H12267

NOAA FORM 76-35A

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

DESCRIPTIVE REPORT

Type of Survey Navigable Area Survey

Field No. N/A

Registry No. H12267

LOCALITY

State Maryland

General Locality Chesapeake Bay

Sublocality 3 NM South of Cedar Point

2010

CHIEF OF PARTY

LTJG Megan Guberski

LIBRARY & ARCHIVES

DATE

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

HYDROGRAPHIC TITLE SHEET

REGISTRY No

H12267

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

FIELD No:

State **Maryland**

General Locality **Chesapeake Bay**

Sub-Locality **3 NM South of Cedar Point**

Scale **1:10,000** Date of Survey **June 9, 2010 to March 28, 2011**

Instructions dated **7/21/2008** Project No. **OPR-E349-BH-10**

Vessel(s) **R/V Bay Hydro II**

Chief of party **LTJG Megan Guberski**

Surveyed by **Bay Hydro II Personnel**

Soundings by **Reson SeaBat 7125 MBES, ODOM Mark III VBES**

SAR by **Kay MacDonald** Compilation by **Kurt Brown**

Soundings compiled in **Meters**

REMARKS: **All times are UTC. UTM Zone 18N.**

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. Revisions and end notes in red were generated during office processing. The processing branch concurs with all information and recommendations in the DR unless otherwise noted. Page numbering may be interrupted or non sequential.

All pertinent records for this survey, including the Descriptive Report, are archived at the National Geophysical Data Center (NGDC) and can be retrieved via http://www.ngdc.noaa.gov/.

Descriptive Report to Accompany Survey H12267

Project: OPR-E349-BH-10

Locality: Chesapeake Bay

Sublocality: 3 NM South of Cedar Point

Scale: 1:10000

June 2010 - March 2011

R/V Bay Hydro II

Chief of Party: LTJG Megan Guberski

A Area Surveyed

Sheet H12267 is 3.8 square nautical mile area positioned three nautical miles south of Cedar Point, Maryland. The sheet extends from the 4-meter contour out to 2.75 nautical miles offshore.

A.1 Survey Limits

Data was acquired within the following survey limits:

Northwest Limit	Southeast Limit
378207.47 N 4234805.91 W	383027.4 N 4230997.67 W

Table 1: Survey Limits

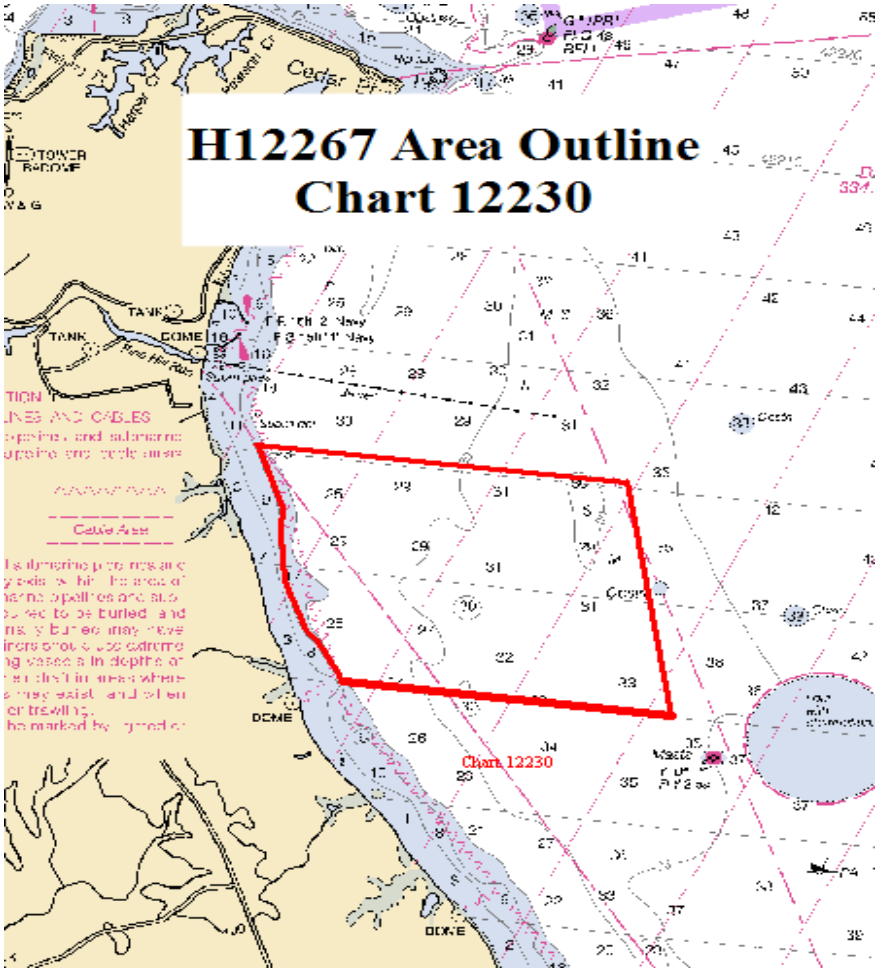

Figure 1: H12267 Project Outline

AWOIS item number 14776 was added to this survey after the Project Instructions OPR-E349-BH-10 were released. AWOIS item number 14776 is a "Visible Wreck, Position Approximate" with a position of
38/12/00.0"N, 076/19/00.0"W; and had a search radius of 350m. See Figure 3: AWOIS #14776 Position for its position in relation to the survey area under The Coverage Graphic section. The rest of the AWOIS items assigned to OPR-E349-BH-10 were addressed in prior surveys.[1]

A.2 Survey Purpose

This project responds to multiple requests from the Maryland Port Administration, Association of Maryland Pilots, U.S. Army Corps of Engineers, and the U.S. Coast Guard. This modern hydrographic survey is necessary due to the growth of international bulk and container ships transiting the Chesapeake Bay, and the corresponding need for accurate hydrographic data.

A.3 Survey Quality

The entire survey is adequate to supersede previous data.

As per the letter instructions, OPR-E349-BH-10, H12267 was conducted using 200% Side Scan Sonar coverage with concurrent Vertical Beam Echosounder coverage. All AWOIS items and features were developed using object detection Multibeam coverage. The hydrographer recommends that all affected charts be updated to reflect the current bathymetric data acquired over the survey area.

A.4 Survey Coverage

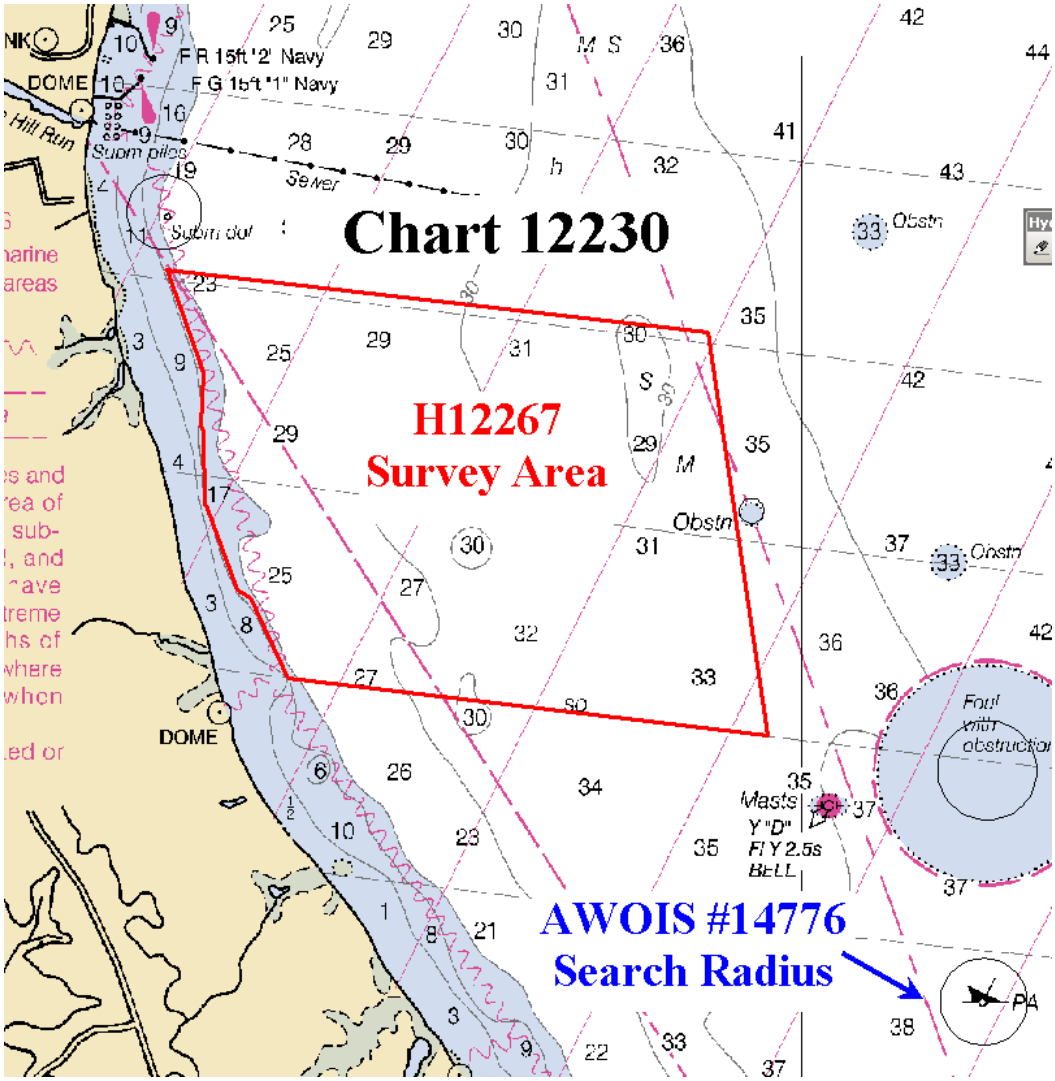

Figure 2: H12267 Coverage Map and AWOIS #14776

In the southwest region of the survey area, there exists a gap in Side Scan coverage approximately 700m long, by 150m wide. The vessel was unable to safely tow the Side Scan in this area due to a shoal at the south end, and a fish weir at the north.[2] The area was ensonified by VBES. There were several attempts during high tide to acquire the 4m contour coverage requirement. Due to the RV Bay Hydro II draft limitations it was the OIC's precautionary decision to accept the acquired data as the inshore coverage limits. Therefore, the 4m contour was not acquired.

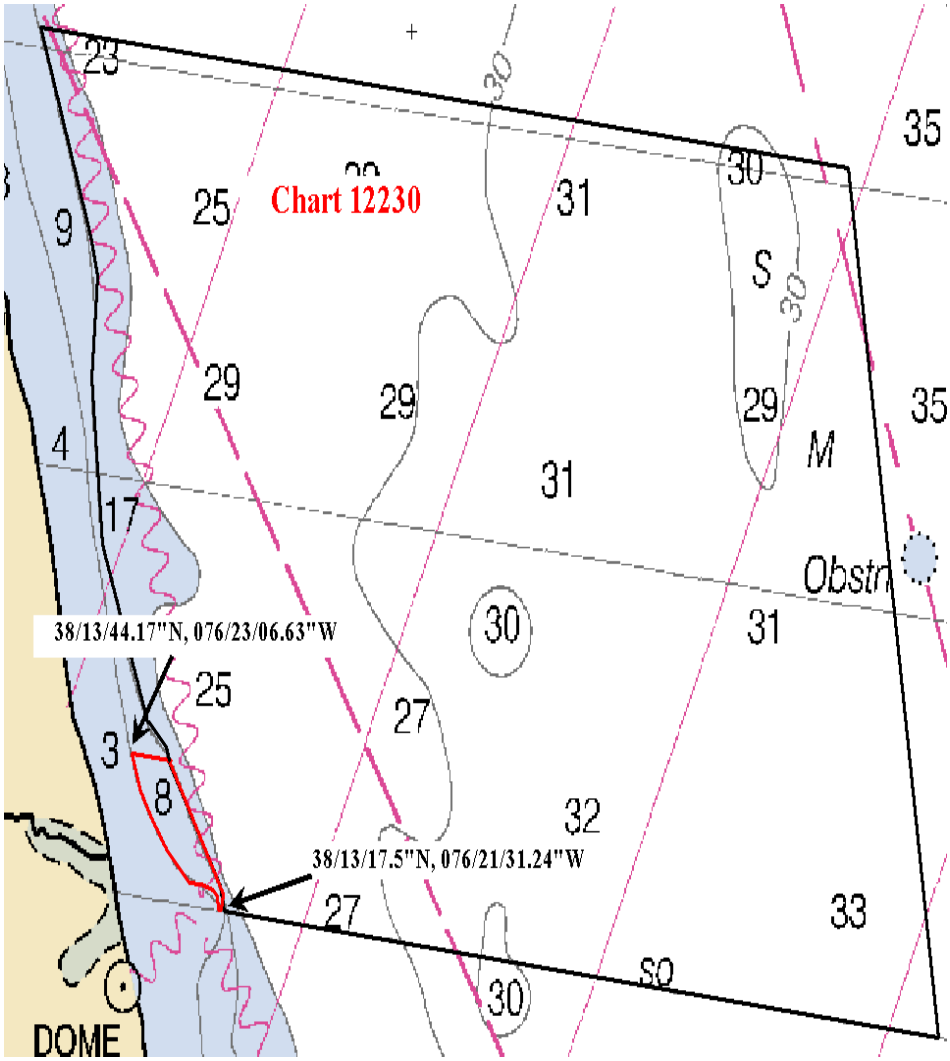

Figure 4: Gap in Side Scan Data

A.5 Survey Statistics

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

	HULL ID	*5401*	*Total*
LNM	**SBES Mainscheme**	146.67	146.67
	MBES Mainscheme	0.0	0.0
	Lidar Mainscheme	0.0	0.0
	SSS Mainscheme	0.0	0.0
	SBES/MBES Combo Mainscheme	0.0	0.0
	SBES/SSS Combo Mainscheme	140.45	0.0
	MBES/SSS Combo Mainscheme	0.0	140.45
	SBES/MBES Combo Crosslines	12.03	12.03
	Lidar Crosslines	0.0	0.0
Number of Bottom Samples			4
Number of DPs			1
Number of Items Investigated by Dive Ops			0
Total Number of SNM			3.8

Table 2: Hydrographic Survey Statistics

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

Survey Dates
09/23/2010
10/13/2010
10/18/2010
10/19/2010
10/20/2010
10/21/2010
03/17/2011
03/22/2011
04/11/2011
03/28/2011

Table 3: Dates of Hydrography

R/V BAY HYDRO II was the sole vessel assigned to this sheet.

A.6 Shoreline

There was no shoreline verification assigned to this survey.

A.7 Bottom Samples

Bottom Samples for Project OPR-E349-BH-10 were originally collected across the entire project area in 2008. A total of four samples were acquired for H12267.[3] Refer to H12267 Bottom Sample Report, located in Appendix V.

B Data Acquisition and Processing

B.1 Equipment and Vessels

Refer to OPR-E349-BH-10, H12267 Data Acquisition and Processing Report (DAPR) for a complete description of data acquisition and processing systems, survey vessels, quality control procedures and data processing methods.[4] Additional information to supplement sounding and survey data, and any deviations from the DAPR are discussed in the following sections.

B.1.1 Vessels

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

Hull ID	*5401*
LOA	17.3 meters
Draft	1.8 meters

Table 4: Vessels Used

The R/V Bay Hydro II collected all Multibeam data, Side Scan data, Vertical Beam data, and Sound Velocity data for survey H12267.

B.1.2 Equipment

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

Manufacturer	Model	Type
RESON	SeaBat 7125	MBES
KLEIN	500	SSS
ODOM	Mark III	VBES
Applanix	v	Vessel Attitude System
ODOM	Digi-bar Pro	Sound Speed System
Sea-Bird	19+	Sound Speed System

Table 5: Major Systems Used

Vessel configurations, equipment operation, and data acquisition and processing were consistent with specifications described in the DAPR.

B.2 Quality Control

B.2.1 Crosslines

The R/V Bay Hydro II collected 12.03 linear nautical miles (lnm) of Vertical Beam Echosounder (VBES) crosslines, equating to 11.6% of mainscheme VBES data. Crosslines were compared to mainscheme through the creation of 28 checkpoints, placed on areas of overlap between mainscheme and crosslines. Pydro was used to analyze the mean and standard deviation of all soundings within the checkpoint. All comparison

points were found to be within IHO Special Order specifications. Refer to Separates \II Digital Data\ Checkpoint Summary & Crossline Comparisons to review the checkpoint report.

B.2.2 Uncertainty

Hull	Measured - CTD	Measured - MVP	Surfa
54	2		0.

Table 6: Survey Specific Sound Speed TPU Values

For the VBES data, uncertainty values ranged from 0.24m to 0.29m. The highest value occurred on line 030_1247 (DN294) during which an unknown error occurred. Refer to figures 5 and 6 for discussion. MBES uncertainty ranges from 0.23m to 0.25m. The higher uncertainty occurs in the outer beams, particularly in the deeper water. All uncertainty remains within IHO order1 specifications.

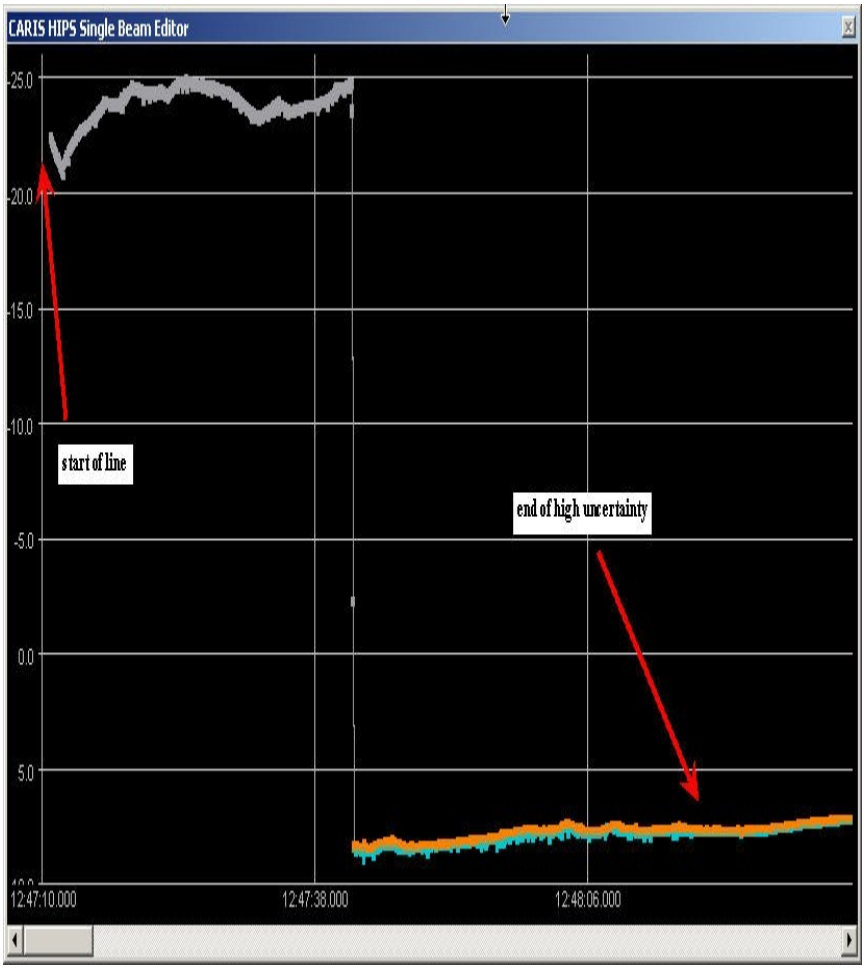

Figure 5: Single beam editor showing error on line 030_1247. Erroneous sounds have been rejected, higher uncertainty continues for several seconds.

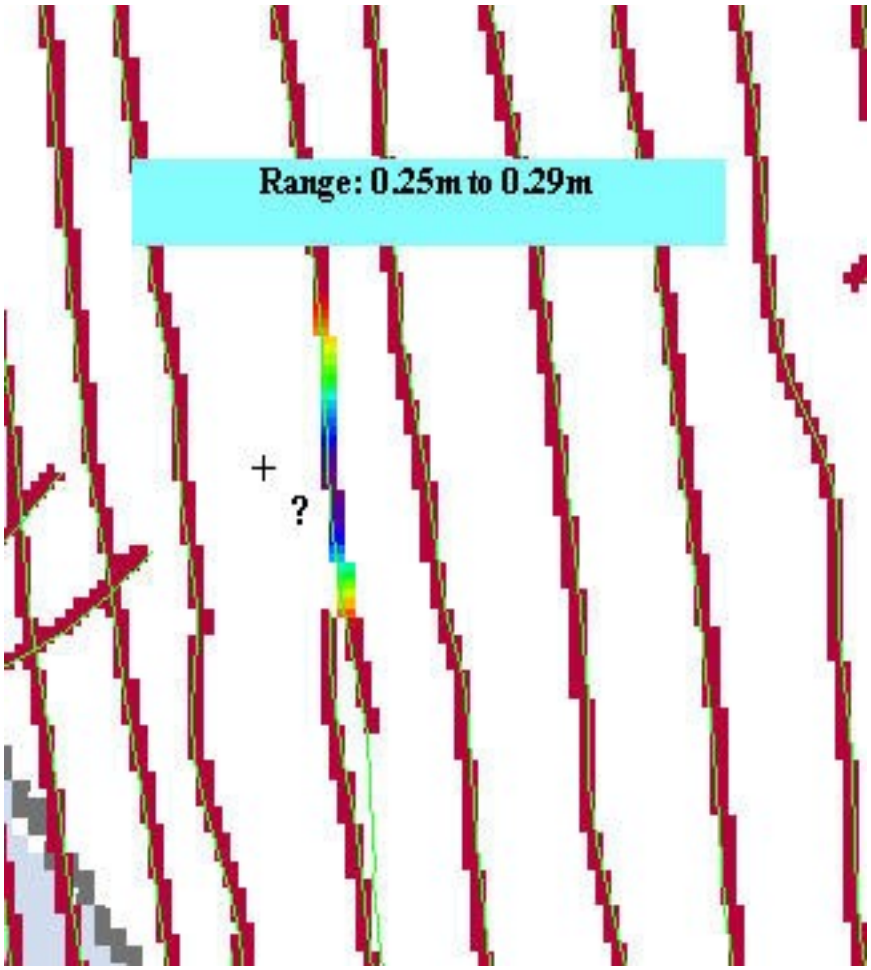

Figure 6: Area of higher uncertainty on line 030_1247.

B.2.3 Junctions

The following junctions were made with this survey:

Registry Number	Scale	Year	Field Unit	Relative Location
H11598	1:10000	2010	NOAA R/V BAY HYDRO II	E
H11918	1:10000	2010	NOAA R/V BAY HYDRO II	N

Table 7: Junctioning Surveys

H11598

Survey H11598 borders H12267 along the extent of its eastern edge, with approximately five hundred meters of overlap. Within this overlap area, 10 random samples were taken, and the VBES depths compared. Four points had less than a one foot difference; five agreed within one foot, and one point

agreed within two feet. All points remain within allowable differences. Refer to Separates\II_Digital_Data \Checkpoint_Summary_&_Crossline_Comparisons\Junction Comparison.

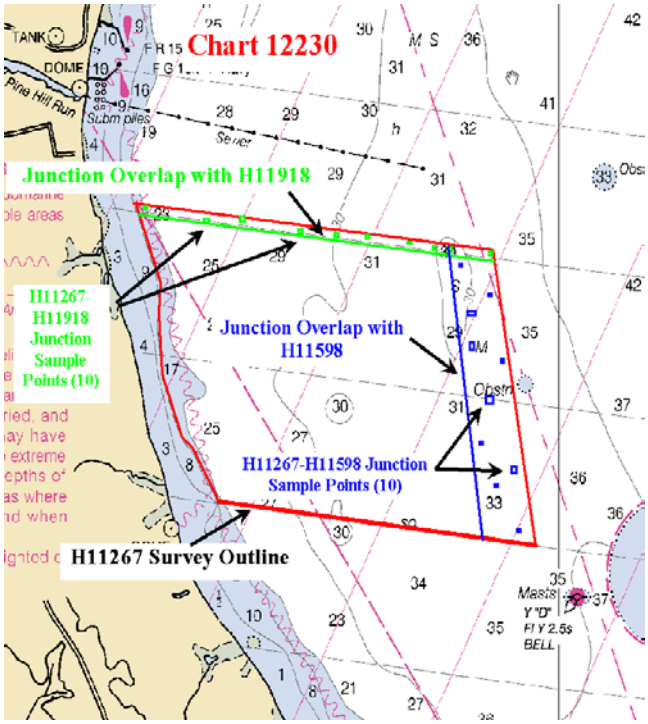

Figure 7: H12267 Junctions[5]

H11918

Survey H11918 borders H12267 along the extent of its northern edge, with approximately one hundred meter of overlap. Within this overlap area, 10 random samples were taken and the VBES depths compared. Three points had less than one foot difference; six agreed within one foot, and one point agreed within 3 feet.

B.2.4 Sonar QC Checks

Daily confidence checks were made by observing the outer ranges of the side scan sonar (SSS) images on the Klein 5000. These checks were accomplished by distinguishing crab pots and their float lines in the sonar record. Quality of sounding data was checked by systematic comparisons between multibeam soundings and Vertical Beam sounding throughout the survey area. Refer to DAPR for system calibration cycles

B.2.5 SVP Inaccuracies on Day Number 2011_055

On Day Number 2011_055 a sound velocity issue was observed in the processed MBES data. The error is likely due to a storm passing through the survey area the preceding night. The waters in the area remained well aerated through DN055, causing bubbles to form on the face of the DigiBar Pro sensor, which was used to resolve sound speed a the face of the MB transducer. The uncertainty remains within IHO Order 1 specifications.

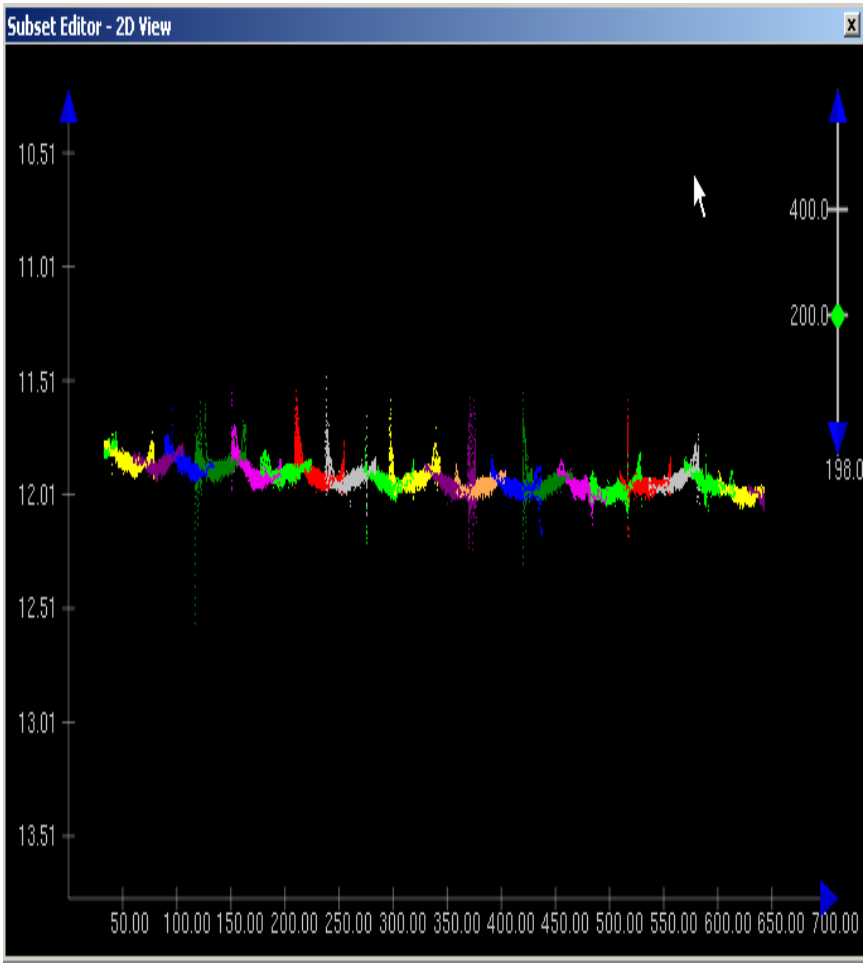

Figure 8: DN2011_055 Sound Speed Issue

B.2.6 Towfish Altitude Error

On Day Number 2011_293 three SSS) lines (101020123300, 101020124100, and 101020124300) presented with vertical striping in the data (See Figure 9: Ping Loss to Propeller Washout).The striations are a result of the towfish being flown at the surface, causing pings to be lost in the vessel's propeller wash. While the striping created gaps in the Side Scan Mosaic, with three exceptions, the gaps were located inshore of the NALL line. When the gaps in coverage extended past the NALL line, the overlapping 200% Side Scan data was checked for contacts.

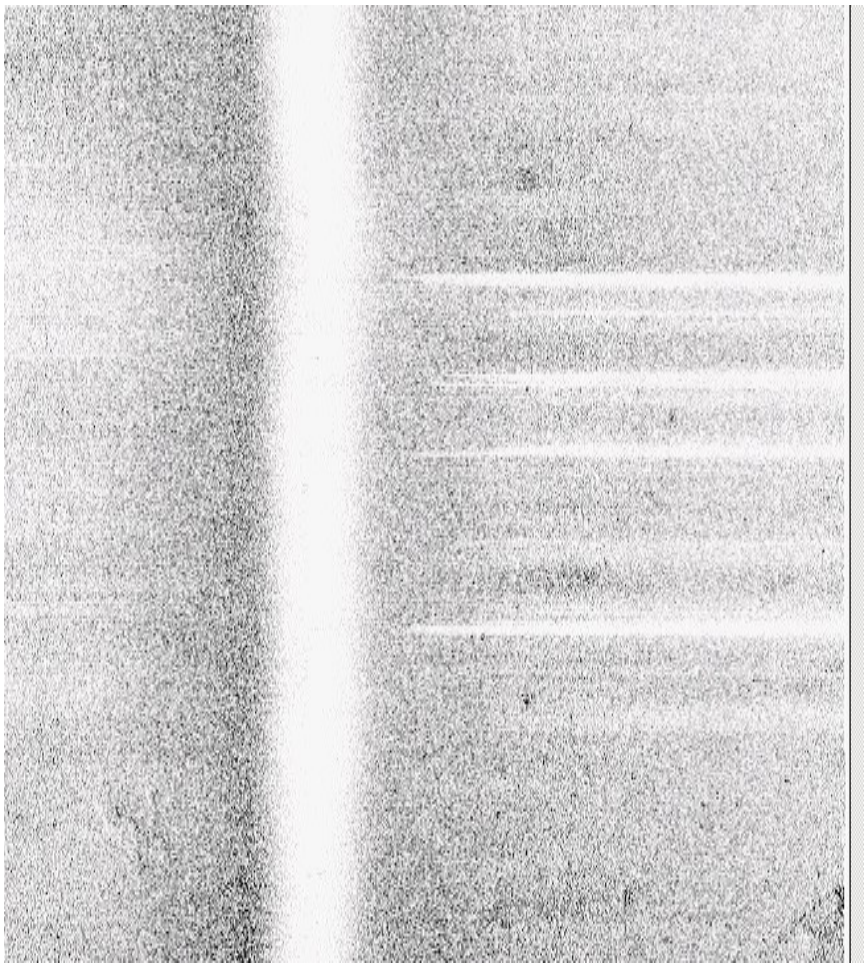

Figure 9: Ping Loss to Propeller Washout

B.2.7 Day Number 2011_081 POSPAC Application Failure

On Day Number 2011_081 an issue occurred while trying to apply the POSPAC heave file in Caris. The file was corrected using the Caris Utility: Fix TrueHeave, and successfully applied.

B.2.8 27 Foot VBES Designated Sounding

While performing the final quality control checks of all the data associated with H12267, a 27 foot sounding was found at position 38°13’20.0785”N, 076°21’21.4466”W that had no corresponding Multibeam development. Hydrographer recommends a chart scale sounding of 27 feet surrounded by a 30 foot blue tinted contour.[6]

B.2.9 Sound Speed Methods

Sound Speed Cast Frequency: During collection of Side Scan Sonar and Vertical Beam Echosounder data, sound velocity casts were acquired once a week. Sound velocity castes for Multibeam Echosounder developments were taken every two to four hours.

Individual .svp files were concatenated into a master file, named H12267_master.svp, which was applied to the data post processing. The CARIS setting used was Nearest in Distance with in Time, four hours. DQA checks were performed inconsistently too check for accuracy of SVP readings. The complete DQA records will not be submitted in the Sound Speed Records folder within the survey deliverables.

B.2.10 Coverage Equipment and Methods

Vessel configurations, equipment, operations, and data acquisition and processing were consistent with specifications described in the DAPR.

B.2.11 No .bin Files for VBES Data

No .bin files were collected for survey H112267 due to a faulty Ethernet port.

B.3 Echo Sounding Corrections

B.3.1 Corrections to Echo Sounding

All methods and instruments used are described in the project DAPR. The positions of sound velocity casts are within the PSS as individual generic position features (GP's), with the depth versus sound velocity information contained in the remarks.

B.3.2 Calibrations

Angular biases for the RESON 7125 system were originally resolved via a patch test performed on Day Number 2010_061. Prior to acquisition on H12267, the RESON projector and receiver were removed from the vessel's MB arm. The sonar was re-installed, and a patch test was performed on DN 2010_264. On DN 2011_055 a roll bias was observed in the MBES data collected over AWOIS item #14776. The system was re-patched, and the updated values were backdated to Day 2011_055.

B.4 Backscatter

Backscatter was not collected for this survey.

B.5 Data Processing

B.5 Software Updates

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

The following Feature Object Catalog was used: none

B.5.1 Surfaces

The following CARIS surfaces were submitted to the Processing Branch:[7]

Surface Name	Surface Type	Resolution	Depth Range	Surface Parameter	Purpose
H12267_SSS100_1m	SSS Mosaic	1.0 meters	3.2 meters - 11.0 meters	NOAA_1m	100% SSS
H12267_SSS200_1m	SSS Mosaic	1.0 meters	3.2 meters - 11.0 meters	NOAA_1m	200% SSS
H12267_VB_4m_MLLW_1of1	BASE Uncertainty	4.0 meters	3.2 meters - 11.0 meters	NOAA_4m	SBES Set Line Spacing
H12267_MB_50cm_mllw_1of1	CUBE	0.50 meters	3.2 meters - 11.9 meters	NOAA_0.5m	Object Detection

Table 8: CARIS Surfaces

C Vertical and Horizontal Control

Additional information discussing the vertical or horizontal control for this survey can be found in the accompanying HVCR.

C.1 Vertical Control

The vertical datum for this project is Mean lower low water.

Standard Vertical Control Methods Used:

TCARI

The following National Operating National Water Level Observation Network (NWLON) stations served as

datum control for this survey:

Station Name	Station ID
Solomons Island, MD	8577330
Lewisetta, VA	8635750
Bishops Head, MD	8571421

Table 9: NWLON Tide Stations

File Name	Status
E349BH2011.tc	Verified Observed

Table 10: Water Level Files (.tid)

There was no Tide Corrector file associated with this survey.

A request for final approved tides was sent to N/OPS1 on 03/30/2011. The final tide note was received on 04/20/2011.[8]

During acquisition on survey H12267, instructions for project OPR-E349-BH-10 were updated, and re-issued as OPR-E349-BH-11. During the update, the original zoned tide file issued with the 2008 instructions was changed to a Tidal Constituents and Residual Interpolation (TCARI) grid. Accordingly, the Final Tide Note for OPR-E349-BH-10, H12267 instructed that TCARI grid OPR-E349- BH-11 be used as final gridding. See Appendix IV for both the Preliminary, and Final Tide notes.

C.2 Horizontal Control

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

U.S. Coast Guard GPS (DGPS) was the sole method of positioning during this survey.

The following DGPS Stations were used for horizontal control:

DGPS Stations
U.S. Coast Guard Beacon at Annapolis, MD (301 kHz)

Table 11: USCG DGPS Stations

D Results and Recommendations

D.1 Chart Comparison

D.1.1 Raster Charts

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

Chart	Sca	Edition	Edition	LNM Date	NM Date
12230	1:80000	6	03/2009	04/19/2011	04/30/2011
12233	1:40000	3	01/2007	04/19/2011	04/30/2011
12264	1:40000	3	07/2007	04/19/2011	04/30/2011

Table 12: Largest Scale Raster Charts

12230

The bathymetric data from H12267 indicates that the entire area is one to three feet deeper than what is currently charted. The data also shows a landward shift of the 12, 18, and 30 foot contours. The largest of these shifts was in the thirty foot contour.

12233

The bathymetric data from H12267 indicates that the entire area is one to eight feet deeper than what is currently charted. The data also shows a landward shift of the 12, 18, and 30 foot contours.[9]

12264

There is no overlap between H12267 and chart 12264.

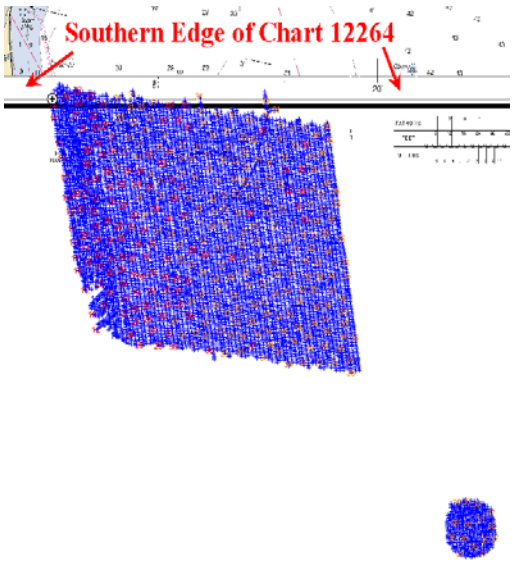

Figure 10: Chart 12264 Southern Extent

D.1.2 Electronic Navigational Charts

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

ENC	Scale	Edition	Update Application Date	Issue Date	Preliminary?
US5MD21M	1:40000	13	12/01/2010	12/01/2010	NO
US5VA22M	1:40000	17	01/06/2011	03/23/2011	NO

Table 13: Largest Scale ENCs

US5MD21M

There is no overlap between H12267 and chart US5MD21M.

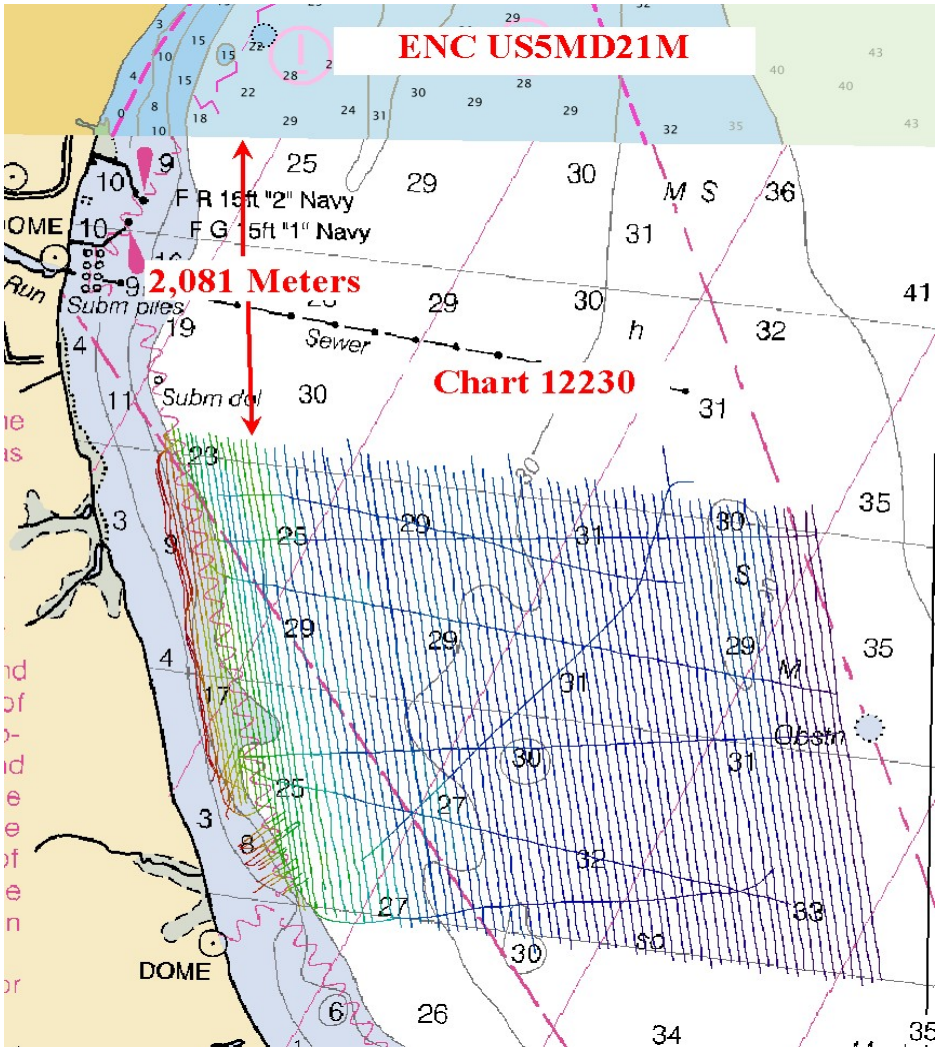

Figure 11: ENC US5MD21M Southern Extent

US5VA22M

While in Caris Hips/Sips, when Chart 12233 is over laid on ENC US5VA22M with a fifty percent transparency, all features and depths from both aligned and are identical. Therefore, see discussion from Raster Chart 12233

D.1.3 AWOIS Items

Number of AWOIS Items Addressed: 1
Number of AWOIS Items Not Addressed: 11

AWOIS item 14776 is a PA visible wreck. As part of H12267, a search radius of three hundred fifty meters was ensonified using a Reson 7125 MBES, and coverage was controlled using a 0.5 meter CUBE Surface. No wreck was identified. For full discussion, refer to section 1.1 of the Feature Report.[10]

D.1.4 Charted Features

The survey area that is H12267 is positioned, almost in its entirety, within a charted Fish Trap Area. This area is denoted on Chart 12230 and all other applicable charts by a pink dashed line, with alternating short and long dashes, and extends landward to the shoreline (See Figure 12: Fish Trap Area Boundary).

The chart also currently contains a note, stating the hazards of Fish Traps to mariners (See Figure 14: Fish Trap Chart Note). Currently there is one Fish Trap within the survey limits (See Figure 13: Fish Trap Structure). Due to vessel safety concerns, investigation of the fish trap was postponed until NSD Ops provided resolution and guidance on how to address all current and future uncharted fish traps within project OPR-E349-BH-10 and OPR-E349-BH-2011. Correspondence with the processing branch, AHB and NSD Ops resulted with the ruling for BH2 not to investigate these features. The MCD Production Team was requested to remove the currently charted "Fish Trap Areas & Structures" note from Chesapeake Bay charts, replace the currently charted note with the two notes shown in the Nautical Chart Manual, Section 4.12, page 608; bottom of the page. For records of discussion with AHB and NSD Ops see the deliverable Project Correspondence folder or Appendix V of this report.[11]

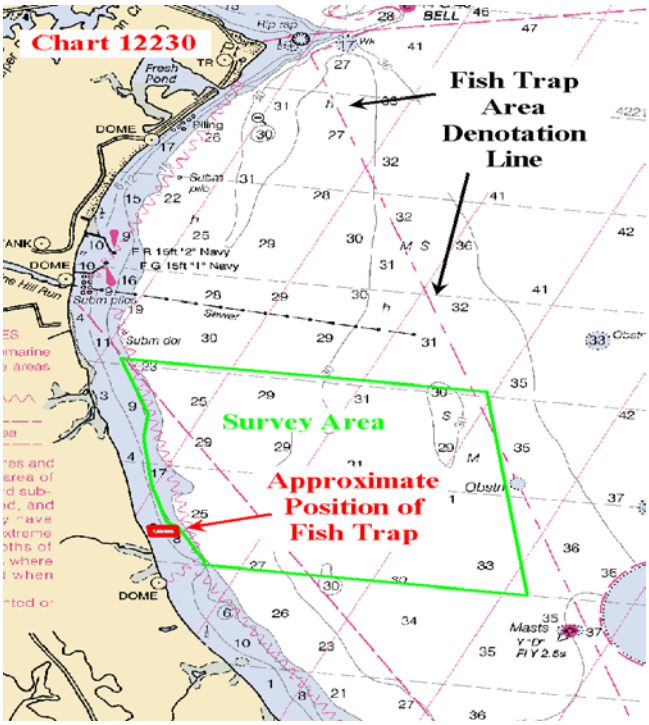

Figure 12: Fish Trap Area Boundary

Figure 13: Fish Tap Structure

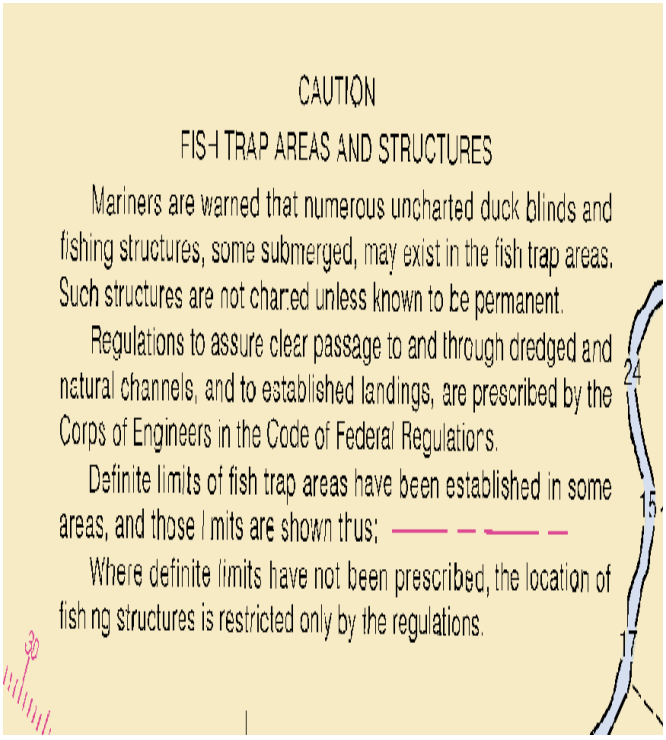

Figure 14: Fist Trap Chart Note

D.1.5 Uncharted Features

Survey H12267 contains 4 significant features that are currently uncharted.

1. 24.24 Foot Obstruction at position 38° 14' 29.6" N, 076° 20' 58.5" W (See Feature Report, Section 2.1 for discussion).
2. 24.29 Foot obstruction at position 38° 14' 35.8" N, 076° 20' 59.6" W (See Feature Report, Section 2.2 for discussion).
3. Exposed Pile at position 38° 13' 32.0" N, 076° 22' 55.9" W (See Feature Report, Section 2.3 for discussion)
4. 31 Foot Obstructions at position 38° 12' 04.7"N, 076° 18' 52.9"W (see Feature Report, Section 2.4 for discussion).[12]

D.1.6 Dangers to Navigation

There are no DTONs to report in this survey area.

D.1.7 Shoal and Hazardous Features

There are no hazardous shoals or features within the survey bounds.

D.1.8 Channels

There are no U.S. Army Corp of Engineers federally marked channels in this survey area.

D.2 Additional Results

D.2.1 Shoreline

There was no shore line conducted during this survey.

D.2.2 Prior Surveys

H12267 was not compared to any prior surveys except in junction areas by the hydrographer (See Junction section of the descriptive report for details).

D.2.3 Aids to Navigation

There are no ATONS within the bounds of this survey area.

D.2.4 Overhead Features

There are no charted or uncharted overhead features within the bounds of this survey area.

D.2.5 Submarine Features

There is one charted submarine cable that runs parallel to the shore line and the survey area's western inshore limit, inshore of the eighteen foot contour. See Feature Report 2.3 for discussion.

D.2.6 Ferry Routes and Terminals

No ferry routes or terminals exist within the bounds of this survey area.

D.2.7 Platforms

There are no platforms or rigs within the bounds of the survey area.

D.2.8 Significant Features

The entire extent of the thirty foot contour has shifted landward, see Chart 12230 Chart Comparison for details. The largest shift seen was in the region between positions 38°14'44.74" N 076°21'49.11" W and 38°
14' 34.2456"N, 076° 21' 45.9324"W. This shift was over fifteen hundred meters and it occurred in

twenty to forty years (area last survey between 1970-1989 according to Chart 12230 Source Diagram).

D.2.9 Construction and Dredging

There is currently no construction or dredging occurring within the bounds of this survey 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, Field Procedures Manual, Standing and Letter Instructions, and all HSD Technical Directives. 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.

There are no additional informations needed.

Approver Name	Approver Title	Approval Date	Signature
LTJG Megan Guberski	Chief of Party	05/17/2011	Digitally signed by LTJG Megan R. Guberski Date: 2011.07.15 11:34:02 -04'00'
Robert Mowery	Senior Survey Technician	05/17/2011	Digitally signed by Robert Mowery Date: 2011.07.15 11:28:14 -04'00'
Nicole Trenholm	Assistant Survey Technician	05/17/2011	Digitally signed by Nicole Trenholm Date: 2011.07.15 11:30:02 -04'00'

Revisions and Corrections Compiled During Office Processing and Certification

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[1] The AWOIS report is attached.
[2] The charted 8 ft. sounding at position 38/13/38 N, 076/23/02 W, in the area without SSS coverage, was recommended to be retained. Separate delineations of data coverage have been created during compilation and recommended for charting.
[3] All the bottom samples were recommended for charting.
[4] The DAPR was destroyed (see appended email). Despite the missing deliverable the survey has been accepted by the Pacific Hydrographic Branch. DAPR S-D920-BH-10, supporting a different project during a similar time frame of data acquisition has been used in place of the original DAPR.
[5] The figure incorrectly references survey H11267. The correct survey number is H12267.
[6] The sounding was recommended for charting.
[7] The 4m combined surface, H12267_4m_Combined, was used for compilation.
[8] The Tide Note is attached.
[9] Concur with clarification. In several areas the survey indicates shoaler soundings than charted.
[10] The AWOIS section of the feature report is attached. The Survey Feature Report is filed with the hydrographic records. All features included in the compilation of H12267 have come directly from CARIS Notebook, which is the official features deliverable for this survey.
[11] The correspondence was not included in the DR appendices.
[12] All the features were recommended for charting.

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

TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE : April 20, 2011

HYDROGRAPHIC BRANCH: Atlantic
HYDROGRAPHIC PROJECT: OPR-E349-BH-2011
HYDROGRAPHIC SHEET: H12267

LOCALITY: Central Chesapeake Bay
TIME PERIOD: September 23, 2010 - March 22, 2011

TIDE STATION USED: Bishops Head, MD 857-1421
Lat.38° 13.2′ N Long. 76° 02.3' W
PLANE OF REFERENCE (MEAN LOWER LOW WATER): 0.000 meters
HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 0.570 meters

TIDE STATION USED: Solomons Island, MD 857-7330
Lat. 38° 19.0' N Long. 76° 27.1' W
PLANE OF REFERENCE (MEAN LOWER LOW WATER): 0.000 meters
HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 0.405 meters

Tide STATION USED: Lewisetta, VA 863-5750
Lat. 37° 59.7′ Long. 76° 27.9' W
PLANE OF REFERENCE (MEAN LOWER LOW WATER): 0.000 meters
HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 0.416 meters

REMARKS: RECOMMENDED GRID

Please use the TCARI grid "E349BH2011" as the final grid for project OPR-E349-BH-2011, Registry No. H12267 during the time period between September 23, 2010 and March 22, 2011.

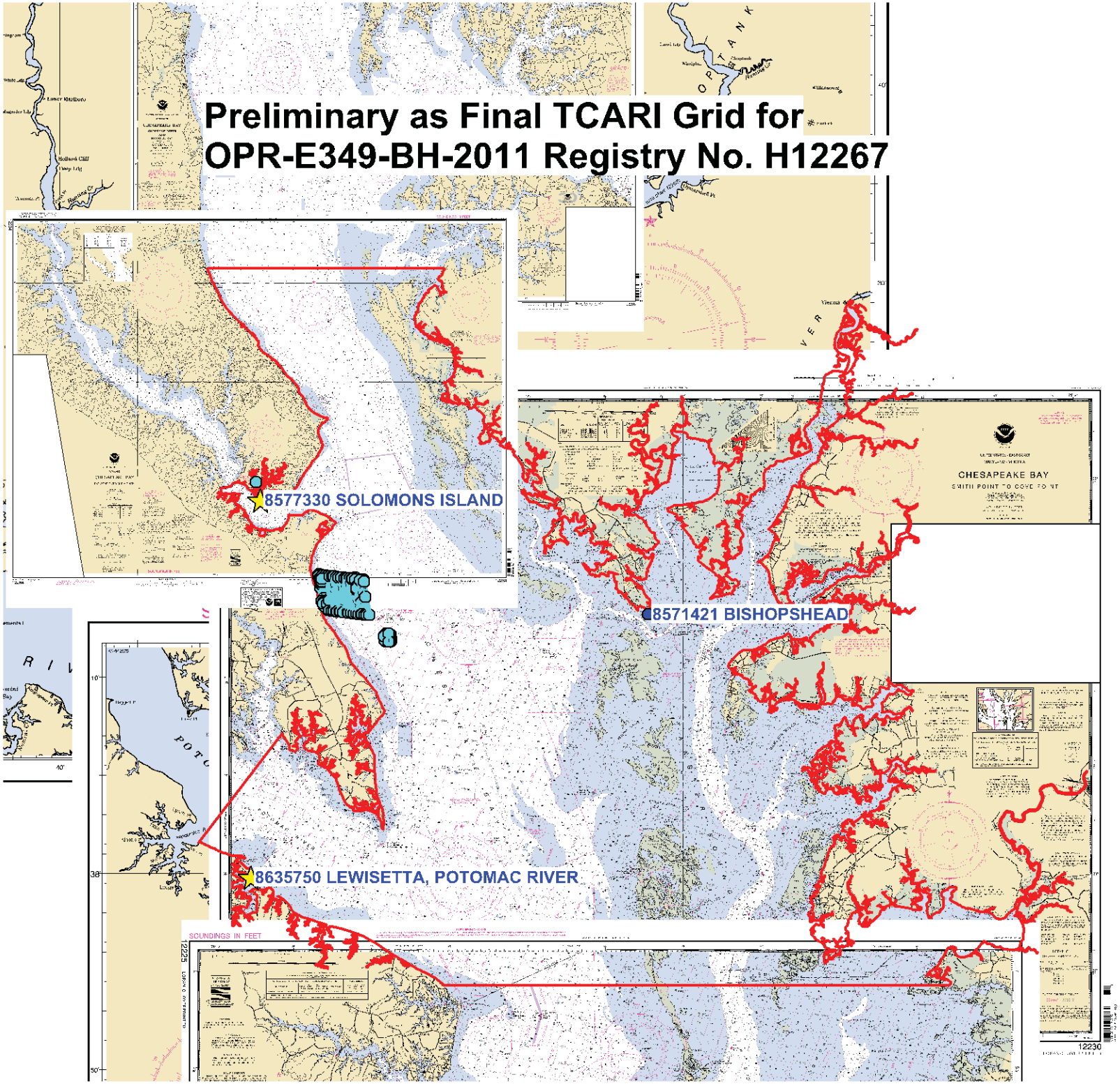
Refer to attachments for grid information.

Note 1: Provided time series data are tabulated in metric units (meters), relative to MLLW and on Greenwich Mean Time on the 1983-2001 National Tidal Datum Epoch (NTDE).

Peter J. Stone

Digitally signed by Peter J. Stone
DN: cn=Peter J. Stone, o=Oceanographic Division, ou=NOAA/NOS/CO-OPS, email=peter.stone@noaa.gov, c=US
Date: 2011.04.22 04:05:17 -04'00'

CHIEF, OCEANOGRAPHIC DIVISION


Preliminary as Final TCARI Grid for
OPR-E349-BH-2011 Registry No. H12267
8577330 SOLOMONS ISLAND
8571421 BISHOPSHEAD
8635750 LEWISETTA, POTOMAC RIVER
CHESAPEAKE BAY
SMITH POINT TO COVE POINT
SOUNDINGS IN FEET
12225
12230

---------- Forwarded message ----------
From: Megan Guberski <megan.guberski@noaa.gov>
Date: Mon, Apr 9, 2012 at 9:28 AM
Subject: H12267 DAPR
To: Peter Holmberg <peter.holmberg@noaa.gov>

Good Afternoon Pete,

This email is to inform you that the DAPR for OPR-E349-BH-08, H12267 was lost due to a catastrophic server failure.

Please let me know if you have any further questions.

Very Respectfully,
Megan

--
LT Megan Guberski, NOAA
OIC Bay Hydro II
c/o Calvert Marina
14485 Dowell Rd
Solomons, MD 20688
c 206 661-6985

H12267_AWOIS Report

Registry Number: H12267
State: Maryland
Locality: Central Chesapeake Bay
Sub-locality: South Cedar Point
Project Number: OPR-E349-BH-10
Survey Dates: 06/09/2010 - 03/28/2011

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
12233	37th	01/01/2007	1:40,000 (12233_1)	USCG LNM: 3/22/2011 (4/19/2011) NGA NTM: 4/5/1997 (4/30/2011)
12230	64th	03/01/2009	1:80,000 (12230_1)	USCG LNM: 04/27/2010 (06/01/2010) NGA NTM: 08/02/2008 (06/05/2010)
12280	8th	03/01/2008	1:200,000 (12280_1)	[L]NTM: ?
13003	50th	05/01/2010	1:1,200,000 (13003_1)	USCG LNM: 1/25/2011 (2/15/2011) CHS NTM: 8/27/2010 (8/27/2010) NGA NTM: 1/8/2011 (2/26/2011)

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

Features

No.	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	AWOIS	[no data]	[no data]	[no data]	---
2.1	Obstruction	7.40 m	38° 14' 29.6" N	076° 20' 58.5" W	---
2.2	Pile	[None]	38° 13' 32.0" N	076° 22' 55.9" W	---
2.3	Obstruction	9.37 m	38° 12' 04.7" N	076° 18' 52.9" W	---

1 - Charted Features

1.1) AWOIS #14776 - UNKNOWN

No Primary Survey Feature for this AWOIS Item

Search Position: 38° 12' 00.0" N, 076° 19' 00.0" W

Historical Depth: [None]

Search Radius: 350

Search Technique: VS, S2, MB

Technique Notes: [None]

History Notes:

LNM 14/09-- 52 ft sailing with two mast, reportedly sank at the approximate position of 38°12'00.00"-076°19'00.00". The wreck is reported to be a visible wreck. (Entered CEH 4/2010)

Survey Summary

Charts Affected: 12233_1, 12230_1, 12280_1, 13003_1

Remarks:

AWOIS item #14776, was developed using a RESON 7125, with object detection coverage monitored by creation of 0.5m resolution CUBE surface. The visible wreck was not identified within th multibeam development radius.

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 14776	0.00	000.0	Primary

Hydrographer Recommendations

It is the hydrographer's recommendation to remove the visible wreck symbol from all associated raster charts and ENC's.

S-57 Data

[None]

Office Notes

Concur.

APPROVAL PAGE

H12267

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

- H122267_DR.pdf
- Collection of depth varied resolution BAGS
- Processed survey data and records
- H12267_GeoImage.pdf

The survey evaluation and verification has been conducted according current OCS Specifications.

Approved: Digitally signed by Peter S. Holmberg
DN: cn=Peter S. Holmberg, o, ou, email=peter.holmberg@noaa.gov, c=US
Date: 2012.08.28 11:49:49 -07'00'

Peter Holmberg
Physical Scientist, Pacific Hydrographic Branch

The survey has been approved for dissemination and usage of updating NOAA's suite of nautical charts.

Approved: Digitally signed by Russ Davies
DN: cn=Russ Davies, o=OCS, ou=PHB, email=russ.davies@noaa.gov, c=US
Date: 2012.08.28 13:16:25 -07'00'

Russ Davies,
Cartographer, Pacific Hydrographic Branch