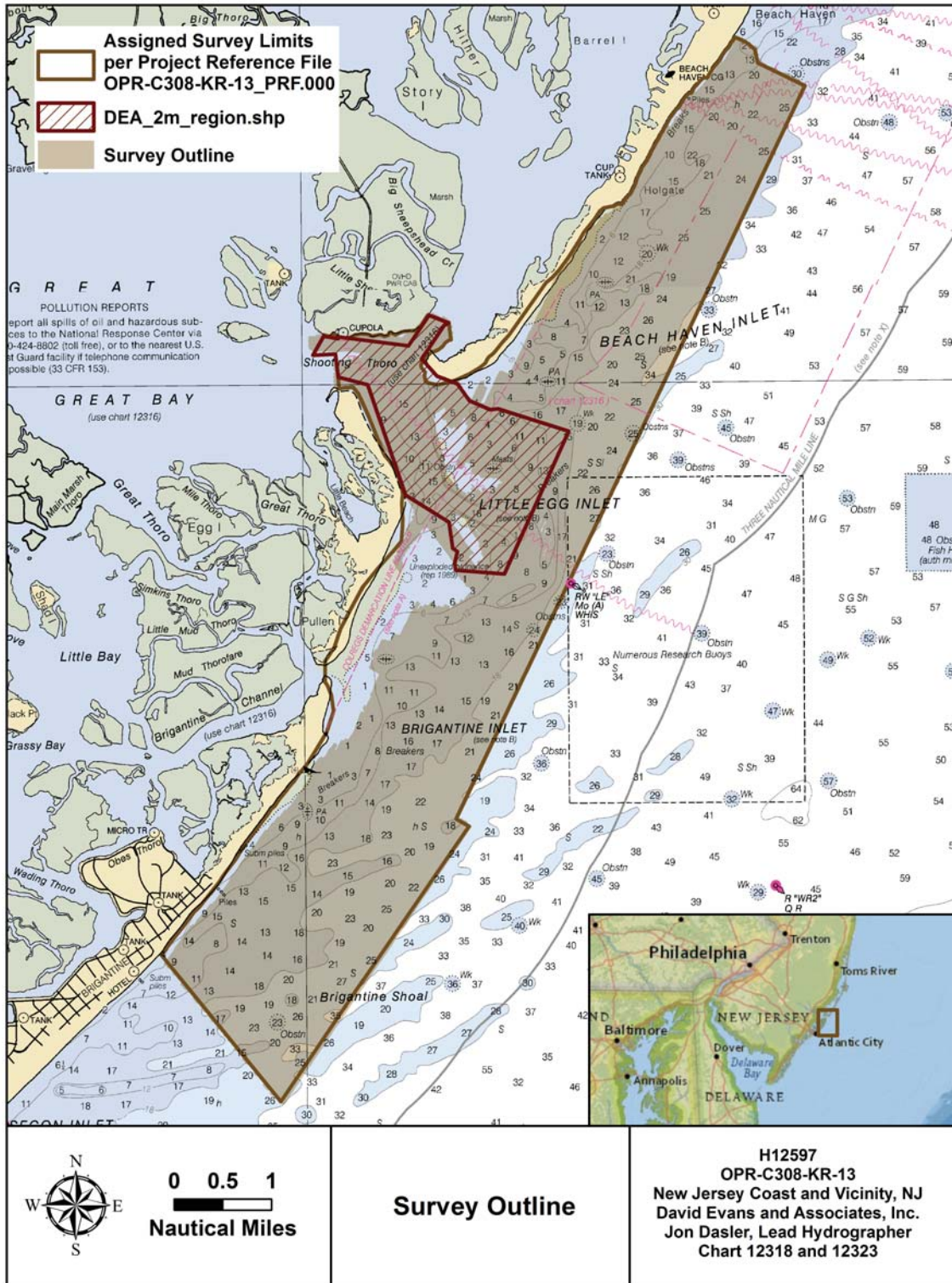


Figure 2: H12597 Survey Outline

The survey consisted of 200% side scan sonar coverage with concurrent single beam in all waters 4 meters and deeper; and 100% side scan sonar coverage with concurrent single beam in depths between 2 meters and 4 meters in waters inside the polygon DEA_2m_region.shp provided by HSD staff. For survey H12597, this polygon encompassed Little Egg Inlet and its approaches. The survey polygon depicted in the Project Reference File (PRF) OPR-C308-KR-13_PRF.000, which was included with the Hydrographic Survey Project Instructions (June 27, 2013), was used to define the limits for each survey. The survey was conducted over 80-meter set line spacing per 100% coverage (50-meter side scan sonar range) with additional lines spaced to fill holidays created when effective range was reduced in shallow waters. Automated Wreck and Obstruction Information System (AWOIS) items identified by side scan sonar and significant side scan sonar contacts were developed with multibeam sonar to meet Object Detection coverage requirements for multibeam surveys. The coverage area totaled 18.1 square nautical miles using a combination of side scan, single beam and multibeam survey methods.

A.5 Survey Statistics

The following table lists the mainscheme and crossline acquisition mileage for this survey:

	HULL ID	<i>R/V Chinook</i>	<i>Total</i>
LNM	SBES Mainscheme	0	0.0
	MBES Mainscheme	0	0.0
	Lidar Mainscheme	0	0.0
	SSS Mainscheme	0	0.0
	SBES/MBES Combo Mainscheme	0	0.0
	SBES/SSS Combo Mainscheme	0	0.0
	MBES/SSS Combo Mainscheme	995.9	995.9
	SBES/MBES Combo Crosslines	82.6	82.6
	Lidar Crosslines	0	0.0
Number of Bottom Samples			14
Number AWOIS Items Investigated			5
Number Maritime Boundary Points Investigated			0
Number of DPs			0
Number of Items Items Investigated by Dive Ops			0
Total Number of SNM			18.1

Table 2: Hydrographic Survey Statistics

The following table lists the specific dates of data acquisition for this survey:

Survey Dates	Julian Day Number
08/24/2013	236

Survey Dates	Julian Day Number
08/25/2013	237
08/28/2013	240
08/29/2013	241
08/30/2013	242
09/02/2013	245
09/03/2013	246
09/04/2013	247
09/07/2013	250
09/08/2013	251
09/11/2013	254
09/14/2013	257
09/15/2013	258
09/16/2013	259
09/18/2013	261
09/19/2013	262
09/20/2013	263
09/21/2013	264
09/25/2013	268
09/26/2013	269
10/01/2013	274
10/02/2013	275
10/03/2013	276
10/04/2013	277
10/05/2013	278
10/06/2013	279
10/16/2013	289
10/17/2013	290
10/19/2013	292
10/21/2013	294
10/30/2013	303
02/20/2014	51
02/21/2014	52
02/22/2014	53

Survey Dates	Julian Day Number
02/23/2014	54
03/11/2014	70
03/11/2014	70
04/01/2014	91
04/02/2014	92

Table 3: Dates of Hydrography

B. Data Acquisition and Processing

B.1 Equipment and Vessels

The OPR-C308-KR-13 Data Acquisition and Processing Report (DAPR) submitted under a separate cover, details equipment and vessel information as well as data acquisition and processing procedures used during this survey. There were no vessel or equipment configurations used during data acquisition that deviated from those described in the DAPR.

B.1.1 Vessels

The following vessels were used for data acquisition during this survey:

Hull ID	<i>R/V Chinook</i>
LOA	28 feet
Draft	2 feet

Table 4: Vessels Used



Figure 3: R/V Chinook

B.1.2 Equipment

The following major systems were used for data acquisition during this survey:

Manufacturer	Model	Type
ODOM	CV 100	SBES
RESON	8101	MBES
Edgetech	4200-HF	SSS
AML	SV Pulse V2	Primary Sound Speed Profiler
Sea-Bird	SEACAT SBE-19 CTD Profiler	Secondary Sound Speed Profiler
AML	SV Plus V2	Secondary Sound Speed Profiler
Applanix	POS/MV 320 v4	Positioning & Attitude

Table 5: Major Systems Used

B.2 Quality Control

B.2.1 Crosslines

Crosslines, acquired for this survey, totalled 8.3% of mainscheme acquisition.

Single beam crosslines were run in a direction perpendicular to main scheme lines across the entire surveyed area, providing a good representation for analysis of consistency. All crosslines were used for crossline comparisons.

Crossline analysis was performed using the CARIS Hydrographic Information Processing System (HIPS) Quality Control (QC) Report tool, which compares crossline data to a gridded surface and reports results. Crosslines were compared to a 4-meter CUBE surface encompassing mainscheme data for the entire survey area. The QC Report tabular output is included in Separate II Digital Data. The results of the analysis meet the requirements as stated in the 2013 HSSD.

Additional crossline analysis was performed by computing a 4-meter CUBE surface from the crossline data. The surface was then differenced from a 4-meter CUBE surface comprised of all mainscheme, fill, and investigation data. The resultant difference surface was exported using the Base Surface to American Standard Code for Information Interchange (ASCII) function and statistics were compiled on the ASCII data. The crossline analysis included 9,513 node comparisons with an average difference of 0.02 meters

and standard deviation of 0.146 meters. Maximum deviations appear in areas adjacent to steep slopes where resolving depth differences using a 4-meter CUBE surface can be problematic.

B.2.2 Uncertainty

The following survey specific parameters were used for this survey:

Measured	Zoning
0 meters	0.097 meters

Table 6: Survey Specific Tide TPU Values

Hull ID	Measured - CTD	Measured - MVP	Surface
R/V Chinook	2.000 meters/second	n/a meters/second	0.500 meters/second

Table 7: Survey Specific Sound Speed TPU Values

Additional discussion of these parameters is included in the DAPR.

During surface finalization in HIPS, the "greater of the two" option was selected, where the calculated uncertainty from total propagated uncertainty (TPU) is compared to the standard deviation of the soundings influencing the node, and where the greater value is assigned as the final uncertainty of the node. The uncertainty of the finalized surfaces increased for nodes, where the standard deviation of the node was greater than the total propagated uncertainty.

The resulting calculated uncertainty values of all nodes in the finalized 4-meter single beam surface range from 0.235 meters to 0.631 meters with a standard deviation of 0.013 meters.

The uncertainty values of all nodes in the finalized 1 meter Complete Coverage multibeam surface range from 0.222 meters to 1.421 meters with a standard deviation of 0.072 meters.

The uncertainty values of all nodes in the finalized 50-centimeter Object Detection multibeam surfaces range from 0.223 meters to 1.686 meters with a standard deviation of 0.027 meters.

To determine if surface grid nodes met International Hydrographic Organization (IHO) Order 1 specification, a ratio of the final node uncertainty to the allowable uncertainty at that depth was determined. As a percentage, this value represents the amount of error budget utilized by the uncertainty value at each node. Values greater than 100% indicate nodes exceeding the allowable IHO uncertainty.

For the 4-meter single beam surface the allowable uncertainty utilized ranges from 46% to 123%. The mean allowable uncertainty for the surface is 47% with a standard deviation of 0.024. In total 108 nodes out of 699,790 fail to meet specification.

For the 1 meter Complete Coverage multibeam surface the allowable uncertainty utilized ranges from 43% to 278%. The mean allowable uncertainty for the surface is 48% with a standard deviation of 0.142. In total 9,513 nodes out of 435,846 fail to meet specification.

For the 50-centimeter Object Detection multibeam surface the allowable uncertainty utilized ranges from 43% to 333%. The mean allowable uncertainty for the surface is 43% with a standard deviation of 0.100. In total 18,428 nodes out of 475,319 fail to meet specification.

Nodes that were reported out of specification were coincident with areas of high depth standard deviation such as steep terrain, areas of overlap where the bottom had significantly changed, or over features. All uncertainty values were within allowable specification prior to surface finalization when standard deviation was incorporated into the solution when it was greater than the node uncertainty.

B.2.3 Junctions

Survey H12597 junctions with H12598 from project OPR-C308-KR-13 also performed by David Evans and Associates, Inc.

The following junctions were made with this survey:

Registry Number	Scale	Year	Field Unit	Relative Location
H12598	1:40000	2013	David Evans and Associates, Inc.	S

Table 8: Junctioning Surveys

H12598

At the time of writing, junction analysis with survey H12598 had not been completed. Junction analysis between H12597 and H12598 will be discussed in the H12598 Descriptive Report.

B.2.4 Sonar QC Checks

Quality control is discussed in detail in Section B of the DAPR. Results from weekly position checks and weekly multibeam and single beam bar checks are included in Separate I Acquisition and Processing Logs. The weekly sound speed checks can be found in Separate II Sound Speed Data Summary of this report.

Sounding data were reviewed at multiple levels of data processing including: CARIS HIPS conversion, single beam editing, subset editing, and analysis of anomalies revealed in CUBE surfaces. Submerged significant features identified during survey operations were noted in the acquisition logs, saved to Isis cursor log files, and then displayed during HIPS editing to act as a check during feature compilation. In addition to

the field interpretation of side scan contacts, two independent post-processing reviews of the side scan data were conducted, and all significant contacts or potentially significant contacts tracked in a custom database.

B.2.5 Equipment Effectiveness

A timing latency and associated heave artifact has been removed from the last three single beam survey lines (2013CH2451757, 2013CH2451844, and 2013CH2451938) collected on September 2, 2013. Inspection of the Hypack raw files revealed that the echosounder timing and secondary GPS timing, which use the Hypack Veritime clock, were approximately 3.3 seconds behind the times of the primary GPS and attitude data coming from the POS M/V, which use UTC timing. This was confirmed by comparing the times of the Hypack position quality strings for the primary and secondary GPS sensors which included both Hypack Veritime time (seconds after midnight) and UTC. The latency started during acquisition of line 2013CH2451757 with a 3.3 second backwards jump in the echosounder time which occurred at 18:07:37.8.

The latency was removed from these lines by adding an echosounder latency (-3.3 seconds) in the HIPS vessel file swath1 entry from 18:07 to 23:59 on DN245. The fix required splitting the Hypack raw file for 2013CH2451757 into a section without the latency (2013CH2451757_1.raw) and section with the latency (2013CH2451757_2.raw). No other timing errors were observed during the survey. This latency may have been caused by a memory allocation issue on the Hypack computer.

B.2.6 Factors Affecting Soundings

There were no other factors that affected corrections to soundings.

B.2.7 Sound Speed Methods

Sound Speed Cast Frequency: Approximately 90-minute intervals.

An AML Oceanographic SV Plus V2 was the primary instrument used to acquire sound speed readings during the survey. Sound speed readings were measured at approximately 90-minute intervals during survey single beam operations and at each investigation site during multibeam acquisition. Additional discussion of sound speed methods can be found in the DAPR.

B.2.8 Coverage Equipment and Methods

Survey speeds were maintained to meet or exceed along track coverage requirements throughout the survey.

Where 200% side scan coverage was required, demonstration of 200% coverage was achieved by producing two separate 100% 1 meter resolution mosaics. Mosaics were thoroughly reviewed for holidays and areas of poor quality coverage due to biomass, vessel wakes, or other factors. A fill plan was created in order to acquire side scan data where holidays and significant poor quality coverage existed.

Significant side scan sonar contacts were developed with multibeam sonar to obtain least depths on contacts using multibeam Object Detection coverage requirements.

B.2.9 Density

The requirement that 95% of all Complete Coverage and Object Detection surface nodes must be populated with at least five soundings was verified by exporting the density child layer of each CUBE surface to an ASCII text file and compiling statistics on the density values. More than 98% of all the CUBE surface nodes of the 1 meter Complete Coverage multibeam surface contained five or more soundings. Two of the 24 individual investigation surfaces which use Object Detection requirements failed to meet the sounding density requirement. Investigation surfaces 278-133025-P and 278-203815-P have 94% of all nodes populated with five or more soundings which is just out of specification and results from the survey line orientation of the investigation plans producing a high percentage of edge. Nodes along these edges were only populated with beams from the outer swath which yielded a low node density. All nodes over features exceed density requirements and least depths of all features have been determined with designated soundings from reliable data.

B.3 Echo Sounding Corrections

B.3.1 Corrections to Echo Soundings

Data reduction procedures for survey H12597 are detailed in the DAPR. The multibeam and single beam summary processing logs are included Separate I Acquisition and Processing Logs of this report.

B.3.2 Calibrations

The following calibrations were conducted after the initial system calibration discussed in the DAPR:

Calibration Type	Date	Reason
MBES	2014-03-11	Routine calibration test
MBES	2014-03-14	Routine calibration test
MBES	2014-03-24	Routine calibration test
MBES	2014-04-02	Routine calibration test

Table 9: Calibrations not discussed in the DAPR.

The H12597 survey was still active at time of DAPR submission. A revision to DAPR Appendix II, which includes these additional calibration tests and results from new weekly bar checks has been submitted with the survey deliverables.

B.4 Backscatter

Multibeam backscatter was logged during side scan contact investigations in Hypack 81X format and is included with the H12597 digital deliverables. Data were processed periodically in CARIS HIPS to evaluate backscatter quality but the processed data is not included with the deliverables.

B.5 Data Processing

B.5.1 Software Updates

There were no software configuration changes after the DAPR was submitted.

The following Feature Object Catalog was used: 5.3.2

B.5.2 Surfaces

The following surfaces and/or BAGs were submitted to the Processing Branch:

Surface Name	Surface Type	Resolution	Depth Range	Surface Parameter	Purpose
H12597_SB_4m_MLLW	CUBE	4.0 meters	0.04 meters - 19.33 meters	NOAA_4m	Set Line Spacing Coverage
H12597_SB_4m_MLLW_Final	CUBE	4.0 meters	0.04 meters - 19.33 meters	NOAA_4m	Set Line Spacing Coverage
H12597_MB_1m_MLLW	CUBE	1.0 meters	0.12 meters - 14.74 meters	NOAA_1m	Complete Multibeam Coverage
H12597_MB_1m_MLLW_Final	CUBE	1.0 meters	0.12 meters - 14.74 meters	NOAA_1m	Complete Multibeam Coverage
H12597_MB_50cm_MLLW_combined	CUBE	0.5 meters	1.87 meters - 13.76 meters	NOAA_0.5m	Object Detection Coverage
H12597_MB_50cm_MLLW_combined_Final	CUBE	0.5 meters	1.26 meters - 13.76 meters	NOAA_0.5m	Object Detection Coverage

Surface Name	Surface Type	Resolution	Depth Range	Surface Parameter	Purpose
H12597_100Percent	Mosaic	1.0 meters	-	N/A	First 100-percent coverage
H12597_200Percent	Mosaic	1.0 meters	-	N/A	Second 100-percent coverage

Table 10: Submitted Surfaces

Bathymetric grids were created relative to Mean Lower Low Water (MLLW) in CUBE format using Set Line Spacing, Complete Coverage and Object Detection resolution requirements as described in the National Ocean Surveys (NOS) HSSD (April 2013).

A 1 meter resolution surface using the Complete Multibeam Coverage requirement was created for all multibeam data. This surface was created as a repository for ancillary multibeam data acquired in support of the survey, or multibeam data acquired during investigations that do not fall within the individual field sheets which surround significant features.

The 50-centimeter combined surface includes investigation data at Object Detection resolution over significant features. In addition, field sheets and surfaces were submitted for all significant individual investigations. The name of the investigation field sheets correspond to the primary side scan sonar contact name. Least depths for all significant contact investigations were added to the final surface with a designated sounding. Additional designated soundings were added to depth surfaces as necessary in order to accurately represent the seafloor in accordance with the NOS HSSD. A bug in HIPS 7.1.1 Service Pack 1 Hotfix 1 caused incorrect survey line names to be listed in the combined surface metadata.

C. Vertical and Horizontal Control

A complete description of the horizontal and vertical control for survey H12597 can be found in the OPR-C308-KR-13 Horizontal and Vertical Control Report (HVCR), submitted under a separate cover. A summary of horizontal and vertical control for this survey follows.

C.1 Vertical Control

The vertical datum for this project is Mean Lower Low Water.

Standard Vertical Control Methods Used:

Discrete Zoning

The following National Water Level Observation Network (NWLON) stations served as datum control for this survey:

Station Name	Station ID
Atlantic City, NJ	8534720

Table 11: NWLON Tide Stations

File Name	Status
8534720.tid	Verified Observed

Table 12: Water Level Files (.tid)

File Name	Status
C308KR2013CORP_rev.zdf	Final

Table 13: Tide Correctors (.zdf or .tc)

C.2 Horizontal Control

The horizontal datum for this project is North American Datum of 1983 (NAD83).

The projection used for this project is NAD83 UTM Zone 18 North.

During survey operations, some Differential Global Positioning System (DGPS) outages from the primary beacon (286 kHz) occurred. The system was set up to automatically switch to the secondary beacon (293 kHz) when the primary signal was lost.

The following DGPS Stations were used for horizontal control:

DGPS Stations
Sandy Hook, NJ (286 kHz)
Moriches, NY (293 kHz)

Table 14: USCG DGPS Stations

D. Results and Recommendations

D.1 Chart Comparison

The majority of the chart comparison was performed by comparing H12597 depths to a digital surface generated from electronic navigational charts (ENCs) covering the survey area. A 50-meter product surface was then generated from a triangular irregular network (TIN) created from the soundings, depth contours, and depth features for each ENC scale. An additional 50-meter HIPS product surface of the entire survey area was generated from the finalized Multibeam Echo Sounder (MBES) and SBES CUBE surfaces. The chart comparison was conducted by creating and reviewing the resultant difference surface. The chart comparison also included a review of the presence and adequacy of all assigned charted features within the survey area.

The raster chart comparison was performed by comparing the raster navigational charts (RNCs) covering the survey area to the corresponding ENCs which were subsequently compared to H12597 using difference surface techniques.

The electronic and raster versions of the relevant charts used during the comparison were reviewed to ensure that all US Coast Guard (USCG) Local Notice to Mariners (LNM) issued during survey acquisition, impacting the survey area, were applied and addressed by this survey.

D.1.1 Raster Charts

The following are the largest scale raster charts, which cover the survey area:

Chart	Scale	Edition	Edition Date	LNM Date	NM Date
12316	1:40000	35	10/2012	04/29/2014	04/26/2014
12318	1:80000	45	04/2010	04/22/2014	04/26/2014
12323	1:80000	26	12/2012	04/15/2014	04/26/2014

Table 15: Largest Scale Raster Charts

12316

Small Craft Route Chart 12316 was compared to US5NJ20M within the H12597 survey area. No differences between the RNC and ENC were observed other than minor differences in the placement of some contours. Charted differences determined by comparing surveyed depths to a digital surface of US5NJ20M are discussed in Section D.1.2.

12318

Coastal Chart 12318 was compared to US4NJ22M within the H12597 survey area. Several minor differences in the placement of contours and soundings were observed during this comparison.

12323

Coastal Chart 12323 was compared to US4NJ22M and US4NJ23M within the H12597 survey area. Only minor differences in the placement of contours and soundings were observed during this comparison.

D.1.2 Electronic Navigational Charts

The following are the largest scale ENC's, which cover the survey area:

ENC	Scale	Edition	Update Application Date	Issue Date	Preliminary?
US5NJ20M	1:40000	14	12/27/2013	03/26/2014	NO
US4NJ22M	1:80000	14	01/10/2013	04/03/2013	NO
US4NJ23M	1:80000	11	01/22/2013	04/03/2013	NO

Table 16: Largest Scale ENC's

US5NJ20M

In general depths are between 2 feet shoaler to 5 feet deeper than charted, though considerable change has occurred within the survey area since it was last surveyed. The recent application of H12597 Danger to Navigation (Dton) 4 to the charts addressed much of this change in the vicinity of Little Egg Inlet. Significant deepening is still apparent when comparing the H12597 surveyed depths to US5NJ20M in the vicinity of Little Egg Inlet and Shooting Thorofare as a result of excluding the 18-foot and 30-foot contours from the chart. Differences approaching 39 feet are apparent when comparing the ENC TIN surface to the survey. Areas in the Atlantic south of Little Egg Inlet are up to 8 feet shoaler and 16 feet deeper than charted due to the migration of numerous small shoals, including charted Brigantine Shoal and the retreat of the shoal at the approaches to Brigantine Inlet. Depths north of Little Egg Inlet are up to 7 feet shoaler and 12 feet deeper than charted as a result of the migration of the 18-foot and 30-foot contours. Depths along the western edge of the survey area south of Holgate, NJ are as much as 15 feet deeper as a result of shoreline retreat.

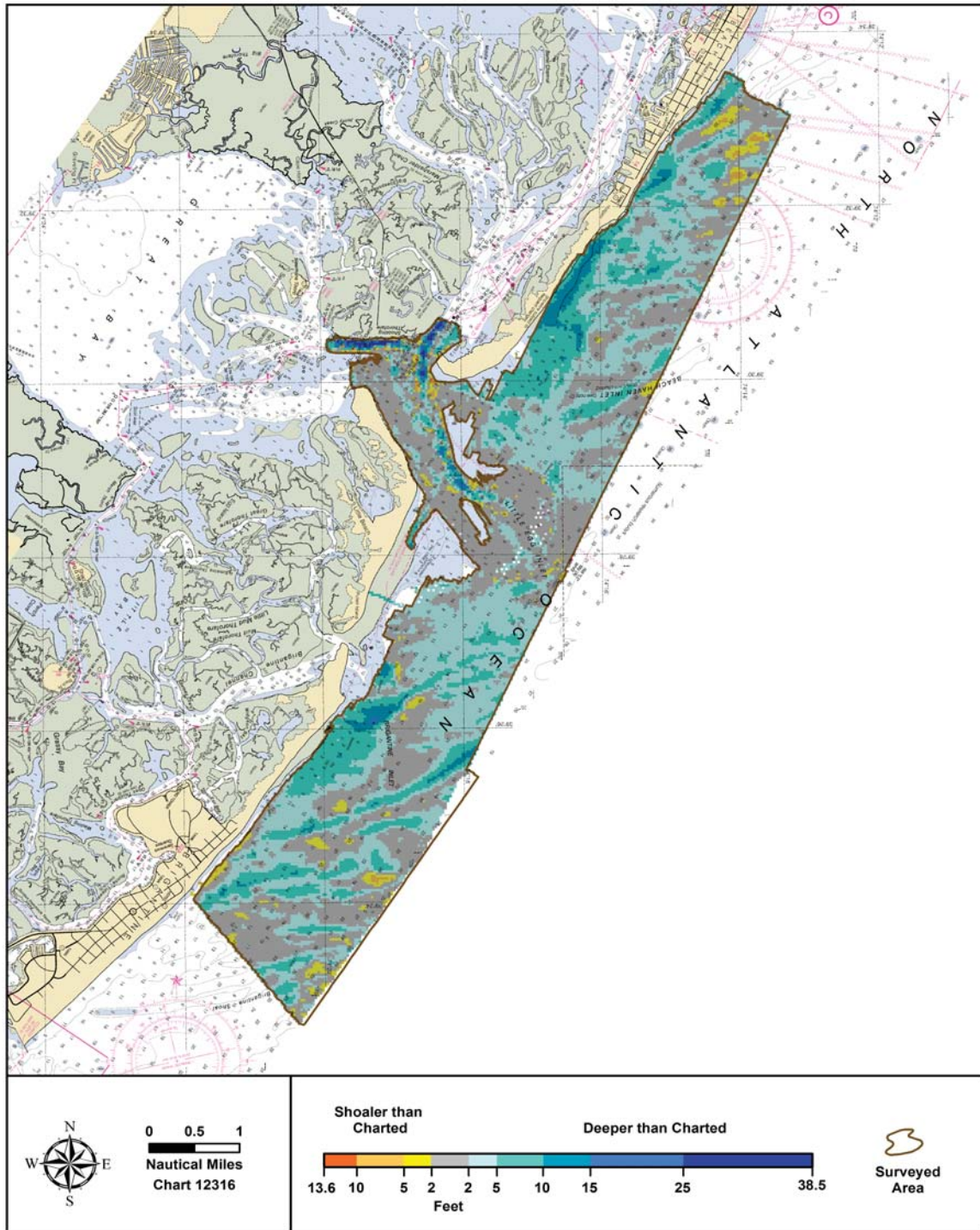


Figure 4: Depth Difference between H12597 and chart US5NJ20M

US4NJ22M

Chart comparison with US4NJ22M shows similar results to the comparison with US5NJ20M.

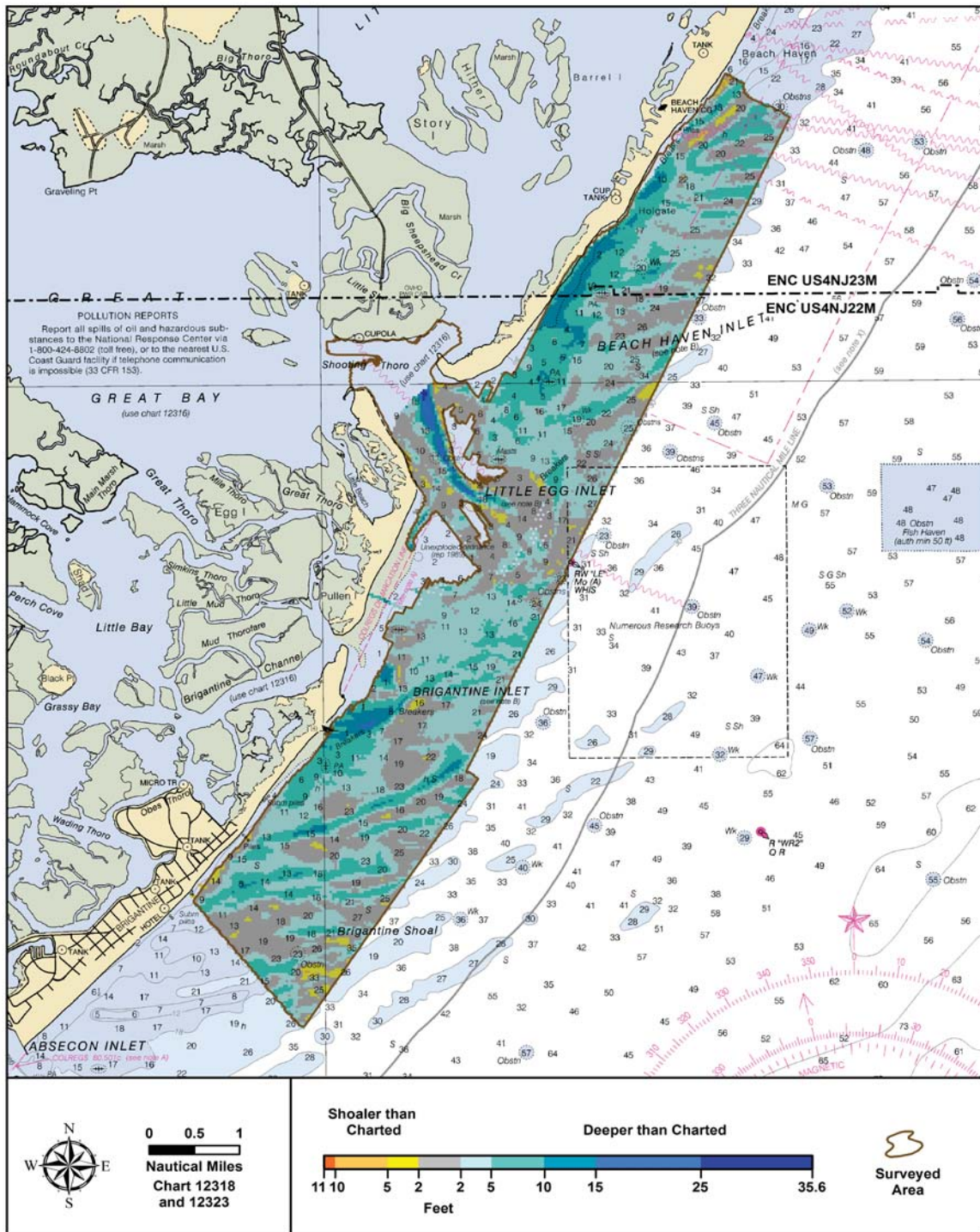


Figure 5: Depth Difference between H12597 and charts US4NJ22M and US4NJ23M
 US4NJ23M

Chart comparison with US4NJ23M shows similar results to the comparison with US5NJ20M.

D.1.3 AWOIS Items

Five (5) AWOIS items were assigned for investigation within the survey H12597 area.

2754

AWOIS Item #2754 is currently charted as a wreck with a 20-foot least depth. The 200-meter search radius was surveyed with 200% side scan sonar coverage and followed by multibeam investigation of a cluster of three contacts located within the radius. A wreck was found approximately 8 meters from the location of AWOIS Item #2754. The charted wreck as depicted in the Composite Source File (CSF) has been included in the Final Feature File (FFF) with a description of 'Delete'. A wreck depicting AWOIS #2754 as surveyed is included in the FFF with a description of 'New'.

11195

AWOIS Item #11195 is listed in the AWOIS database as a 19-foot outboard vessel reported in Local Notice to Mariners 27/76. This item is currently charted as a submerged dangerous wreck, Position Approximate (PA). A full search of the assigned 200-meter search radius has disproved this item with 200% side scan coverage. It is recommended that the AWOIS database be updated with findings from the H12597 survey. The charted wreck as depicted in the CSF has been included in the FFF with a description of 'Delete'.

11196

AWOIS Item #11196 is listed in the AWOIS database as the 36 foot tug Vinnie V. which was reported sunk on July 11, 1986. This item is currently charted as a submerged dangerous wreck, depth unknown, Position Approximate (PA). The search radius was surveyed with 200% side scan sonar coverage and followed by multibeam investigation of four contacts located within the radius. The multibeam investigations disproved two of the contacts and located one wreck and one obstruction.

The investigated wreck, which is believed to be AWOIS Item #11196, was found approximately 150 meters from its charted position. The charted wreck as depicted in the Composite Source File (CSF) has been included in the FFF with a description of 'Delete'. A wreck depicting this feature (AWOIS #11196) as surveyed is included in the FFF with a description of 'New'.

A feature depicting the new uncharted obstruction found within the AWOIS #11196 search radius has been included in the FFF with a description of 'New'.

11199

AWOIS Item #11199 is listed in the AWOIS database as the 65-foot schooner Sadie and Edgar. The most recent AWOIS entry for this feature from January 2002 reported that four feet of mast was visible above water. This item is currently charted as a submerged dangerous wreck, depth unknown. Partial 200% side scan sonar coverage within the assigned 500-meter search radius was performed. The search radius extended inshore of the surveyed 4-meter inshore limit and beyond the inshore limit of safe navigation. No evidence of the AWOIS item was seen in the data. The charted wreck as depicted in the Composite Source File (CSF) has been included in the FFF with a description of 'Retain'.

11202

AWOIS Item #11202 is listed in the AWOIS database as a stranded wreck which was reported in NM 17/70. The charting status of this feature changed to a dangerous sunken wreck PA in 2002. The search radius

extended inshore of the surveyed 4-meter inshore limit and beyond the inshore limit of safe navigation resulting in partial 200% side scan sonar coverage within the assigned 500-meter search radius. No evidence of the AWOIS item was seen in the data. The charted wreck as depicted in the CSF has been included in the FFF with a description of Retain.

D.1.4 Maritime Boundary Points

No Maritime Boundary Points were assigned for this survey.

D.1.5 Charted Features

Three Wreck PA features are charted within the assigned survey area. These features correspond to AWOIS Items 11195, 11196 and 11202 which have been discussed in Section 1.3.

An Unexploded Ordnance obstruction (rep 1989) is charted inshore of the surveyed 4-meter inshore limit and beyond the inshore limit of safe navigation. The charted obstruction as depicted in the Composite Source File (CSF) has been included in the FFF with a description of 'Not Addressed'.

The survey area does not contain any charted features labeled as Position Doubtful (PD) or Existence Doubtful (ED). Charted features assigned in the CSF are portrayed in the H12597 File Feature File as surveyed and denoted with the Assignment Flag of 'Assigned'.

D.1.6 Uncharted Features

All uncharted features are portrayed in the FFF as surveyed and attributed with the description of 'New'.

D.1.7 Dangers to Navigation

Five (5) DtoNs were reported for this survey using preliminary survey data. All DtoNs are currently applied to the charts.

H12597 DtoN 1 represents a 60 meter long wreck that was uncharted at time of survey. Inquiries were made to AHB and the State Historic Preservation Officer (SHPO) about possible historic significance of this wreck. During initial review the wreck was found to have no known historic significance. Correspondence with the SHPO is included with the Danger to Navigation Reports in Appendix II. A new obstruction located approximately 50 meters northeast of H12597 DtoN 1 was investigated after the danger was reported and charted. This new obstruction, which is included in the FFF, is approximately 2 feet shoaler than DtoN 1.

H12597 DtoN 2 is a stranded wreck with approximate length of 40 meters which was uncharted at time of survey. This wreck is included in the FFF with a slight adjustment in the bearing height after applying verified water levels to the height above water estimated in the field.

H12597 DtoN 3 is a United States Geological Survey (USGS) scientific platform which was uncharted when it was discovered while the survey vessel was transiting outside of the survey area. This feature is included in the FFF though it falls outside of the survey M_COVR area.

H12597 DtoN 4 was a nonstandard submission in .000 format containing preliminary SBES soundings which depicted shoaling in the vicinity of Little Egg Inlet. AHB staff used this submission to generate soundings, chart interval depth contours, and a bounding polygon which were sent to the Nautical Data Branch (NDB) and have since been used to update the charts. H12597 DtoN 4 was compiled from preliminary soundings and incomplete coverage acquired through October 6, 2013. The shoaling represented by the DtoN is more accurately depicted in the bathymetric grids submitted with this survey therefore the soundings and contours generated by AHB are not included in the FFF.

H12597 DtoN 5 is an obstruction found in the area impacted by the H12597 DtoN 4 chart update.

D.1.8 Shoal and Hazardous Features

As previously mentioned, H12597 DtoN 4 was submitted to address significant shoaling and change in the vicinity of Little Egg Inlet.

D.1.9 Channels

The H12597 survey area encompasses Little Egg Inlet, Beach Haven Inlet, and the approaches to Brigantine Inlet. As noted on the charts, buoys are not charted within the inlets because they are frequently relocated or removed when shoaling prohibits navigation with the inlet.

D.1.10 Bottom Samples

Fourteen (14) bottom samples were acquired on October 22, 2013 (DN 295), January 30, 2014 (DN 030), and February 23, 2014 (DN 054). The final sampling plan followed suggested sample locations included in the PRF provided by the Hydrographic Surveys Division.

D.2 Additional Results

D.2.1 Shoreline

A limited shoreline investigation was assigned in the OPR-C308-KR-13 Hydrographic Survey Project Instructions. None of the assigned shoreline features included in the CSF are charted within the H12597 survey area.

In some instances baring features shoreward of the inshore limit were captured in the side scan data. HSD and AHB staff provided guidance on how to handle these features during data processing and reporting.

If contacts were created on these features they have been classified as insignificant in the Side Scan Sonar Contact File and denoted with the comment, "Target is a baring feature outside the limits of survey and will be further resolved by forthcoming RSD imagery". This includes the ends of several charted jetties, which extend into the H12597 survey area. Side scan contacts depicting the submerged end point at the base of these jetties are included in the Side Scan Sonar Contact File.

D.2.2 Prior Surveys

No comparisons with prior surveys were conducted.

D.2.3 Aids to Navigation

Several public aids to navigation are charted within the H12597 survey area. Notes on the charts covering the area indicate that additional aids to navigation located within inlets are frequently moved and therefore not included on the charts. All charted public aids to navigation were found to be serving their intended purpose.

D.2.4 Overhead Features

There were no overhead bridges, cables, or other structures which would impact overhead clearance in the survey area.

D.2.5 Submarine Features

The termini of several charted jetties extend into the H12597 survey area. It is recommended that all charted jetties be retained as charted.

Five (5) submarine cables are charted within the survey area. None of these cables were observed in the H12597 data.

D.2.6 Ferry Routes and Terminals

There were no ferry routes or terminals within the survey area.

D.2.7 Platforms

A USGS scientific platform located outside of the survey area was submitted as H12597 DtoN 3. No platforms were charted or located within the H12597 survey area.

D.2.8 Significant Features

Water turbulence features denoting the location of breakers observed during survey operations have been included in the FFF.

Sediment migration is apparent when comparing data acquired over multiple days in the vicinity of Little Egg Inlet and Shooting Thorofare. As noted on the charts, areas adjacent to inlets such are subject to frequent change.

D.2.9 Construction and Dredging

No construction or dredging activities were observed during survey operations.

D.2.10 New Survey Recommendation

No new surveys or further investigations are recommended for this area.

D.2.11 New Inset Recommendation

No new insets are recommended for this area.



E. Approval Sheet

As Chief of Party, Field operations for this hydrographic survey were conducted under my direct supervision, with frequent personal checks of progress and adequacy. I have reviewed the attached survey data and reports.

All field sheets, this Descriptive Report, and all accompanying records and data are approved. All records are forwarded for final review and processing to the Processing Branch.

The survey data meets or exceeds requirements as set forth in the NOS Hydrographic Surveys and Specifications Deliverables Manual, Statement of Work, and Hydrographic Survey Project Instructions. These data are adequate to supersede charted data in their common areas. This survey is complete and no additional work is required with the exception of deficiencies noted in the Descriptive Report.

Report Name	Report Date Sent
Data Acquisition and Processing Report	2014-03-21

Approver Name	Approver Title	Approval Date	Signature
Jonathan L. Dasler, PE, PLS, CH	NSPS/THSOA Certified Hydrographer, Chief of Party	07/28/2014	 Digitally signed by Jon Dasler DN: cn=Jon Dasler, o=David Evans and Associates, Inc., ou=Marine Services Division, email=jkld@deainc.com, c=US Date: 2014.07.28 12:22:04 -0700
Jason Creech, CH	NSPS/THSOA Certified Hydrographer, Lead Hydrographer	07/28/2014	 Digitally signed by Jason Creech DN: cn=Jason Creech, o=David Evans and Associates, Inc., ou=Marine Services Division, email=jasc@deainc.com, c=US Date: 2014.07.28 12:22:44 -0700

APPENDIX I
TIDE NOTE AND GRAPHICS

Project: OPR-C308-KR-13 Registry No: H12597

Contractor Name: David Evans and Associates, Inc.

Date: April 02, 2014

Sheet Number: 2

Inclusive Dates: August 24, 2013 - April 02, 2014

Time (UTC)

Day Number	Date	Start Time	End Time
236	08/24/2013	12:05:08	13:00:37
237	08/25/2013	11:18:08	20:38:56
240	08/28/2013	10:50:04	18:04:07
241	08/29/2013	13:34:33	19:58:29
242	08/30/2013	11:13:31	20:22:45
245	09/02/2013	11:04:41	20:23:55
246	09/03/2013	11:32:15	20:59:20
247	09/04/2013	11:15:18	18:37:10
250	09/07/2013	11:11:11	20:16:29
251	09/08/2013	11:13:27	11:44:48
254	09/11/2013	11:23:24	17:49:56
257	09/14/2013	13:06:08	22:06:39
258	09/15/2013	11:27:05	21:04:51
259	09/16/2013	11:13:26	21:07:43
261	09/18/2013	11:33:17	20:52:05
262	09/19/2013	11:22:54	19:44:04
263	09/20/2013	12:32:07	21:19:40
264	09/21/2013	11:16:23	15:27:23
268	09/25/2013	12:07:59	21:03:49
269	09/26/2013	11:47:11	21:27:52
274	10/01/2013	11:12:29	21:27:36
275	10/02/2013	11:23:24	21:13:26
276	10/03/2013	12:21:47	21:02:15
277	10/04/2013	11:42:51	21:19:59
278	10/05/2013	11:38:07	20:48:44
279	10/06/2013	11:57:14	20:54:11
289	10/16/2013	12:22:01	12:57:27
290	10/17/2013	13:07:43	20:31:00
292	10/19/2013	12:21:33	21:26:35
294	10/21/2013	11:52:17	21:01:45
303	10/30/2013	16:31:51	20:18:41
51	02/20/2014	12:21:13	21:14:51
53	02/22/2014	12:17:34	20:54:12
54	02/23/2014	11:57:15	21:10:54
70	03/11/2014	12:10:07	20:52:57
91	04/01/2014	15:31:47	15:32:32
92	04/02/2014	12:16:09	13:05:40

H12597

FINAL TIDE NOTE and FINAL TIDE ZONING CHART

DATE: April 02, 2014

PROCESSING BRANCH: Atlantic Hydrographic Branch

HYDROGRAPHIC PROJECT: OPR-C308-KR-13

HYDROGRAPHIC SHEET: H12597

LOCALITY New Jersey Coast and Vicinity, New Jersey

SUB-LOCALITY: Vicinity of Little Egg Inlet

TIME PERIOD:	August	24-25,28-30
	September	2-4,7-8,11,14-16,18-21,25-26
	October	1-6,16-17,19,21,30
	February	20,22,23
	March	11
	April	1-2

TIDE STATIONS USED: 8534720, Atlantic City, NJ
Lat. 39° 21.3' N, Lon. 74° 25.1' W

PLANE OF REFERENCE (MEAN LOWER LOW WATER): 0.000 meters

HEIGHT OF MEAN HIGH WATER (8534720) ABOVE PLANE OF REFERENCE: 1.276 meters¹

¹ MLLW 1.511m Mean Lower-Low Water
MHW 2.787m Mean High Water

**FINAL TIDE ZONING
H12597
OPR-C308-KR-13**

Zone	Time Corrector (Mins)	Range Ratio	Reference Station
NJ35	24	0.93	8534720
NJ36	30	0.9	8534720
NJ37	42	0.86	8534720
NJ38	54	0.83	8534720
NJ39	66	0.83	8534720
SA17	0	1.01	8534720
SA18	12	0.97	8534720

NOTE: Final soundings were reduced to chart datum using a revised version of the zoning scheme that was provided with the Final Project Instructions. David Evans and Associates, Inc. revised the zoning by moving the western extents of zone SA18 shoreward so that the zoning scheme would fully encompass the project area.

APPENDIX II

SUPPLEMENTAL SURVEY RECORDS
AND CORRESPONDENCE



Deborah Bland - NOAA Federal <deborah.a.bland@noaa.gov>

Shoreline Request

1 message

Deborah Bland - NOAA Federal <deborah.a.bland@noaa.gov>

Wed, Apr 29, 2015 at 1:11 PM

To: ngs.shoreline@noaa.gov

Cc: Matthew Jaskoski - NOAA Federal <matthew.jaskoski@noaa.gov>, Owens Edward <Edward.Owens@noaa.gov>, "Bland Deborah @ Work" <deborah.a.bland@noaa.gov>

RSD,

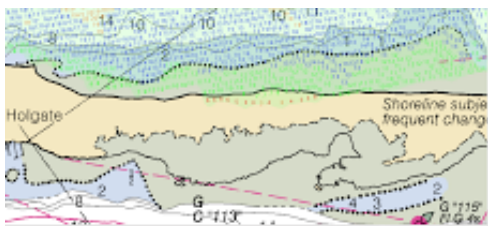
If it is available, I am requesting up to date shoreline for the following area on the New Jersey Coast, in the vicinity of Little Egg Inlet, bounded by Latitude 39-33-02N, Longitude 074-13-16.87W to the NW; Latitude 39-33-33.N, Longitude 074-14-06.05W to the SW; Latitude 39-22-33.60N, Longitude 074-20-24.1W to the NE; Latitude 39-24-04.35N, Longitude 074-21-53.75W to the SW.

See specific areas attached.

--

DEBBIE

2 attachments



Holgate shoreline.png
446K



Tuckers Island shoreline.png
718K



Deborah Bland - NOAA Federal <deborah.a.bland@noaa.gov>

Little Egg Inlet Shoreline Request

5 messages

Tim Blackford <tim.blackford@noaa.gov>

Wed, Apr 29, 2015 at 2:12 PM

To: Debbie Bland <Deborah.A.Bland@noaa.gov>, "_NOS NGS.Shoreline.Request" <ngs.shoreline.request@noaa.gov>

Cc: Matthew Jaskoski <Matthew.Jaskoski@noaa.gov>, Edward Owens <Edward.Owens@noaa.gov>, Stephen White <Stephen.A.White@noaa.gov>, Mike Espey <Mike.Espey@noaa.gov>

Debbie,

I am forwarding this shoreline request to the correct email address.

In the future please send your requests to: ngs.shoreline.request@noaa.gov

(Not "ngs.shoreline@noaa.gov", which is for questions about the NOAA Shoreline Data Explorer web application.)

This area appears to be covered by one of our recent topo-bathy lidar projects, NJ1302-CM-N.

Mike Espey and/or Stephen White can provide you with the status of the shoreline compilation for this project.

-Tim Blackford

----- Forwarded Message -----

Subject:ngs.noaa.gov shoreline_req #1664] Shoreline Request

Date:Wed, 29 Apr 2015 13:11:02 -0400

From:Deborah Bland - NOAA Federal <deborah.a.bland@noaa.gov>

To:ngs.shoreline@noaa.gov

CC:Matthew Jaskoski - NOAA Federal <matthew.jaskoski@noaa.gov>, Owens Edward <Edward.Owens@noaa.gov>, Bland Deborah @ Work <deborah.a.bland@noaa.gov>, ngs.shoreline@denair.ngs.noaa.gov

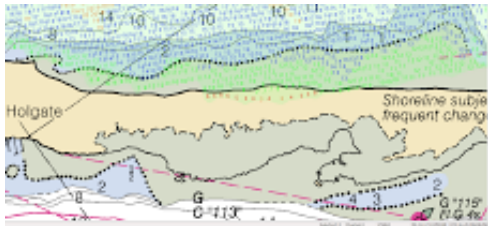
RSD,

If it is available, I am requesting up to date shoreline for the following area on the New Jersey Coast, in the vicinity of Little Egg Inlet, bounded by Latitude 39-33-02N, Longitude 074-13-16.87W to the NW; Latitude 39-33-33.N, Longitude 074-14-06.05W to the SW; Latitude 39-22-33.60N, Longitude 074-20-24.1W to the NE; Latitude 39-24-04.35N, Longitude 074-21-53.75W to the SW.

See specific areas attached.

--

DEBBIE

2 attachments

Holgate shoreline.png
446K



Tuckers Island shoreline.png
718K

Deborah Bland - NOAA Federal <deborah.a.bland@noaa.gov>
To: Tim Blackford <tim.blackford@noaa.gov>

Wed, Apr 29, 2015 at 2:18 PM

Thank you very much for the correction.

[Quoted text hidden]

--

DEBBIE

Gretchen Imahori - NOAA Federal <gretchen.imahori@noaa.gov>
To: Deborah Bland - NOAA Federal <deborah.a.bland@noaa.gov>

Tue, May 5, 2015 at 8:11 AM

Hi Debbie,

Sorry I should have emailed you back last week and I completely forgot. Stephen White and I are meeting with Mike A. today to discuss your shoreline request for Little Egg and other back bay areas. I should be able to give you more information later today or tomorrow.

Best,
Gretchen

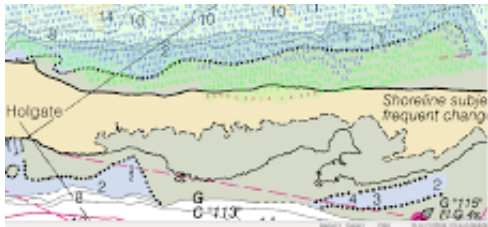
[Quoted text hidden]

--

Gretchen Imahori
Remote Sensing Division
National Geodetic Survey
(o): 301-713-2670 x146
(tw): 240-515-6263

<http://www.ngs.noaa.gov/>

2 attachments



Holgate shoreline.png
446K



Tuckers Island shoreline.png
718K

Gretchen Imahori - NOAA Federal <gretchen.imahori@noaa.gov>
To: Deborah Bland - NOAA Federal <deborah.a.bland@noaa.gov>

Mon, May 11, 2015 at 2:26 PM

Hi Debbie,

Just wanted to keep you updated. We have a 2013 survey in Little Egg that was done with our in-house lidar system but this survey was put on hold because we thought we would have funds to do all the backbay areas by contractors this year - which would have given you more updated information. That looks like it isn't going to pan out so the in-house survey is going to be put back into production for your request. When would you need this data? In 2-6 months? The reason I ask is RSD just met with OCS about prioritizing our surveys and this survey wasn't a high priority at the time. If things have changed and it is a priority we will need to bring this up to MCD and revise our list.

Thanks for your patience,
Gretchen

[Quoted text hidden]

Deborah Bland - NOAA Federal <deborah.a.bland@noaa.gov>
Draft To: Gretchen Imahori - NOAA Federal <gretchen.imahori@noaa.gov>

Tue, May 12, 2015 at 10:59 AM

Morning Gretchen,

Thank you for getting back to me. I am going to forward your message to my superiors so they can let you know how we want to handle this. My survey is completed and I'm just waiting for the updated coastline but I know some other surveys in the same area, north or south of where my survey falls, are coming up for processing soon. I will let Ed Owens or Lieutenant Commander Jaskoski decide how to handle this issue.

Again, thank you very much for your help.

[Quoted text hidden]

--

DEBBIE



Deborah Bland - NOAA Federal <deborah.a.bland@noaa.gov>

Little Egg Inlet Shoreline Request

Gretchen Imahori - NOAA Federal <gretchen.imahori@noaa.gov>

Mon, May 11, 2015 at 2:26 PM

To: Deborah Bland - NOAA Federal <deborah.a.bland@noaa.gov>

Hi Debbie,

Just wanted to keep you updated. We have a 2013 survey in Little Egg that was done with our in-house lidar system but this survey was put on hold because we thought we would have funds to do all the backbay areas by contractors this year - which would have given you more updated information. That looks like it isn't going to pan out so the in-house survey is going to be put back into production for your request. When would you need this data? In 2-6 months? The reason I ask is RSD just met with OCS about prioritizing our surveys and this survey wasn't a high priority at the time. If things have changed and it is a priority we will need to bring this up to MCD and revise our list.

Thanks for your patience,
Gretchen

[Quoted text hidden]

APPENDIX III

SURVEY FEATURES REPORT

DTONs - four

AWOIS - eight

Wrecks - four

Maritime Boundaries - none

H12597_Features Report

Registry Number:

State:

Locality:

Sub-locality:

Project Number:

Survey Dates: 12/01/2005 - 04/02/2014

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
12316	34th	06/01/2008	1:40,000 (12316_1)	[L]NTM: ?
12323	25th	11/01/2008	1:80,000 (12323_1)	[L]NTM: ?
12318	44th	12/01/2006	1:80,000 (12318_1)	[L]NTM: ?
12300	47th	05/01/2008	1:400,000 (12300_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	AWOIS #11202	Wreck	[None]	39° 25' 36.6" N	074° 19' 57.6" W	11202
1.2	AWOIS #11199	Wreck	[None]	39° 27' 08.8" N	074° 18' 57.2" W	11199
1.3	AWOIS #1366	GP	[None]	39° 27' 48.1" N	074° 17' 15.1" W	1366
1.4	AWOIS #13277	GP	[None]	39° 27' 35.6" N	074° 16' 48.7" W	13277
1.5	AWOIS #11196	Wreck	3.68 m	39° 30' 05.3" N	074° 16' 44.7" W	11196
1.6	AWOIS #11195	GP	[None]	39° 31' 00.5" N	074° 15' 58.6" W	11195
1.7	AWOIS #2755	Obstruction	8.67 m	39° 29' 28.0" N	074° 15' 37.8" W	2755
1.8	AWOIS #2754	Wreck	6.08 m	39° 31' 19.0" N	074° 15' 24.4" W	2754
2.1	DTON 2	Wreck	-1.10 m	39° 26' 00.5" N	074° 19' 56.2" W	---
2.2	DTON 5	Obstruction	3.35 m	39° 29' 09.1" N	074° 18' 22.2" W	---
2.3	DTON 3	GP	[None]	39° 30' 44.1" N	074° 18' 05.7" W	---
2.4	DTON 1	Obstruction	5.35 m	39° 29' 36.7" N	074° 16' 16.4" W	---

3.1	AWOIS #11202	Wreck	[None]	39° 25' 36.6" N	074° 19' 57.6" W	---
3.2	DTON 2	Wreck	-1.10 m	39° 26' 00.5" N	074° 19' 56.2" W	---
3.3	AWOIS #11199	Wreck	[None]	39° 27' 08.8" N	074° 18' 57.2" W	---
3.4	15 foot wreck	Wreck	4.67 m	39° 26' 48.0" N	074° 18' 31.8" W	---
3.5	4 foot wreck	Wreck	1.26 m	39° 29' 07.5" N	074° 17' 30.2" W	---
3.6	9 foot wreck	Wreck	2.81 m	39° 28' 39.6" N	074° 17' 13.1" W	---
3.7	AWOIS #11196	Wreck	3.68 m	39° 30' 05.3" N	074° 16' 44.7" W	---
3.8	AWOIS #2754	Wreck	6.08 m	39° 31' 19.0" N	074° 15' 24.4" W	---
3.9	19 foot wreck	Wreck	5.80 m	39° 32' 20.8" N	074° 14' 49.2" W	---

1 - AWOIS Features

1.1) AWOIS #11202

Feature for AWOIS Item #11202

Search Position: 39° 25' 36.6" N, 074° 19' 57.6" W
Historical Depth: [None]
Search Radius: 500
Search Technique: Type: UNKNOWN, Itemstatus: ASSIGNED, Searchtype: FULL, Technique: S2 MBES VS

Technique Notes:

History Notes:

History

NM17/70--04/03/70 USN; STRANDED WRECK (VISIBLE) REPORTED IN (APPROX.) LAT 39/25/36.00N LONG 074/20/00.00W (NAD 27). (ENTERED BY PSH 01/02) CL2230/75--USPS; REPORTS THE WRECK NOT VISIBLE. CHANGED TO DANGEROUS SUNKEN WRECK PA. (UPDATED 12/02 BY MBH)

Survey Summary

Survey Position: 39° 25' 36.6" N, 074° 19' 57.6" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2005-335.00:00:00.000 (12/01/2005)
Dataset: H12597_Features for PYDRO.000
FOID: 0_ 0003265151 00001(FFFE0031D27F0001)
Charts Affected: 12316_1, 12318_1, 12300_1, 13003_1

Remarks:

WRECKS/remrks: DEA CF #129. AWOIS #11202. Wreck not observed in 200% side scan or VBES coverage. Partial coverage only of AWOIS radii. Area of AWOIS radii not surveyed was inshore of the NALL and not attainable.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12597_Features for PYDRO.000	0_ 0003265151 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Wreck (WRECKS)
Attributes: CATWRK - 2:dangerous wreck
NINFOM - Retain wreck
QUASOU - 2:depth unknown
SORDAT - 20051200
SORIND - US,US,graph,Chart 12316
WATLEV - 3:always under water/submerged

Office Notes

SAR: Concur. The field did not obtain full coverage in required AWOIS search radius. Retain wreck.

COMPILATION: Concur. Retain charted dangerous sunken wreck, depth unknown, AWOIS 11202.

1.2) AWOIS #11199

Feature for AWOIS Item #11199

Search Position: 39° 27' 08.8" N, 074° 18' 57.2" W
Historical Depth: [None]
Search Radius: 500
Search Technique: Type: SADIE AND EDGAR, Itemstatus: ASSIGNED, Searchtype: FULL, Technique: S2 MBES VS

Technique Notes:

History Notes:

History

" LNM6/74--02/06/74 3RD CGD; THE 65 FOOT NEWFOUNDLAND SCHOONER ""SADIE AND EDGAR"" IS REPORTED TO HAVE SUNK IN APPROXIMATE POSITION LAT 39/27/15.00N LONG 074/18/36.00W (NAD 27) IN 14 FEET OF WATER. LNM16/74--04/10/74 3RD CGD; THE 65 FOOT NEWOUNDLAND SCHOONER ""SADIE AND EDGAR"" IS NOW REPORTED SUNK IN LAT 39/27/08.00N LONG 074/18/58.00W (NAD 27) IN 12 FEET OF WATER WITH APPROXIMATELY 4 FEET OF THE MAST VISABLE ABOVE WATER. (ENTERED BY PSH 01/02)"

Survey Summary

Survey Position: 39° 27' 08.8" N, 074° 18' 57.2" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2005-335.00:00:00.000 (12/01/2005)
Dataset: H12597_Features for PYDRO.000
FOID: 0_ 0003265099 00001(FFFE0031D24B0001)
Charts Affected: 12316_1, 12318_1, 12323_1, 12300_1, 13003_1

Remarks:

WRECKS/remrks: DEA CF #123. AWOIS #11199. Wreck not observed in 200% side scan or VBES coverage. Partial coverage only of AWOIS radii. Area of AWOIS radii not surveyed was inshore of the NALL and not attainable.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12597_Features for PYDRO.000	0_ 0003265099 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Wreck (WRECKS)
Attributes: CATWRK - 2:dangerous wreck
NINFOM - Retain wreck
QUASOU - 2:depth unknown
SORDAT - 20051200
SORIND - US,US,graph,Chart 12316
WATLEV - 3:always under water/submerged

Office Notes

SAR: Concur. The field did not obtain full coverage in required AWOIS search radius. Retain wreck.

COMPILATION: Concur. Feature not thoroughly investigated during the present survey. Retain AWOIS #11199, charted dangerous sunken wreck, least depth unknown.

1.3) AWOIS #1366

Feature for AWOIS Item #1366

Search Position: 39° 27' 48.1" N, 074° 17' 15.1" W
Historical Depth: [None]
Search Radius: [unknown]
Search Technique: [unknown]
Technique Notes:

History Notes: CL 518/50--PRELIMINARY REPORT FROM F00094 REGARDING THE INVESTIGATION FOR THIS WRECK. F00094/50--WIRE DRAG INVESTIGATION FOR THE WRECK ANN HOOPER. WRECK NOT FOUND BUT THE REPORTED POSITION CLEARED BY 9 FEET MLW. NIMA INFORMATION - NOTES THAT THE WRECK ANN HOOPER WAS SUNK 02/07/42 AND HAS A CHARTED DATE OF 02/28/51. THE SOURCE IS LISTED AS REPORTS OF KNOWN WRECKS BY U.S. COAST GUARD DISTRICTS, 1950. OTHER INFORMATION LISTED IS THAT THIS WRECK IS OF A 1900 SCHOONER. (ENTERED BY PSH, 01/02) H11241/04 -- OPR-C303-KR-03; SEARCH OF THE EASTERN PORTION OF THE 2000-METER RADIUS TO DEPTHS OF ABOUT 10 FEET MLLW ON THE WEST WITH 200% SIDE SCAN AND MULTIBEAM. A WRECK WAS FOUND ABOUT 100 METERS NW. THE LD OF BOTH FEATURES IS 13 FEET MLLW. RECOMMEND REMOVAL OF THE CHARTED OBSTN CLEARED TO 9 FT, DANGER CURVE AND BLUE TINT IN 39-27-45.42N 074-17-12.51W AND RECOMMEND CHARTING A 13 WK WITH A DANGER CURVE IN 39-27-48.08N 074-17-15.11W (UPDATE 6/6/05, JRS) 24 NO.1131; SCHOONER, 1900 GT,SUNK 2/7/42; POSITION ACCURACY WITHIN 1 MILE

Survey Summary

Survey Position: 39° 27' 48.1" N, 074° 17' 15.1" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2014-092.00:00:00.000 (04/02/2014)
Dataset: H12597_Features for PYDRO.000
FOID: 0_0003264612 00001(FFFE0031D0640001)
Charts Affected: 12316_1, 12318_1, 12323_1, 12300_1, 13003_1
Remarks:
 [None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12597_Features for PYDRO.000	0_0003264612 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Attributes: NINFOM - NO CHANGE IN CHARTING
NTXTDS - ENC#US5NJ20AM, Edition15, 20140718
SORDAT - 20140402
SORIND - US, US, graph, H12597

Office Notes

SAR: Ensonified with 200% SSS. No evidence of this feature was found. This feature is considered as disproved; feature currently not charted.

COMPILATION: Concur. Consider AWOIS #1366, an uncharted dangerous sunken wreck, least depth 13 feet, disproved. Update the chart with present survey depths. Update AWOIS database with present survey findings.

1.4) AWOIS #13277

Feature for AWOIS Item #13277

Search Position: 39° 27' 35.6" N, 074° 16' 48.7" W

Historical Depth: [None]

Search Radius: [unknown]

Search Technique: [unknown]

Technique Notes:

History Notes: H11241/04 -- OPR-C303-KR-03; OBSTRUCTION FOUND. EVALUATOR RECOMMENDS CHARTING 23 OBSTN IN LAT. 39-27-35.59, LONG. 074-16-48.71 (ENT. 6/8/05, JRS)

Survey Summary

Survey Position: 39° 27' 35.6" N, 074° 16' 48.7" W

Least Depth: [None]

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

Timestamp: 2014-092.00:00:00.000 (04/02/2014)

Dataset: H12597_Features for PYDRO.000

FOID: 0_ 0003264617 00001(FFFE0031D0690001)

Charts Affected: 12316_1, 12318_1, 12323_1, 12300_1, 13003_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12597_Features for PYDRO.000	0_ 0003264617 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Attributes: NINFOM - NO CHANGE IN CHARTING
NTXTDS - ENC#US5NJ20AM,Edition15,20140718
SORDAT - 20140402
SORIND - US,US,graph,H12597

Office Notes

SAR: Ensonified with 200% SSS. No evidence of this feature was found. This feature is considered as disproved; feature currently not charted.

COMPILATION: Concur. Consider AWOIS #13277, an uncharted dangerous submerged obstruction, least depth 23 feet, disproved. Update the chart with present survey depths. Update AWOIS database with present survey findings.

1.5) AWOIS #11196

Feature for AWOIS Item #11196

Search Position: 39° 30' 05.3" N, 074° 16' 44.7" W
Historical Depth: 3.68 m
Search Radius: 500
Search Technique: Type: VINNIE V., Itemstatus: ASSIGNED, Searchtype: FULL, Technique: S2 MBES

Technique Notes:

History Notes:

History

LNM35/86--09/02/86 3RD CGD; THE 36 FOOT TUG VINNIE V. IS REPORTED TO HAVE SUNK ON 11 JULY 1986 IN APPROXIMATE POSITION LAT 39/30/00.00N LONG 074/16/48.00W (NAD 27) IN 10 FEET MLW. THE WRECK HAS SHIFTED AND AS OF 28 AUGUST ITS POSITION IS UNKOWN. (ENTERED BY PSH 01/02) H11241/04 -- OPR-C303-KR-03; FULL SEARCH OF THE EASTERN THIRD OF THE 2000-METER RADIUS WITH 200% SIDE SCAN AND MULTIBEAM SONAR COVERAGE IN 39-30- 00.42N 074-16-46.51W (NAD83). NO COVERAGE OF THE CHARTED DANGEROUS WRECK PA. EVALUATOR RECOMMENDS NO CHANGE IN CHARTING IS NEEDED. (UPDATE 6/6/05 JRS)

Survey Summary

Survey Position: 39° 30' 05.3" N, 074° 16' 44.7" W
Least Depth: 3.68 m (= 12.09 ft = 2.014 fm = 2 fm 0.09 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2014-092.00:00:00.000 (04/02/2014)
Dataset: H12597_Features for PYDRO.000
FOID: 0_ 0003264838 00001(FFFE0031D1460001)
Charts Affected: 12316_1, 12318_1, 12323_1, 12300_1, 13003_1

Remarks:

WRECKS/remrks: DEA CF #133. AWOIS #11196. Wreck is approximately 12m x 4m in dimension and is rising approximately 1.8m above the natural bottom. New position and depth of charted feature.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12597_Features for PYDRO.000	0_ 0003264838 00001	0.00	000.0	Primary

Hydrographer Recommendations

Add feature to chart.

Cartographically-Rounded Depth (Affected Charts):

12ft (12316_1, 12318_1, 12323_1)

2fm (12300_1, 13003_1)

S-57 Data

Geo object 1: Wreck (WRECKS)
Attributes: CATWRK - 2:dangerous wreck
NINFOM - Add wreck
QUASOU - 6:least depth known
SORDAT - 20140402
SORIND - US,US,graph,H12597
TECSOU - 2,3:found by side scan sonar,found by multi-beam
VALSOU - 3.684 m
WATLEV - 3:always under water/submerged

Office Notes

SAR: Feature was ensonified with object detect SSS and MBES. Feature is considered significant and verified as per survey data. Defer the final charting disposition to AHB Compile Team.

COMPILATION: Concur. Delete charted dangerous sunken wreck PA, depth unknown. Add AWOIS #11196, a dangerous sunken wreck, least depth 12.01 feet, in the present survey position. Update the AWOIS database based on present survey findings.

Feature Images

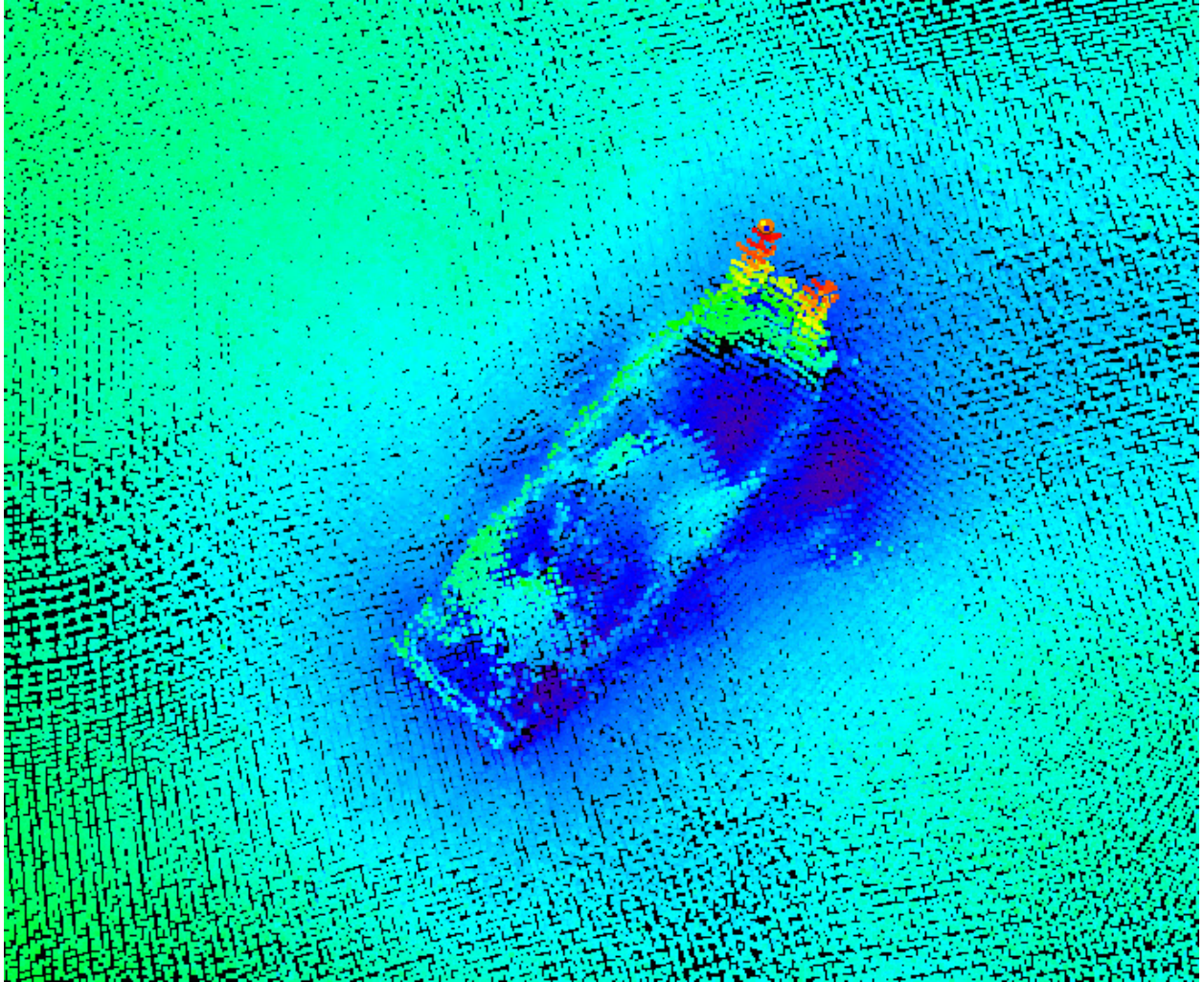


Figure 1.5.1

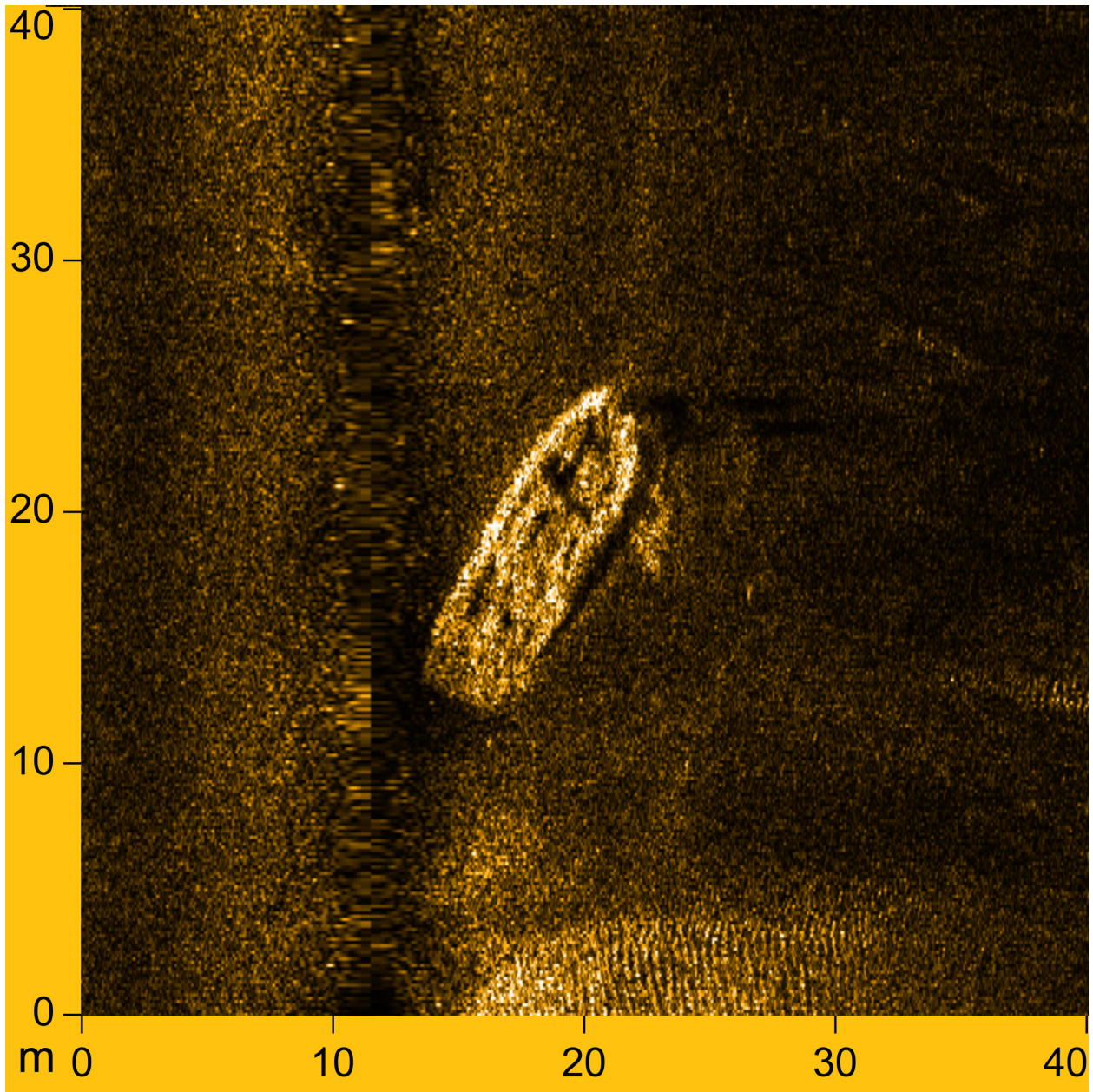


Figure 1.5.2

1.6) AWOIS #11195

Feature for AWOIS Item #11195

Search Position: 39° 31' 00.5" N, 074° 15' 58.6" W
Historical Depth: [None]
Search Radius: 200
Search Technique: Type: UNKNOWN, Itemstatus: ASSIGNED, Searchtype: FULL, Technique: S2 MBES

Technique Notes:

History Notes:

History

LNM27/76--06/16/76 3RD CGD: 19 FOOT OUTBOARD VESSEL HAS BEEN REPORTED SUNK IN LAT 39/31/00.00N LONG 074/16/00.00W (NDAD 27). (ENTERED BY PSH 01/02) H11241/04 -- OPR-C303-KR-03; FULL SEARCH THE EASTERN THIRD OF THE 2000-METER RADIUS IN 39-31-00.42N 074-15-58.51W. NO COVERAGE OF THE CHARTED DANGEROUS WRECK PA. EVALUATOR RECOMMENDS NO CHANGE IN CHARTING IS RECOMMENDED.(UPDATE 6/6/05 JRS).

Survey Summary

Survey Position: 39° 31' 00.5" N, 074° 15' 58.6" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2014-092.00:00:00.000 (04/02/2014)
Dataset: H12597_Features for PYDRO.000
FOID: 0_ 0003264795 00001(FFFE0031D11B0001)
Charts Affected: 12316_1, 12318_1, 12323_1, 12300_1, 13003_1

Remarks:

\$CSYMB/remrks: Disproved by 200% side scan coverage.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12597_Features for PYDRO.000	0_ 0003264795 00001	0.00	000.0	Primary

Hydrographer Recommendations

Remove feature from chart.

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)
Attributes: NINFOM - Delete wreck
NTXTDS - ENC#US5NJ20AM, Edition15, 20140718
SORDAT - 20140402
SORIND - US, US, graph, H12597

Office Notes

SAR: Ensonified with 200% SSS. No evidence of this feature was found. This feature is considered as disproved.

COMPILATION: Concur. Consider AWOIS #11195, a charted dangerous sunken wreck PA, least depth unknown, disproved. Update the chart with present survey depths. Update AWOIS database with present survey findings.

1.7) AWOIS #2755

Feature for AWOIS Item #2755

Search Position: 39° 29' 28.0" N, 074° 15' 37.8" W

Historical Depth: 8.67 m

Search Radius: [unknown]

Search Technique: [unknown]

Technique Notes:

History Notes: CL518/50--07/21/50, USC & GS; PRELIMINARY REPORT FROM F00094 REGARDING THE INVESTIGATION FOR THIS OBSTRUCTION. F00094/50--WD INVESTIGATION HUNG THE OBSTRUCTION AT 27 FEET AND CLEARED IT AT 24.5 FEET MLW. THE OBSTRUCTION IS LOCATED IN LAT 39/29/22.00N, LONG 074/15/32.00W (NAD 27). (UPDATED BY PSH, 01/02) H11241/04 -- OPR-C303-KR-03; FULL 500-METER RADIUS SEARCH WITH 200% SIDE SCAN AND MULTIBEAM SONAR COVERAGE. THREE OBSTRUCTIONS WERE FOUND WITHIN THE SEARCH RADIUS. THE SHOALEST FEATURE, A 25 OBSTN, IS ABOUT 250 METERS NW. EVALUATOR RECOMMENDS REMOVAL OF THE CHARTED OBSTN CLEARED TO 24 FT, DANGER CURVE AND BLUE TINT IN 39-29-22.42N 074-15-30.51W AND RECOMMEND CHARTING A 25 OBSTN IN 39-29-28.45N 074-15-37.59W. (UPDATE 6/6/05, JRS).

Survey Summary

Survey Position: 39° 29' 28.0" N, 074° 15' 37.8" W

Least Depth: 8.67 m (= 28.44 ft = 4.740 fm = 4 fm 4.44 ft)

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

Timestamp: 2014-092.00:00:00.000 (04/02/2014)

Dataset: H12597_Features for PYDRO.000

FOID: 0_ 0003264679 00001(FFFE0031D0A70001)

Charts Affected: 12316_1, 12318_1, 12323_1, 12300_1, 13003_1

Remarks:

OBSTRN/remrks: DEA CF #17. Object rising approximately 0.6m above the natural bottom. New position and depth of charted feature.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12597_Features for PYDRO.000	0_ 0003264679 00001	0.00	000.0	Primary

Hydrographer Recommendations

Add feature to chart.

Cartographically-Rounded Depth (Affected Charts):

28ft (12316_1, 12318_1, 12323_1)

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

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)
Attributes: NINFOM - Delete obstruction
NTXTDS - ENC#US5NJ20AM, Edition15, 20140718
SORDAT - 20140402
SORIND - US, US, graph, H12597

Office Notes

SAR: Feature was ensonified with object detect SSS and MBES. Feature is considered significant and verified as per survey data. Defer the final charting disposition to AHB Compile Team.

COMPILATION: Concur with conditions. Delete AWOIS #2755, charted dangerous obstruction, least depth 25 feet. Consider AWOIS item 2755 disproved. Update AWOIS database with present survey findings.

Feature Images

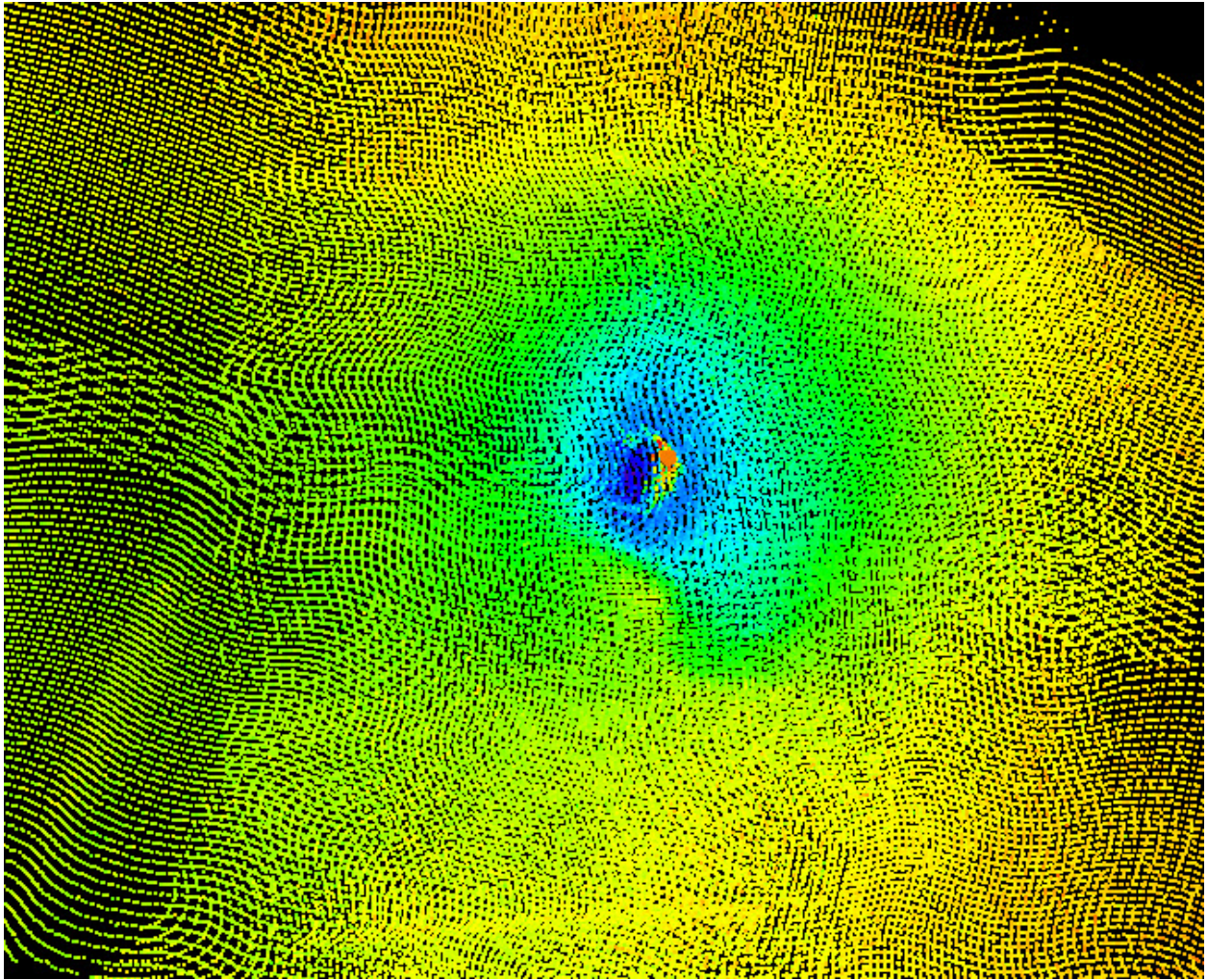


Figure 1.7.1

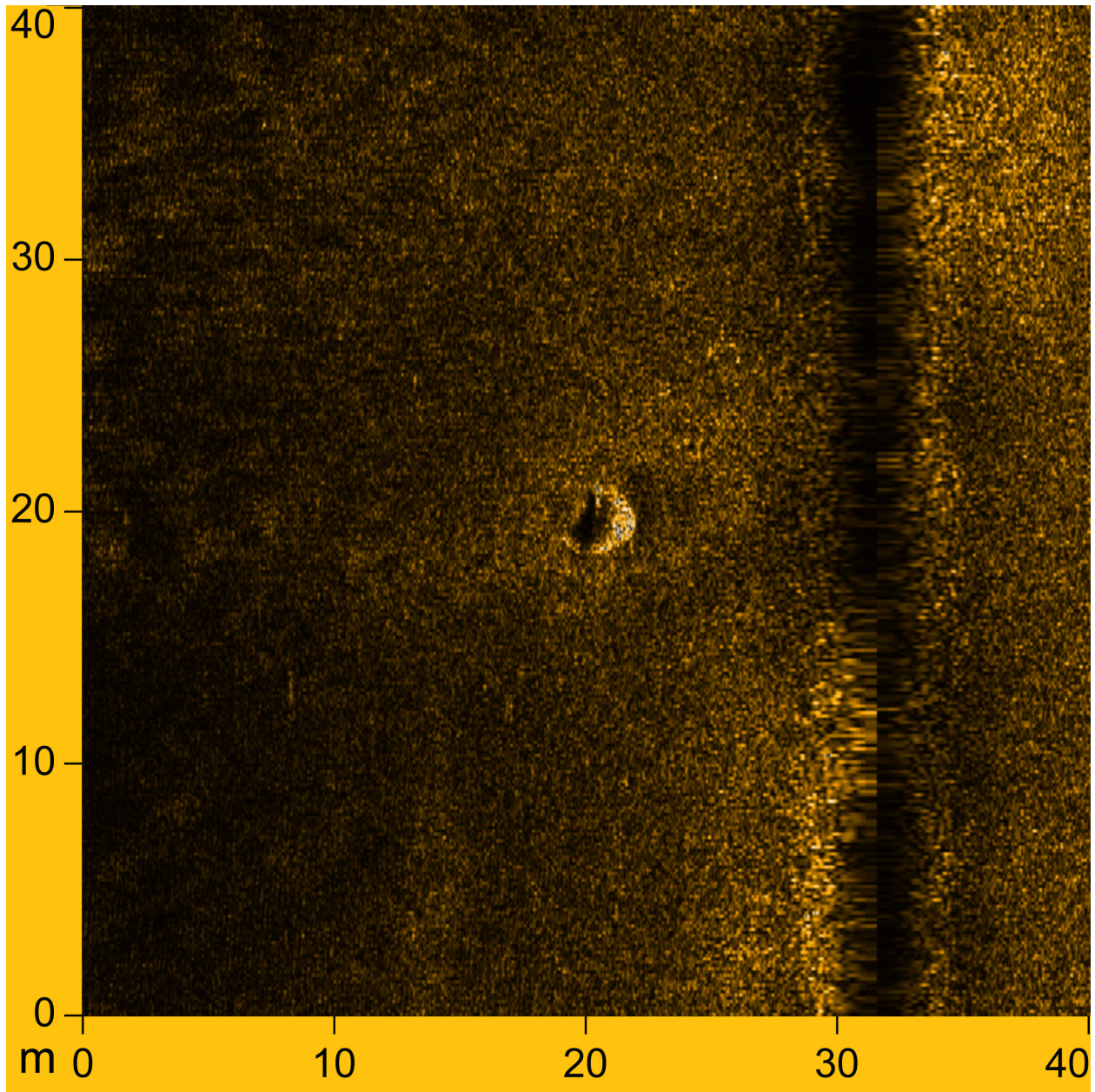


Figure 1.7.2

1.8) AWOIS #2754

Feature for AWOIS Item #2754

Search Position: 39° 31' 19.0" N, 074° 15' 24.4" W
Historical Depth: 6.08 m
Search Radius: 200
Search Technique: Type: ONTARIO, Itemstatus: ASSIGNED, Searchtype: FULL, Technique: S2 MBES

Technique Notes:

History Notes:

History

ITEM NOT CHARTED. ITEM PROVIDED AS AN INFORMATION ITEM. H11241/04 -- OPR-C303-KR-03; PARTIAL SEARCH OF THE EASTERN PART OF THE 2000-METER RADIUS WITH 200% SIDE SCAN AND MULTIBEAM SONAR COVERAGE IN 39-31-30.42N 074-15-40.50W. NO COVERAGE OF THE LISTED AWOIS POSITION WHICH IS NOT CURRENTLY CHARTED. EVALUATOR RECOMMENDS CHARTING A 20 WK IN 39-31-19.13N 074-15-25.50W(UPDATE 6/6/05 JRS) SEE THE PROPRIETARY FIELD FOR HISTORY.

Survey Summary

Survey Position: 39° 31' 19.0" N, 074° 15' 24.4" W
Least Depth: 6.08 m (= 19.95 ft = 3.325 fm = 3 fm 1.95 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2014-092.00:00:00.000 (04/02/2014)
Dataset: H12597_Features for PYDRO.000
FOID: 0_ 0003264800 00001(FFFE0031D1200001)
Charts Affected: 12316_1, 12323_1, 12300_1, 13003_1

Remarks:

WRECKS/remrks: DEA CF #125. AWOIS #2754. Wreck is approximately 51m x 10m in dimension and is rising approximately 1.5m above the natural bottom. New position and depth of charted feature.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12597_Features for PYDRO.000	0_ 0003264800 00001	0.00	000.0	Primary

Hydrographer Recommendations

Add feature to chart.

Cartographically-Rounded Depth (Affected Charts):

20ft (12316_1, 12323_1)

3 ¼fm (12300_1, 13003_1)

S-57 Data

Geo object 1: Wreck (WRECKS)
Attributes: CATWRK - 2:dangerous wreck
NINFOM - Add wreck
QUASOU - 6:least depth known
SORDAT - 20140402
SORIND - US,US,graph,H12597
TECSOU - 2,3:found by side scan sonar,found by multi-beam
VALSOU - 6.081 m
WATLEV - 3:always under water/submerged

Office Notes

SAR: Feature was ensonified with object detect SSS and MBES. Feature is considered significant and verified as per survey data. Defer the final charting disposition to AHB Compile Team.

COMPILATION: Concur. Delete charted dangerous sunken wreck, least depth 20 feet, Add, AWOIS #2754, a dangerous sunken wreck, least depth 19.95 feet, in the present survey position. Update AWOIS database with present survey findings.

Feature Images

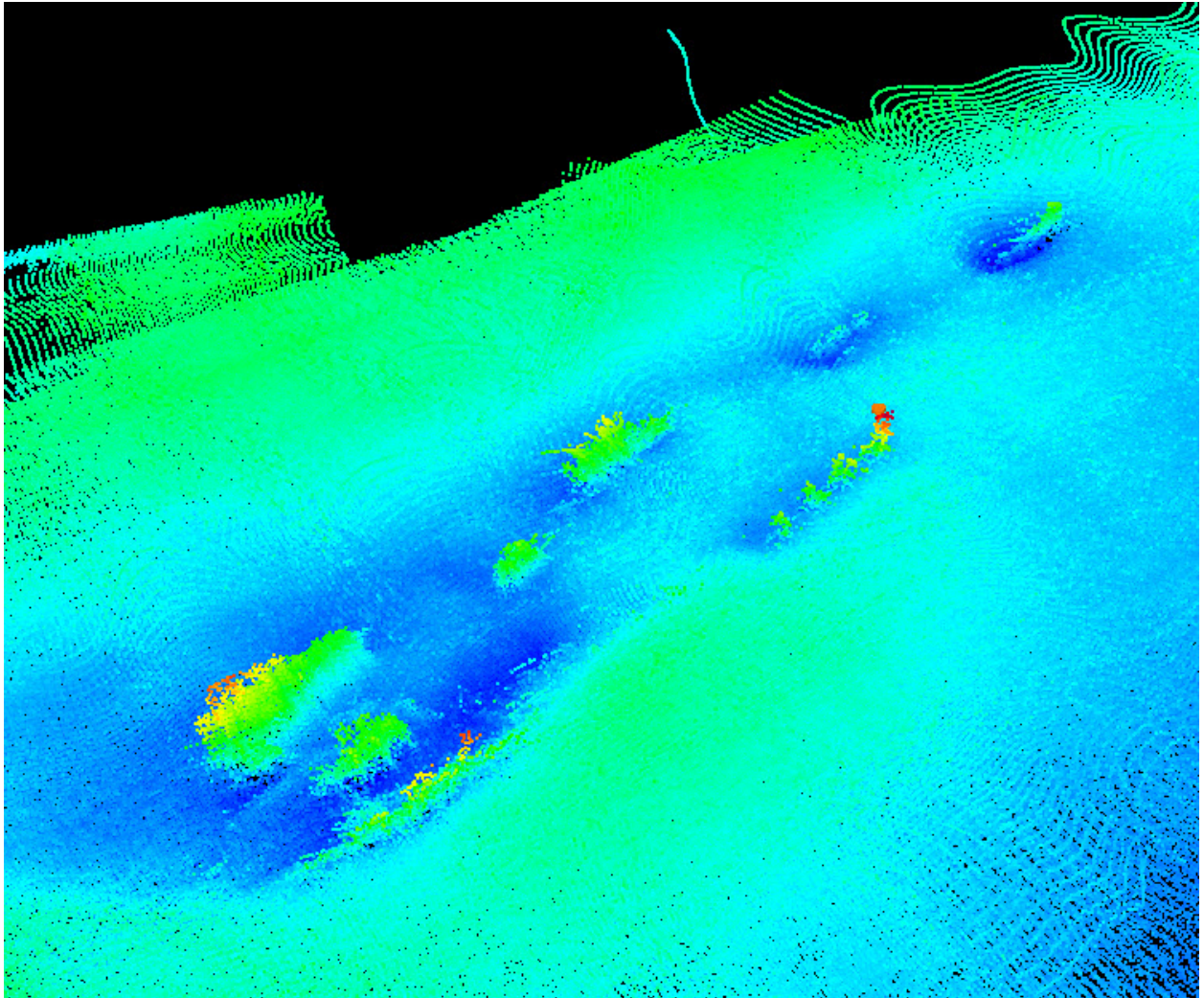


Figure 1.8.1

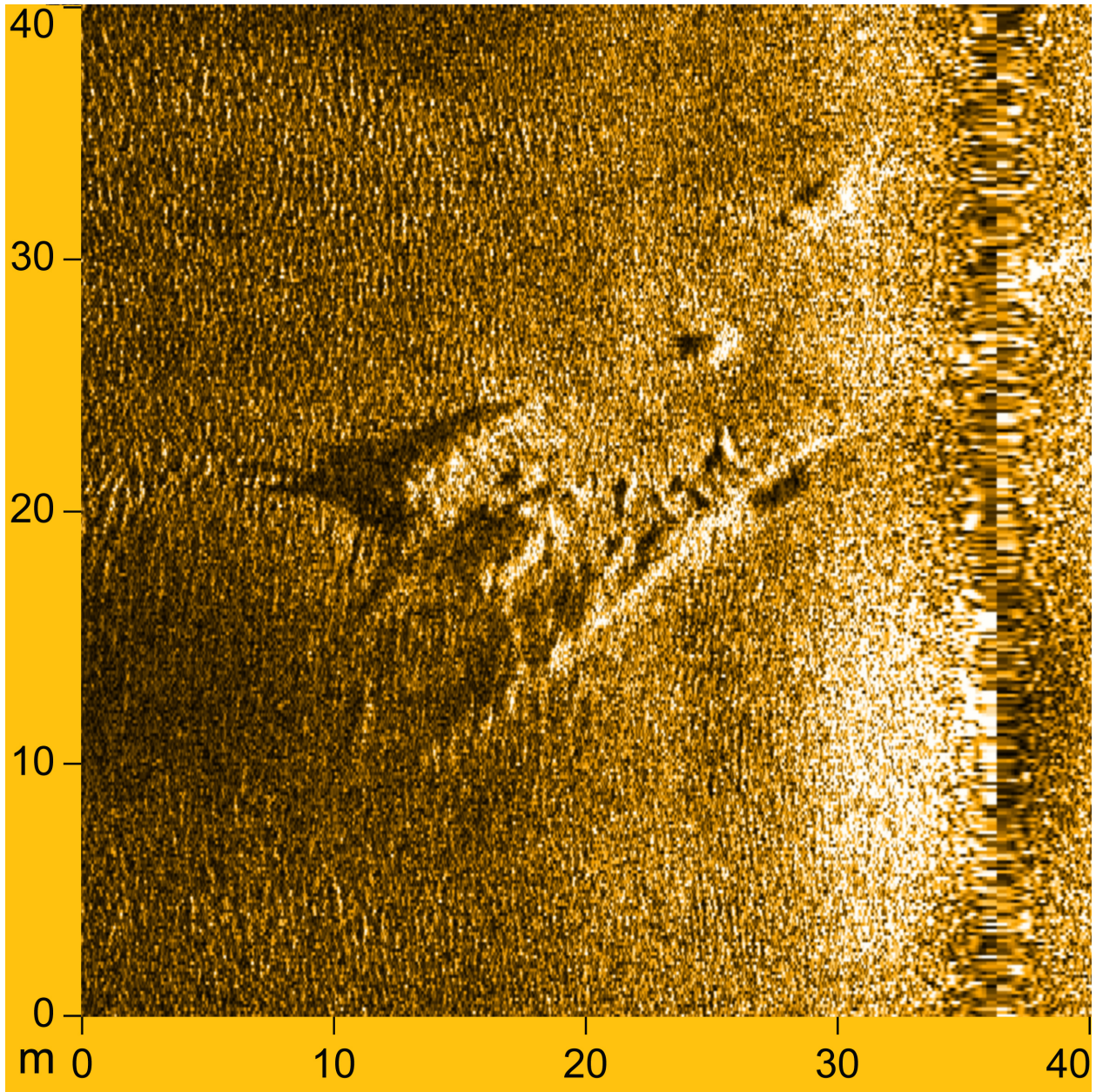


Figure 1.8.2

2 - Dangers To Navigation

2.1) DTON 2

DANGER TO NAVIGATION

Survey Summary

Survey Position: 39° 26' 00.5" N, 074° 19' 56.2" W
Least Depth: -1.10 m (= -3.62 ft = -0.603 fm = 0 fm 2.38 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2014-092.00:00:00.000 (04/02/2014)
Dataset: H12597_Features for PYDRO.000
FOID: 0_ 0003265087 00001(FFFE0031D23F0001)
Charts Affected: 12316_1, 12318_1, 12300_1, 13003_1

Remarks:

WRECKS/remrks: DtoN #2. Wreck is approximately 40m x 8m in dimension. VALSOU computed from estimated height above water (65cm) reduced to MLLW with verified zoning.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12597_Features for PYDRO.000	0_ 0003265087 00001	0.00	000.0	Primary

Hydrographer Recommendations

Add feature to chart.

Cartographically-Rounded Depth (Affected Charts):

-3ft (12316_1, 12318_1)

-1 ¼fm (12300_1, 13003_1)

S-57 Data

Geo object 1: Wreck (WRECKS)
Attributes: CATWRK - 4:wreck showing mast/masts
 NINFOM - Add wreck
 QUASOU - 6:least depth known
 SORDAT - 20140402

SORIND - US,US,graph,H12597

TECSOU - 2,12:found by side scan sonar,found by levelling

VALSOU - -1.102 m

WATLEV - 4:covers and uncovers

Office Notes

SAR: Feature was visually verified by the field. The field took a height on the feature on DN258 and recorded the height and time measured (See Separates I: Acquisition Logs pg. 117). The reviewer has confirmed the height has been corrected with the appropriate water levels.

COMPILATION: Concur. Delete charted visible wreck, bearing 4 ft. Add visible wreck, bearing 3 ft in the present survey position.

Feature Images



Figure 2.1.1



Figure 2.1.2

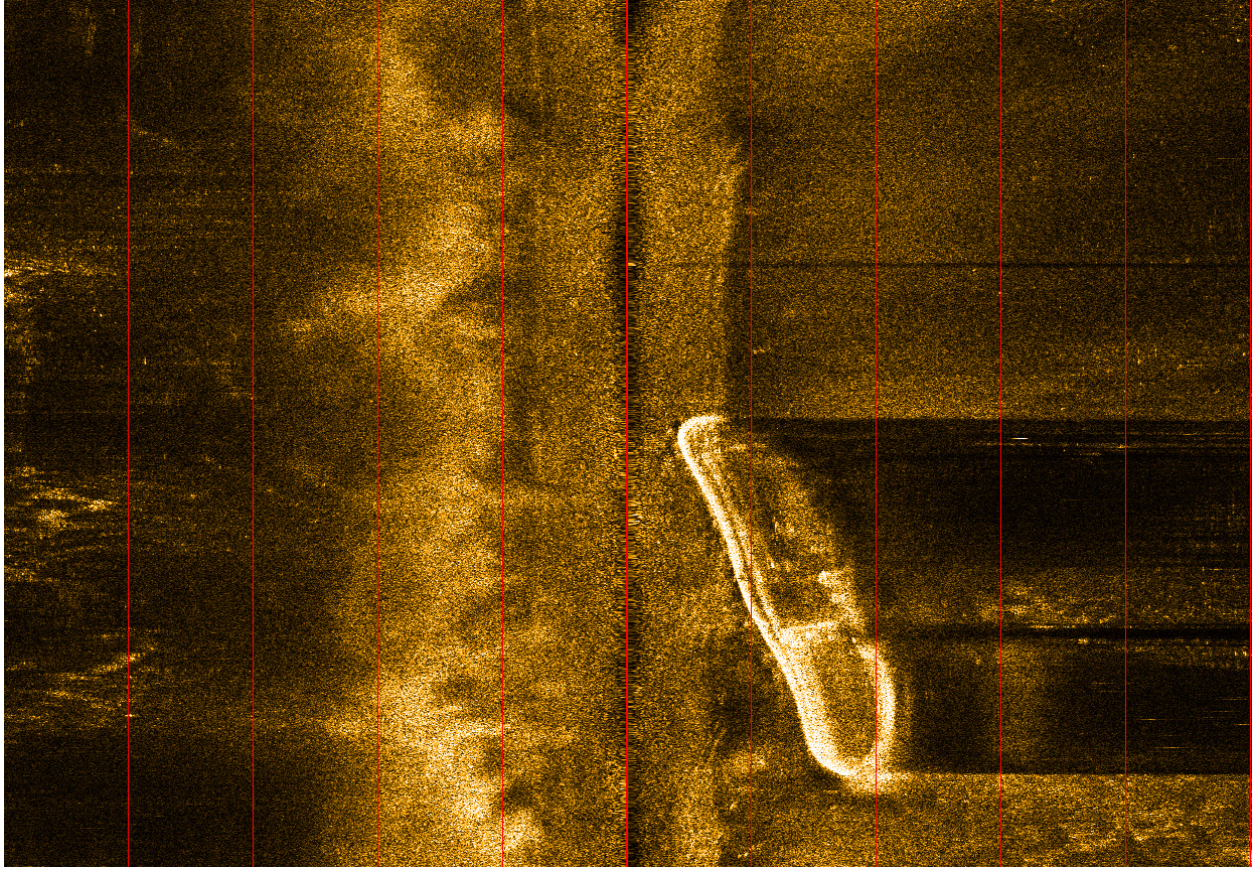


Figure 2.1.3

2.2) DTON 5

DANGER TO NAVIGATION

Survey Summary

Survey Position: 39° 29' 09.1" N, 074° 18' 22.2" W
Least Depth: 3.35 m (= 10.99 ft = 1.832 fm = 1 fm 4.99 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2014-092.00:00:00.000 (04/02/2014)
Dataset: H12597_Features for PYDRO.000
FOID: 0_ 0003264913 00001(FFFE0031D1910001)
Charts Affected: 12316_1, 12318_1, 12323_1, 12300_1, 13003_1

Remarks:

OBSTRN/remrks: DtoN #5. Object rising approximately 2.0m above the natural bottom.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12597_Features for PYDRO.000	0_ 0003264913 00001	0.00	000.0	Primary

Hydrographer Recommendations

Add feature to chart.

Cartographically-Rounded Depth (Affected Charts):

11ft (12316_1, 12318_1, 12323_1)

1 $\frac{3}{4}$ fm (12300_1, 13003_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: NINFOM - Add obstructions
 QUASOU - 6:least depth known
 SORDAT - 20140402
 SORIND - US,US,graph,H12597
 TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 3.351 m

WATLEV - 3:always under water/submerged

Office Notes

SAR: Feature was ensonified with object detect SSS and MBES. Feature is considered significant and verified as per survey data. Defer the final charting disposition to AHB Compile Team.

COMPILATION: Concur. Delete charted dangerous submerged obstruction, least depth 11 feet. Add dangerous submerged obstruction, least depth 10.99 feet and label as obstructions to incorporate the 13.9 foot obstruction to the SW.

Feature Images

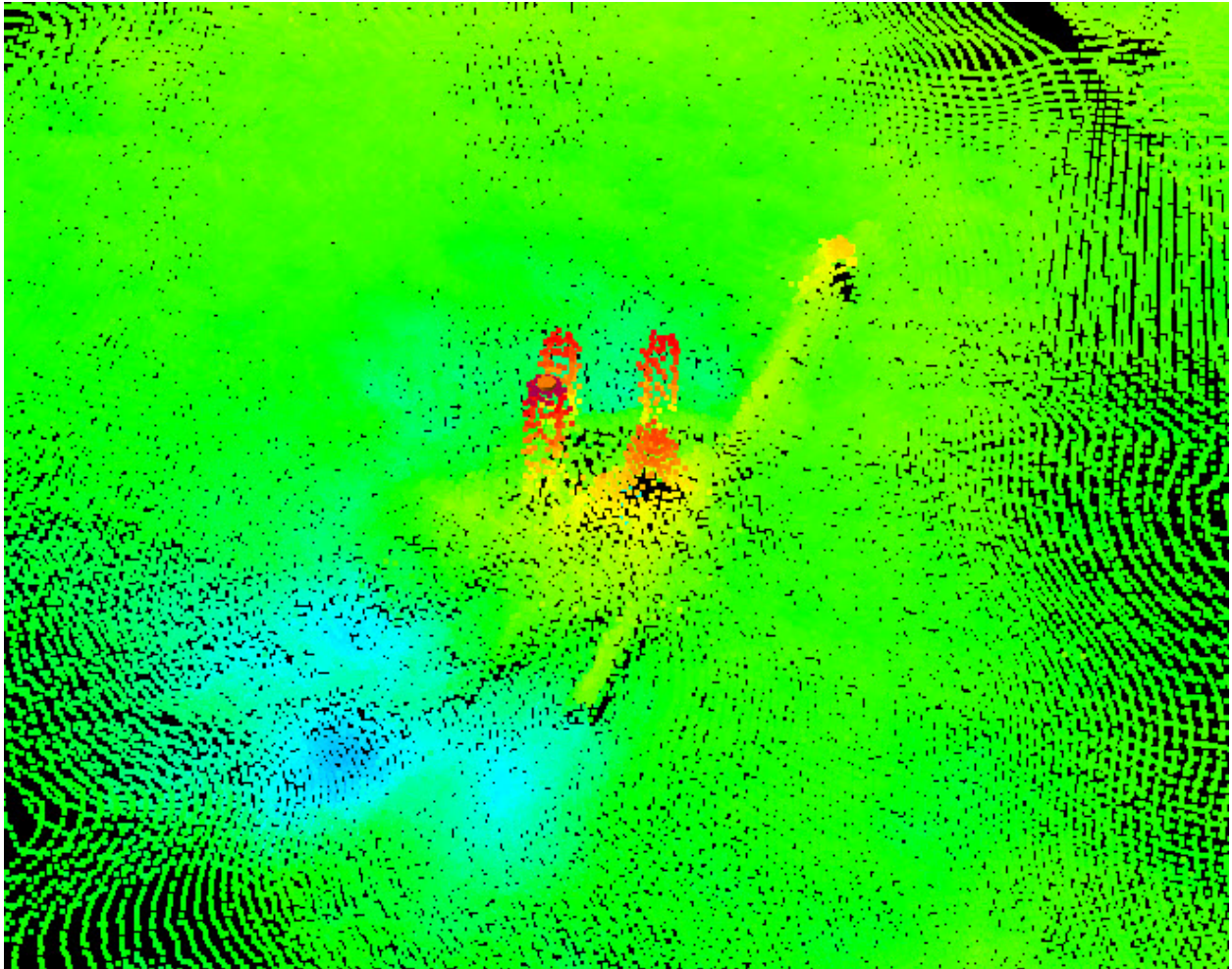


Figure 2.2.1

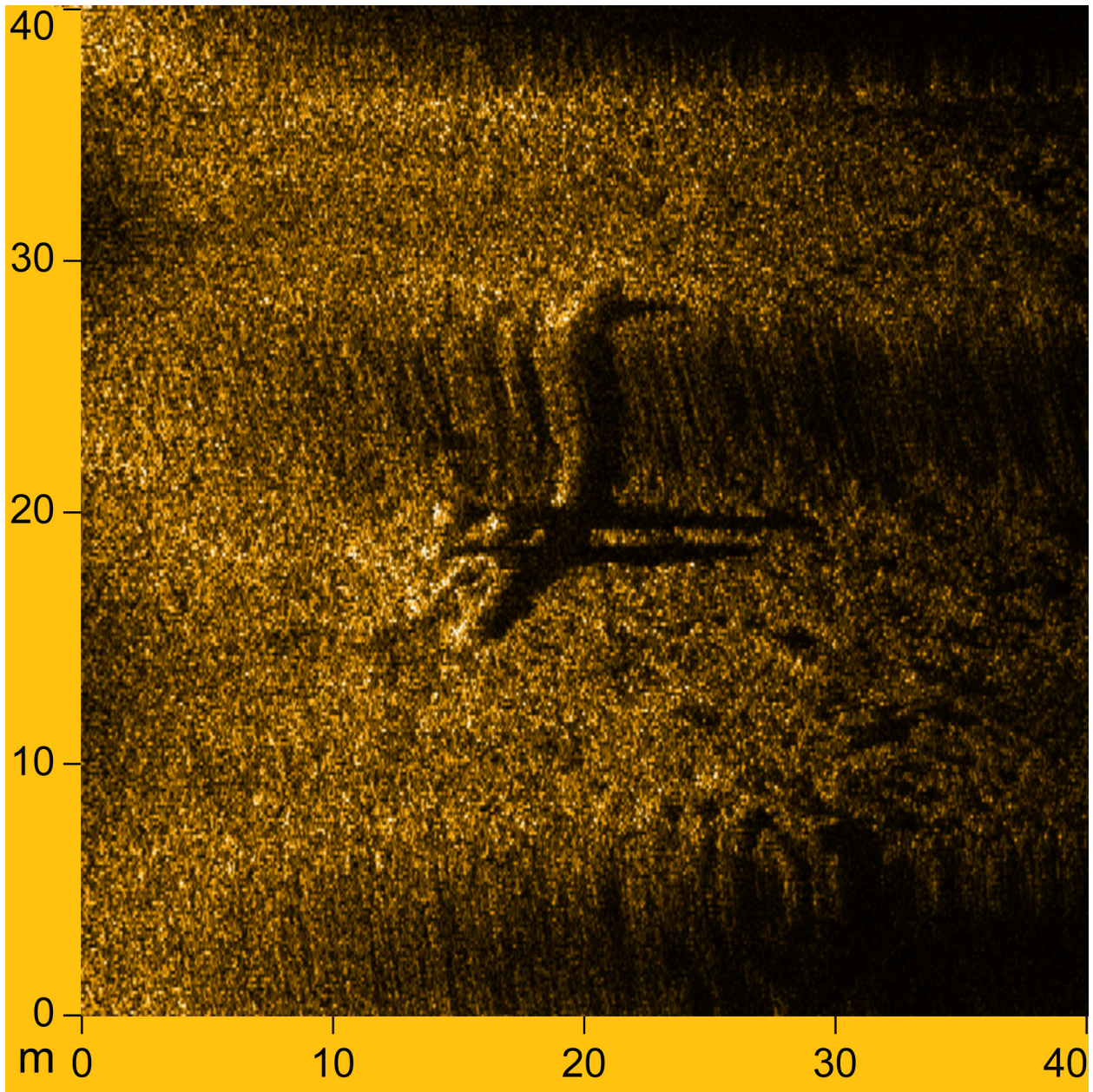


Figure 2.2.2

2.3) DTON 3

DANGER TO NAVIGATION

Survey Summary

Survey Position: 39° 30' 44.1" N, 074° 18' 05.7" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2014-092.00:00:00.000 (04/02/2014)
Dataset: H12597_Features for PYDRO.000
FOID: 0_ 0003265066 00001(FFFE0031D22A0001)
Charts Affected: 12316_1, 12318_1, 12323_1, 12300_1, 13003_1

Remarks:

OFSPFL/remrks: DtoN #3. Uncharted fixed platform with signage "USGS A". The platform was located during H12597 survey operations but is located outside of the H12597 survey area.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12597_Features for PYDRO.000	0_ 0003265066 00001	0.00	000.0	Primary

Hydrographer Recommendations

Add feature to chart.

S-57 Data

Geo object 1: Offshore platform (OFSPFL)
Attributes: NINFOM - Add offshore platform DTON
 SORDAT - 20140402
 SORIND - US,US,graph,H12597

Office Notes

SAR: Verified in GoogleEarth. Survey data does not include any data types for verification.

COMPILATION: Concur. Delete charted offshore platform. Add offshore platform in the present survey position.

Feature Images



Figure 2.3.1



Figure 2.3.2



Figure 2.3.3

2.4) DTON 1

DANGER TO NAVIGATION

Survey Summary

Survey Position: 39° 29' 36.7" N, 074° 16' 16.4" W
Least Depth: 5.35 m (= 17.55 ft = 2.924 fm = 2 fm 5.55 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2014-092.00:00:00.000 (04/02/2014)
Dataset: H12597_Features for PYDRO.000
FOID: 0_ 0003264654 00001(FFFE0031D08E0001)
Charts Affected: 12316_1, 12318_1, 12323_1, 12300_1, 13003_1

Remarks:

OBSTRN/remrks: DtoN #1. Wreck is approximately 62m x 14m in dimension and is rising approximately 2.0m above the natural bottom.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12597_Features for PYDRO.000	0_ 0003264654 00001	0.00	000.0	Primary

Hydrographer Recommendations

Update charts with new obstruction located approximately 50 meters northeast of H12597 DtoN 1 which was investigated after the danger was reported and charted.

Cartographically-Rounded Depth (Affected Charts):

17ft (12316_1, 12318_1, 12323_1)

2 $\frac{3}{4}$ fm (12300_1, 13003_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: CATOBS - 6:foul area
 NINFOM - Add obstruction (wreckage)
 QUASOU - 6:least depth known
 SORDAT - 20140402

SORIND - US,US,graph,H12597

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

VALSOU - 5.348 m

WATLEV - 3:always under water/submerged

Office Notes

SAR: Feature was ensonified with object detect SSS and MBES. Feature is considered significant and verified as per survey data. Defer the final charting disposition to AHB Compile Team.

COMPILATION: Concur with conditions. The field found a dangerous 17 foot obstruction and a dangerous 19 foot sunken wreck within meters of each other. It is recommended that since both features can not be charted, this feature is charted as a dangerous obstruction (wreckage) with a least depth of 17.546 feet in the present survey location.

Feature Images

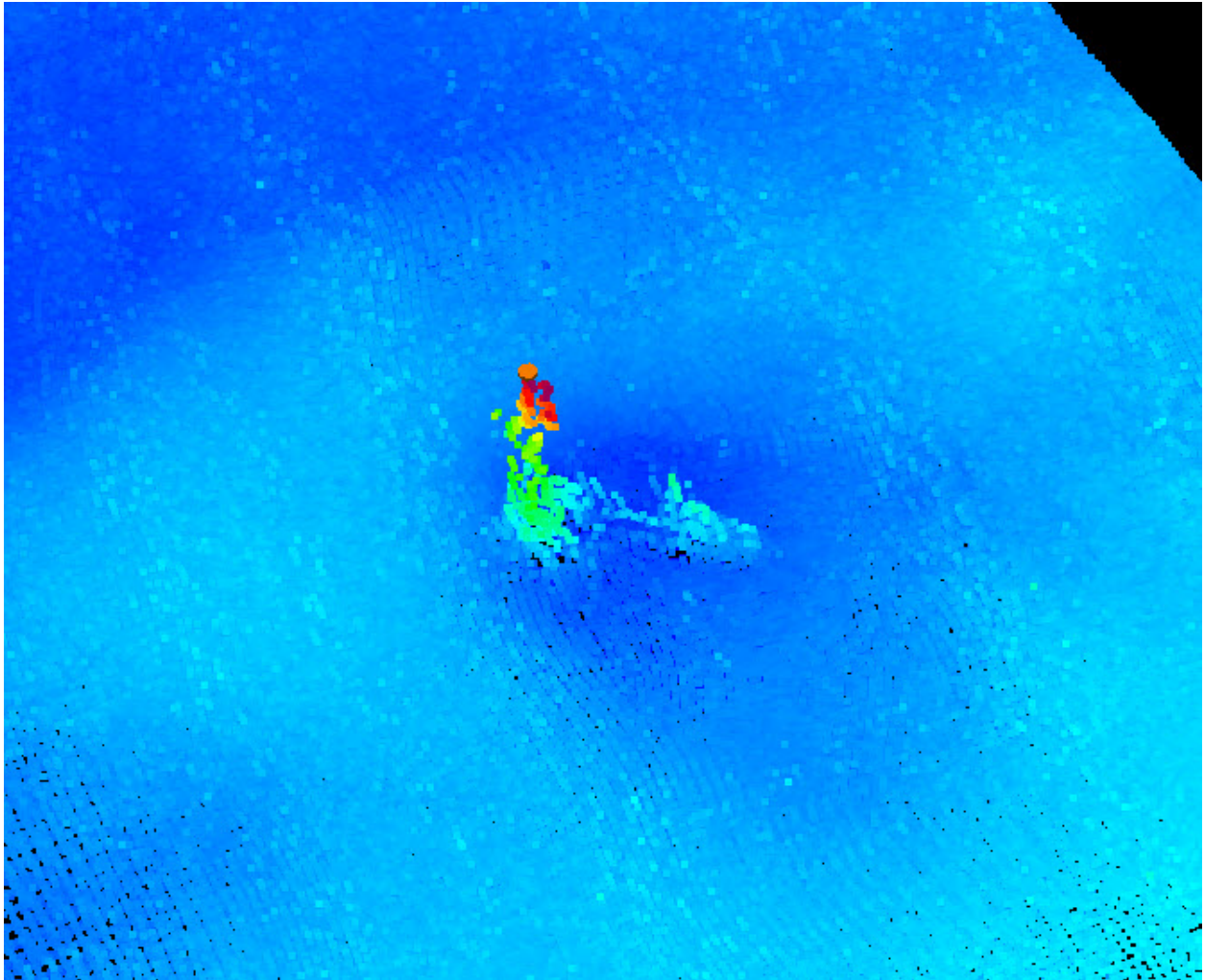


Figure 2.4.1

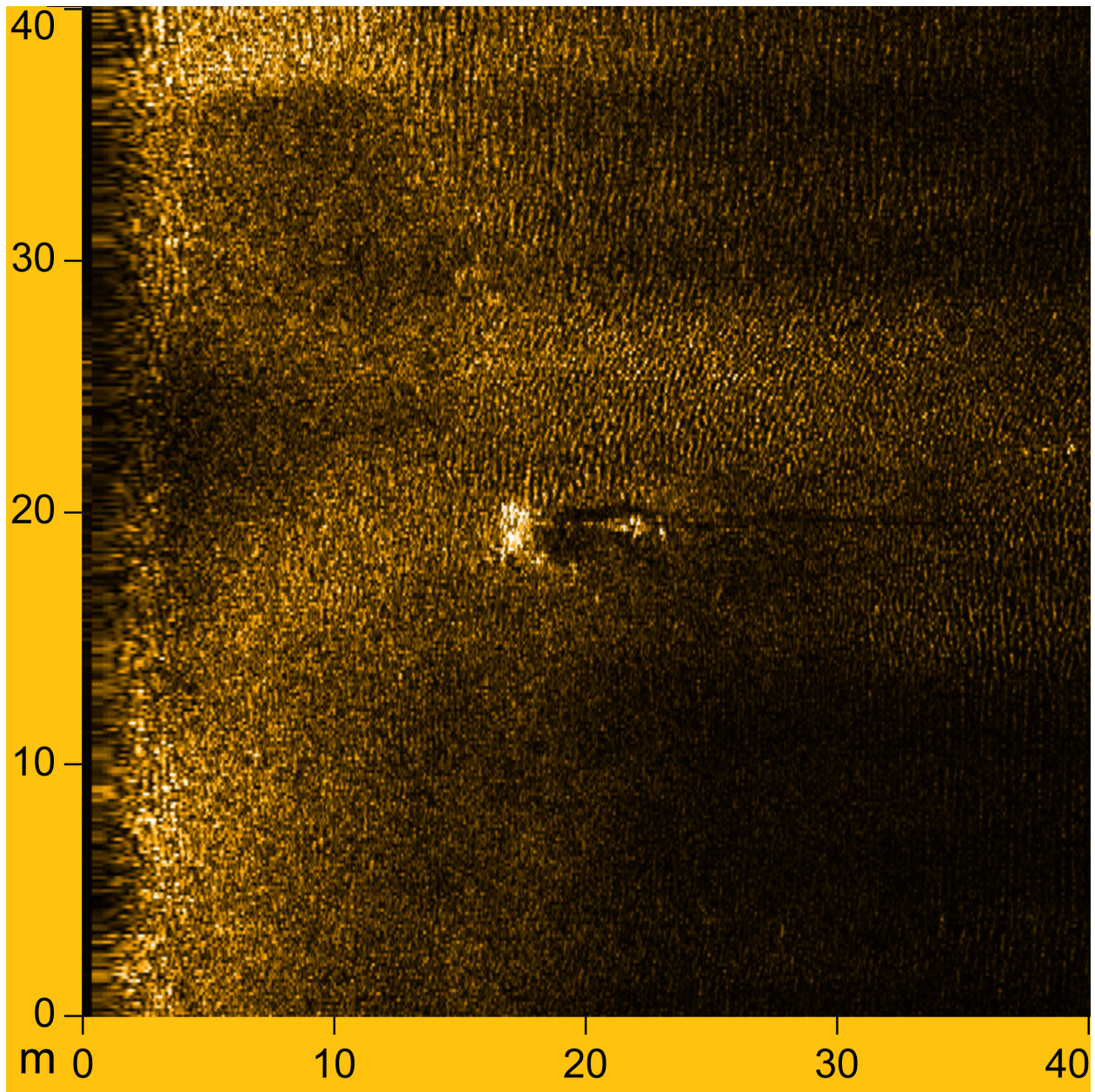


Figure 2.4.2

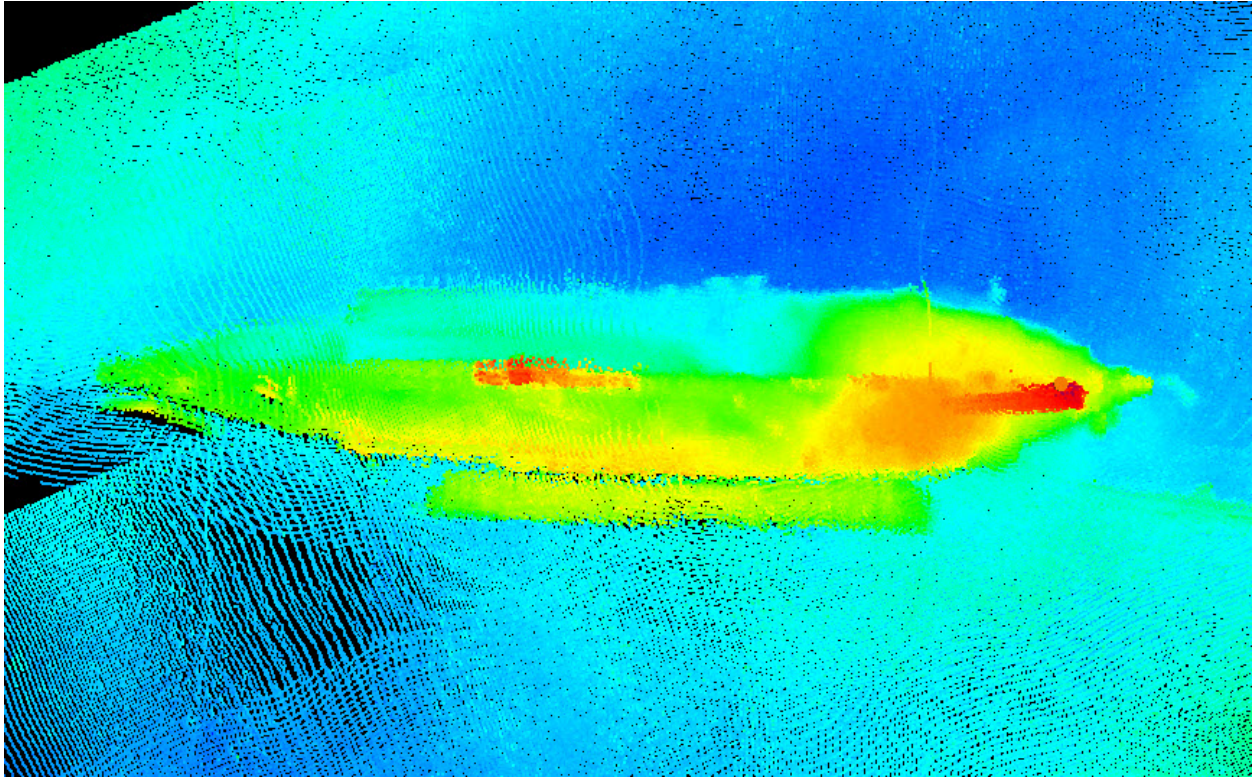


Figure 2.4.3

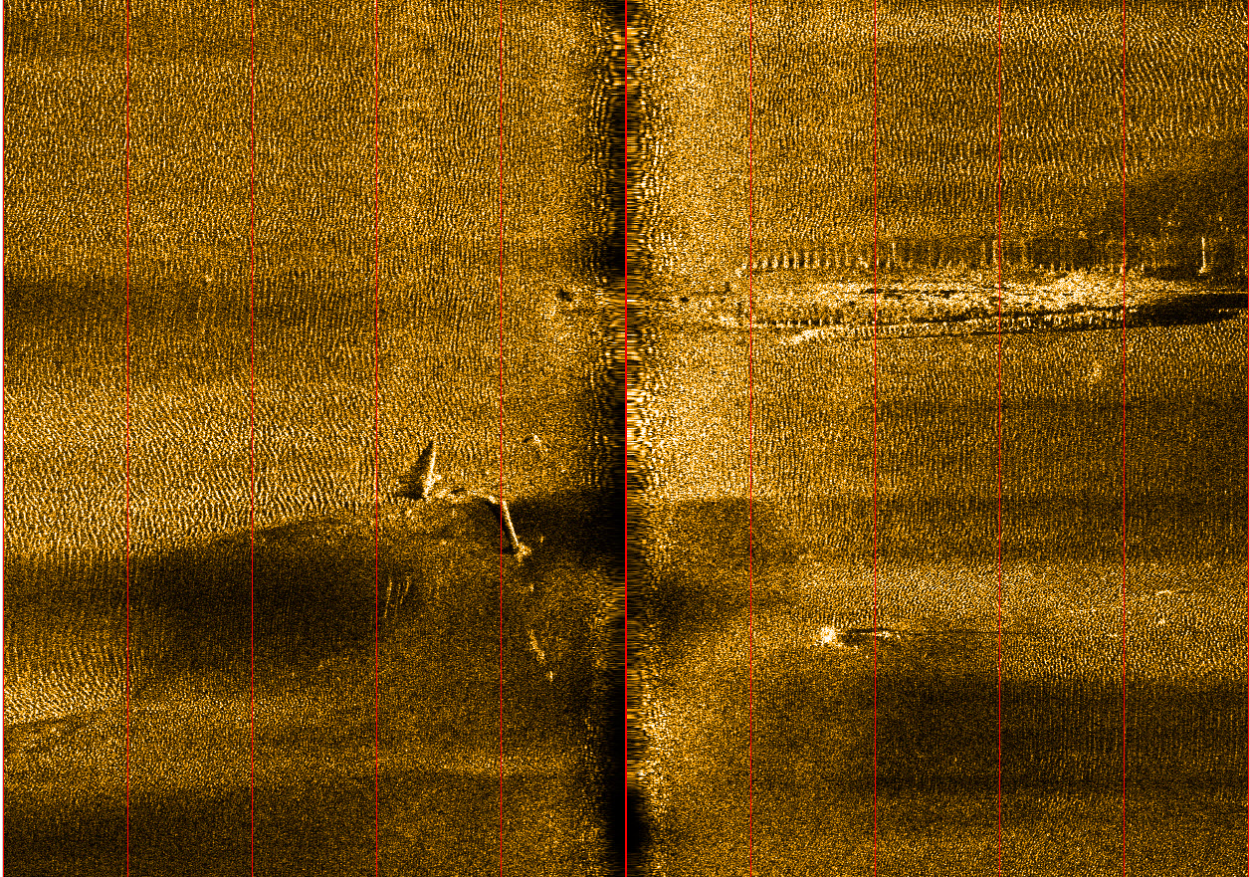


Figure 2.4.4

3 - Wreck Features

3.1) AWOIS #11202

Survey Summary

Survey Position: 39° 25' 36.6" N, 074° 19' 57.6" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2005-335.00:00:00.000 (12/01/2005)
Dataset: H12597_Features for PYDRO.000
FOID: 0_ 0003265151 00001(FFFE0031D27F0001)
Charts Affected: 12316_1, 12318_1, 12300_1, 13003_1

Remarks:

WRECKS/remrks: DEA CF #129. AWOIS #11202. Wreck not observed in 200% side scan or VBES coverage. Partial coverage only of AWOIS radii. Area of AWOIS radii not surveyed was inshore of the NALL and not attainable.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12597_Features for PYDRO.000	0_ 0003265151 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Wreck (WRECKS)
Attributes: CATWRK - 2:dangerous wreck
 NINFOM - Retain wreck
 QUASOU - 2:depth unknown
 SORDAT - 20051200
 SORIND - US,US,graph,Chart 12316
 WATLEV - 3:always under water/submerged

Office Notes

SAR: Concur. The field did not obtain full coverage in required AWOIS search radius. Retain wreck.

COMPILATION: Concur. Retain charted dangerous sunken wreck, depth unknown, AWOIS 11202.

3.2) DTON 2

DANGER TO NAVIGATION

Survey Summary

Survey Position: 39° 26' 00.5" N, 074° 19' 56.2" W
Least Depth: -1.10 m (= -3.62 ft = -0.603 fm = 0 fm 2.38 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2014-092.00:00:00.000 (04/02/2014)
Dataset: H12597_Features for PYDRO.000
FOID: 0_ 0003265087 00001(FFFE0031D23F0001)
Charts Affected: 12316_1, 12318_1, 12300_1, 13003_1

Remarks:

WRECKS/remrks: DtoN #2. Wreck is approximately 40m x 8m in dimension. VALSOU computed from estimated height above water (65cm) reduced to MLLW with verified zoning.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12597_Features for PYDRO.000	0_ 0003265087 00001	0.00	000.0	Primary

Hydrographer Recommendations

Add feature to chart.

Cartographically-Rounded Depth (Affected Charts):

-3ft (12316_1, 12318_1)

-1 ¼fm (12300_1, 13003_1)

S-57 Data

Geo object 1: Wreck (WRECKS)
Attributes: CATWRK - 4:wreck showing mast/masts
 NINFOM - Add wreck
 QUASOU - 6:least depth known
 SORDAT - 20140402

SORIND - US,US,graph,H12597

TECSOU - 2,12:found by side scan sonar,found by levelling

VALSOU - -1.102 m

WATLEV - 4:covers and uncovers

Office Notes

SAR: Feature was visually verified by the field. The field took a height on the feature on DN258 and recorded the height and time measured (See Separates I: Acquisition Logs pg. 117). The reviewer has confirmed the height has been corrected with the appropriate water levels.

COMPILATION: Concur. Delete charted visible wreck, bearing 4 ft. Add visible wreck, bearing 3 ft in the present survey position.

Feature Images



Figure 3.2.1



Figure 3.2.2

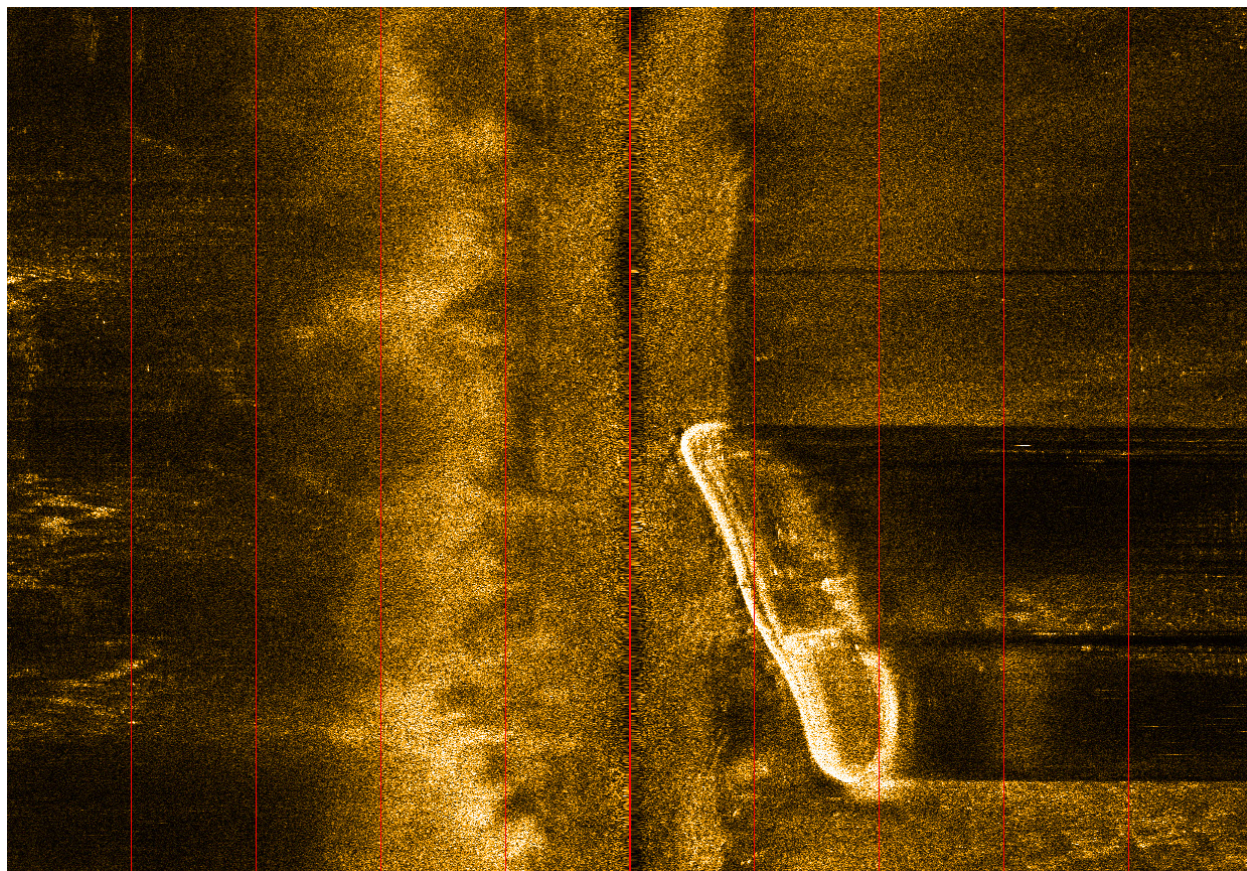


Figure 3.2.3

3.3) AWOIS #11199

Survey Summary

Survey Position: 39° 27' 08.8" N, 074° 18' 57.2" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2005-335.00:00:00.000 (12/01/2005)
Dataset: H12597_Features for PYDRO.000
FOID: 0_ 0003265099 00001(FFFE0031D24B0001)
Charts Affected: 12316_1, 12318_1, 12323_1, 12300_1, 13003_1

Remarks:

WRECKS/remrks: DEA CF #123. AWOIS #11199. Wreck not observed in 200% side scan or VBES coverage. Partial coverage only of AWOIS radii. Area of AWOIS radii not surveyed was inshore of the NALL and not attainable.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12597_Features for PYDRO.000	0_ 0003265099 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Wreck (WRECKS)
Attributes: CATWRK - 2:dangerous wreck
 NINFOM - Retain wreck
 QUASOU - 2:depth unknown
 SORDAT - 20051200
 SORIND - US,US,graph,Chart 12316
 WATLEV - 3:always under water/submerged

Office Notes

SAR: Concur. The field did not obtain full coverage in required AWOIS search radius. Retain wreck.

COMPILATION: Concur. Feature not thoroughly investigated during the present survey. Retain AWOIS #11199, charted dangerous sunken wreck, least depth unknown.

3.4) 15 foot wreck

Survey Summary

Survey Position: 39° 26' 48.0" N, 074° 18' 31.8" W
Least Depth: 4.67 m (= 15.33 ft = 2.555 fm = 2 fm 3.33 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2014-092.00:00:00.000 (04/02/2014)
Dataset: H12597_Features for PYDRO.000
FOID: 0_ 0003265084 00001(FFFE0031D23C0001)
Charts Affected: 12316_1, 12318_1, 12300_1, 13003_1

Remarks:

WRECKS/remrks: Wreck is approximately 23m x 7m in dimension and is rising approximately 0.6m above the natural bottom.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12597_Features for PYDRO.000	0_ 0003265084 00001	0.00	000.0	Primary

Hydrographer Recommendations

Add feature to chart.

Cartographically-Rounded Depth (Affected Charts):

15ft (12316_1, 12318_1)

2 ½fm (12300_1, 13003_1)

S-57 Data

Geo object 1: Wreck (WRECKS)
Attributes: CATWRK - 2:dangerous wreck
 NINFOM - Add wreck
 QUASOU - 6:least depth known
 SORDAT - 20140402
 SORIND - US,US,graph,H12597
 TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 4.672 m

WATLEV - 3:always under water/submerged

Office Notes

SAR: Feature was ensonified with object detect SSS and MBES. Feature is considered significant and verified as per survey data. Defer the final charting disposition to AHB Compile Team.

COMPILATION: Concur. Add dangerous sunken wreck, least depth 15.33 feet in the present survey location.

Feature Images

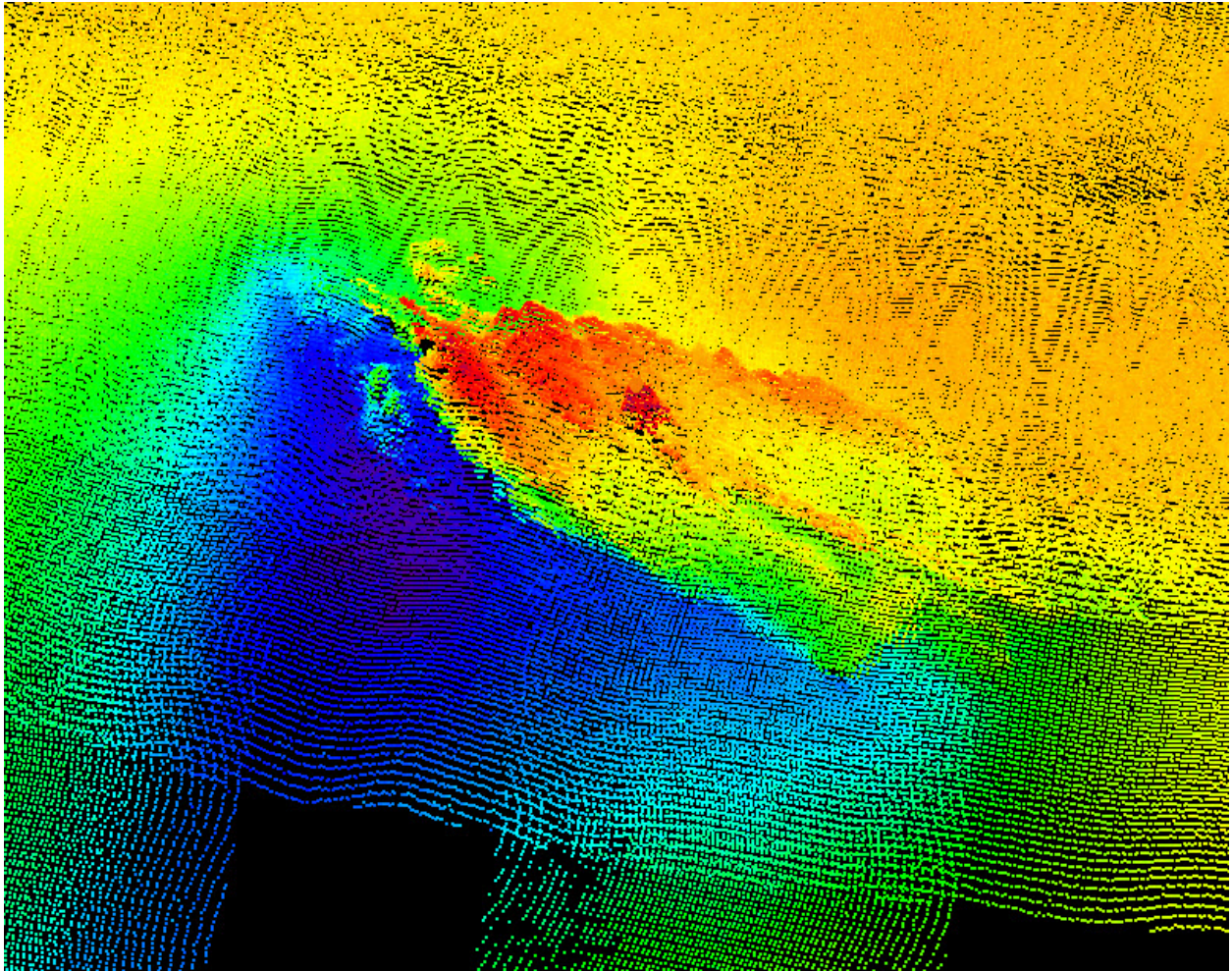


Figure 3.4.1

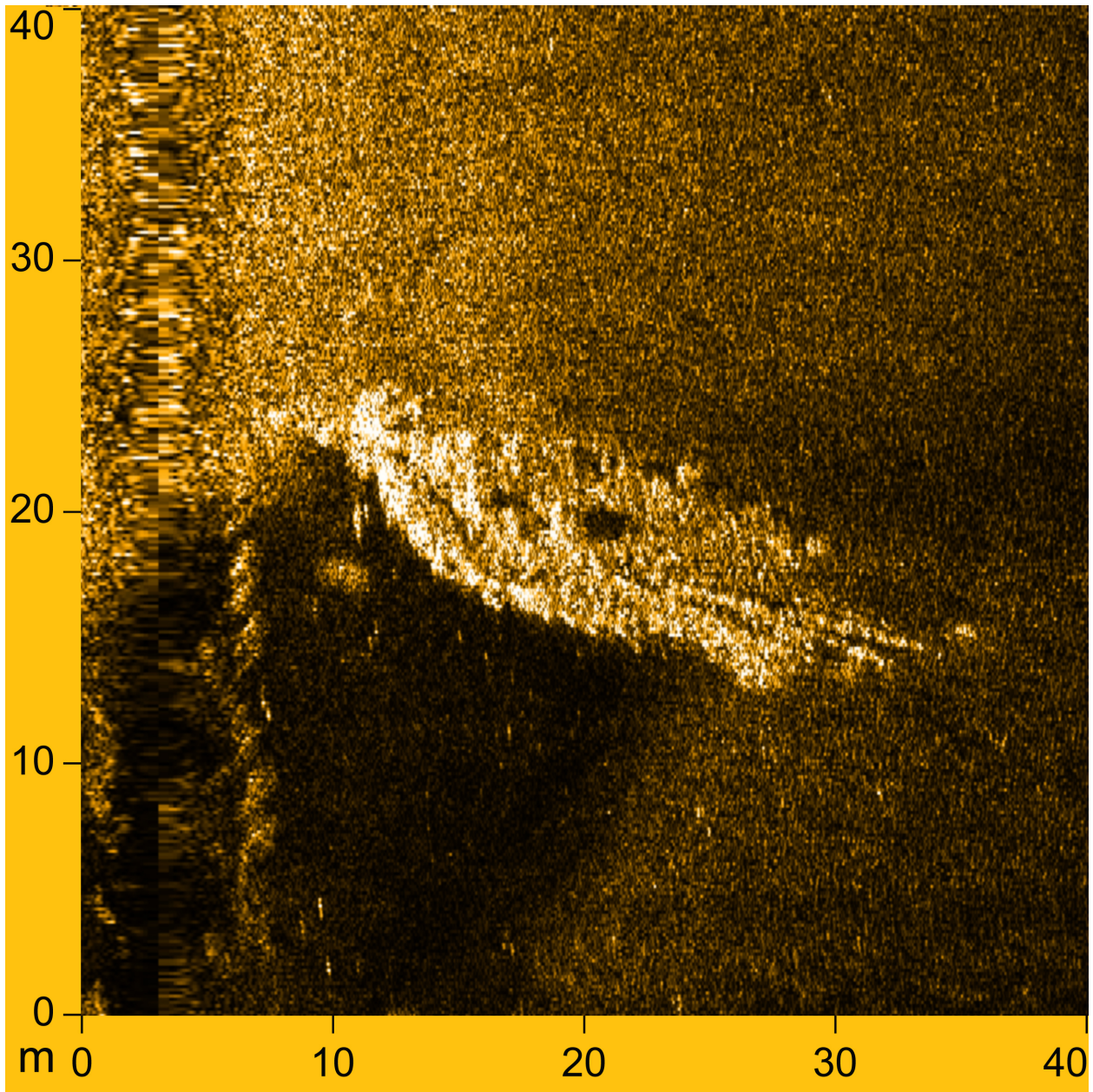


Figure 3.4.2

3.5) 4 foot wreck

Survey Summary

Survey Position: 39° 29' 07.5" N, 074° 17' 30.2" W
Least Depth: 1.26 m (= 4.14 ft = 0.690 fm = 0 fm 4.14 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp: 2014-092.00:00:00.000 (04/02/2014)
Dataset: H12597_Features for PYDRO.000
FOID: 0_ 0003264894 00001(FFFE0031D17E0001)
Charts Affected: 12316_1, 12318_1, 12323_1, 12300_1, 13003_1

Remarks:

WRECKS/remrks: DEA CF #121. Remains of wreck rising approximately 1.0m above the natural bottom. New position and depth of charted feature.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12597_Features for PYDRO.000	0_ 0003264894 00001	0.00	000.0	Primary

Hydrographer Recommendations

Add feature to chart.

Cartographically-Rounded Depth (Affected Charts):

4ft (12316_1, 12318_1, 12323_1)

0 $\frac{3}{4}$ fm (12300_1, 13003_1)

S-57 Data

Geo object 1: Wreck (WRECKS)
Attributes: CATWRK - 3:distributed remains of wreck
 NINFOM - Add wreck
 QUASOU - 6:least depth known
 SORDAT - 20140402
 SORIND - US,US,graph,H12597
 TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 1.261 m

WATLEV - 3:always under water/submerged

Office Notes

SAR: Feature was ensonified with object detect SSS and MBES. Feature is considered significant and verified as per survey data. Defer the final charting disposition to AHB Compile Team.

COMPILATION: Concur. Delete charted dangerous sunken wreck, Masts, least depth unknown. Add dangerous sunken wreck, least depth 4.137 feet, in the present survey position.

Feature Images

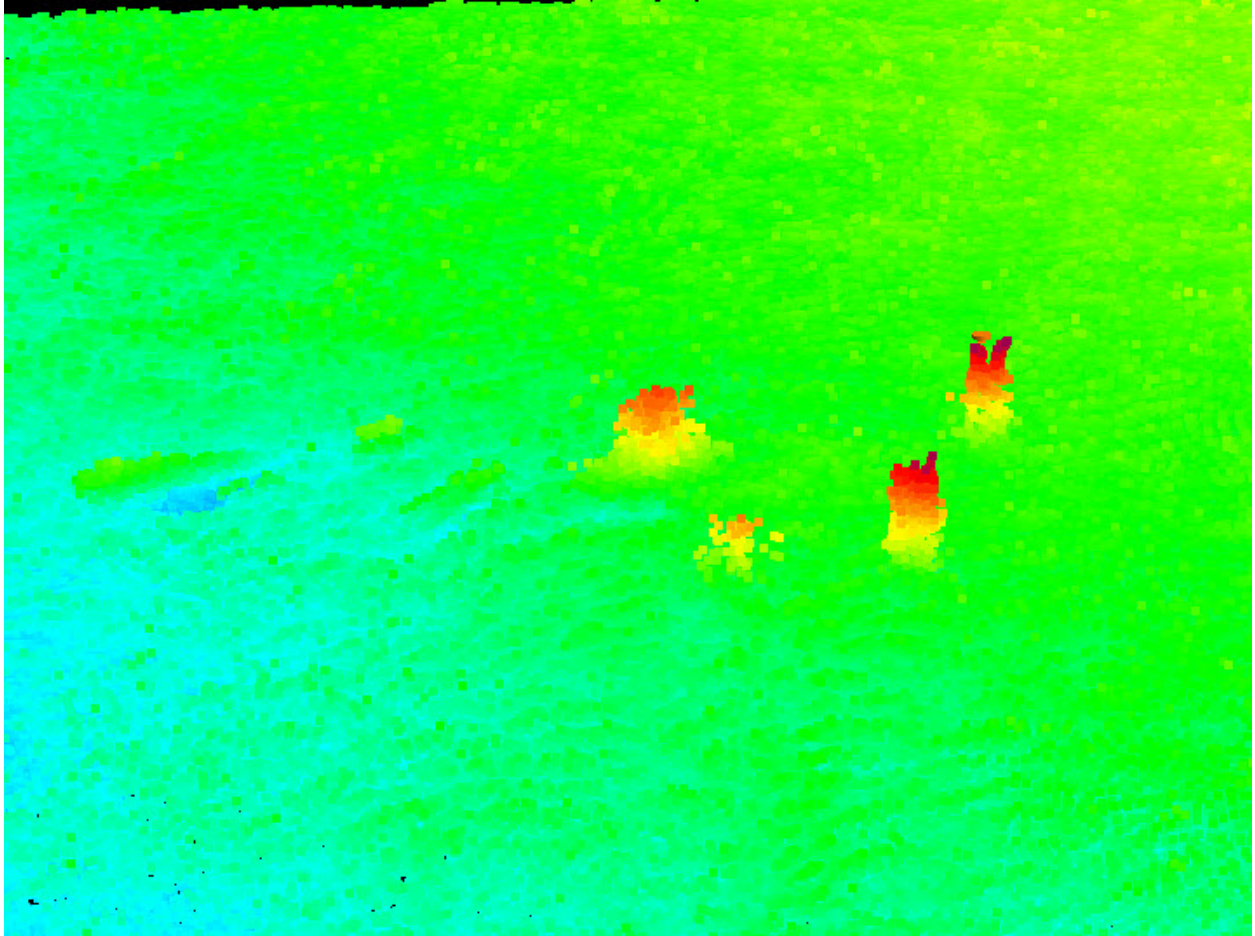


Figure 3.5.1

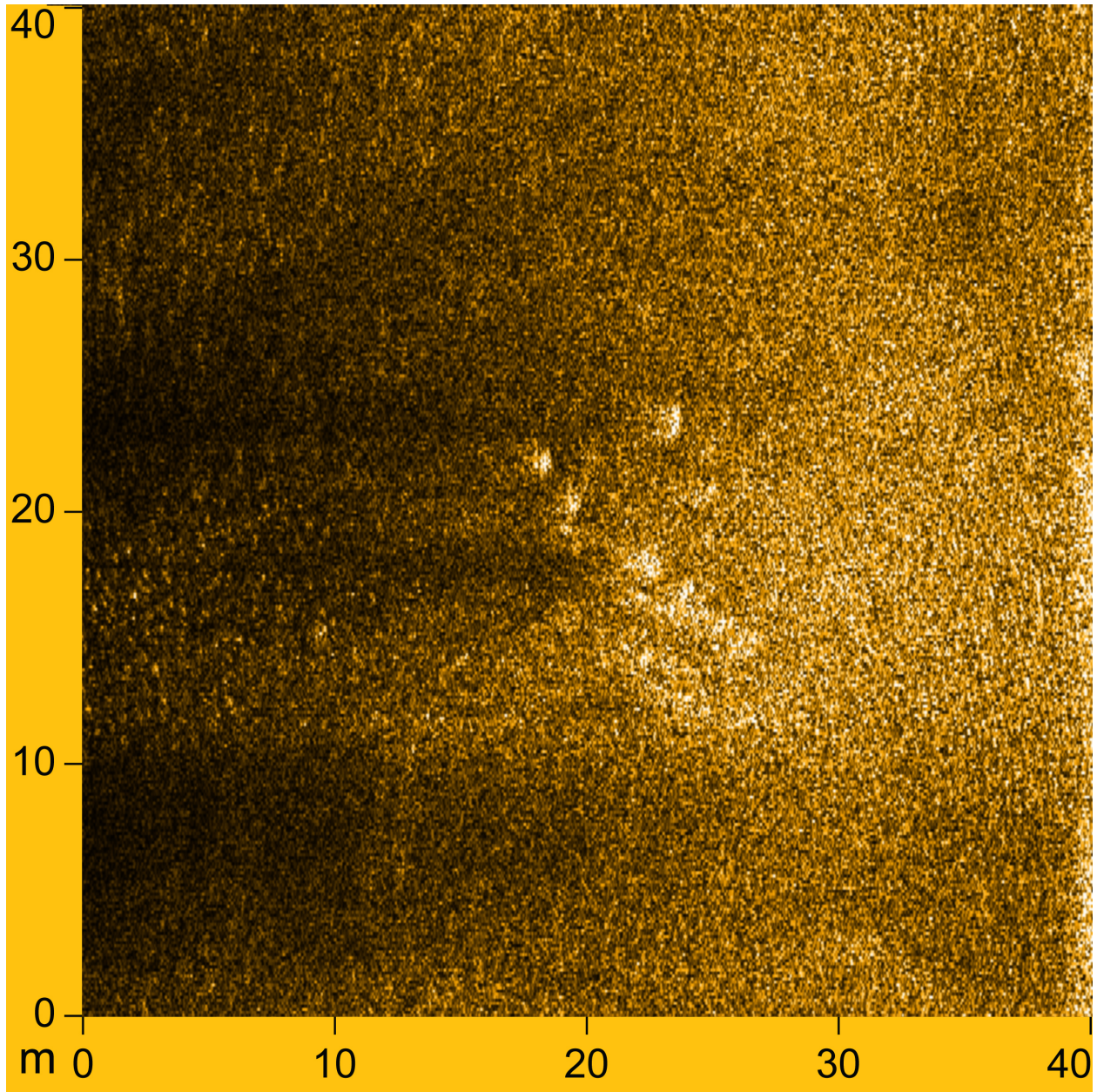


Figure 3.5.2

3.6) 9 foot wreck

Survey Summary

Survey Position: 39° 28' 39.6" N, 074° 17' 13.1" W
Least Depth: 2.81 m (= 9.22 ft = 1.537 fm = 1 fm 3.22 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2014-092.00:00:00.000 (04/02/2014)
Dataset: H12597_Features for PYDRO.000
FOID: 0_ 0003264663 00001(FFFE0031D0970001)
Charts Affected: 12316_1, 12318_1, 12323_1, 12300_1, 13003_1

Remarks:

WRECKS/remrks: Wreck is approximately 10m long, resting on its side, and is rising approximately 1.2m above the natural bottom.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12597_Features for PYDRO.000	0_ 0003264663 00001	0.00	000.0	Primary

Hydrographer Recommendations

Add feature to chart.

Cartographically-Rounded Depth (Affected Charts):

9ft (12316_1, 12318_1, 12323_1)

1 ½fm (12300_1, 13003_1)

S-57 Data

Geo object 1: Wreck (WRECKS)
Attributes: CATWRK - 2:dangerous wreck
 NINFOM - Add wreck
 QUASOU - 6:least depth known
 SORDAT - 20140402
 SORIND - US,US,graph,H12597
 TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 2.810 m

WATLEV - 3:always under water/submerged

Office Notes

SAR: Feature was ensonified with object detect SSS and MBES. Feature is considered significant and verified as per survey data. Defer the final charting disposition to AHB Compile Team.

COMPILATION: Concur. Add a dangerous sunken wreck, least depth 9.2192 feet in the present survey area.

Feature Images

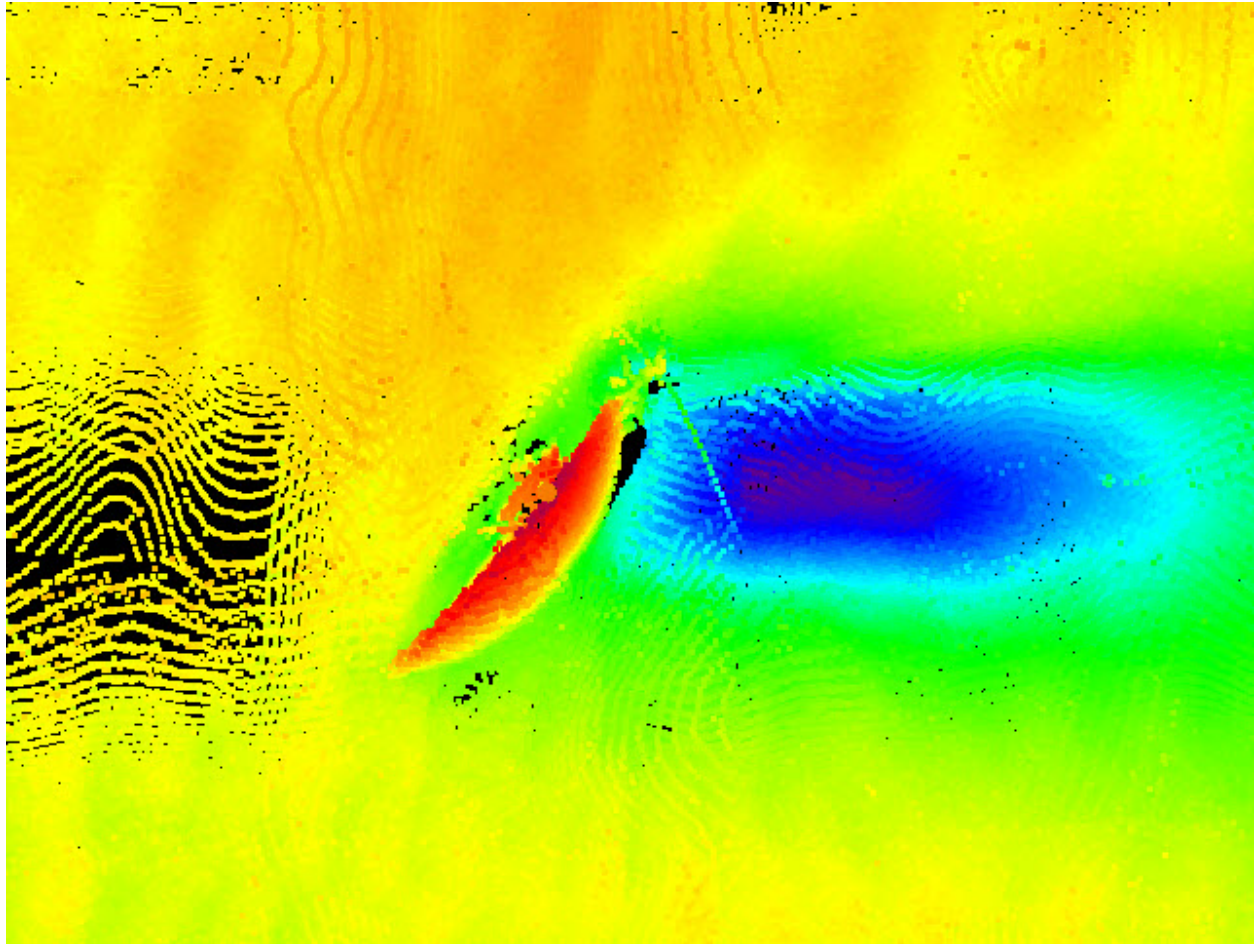


Figure 3.6.1

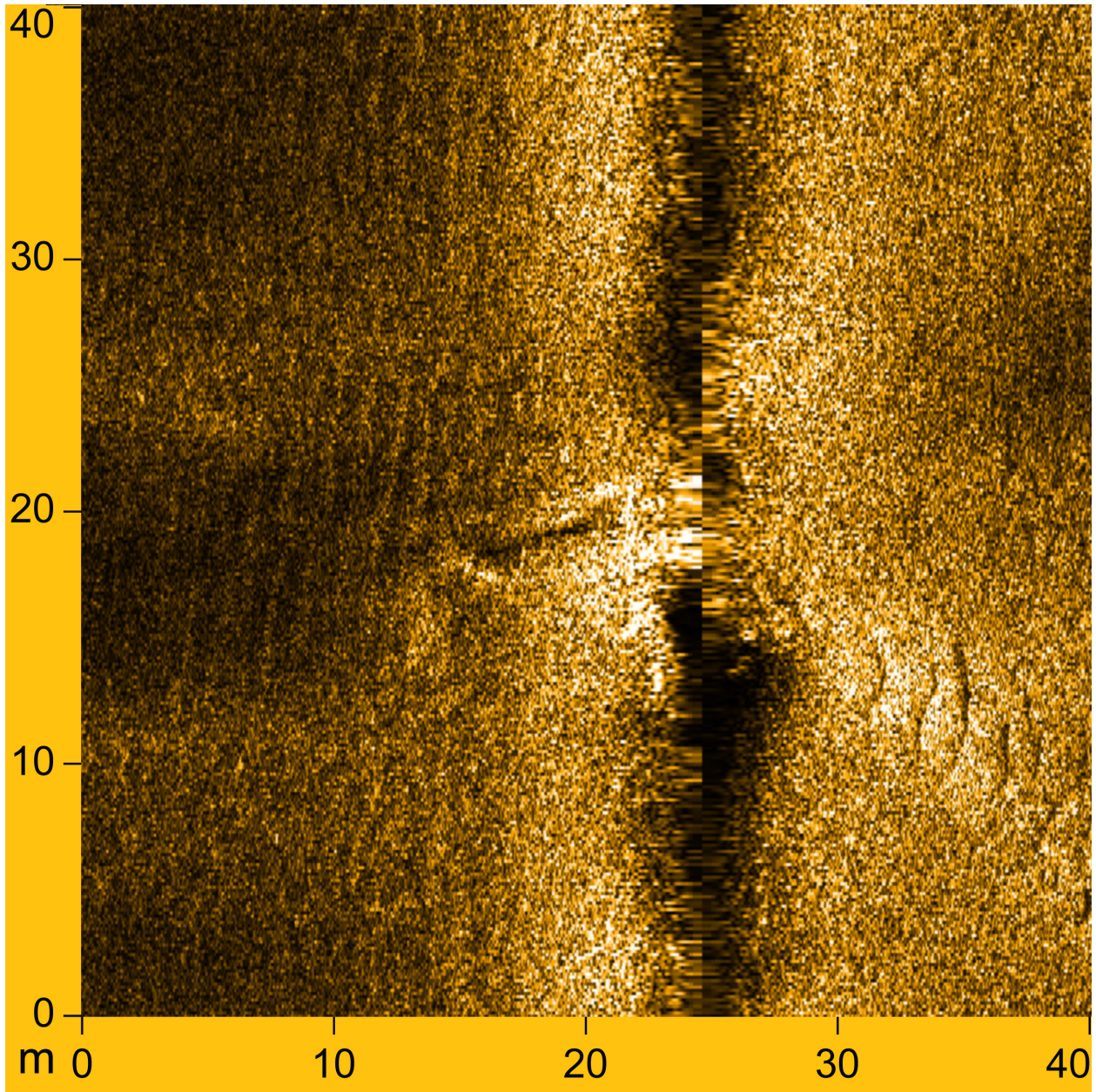


Figure 3.6.2

3.7) AWOIS #11196

Survey Summary

Survey Position: 39° 30' 05.3" N, 074° 16' 44.7" W
Least Depth: 3.68 m (= 12.09 ft = 2.014 fm = 2 fm 0.09 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2014-092.00:00:00.000 (04/02/2014)
Dataset: H12597_Features for PYDRO.000
FOID: 0_ 0003264838 00001(FFFE0031D1460001)
Charts Affected: 12316_1, 12318_1, 12323_1, 12300_1, 13003_1

Remarks:

WRECKS/remrks: DEA CF #133. AWOIS #11196. Wreck is approximately 12m x 4m in dimension and is rising approximately 1.8m above the natural bottom. New position and depth of charted feature.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12597_Features for PYDRO.000	0_ 0003264838 00001	0.00	000.0	Primary

Hydrographer Recommendations

Add feature to chart.

Cartographically-Rounded Depth (Affected Charts):

12ft (12316_1, 12318_1, 12323_1)

2fm (12300_1, 13003_1)

S-57 Data

Geo object 1: Wreck (WRECKS)
Attributes: CATWRK - 2:dangerous wreck
 NINFOM - Add wreck
 QUASOU - 6:least depth known
 SORDAT - 20140402
 SORIND - US,US,graph,H12597
 TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 3.684 m

WATLEV - 3:always under water/submerged

Office Notes

SAR: Feature was ensonified with object detect SSS and MBES. Feature is considered significant and verified as per survey data. Defer the final charting disposition to AHB Compile Team.

COMPILATION: Concur. Delete charted dangerous sunken wreck PA, depth unknown. Add AWOIS #11196, a dangerous sunken wreck, least depth 12.01 feet, in the present survey position. Update the AWOIS database based on present survey findings.

Feature Images

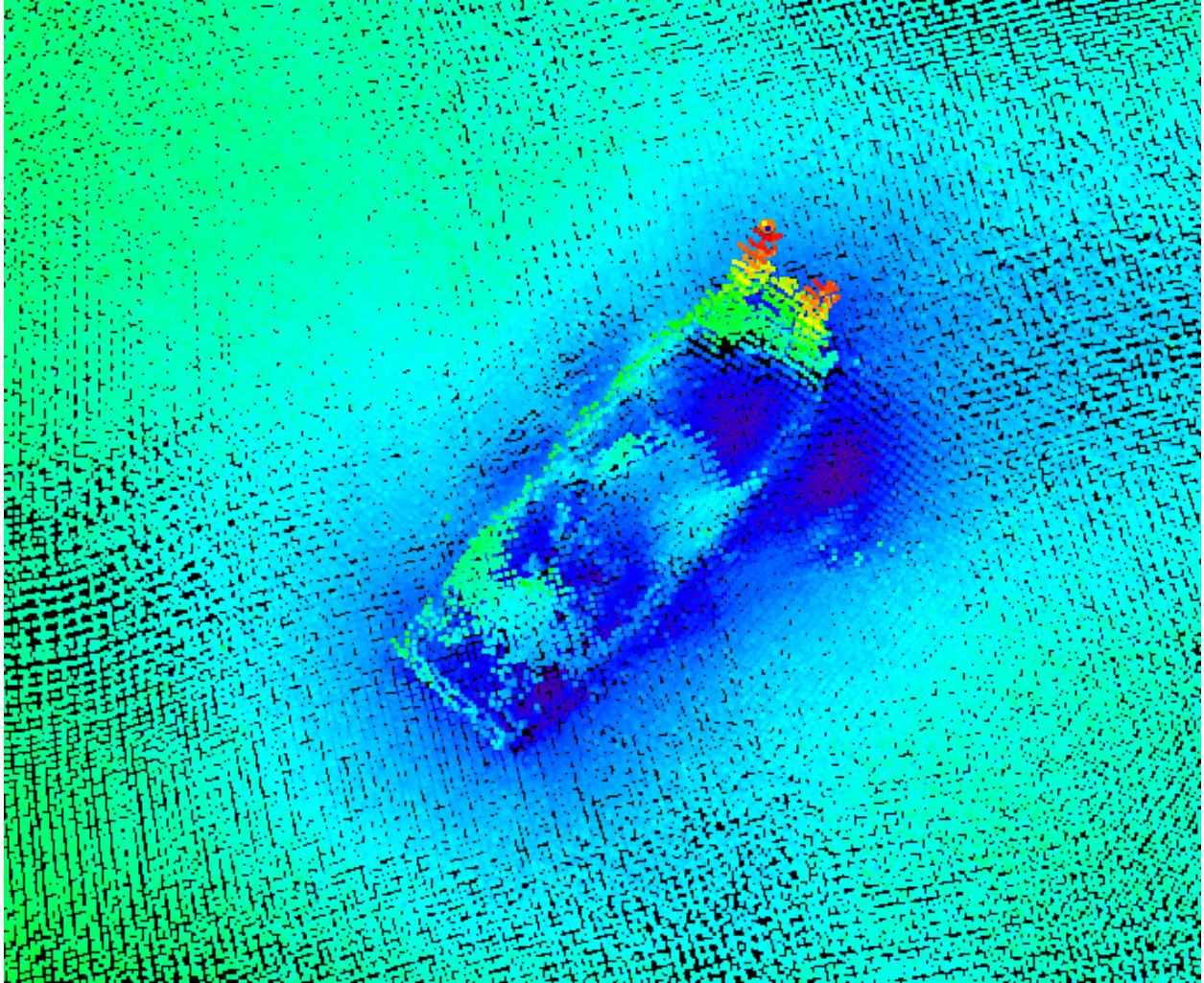


Figure 3.7.1

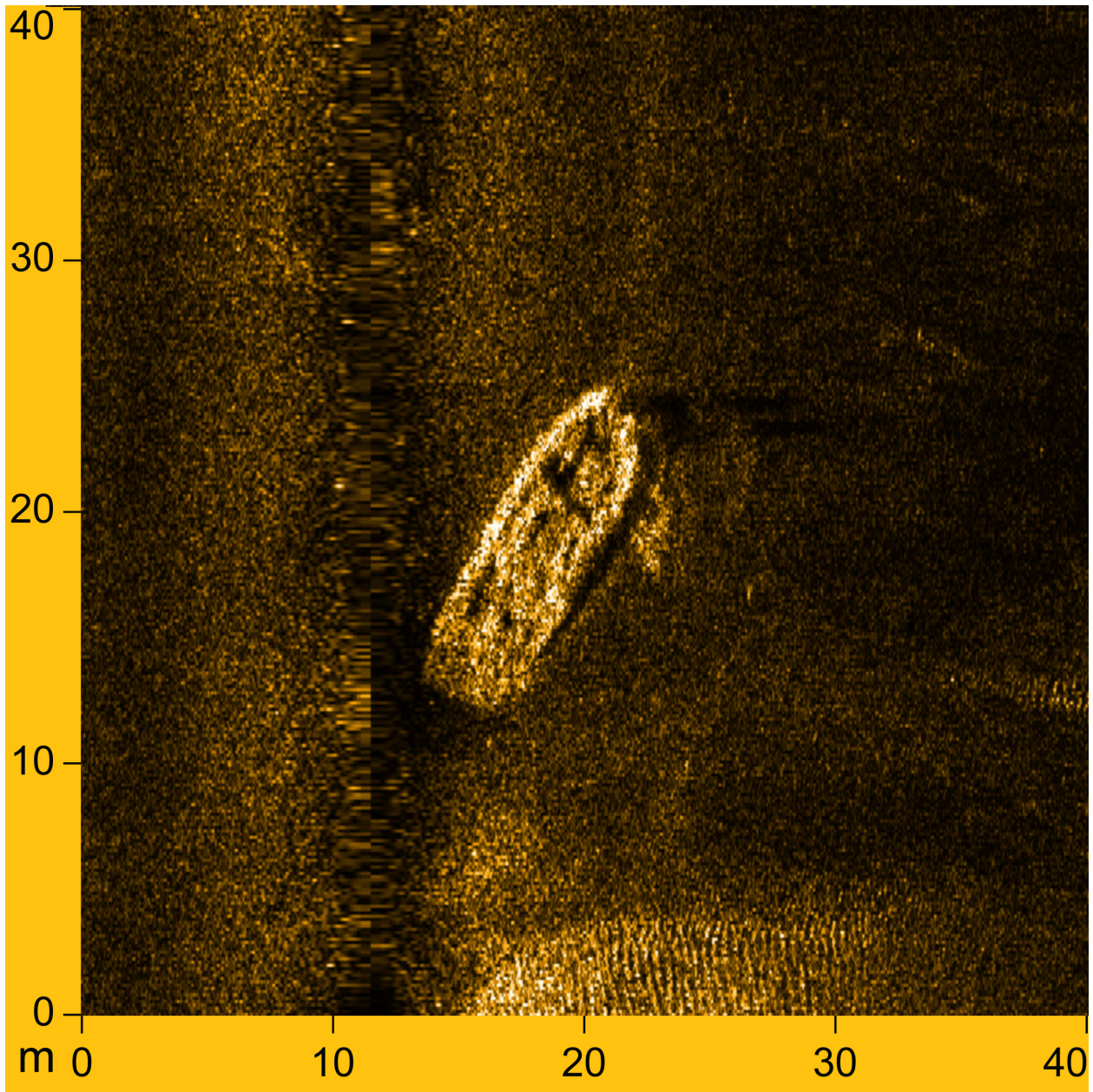


Figure 3.7.2

3.8) AWOIS #2754

Survey Summary

Survey Position: 39° 31' 19.0" N, 074° 15' 24.4" W
Least Depth: 6.08 m (= 19.95 ft = 3.325 fm = 3 fm 1.95 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp: 2014-092.00:00:00.000 (04/02/2014)
Dataset: H12597_Features for PYDRO.000
FOID: 0_ 0003264800 00001(FFFE0031D1200001)
Charts Affected: 12316_1, 12323_1, 12300_1, 13003_1

Remarks:

WRECKS/remrks: DEA CF #125. AWOIS #2754. Wreck is approximately 51m x 10m in dimension and is rising approximately 1.5m above the natural bottom. New position and depth of charted feature.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12597_Features for PYDRO.000	0_ 0003264800 00001	0.00	000.0	Primary

Hydrographer Recommendations

Add feature to chart.

Cartographically-Rounded Depth (Affected Charts):

20ft (12316_1, 12323_1)

3 ¼fm (12300_1, 13003_1)

S-57 Data

Geo object 1: Wreck (WRECKS)
Attributes: CATWRK - 2:dangerous wreck
 NINFOM - Add wreck
 QUASOU - 6:least depth known
 SORDAT - 20140402
 SORIND - US,US,graph,H12597
 TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 6.081 m

WATLEV - 3:always under water/submerged

Office Notes

SAR: Feature was ensonified with object detect SSS and MBES. Feature is considered significant and verified as per survey data. Defer the final charting disposition to AHB Compile Team.

COMPILATION: Concur. Delete charted dangerous sunken wreck, least depth 20 feet, Add, AWOIS #2754, a dangerous sunken wreck, least depth 19.95 feet, in the present survey position. Update AWOIS database with present survey findings.

Feature Images

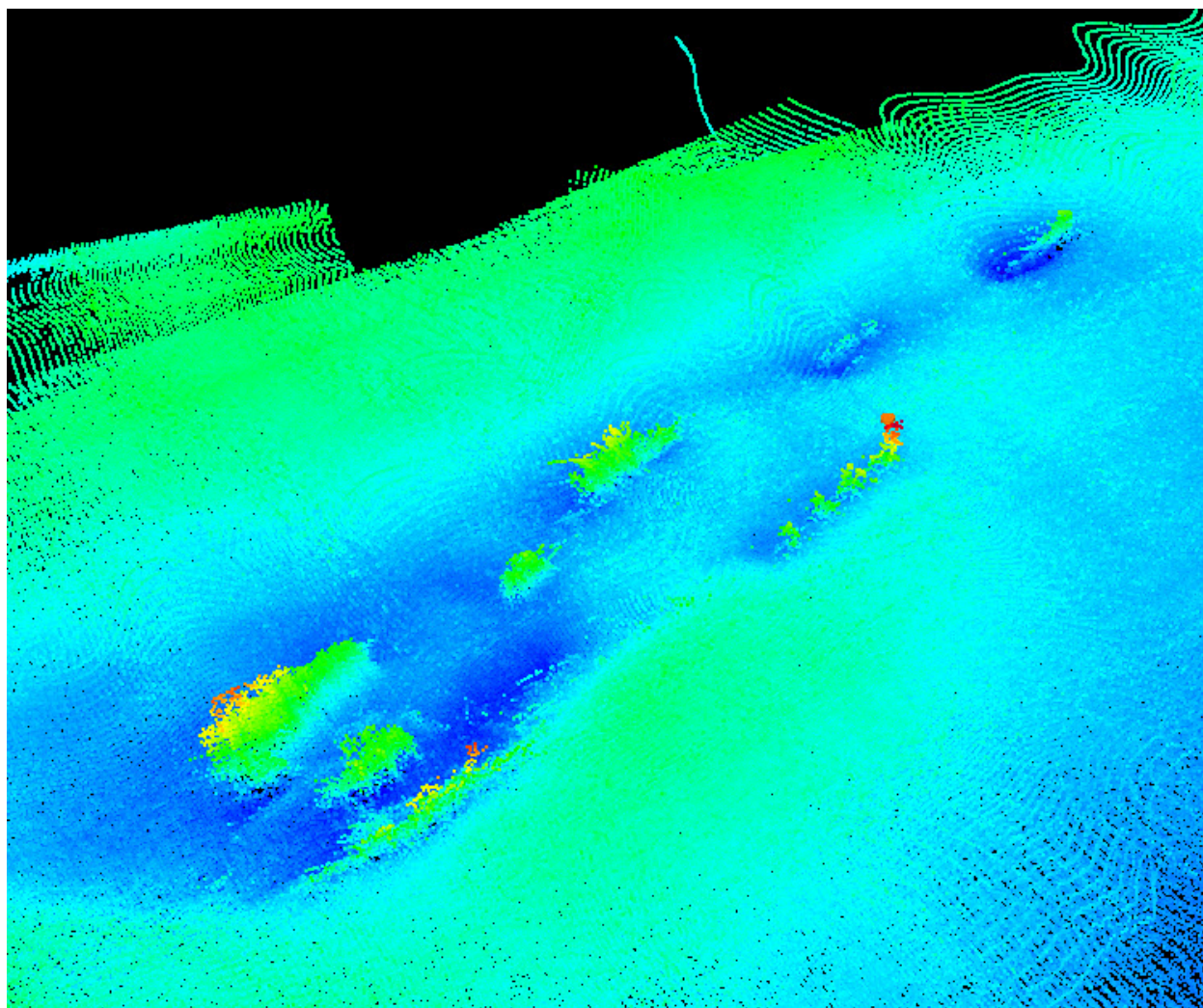


Figure 3.8.1

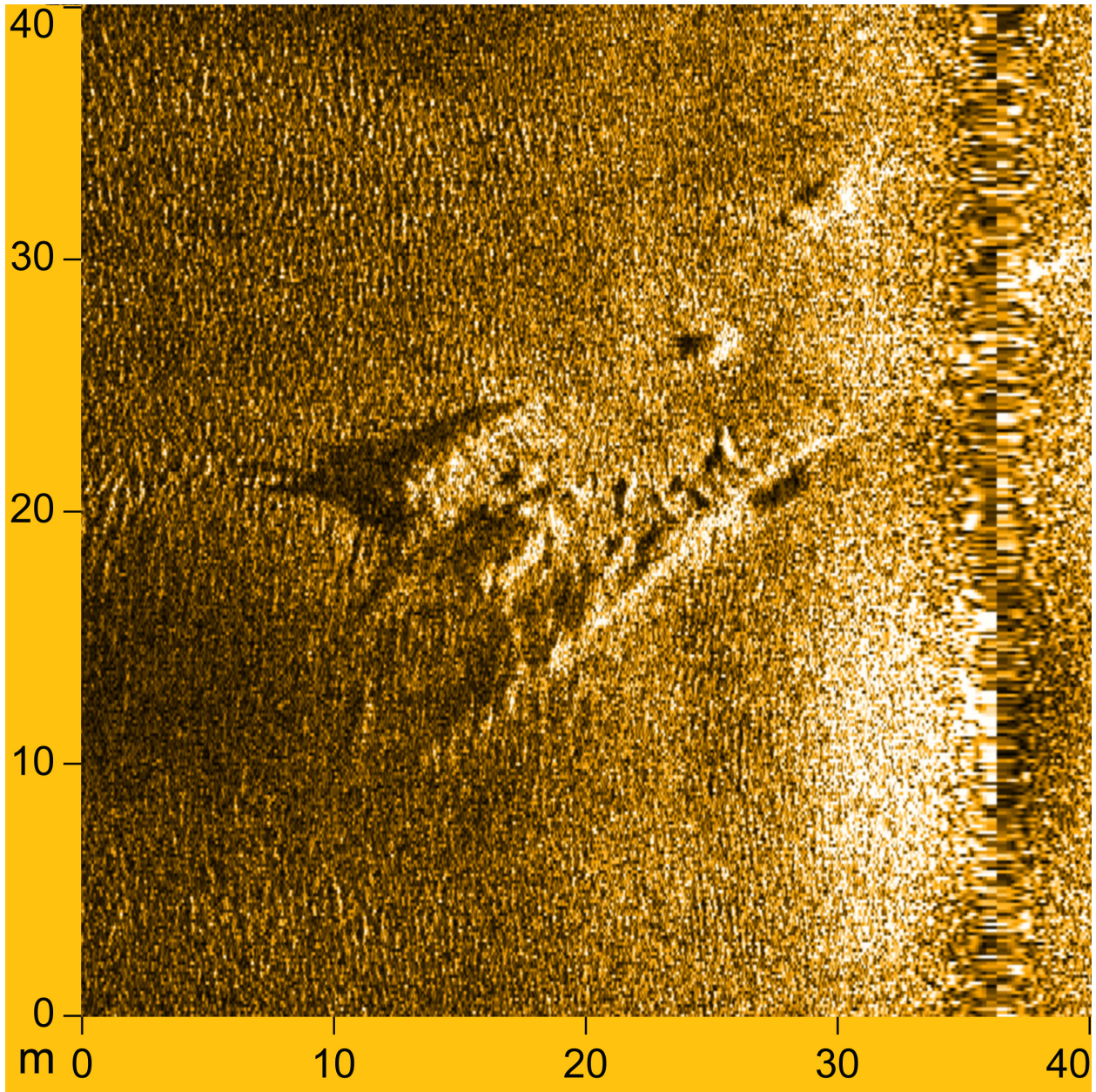


Figure 3.8.2

3.9) 19 foot wreck

Survey Summary

Survey Position: 39° 32' 20.8" N, 074° 14' 49.2" W
Least Depth: 5.80 m (= 19.02 ft = 3.170 fm = 3 fm 1.02 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2014-092.00:00:00.000 (04/02/2014)
Dataset: H12597_Features for PYDRO.000
FOID: 0_ 0003264717 00001(FFFE0031D0CD0001)
Charts Affected: 12316_1, 12323_1, 12300_1, 13003_1

Remarks:

WRECKS/remrks: Wreck is approximately 43m x 9m in dimension and is rising approximately 1.2m above the natural bottom.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12597_Features for PYDRO.000	0_ 0003264717 00001	0.00	000.0	Primary

Hydrographer Recommendations

Add feature to chart.

Cartographically-Rounded Depth (Affected Charts):

19ft (12316_1, 12323_1)

3fm (12300_1, 13003_1)

S-57 Data

Geo object 1: Wreck (WRECKS)
Attributes: CATWRK - 2:dangerous wreck
 NINFOM - Add wreck
 QUASOU - 6:least depth known
 SORDAT - 20140402
 SORIND - US,US,graph,H12597
 TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 5.797 m

WATLEV - 3:always under water/submerged

Office Notes

SAR: Feature was ensonified with object detect SSS and MBES. Feature is considered significant and verified as per survey data. Defer the final charting disposition to AHB Compile Team.

COMPILATION: Concur. Add dangerous sunken wreck, lesat depth 19.019 feet, in the present survey position.

Feature Images

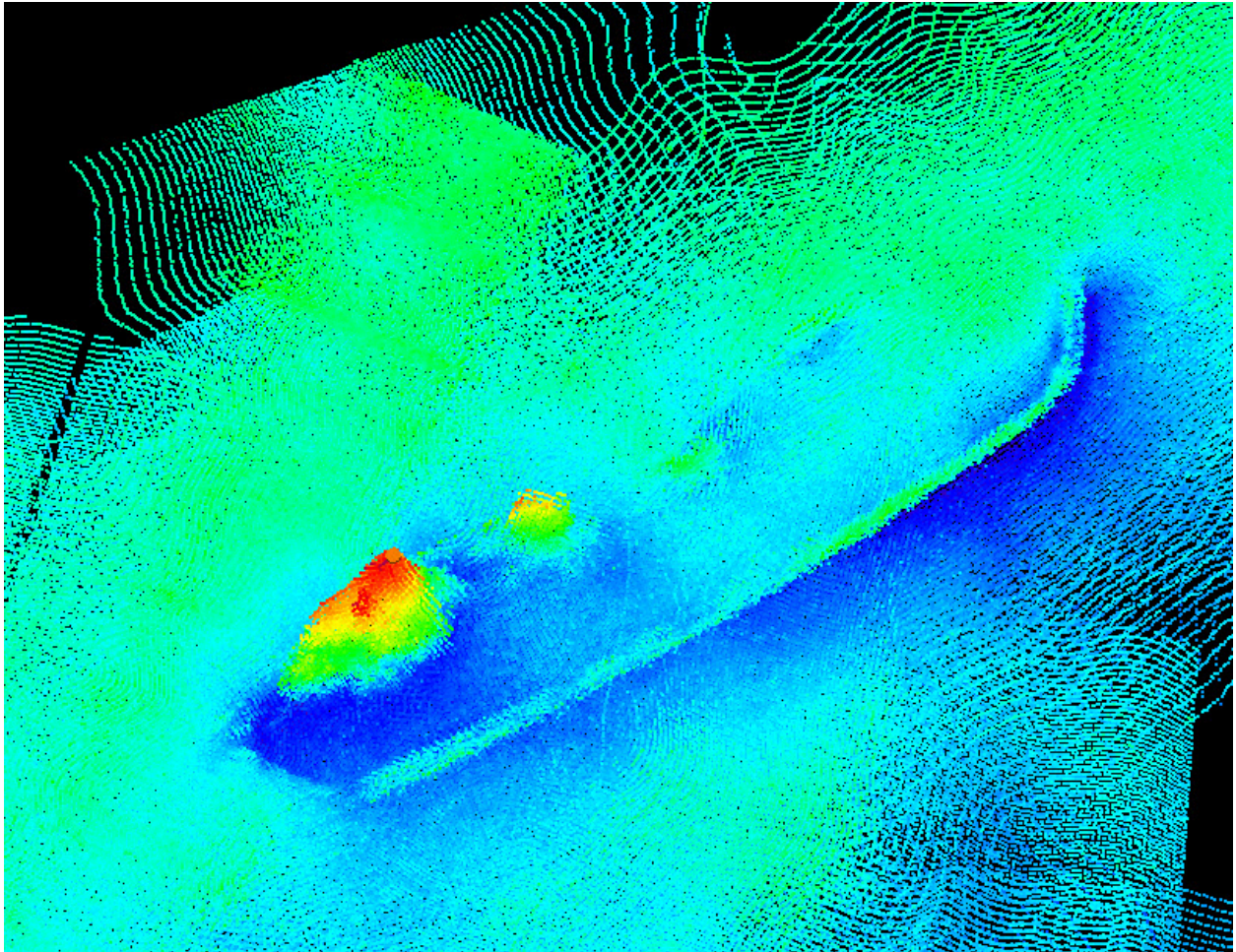


Figure 3.9.1

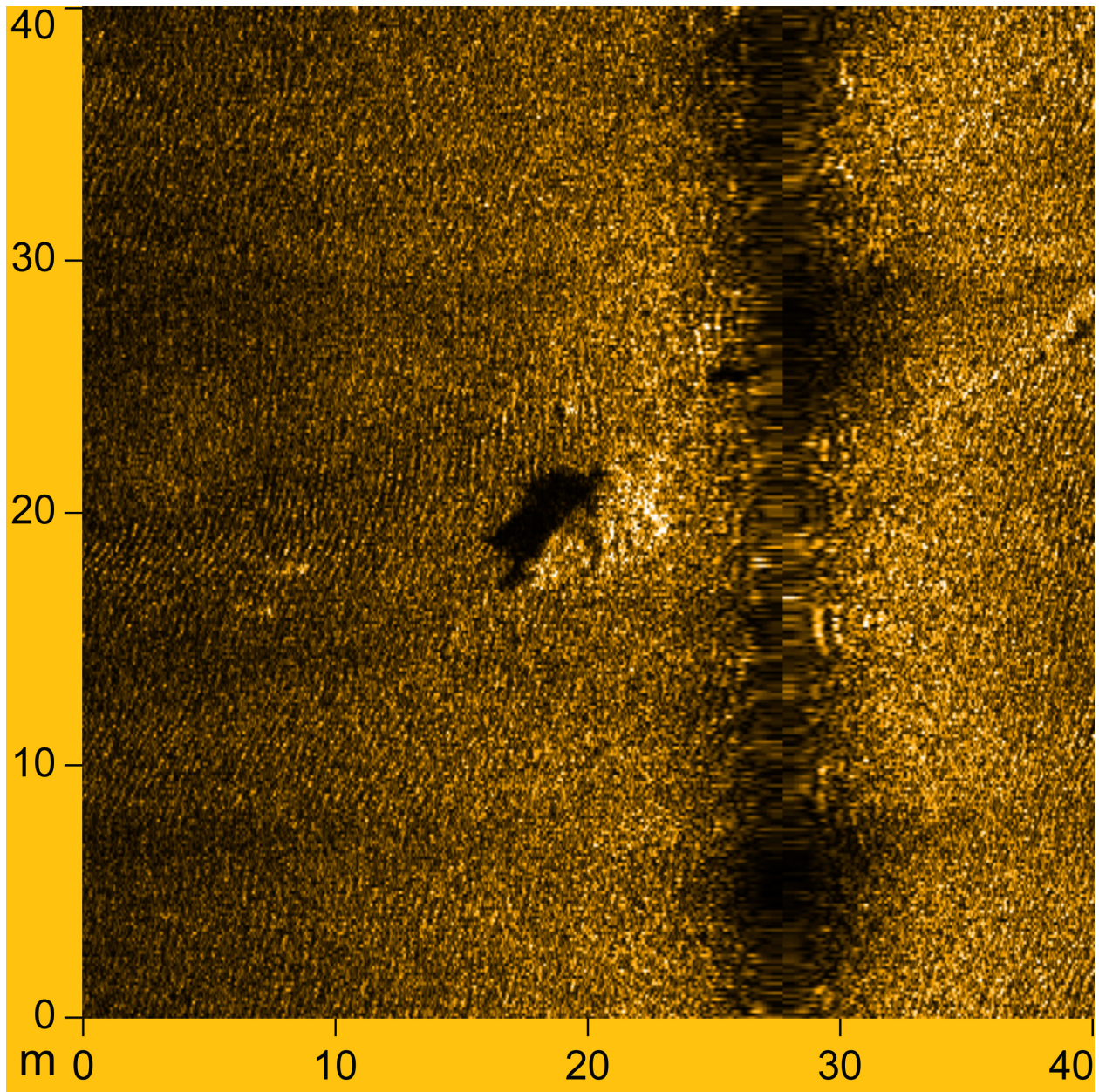


Figure 3.9.2

APPROVAL PAGE

H12597

Data meet or exceed current specifications as certified by the OCS survey acceptance review process. Descriptive Report and survey data except where noted are adequate to supersede prior surveys and nautical charts in the common area.

The following products will be sent to NGDC for archive

- H12597_DR.pdf
- Collection of depth varied resolution BAGS
- Processed survey data and records
- H12597_GeoImage.pdf

The survey evaluation and verification has been conducted according to current OCS Specifications, and the survey has been approved for dissemination and usage of updating NOAA's suite of nautical charts.

Approved: _____

Lieutenant Commander Matthew Jaskoski, NOAA
Chief, Atlantic Hydrographic Branch