H12718

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

DESCRIPTIVE REPORT

Type of Survey:	Basic Hydrographic Survey
Registry Number:	H12718

LOCALITY

State(s):	Florida
General Locality:	Approaches to Panama City
Sub-locality:	7nm S of St Andrews Bay

2015

CHIEF OF PARTY
David Neff, ACSM C.H.

LIBRARY & ARCHIVES

Date:

U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	REGISTRY NUMBER:
HYDROGRAPHIC TITLE SHEET	**H12718**

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):	**Florida**
General Locality:	**Approaches to Panama City**
Sub-Locality:	**7nm S of St Andrews Bay**
Scale:	**12500**
Dates of Survey:	**01/18/2015 to 02/25/2015**
Instructions Dated:	**07/10/2014**
Project Number:	**OPR-J357-KR-14**
Field Unit:	**eTrac Inc.**
Chief of Party:	**David Neff, ACSM C.H.**
Soundings by:	**Multibeam Echo Sounder**
Imagery by:	**Side Scan Sonar**
Verification by:	**Atlantic Hydrographic Branch**
Soundings Acquired in:	**meters at Mean Lower Low Water**

Remarks:

All times are UTC. The purpose of this survey is to update existing NOS nautical charts. H12718 will cover approximately 20 square nautical miles of critical area in the Approaches to Panama City as designated in NOAA Hydrographic Survey Priorities, 2012 edition. SUBCONSULTANT: Geodynamics LLC, 310A Greenfield Dr., Newport, NC 98570 SUBCONSULTANT: Theory Marine, 777 Viewcrest Dr., Ventura, CA 93003 Projection: UTM 16N, NAD83

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 H12718

Project: OPR-J357-KR-14

Locality: Approaches to Panama City

Sublocality: 7nm S of St Andrews Bay

Scale: 1:12500

January 2015 - February 2015

eTrac Inc.

Chief of Party: David Neff, ACSM C.H.

A. Area Surveyed

eTrac Inc. conducted hydrographic survey operations in the vicinity of the Approaches to Panama City, FL. H12718 covers approximately 20 square nautical miles of critical survey area including the safety fairway approaching Panama City, FL. H12718 is irregular in geometry and includes the southern and eastern approaches of the entrance to St. Andrews Bay.

Survey was conducted within these limits between January 18, 2015 (DN018) and February 25, 2015 (DN056).

A.1 Survey Limits

Data were acquired within the following survey limits:

Northwest Limit	Southeast Limit
30° 7' 1.41" 85° 49' 38.8"	30° 0' 55.07" 85° 42' 39.56"

Table 1: Survey Limits

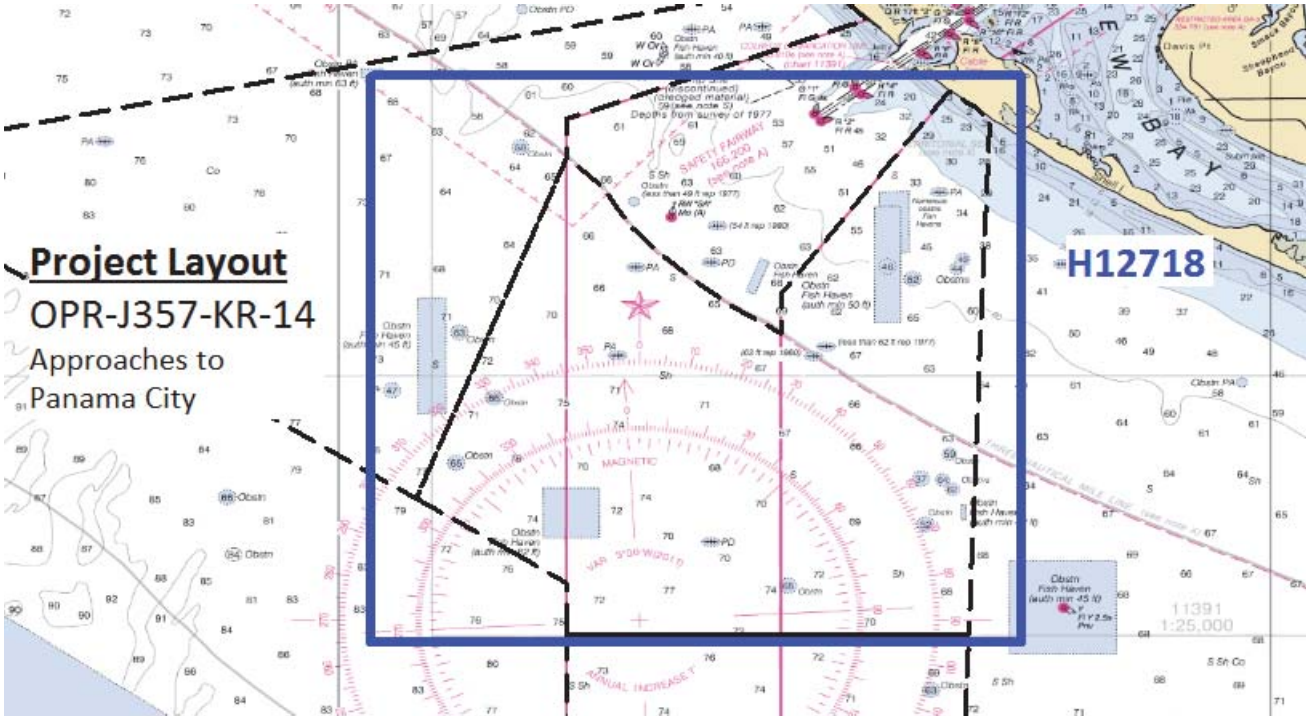


Figure 1: Survey Limits (black dashed line)

All data were acquired in accordance with the requirements in the Project Requirements and spacifications set forth in Hydrographic Survey Specifications and Deliverables 2014 Edition (HSSD 2014).

A.2 Survey Purpose

The purpose of this survey is to update existing NOS nautical charts. H12718 will cover approximately 20 square nautical miles of critical survey area in the Approaches to Panama City as designated in NOAA Hydrographic Survey Priorities, 2012 edition.

A.3 Survey Quality

The entire survey is adequate to supersede previous data.

Survey H12718 is accurate to IHO Order 1a as required per HSSD 2014.

A.4 Survey Coverage

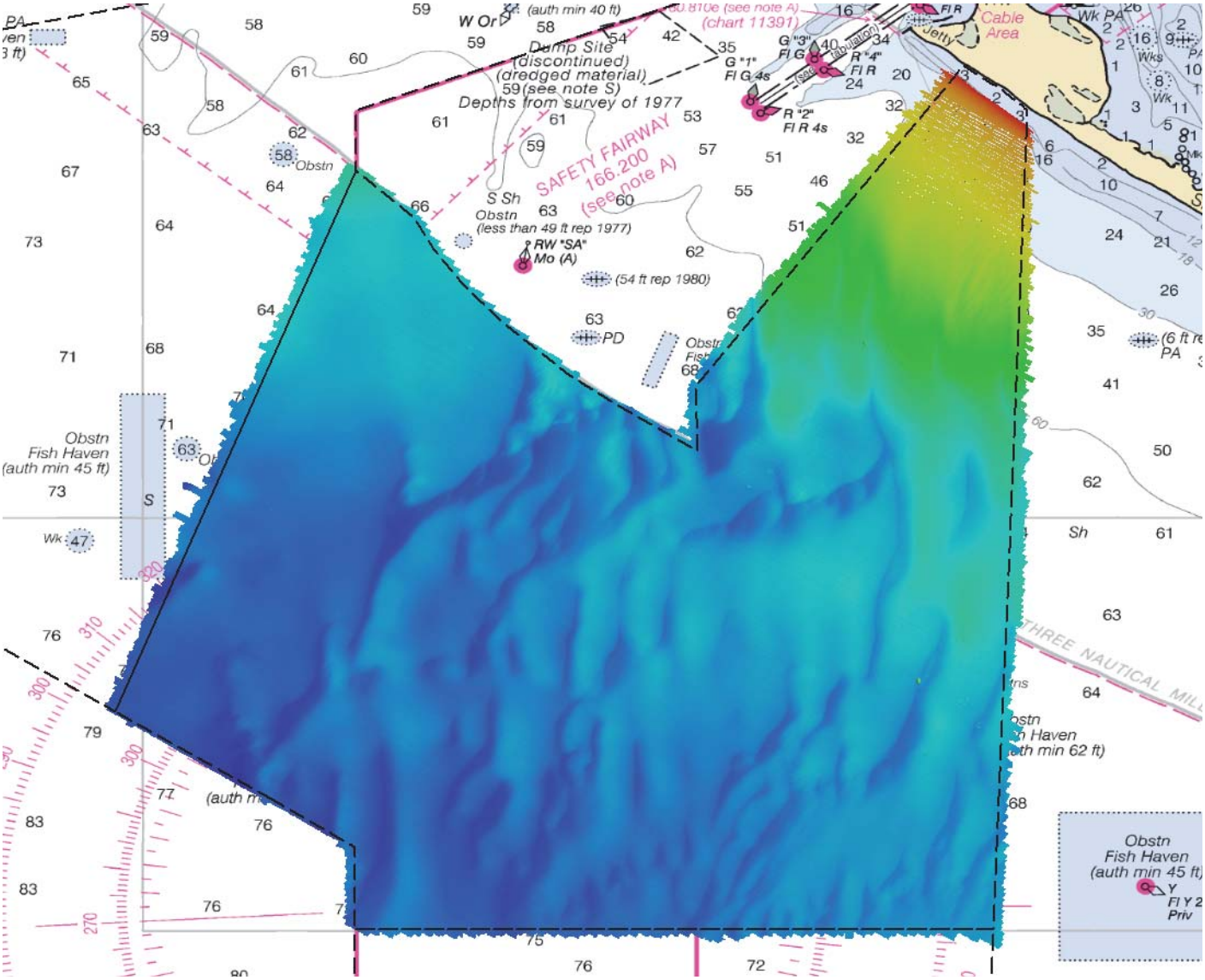


Figure 2: Survey Coverage

Survey Coverage was in accordance with the requirements in the Project Instructions and the HSSD.

H12718 was covered using three coverage methods in accordance with HSPI for efficiency of data acquisition.

Complete MBES with Backscatter standards were utilized in water depths greater than 20 meters. Object Detection MBES standards were utilized in an area approximately 18m to 20m depth.

200% SSS with concurrent Set Line Spacing MBES with Backscatter standards were utilized in water depths of approximately 18m to the NALL.

A.5 Survey Statistics

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

	HULL ID	*M/V Jab*	*R/V Benthos*	*Total*
LNM	**SBES Mainscheme**	0	0	0
	MBES Mainscheme	416	206	622
	Lidar Mainscheme	0	0	0
	SSS Mainscheme	0	0	0
	SBES/SSS Mainscheme	0	0	0
	MBES/SSS Mainscheme	130	0	130
	SBES/MBES Crosslines	12	23	35
	Lidar Crosslines	0	0	0
Number of Bottom Samples				0
Number of AWOIS Items Investigated				0
Number Maritime Boundary Points Investigated				0
Number of DPs				0
Number of Items Investigated by Dive Ops				0
Total SNM				21

Table 2: Hydrographic Survey Statistics

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

Survey Dates	Day of the Year
01/18/2015	18
01/22/2015	22
01/27/2015	27
01/28/2015	28
01/30/2015	30
02/01/2015	32
02/05/2015	36
02/07/2015	38
02/08/2015	39
02/09/2015	40
02/11/2015	42
02/12/2015	43
02/13/2015	44
02/14/2015	45
02/15/2015	46
02/16/2015	47
02/19/2015	50
02/20/2015	51
02/24/2015	55
02/25/2015	56

Table 3: Dates of Hydrography

B. Data Acquisition and Processing

B.1 Equipment and Vessels

Refer to the 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. 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	*M/V Jab*	*R/V Benthos*
LOA	13 meters	10 meters
Draft	0.75 meters	0.6 meters

Table 4: Vessels Used

Figure 3: M/V Jab

Figure 4: R/V Benthos

The M/V Jab is a 13 meter aluminum catamaran equipped with a multibeam moonpool and A-Frame for towed bodey operations.

The R/V Benthos is a 10 meter aluminum catamaran equipped with an over-the-side multibeam mount as well as an A-Frame for towed body operations.

B.1.2 Equipment

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

Manufacturer	Model	Type
R2Sonic	2024	MBES
Applanix	POSMV 320 Ver. 5	Positioning and Attitude System
AML	BaseX	Sound Speed System
AML	MinosX	Sound Speed System
Trimble	SPS461	Positioning System
Edgetech	4200	SSS

Table 5: Major Systems Used

Note: The major systems listed above were used on both vessels. The AML MinosX was utilized on the M/V Jab and the AML BaseX was utilized on the R/V Benthos. The Edgetech 4200 Sidescan Sonar was utilized only on the M/V Jab.

B.2 Quality Control

B.2.1 Crosslines

Crosslines acquired for this survey totaled 5% of mainscheme acquisition.

A comparison of crossline mileage to main scheme mileage in areas covered by object detection multibeam or complete coverage multibeam specifications yields a crossline percentage of 4.6% and is noted to be above the required 4%. A comparison of crossline mileage to main scheme mileage in areas covered by set line spacing specifications yields a crossline percentage of 9.0% and is noted to be above the required 8%.

A beam-to-beam statistical analysis was performed using the Line QC reporting tool in Caris HIPS and SIPS software. A 2 meter CUBE weighted BASE surface was created incorporating only the mainscheme lines and excluding crosslines. Note this surface was created for QC only and is not submitted as a surface deliverable. The Line QC reporting tool was used to perform the beam-to-beam comparison of the crossline data to the mainscheme surface. Comparisons showed excellent agreement well above 95% of the allowable TVU. Note the statistical analysis excludes the outer 5 beams (beams 1-5 and beams 252-256), as these beams were excluded from both mainscheme and crossline data across the entire project.

The beam-to-beam crossline comparison report generated through the CARIS QC Reporting tool is included in Separate II.

Below is a graph of crossline comparison statistics showing IHO Special Order and Order 1a compliance percentage per beam.

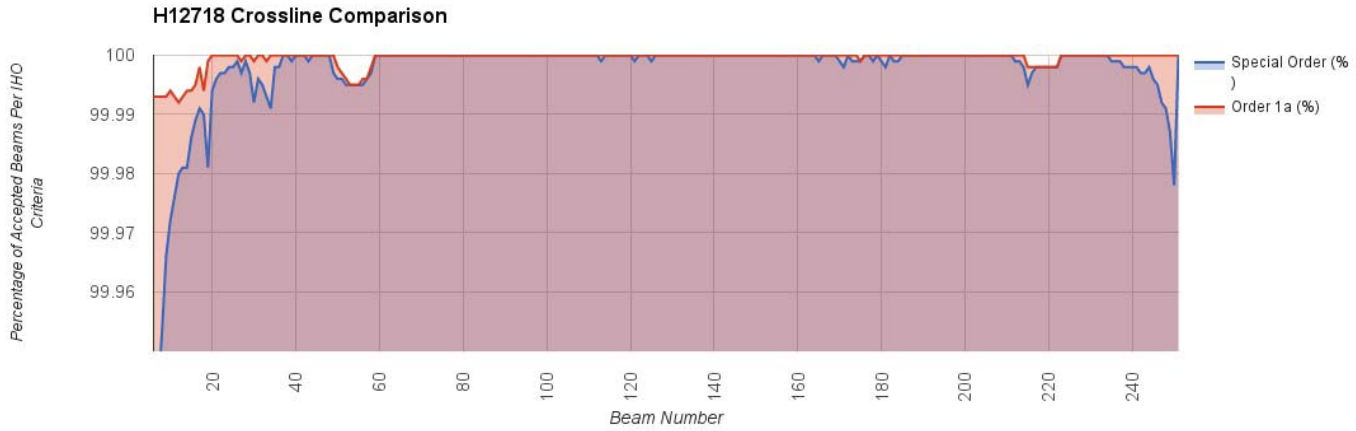


Figure 5: H12718 Crossline Comparison

B.2.2 Uncertainty

The following survey specific parameters were used for this survey:

Measured	Zoning
0.11 meters	0 meters

Table 6: Survey Specific Tide TPU Values

Hull ID	Measured - CTD	Measured - MVP	Surface
M/V Jab	4 meters/second	0 meters/second	2 meters/second
R/V Benthos	4 meters/second	0 meters/second	2 meters/second

Table 7: Survey Specific Sound Speed TPU Values

Standard deviation and uncertainty BASE surfaces were utilized during data processing to search for features, water column noise, and systematic errors. Additionally, a custom layer is created within the BASE surface utilizing the Deep and Shoal layers in the following configuration:

Custom Layer = (Deep - Shoal)^2

By viewing the custom layer, seafloor features, water column noise, and systematic errors are graphically exaggerated and can easily be identified for further examination.

Standard deviation and uncertainty was quantified using the QC Reporting tool within Caris HIPS and SIPS. The option "Greater of the two" was selected in the reporting tool in order to generate statistics quantifying the maximum error occuring within the data. IHO Order 1a uncertainty specifications were met by 100% of the nodes.

B.2.3 Junctions

The following junctions were made with this survey:

Registry Number	Scale	Year	Field Unit	Relative Location
H12717	1:40000	2015	eTrac Inc.	S
H12719	1:12500	2015	eTrac Inc.	W
H12357	1:10000	2014	Navigation Response Team 1	NW

Table 8: Junctioning Surveys

H12717

H12718 junctions with H12717 to the south. The junction comparison was performed using approximately 250m of overlapping data between H12717 and H12718. Depths were compared in Caris HIPS and SIPS 9.0 by creating a 2M difference surface between the junctioning datasets. Note the 2M difference surface was created for comparison efforts only and is not submitted as a surface deliverable. The comparison showed excellent agreement between H12718 and H12717. Depth differences generally were within 20cm or less with the majority of depth differences being less than 10cm.

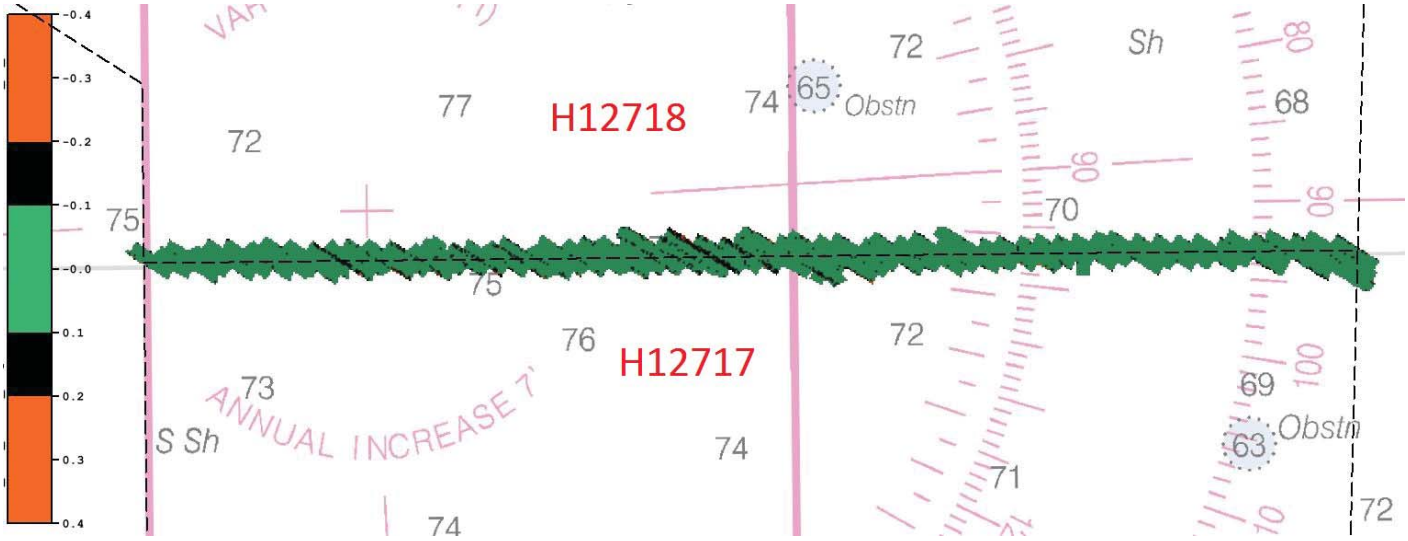


Figure 6: Junction Comparison (H12717 to H12718)

H12719

H12718 junctions with H12719 to the west. The junction comparison was performed using approximately 250m of overlapping data between H12717 and H12718. Depths were compared in Caris HIPS and SIPS 9.0 by creating a 2M difference surface between the junctioning datasets. Note the 2M difference surface was created for comparison efforts only and is not submitted as a surface deliverable. The comparison showed excellent agreement between H12718 and H12719. Depth differences generally were within 20cm or less with the majority of depth differences being less than 10cm.

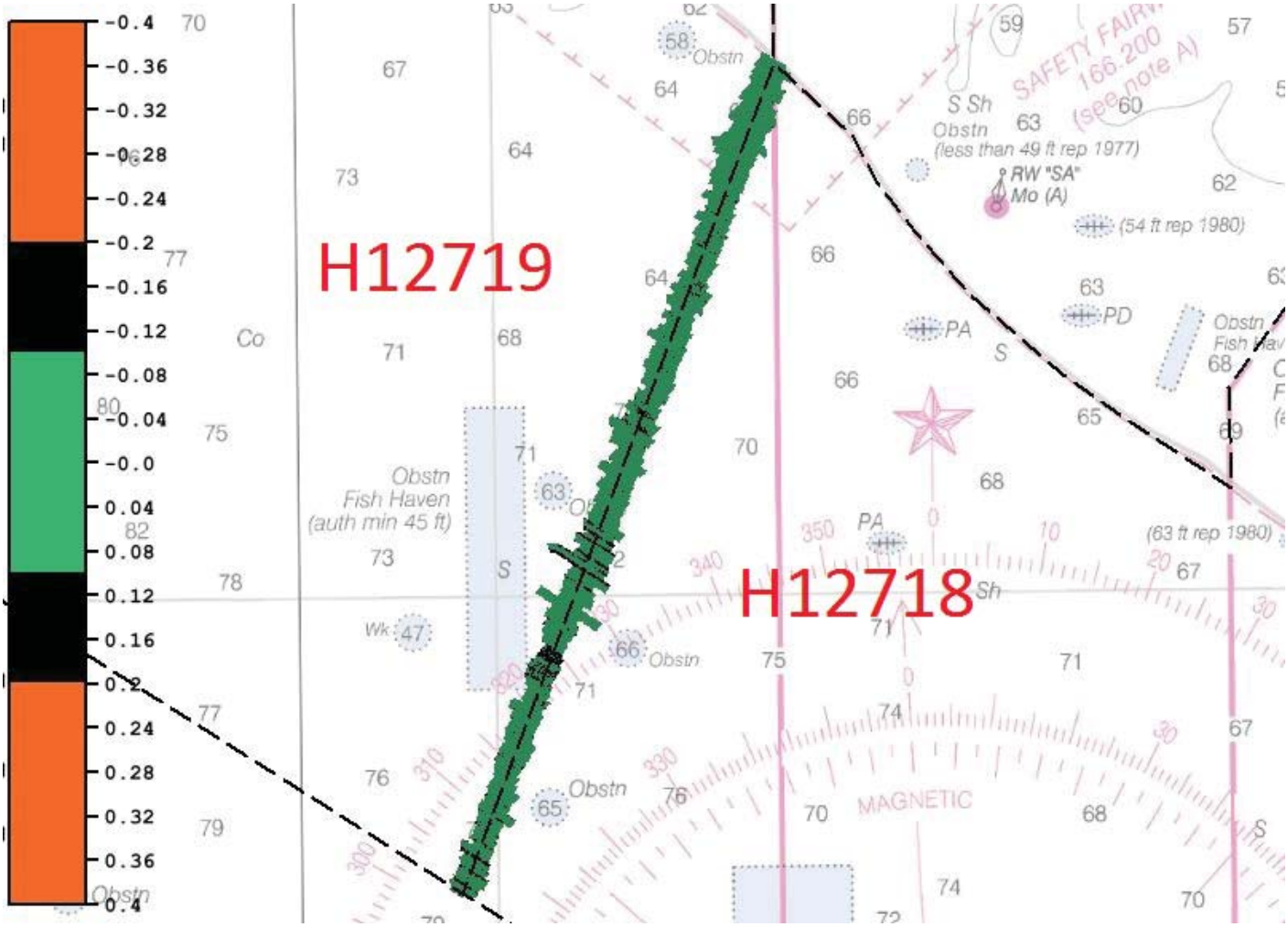


Figure 7: Junction Comparison (H12718 to H12719)

H12357

H12718 junctions with H12357 to the north and the west. The junction is varied in amount of overlap. H12357 is an SBES survey. The western overlapping area creates the best comparison as the SBES lines are oriented perpendicular to the junction boundary. The northern overlapping area offers little comparison, as the SBES lines are oriented parallel to the junction boundary. Depths were compared in Caris HIPS and SIPS 9.0 by creating a 2M difference surface between the junctioning datasets. Note the 2M difference surface was created for comparison efforts only and is not submitted as a surface deliverable. The comparison showed excellent agreement between H12718 and H12357. Depth differences generally were within 20cm or less with the majority of depth differences being less than 10cm.

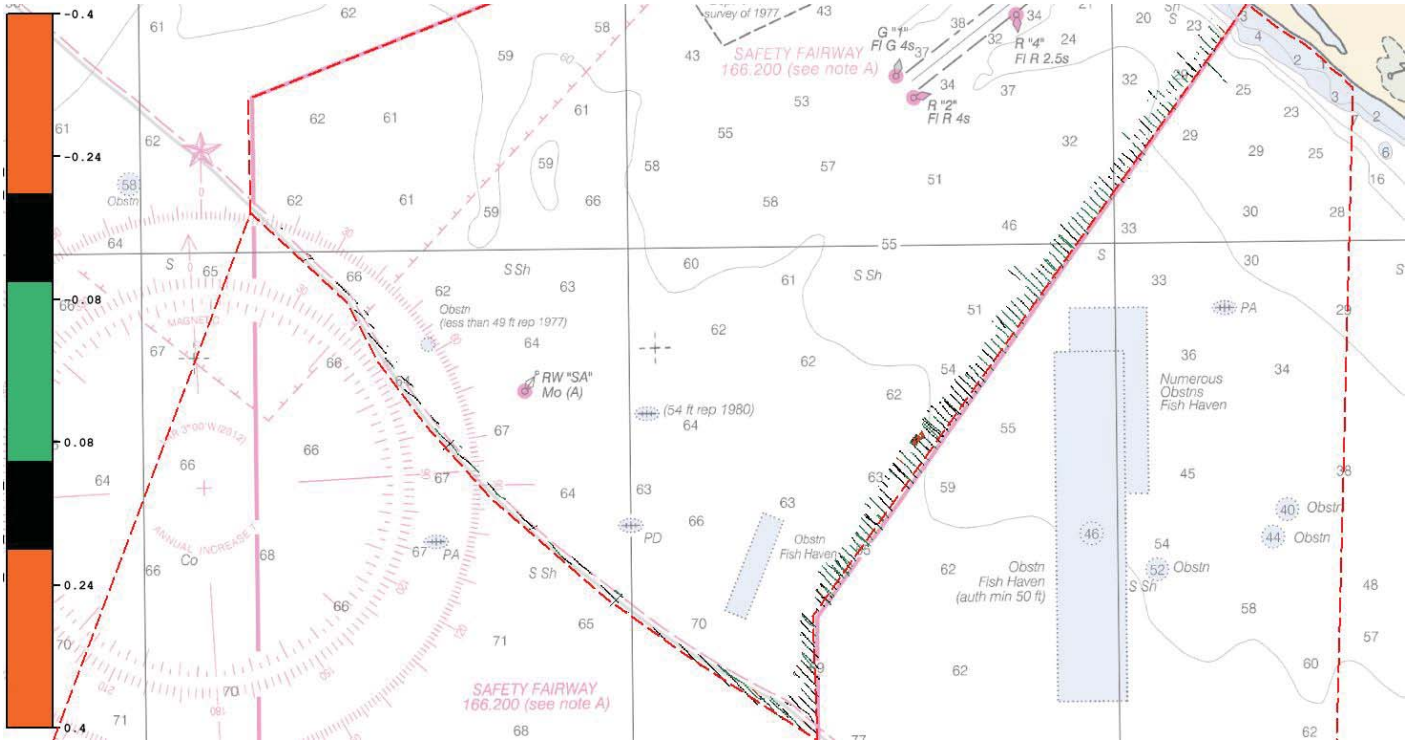


Figure 8: Junction Comparison (H12718 to H12357) Overview

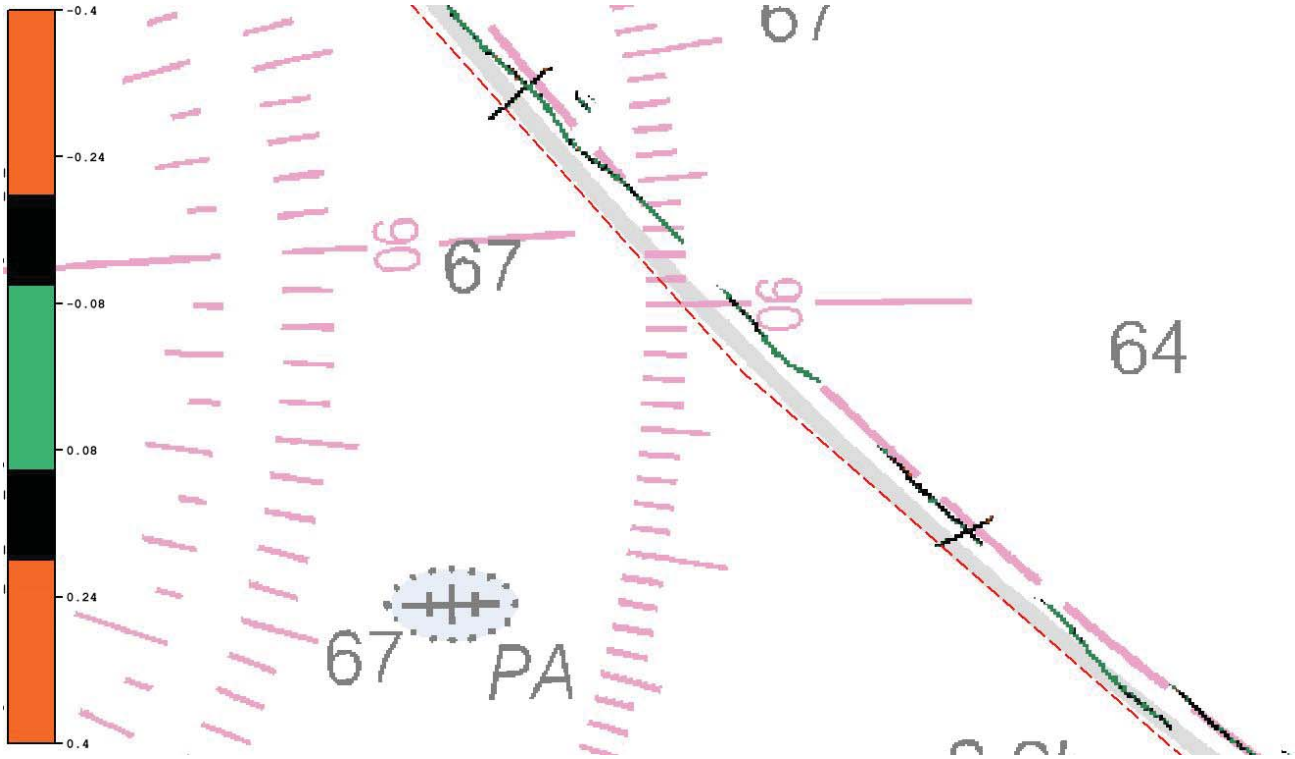


Figure 9: Junction Comparison (H12718 to H12357) Northern Comparison Area

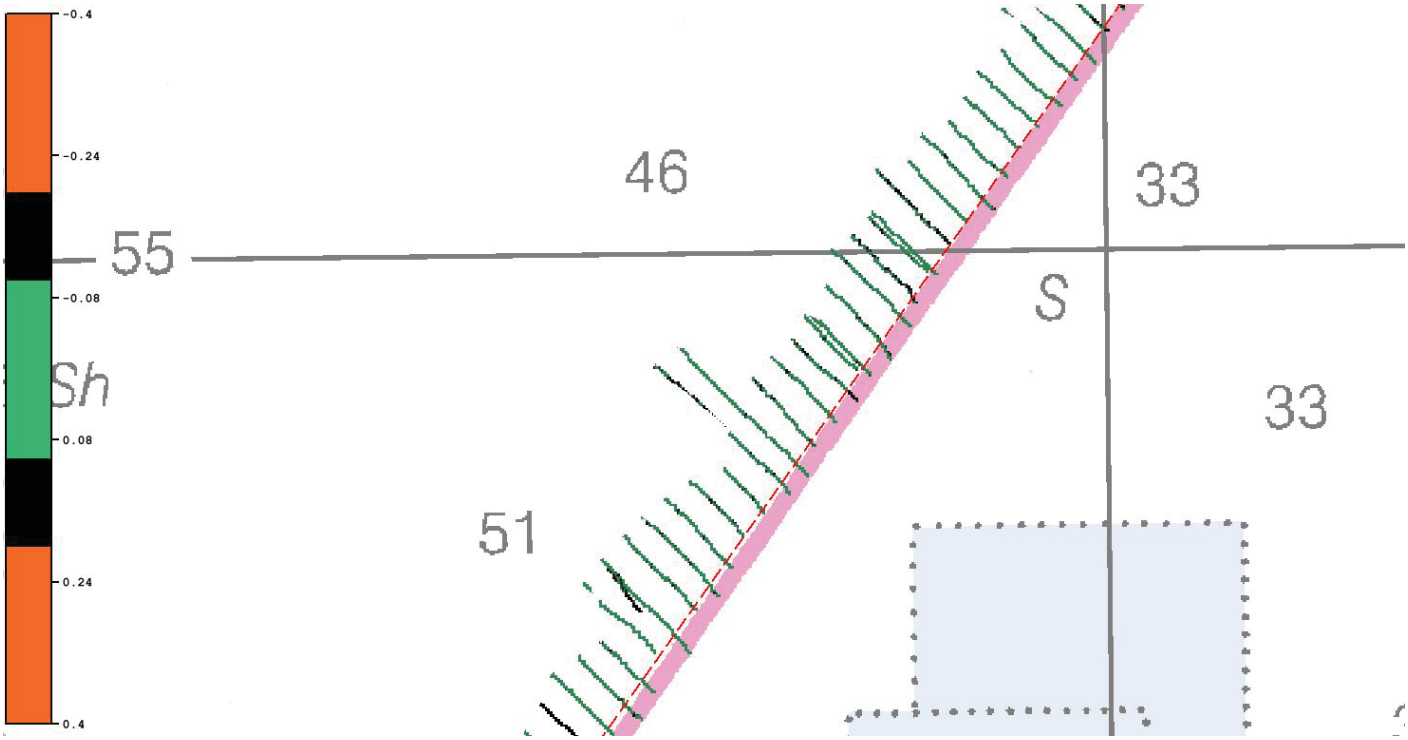


Figure 10: Junction Comparison (H12718 to H12357) Western Comparison Area

B.2.4 Sonar QC Checks

Sonar system quality control checks were conducted as detailed in the quality control section of the DAPR.

B.2.5 Equipment Effectiveness

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: SVP casts were generally taken every 2 hours. Ocassionally casts would exceed a 2 hour frequency, however would never exceed a 4 hour frequency. Casts were applied in QPS Qinsy acquisition software at the time of the cast. Surface SV measured at 1Hz was compared to surface speed from the current profile in realtime. If the surface velocity comparison was in excess of 2m/s at any time during survey operations, a new cast was taken.

SVP surface velocities were compared in real-time and profile to profile for each cast on the vessel. Additionally, profiles were compared day-to-day in the field office using in-house software to better understand trends for efficient acquisition planning.

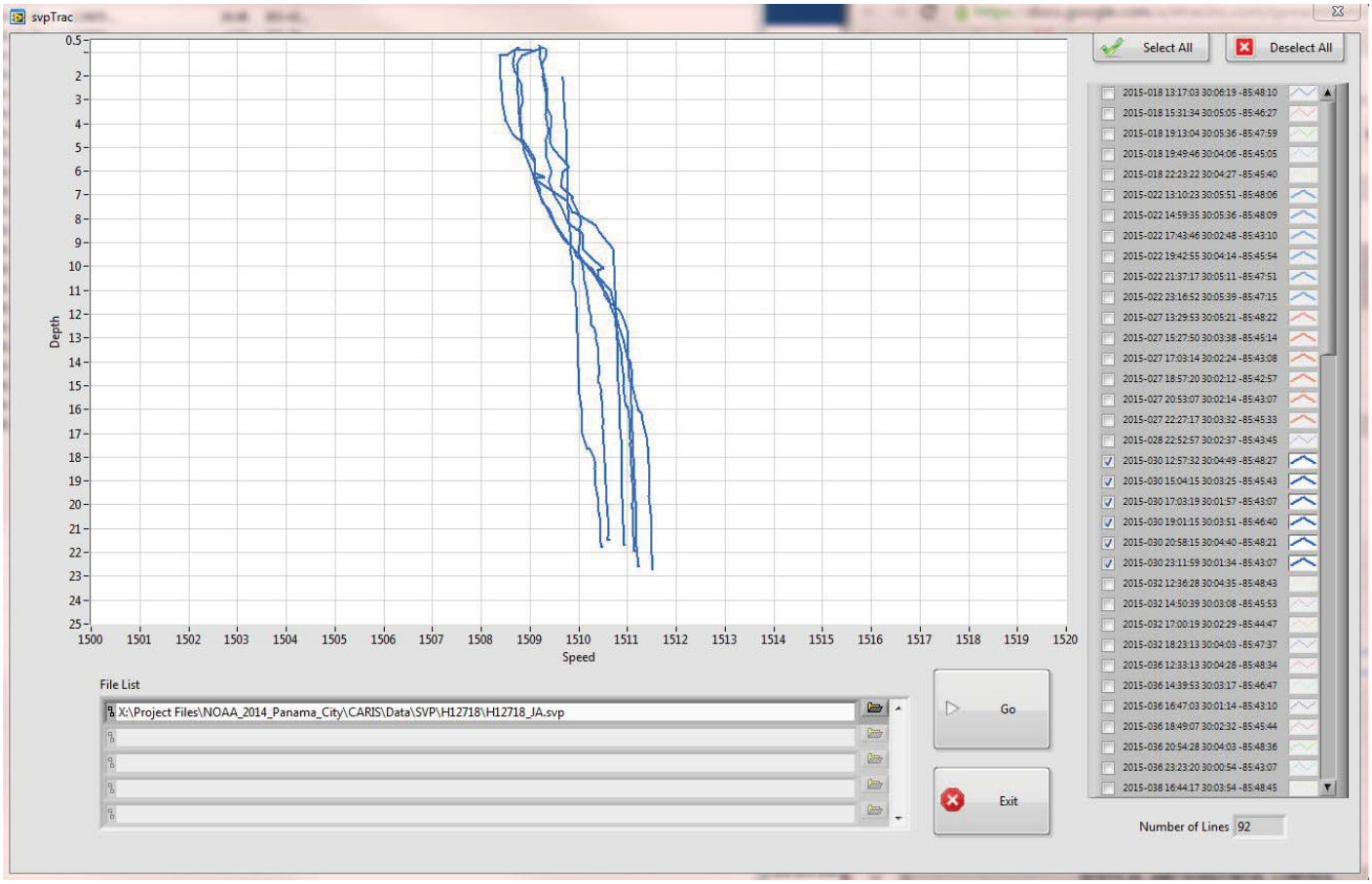


Figure 11: Example of Daily SVP Data Plot (DN 030)

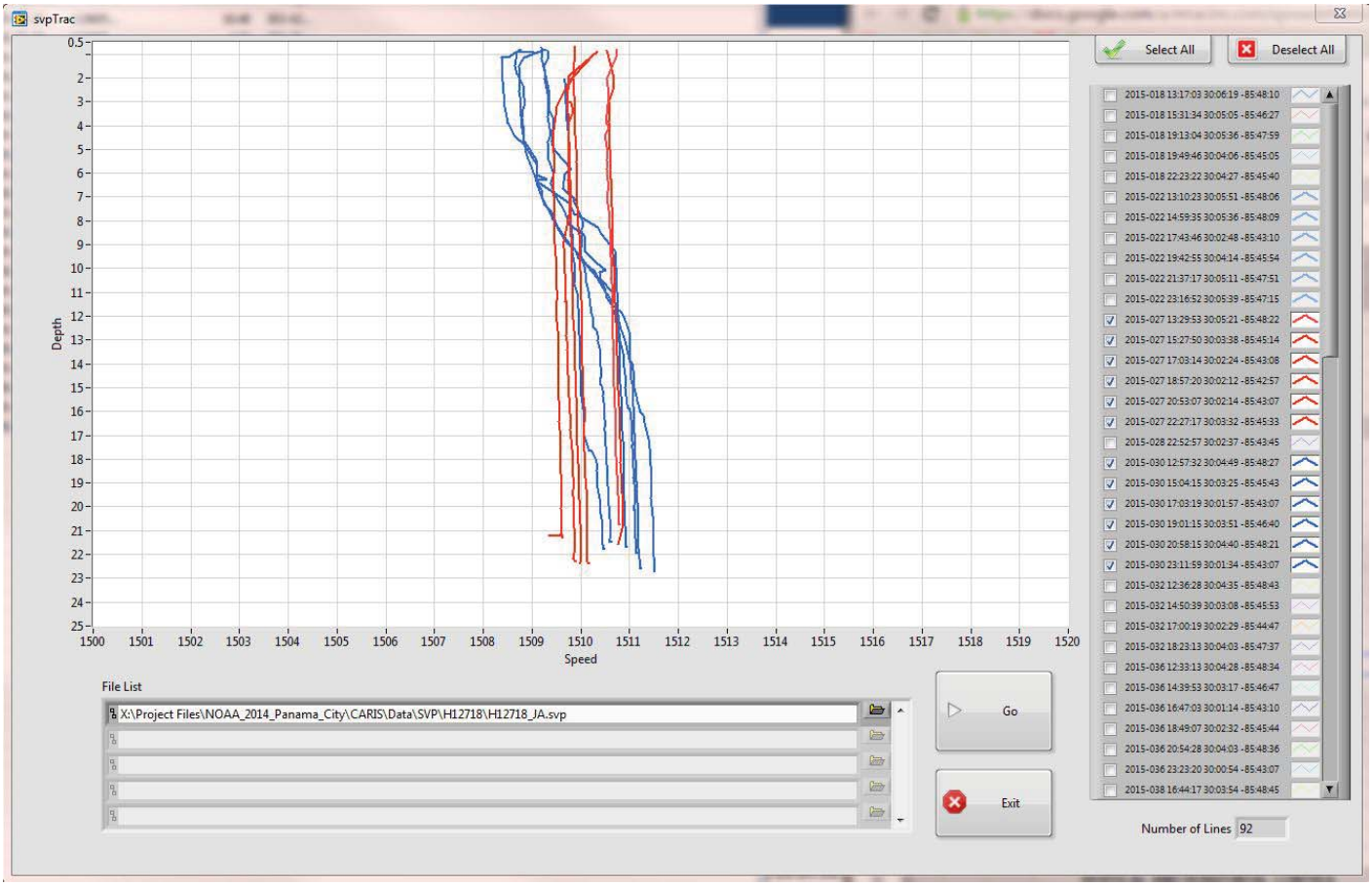


Figure 12: Example of Day to Day Velocity Comparison (DN027 and DN030)

B.2.8 Coverage Equipment and Methods

All equipment and survey methods were used as detailed in the DAPR.

B.2.9 Data Density Evaluation

In order to determine if the density of the data has met the specified 5 soundings per node, data density was evaluated using the DensityTrac program developed in-house by eTrac Inc. Each BASE surfaces nodes were exported to an ascii CSV file where the fields where (Easting, Northing, Density) for each node. The CSV file was then loaded into the DensityTrac program and density statistics are computed. For H12718 the following percentages represent the results of the density testing:
Object Detection MBES Areas (0.5 Meter Gridded Surface) = 96.95% of nodes are composed from at least 5 soundings.
Complete Coverage MBES Areas (2 Meter Gridded Surface) = 99.83% of all nodes are composed of at least 5 soundings.
Concurrent MBES/SSS (4 Meter Gridded Surface) = 99.97% of all nodes are composed of at least 3 soundings.

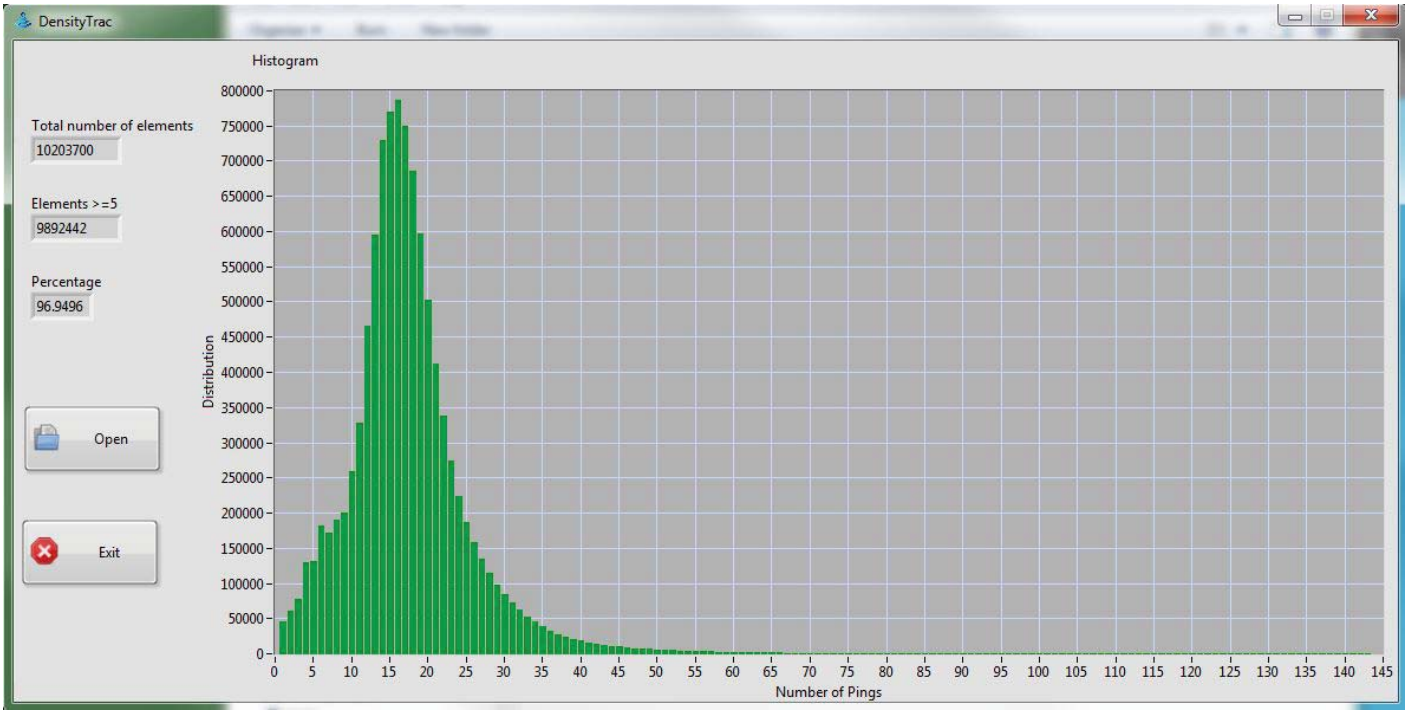


Figure 13: H12718 50CM Object Detection Density Distribution Statistics

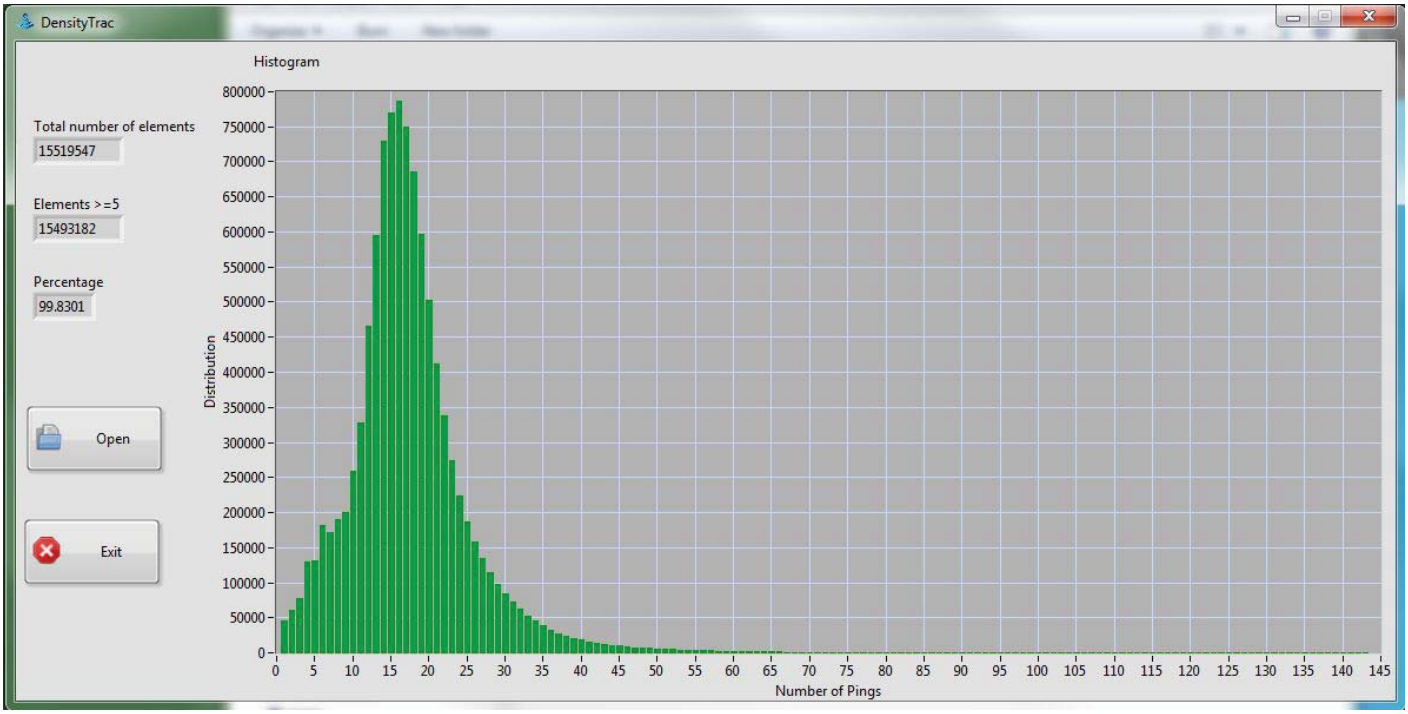


Figure 14: H12718 2M Complete Coverage MBES Density Distribution Statistics

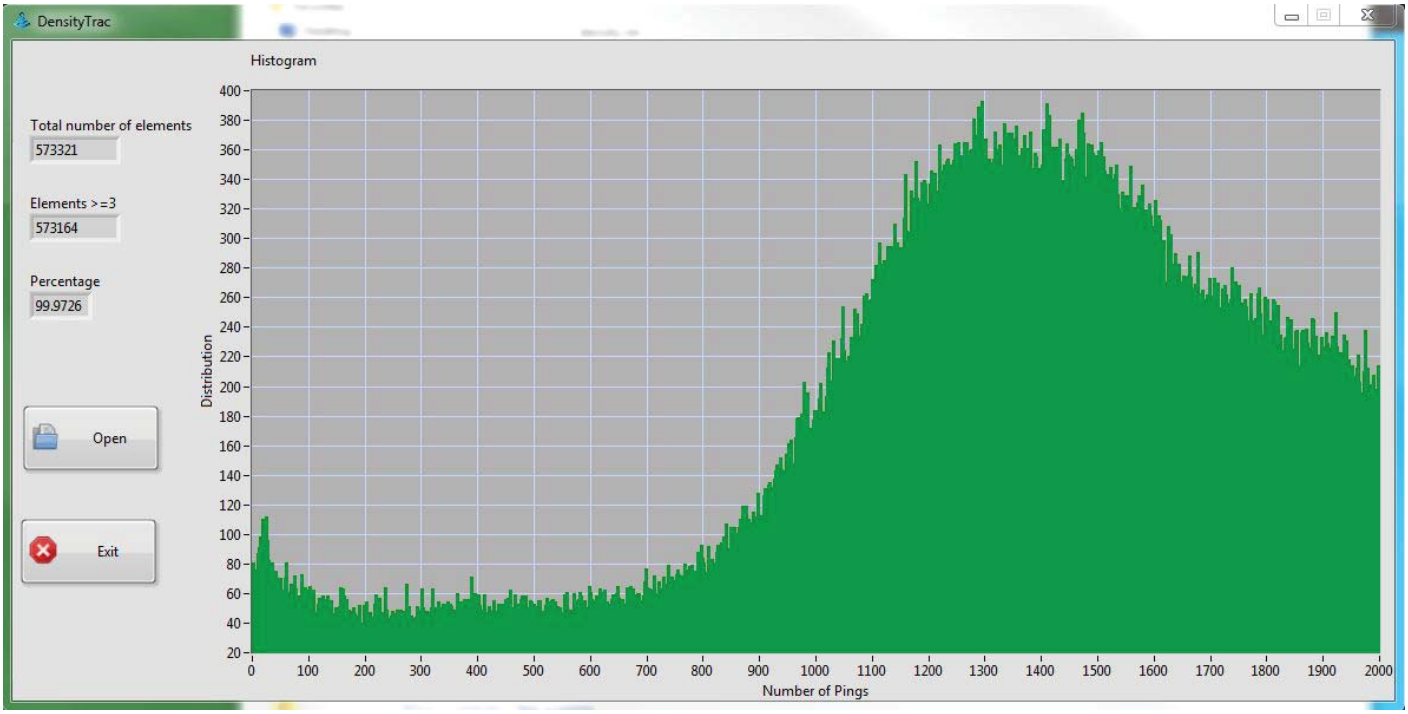


Figure 15: H12718 4M Set Line Spacing Density Distribution Statistics

B.3 Echo Sounding Corrections

B.3.1 Corrections to Echo Soundings

All data reduction procedures conform to those detailed in the DAPR.

B.3.2 Calibrations

All sounding systems were calibrated as detailed in the DAPR

B.4 Backscatter

Backscatter data were collected throughout the survey and are retained in the raw XTF files. Every effort was made in the field to collect quality backscatter data while maintaining the primary mandate of high quality bathymetric data. While no processing or analysis of backscatter data was required, eTrac engaged in a minimal effort to verify coverage and general quality of the backscatter data collected. Raw backscatter data were viewed in QPS Qinsy to ensure collection criteria had been met. Shown below is an example of the unprocessed backscatter mosaic from H12718 DN027 and DN030.

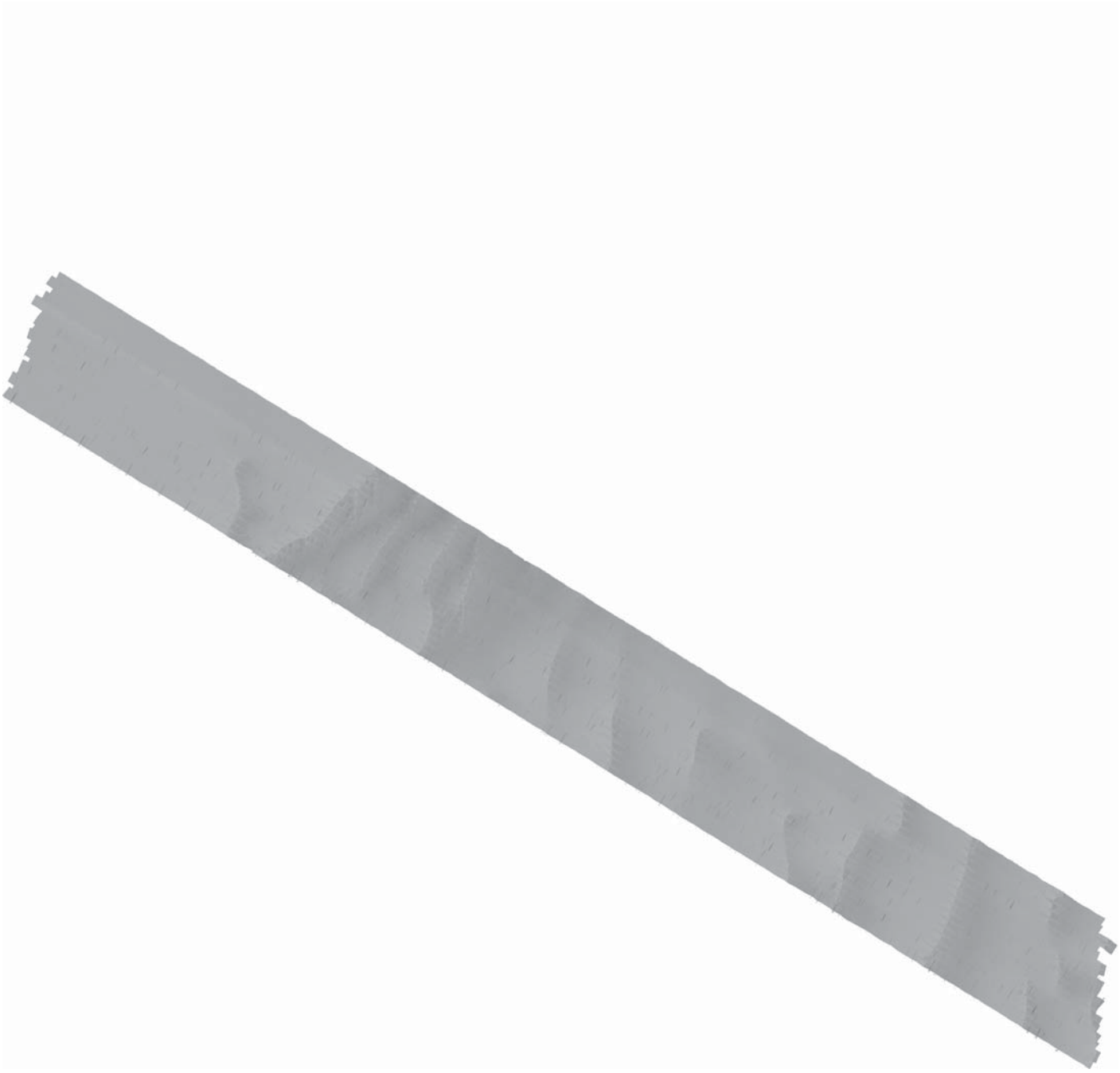


Figure 16: Raw Backscatter From M/V Jab (DN027 and DN030)

B.5 Data Processing

B.5.1 Software Updates

The following software updates occurred after the submission of the DAPR:

Manufacturer	Name	Version	Service Pack	Hotfix	Installation Date	Use
Caris	HIPS/SIPS	9.0.5	N/A	N/A	01/12/2015	Processing
Caris	HIPS/SIPS	9.0.6	N/A	N/A	01/23/2015	Processing
Caris	HIPS/SIPS	9.0.7	N/A	N/A	02/12/2015	Processing
Caris	HIPS/SIPS	9.0.8	N/A	N/A	02/17/2015	Processing
Caris	HIPS/SIPS	9.0.12	N/A	N/A	04/17/2015	Processing

Table 9: Software Updates

The following Feature Object Catalog was used: NOAA Profile V_5_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
H12718_MB_2M_MLLW.csar	CUBE	2 meters	6.96 meters - 27.15 meters	NOAA_2m	Complete MBES
H12718_MB_50CM_MLLW.csar	CUBE	50 centimeters	11.48 meters - 24.08 meters	NOAA_0.5m	Object Detection
H12718_MB_4M_MLLW.csar	CUBE	4 meters	2.86 meters - 24.16 meters	NOAA_4m	MBES TracklineSBES Set Line Spacing
H12718_SSS_1M_100Percent_Mosaic.tif	SSS Mosaic	1 meters	0 meters - 0 meters	N/A	100% SSS
H12718_SSS_1M_200Percent_Mosaic.tif	SSS Mosaic	1 meters	0 meters - 0 meters	N/A	200% SSS

Table 10: Submitted Surfaces

BASE surface deliverables for H12718 incorporate 3 surfaces of varying resolution with sufficient overlap such that H12718 is covered entirely under the specifications set forth in the HSSD 2014.

In areas shoaler than 20 meters, a 4 meter surface is provided within areas where Sidescan sonar data was concurrently collected with the multibeam bathymetry.

In areas shoaler than 20 meters, not including concurrent Sidescan sonar imagery, a 50 centimeter surface is provided meeting Object Detection Multibeam specifications.

In areas deeper than 20 meters, a 2 meter surface is provided meeting Complete Coverage MBES specifications.

Sidescan sonar mosaics are provided for each separate 100% SSS survey performed.

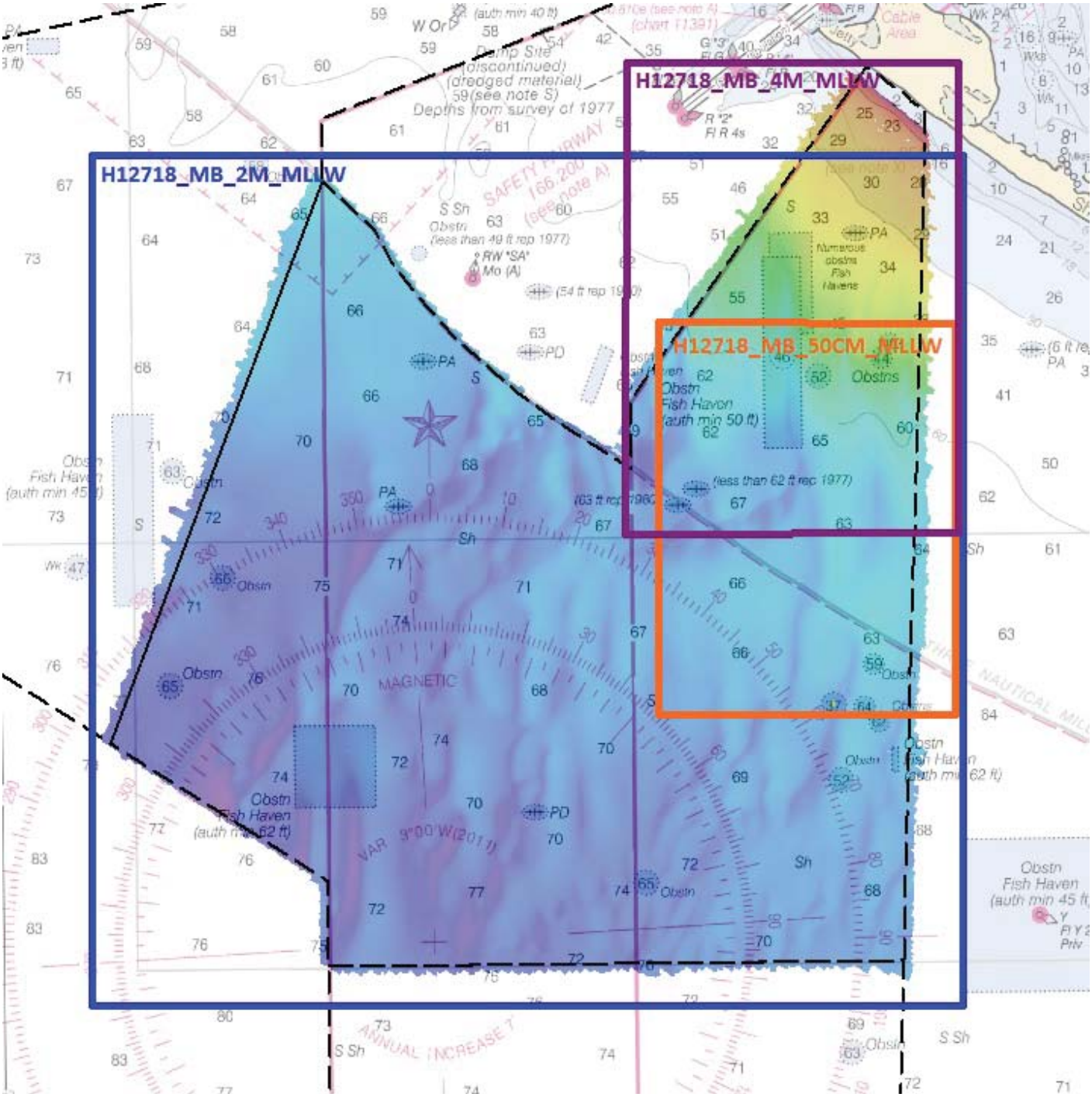


Figure 17: H12718 Delivered BASE Surface Coverage Graphic

C. Vertical and Horizontal Control

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
Panama City Beach, FL	8729210

Table 11: NWLON Tide Stations

File Name	Status
8729210.tid	Verified Observed

Table 12: Water Level Files (.tid)

File Name	Status
J357KR2014CORP.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 UTM Zone 16.

DGPS Corrections were monitored realtime during data collection for dropouts. No dropouts were witnessed during data collection. In addition to the realtime monitoring of DGPS corrections, position data was

analyzed in the office during postprocessing. The attitude editor withing Caris HIPS and SIPS 9.0 was utilized to identify any position data that may be insufficient for final delivery.

The following DGPS Stations were used for horizontal control:

DGPS Stations
Eglin, 985 kHz, ID: 812

Table 14: USCG DGPS Stations

C.3 Additional Horizontal or Vertical Control Issues

3.3.1 Decommissioning of CORS station PNCY

CORS station PNCY was included in the project instructions. Prior to project mobilization it was found that PNCY had been decommisioned in February 2010. PNCY was removed from project planning and DGPS was used as the primary correction source.

D. Results and Recommendations

D.1 Chart Comparison

A chart comparison was conducted for H12718 using Caris HIPS and SIPS 9.0. Contours as well as soundings were compared against the largest scale RNC (11391) chart to accomplish the chart comparison. RNC (11391) does not cover a small portion of the southwest corner of H12718 and therefor RNC (11389) was included to complete the chart comparison. The methods and results of the comparison are detailed below.

Contour Comparison Method:
A combined CUBE weighted BASE surface was generated from the seperate BASE surfaces of varying resolution for the purposes of the contour comparison. Note that the combined BASE surface was generated for the chart comparison process only and is not included as a delivered surface. From the combined BASE surface, the 60ft, 30ft, 18ft, and 12ft contours were generated and displayed against the charted contours. Additionally, the combined BASE surface was viewed by a custom color band range based on the contour intervals (12ft, 18ft, 30ft, 60ft, and 90ft). The results of the comparison are described below.

Sounding Comparison Method:
Using the same combined BASE surface generated for the contour comparison, spot soundings were also generated in CARIS HIPS and SIPS 9.0 for H12718. Soundings were displayed against the charted soundings and a visual comparison was made. The results are described below.

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
11391	1:25000	25	01/2013	03/18/2015	03/19/2015
11389	1:80000	34	06/2016	03/18/2015	03/19/2015

Table 15: Largest Scale Raster Charts

11391

A contour comparison was made against contours created from a combined gridded BASE surface against the largest scale chart 11391. The 60 foot contour has receeded shoreward, on average, approximately 150 meters from the charted contour. This trend can be seen througout junction surveys H12357 and H12719 as well.

The 30-foot contour has receeded shoreward, on average, approximately 500 meters from the charted contour.

The surveyed 12-foot and 18-foot contours are in general agreemement with the charted contours.

Sounding Comparison Results:
With exception to the differences identified through the contour comparison, in general, the soundings are in excellent agreement, with no major discrepancies. Soundings are generally within 1 foot (0.3m) of each other. Occasionally soundings differ by 2 to 3 feet, however generally depth differences appear to be minimal. Depth differences are in not biased in any particular direction to support a systemic error.

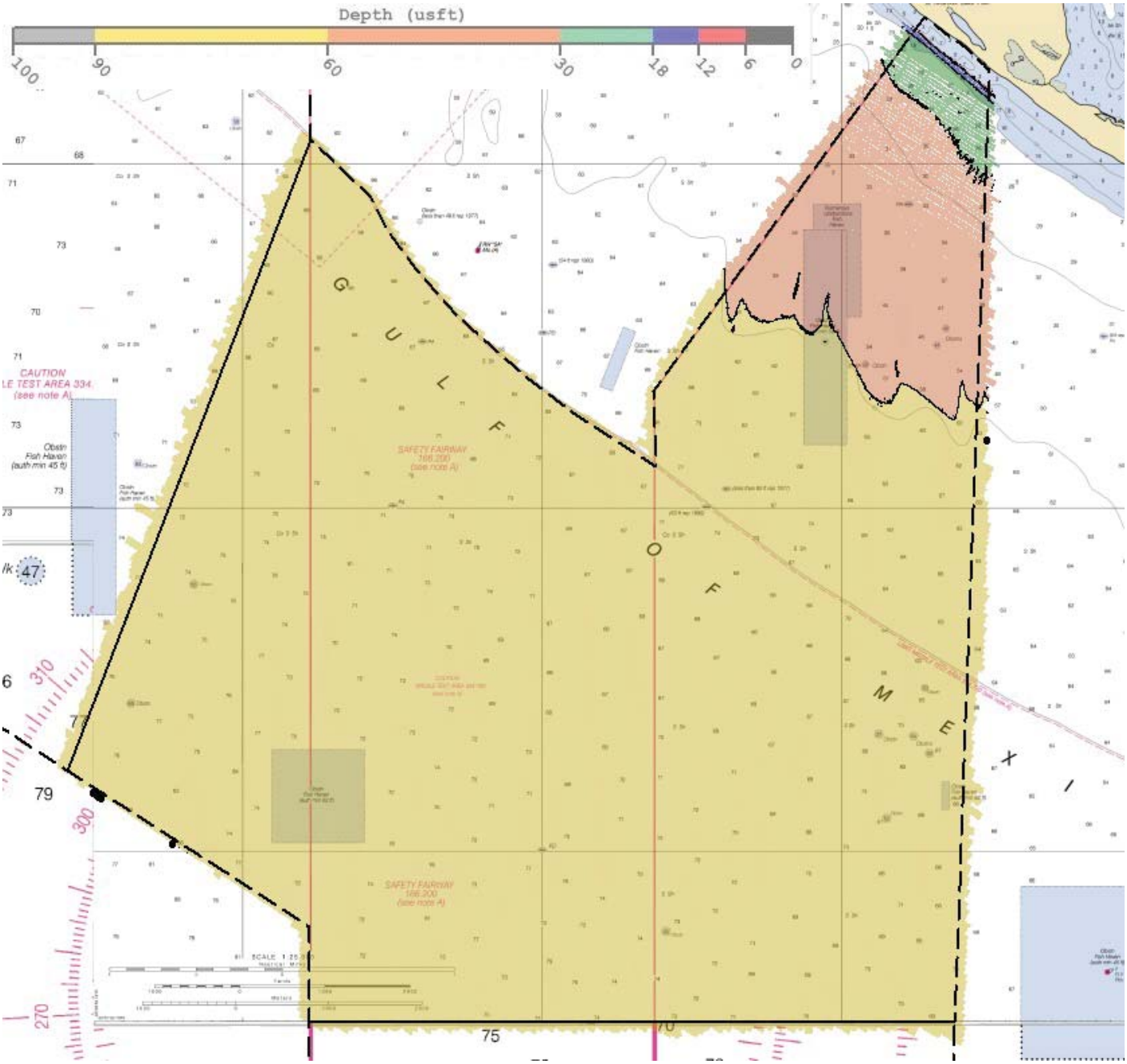


Figure 18: H12718 Contour Comparison (Overview)

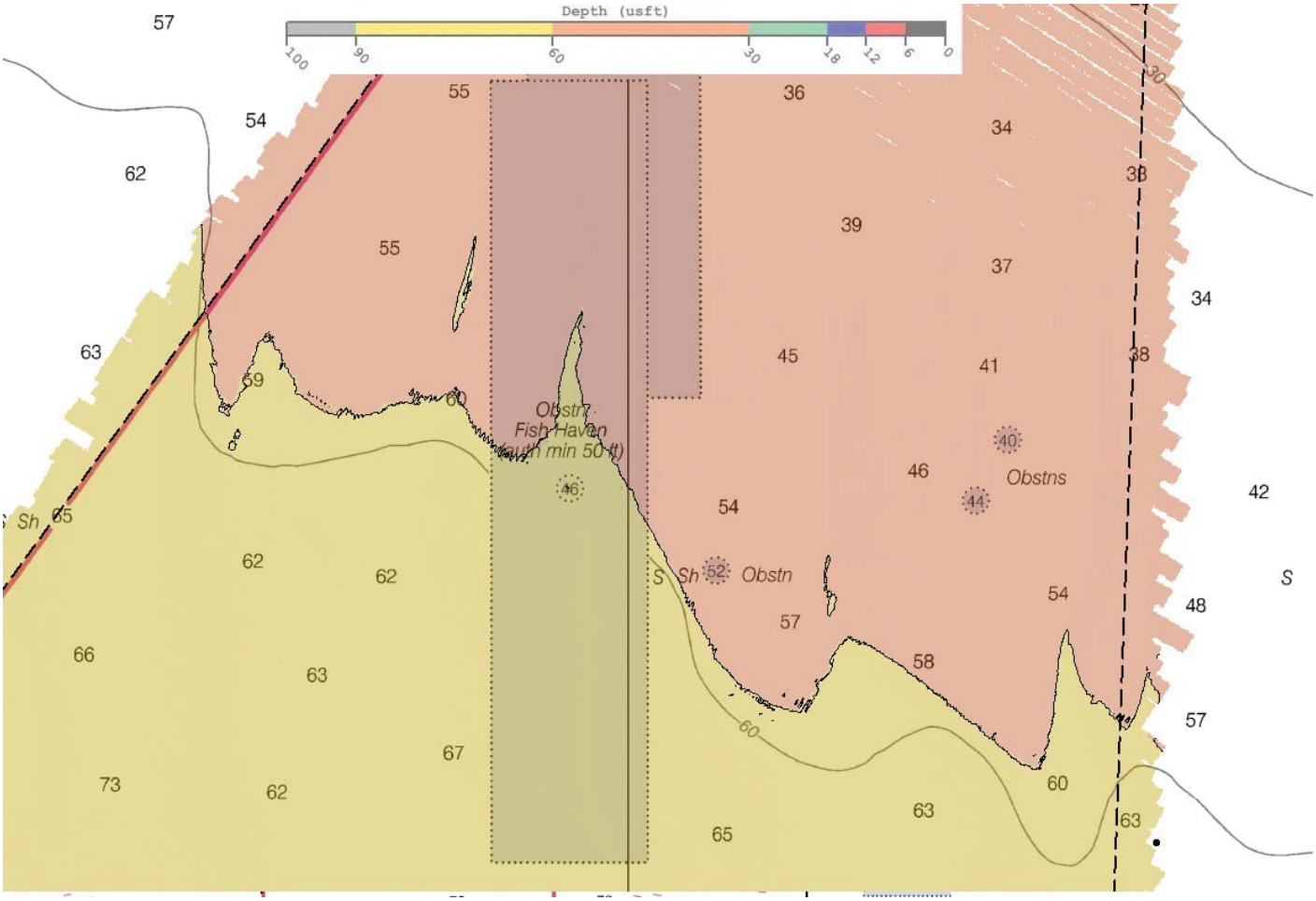


Figure 19: H12718 Contour Comparison (60ft Contour)

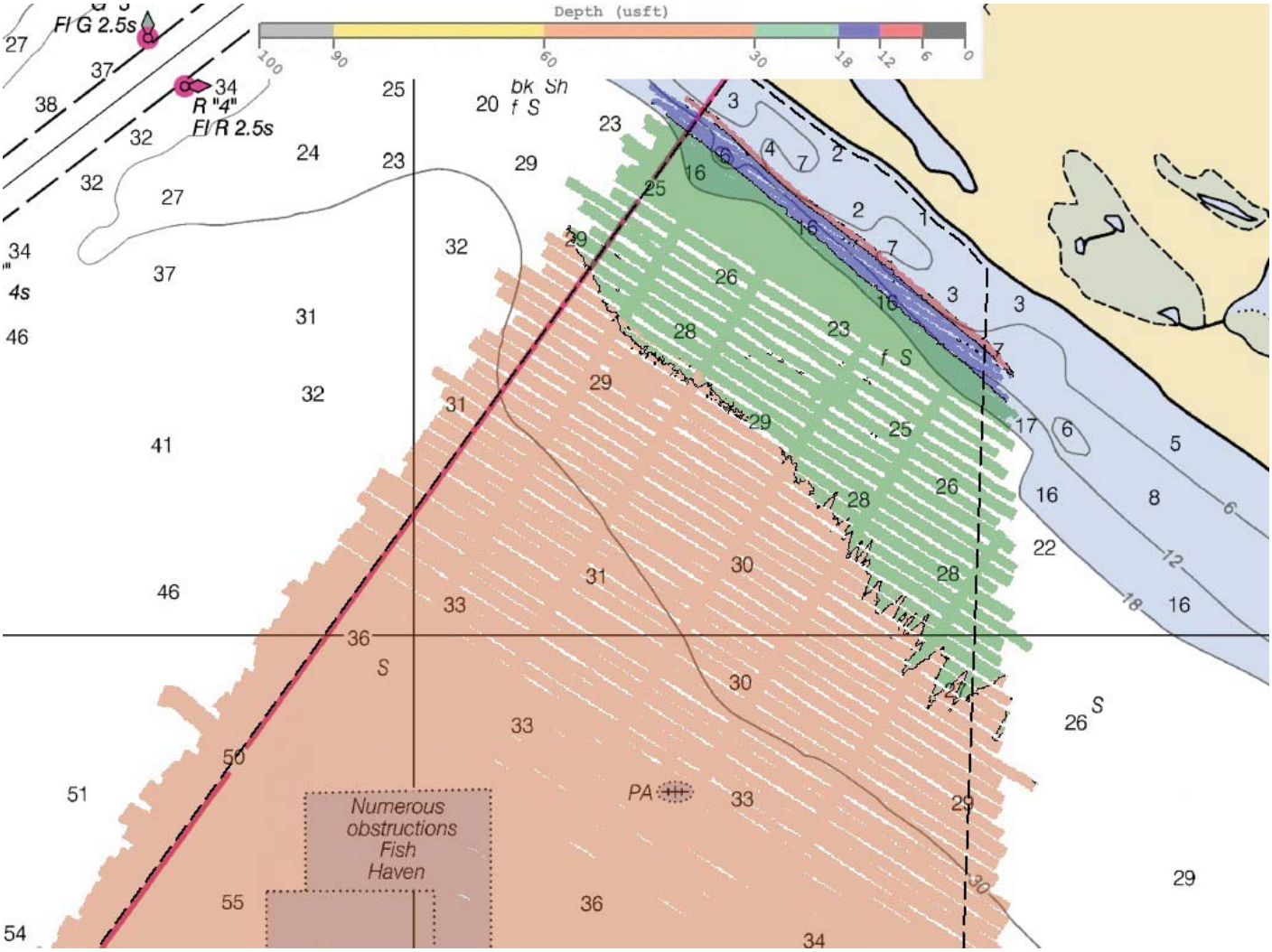


Figure 20: H12718 Contour Comparison (30ft, 18ft, and 12ft Contour)

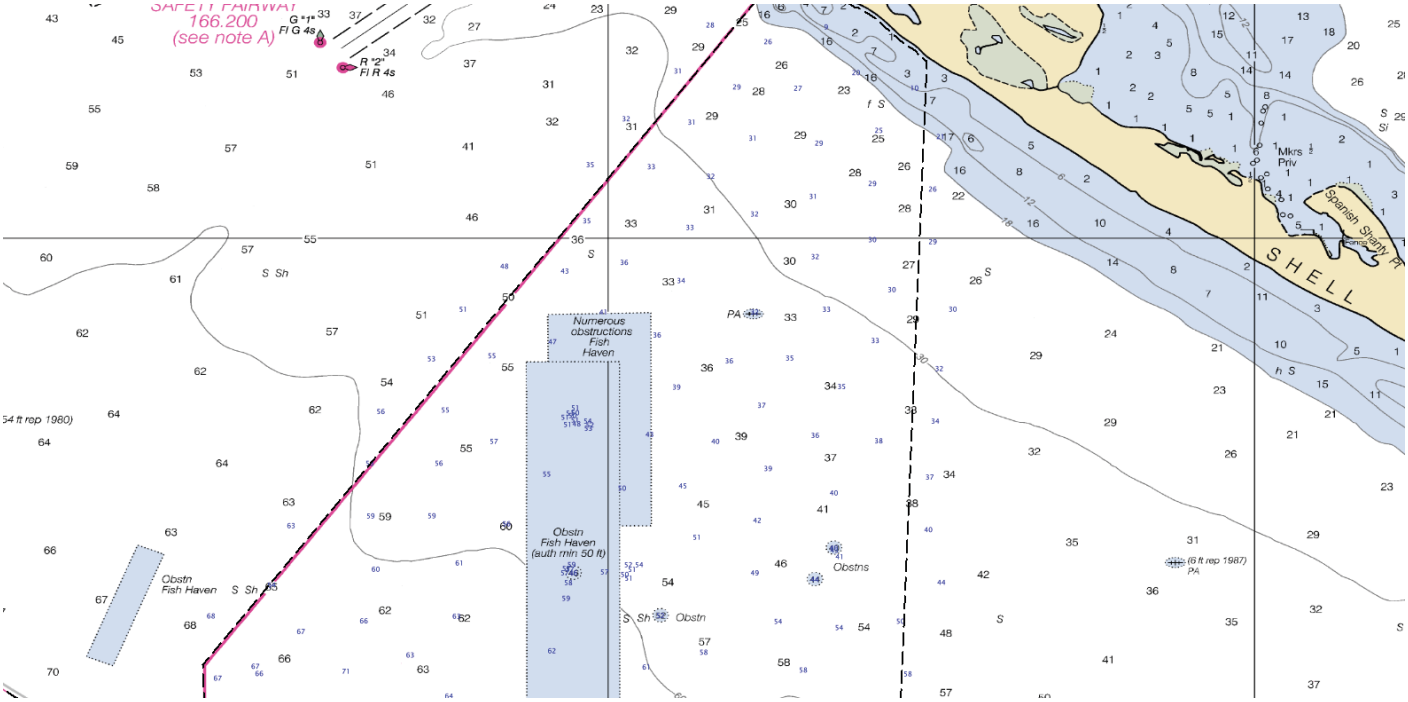


Figure 21: H12718 Sounding Comparison (Example Area 1)

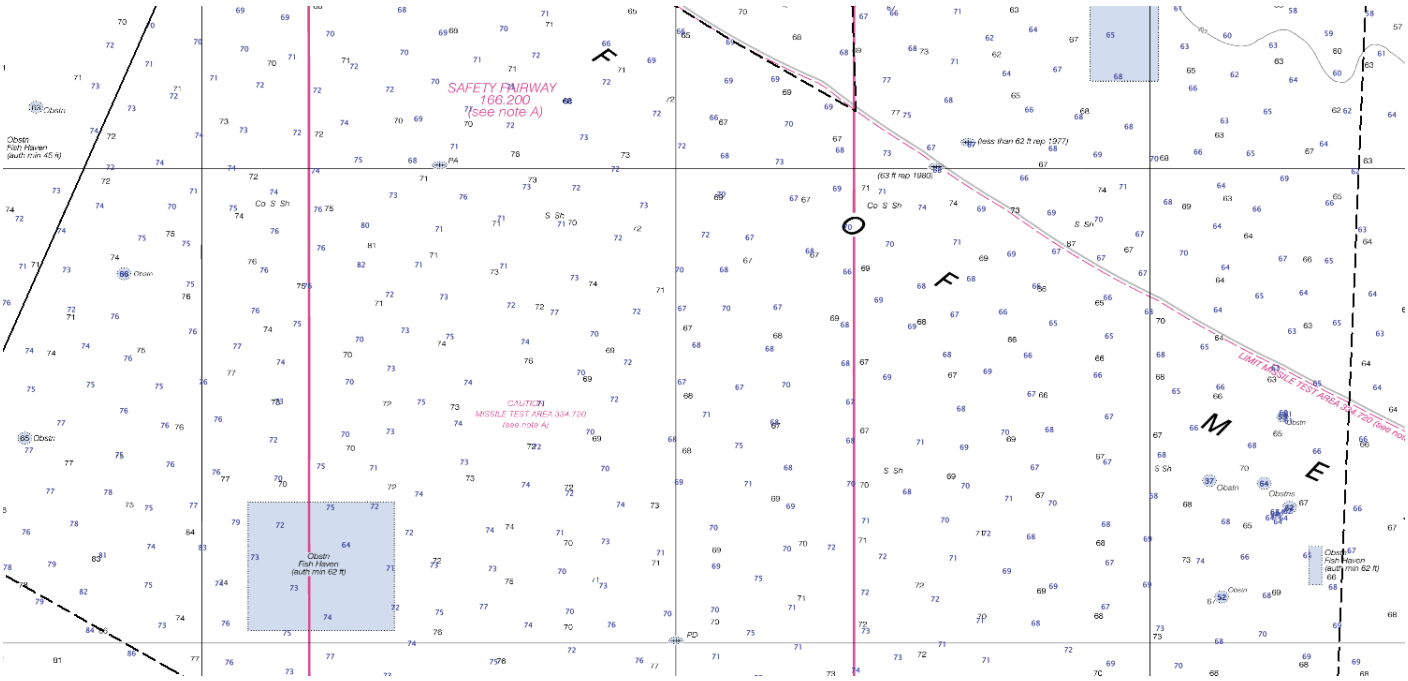


Figure 22: H12718 Sounding Comparison (Example Area 2)

11389

Results of the chart comparison with RNC 11389 match those of the comparison with RNC 11391.

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?
US5FL66M	1:25000	7	04/02/2013	03/30/2015	NO
US4FL60M	1:80000	11	10/02/2012	02/03/2015	NO

Table 16: Largest Scale ENCs

US5FL66M

The results of the chart comparison with US5FL66M match those of the RNC chart comparison.

US4FL60M

USFL60M offers no usable information for a chart comparison with H12718.

D.1.3 AWOIS Items

No AWOIS Items were assigned for this survey.

D.1.4 Maritime Boundary Points

No Maritime Boundary Points were assigned for this survey.

D.1.5 Charted Features

There were 11 charted features assigned for H12718. Each assigned feature is retained in the Final Feature File (FFF). Each feature in the FFF has been given a unique identifier in the userid field (format H12718_XXX). Of the (11) assigned features the following determinations and recommendations were made:

DELETE: (6) assigned features were not found. A DELETE action is recommended.

NEW/DELETE: (3) assigned features were found with significant horizontal distance discrepencies. A NEW/DELETE action is recommended. For these features, the assigned feature in the FFF is flagged as DELETE and a new feature has been added to the FFF with proper position and attributes.

RETAIN: (1) assigned feature was found to be charted properly. A RETAIN action is recommended.

UPDATE: (1) assigned feature was found to be shoaler than the charted minimum depth. An UPDATE action is recommended.

D.1.6 Uncharted Features

A total number of 28 new features were found on H12718 and are included in the Final Feature File (FFF). Each feature was given a unique identifier located in the "userid" field of the .000 S-57 file (Format H12718_XXX). Of the 28 features found and included in the FFF, (12) features are DTONs and are further detailed in the DTON section of this report.

D.1.7 Dangers to Navigation

The following DTON reports were submitted to the processing branch:

DTON Report Name	Date Submitted
H12718_DtoN1_59ftOBSTRN.pdf	2015-01-25
H12718_DtoN2_37ftOBSTRN.pdf	2015-01-29
H12718_DtoN3_52ftOBSTRN.pdf	2015-02-01
H12718 DtoN 4 66ft OBSTRN.pdf	2015-02-10
H12718 DtoN 5 65ft OBSTRN	2015-02-10
H12718 DtoN 6-11.pdf	2015-03-02
H12718_DtoN12_Uncharted_66ft_OBSTRN.pdf	2015-04-02

Table 17: DTON Reports

12 DTONs were identified for H12718 and are included in the FFF. The least depth attributed in the FFF represents the final least depth of the feature after application of Verified Tides. DtoN reports can be found in Appendix II of this report.

D.1.8 Shoal and Hazardous Features

Features deemed hazardous have been reported and submitted in the DTONs section of this report. Investigation methods and least depths are included. No shoals were found.

D.1.9 Channels

A safety fairway runs north-south through H12718. The surveyed depths within the safety fairway are in general agreement with the charted depths as detailed in the chart comparison section of this report. Two DTONs overlap the eastern boundary of the charted safety fairway (H12718_DTON_05 and H12718_DTON_12).

D.1.10 Bottom Samples

No bottom samples were required for this survey.

D.2 Additional Results

D.2.1 Shoreline

A limited shoreline verification was performed using the composite source file (CSF) provided with the project instructions. No assigned shoreline features exist for H12718. No new shoreline features were found for H12718.

D.2.2 Prior Surveys

No prior survey comparisons exist for this survey.

D.2.3 Aids to Navigation

No Aids to navigation (ATONs) exist for this survey.

D.2.4 Overhead Features

No overhead features exist for this survey.

D.2.5 Submarine Features

No submarine features exist for this survey.

D.2.6 Ferry Routes and Terminals

No ferry routes or terminals exist for this survey.

D.2.7 Platforms

No platforms exist for this survey.

D.2.8 Significant Features

No significant features exist for this survey.

D.2.9 Construction and Dredging

No present or planned construction or dredging exist within the survey limits.

D.2.10 New Survey Recommendation

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

D.2.11 Inset Recommendation

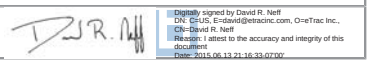
No new insets are recommended for this area.

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 CSAR Surfaces, 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, 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.

Approver Name	Approver Title	Approval Date	Signature
David R. Neff, ACSM C.H.	VP of Survey, eTrac Inc.	12/31/1903	

APPENDIX I

TIDE NOTE AND GRAPHICS

eTrac Inc.
637 Lindaro St., Suite 100
San Rafael, CA 94901
888-410-3890

OPR-J357-KR-14 Approaches to Panama City

Abstract: Times of Hydrography

H12718

Survey Date	Day of the Year	Start Time	End Time
1/18/2015	18	13:37	22:18
1/22/2015	22	13:18	22:46
1/27/2015	27	13:57	22:30
1/28/2015	28	22:54	23:03
1/30/2015	30	13:06	23:03
2/1/2015	31	12:49	17:19
2/5/2015	36	12:45	22:34
2/7/2015	38	16:52	22:58
2/8/2015	39	12:49	22:01
2/9/2015	40	19:25	23:17
2/11/2015	42	13:20	16:59
2/12/2015	43	21:17	22:11
2/13/2015	44	12:37	23:27
2/14/2015	45	13:25	22:57
2/15/2015	46	13:07	5:13 (2/16/2015)
2/16/2015	47	13:01	22:25
2/19/2015	50	21:25	23:17
2/20/2015	51	20:52	22:55
2/24/2015	55	15:25	22:29
2/25/2015	56	12:42	14:45

David Neff <david@etracinc.com>

eTrac Inc. commencing OPR-J357-KR-14 Survey Operations

Hua Yang - NOAA Affiliate <hua.yang@noaa.gov> Mon, Mar 2, 2015 at 6:24 PM
To: David Neff <david@etracinc.com>
Cc: Megan Greenaway - NOAA Federal <megan.greenaway@noaa.gov>, Paul Turner <paul.turner@noaa.gov>, "_NOS.CO-OPS.HPT" <nos.coops.hpt@noaa.gov>, _NOS CO-OPS OET Team <nos.coops.oetteam@noaa.gov>

Hi David,

The station 8729210 Panama City, FL was just deleted from the Hydro Hot List for OPR-J357-KR-14 upon your request. Thank you very much for your timely notice.

Best regards,

Hua Yang

Hydrographic Planning Team
NOAA/National Ocean Service
Center for Operational Oceanographic Products and Services
Station 7128
1305 East West Highway, SSMC4
Silver Spring, MD 20910
Office: 301-713-2890 x210
Email: Hua.Yang@noaa.gov
Web: http://tidesandcurrents.noaa.gov/

Hydro Hot List: http://tidesandcurrents.noaa.gov/hydro.shtml

On Mon, Mar 2, 2015 at 1:08 PM, David Neff <david@etracinc.com> wrote:

> Ref OPR-J357-KR-14
>
> eTrac has demobilized all field equipment from the project site in Panama City, FL. I have verified that "verified tides" are available for the entire span of our data collection period.
>
> The Panama City Beach, FL gauge (8729210) can be removed from the hotlist.
>
> Thank you.
>
> Dave Neff
>
> On Wed, Jan 14, 2015 at 9:48 AM, Hua Yang - NOAA Affiliate <hua.yang@noaa.gov> wrote:
>
> > Hi Dave,
> >
> > The station Panama City Beach, FL (8729210) was just added to the Hydro Hot List.
> >
> > Thanks,
> >
> > Hua Yang
> >
> > Hydrographic Planning Team
> > NOAA/National Ocean Service

Center for Operational Oceanographic Products and Services
Station 7128
1305 East West Highway, SSMC4
Silver Spring, MD 20910
Office: 301-713-2890 x210
Email: Hua.Yang@noaa.gov
Web: http://tidesandcurrents.noaa.gov/

Hydro Hot List: http://tidesandcurrents.noaa.gov/hydro.shtml

On Wed, Jan 14, 2015 at 12:25 PM, David Neff <david@etracinc.com> wrote:

> Hello,
>
> I had sent the following email last week to add the Panama City, FL gauge to the Hydro Hot List. I realize the email address was mistyped and likely never reached you. Many apologies. Can we get the gauge added to the hotlist today? We will likely begin survey operations on Friday, but it is possible we may be able to start tomorrow. See below for original email.
>
> Thanks and sorry for the mistype.
>
> Dave Neff
> ---------- Forwarded message ----------
> From: **David Neff** <david@etracinc.com>
> Date: Fri, Jan 9, 2015 at 6:46 PM
> Subject: eTrac Inc. commencing OPR-J357-KR-14 Survey Operations
> To: nos.ccops.hpt@noaa.gov, nos.coops.oetteam@noaa.gov
>
> Hello All,
>
> eTrac Inc. will be commencing survey operations on OPR-J357-KR-14 in the vicinity of Panama City Beach, Florida. Survey operations are scheduled as follows:
>
> Survey Operations Begin: 01/14/15
> Survey Operations End: 03/15/15
>
> Should the survey end date change, I will notify the same email addresses with the updated schedule. Please add Panama City Beach, FL (STA: 8729210) to the Hydro Hot List.
>
> Thank you.
>
> --
> David Neff, C.H.
> Mobile: (415)-517-0020
> www.etracinc.com

--
David Neff, C.H.
Mobile: (415)-517-0020
www.etracinc.com

APPENDIX II

SUPPLEMENTAL SURVEY RECORDS AND CORRESPONDENCE

David Neff <david@etracinc.com>

eTrac Inc. commencing OPR-J357-KR-14 Survey Operations

Hua Yang - NOAA Affiliate <hua.yang@noaa.gov> Wed, Jan 14, 2015 at 9:48 AM
To: David Neff <david@etracinc.com>
Cc: "_NOS.CO-OPS.HPT" <nos.coops.hpt@noaa.gov>, _NOS CO-OPS OET Team <nos.coops.oetteam@noaa.gov>

Hi Dave,

The station Panama City Beach, FL (8729210) was just added to the Hydro Hot List.

Thanks,

Hua Yang

Hydrographic Planning Team
NOAA/National Ocean Service
Center for Operational Oceanographic Products and Services
Station 7128
1305 East West Highway, SSMC4
Silver Spring, MD 20910
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>
> I had sent the following email last week to add the Panama City, FL gauge to the Hydro Hot List. I realize the email address was mistyped and likely never reached you. Many apologies. Can we get the gauge added to the hotlist today? We will likely begin survey operations on Friday, but it is possible we may be able to start tomorrow. See below for original email.
>
> Thanks and sorry for the mistype.
>
> Dave Neff
> ---------- Forwarded message ----------

From: **David Neff** <david@etracinc.com>
Date: Fri, Jan 9, 2015 at 6:46 PM
Subject: eTrac Inc. commencing OPR-J357-KR-14 Survey Operations
To: nos.ccops.hpt@noaa.gov, nos.coops.oetteam@noaa.gov

Hello All,

eTrac Inc. will be commencing survey operations on OPR-J357-KR-14 in the vicinity of Panama City Beach, Florida. Survey operations are scheduled as follows:

Survey Operations Begin: 01/14/15
Survey Operations End: 03/15/15

Should the survey end date change, I will notify the same email addresses with the updated schedule. Please add Panama City Beach, FL (STA: 8729210) to the Hydro Hot List.

Thank you.

--
David Neff, C.H.
Mobile: (415)-517-0020
www.etracinc.com

--
David Neff, C.H.
Mobile: (415)-517-0020
www.etracinc.com

David Neff <david@etracinc.com>

Leadline Checks

David Neff <david@etracinc.com> Wed, Jan 21, 2015 at 9:43 AM
To: Megan Greenaway - NOAA Federal <megan.greenaway@noaa.gov>

I see. That clarifies the "per survey" requirement. Yes, we are using 2 boats. We are moving the vessels around based on weather. When weather is too rough in H12717, we may still capable of collecting data in H12718 and H12719 and have done so on 2 days so far. With there being no clear ending of one sheet and start to another, for reporting purposes how would you suggest to proceed? Perhaps we could agree on 1 or a combination of the following:

1. The Leadline checks we performed on each boat before commencing surveys on all 3 sheets will be the reported leadline for each sheet.
2. We can perform an additional lead line at the end of the project.
3. When we reach %50 of total project completion, we can perform another leadline and then one again at the end of the project. That would be 3 leadlines in total.

Dave

On Wed, Jan 21, 2015 at 5:22 PM, Megan Greenaway - NOAA Federal <megan.greenaway@noaa.gov> wrote:

> David,
> You are using multiple vessels, correct? And will the data overlap? If that is the case then you will need to perform a lead line or bar check once per survey (i.e. H#). If the data does not overlap they you will need to perform the check at least once per week (page 93 of 2014 HSSD).
> Megan
>
> On Tue, Jan 20, 2015 at 5:14 PM, David Neff <david@etracinc.com> wrote:
>
> > I wanted to double check that we are only required to perform a leadline or bar check on our system once per project. We are performing position checks and SVP comparisons weekly.
> >
> > --
> > David Neff, C.H.
> > Mobile: (415)-517-0020
> > www.etracinc.com

--
David Neff, C.H.
Mobile: (415)-517-0020
www.etracinc.com

David Neff <david@etracinc.com>

DTON Submissions

Castle Parker - NOAA Federal <castle.e.parker@noaa.gov> Wed, Jan 21, 2015 at 12:22 PM
To: David Neff <david@etracinc.com>

David,

The requested date was for survey metadata which is needed to generate the report. The date of acquisition of the features is populated in the attribute “obstim” for observed time. The metadata survey date is supposed to reference the first day of survey acquisition. It’s sort of a moot point, but the two dates represent different dates. The SORDAT is generally the day the feature was observed, which in this case is the date you provided. The actual time stamp is the observed time.

In the submitted feature file, the SORDAT will be the last day of survey operations for the specific survey.

Standby for the DtoN reports.

Thanks,

gene

From: David Neff [mailto:david@etracinc.com]
Sent: Wednesday, January 21, 2015 2:46 PM
To: Castle Parker - NOAA Federal
Cc: Megan Greenaway - NOAA Federal; Matthew Jaskoski - NOAA Federal
Subject: Re: DTON Submissions

Hello and good day to you too Gene,

Thank you, very helpful information here. See my response inline.

Looking forward to catching up next week.

On Wed, Jan 21, 2015 at 5:39 PM, Castle Parker - NOAA Federal <castle.e.parker@noaa.gov> wrote:

Hello and good day David ,

Thanks for the DtoN submissions.

We normally have the DtoN submissions submitted per the registry number of the survey rather than the project number. AHB manages the Dangers per the HXXXXX registry numbers and we name each DtoN in sequential naming convention; i.e. H12717 DtoN #1, H12717 DtoN #2, etc. I have found that this makes the DtoNs easier to track. I realize that HSSD does not specify the naming convention, but each survey is independent of the others. I have an Excel spreadsheet of which I manage for all of the KR to AHB DtoNs and naming per the project is not specific. With the recent submission, there are three surveys, each with one DtoN submission. You do not need to resubmit as I can take care of this at AHB.

No Problem, we have renamed the DTONs and reattached.

> AHB will accept and submit H12717 DtoN #1 and H12719 DtoN #1. We will need images of each of these features. Include side scan contact images and HIPS bathymetric data views in 2d and 3d subset views. At this point, the data images are the only thing we have for feature identification with no data for validation. So, the images have to stand on their own merits. Image format does not have to be PNG, will use jpg or tiff formats.

The images were in the original zip files and are also in the revised zip files. They are in PNG format. Understood about the other formats being possible as well. They are Multibeam only, at this point in the project we are not running sidescan.

> If you cannot get the images linked for the S57 format, we can use HOB format. The HOB format file is more to the spec than the S57 files. So, if the S57 export drops attributes, we will use the HOB file.

We have sorted out the S57 linking issue. I have included the .HOB file as well and will continue to do so, but the .000 is complete now as well.

> Once I receive the image files, I will process and submit to Marine Chart Division. Once the report is generated and submitted, I will include

> eTrac on the submission email which will contain a PDF document for your inclusion in the Descriptive Report Appendices.

You should have the images now, properly named and linked to the .HOB

> Regarding Megan's comments, H12718 DtoN #1 (OPR-357 Dton2) is not a Danger based upon the charted wreck PA. That is enough to say that the wreck is adequately charted even if the symbology is listed as position approximate. This feature will not be submitted to Nautical Data Branch as a DtoN, but would be included in the H12718's feature file.

Understood. That was called out as a DTON only because the nearest charted depth is approximately 2 meters deeper. But I understand the cartographic standpoint. The feature is charted as PA and is represented properly on the chart. We don't want to cause any undue clutter. This will not be submitted as a DTON.

> Also, for the survey's metadata within the DtoN report, I need to know the date of which each survey was started; basically, what is the first calendar date for the start of acquisition per each of the surveys.

We populated the SORDAT field with the date you are requesting. Is the that proper location? In the future how should we deliver that date to you? Just in an email like this?

Start Dates

H12717 - 01/17/2015

H12718 - 01/18/2015

H12719 - 01/18/2015

> Generate the images and submit, then AHB will process and submit for charting.

I never actually made an official AHB submission, I can do that now, but I know it probably goes straight to you anyway? Moving forward we will submit directly to AHB in the attached format. I may consult you in the future if we run into a "is this a DTON or not question".

> Please respond if I am not clear with guidance listed above.
>
> Regards,

Gene

Castle Eugene Parker

NOAA Office of Coast Survey

Atlantic Hydrographic Branch

Hydrographic Team Lead / Physical Scientist

castle.e.parker@noaa.gov

office (757) 441-6746 x115

David Neff <david@etracinc.com>

Feature File Questions

Megan Greenaway - NOAA Federal <megan.greenaway@noaa.gov> Sun, Jan 25, 2015 at 3:18 PM
To: David Neff <david@etracinc.com>

David,
I'm assuming the features outside of your sheet limits ***do not*** have an "assigned" attribute? If that is the case then you can remove them from the FFF. If they were "assigned" then you would need to retain them in the FFF and flag them as "not addressed" with a remark as to why the features were not addressed.

From my experience with CARIS BDB the export from .hob to .000 does not mean anything as you are not creating a true ENC even though it is a .000 format. However, as I stated I have not worked with CARIS 9.0 so maybe check with CARIS to see how the survey scale impacts the export.

Also, I realize I have not gotten back to you regarding the lead line/bar checks. I forwarded your message last week but with the conference coming up my bosses have been busy. I will try to get back to you tomorrow after I talk to them.

I just arrived in Norfolk. Looking forward to seeing you in a few days.
Megan

On Sun, Jan 25, 2015 at 1:49 PM, David Neff <david@etracinc.com> wrote:

> Hi Megan, 2 Questions:
>
> 1. We have a number of features in the Composite Source File (CSF) that did not fall within our survey limits. Can we simply remove them from our Final Feature File (FFF) or do we have to mark them all as Not Addressed?
>
> 2. Should our compilation scale in the export from hob to 000 be set to our survey scale (12,500 and 40,000) or the default of 10,000?
>
> I'm generating a list of questions to discuss with you in person this week coming up. No need to answer here and now. We can hash it out this week.
>
> --
> David Neff, C.H.
> Mobile: (415)-517-0020
> www.etracinc.com

David Neff <david@etracinc.com>

Junction Survey Question

Megan Greenaway - NOAA Federal <megan.greenaway@noaa.gov> Wed, Mar 25, 2015 at 7:29 AM
To: David Neff <david@etracinc.com>

Dave,
See in line responses.

On Tue, Mar 24, 2015 at 7:08 PM, David Neff <david@etracinc.com> wrote:

> Hi Megan,
>
> I'm just wanting to verify some of the terminology here.
>
> A junction survey is a comparison of our own H-cells to eachother at their junction. These comparisons would always be required.

Correct.

> A junction survey is also a comparison of our H-cells where they junction another contemporary survey (i.e. the NRT H12357). This comparison would always be called out in the project instructions if required.

Correct.

> There is a section in D.2. as a place holder for "Prior Surveys". It seems to me that this is available if someone wanted to do some additional comparisons to some other, "unofficial", "non-NOAA" survey data? This not typically required, but may lend value to the project at our discretion.

Correct, but in general most field units do not do a comparison to Prior Surveys unless the data came from an official source. HSD OPS will sometimes deliver shoreline features of prior surveys in areas where there was a lot of cartographic interpretatoin. For example in AK the rocks are sometimes pulled offshore so that they can be displayed on a smaller scale chart. Supplying the field unit with the prior survey means they don't have to re-position the feature. This is a unique situation and is really project specific.

I would hesitate to do a prior survey comparison without discussing it with the COR first. I would be concerned about the source of the data.

> Do I have all that right?

Megan

--
David Neff, C.H.
Mobile: (415)-517-0020
www.etracinc.com

David Neff <david@etracinc.com>

Feature File Questions

Castle Parker - NOAA Federal <castle.e.parker@noaa.gov> Tue, Feb 24, 2015 at 9:43 AM
To: David Neff <david@etracinc.com>
Cc: Paul Turner - NOAA Federal <paul.turner@noaa.gov>, Megan Greenaway - NOAA Federal <megan.greenaway@noaa.gov>

Hello David,

My responses are in blue fonts.

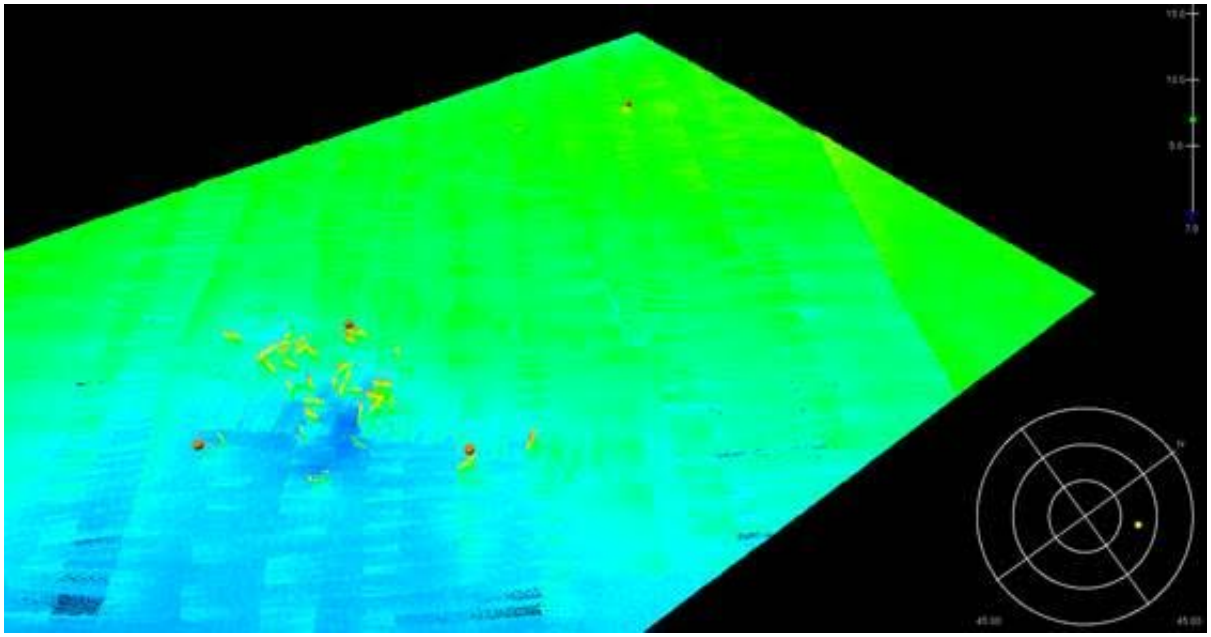
gp

From: David Neff [mailto:david@etracinc.com]
Sent: Tuesday, February 24, 2015 11:41 AM
To: Megan Greenaway - NOAA Federal
Cc: Paul Turner; Castle Parker - NOAA Federal
Subject: Re: Feature File Questions

Thank you Megan and Gene,

That is helpful information but also spawns another question:

1. Are we not supposed to be recommending adding fish havens to the chart? Does NOAA not have the authority? It seems like its a multi-agency process. We have clusters of designated soundings like in the example below. You can the recommendation, but Hydro Surveys Division does not have the authority to create a fish haven area, only through the permitting process do fish haven get applied to the chart as such. AHB will use and accept an area object OBSTRN, which is the same as a fish haven, but we cannot call it or categorize it as a fish haven. Another question would be, what defined the limits of the area object? E.g. the spatial limits of the cluster of obstructions… hopefully.



The way we have addressed items like this in the FFF is to create a feature area and call it a Fish Haven. That way we are not trigger happy on the point features, and our recommendations almost always have a cartographic thought process behind them. Is there another way we should be handling all these features? I would not attribute the area object as fish haven based upon lack of source authority. I'm going to send you the Marine Chart Divisions Nautical Chart Manual which defines the source authority (USACE). (NCM Section 4.12 Fish Havens)

Overall maybe we are simply over thinking all of this and shouldn't worry so much about the cartography? NDB will do what they want in the end anyway, so maybe everything should just be a point feature and they can sort it out? Part of the issue is defining the limits. Use the data to define and do not be overzealous including features that are farther away for the cluster of obstructions. Don't worry about what it will look like on the chart, deal with the features at the survey scale. It seems that you are doing things correctly from what I've seen so far.

I will be sending the NCM in separate email as I need to download the latest version. I will also include an ENC Encoding Guide for your review. I may have to place the files on a publicly accessible FTP site or in separate emails.

Gene

Thanks for the guidance

Dave

On Tue, Feb 24, 2015 at 6:33 AM, Megan Greenaway - NOAA Federal <megan.greenaway@noaa.gov> wrote:

David,

See in line responses below in blue.

On Sat, Feb 21, 2015 at 8:04 PM, David Neff <david@etracinc.com> wrote:

Hello Megan,

I have a list of feature file questions that we've been compiling over the last week. See below

We maybe over thinking some of this. I believe we are being thorough, but want to double check a couple things.

1. For a disproval, after adding the remarks and recommendations should we be deleting the other existing attributes provided in the assigned feature (such as CATOBS, EXPSOU, SCAMIN, VALSOU, WATLEV), or should we be leaving them as is.

Leave the other existing attributes as is.

> 2. Do we remove the "assigned" flag?

You can keep the "assigned" flag/attribute.

> 3. For a feature that was previously subbmitted as a DtoN, do we leave the SFTYPE as DtoN in the FFF or remove it and note it in the remarks?

Keep the SFTYPE as DtoN in the FFF. In the remarks note that it was already submitted and include the date it was submitted.

> 4. At our survey scale, if an assigned feature is found to be less than 25m different horizontally, an "Update" is applied to the assigned feature. What then happens with the designated sounding? Is it still considered a new feature, in turn creating 2 features for the same item?

Just to clarify, you have an existing feature which is "assigned". You ran MBES and have "designated" a sounding which you believe is the least depth however the designated sounding and the feature are not in the exact same location but are within 25 meters horizontally. You updated the "assigned" feature least depth to be that of the designated sounding? That's it. You are finished. The rest is up to the cartographer at the processing branch. Gene informed me, they will not create a second feature. The feature object documented by the survey data would be relocated to the designated depth grid node that represents the feature.

> 5. For DtoNs that we have submitted and have already made it to the chart through an update, how does the feature transfer to the FFF? Does the sftype remain DTON or is that removed and noted in the remarks.

Keep the SFTYPE as DtoN in the FFF. In the remarks note that it was already submitted and include the date it was submitted. In addition, note that it was already applied to the chart by the time you delivered your products. In short, this lets the branch know that you have done your homework and that you are on top of things.

> 5. Is a purposely sunken vessel a WRECKS or an OBSTRN? sort of leads to the next question.

In these situations, make your best educated guess. You are asking a cartographic question which will be determined at the processing branch. The products you deliver to the branch should clearly demonstrate what is happening in the real world. Don't worry so much about the cartography but make sure that you supply the best information in the most clear format so that the cartographers can make their decisions easily. Here is guidance from Gene, "If the feature looks like a wreck or is wreck like in appearance, call it a wreck. If one is not able to determine or interpret the feature as a wreck, then it is an obstruction."

> 6. One of the DtoNs we submitted on H12719 was a shipwreck called the "Black Bart". We called it a wreck on our DtoN submittal. We now have learned that it was sunk intentionally as a fish haven. Should it be charted as a wreck or as an obstruction (point feature) with CATOBS fish haven.

Gene had a response to this question as well. Here is his response, "Fish havens are permitted cartographic objects. A permitted fish haven will have official documents from USCE or BOEM with the geographic limits. It thus would be charted as a fish haven (Obstruction in S57); if there is not charted fish haven, then the wreck should be submitted as a wreck. The hydro survey is not the source for the permit or changing the single point feature to a permitted object.

We've seen several times where features are submerged or sunken near permitted fish havens and the group doing the work dropped the object in the wrong location. Even if the wrecks were intended to be located within the fish haven, and reside outside the permitted limits, it will be a standalone feature on the chart."

I have one other comment for this question. For your information, there may be times where you find a wreck but in the end it get's charted as an obstruction. One reason this may occur is if the wreck is a sensitive wreck, meaning all new wrecks go through the local State Historic Preservation Office (SHPO) for review. If the wreck is sensitive, it will not be charted as a wreck but as a sounding or obstruction.

Megan

> David Neff, C.H.
> Mobile: (415)-517-0020
> www.etracinc.com

--

David Neff, C.H.
Mobile: (415)-517-0020
www.etracinc.com

David Neff <david@etracinc.com>

Feature Reporting

Katrina Wyllie - NOAA Federal <katrina.wyllie@noaa.gov> Fri, Mar 27, 2015 at 11:19 AM
To: David Neff <david@etracinc.com>
Cc: Megan Greenaway - NOAA Federal <megan.greenaway@noaa.gov>

Hi David,

You only need to address the DtoNs in the 'DtoN' section and not the 'charted features' or 'uncharted features' sections of the DR. And yes, the DtoN features need to be included in the FFF submission.

Thanks,
Katrina

On Fri, Mar 27, 2015 at 12:35 PM, David Neff <david@etracinc.com> wrote:

> Hello Katrina,
>
> Thank you for the chat yesterday, it cleared up a few things. Next question:
>
> We have a number of features that were identified as DTONs, submitted to AHB as such, and have now made it to the chart already. There are 3 sub sections in the Chart Comparison section of the DR to report on features:
>
> Charted Features
> Uncharted Features
> DTON
>
> We will report on them in the DTON section for sure, but would we also need to report on them in one of the other 2 sections, and if so which section? Are they charted features now that they are on the chart or uncharted features, since they were not charted before we began? Or does it really matter as long as they are reported in the DTON section and ultimately part of our FFF, maybe I'm over thinking it?
>
> --
> David Neff, C.H.
> Mobile: (415)-517-0020
> www.etracinc.com

Charted Features

David Neff <david@etracinc.com> Wed, Apr 1, 2015 at 11:15 AM
To: Katrina Wyllie - NOAA Federal <katrina.wyllie@noaa.gov>
Cc: Megan Greenaway - NOAA Federal <megan.greenaway@noaa.gov>, Michael Gonsalves - NOAA Federal <michael.gonsalves@noaa.gov>, Matthew Jaskoski - NOAA Federal <matthew.jaskoski@noaa.gov>

I agree with the purple line, for sounding designation.

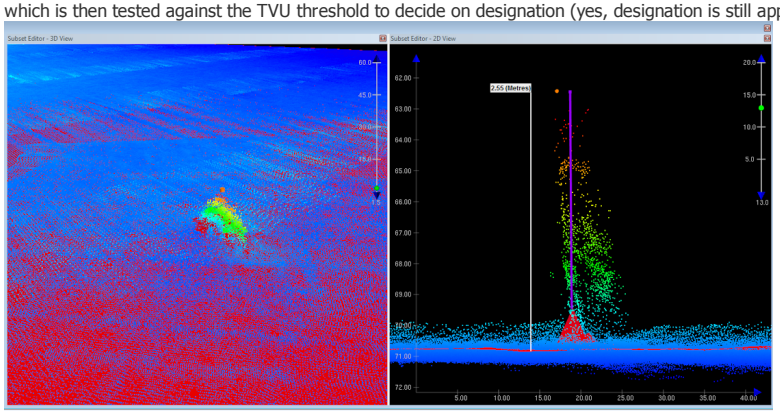
For feature classification we should be measuring least depth to the surrounding natural seafloor and running that measurement through the 1m proud or 5% of water depth criteria, correct?

Dave

On Wed, Apr 1, 2015 at 5:48 PM, Katrina Wyllie - NOAA Federal <katrina.wyllie@noaa.gov> wrote:

Hi Dave,

Everything looks correct except one minor clarification. You want to be measuring from how the surface represents the feature to the shoalest reliable sounding of that feature. For this example, that would be the length of the purple line, which is then tested against the TVU threshold to decide on designation (yes, designation is still appropriate in this example). Agree?



Thanks,
Katrina

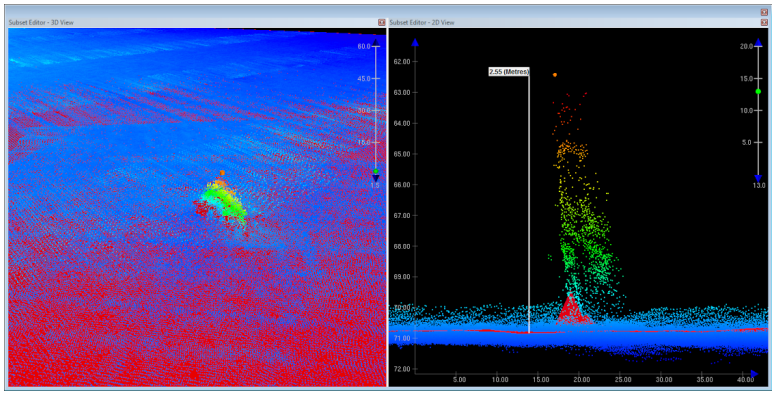
On Wed, Apr 1, 2015 at 1:30 PM, David Neff <david@etracinc.com> wrote:

Thanks for the super quick response!

See my responses inline.

Designated Soundings
The max allowable TVU threshold numbers you have are correct. It's great that you have a feature less than 20m so I can clearly see the threshold changes at 20m. I just want to confirm that you aren't designating based on height of feature vs. TVU threshold, but instead you are designating based on what the separation is between the appropriate resolution surface and reliable shoal point of the feature. You sent great images of your features in point cloud view but I could not verify without seeing the behavior of the surface. Please let me know if you would like to discuss further. And again, don't un-designate the work you've already done!

Referencing the image below, you can see now the reference surface represented in **RED** with my measurement from the surface to the shoalest depth of the obstruction. This measured value is what we will compare to our TVU threshold for designation decisions. Sound right?



Features
I should have made myself more clear with the "1m proud" comment. For this project, "1m proud" is appropriate for features in 4-20m depths because the coverage requirement is object detection. In greater than 20m of water (most of H12717), the coverage requirements switch from object detection to complete coverage and the feature significance requirements are now "Detect features measuring 10% of depth horizontally and approximately **5% vertically**." So from the features you have listed for inclusion in the FFF in depths greater than 20 m a few more can be removed, but you're on the right track. The statement about possibly reducing the number of features you are submitting was a general statement for the other two sheets based on the comment in your previous email of "This is simple for H12718 and H12719, everything becomes a feature."

Thank you for the clarification and working through that with me. I believe I have it now. I've revised the feature list below. Thank you again for your patience.

Dave

eTrac Unique ID	Depth (m)	Height (m)	Designate?	Add to FFF?	Reason for FFF Decision
H12717_101	19.01	2.26	0.28	YES	1m Proud
H12717_102	21.11	2.20	0.57	YES	> 5% of depth
H12717_103	21.53	1.45	0.57	YES	> 5% of depth
H12717_104	21.68	1.04	0.57	NO	insignificant
H12717_105	22.69	3.16	0.58	YES	> 5% of depth
H12717_106	23.29	1.02	0.58	NO	insignificant
H12717_107	23.67	1.03	0.59	NO	insignificant
H12717_108	23.85	1.05	0.59	NO	insignificant
H12717_109	24.34	0.59	0.59	NO	insignificant
H12717_110	24.52	1.97	0.59	YES	> 5% of depth
H12717_111	24.68	0.25	0.59	NO	insignificant
H12717_112	24.89	0.83	0.60	NO	insignificant
H12717_113	25.11	1.00	0.60	NO	insignificant
H12717_114	25.39	1.39	0.60	YES	> 5% of depth
H12717_115	25.50	1.11	0.60	NO	insignificant
H12717_116	25.54	0.79	0.60	NO	insignificant
H12717_117	25.62	1.08	0.60	NO	insignificant
H12717_118	25.85	0.29	0.60	NO	insignificant
H12717_119	26.19	1.94	0.60	YES	> 5% of depth
H12717_120	26.22	1.02	0.61	NO	insignificant
H12717_121	26.25	0.95	0.61	NO	insignificant
H12717_122	26.43	0.74	0.61	NO	insignificant
H12717_123	27.27	2.33	0.61	YES	> 5% of depth
H12717_124	27.98	2.13	0.62	YES	> 5% of depth
H12717_125	28.94	0.44	0.63	NO	insignificant
H12717_126	29.66	2.31	0.63	YES	> 5% of depth
H12717_127	30.19	0.71	0.64	NO	insignificant

On Wed, Apr 1, 2015 at 2:14 PM, Katrina Wyllie - NOAA Federal <katrina.wyllie@noaa.gov> wrote:

Hi Dave,

Yes, we are just about there! Thanks for being patient with my response time.

Designated Soundings
The max allowable TVU threshold numbers you have are correct. It's great that you have a feature less than 20m so I can clearly see the threshold changes at 20m. I just want to confirm that you aren't designating based on height of feature vs. TVU threshold, but instead you are designating based on what the separation is between the appropriate resolution surface and reliable shoal point of the feature. You sent great images of your features in point cloud view but I could not verify without seeing the behavior of the surface. Please let me know if you would like to discuss further. And again, don't un-designate the work you've already done!

Features
I should have made myself more clear with the "1m proud" comment. For this project, "1m proud" is appropriate for features in 4-20m depths because the coverage requirement is object detection. In greater than 20m of water (most of H12717), the coverage requirements switch from object detection to complete coverage and the feature significance requirements are now "Detect features measuring 10% of depth horizontally and approximately **5% vertically**." So from the features you have listed for inclusion in the FFF in depths greater than 20 m a few more can be removed, but you're on the right track. The statement about possibly reducing the number of features you are submitting was a general statement for the other two sheets based on the comment in your previous email of "This is simple for H12718 and H12719, everything becomes a feature."

Thanks,
Katrina

On Tue, Mar 31, 2015 at 8:02 PM, David Neff <david@etracinc.com> wrote:

Katrina,

Thank you for your clarifications and corrections, and for your patience. I think we are closing in on wrapping up this topic.

With the clarity you've provided and with continuing to use H12717 as an example case, I've reworked the designated sounding tracking sheet.

Designating Soundings
Thank you for the correction to my TVU calc, I see my error now. In retrospect, there were a few soundings designated that didn't need to be, but we will leave them like you said. Also, I understand the model forcing purpose of designating soundings.

Assigning Features
I understand that any assigned feature will automatically be in the FFF along with any DTON. There are no assigned features for H12717 so all of the features are new. There is 1 DTON (H12717_101 below)
That leaves the second/third criteria (anthropogenic and 1m proud, or natural and navigationally significant). From what I can tell in the images and subsets we create, they mostly all look man made, with the exception of maybe H12717_125. So then it seems to be simply answering the question "is it more than 1m proud?". I've pasted the updated H12717 designated soundings below with my FFF decisions. I think I'm on the right track.

I only ask for added clarity because you mentioned to have a look at the FFF and possibly **reduce** the number of features we are submitting. I'm not sure if that was a general statement or geared towards the H12717 example case, but with my updated and hopefully final understanding of how to choose features, the number of them has increased.

Thanks again for you time.

Dave

eTrac Unique ID	Depth (m)	Height (m)	TVU Threshold (m)	Designate?	Add to FFF?	Reason for FFF Decision
H12717_101	19.01	2.26	0.28	YES	YES	Anthropogenic, 1m proud
H12717_102	21.11	2.2	0.57	YES	YES	Anthropogenic, 1m proud
H12717_103	21.53	1.45	0.57	YES	YES	Anthropogenic, 1m proud
H12717_104	21.68	1.04	0.57	YES	YES	Anthropogenic, 1m proud
H12717_105	22.69	3.16	0.58	YES	YES	Anthropogenic, 1m proud
H12717_106	23.29	1.02	0.58	YES	YES	Anthropogenic, 1m proud
H12717_107	23.67	1.03	0.59	YES	YES	Anthropogenic, 1m proud
H12717_108	23.85	1.05	0.59	YES	YES	Anthropogenic, 1m proud
H12717_109	24.34	0.59	0.59	NO	NO	insignificant
H12717_110	24.52	1.97	0.59	YES	YES	Anthropogenic, 1m proud
H12717_111	24.68	0.25	0.59	NO	NO	insignificant
H12717_112	24.89	0.83	0.6	YES	NO	insignificant
H12717_113	25.11	1	0.6	YES	YES	Anthropogenic, 1m proud
H12717_114	25.39	1.39	0.6	YES	YES	Anthropogenic, 1m proud
H12717_115	25.5	1.11	0.6	YES	YES	Anthropogenic, 1m proud
H12717_116	25.54	0.79	0.6	YES	NO	insignificant
H12717_117	25.62	1.08	0.6	YES	YES	Anthropogenic, 1m proud
H12717_118	25.85	0.29	0.6	NO	NO	insignificant
H12717_119	26.19	1.94	0.6	YES	YES	Anthropogenic, 1m proud
H12717_120	26.22	1.02	0.61	YES	YES	Anthropogenic, 1m proud

H12717_121	26.25	0.95	0.61	YES	NO	insignificant
H12717_122	26.43	0.74	0.61	YES	NO	insignificant
H12717_123	27.27	2.33	0.61	YES	YES	Anthropogenic, 1m proud
H12717_124	27.98	2.13	0.62	YES	YES	Anthropogenic, 1m proud
H12717_125	28.94	0.44	0.63	NO	NO	insignificant
H12717_126	29.66	2.31	0.63	YES	YES	Anthropogenic, 1m proud
H12717_127	30.19	0.71	0.64	YES	NO	insignificant

On Tue, Mar 31, 2015 at 9:51 PM, Katrina Wyllie - NOAA Federal <katrina.wyllie@noaa.gov> wrote:

> Hi Dave,
>
> Thanks for the information on your designated sounding process. I do see an opportunity to clarify the specifications regarding designating soundings.
>
> Shorter version, the correct criteria:
>
> 1. Soundings are designated if greater than the max allowable TVU from the grid
> 2. That sounding becomes a FFF feature if it is an assigned feature to begin with, if it is anthropogenic and meets significance criteria (1m proud), or naturally occurring features of navigational significance (e.g. rock awash)
>
> - The criteria you stated used to designate soundings was incorrect; it should be based on number 1, above. Also, TVU has been incorrectly calculated in the real world example email. Please see the interactive excel cheat sheet, attached. The formula to calculate TVU is ± (Sqrt [a^2+(b*d)^2]). We are not, however, asking you to un-designate the soundings you have already designated.
>
> - As for features, please follow number 2 above. Features are not created based on TVU or the 10% rule. Most of the features will likely be a subset of the designated soundings but it is very unlikely to be all of the designated soundings (not to complicate matters, there may be a few features well-represented by the grid that do not require a designated sounding but still meet the FFF criteria defined above). We are asking you to take action on this and take another look at what is in your FFF to possibly reduce the number of submitted features.
>
> Longer version:
>
> The purpose of designating a sounding is to force the gridded surface model to recognize a navigationally significant shoal sounding. The threshold for 'forcing' the gridded model is based on the depth difference between the gridded surface and reliable shoal sounding. The sounding should be designated in water depths 20m or less if the depth difference is greater than ½ max TVU and in water depths greater than 20m when the depth difference is greater than max TVU.
>
> This discussion then gets back to your question of what should go into the FFF. All assigned features need to be included in the FFF. All new anthropogenic features meeting significance criteria should be included in the FFF. As for naturally occurring bathymetry, as long as the grid is adequately representing the feature (i.e. top of the rock), there is no requirement to include these features in the FFF and AHB can make cartographic decisions based on the submitted surfaces. If, however, a new naturally occurring feature like a rock awash is found in the survey area that is deemed navigationally significant it is likely a DtoN and by default included in the FFF.
>
> If you have small areas (i.e. fish havens, sand waves, rocky areas) not being well represented in the gridded surface, the option to grid at a higher resolution (while still meeting density requirements) is available to reduce or eliminate the number of designated soundings in that area and increase processing efficiency. For larger areas, consultation with the COR is required.
>
> I will be happy to provide more guidance as needed.
>
> Thanks,
>
> Katrina
>
> On Tue, Mar 31, 2015 at 3:58 PM, David Neff <david@etracinc.com> wrote:
>
> > Katrina,
> >
> > I thought maybe the real world examples may aid in this discussion and guidance. I've tabulated all the designated soundings for H12717.
> >
> > For discussion purposes:
> >
> > TVU Rule (HSSD 5.2.1.2) = The height of the object off the seafloor is greater than the maximum allowable TVU at that depth. (Max TVU = 0.5 +(0.013*Depth)^2 (HSSD 5.1.3)
> >
> > 10% Rule = The height of the object off the seafloor is greater than 10% of the depth.

I've calculated the thresholds for inclusion in the FFF both using the 10% rule and the max TVU based upon depth. You can see the results on the far right columns for the decision to include or not in the FFF. As I said before my plan is to include the features that meet the TVU rule as it is the conservative calculation and is per the spec, as long as I am interpreting the spec properly. In that case, there will be 9 features in the FFF for H12717. I see no reason to include any of the others. Can you confirm my direction is valid? I've also included a zip file of images for all 27 designated soundings.

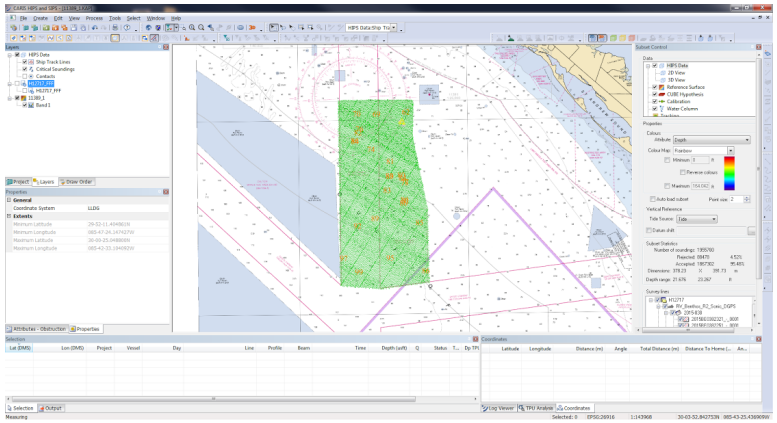
If including all soundings in the FFF is the proper direction, that is no problem. It is not an extensive amount. We're just ultimately trying to develop the best practice for this and future projects to minimize these questions.

eTrac Unique ID	Depth (m)	Height (M)	Threshold (m) (TVU)	Threshold (m) (10%)	Added to FFF (TVU)	Added to FFF (10%)
H12717_101	19.01	2.26	1.16	1.90	YES	YES
H12717_102	21.11	2.20	1.31	2.11	YES	YES
H12717_103	21.53	1.45	1.34	2.15	YES	NO
H12717_104	21.68	1.04	1.35	2.17	NO	NO
H12717_105	22.69	3.16	1.44	2.27	YES	YES
H12717_106	23.29	1.02	1.49	2.33	NO	NO
H12717_107	23.67	1.03	1.52	2.37	NO	NO
H12717_108	23.85	1.05	1.53	2.39	NO	NO
H12717_109	24.34	0.59	1.58	2.43	NO	NO
H12717_110	24.52	1.97	1.59	2.45	YES	NO
H12717_111	24.68	0.25	1.61	2.47	NO	NO
H12717_112	24.89	0.83	1.63	2.49	NO	NO
H12717_113	25.11	1.00	1.65	2.51	NO	NO
H12717_114	25.39	1.39	1.67	2.54	NO	NO
H12717_115	25.50	1.11	1.68	2.55	NO	NO
H12717_116	25.54	0.79	1.69	2.55	NO	NO
H12717_117	25.62	1.08	1.69	2.56	NO	NO
H12717_118	25.85	0.29	1.72	2.58	NO	NO
H12717_119	26.19	1.94	1.75	2.62	YES	NO
H12717_120	26.22	1.02	1.75	2.62	NO	NO
H12717_121	26.25	0.95	1.75	2.62	NO	NO
H12717_122	26.43	0.74	1.77	2.64	NO	NO
H12717_123	27.27	2.33	1.85	2.73	YES	NO
H12717_124	27.98	2.13	1.92	2.80	YES	NO
H12717_125	28.94	0.44	2.02	2.89	NO	NO
H12717_126	29.66	2.31	2.10	2.97	YES	NO
H12717_127	30.19	0.71	2.16	3.02	NO	NO

Dave

On Mon, Mar 30, 2015 at 11:22 PM, David Neff <david@etracinc.com> wrote:

> Great Katrina, thanks for elevating this. We want to make sure we are properly reporting on our findings.
>
> The 150 was a project wide number, if we were to select all objects on the seafloor regardless of size. Project wide we have designated 114 soundings, of which approximately 60 have made it to the FFF, we are still in the review process. The basic criteria is everything over 1m tall is designated, a conservative criteria for depths greater than 20m. Part of that comes from my experience running concurrent MBES/SSS in similar depths. In the past, if we identified an object in the SSS and estimated it to be less than 1m, that was it, we wouldn't develop it further and it became "insignificant". Some of this guidance also comes from Gene Parker from an email thread on Feb 20th. I've copied the text below for reference.
>
> Having completed the task of designating soundings with that basic 1m criteria, we are now faced with the task of deciding which of these designated soundings become features and are delivered in the FFF. This is simple for H12718 and H12719, everything becomes a feature. H12717 is where we are struggling I believe at the moment. For H12717, we mainly used a 10% rule described below. We had originally setup our feature tracking spreadsheet to calculate the maximum allowable TVU for each DS and making our decision by comparing that to the height of the object off the seafloor. We then switched to the 10% rule.
>
> I think we may switch back to the TVU comparison as that as it is the more conservative estimate and is what is clearly written in the spec. So if I may present my criteria and you can please let me know if we are on the right track.
>
> 1. Soundings are designated if the object in question rises 1m from the surrounding seafloor bathy.
> 2. Once a sounding is designated, it is considered a feature if its height off the seafloor is greater than the maximum allowable TVU at that depth.
>
> The other option would be to just include anything we've designated as a feature and let AHB make the call.
>
> Please let me know your comments and if a phone call would be more efficient, I am available anytime.
>
> Dave
>
> As a quick reference these are the features in H12717 (not a ridiculous amount). Also, Genes comments are below that. Thank you



Castle Parker - NOAA Federal <castle.e.parker@noaa.gov> Feb 20

to **Matthew**, me, Megan, Paul

Good day David,
The image was dropped from the email, the email was probably sent as text instead of html. (?)

DtoNs can be subjective. If in doubt, then submit.

Regarding when to drop a feature, this is somewhat subjective as well. At the very least I would include features that are the minimum detection size, SS= 1m cube, object detection MB = 1m cube (depth range 0-22m), and complete coverage MB = 2m(L)x2m (W) x1m (vertical height), and/or the 10% rule (a best practice defined below). The object detection MB minimum size is 1m cube for water depths less than 22m, and features with a rise above the sea floor of at least 5% of the water depth in water depths less than 22m. Water depths deeper than 22m follow the 10% rule. *Reference HSSD 2014, Section 5.2.2.1 Object Detection Coverage page 88, or Acrobat page 93/186.*

I would not include a feature in the FFF if it did not meet the significant criteria of 1m height above the sea floor or at least meet the 5% rule in water depths less than 22m. The 10% rule is where the feature's height or rise above the sea floor is at least 10% of the water depth in that specific area.

For instance, 120ft of water, the object would rise 12ft (10%) and in this case, include in the FFF. What if it were only 10ft rise, I would still include in the FFF. If in 120ft of water the feature has only 1m rise, then probably not, depending upon the horizontal size of the object.

Bearing in mind your survey areas, I would not make features out of all the objects within a fish haven.

The point is to document the significant features within the survey area, whether or not they go to chart. If in doubt, include it. It's a matter of CYA and if in doubt, include.

All significant features should be in the FFF regardless of navigational significance. And I'm not saying that all features have to be developed; if for instance the mainscheme hydro line documents a feature and is deep and the height above the sea floor is not significant, then development is not necessary.

So, bearing in mind the minimum size to detect, if it rises 1m and is an obstruction or some anthropogenic feature, I would include. If it appears to be part of the sea floor or Group 1 object that is part of the Skin of the Earth (SOE) I would not include. It is the cartographer's decision whether a feature is represented as a feature Group 2 object (non-skin of the earth) in the HCell navigation product AHB submits to Marine Chart Division. There is a thin line between hydrographic products and cartographic products, and sometimes it gets blended.

If you would, try to resend the image for review.
Thanks,
Gene

PS: I realize this is sort of free flowing thoughts, if I'm unclear point out what is still uncertain.

Designated soundings are selected based mainly on the

On Mon, Mar 30, 2015 at 9:28 PM, Katrina Wyllie - NOAA Federal <katrina.wyllie@noaa.gov> wrote:

Hi Dave,

I was thinking back to our phone call and I keep going back to how you said you have ~ 150 designated soundings for H12717. Do you mind if I pull this thread and ask what criteria/guidance you were following for designation? I am coming into this a bit late so I apologize if you have already had this conversation with Megan, I just want to make sure the level of effort in regards to designation is appropriate before the next couple sheets are processed.

Thanks,
Katrina

On Mon, Mar 30, 2015 at 4:30 PM, Katrina Wyllie - NOAA Federal <katrina.wyllie@noaa.gov> wrote:

Hi Dave,

Just wanted to recap our phone conversation for Megan's sake:

There are many uncharted items in H12717 but they are deeper than 66 ft (so not DtoNs) and they are not taller than 1 m (so not significant) and they do not need to be included in the FFF submission.

Thanks,
Katrina

On Mon, Mar 30, 2015 at 4:07 PM, David Neff <david@etracinc.com> wrote:

Katrina,

This has opened up a discussion here. Is it possible to get on the phone today for a few minutes to discuss? My number is 415-517-0020

Dave

On Mon, Mar 30, 2015 at 8:00 PM, Katrina Wyllie - NOAA Federal <katrina.wyllie@noaa.gov> wrote:

Hi Dave,

Sounds great. Just for your information in the future, if you ever get to the point where the number of new features seems ridiculous (e.g. hundreds of new rocks), please reach out to the OPS Project Manager for discussion. There is some guidance related to this in 5.2.1.2 of HSSD.

As for the 'recomd' field, it is required to be populated for new features and what you have stated is appropriate.

Thanks,
Katrina

On Mon, Mar 30, 2015 at 3:35 PM, David Neff <david@etracinc.com> wrote:

Thank you Katrina,

We will include all found features in the FFF and let AHB make the call. I guess my only follow up question would be the recomd field. I think for all of these I would say "hydrographer recommends not charting the obstruction". Does that seem appropriate or should it be left blank?

Dave

On Mon, Mar 30, 2015 at 6:30 PM, Katrina Wyllie - NOAA Federal <katrina.wyllie@noaa.gov> wrote:

Hi David,

In general, all features marked 'assigned' in the CSF as well as any new features must be included in the FFF and represented in the surface. It looks like H12717 did not have any assigned features, so that part is easy. The navigational insignificance viewpoint you mention should be used when determining if said uncharted features should even be considered for a DtoN submission or not. In this case, your features are all deeper than 66 ft so you wouldn't worry about DtoN submissions, but you do need to include all features in the FFF submission. At AHB/PHB the cartographic team will take a subset of the field's submitted survey scale features to apply to the chart using cartographic rules. As for reporting on these features in the 'Uncharted Feature' section of the DR, you can reference the FFF as the source of the positions and depths of these new features. If there are any distinguishing characteristics not represented by S-57 attribution, those should be mentioned in this section.

For more, reference Specs 8.2. Please let me know if you have additional questions.
All "Assigned" CSF features shall be delivered in a Final Feature File (FFF) in S-57 .000 format. Each FFF shall be broken down according to surveys. Only the features within the survey limits shall reside in each survey deliverable (i.e. HXXXXX.FFF.000, not the entire project feature data). The FFF shall contain attributed information on specific objects that cannot be portrayed in a simple depth grid. Features to include in the FFF include; all "Assigned" features from the Composite Source File (CSF) and any new features found within the survey area. The FFF shall be in the WGS84 datum, unprojected.

The FFF shall include shoreline data only if the hydrographer conducted shoreline verification. New features and changes to the source shoreline shall be portrayed in the FFF and be as fully attributed as possible using S-57 encoding rules.

U.S. Coast Guard maintained aids to navigation shall NOT be included in the FFF. The hydrographer shall investigate all aids to navigation and report results as required in section 7.2. Privately maintained aids and/or mooring buoys shall be included in the FFF, unless they are temporary in nature or are repositioned frequently.

General soundings, contours and depth areas will NOT be included in the FFF since these objects will be derived from Caris surfaces or final BAGs during chart compilation. In rare cases, an isolated sounding may be part of the FFF if it is a navigationally significant shoal and/or needs additional attribution.

Thanks,
Katrina

On Mon, Mar 30, 2015 at 1:08 PM, David Neff <david@etracinc.com> wrote:

> Happy Monday Katrina,
>
> We have a number of features in H12717 that are all deeper than 66 feet. They are all included in our critical soundings and will be finalized within the surface that we deliver. I would like to verify that it is not necessary to include each of these features in our FFF considering their navigational insignificance. I will also **NOT** be reporting on them in the "Uncharted Feature" section of the DR.
>
> --
> David Neff, C.H.
> Mobile: (415)-517-0020
> www.etracinc.com

--
David Neff, C.H.
Mobile: (415)-517-0020
www.etracinc.com

--
David Neff, C.H.
Mobile: (415)-517-0020
www.etracinc.com

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www.etracinc.com

--
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--
David Neff, C.H.
Mobile: (415)-517-0020
www.etracinc.com

--
David Neff, C.H.
Mobile: (415)-517-0020
www.etracinc.com

David Neff <david@etracinc.com>

DtoN Feature FFF fields

Katrina Wyllie - NOAA Federal <katrina.wyllie@noaa.gov> Tue, Apr 7, 2015 at 12:19 PM
To: David Neff <david@etracinc.com>
Cc: Megan Greenaway - NOAA Federal <megan.greenaway@noaa.gov>

Hi Dave,

Answers
1. Yes, you have correctly interpreted HSSD; DtoNs require 'obstim' as well as side scan sonar contacts. The remaining multibeam features do not require 'obstim' to be filled out.
2. Answered
3. The DR "Charted Features" and "Uncharted Features" sections are general in nature and it is preferred that you reference the FFF instead of duplicating images/least depths/positions. What we want to avoid is having a DR that does not match the least depth/positions (e.g. final tide application) of the FFF features which means AHB has to correct the DR. Anything that is not captured in the S-57 attribution can be included in the DR and your proposed 'general stats' is great.

Thanks for checking in. Keep the questions coming, I'm always happy to help clarify the specifications or double check interpretation!

Thanks,
Katrina

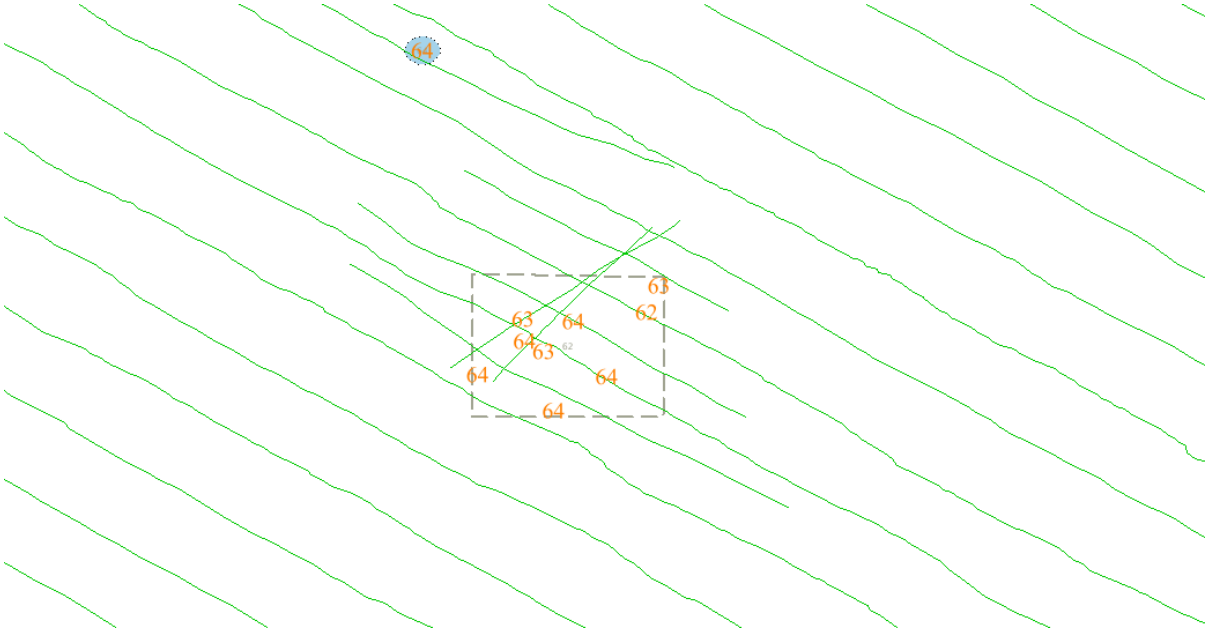
On Tue, Apr 7, 2015 at 1:25 PM, David Neff <david@etracinc.com> wrote:

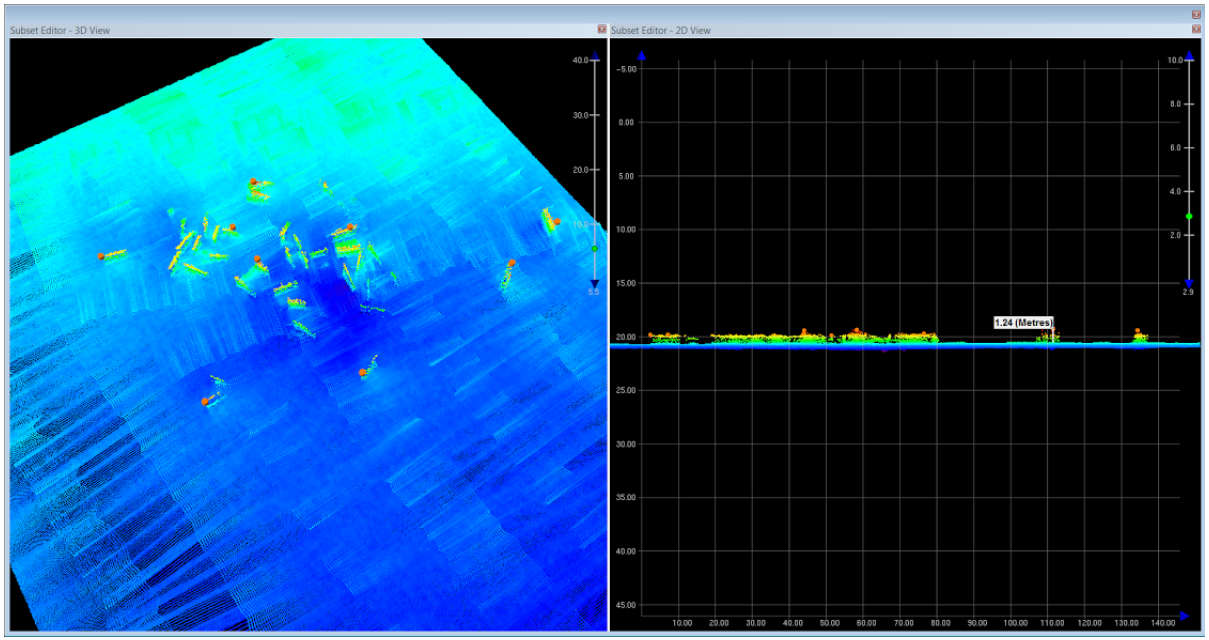
> Thank you Katrina,
>
> No problem on the delay, we have plenty to do here.
>
> Another round of questions:
>
> 1. Do all features need an **obstim**? It notes in the specs that it is required for Contractor DTONs. Should we interpret that as only DTONs need an **obstim?**

obstim	Observed Time	Observed time in the format YYYYMMDDThhmmss

Note:
- *Required for:*
  - *Contractor DTON submission (see section 8.1.3)*
  - *Side scan sonar contacts (e.g. $CSYMB feature - see section 8.2)*

2. If yes to number 1 read on, if no, move to #3. We have an area feature within the FFF which envelopes a number of our critical soundings (not FFF features) and 1 DtoN (a feature in the FFF by default). Images below. Should the **obstim** field of the area feature represent the the **obstim** of the shoalest sounding in the area? If not, what should the **obstim** be?





3. For reporting on "Charted Features" and "Uncharted Features" in the DR. Sections D.1.4 and D.1.5. The XLM schema seems to only support one discussion field rather than being able to report on one feature, include a discussion about it, add an image, and then move on to the next feature doing the same. Questions:

Should these areas in the report include images like the 2D/3D image above for each feature, or should we simply direct the reader to our FFF as all the images are linked in the S-57 features anyway?

Should each feature be reported on specifically in the DR or is it a more general discussion on "Uncharted Features" and we would provide some general stats for example on (number of uncharted features, general types of features, etc.)

Thanks Katrina, I realize #3 may be tricky so if a phone discussion works best I'm available anytime. Also, perhaps there is a previous survey in XML or PDF format that you think describes how to handle these sections best that is public and you could share as an example?

Dave

On Tue, Apr 7, 2015 at 2:37 PM, Katrina Wyllie - NOAA Federal <katrina.wyllie@noaa.gov> wrote:

> Hi Dave,
>
> Sorry for the delay, I was out of the office on Friday and Monday and just got through my emails.
>
> Basically the source of the DtoN is your survey and the charting of the feature is fast-tracked for the mariner's safety. We expect both the depth and position to change, slightly.
>
> Answers
>
> 1. The **descrp** attribute is new if you found a new feature. If, for instance, the DtoN submission was on an already charted feature but with a significantly shoaler least depth (initiated the DtoN submission), the **descrp** field can be populated as 'update'.
>
> 2. The **recomd** attribute would then follow suit. In your case, "Hydrographer recommends charting the new obstruction with least depth"
>
> 3. I'm sure you have this tagged still, but ensure **sftype** is DtoN for that feature.
>
> Thanks,
>
> Katrina

On Thu, Apr 2, 2015 at 6:12 PM, David Neff <david@etracinc.com> wrote:

> Hello Katrina,
>
> As we move forward in finalizing our FFF, some questions from the team have come up regarding the recommendations field for previously submitted DtoNs. The scenario:
>
> A DtoN is found in the field, a report is created and submitted to AHB, NDB processes and updates the chart. The feature is now on the chart.
>
> Now we are back in our office, the FFF is being created and a few things have changed with the feature. It has been added to the chart through an update but also the least depth has now changed due to application of final verified tides.
>
> Questions
>
> 1. Is the **descrp** going to be "NEW" still or would it be "UPDATE" as feature has been charted and the least depth needs an update as it has changed with the final processing?
>
> 2. I think answering question 1 would answer question 2, but I will ask it anyway. Would **recomd** be "Hydrographer recommends charting the new obstruction with least depth" or "Hydrographer recommends updating charted feature with new least depth."?
>
> Thanks
> Dave
>
> --
> David Neff, C.H.
> Mobile: (415)-517-0020
> www.etracinc.com

--
David Neff, C.H.
Mobile: (415)-517-0020
www.etracinc.com

David Neff <david@etracinc.com>

Surface Deliverables

Katrina Wyllie - NOAA Federal <katrina.wyllie@noaa.gov> Sun, Apr 12, 2015 at 12:10 PM
To: David Neff <david@etracinc.com>
Cc: Megan Greenaway - NOAA Federal <megan.greenaway@noaa.gov>, Michael Gonsalves - NOAA Federal <michael.gonsalves@noaa.gov>

Hi Dave,

I hope you're enjoying the weekend. Yes, each resolution grid should be delivered independently. Although a combined surface is beneficial for quality control and chart comparisons, it is not a standard deliverable. If a combined surface is required, language will be included in the project instructions.

Thanks,
Katrina

On Fri, Apr 10, 2015 at 10:53 PM, David Neff <david@etracinc.com> wrote:

> That's great, thanks for the explanation.
>
> Just to clarify, in the sheets where we definitely do have varying resolution grids, should we be delivering each grid separately or should we deliver a combined grid? The specs say NOAA field units should not deliver combined grids unless specified in the project instructions. What's the typical method for contractors? I thought I remembered Mike saying something about combined grids on our phone call. Have a great weekend!
>
> Dave
>
> On Thu, Apr 9, 2015 at 2:24 PM, Katrina Wyllie - NOAA Federal <katrina.wyllie@noaa.gov> wrote:
>
> > Morning Dave,
> >
> > Short answer:
> > A single 2m surface for H12717 is acceptable.
> >
> > Long answer:
> > H12717 is in the complete MBES coverage depth range as assigned in the project instructions. Since the only depth in H12717 less than 20m is a single designated sounding on a significant feature, you are likely falling under the following HSSD bullet from the complete coverage requirements: "All significant shoals or features found in waters less than 30m deep shall be developed to Object Detection standards or have designated soundings from a beam within 30 degrees of nadir unless multiple passes were made over the feature." If H12717 covered depths both greater than 20m and less than 20m, both complete coverage and object detection requirement grids would need to be submitted for that area.
> >
> > Please let me know if you would like to discuss further.

Thanks,
Katrina

On Tue, Apr 7, 2015 at 4:50 PM, David Neff <david@etracinc.com> wrote:

> Hi Katrina,
>
> Here is an interesting one.
>
> Our instructions state deeper than 20m is required **Complete MBES with Backscatter.**
>
> The CUBE surface for H12717 has a min depth of 20.67 and max of 33.61, which means I should be able to deliver one 2M surface conforming to Complete MBES Coverage standards correct?
>
> Now the curve ball: There is one feature that has a Least Depth of 19.01m, the feature that was helpful in the FFF discussion earlier. After finalizing the surface the min depth is now 19.01. So this would suggest that I need to report a portion of H12717 to objection standards and deliver 2 surfaces?
>
> I think this ultimately gets cleared up with the overlap between Object Detection and Complete Coverage in the HSSD
>
> Object Detection: 0-22 (0.5m)
> Complete Coverage: 18-40 (2m)
>
> Which would suggest there is a 4m range (18m-22m) that can be surveyed to either standard? However, our instructions state a clear line at 20m. Am I right in stating that the Project Instructions supersede the HSSD in most cases?
>
> My instinct is to deliver H12717 as a singe 2m surface with the purpose being Complete MBES Coverage.
>
> Thanks
>
> --
> David Neff, C.H.
> Mobile: (415)-517-0020
> www.etracinc.com

--
David Neff, C.H.
Mobile: (415)-517-0020
www.etracinc.com

David Neff <david@etracinc.com>

Chart Comparison

David Neff <david@etracinc.com> Mon, Apr 27, 2015 at 12:30 PM
To: Katrina Wyllie - NOAA Federal <katrina.wyllie@noaa.gov>
Cc: Megan Greenaway - NOAA Federal <megan.greenaway@noaa.gov>

Perfect explanation, thank you

On Mon, Apr 27, 2015 at 7:17 PM, Katrina Wyllie - NOAA Federal <katrina.wyllie@noaa.gov> wrote:

> Hi Dave,
>
> The chart comparison should focus on the largest scale chart of the area first. If the largest scale does not encompass the entire survey area, you should do a comparison for that chart and the next largest scale. So for example, you would do a comparison for the 1:25,000 scale chart (11391) first, and then the 1:40,000 scale chart (11390) and then, if there are still areas that are not captured on those two charts, continue to do the 1:80,000 scale (11389) chart comparison.
>
> If there are no differences between scales, a general sentence that references the larger scale chart comparison is appropriate.
>
> Thanks,
> Katrina
>
> On Mon, Apr 27, 2015 at 2:38 PM, David Neff <david@etracinc.com> wrote:
>
> > Katrina,
> >
> > I'd like to circle back around to our chart discussion a while back. In my review of our DR's I notice I have only performed the chart comparison to one chart each. This is appropriate for H12717 as it is the largest scale chart for the area and covers the entire area. For H12718 chart 11391 is the largest scale chart and covers the entire area so that will be used for the comparison.
> >
> > H12719 is where I have my questions. 11389 is the largest scale chart that covers the **ENTIRE** area. There are larger scale charts, but they only cover portions of the area. Am I to include them in the chart comparison? If yes, then that would lead to an additional question:
> >
> > The features on the charts that we are discussing in the comparisons (contours, soundings) generally match eachother chart-to-chart. After discussing the comparison to the first chart, would it be appropriate for additional chart comparison discussions to consist of a simple sentence?
> >
> > "The results of the chart comparison with 11391 match those of the chart comparison with 11389."
> >
> > Of course as long as that statement is true and there are actually no additional differences (which would be noted and discussed). Otherwise I think we would just be duplicating multiple paragraphs, multiple times.

> --
> David Neff, C.H.
> Mobile: (415)-517-0020
> www.etracinc.com

--
David Neff, C.H.
Mobile: (415)-517-0020
www.etracinc.com

David Neff <david@etracinc.com>

NRT Junction Survey

Megan Greenaway - NOAA Federal <megan.greenaway@noaa.gov> Fri, Feb 6, 2015 at 11:48 AM
To: David Neff <david@etracinc.com>
Cc: Paul Turner <paul.turner@noaa.gov>

David,
The BAG for H12357 is available on NGDC's web site. PHB is still compiling the survey. Would you like a preliminary copy of the DR as the DR has not been posted to NGDC's site yet?
Megan

On Thu, Feb 5, 2015 at 7:35 PM, David Neff <david@etracinc.com> wrote:

> Hello Megan,
>
> I wanted to inquire about the status of the NRT survey adjacent to H12718 and H12719. We are fully into the reporting on H12717 as we are nearly complete with that sheet and looking to the future and wanted to start lining up the materials needed for the comparison. Thanks
>
> --
> David Neff, C.H.
> Mobile: (415)-517-0020
> www.etracinc.com

SSS Significant/Insignificant Contacts

David Neff <david@etracinc.com> Mon, Apr 20, 2015 at 2:27 PM
To: Katrina Wyllie - NOAA Federal <katrina.wyllie@noaa.gov>
Cc: Megan Greenaway - NOAA Federal <megan.greenaway@noaa.gov>

Got it. Thank you.

Dave

On Mon, Apr 20, 2015 at 9:15 PM, Katrina Wyllie - NOAA Federal <katrina.wyllie@noaa.gov> wrote:

> Hi Dave,
>
> There is verbiage on page 147 and 148 of HSSD directing any contractors that use Caris to submit the field sheet directory for both MBES and SSS data in case AHB/PHB has to do any re-computing during the SAR process. You are correct, the diagram on page 181 does not have a field sheet folder listed, my apologizes in the previous email. However, the "Bathymetry_and_SSS" folder as shown in that diagram would be the appropriate place to put your HDCS data and grids. Contractors are allowed to use whatever processing software they want so we couldn't have 'HDCS' and 'Field sheets' folders listed in the contractor delivery structure (as we do for NOAA) as they are Caris-specific.
>
> Thanks,
> Katrina
>
> On Mon, Apr 20, 2015 at 4:39 PM, David Neff <david@etracinc.com> wrote:
>
> > Ok thank you Katrina.
> >
> > As for the delivery structure. Yes I believe the only difference will be that there are no longer Field Sheets in Caris 9.0. So like you say, we can just place the BASE surfaces where the Field Sheets would normally go. However, we are working off of page 181 of the 2014 HSSD. "Contractors Data Directory Structure". There is not a "Field Sheets" directory listed in the structure, likely due to being a contractor and not having delivery of a Field Sheet as a requirement. Can you advise where to place the surfaces? I can make a **Field Sheets** folder under **Processed?**
> >
> > Hope you had a good weekend
> >
> > Dave
> >
> > On Mon, Apr 20, 2015 at 7:19 PM, Katrina Wyllie - NOAA Federal <katrina.wyllie@noaa.gov> wrote:
> >
> > > Hi Dave,
> > >
> > > Sorry for the delay. As for the image copies, they can remain in both places. I wouldn't want you to delete the ones in the folder and risk breaking the correlation link.

I'll wait for the delivery structure questions to come in but from what I can gather, we will ask you to submit all grids in the field sheet directory even though you won't have field sheets to deliver.

Thanks,
Katrina

On Mon, Apr 20, 2015 at 12:16 PM, David Neff <david@etracinc.com> wrote:
> yes correct. I suppose that may bring up another discussion of delivery structure.
>
> On Mon, Apr 20, 2015 at 4:06 PM, Katrina Wyllie - NOAA Federal <katrina.wyllie@noaa.gov> wrote:
> > Hi Dave,
> >
> > Just to clarify before I send my response, you are using Caris HIPS/SIPS 9.0 for this project?
> >
> > Thanks,
> > Katrina
> >
> > On Fri, Apr 17, 2015 at 1:49 PM, David Neff <david@etracinc.com> wrote:
> > > Another questions regarding SSS contacts.
> > >
> > > We are organizing the data directory delivery structure as outlined on 181 of HSSD (Contractors Data Directory Structure).
> > >
> > > The specs note to place the SSS contact images for significant contacts in the multimedia folder which we have done. The SSS Contacts .000 file is put in Side_Scan_Sonar_Contacts folder. When images are linked within the S-57 Caris puts a copy of the image directly next to the S-57 file. Should those image copies remain or should they only be in the Multimedia folder?
> > >
> > > Dave
> > >
> > > On Fri, Apr 17, 2015 at 5:42 PM, David Neff <david@etracinc.com> wrote:
> > > > Yes that answers the question. Thank you Katrina.
> > > >
> > > > On Fri, Apr 17, 2015 at 5:36 PM, Katrina Wyllie - NOAA Federal <katrina.wyllie@noaa.gov> wrote:
> > > > > Hi Dave,
> > > > >
> > > > > The remarks attribute for the first 100% coverage SSS contacts can remain 'insignificant' for those contacts that don't meet the significance threshold. These contacts should still be correlated to the second 100% coverage 'significant' contacts and examined against the existing MBES data to determine if a MBES development is required. Does that answer your question?
> > > > >
> > > > > Thanks,
> > > > > Katrina
> > > > >
> > > > > On Fri, Apr 17, 2015 at 1:09 PM, David Neff <david@etracinc.com> wrote:
> > > > > > Hi Katrina,

I'm not sure if Megan is back yet, so I will continue to ping you with the questions, with Megan copied of course.

For the SSS contacts S-57 files:

When a contact is correlated to another contact from an adjacent line or the second %100 coverage survey, we are noting the correlation in the remarks attribute of both contacts to tie them together. We have come across a few instances where one of the contacts was estimated to be insignificant based on height and geometry, while the same obstruction from a correlated contact was estimated to be significant. In this case would the insignificant contact be upgraded to significant based on the correlation or would it remain insignificant.

I hope I am explaining myself well, let me know if you need clarification.

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David Neff, C.H.
Mobile: (415)-517-0020
www.etracinc.com

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David Neff, C.H.
Mobile: (415)-517-0020
www.etracinc.com

--
David Neff, C.H.
Mobile: (415)-517-0020
www.etracinc.com

--
David Neff, C.H.
Mobile: (415)-517-0020
www.etracinc.com

--
David Neff, C.H.
Mobile: (415)-517-0020

> www.etracinc.com

--
David Neff, C.H.
Mobile: (415)-517-0020
www.etracinc.com

H12718 Dton #1 59ft Obstruction

Registry Number: H12718
State: Florida
Locality: Guld of Mexico
Sub-locality: 7nm S of St Andrews Bay
Project Number: OPR-J357-KR-14
Survey Date: 01/22/2015

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
11391	25th	01/01/2013	1:25,000 (11391_1)	USCG LNM: 11/11/2014 (11/11/2014) NGA NTM: 12/12/2009 (11/29/2014)
11389	34th	06/01/2011	1:80,000 (11389_1)	USCG LNM: 9/2/2014 (11/11/2014) NGA NTM: 10/17/2009 (11/29/2014)
11360	43rd	11/01/2008	1:456,394 (11360_1)	[L]NTM: ?
1115A	43rd	11/01/2008	1:456,394 (1115A_1)	[L]NTM: ?
11006	32nd	08/01/2005	1:875,000 (11006_1)	[L]NTM: ?
411	52nd	09/01/2007	1:2,160,000 (411_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	59ft Obstruction	Obstruction	18.02 m	30° 02' 57.3" N	085° 43' 26.4" W	---

1 - Dangers To Navigation

1.1) 59ft Obstruction

DANGER TO NAVIGATION

Survey Summary

Survey Position:	30° 02' 57.3" N, 085° 43' 26.4" W
Least Depth:	18.02 m (= 59.11 ft = 9.852 fm = 9 fm 5.11 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2015-022.17:46:52.000 (01/22/2015)
Dataset:	H12718_DtoN1_AHB.000
FOID:	US 0000000003 00001(0226000000030001)
Charts Affected:	11391_1, 11389_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

OBSTRN/remrks: H12718 DTON 01 is an uncharted obstruction. Least depth was determined using preliminary tides.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12718_DtoN1_AHB.000	US 0000000003 00001	0.00	000.0	Primary

Hydrographer Recommendations

Hydrographer recommends charting obstruction with updated location and least depth.

Cartographically-Rounded Depth (Affected Charts):

59ft (11391_1, 11389_1)

9 ¾fm (1115A_1, 11360_1, 11006_1, 411_1)

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	QUASOU - 6:least depth known
	SORDAT - 20150122
	SORIND - US,US,graph,H12718
	TECSOU - 3:found by multi-beam

VALSOU - 18.017 m

WATLEV - 3:always under water/submerged

Office Notes

This danger submission is preliminary. No data has been provided to AHB for verification. Feature will be reviewed and verified once the survey data has been submitted. All depths have been corrected to chart datum MLLW. The horizontal datum is NAD83.

Feature Images

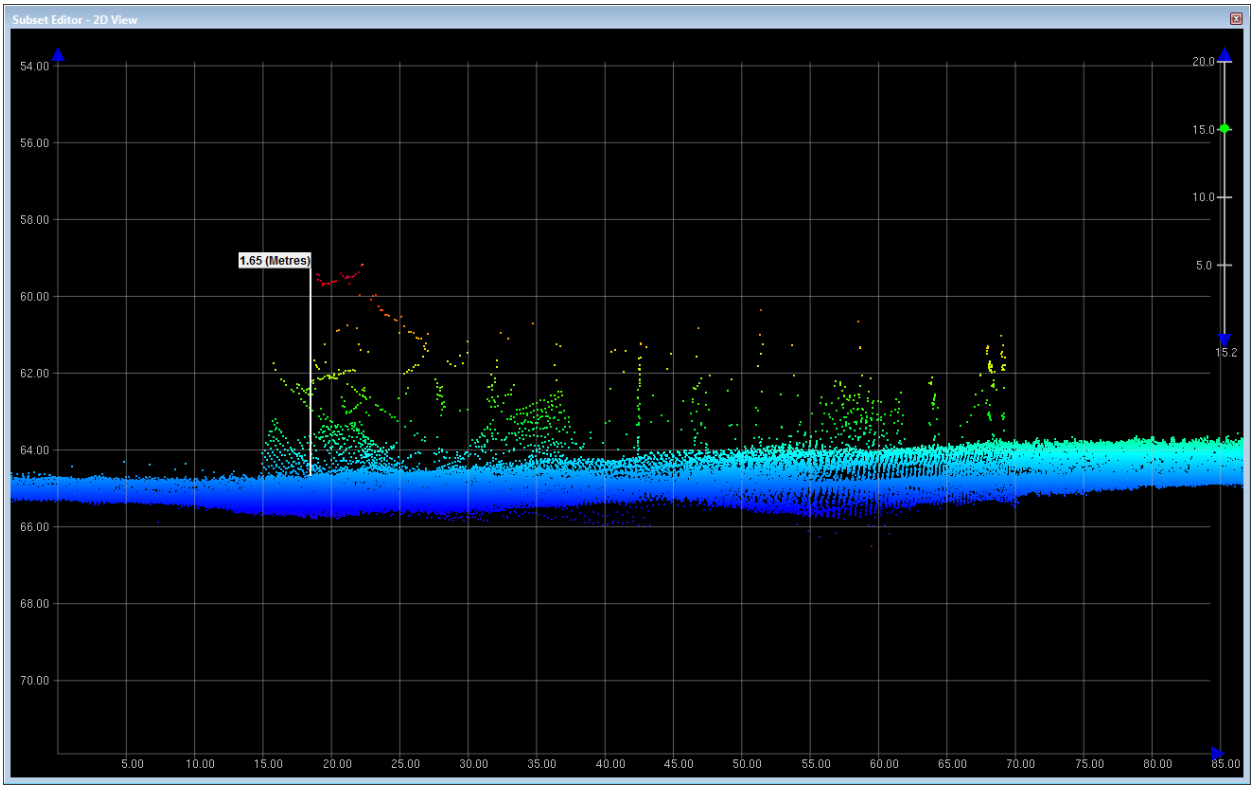

Figure 1.1.1

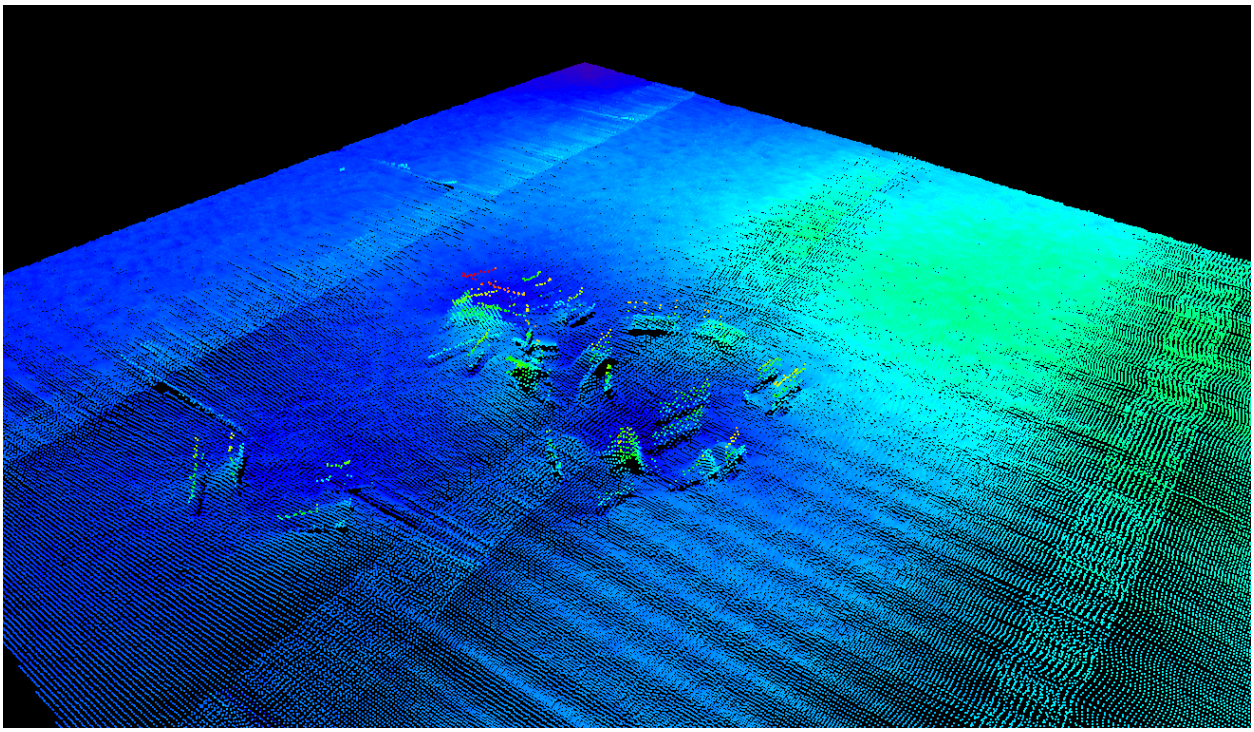

Figure 1.1.2

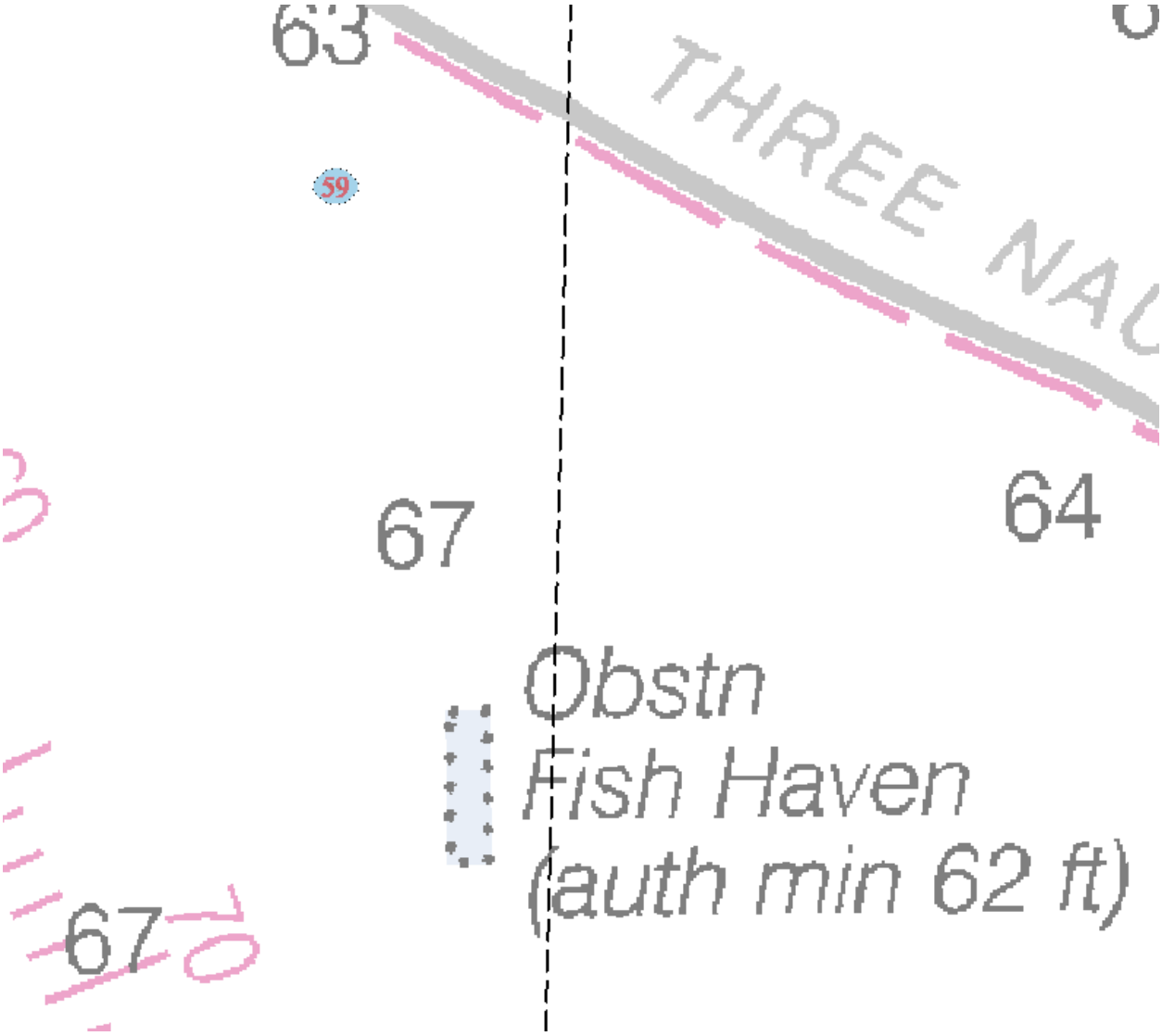

Figure 1.1.3

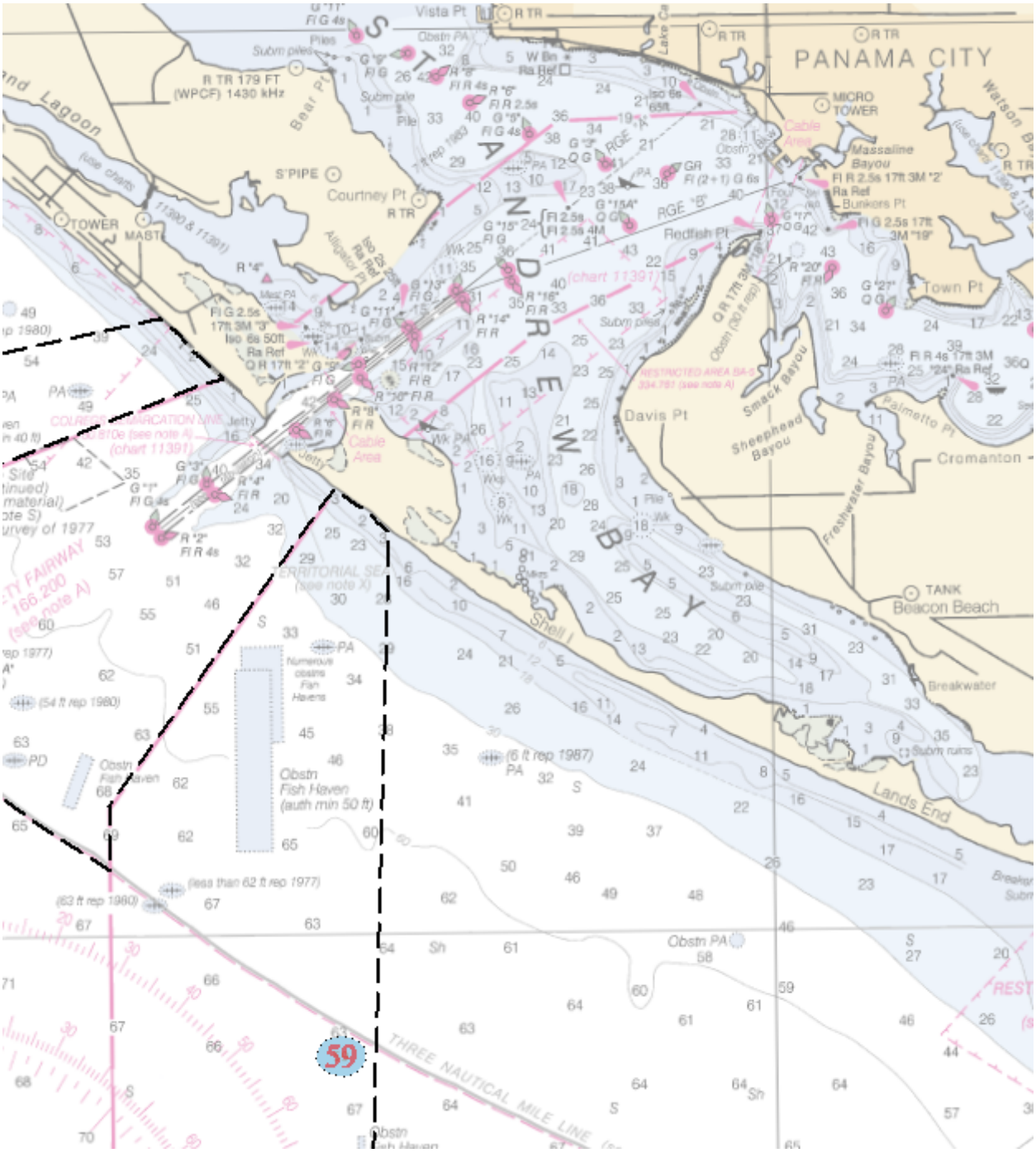
PANAMA CITY
STANDREW BAY
Courtney Pt
Redfish Pt
Town Pt
Davis Pt
Cromanton
Beacon Beach
Lands End
Shell I
Obstn
Fish Haven
(auth min 50 ft)
59
THREE NAUTICAL MILE LINE

Figure 1.1.4

H12718 Dton #2 37ft Obstruction

Registry Number: H12718
State: Florida
Locality: Guld of Mexico
Sub-locality: 7nm S of St Andrews Bay
Project Number: OPR-J357-KR-14
Survey Date: 01/28/2015

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
11391	25th	01/01/2013	1:25,000 (11391_1)	USCG LNM: 11/11/2014 (11/11/2014) NGA NTM: 12/12/2009 (11/29/2014)
11389	34th	06/01/2011	1:80,000 (11389_1)	USCG LNM: 9/2/2014 (11/11/2014) NGA NTM: 10/17/2009 (11/29/2014)
11360	43rd	11/01/2008	1:456,394 (11360_1)	[L]NTM: ?
1115A	43rd	11/01/2008	1:456,394 (1115A_1)	[L]NTM: ?
11006	32nd	08/01/2005	1:875,000 (11006_1)	[L]NTM: ?
411	52nd	09/01/2007	1:2,160,000 (411_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	37ft Obstruction	Obstruction	11.45 m	30° 02' 41.1" N	085° 43' 44.9" W	---

1 - Dangers To Navigation

1.1) 37ft Obstruction

DANGER TO NAVIGATION

Survey Summary

Survey Position:	30° 02' 41.1" N, 085° 43' 44.9" W
Least Depth:	11.45 m (= 37.56 ft = 6.260 fm = 6 fm 1.56 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2015-028.22:58:55.000 (01/28/2015)
Dataset:	H12718_DtoN2_AHB.000
FOID:	US 0000001788 00001(0226000006FC0001)
Charts Affected:	11391_1, 11389_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

OBSTRN/remrks: H12718 DTON 02 is an uncharted obstruction. Least depth was determined using preliminary tides.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12718_DtoN2_AHB.000	US 0000001788 00001	0.00	000.0	Primary

Hydrographer Recommendations

Hydrographer recommends charting obstruction with updated location and least depth.

Cartographically-Rounded Depth (Affected Charts):

37ft (11391_1, 11389_1)

6 ¼fm (1115A_1, 11360_1, 11006_1, 411_1)

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	QUASOU - 6:least depth known
	SORDAT - 20150128
	SORIND - US,US,graph,H12718
	TECSOU - 3:found by multi-beam

VALSOU - 11.449 m

WATLEV - 3:always under water/submerged

Office Notes

This danger submission is preliminary. No data has been provided to AHB for verification. Feature will be reviewed and verified once the survey data has been submitted. All depths have been corrected to chart datum MLLW. The horizontal datum is NAD83.

Feature Images

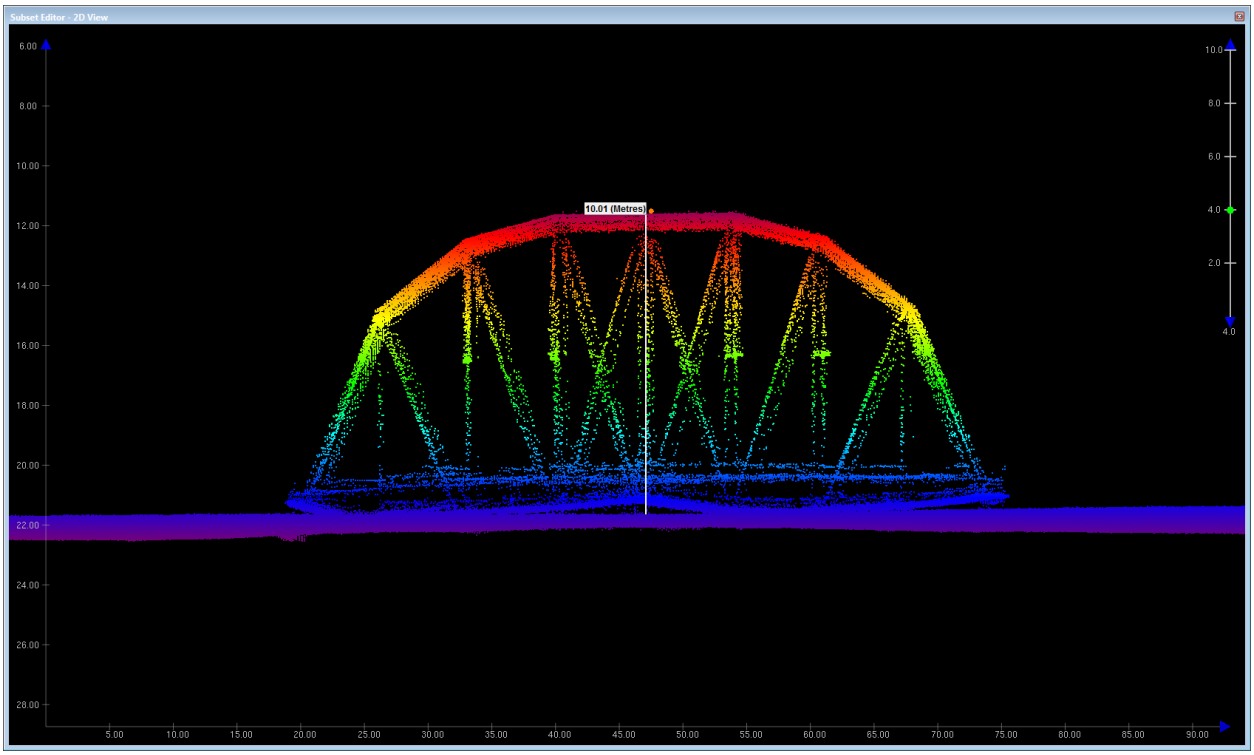

Figure 1.1.1

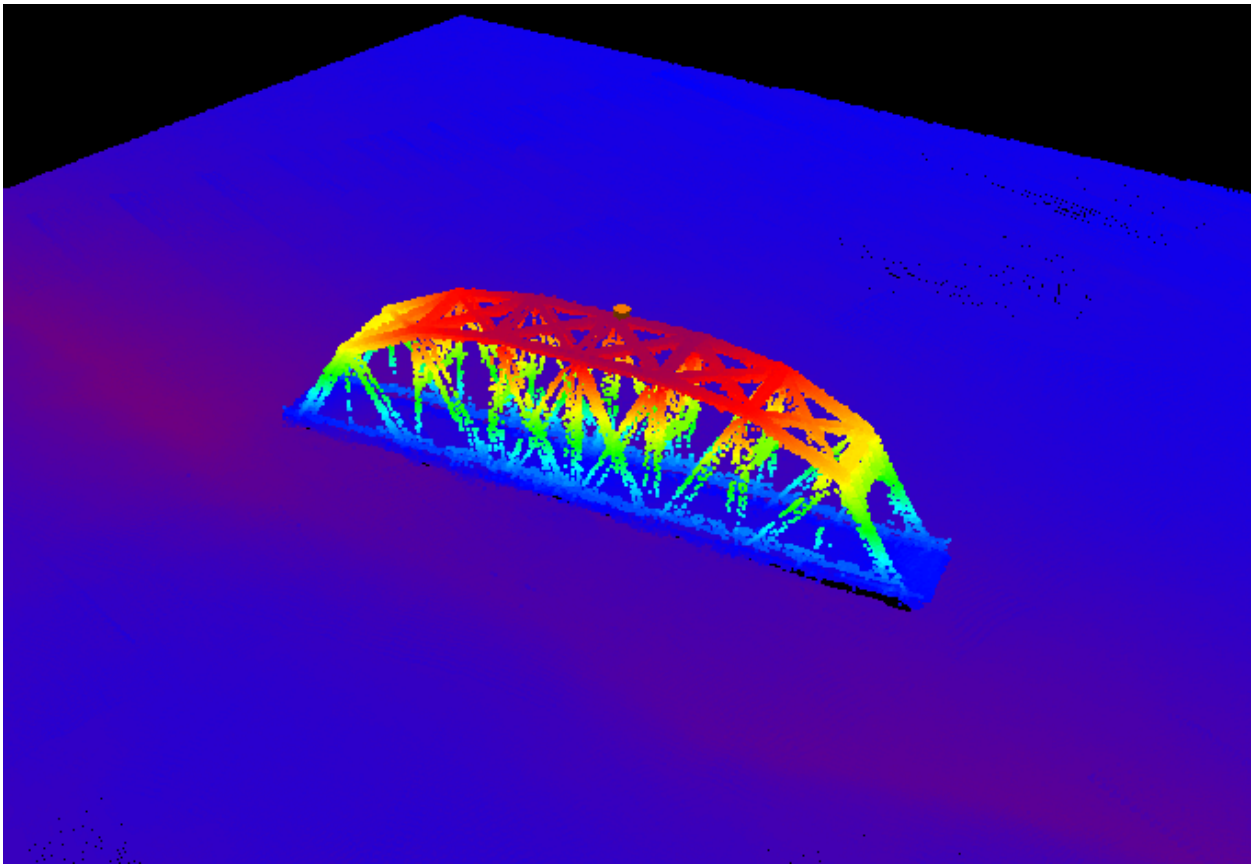

Figure 1.1.2

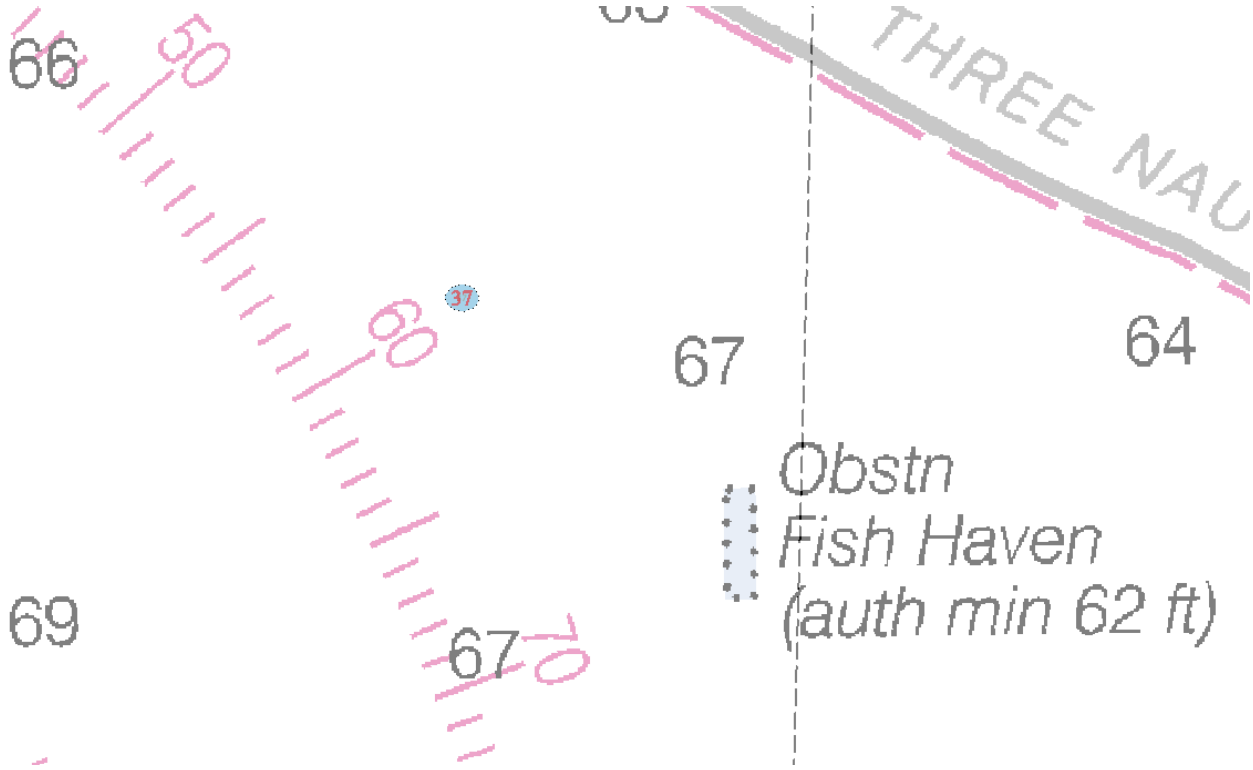

Figure 1.1.3

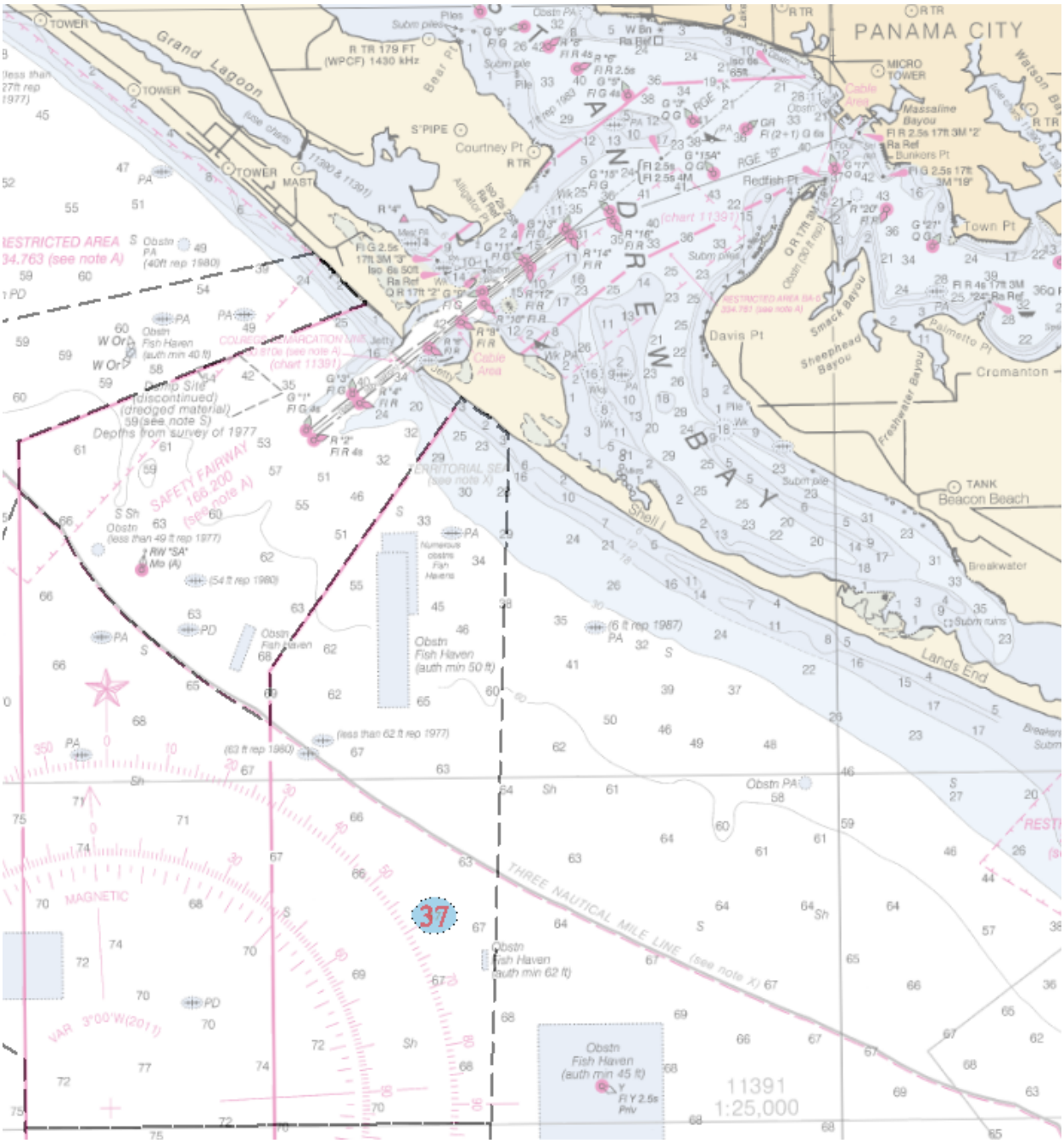
PANAMA CITY
Grand Lagoon
Courtney Pt
Redfish Pt
Davis Pt
Town Pt
Cremanton
Beacon Beach
Lands End
Massalina Bayou
Smack Bayou
Sheephead Bayou
Freshwater Bayou
Palmetto Pt
Bunkers Pt
Breakwater
Shell I
37
THREE NAUTICAL MILE LINE (see note X)
SAFETY FAIRWAY 166.200 (see note A)
Obstn Fish Haven (auth min 50 ft)
Obstn Fish Haven (auth min 62 ft)
Obstn Fish Haven (auth min 45 ft)
Dumping Site (discontinued) (dredged material) 59(see note S)
Depths from survey of 1977
MAGNETIC
VAR 3°00'W(2011)
11391
1:25,000

Figure 1.1.4

H12718 Dton #3 52ft Obstruction

Registry Number: H12718
State: Florida
Locality: Guld of Mexico
Sub-locality: 7nm S of St Andrews Bay
Project Number: OPR-J357-KR-14
Survey Date: 01/30/2015

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
11391	25th	01/01/2013	1:25,000 (11391_1)	USCG LNM: 11/11/2014 (11/11/2014) NGA NTM: 12/12/2009 (11/29/2014)
11389	34th	06/01/2011	1:80,000 (11389_1)	USCG LNM: 9/2/2014 (11/11/2014) NGA NTM: 10/17/2009 (11/29/2014)
11360	43rd	11/01/2008	1:456,394 (11360_1)	[L]NTM: ?
1115A	43rd	11/01/2008	1:456,394 (1115A_1)	[L]NTM: ?
11006	32nd	08/01/2005	1:875,000 (11006_1)	[L]NTM: ?
411	52nd	09/01/2007	1:2,160,000 (411_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	52ft Obstruction	Obstruction	15.90 m	30° 02' 11.7" N	085° 43' 41.8" W	---

1 - Dangers To Navigation

1.1) 52ft Obstruction

DANGER TO NAVIGATION

Survey Summary

Survey Position:	30° 02' 11.7" N, 085° 43' 41.8" W
Least Depth:	15.90 m (= 52.18 ft = 8.697 fm = 8 fm 4.18 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2015-030.18:38:24.000 (01/30/2015)
Dataset:	H12718_DtoN3_AHB.000
FOID:	US 0000001941 00001(0226000007950001)
Charts Affected:	11391_1, 11389_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

OBSTRN/remrks: H12718 DTON 03 is an uncharted obstruction. Least depth was determined using preliminary tides.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12718_DtoN3_AHB.000	US 0000001941 00001	0.00	000.0	Primary

Hydrographer Recommendations

Hydrographer recommends charting obstruction with updated location and least depth.

Cartographically-Rounded Depth (Affected Charts):

52ft (11391_1, 11389_1)

8 ¾fm (1115A_1, 11360_1, 11006_1, 411_1)

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	NATCON - 7:metal
	QUASOU - 6:least depth known
	SORDAT - 20150130
	SORIND - US,US,graph,H12718

TECSOU - 3:found by multi-beam

VALSOU - 15.905 m

WATLEV - 3:always under water/submerged

Office Notes

This danger submission is preliminary. No data has been provided to AHB for verification. Feature will be reviewed and verified once the survey data has been submitted. All depths have been corrected to chart datum MLLW. The horizontal datum is NAD83.

Feature Images

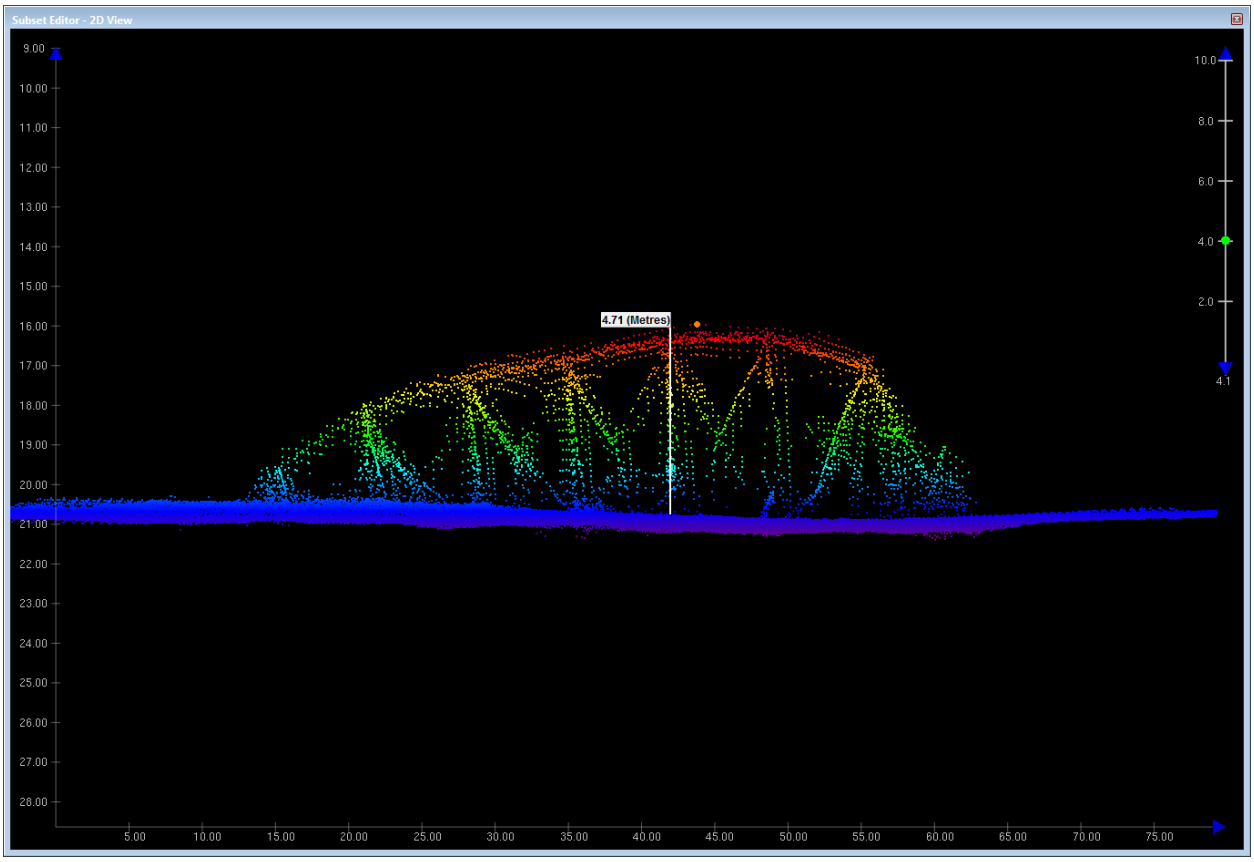

Figure 1.1.1

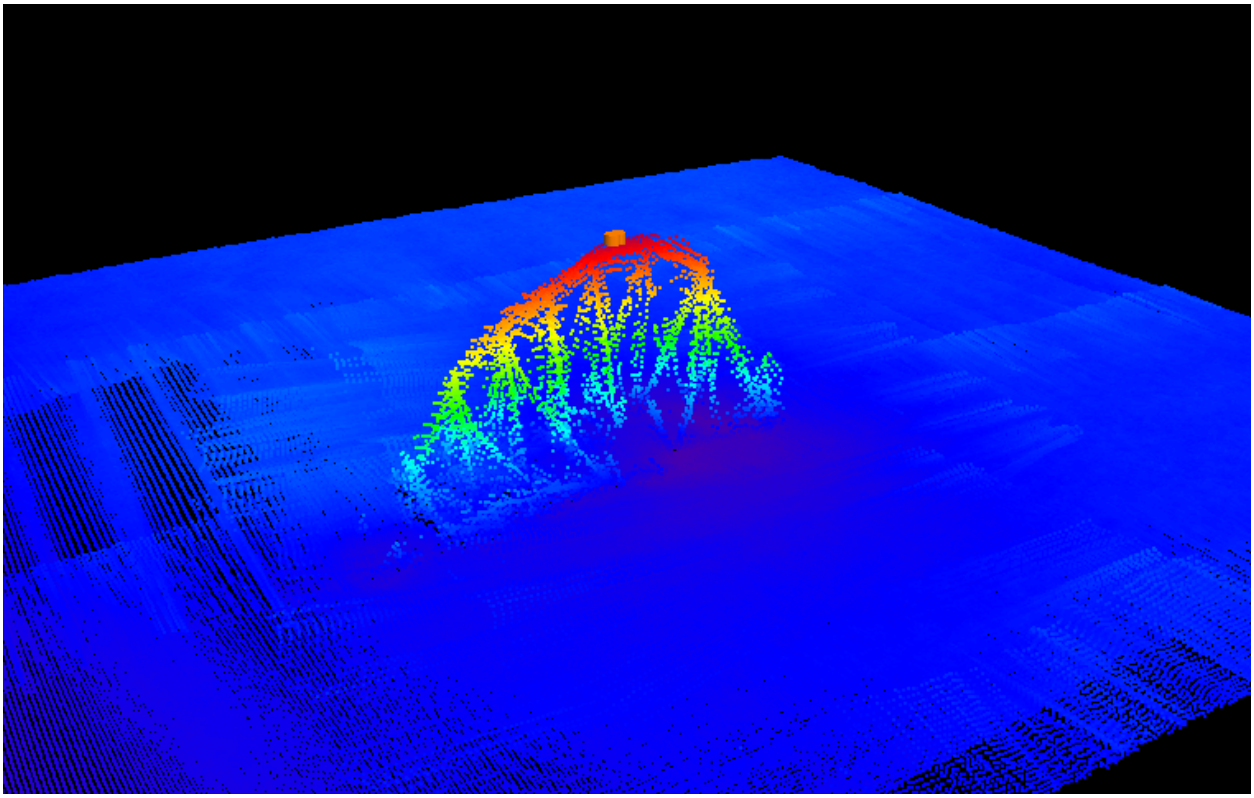

Figure 1.1.2

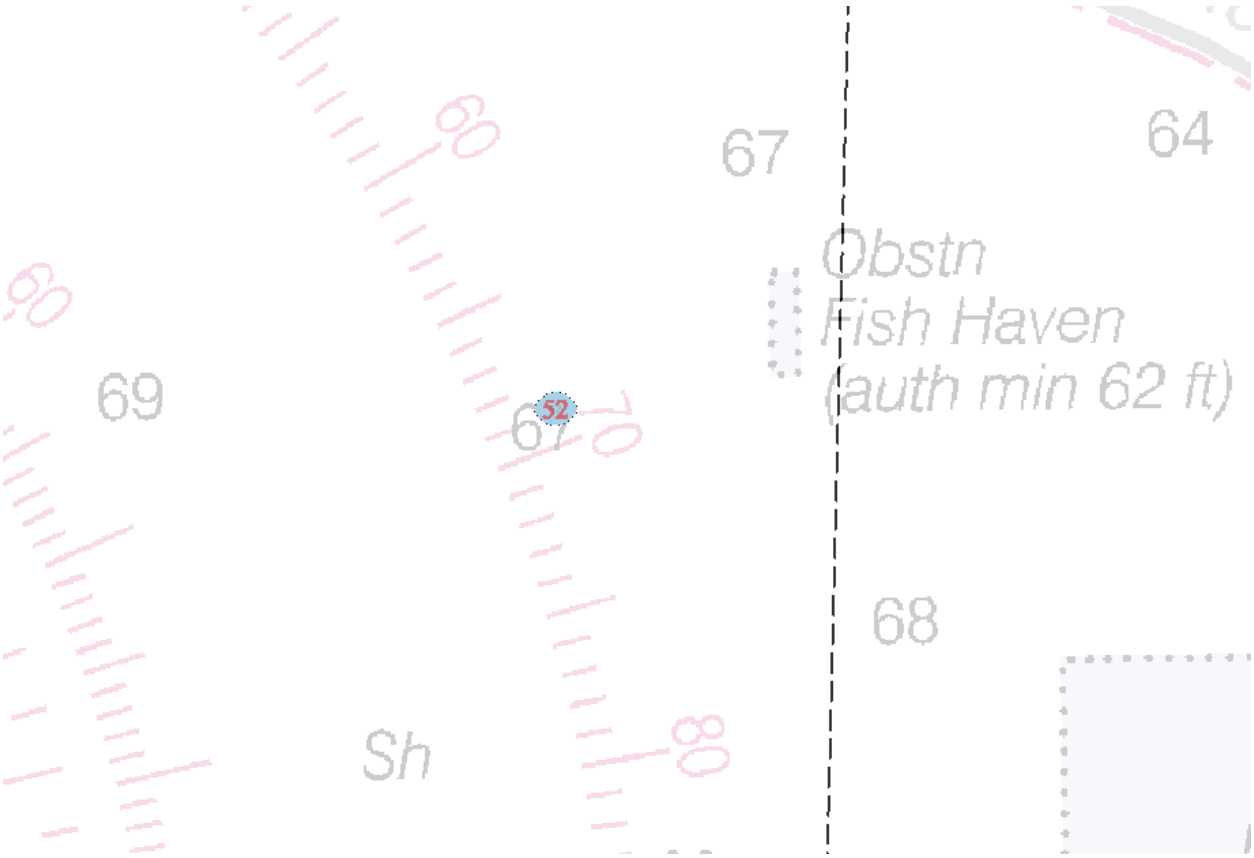

Figure 1.1.3

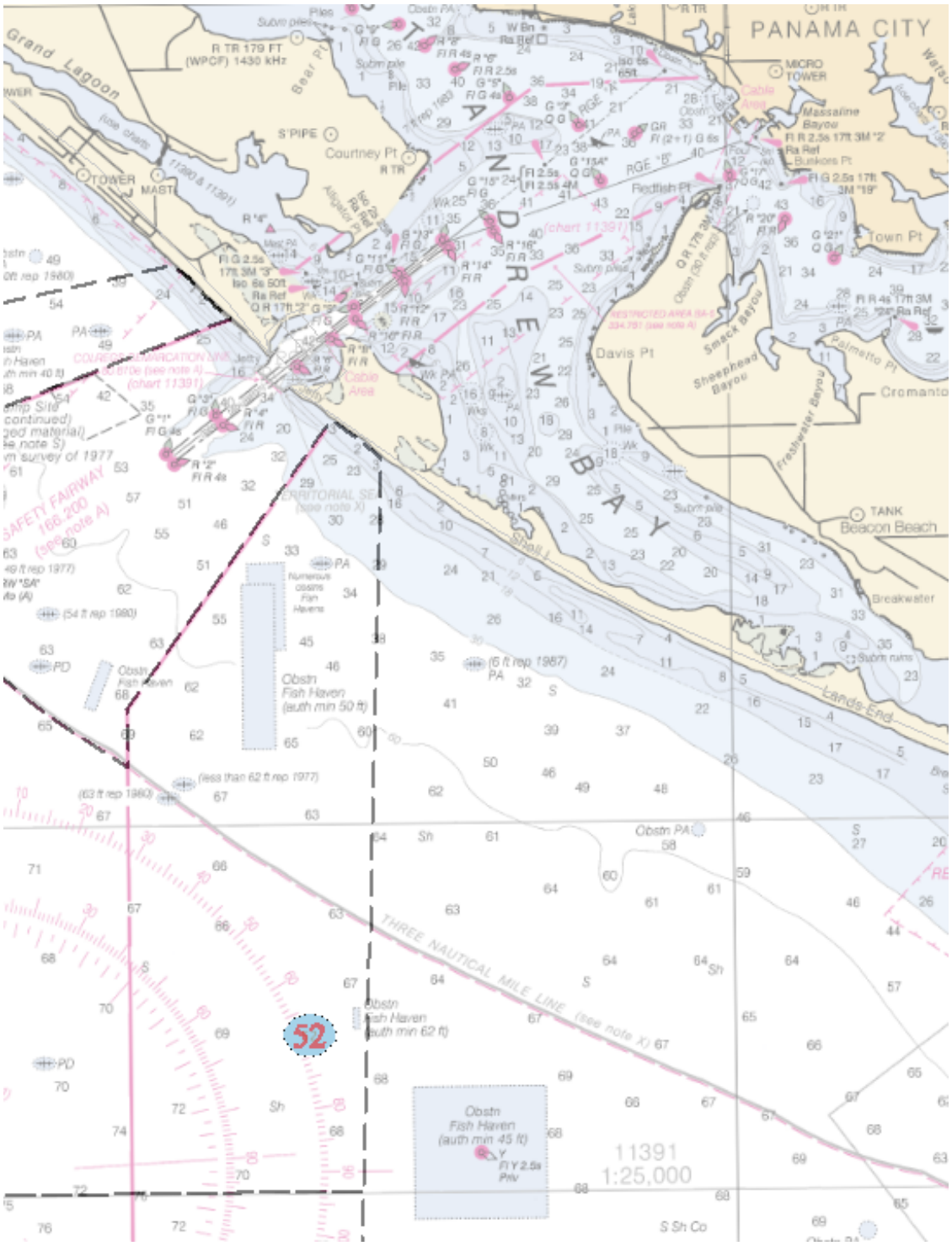
PANAMA CITY
ANDREW BAY
Grand Lagoon
Courtney Pt
Redfish Pt
Davis Pt
Town Pt
Cromanto
Beacon Beach
Breakwater
Lands End
Obstn
Fish Haven
(auth min 50 ft)
Obstn
Fish Haven
(auth min 62 ft)
Obstn
Fish Haven
(auth min 45 ft)
THREE NAUTICAL MILE LINE (see note X)
52
11391
1:25,000

Figure 1.1.4

H12718 DtoN #4 66ft Obstruction

Registry Number: H12718
State: Florida
Locality: Gulf of Mexico
Sub-locality: 7nm S of St Andrews Bay
Project Number: OPR-J357-KR-14
Survey Date: 02/08/2015

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
11391	25th	01/01/2013	1:25,000 (11391_1)	USCG LNM: 11/11/2014 (11/11/2014) NGA NTM: 12/12/2009 (11/29/2014)
11389	34th	06/01/2011	1:80,000 (11389_1)	USCG LNM: 9/2/2014 (11/11/2014) NGA NTM: 10/17/2009 (11/29/2014)
11360	43rd	11/01/2008	1:456,394 (11360_1)	[L]NTM: ?
1115A	43rd	11/01/2008	1:456,394 (1115A_1)	[L]NTM: ?
11006	32nd	08/01/2005	1:875,000 (11006_1)	[L]NTM: ?
411	52nd	09/01/2007	1:2,160,000 (411_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	66ft Obstruction	Obstruction	20.21 m	30° 03' 33.4" N	085° 48' 19.7" W	---

1 - Dangers To Navigation

1.1) 66ft Obstruction

DANGER TO NAVIGATION

Survey Summary

Survey Position:	30° 03' 33.4" N, 085° 48' 19.7" W
Least Depth:	20.21 m (= 66.31 ft = 11.052 fm = 11 fm 0.31 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2015-039.14:50:50.000 (02/08/2015)
Dataset:	H12718_DtoN4_AHB.000
FOID:	US 0000003012 00001(022600000BC40001)
Charts Affected:	11391_1, 11389_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

OBSTRN/remrks: H12718 DTON 04 is an uncharted obstruction. Least depth was determined using preliminary tides.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12718_DtoN4_AHB.000	US 0000003012 00001	0.00	000.0	Primary

Hydrographer Recommendations

Hydrographer recommends charting the new obstruction.

Cartographically-Rounded Depth (Affected Charts):

66ft (11391_1, 11389_1)

11ft (1115A_1, 11360_1, 11006_1, 411_1)

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	QUASOU - 6:least depth known
	SORDAT - 20150208
	SORIND - US,US,graph,H12718
	TECSOU - 3:found by multi-beam

VALSOU - 20.212 m

WATLEV - 3:always under water/submerged

Office Notes

This danger submission is preliminary. No data has been provided to AHB for verification. Feature will be reviewed and verified once the survey data has been submitted. All depths have been corrected to chart datum MLLW. The horizontal datum is NAD83.

Feature Images

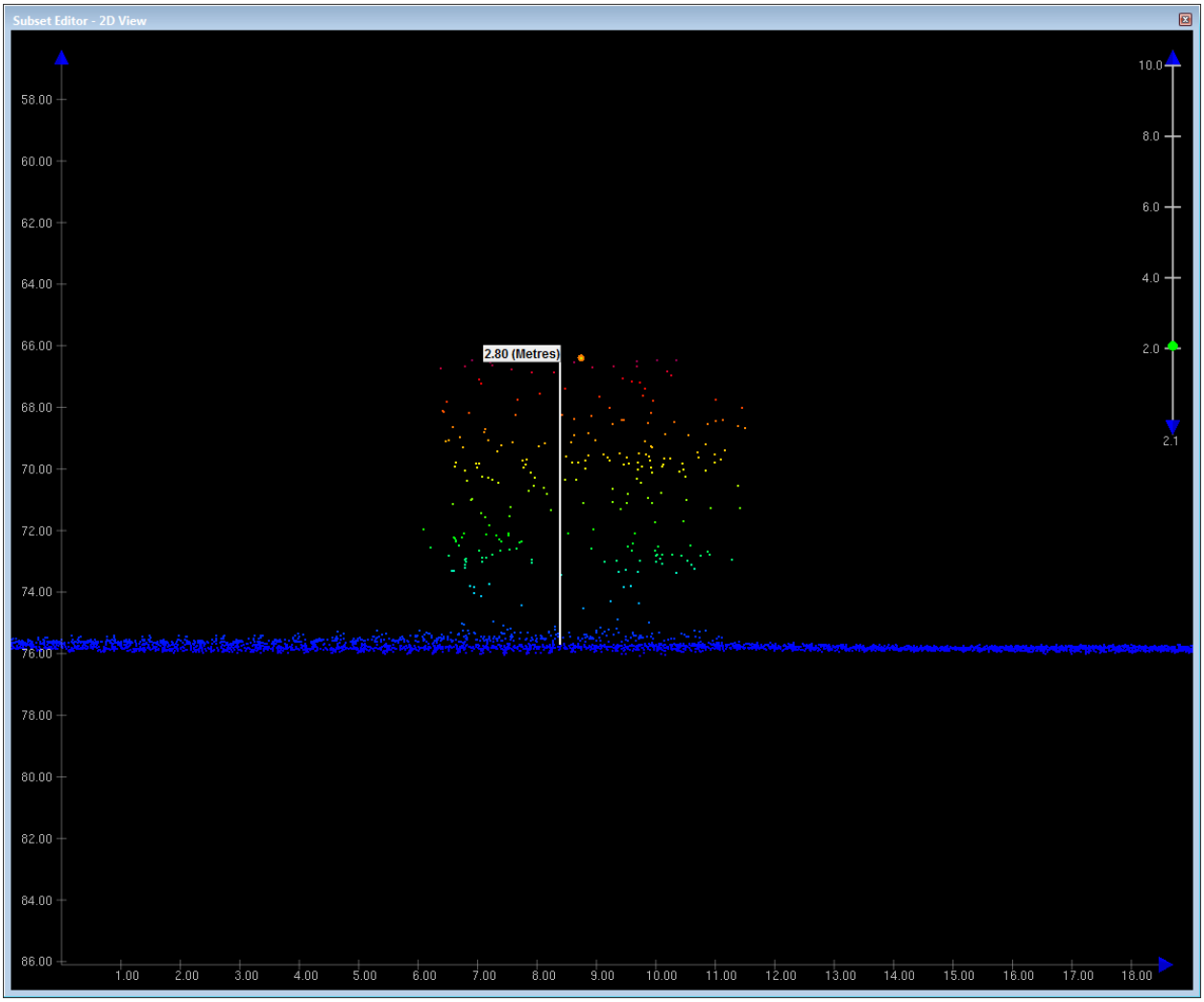

Figure 1.1.1

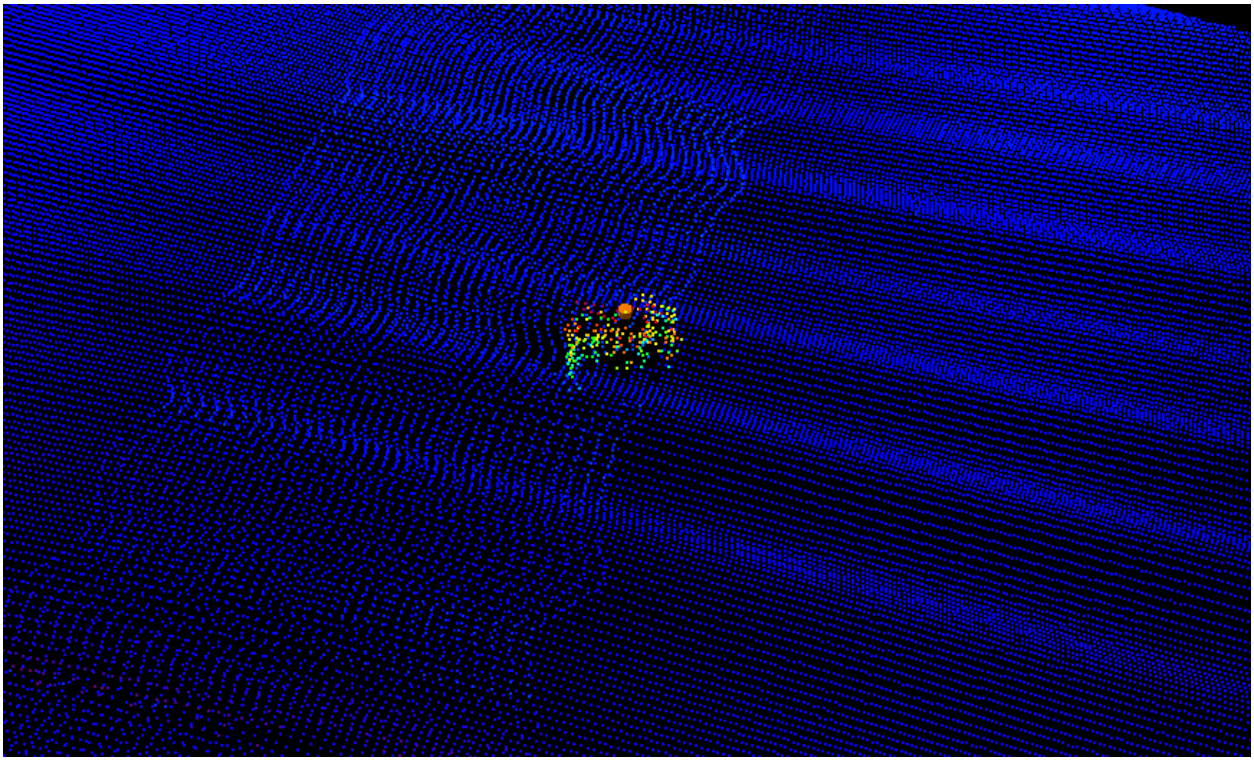

Figure 1.1.2

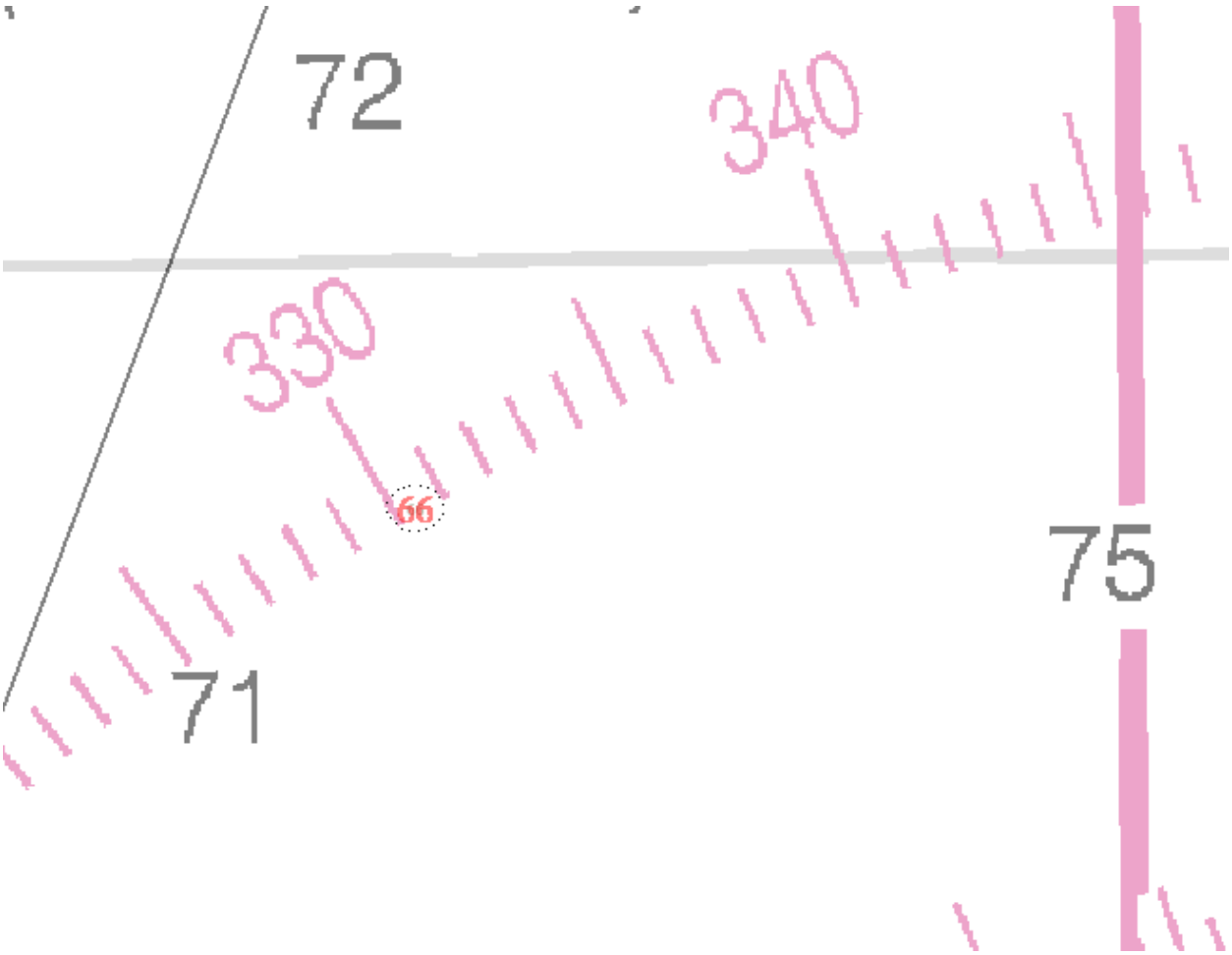

Figure 1.1.3

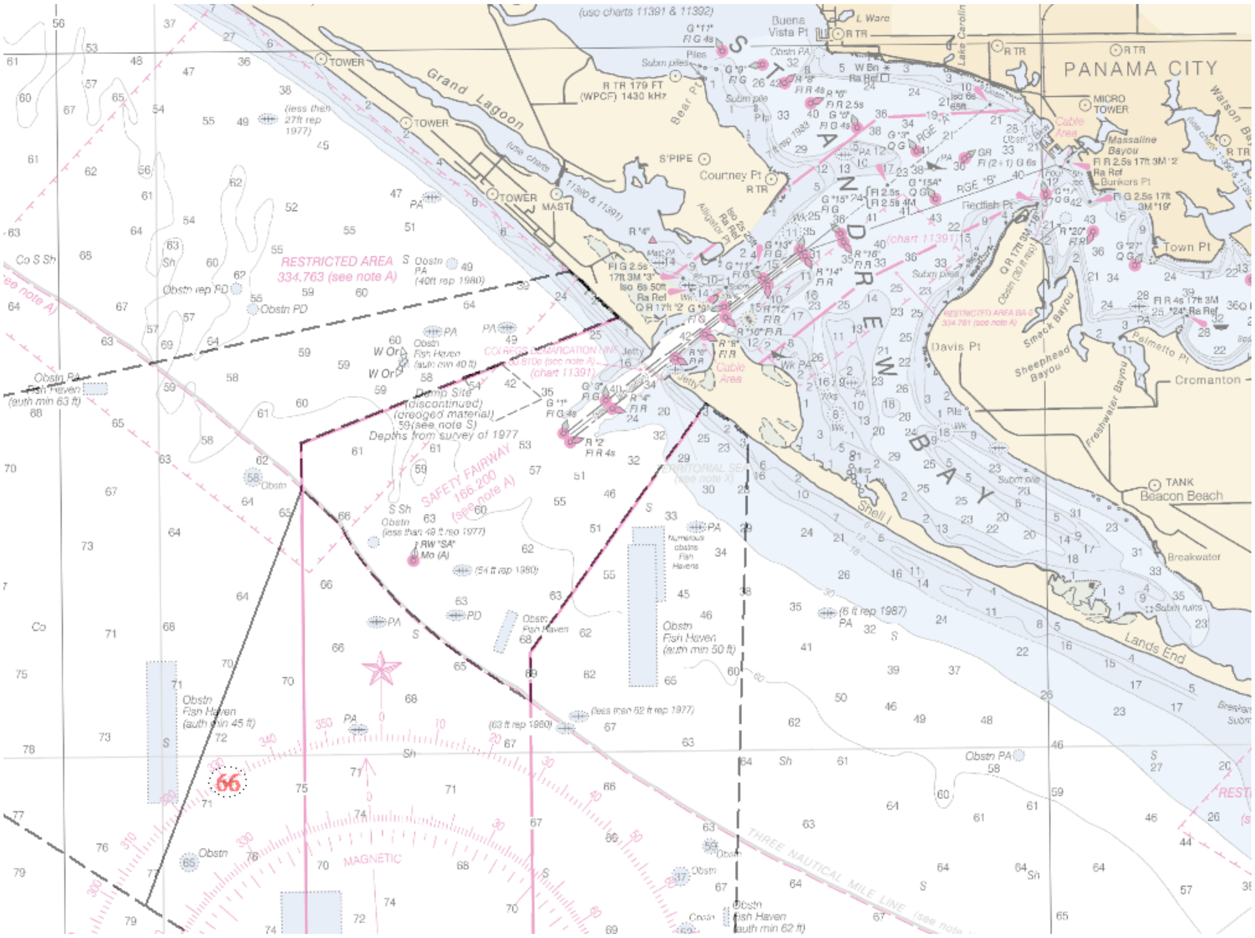
(use charts 11391 & 11392)
Buena Vista Pt
PANAMA CITY
Grand Lagoon
TOWER
MICRO TOWER
Courtney Pt
Redfish Pt
Town Pt
Massaline Bayou
Smack Bayou
Sheephead Bayou
Freshwater Bayou
Palmetto Pt
Cromanton
Davis Pt
TANK
Beacon Beach
Breakwater
Lands End
Shell I
RESTRICTED AREA
334.763 (see note A)
Dump Site
(discontinued)
(dredged material)
(see note S)
Depths from survey of 1977
SAFETY FAIRWAY
166.200
(see note A)
Obstn
Fish Haven
MAGNETIC
THREE NAUTICAL MILE LINE
66

Figure 1.1.4

H12718 DtoN #5 65ft Obstruction

Registry Number: H12718
State: Florida
Locality: Gulf of Mexico
Sub-locality: 7nm S of St Andrews Bay
Project Number: OPR-J357-KR-14
Survey Date: 02/08/2015

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
11391	25th	01/01/2013	1:25,000 (11391_1)	USCG LNM: 11/11/2014 (11/11/2014) NGA NTM: 12/12/2009 (11/29/2014)
11389	34th	06/01/2011	1:80,000 (11389_1)	USCG LNM: 9/2/2014 (11/11/2014) NGA NTM: 10/17/2009 (11/29/2014)
11360	43rd	11/01/2008	1:456,394 (11360_1)	[L]NTM: ?
1115A	43rd	11/01/2008	1:456,394 (1115A_1)	[L]NTM: ?
11006	32nd	08/01/2005	1:875,000 (11006_1)	[L]NTM: ?
411	52nd	09/01/2007	1:2,160,000 (411_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	65ft Obstruction	Obstruction	19.84 m	30° 01' 32.2" N	085° 45' 10.3" W	---

1 - Dangers To Navigation

1.1) 65ft Obstruction

DANGER TO NAVIGATION

Survey Summary

Survey Position:	30° 01' 32.2" N, 085° 45' 10.3" W
Least Depth:	19.84 m (= 65.09 ft = 10.848 fm = 10 fm 5.09 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2015-039.21:50:54.000 (02/08/2015)
Dataset:	H12718_DtoN5_AHB.000
FOID:	US 0000003063 00001(022600000BF70001)
Charts Affected:	11391_1, 11389_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

OBSTRN/remrks: H12718 DTON 05 is an uncharted obstruction. Least depth was determined using preliminary observed water levels.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12718_DtoN5_AHB.000	US 0000003063 00001	0.00	000.0	Primary

Hydrographer Recommendations

Hydrographer recommends charting the new obstruction.

Cartographically-Rounded Depth (Affected Charts):

65ft (11391_1, 11389_1)

10 ¾fm (1115A_1, 11360_1, 11006_1, 411_1)

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	INFORM - 65ft Obstruction
	QUASOU - 6:least depth known
	SORDAT - 20150208
	SORIND - US,US,graph,H12718

TECSOU - 3:found by multi-beam

VALSOU - 19.839 m

WATLEV - 3:always under water/submerged

Office Notes

This danger submission is preliminary. No data has been provided to AHB for verification. Feature will be reviewed and verified once the survey data has been submitted. All depths have been corrected to chart datum MLLW. The horizontal datum is NAD83.

Feature Images

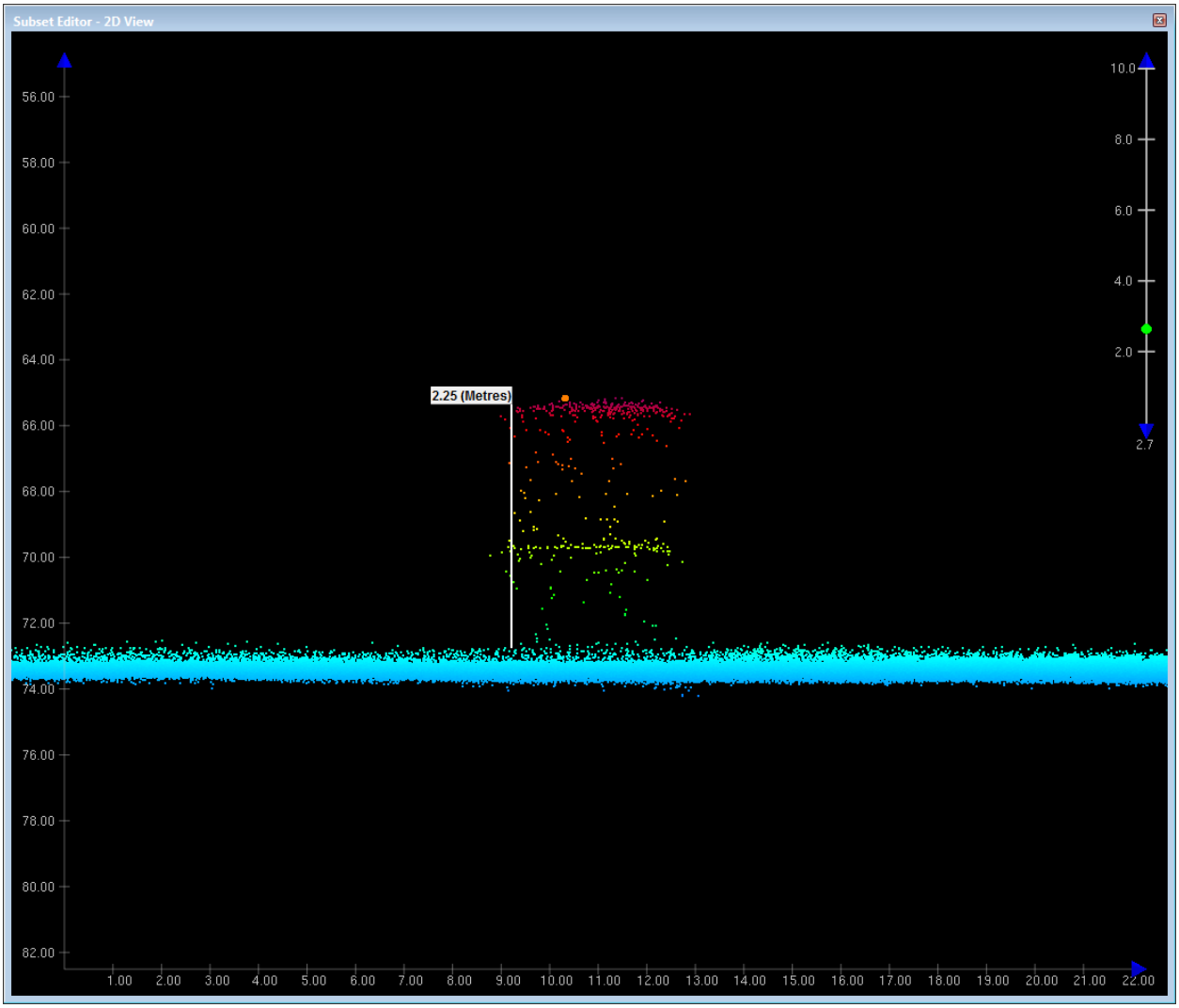

Figure 1.1.1

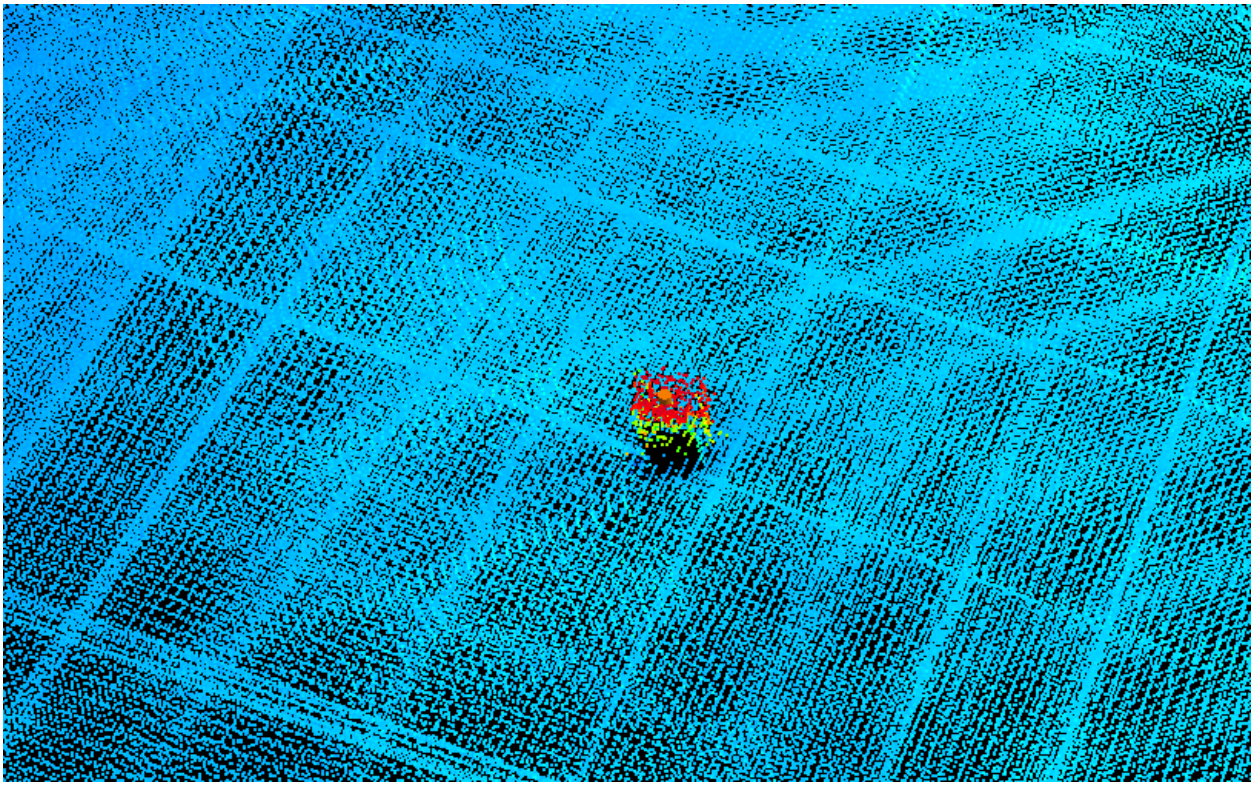

Figure 1.1.2

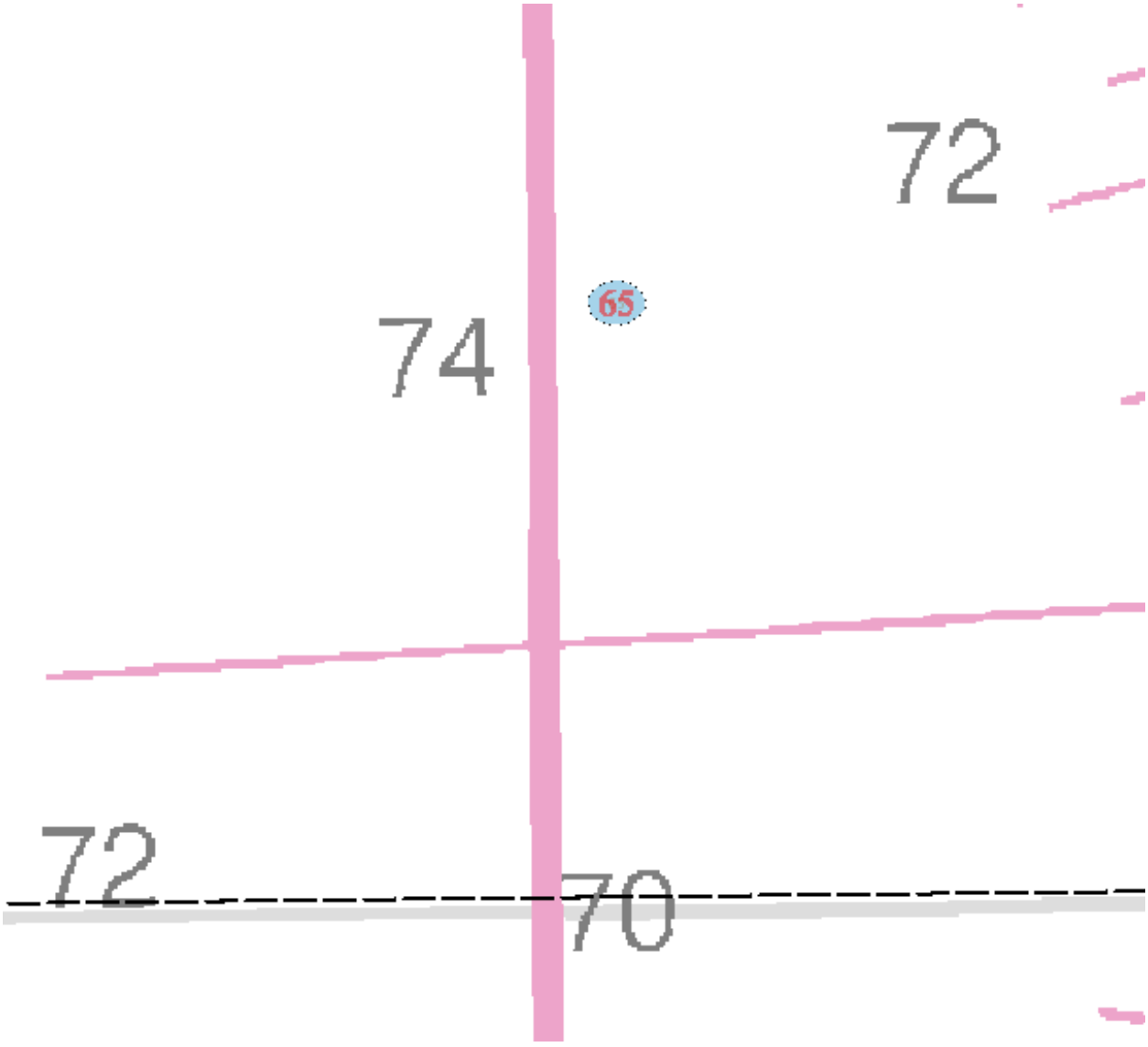

Figure 1.1.3

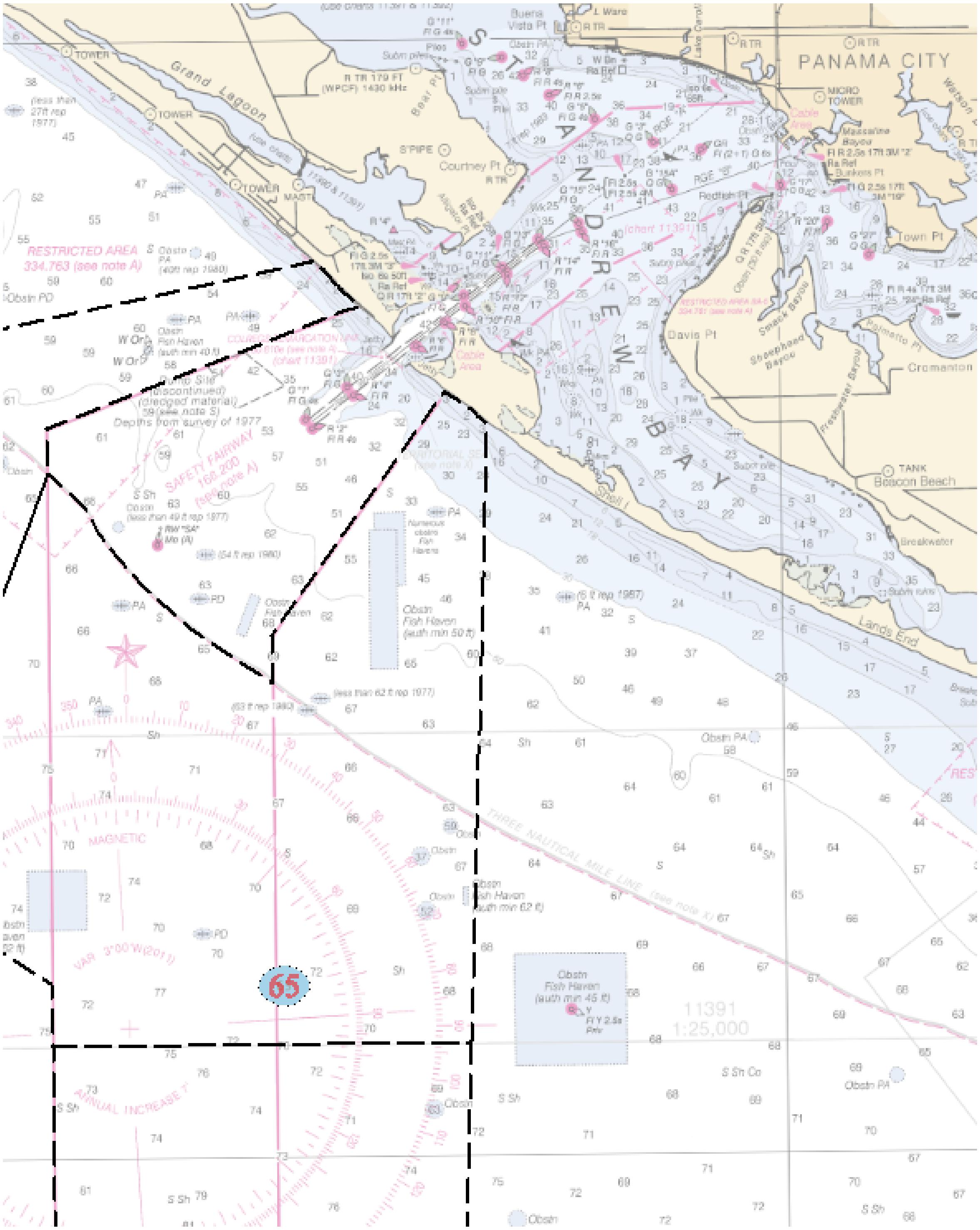
PANAMA CITY
ST ANDREW BAY
Grand Lagoon
Courtney Pt
Davis Pt
Cromanton
Beacon Beach
Lands End
Town Pt
RESTRICTED AREA 334.763 (see note A)
SAFETY FAIRWAY 166.200 (see note A)
Depths from survey of 1977
Obstn Fish Haven (auth min 45 ft)
THREE NAUTICAL MILE LINE (see note X)
MAGNETIC
VAR 3°00'W(2011)
ANNUAL INCREASE 7'
65
11391
1:25,000

Figure 1.1.4

H12718 DtoNs #6 through #11

Registry Number: H12718
State: Florida
Locality: Gulf of Mexico
Sub-locality: 7nm S of St Andrews Bay
Project Number: OPR-J357-KR-14
Survey Dates: 02/14/2015 - 02/20/2015

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
11391	25th	01/01/2013	1:25,000 (11391_1)	USCG LNM: 11/11/2014 (11/11/2014) NGA NTM: 12/12/2009 (11/29/2014)
11390	25th	10/01/2012	1:40,000 (11390_1)	USCG LNM: 11/11/2014 (11/11/2014) NGA NTM: 12/12/2009 (11/29/2014)
11389	34th	06/01/2011	1:80,000 (11389_1)	USCG LNM: 9/2/2014 (11/11/2014) NGA NTM: 10/17/2009 (11/29/2014)
11360	43rd	11/01/2008	1:456,394 (11360_1)	[L]NTM: ?
1115A	43rd	11/01/2008	1:456,394 (1115A_1)	[L]NTM: ?
11006	32nd	08/01/2005	1:875,000 (11006_1)	[L]NTM: ?
411	52nd	09/01/2007	1:2,160,000 (411_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	46ft Obstruction	Obstruction	14.17 m	30° 04' 58.0" N	085° 44' 06.4" W	---
1.2	52ft Obstruction	Obstruction	16.05 m	30° 04' 50.1" N	085° 43' 50.3" W	---
1.3	64ft Obstruction	Obstruction	19.45 m	30° 02' 40.4" N	085° 43' 31.1" W	---
1.4	62ft Obstruction	Obstruction	19.11 m	30° 02' 34.4" N	085° 43' 24.6" W	---
1.5	44ft Obstruction	Obstruction	13.42 m	30° 04' 56.8" N	085° 43' 21.6" W	---
1.6	40ft Obstruction	Obstruction	12.42 m	30° 05' 02.7" N	085° 43' 18.1" W	---

1 - Dangers To Navigation

1.1) 46ft Obstruction

DANGER TO NAVIGATION

Survey Summary

Survey Position:	30° 04' 58.0" N, 085° 44' 06.4" W
Least Depth:	14.17 m (= 46.48 ft = 7.746 fm = 7 fm 4.48 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2015-047.20:42:59.000 (02/16/2015)
Dataset:	H12718_DtoN6-11_AHB.000
FOID:	US 0002941025 00001(0226002CE0610001)
Charts Affected:	11391_1, 11390_1, 11389_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

OBSTRN/remrks: H12718 DTON 11 is an uncharted obstruction. Least depth was determined using preliminary water levels.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12718_DtoN6-11_AHB.000	US 0002941025 00001	0.00	000.0	Primary

Hydrographer Recommendations

Hydrographer recommends charting the new obstruction.

Cartographically-Rounded Depth (Affected Charts):

46ft (11391_1, 11390_1, 11389_1)

7 ¾fm (1115A_1, 11360_1, 11006_1, 411_1)

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	QUASOU - 6:least depth known
	SORDAT - 20150216
	SORIND - US,US,graph,H12718
	TECSOU - 3:found by multi-beam

VALSOU - 14.166 m

WATLEV - 3:always under water/submerged

Office Notes

This danger submission is preliminary. No data has been provided to AHB for verification. Feature will be reviewed and verified once the survey data has been submitted. All depths have been corrected to chart datum MLLW. The horizontal datum is NAD83.

This feature is shoaler than the charted fish haven's authorized minimum depth of 50ft.

Feature Images

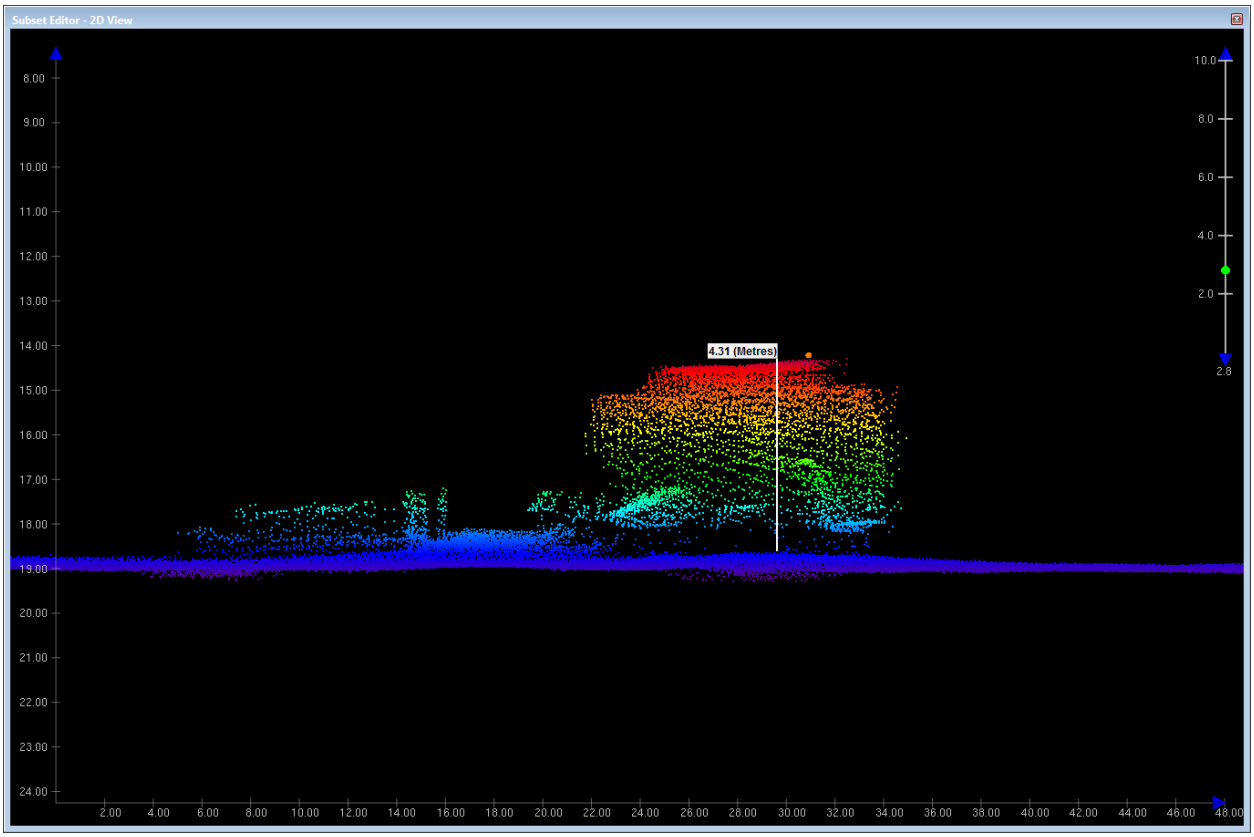

Figure 1.1.1

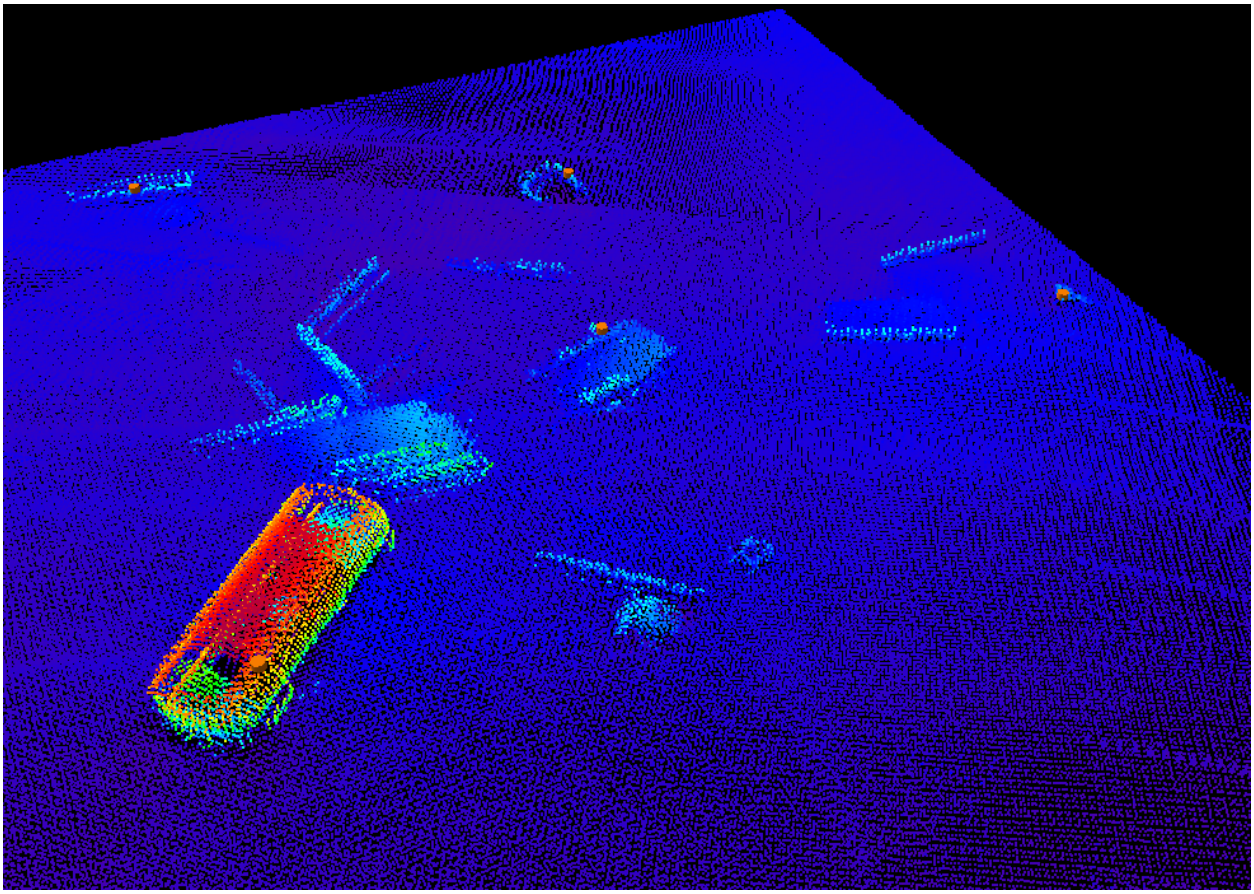

Figure 1.1.2

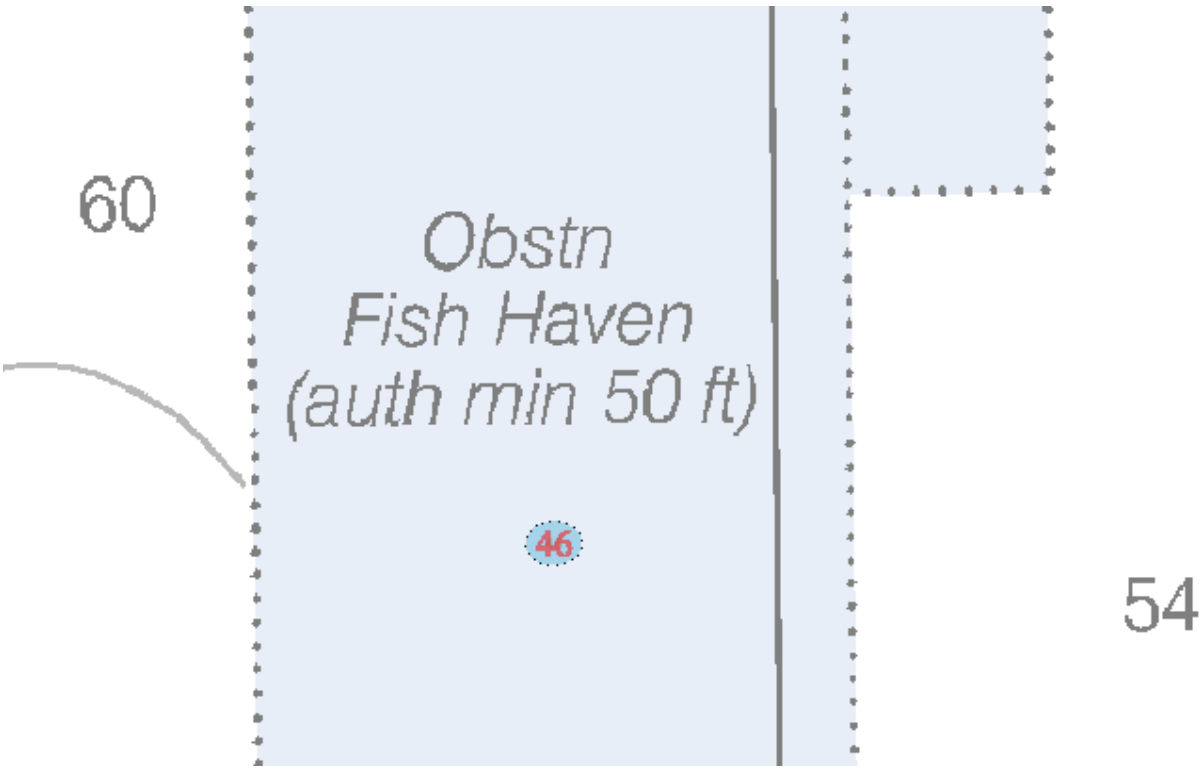

Figure 1.1.3

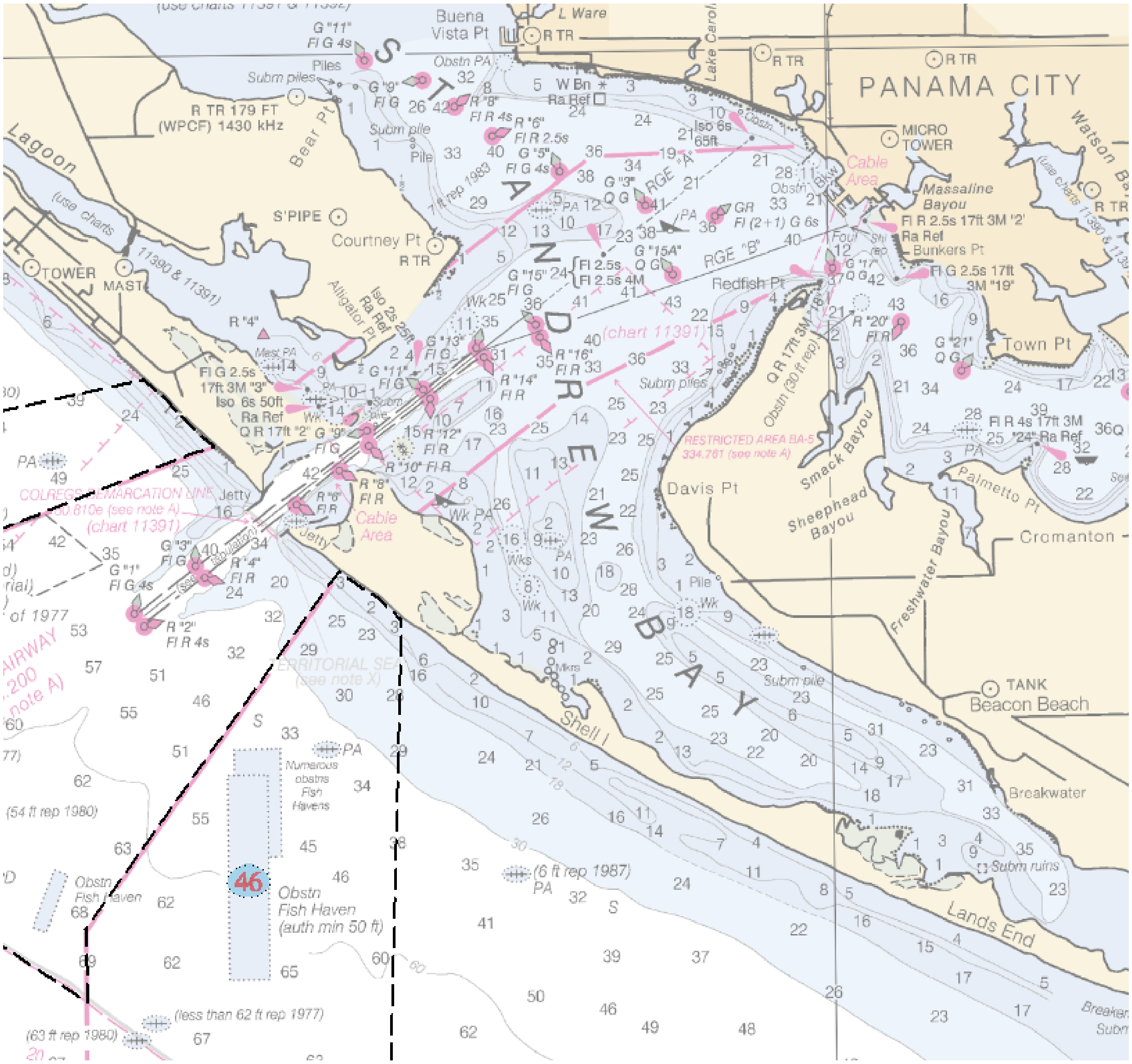
Buena Vista Pt
PANAMA CITY
MICRO TOWER
Massaline Bayou
Bunkers Pt
Redfish Pt
Town Pt
Courtney Pt
Bear Pt
Lagoon
S'PIPE
TOWER
MAST
Alligator Pt
R TR 179 FT (WPCF) 1430 kHz
Lake Caroline
Davis Pt
Smack Bayou
Sheephead Bayou
Palmetto Pt
Cromanton
Freshwater Bayou
TANK
Beacon Beach
Breakwater
Lands End
Shell I
ST ANDREW BAY
RESTRICTED AREA BA-5 334.781 (see note A)
COLREGS DEMARCATION LINE
(chart 11391)
Cable Area
Jetty
Numerous obstns Fish Havens
Obstn Fish Haven (auth min 50 ft)
(less than 62 ft rep 1977)
(63 ft rep 1980)
(54 ft rep 1980)
(6 ft rep 1987)
Subm ruins
Subm piles
46

Figure 1.1.4

1.2) 52ft Obstruction

DANGER TO NAVIGATION

Survey Summary

Survey Position:	30° 04' 50.1" N, 085° 43' 50.3" W
Least Depth:	16.05 m (= 52.66 ft = 8.777 fm = 8 fm 4.66 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2015-045.14:12:31.000 (02/14/2015)
Dataset:	H12718_DtoN6-11_AHB.000
FOID:	US 0002941022 00001(0226002CE05E0001)
Charts Affected:	11391_1, 11390_1, 11389_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

OBSTRN/remrks: H12718 DTON 08 is an uncharted obstruction. Least depth was determined using preliminary water levels.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12718_DtoN6-11_AHB.000	US 0002941022 00001	0.00	000.0	Primary

Hydrographer Recommendations

Hydrographer recommends charting the new obstruction.

Cartographically-Rounded Depth (Affected Charts):

52ft (11391_1, 11390_1, 11389_1)

8 ¾fm (1115A_1, 11360_1, 11006_1, 411_1)

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	QUASOU - 6:least depth known
	SORDAT - 20150214
	SORIND - US,US,graph,H12718
	TECSOU - 3:found by multi-beam

VALSOU - 16.052 m

WATLEV - 3:always under water/submerged

Office Notes

This danger submission is preliminary. No data has been provided to AHB for verification. Feature will be reviewed and verified once the survey data has been submitted. All depths have been corrected to chart datum MLLW. The horizontal datum is NAD83.

Feature Images

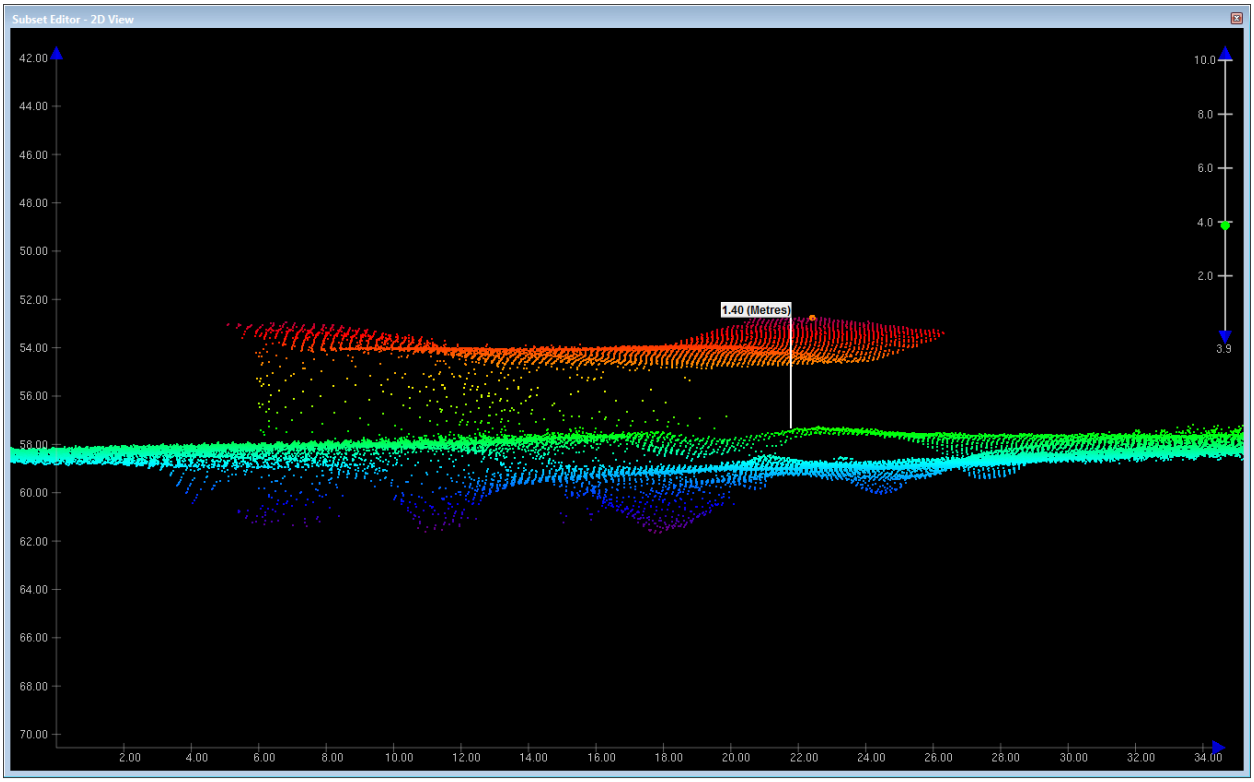

Figure 1.2.1

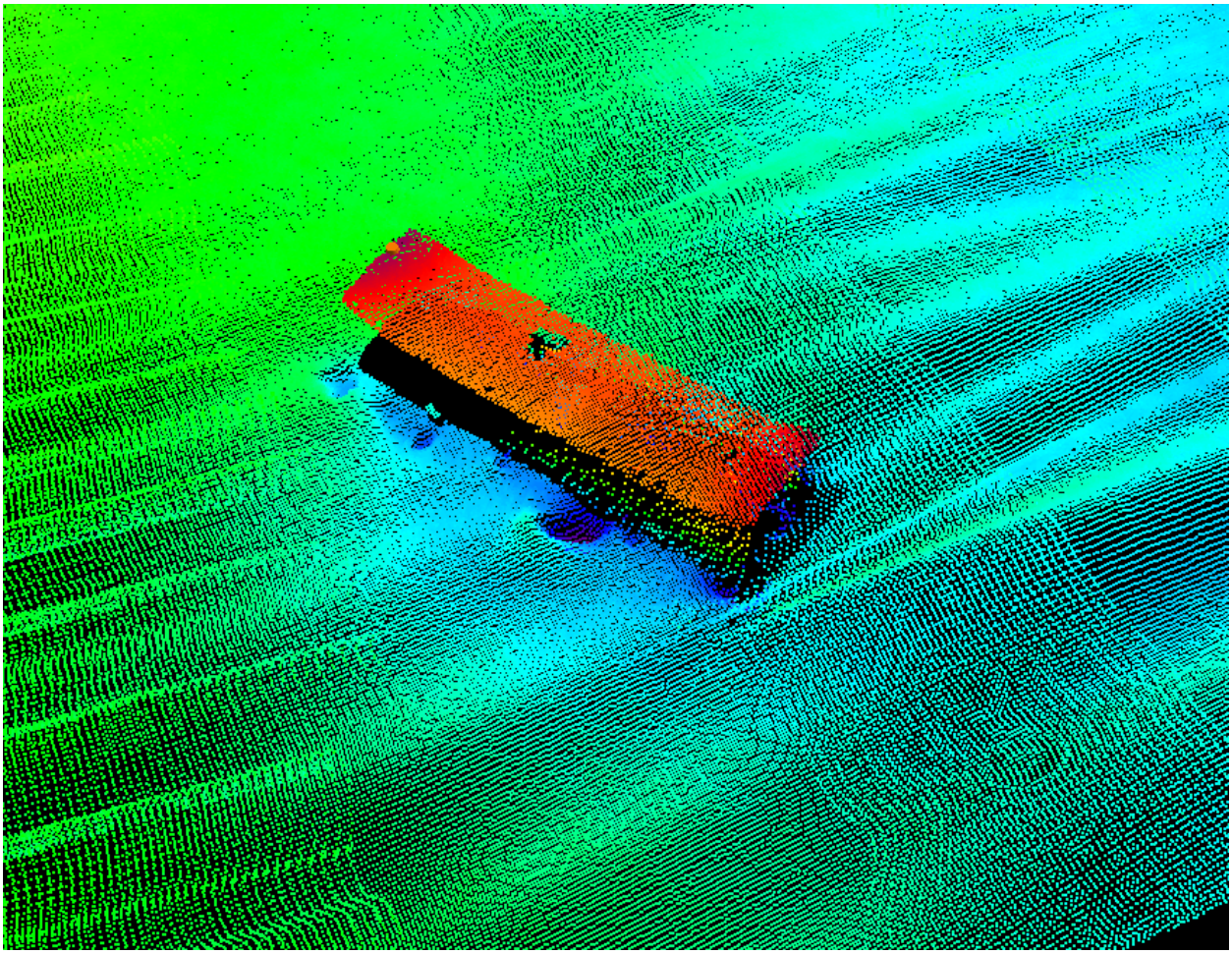

Figure 1.2.2

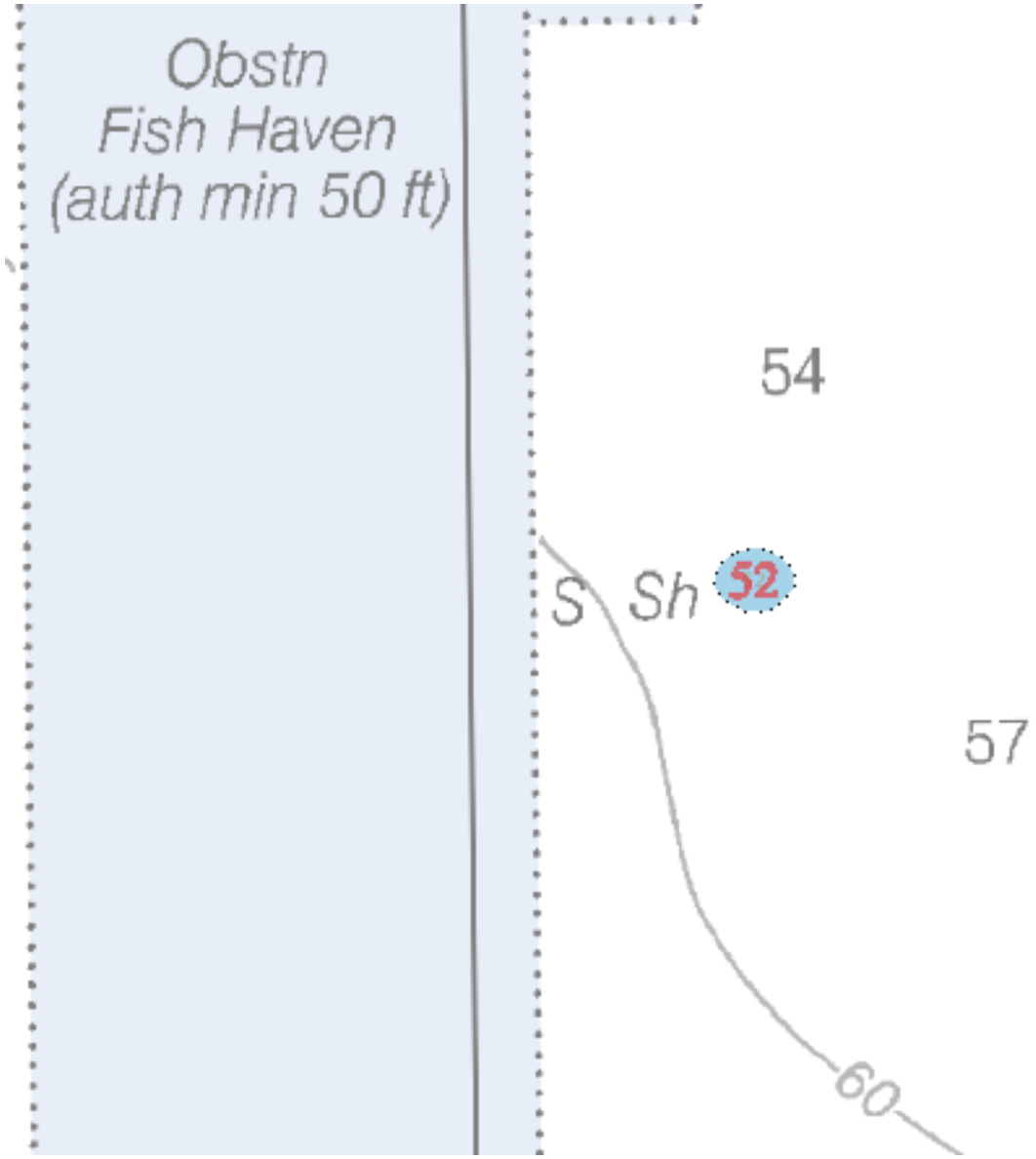

Figure 1.2.3

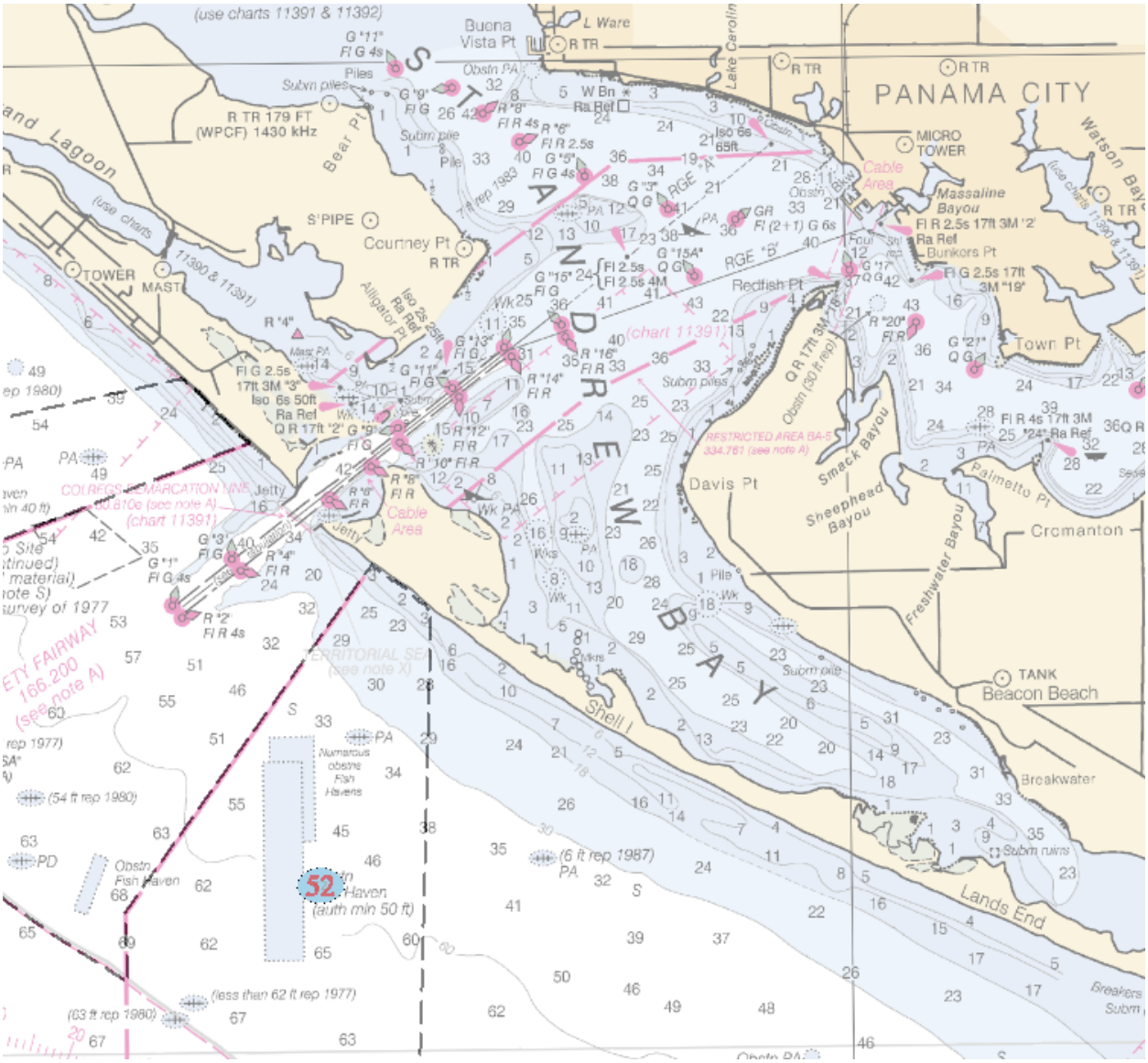
PANAMA CITY
ST ANDREW BAY
Buena Vista Pt
Courtney Pt
S'PIPE
Redfish Pt
Town Pt
Davis Pt
Cromanton
Beacon Beach
Breakwater
Lands End
Shell I
Bear Pt
Alligator Pt
Smack Bayou
Sheephead Bayou
Freshwater Bayou
Massaline Bayou
Bunkers Pt
Palmetto Pt
Watson Bay
MICRO TOWER
TOWER
MAST
TANK
Cable Area
Jetty
Numerous obstns Fish Havens
Haven (auth min 50 ft)
52
(use charts 11391 & 11392)
(use charts 11390 & 11391)
(chart 11391)
(54 ft rep 1980)
(6 ft rep 1987)
(less than 62 ft rep 1977)
(63 ft rep 1980)
Lake Carolin
L Ware
Lagoon

Figure 1.2.4

1.3) 64ft Obstruction

DANGER TO NAVIGATION

Survey Summary

Survey Position:	30° 02' 40.4" N, 085° 43' 31.1" W
Least Depth:	19.45 m (= 63.83 ft = 10.638 fm = 10 fm 3.83 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2015-051.21:27:41.000 (02/20/2015)
Dataset:	H12718_DtoN6-11_AHB.000
FOID:	US 0002941024 00001(0226002CE0600001)
Charts Affected:	11391_1, 11389_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

OBSTRN/remrks: H12718 DTON 10 is an uncharted obstruction. Least depth was determined using preliminary water levels.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12718_DtoN6-11_AHB.000	US 0002941024 00001	0.00	000.0	Primary

Hydrographer Recommendations

Hydrographer recommends charting the new obstruction.

Cartographically-Rounded Depth (Affected Charts):

64ft (11391_1, 11389_1)

10 ½fm (1115A_1, 11360_1, 11006_1, 411_1)

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	QUASOU - 6:least depth known
	SORDAT - 20150220
	SORIND - US,US,graph,H12718
	TECSOU - 3:found by multi-beam

VALSOU - 19.454 m

WATLEV - 3:always under water/submerged

Office Notes

This danger submission is preliminary. No data has been provided to AHB for verification. Feature will be reviewed and verified once the survey data has been submitted. All depths have been corrected to chart datum MLLW. The horizontal datum is NAD83.

Feature Images

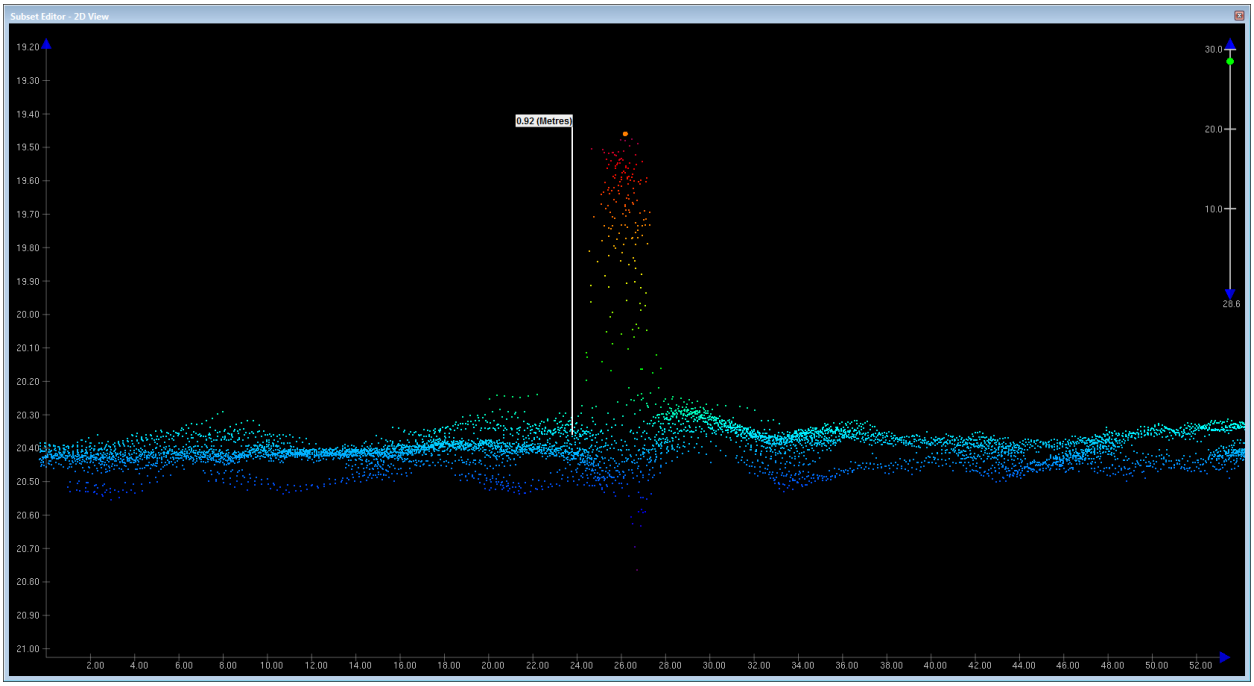

Figure 1.3.1

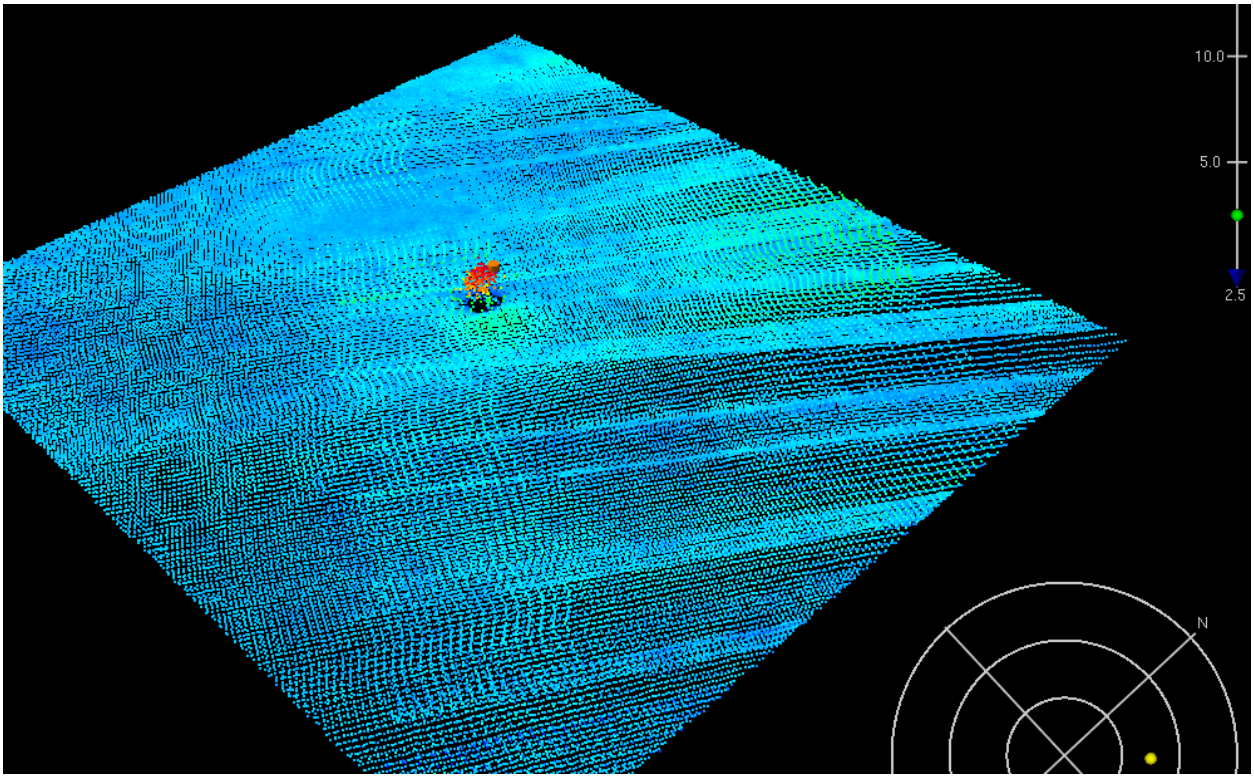

Figure 1.3.2

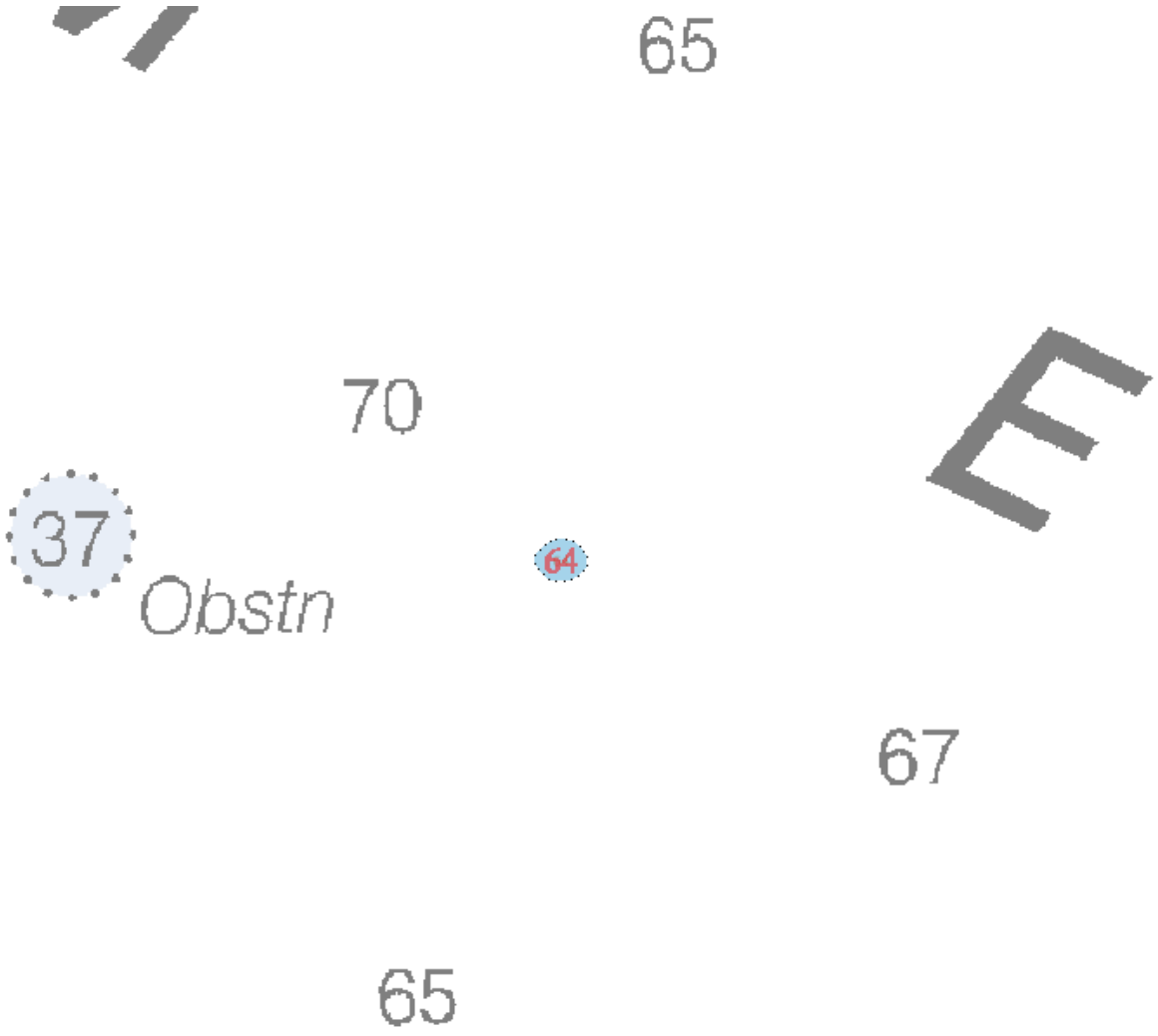

Figure 1.3.3

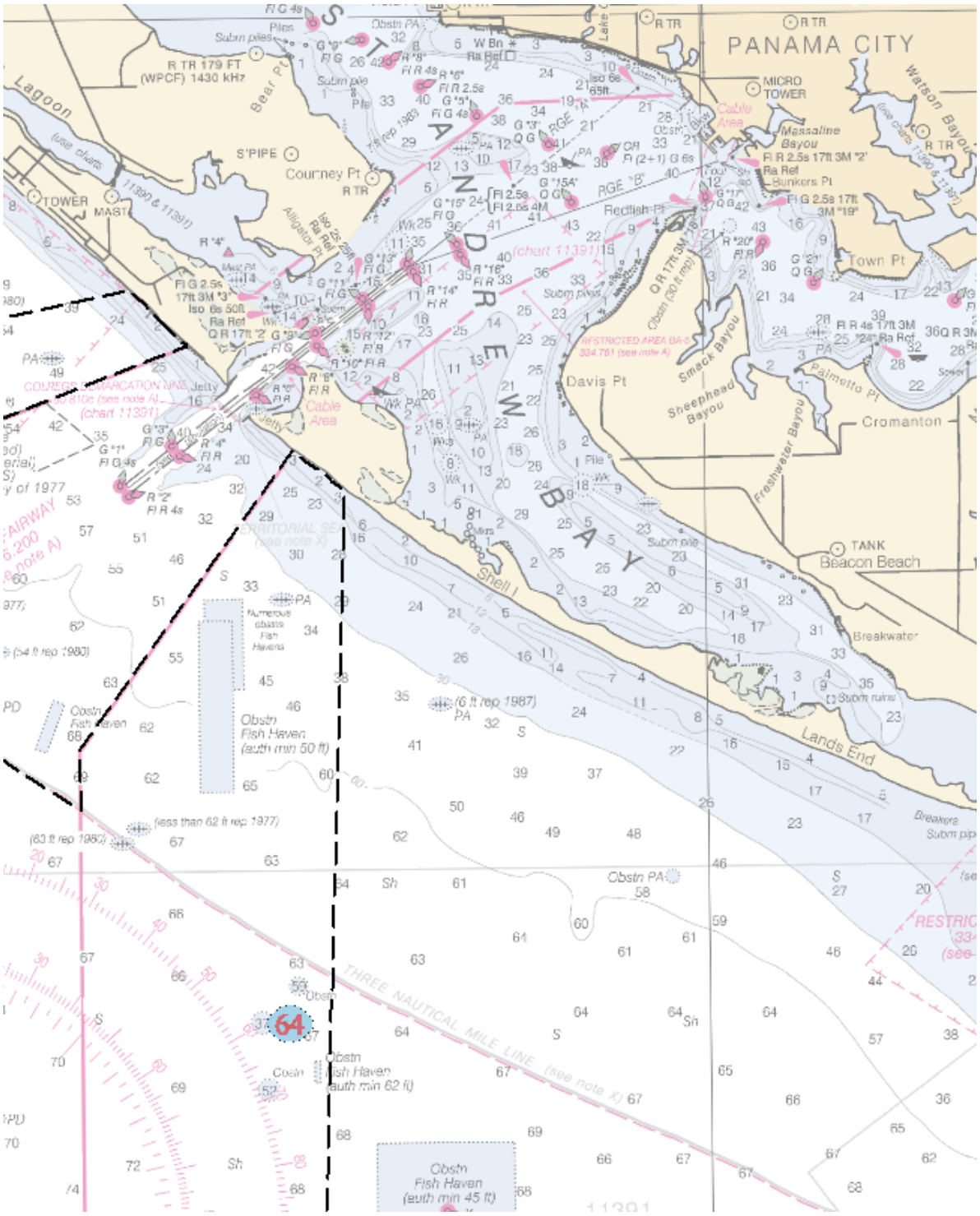
PANAMA CITY
STANDREW BAY
Courtney Pt
Redfish Pt
Davis Pt
Town Pt
Cromanton
Beacon Beach
Lands End
Shell I
Massalina Bayou
Smack Bayou
Sheephead Bayou
Freshwater Bayou
Palmetto Pt
Bear Pt
Alligator Pt
Lagoon
Obstn
Fish Haven
(auth min 50 ft)
Obstn
Fish Haven
(auth min 62 ft)
Obstn
Fish Haven
(auth min 45 ft)
THREE NAUTICAL MILE LINE (see note X)
64

Figure 1.3.4

1.4) 62ft Obstruction

DANGER TO NAVIGATION

Survey Summary

Survey Position:	30° 02' 34.4" N, 085° 43' 24.6" W
Least Depth:	19.11 m (= 62.70 ft = 10.449 fm = 10 fm 2.70 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2015-051.22:19:12.000 (02/20/2015)
Dataset:	H12718_DtoN6-11_AHB.000
FOID:	US 0002941023 00001(0226002CE05F0001)
Charts Affected:	11391_1, 11389_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

OBSTRN/remrks: H12718 DTON 09 is an uncharted area obstruction. Least depth was determined using preliminary water levels.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12718_DtoN6-11_AHB.000	US 0002941023 00001	0.00	000.0	Primary

Hydrographer Recommendations

Hydrographer recommends charting the new area obstruction.

Cartographically-Rounded Depth (Affected Charts):

62ft (11391_1, 11389_1)

10 ½fm (1115A_1, 11360_1, 11006_1, 411_1)

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	QUASOU - 6:least depth known
	SORDAT - 20150220
	SORIND - US,US,graph,H12718
	TECSOU - 3:found by multi-beam

VALSOU - 19.110 m

WATLEV - 3:always under water/submerged

Office Notes

This danger submission is preliminary. No data has been provided to AHB for verification. Feature will be reviewed and verified once the survey data has been submitted. All depths have been corrected to chart datum MLLW. The horizontal datum is NAD83.

The submitted polygon was determined from the bathymetric grid and grouping of scattered features (obstructions) within the polygon. The polygon limits for the area obstruction are listed below:

NW = 30-02-34.424N 085-43-29.725W

NE = 30-02-34.424N 085-43-24.653W

SE = 30-02-30.655N 085-43-24.653W

SW = 30-02-30.655N 085-43-29.725W

Feature Images

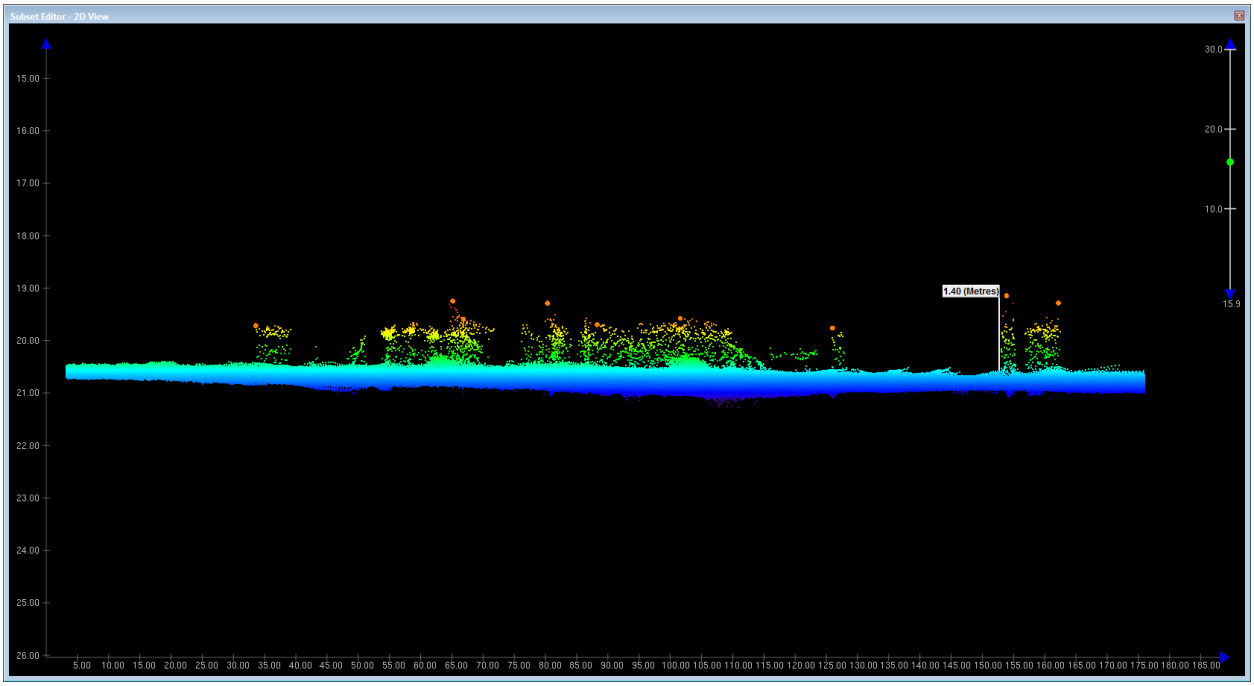

Figure 1.4.1

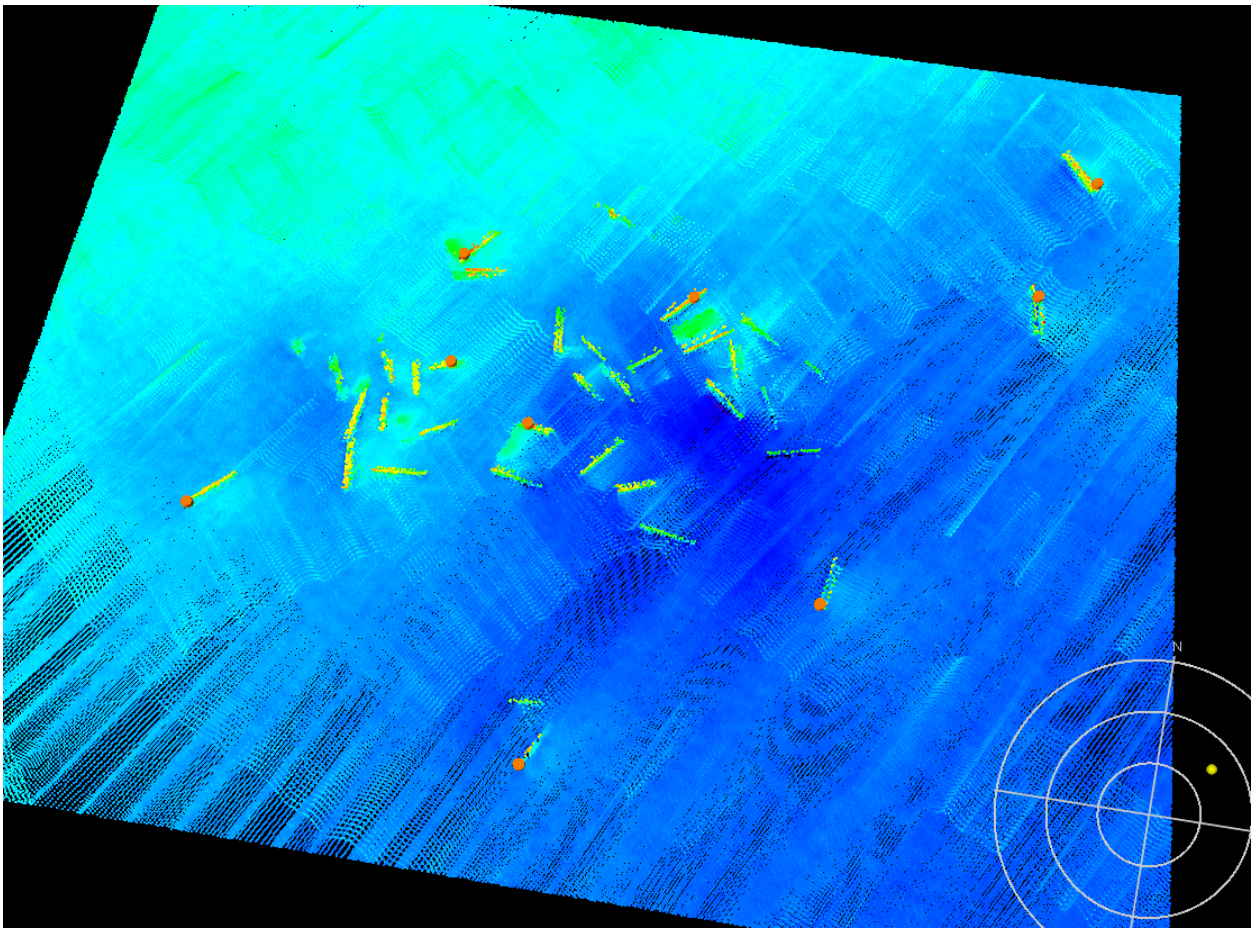

Figure 1.4.2

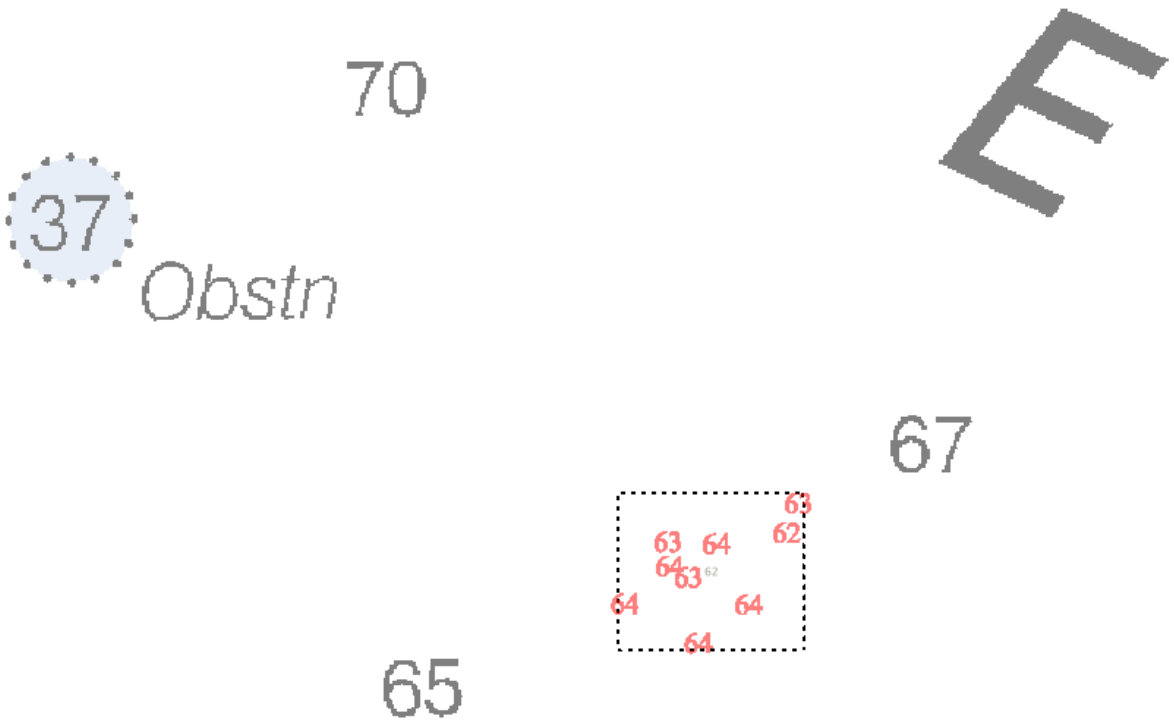

Figure 1.4.3

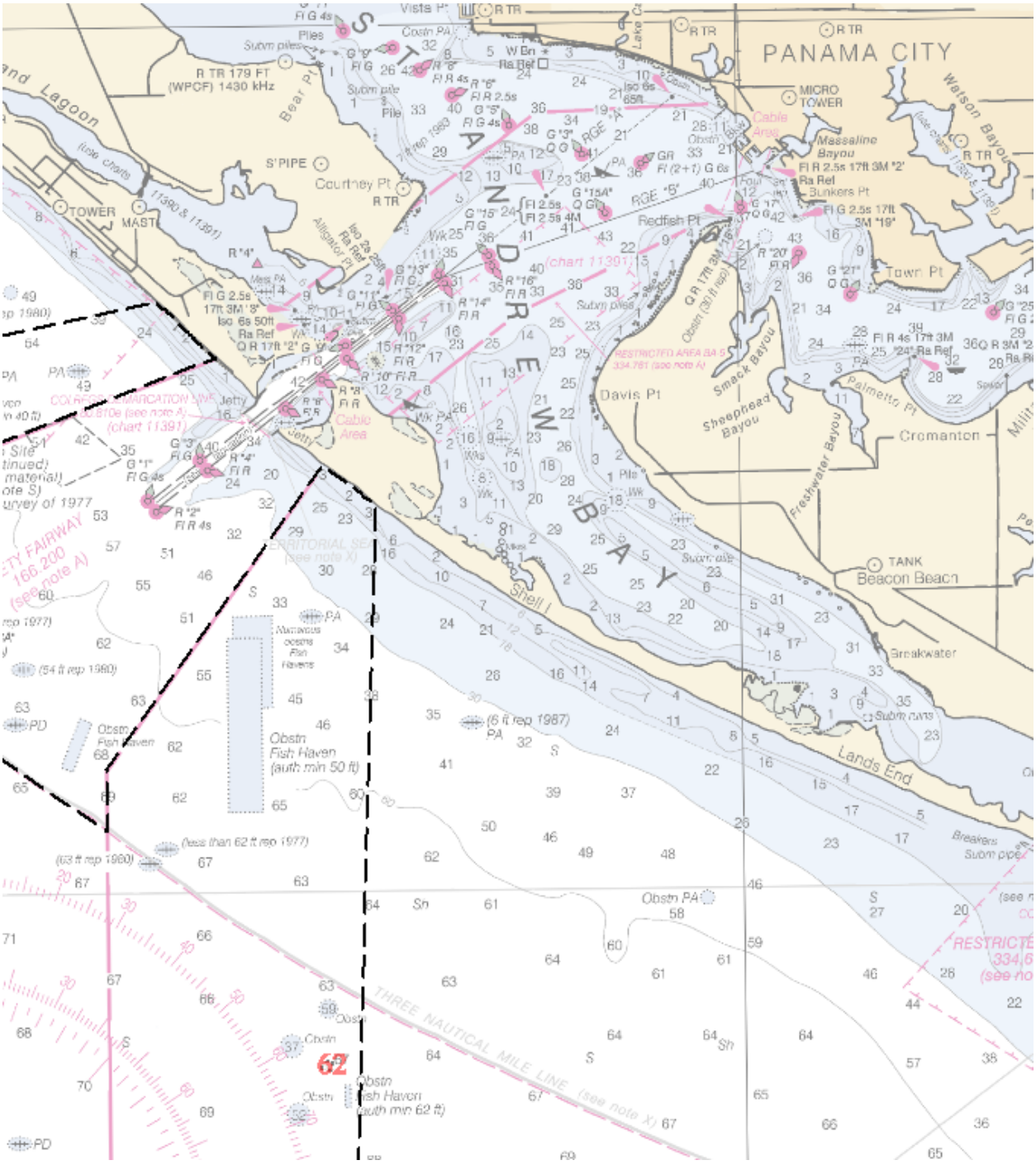
PANAMA CITY
ST ANDREW BAY
R TR 179 FT (WPCF) 1430 kHz
MICRO TOWER
Courtney Pt
Redfish Pt
Davis Pt
Town Pt
Cremanton
Bunkers Pt
Massaline Bayou
Watson Bayou
Smack Bayou
Sheepshead Bayou
Freshwater Bayou
Palmetto Pt
Beacon Beach
Shell I
Lands End
Breakwater
Jetty
Cable Area
Obstn
Fish Haven
(auth min 50 ft)
Obstn PA
THREE NAUTICAL MILE LINE (see note X)
RESTRICTED AREA 334.761 (see note A)
(chart 11391)
62

Figure 1.4.4

1.5) 44ft Obstruction

DANGER TO NAVIGATION

Survey Summary

Survey Position:	30° 04' 56.8" N, 085° 43' 21.6" W
Least Depth:	13.42 m (= 44.03 ft = 7.338 fm = 7 fm 2.03 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2015-045.17:11:07.000 (02/14/2015)
Dataset:	H12718_DtoN6-11_AHB.000
FOID:	US 0002941021 00001(0226002CE05D0001)
Charts Affected:	11391_1, 11390_1, 11389_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

OBSTRN/remrks: H12718 DTON 07 is an uncharted obstruction. Least depth was determined using preliminary water levels.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12718_DtoN6-11_AHB.000	US 0002941021 00001	0.00	000.0	Primary

Hydrographer Recommendations

Hydrographer recommends charting the new obstruction.

Cartographically-Rounded Depth (Affected Charts):

44ft (11391_1, 11390_1, 11389_1)

7 ¼fm (1115A_1, 11360_1, 11006_1, 411_1)

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	QUASOU - 6:least depth known
	SORDAT - 20150214
	SORIND - US,US,graph,H12718
	TECSOU - 3:found by multi-beam

VALSOU - 13.420 m

WATLEV - 3:always under water/submerged

Office Notes

This danger submission is preliminary. No data has been provided to AHB for verification. Feature will be reviewed and verified once the survey data has been submitted. All depths have been corrected to chart datum MLLW. The horizontal datum is NAD83.

Feature Images

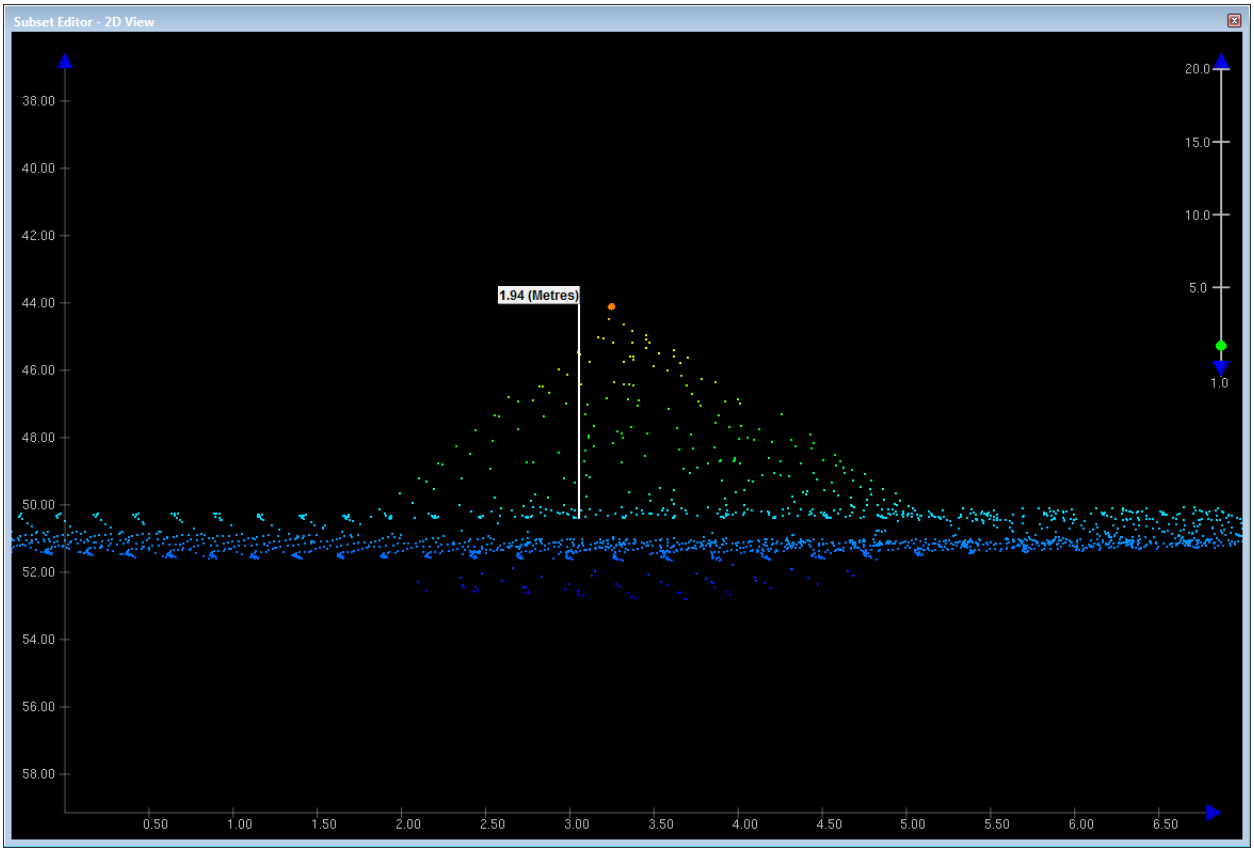

Figure 1.5.1

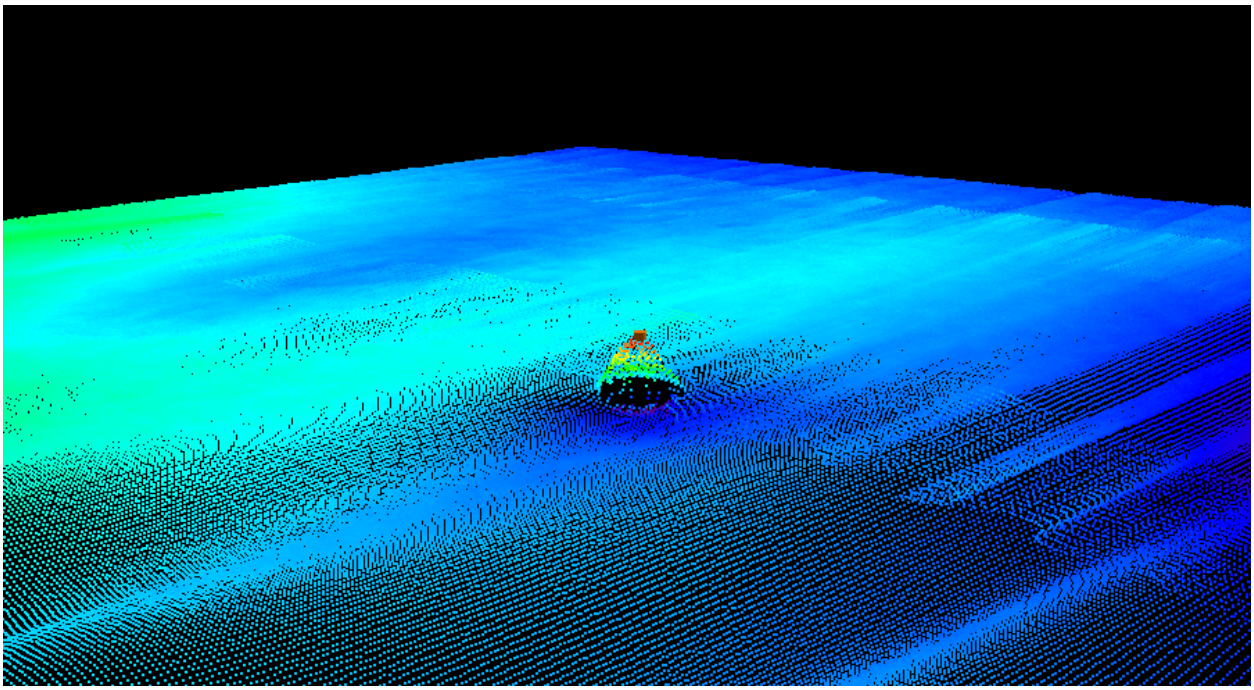

Figure 1.5.2

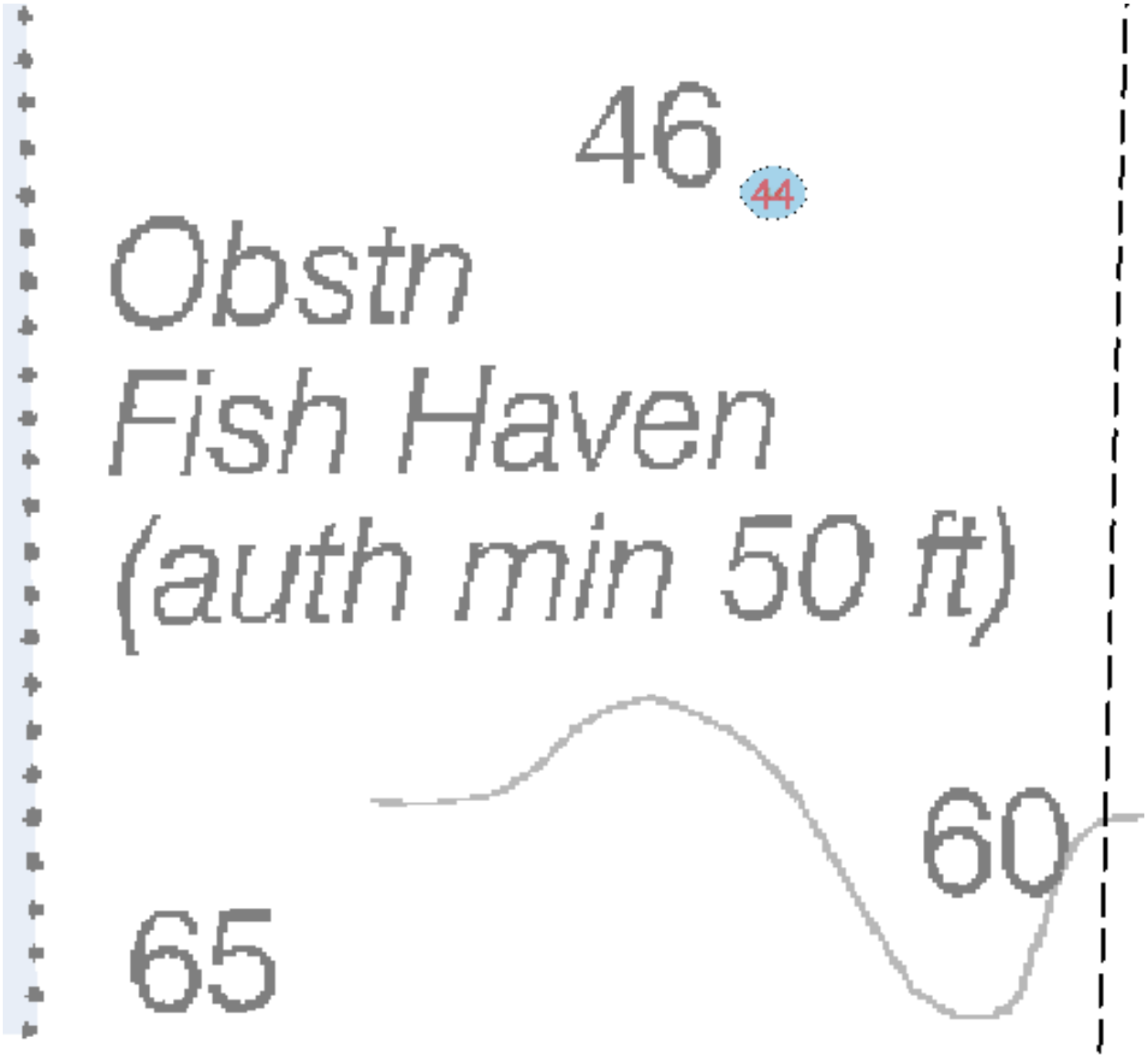

Figure 1.5.3

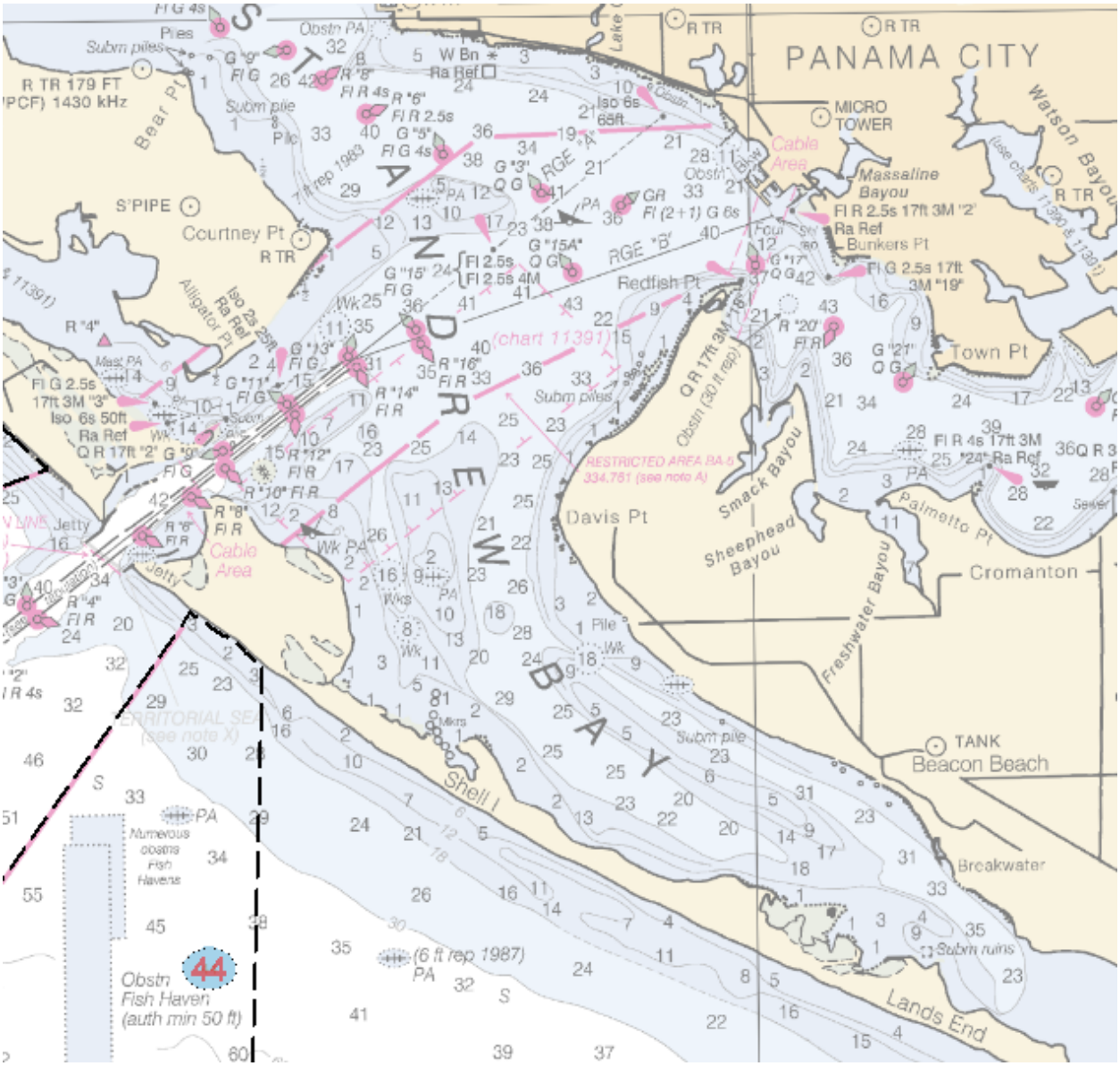
PANAMA CITY
STANDREW BAY
Courtney Pt
Redfish Pt
Bunkers Pt
Town Pt
Davis Pt
Cromanton
Beacon Beach
Breakwater
Lands End
Shell I
Massaline Bayou
Watson Bayou
Smack Bayou
Sheephead Bayou
Freshwater Bayou
Palmetto Pt
MICRO TOWER
TANK
S'PIPE
Cable Area
RESTRICTED AREA BA-5 334.751 (see note A)
Obstn Fish Haven (auth min 50 ft)
44
(chart 11391)

Figure 1.5.4

1.6) 40ft Obstruction

DANGER TO NAVIGATION

Survey Summary

Survey Position:	30° 05' 02.7" N, 085° 43' 18.1" W
Least Depth:	12.42 m (= 40.74 ft = 6.790 fm = 6 fm 4.74 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2015-047.15:55:49.000 (02/16/2015)
Dataset:	H12718_DtoN6-11_AHB.000
FOID:	US 0002941020 00001(0226002CE05C0001)
Charts Affected:	11391_1, 11390_1, 11389_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

OBSTRN/remrks: H12718 DTON 06 is an uncharted obstruction. Least depth was determined using preliminary water levels.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12718_DtoN6-11_AHB.000	US 0002941020 00001	0.00	000.0	Primary

Hydrographer Recommendations

Hydrographer recommends charting the new obstruction.

Cartographically-Rounded Depth (Affected Charts):

40ft (11391_1, 11390_1, 11389_1)

6 ¾fm (1115A_1, 11360_1, 11006_1, 411_1)

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	QUASOU - 6:least depth known
	SORDAT - 20150216
	SORIND - US,US,graph,H12718
	TECSOU - 3:found by multi-beam

VALSOU - 12.417 m

WATLEV - 3:always under water/submerged

Office Notes

This danger submission is preliminary. No data has been provided to AHB for verification. Feature will be reviewed and verified once the survey data has been submitted. All depths have been corrected to chart datum MLLW. The horizontal datum is NAD83.

Feature Images

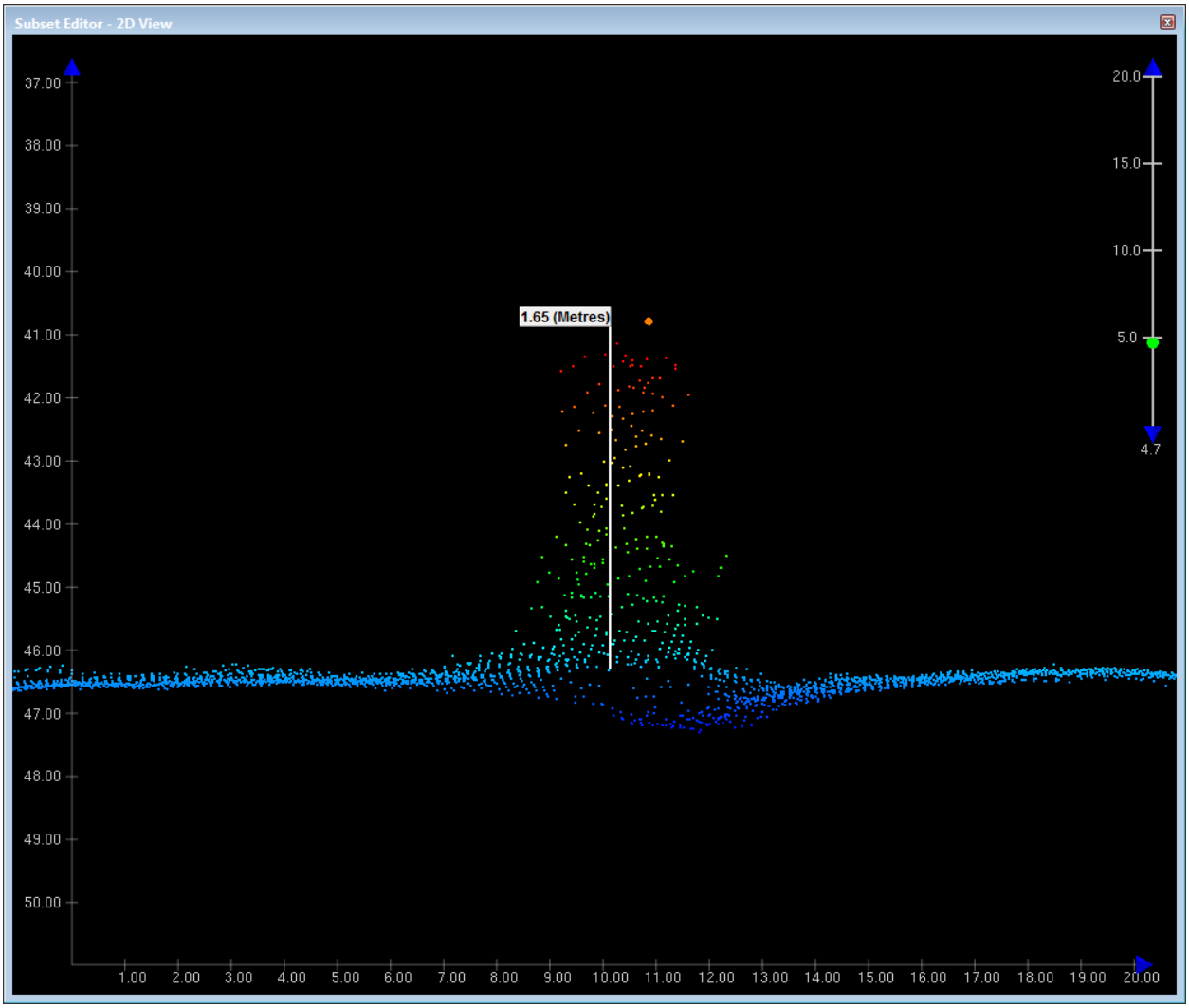

Figure 1.6.1

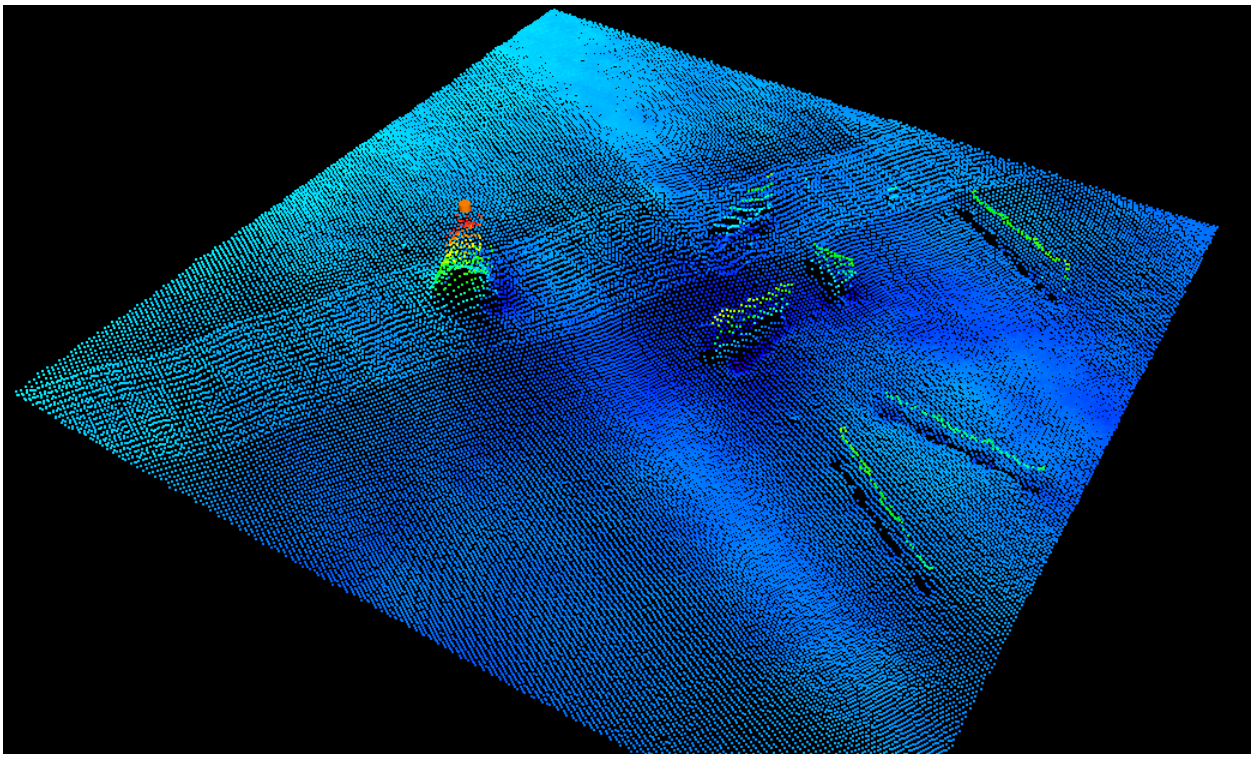

Figure 1.6.2

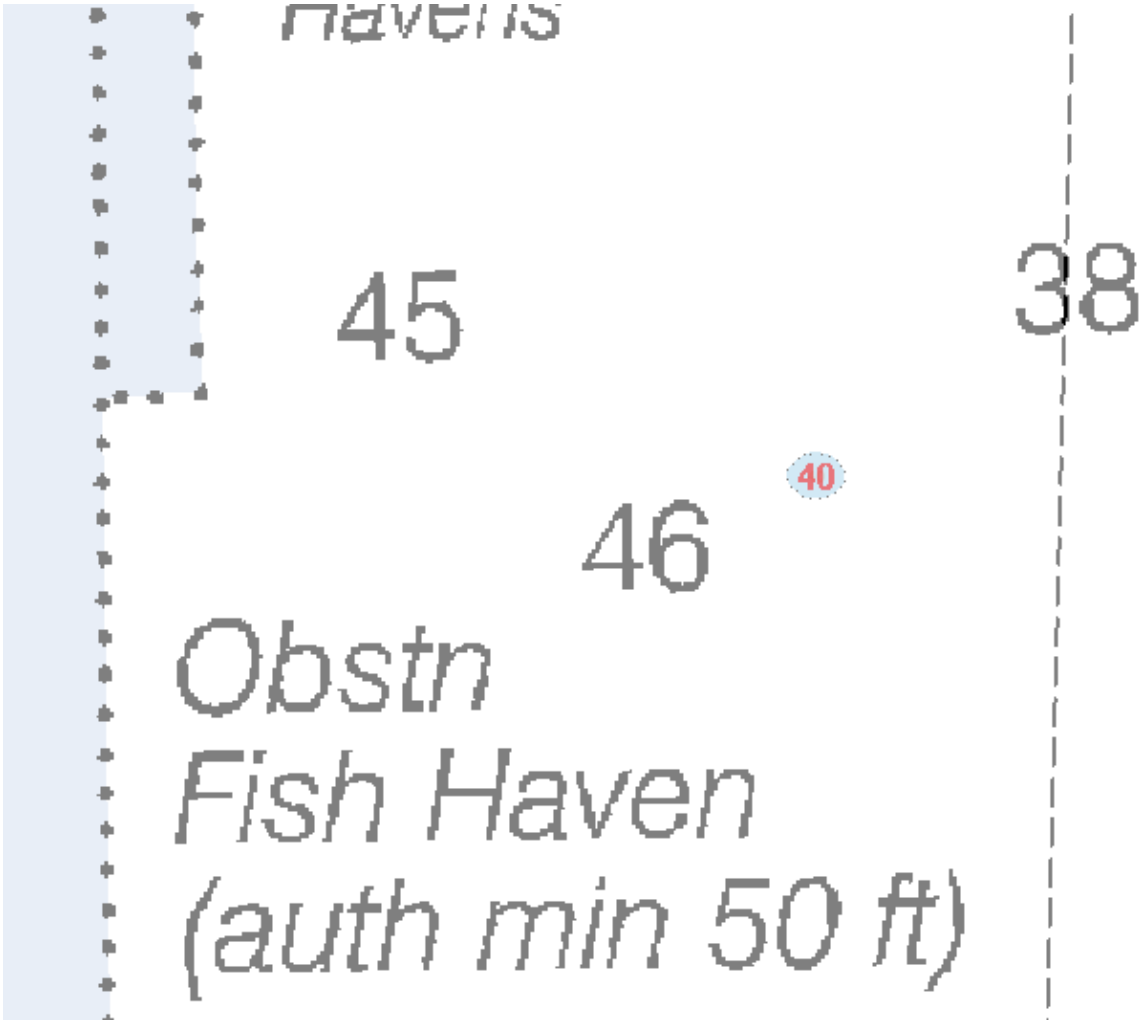

Figure 1.6.3

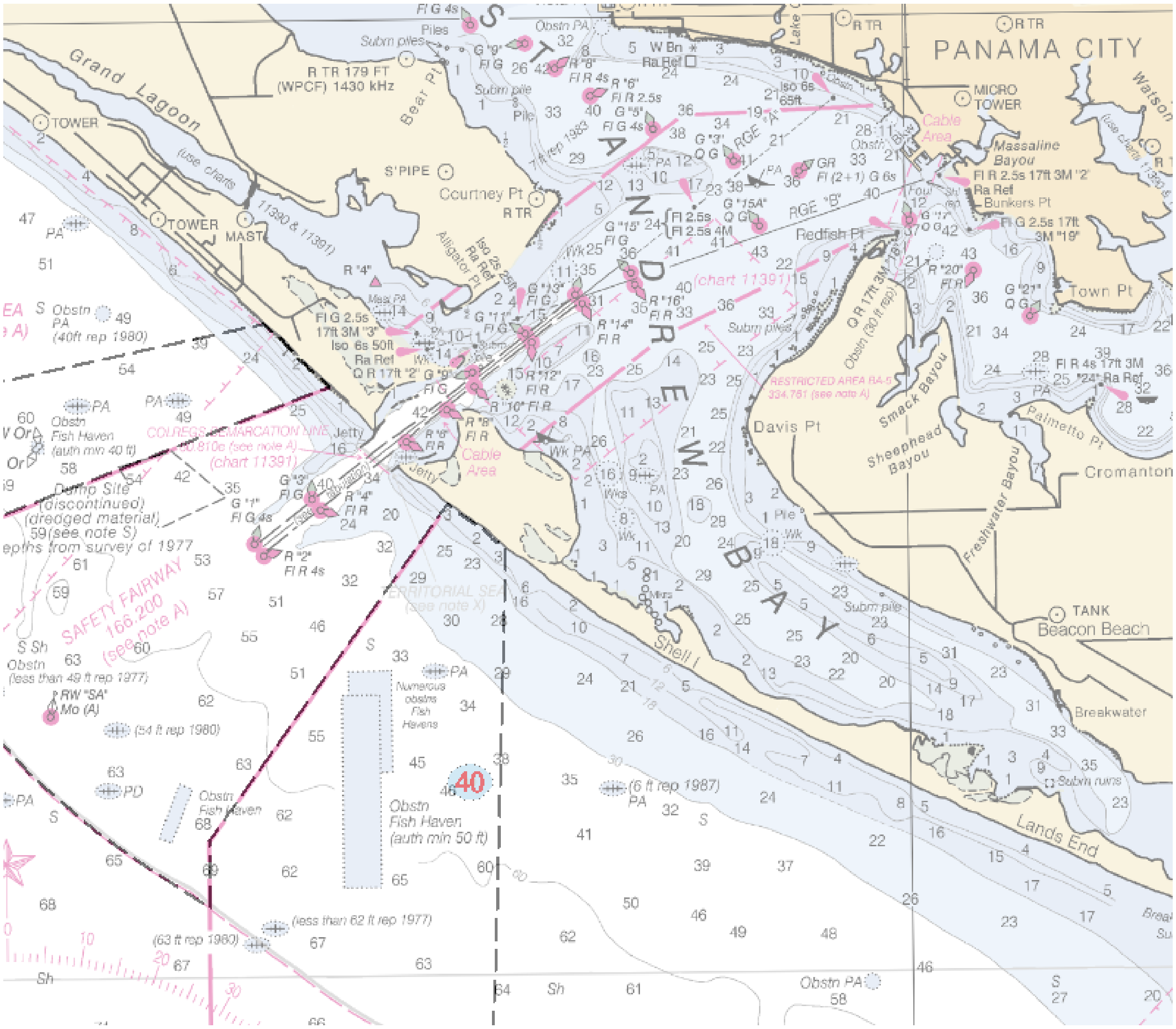
PANAMA CITY
Grand Lagoon
Courtney Pt
Redfish Pt
Davis Pt
Town Pt
Smack Bayou
Sheephead Bayou
Massaline Bayou
Bunkers Pt
Cromanton
Beacon Beach
Shell I
Lands End
Breakwater
Freshwater Bayou
Palmetto Pt
ST ANDREW BAY
MICRO TOWER
TOWER
TANK
Cable Area
COLREGS DEMARCATION LINE
RESTRICTED AREA
SAFETY FAIRWAY 166.200 (see note A)
Dump Site (discontinued) (dredged material)
Obstn Fish Haven (auth min 50 ft)
TERRITORIAL SEA (see note X)
40

Figure 1.6.4

H12718 DtoNs #12 Uncharted 66ft Obstruction

Registry Number: H12718
State: Florida
Locality: Gulf of Mexico
Sub-locality: 7nm S of St Andrews Bay
Project Number: OPR-J357-KR-14
Survey Date: 01/27/2015

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
11391	25th	01/01/2013	1:25,000 (11391_1)	USCG LNM: 11/11/2014 (11/11/2014) NGA NTM: 12/12/2009 (11/29/2014)
11389	34th	06/01/2011	1:80,000 (11389_1)	USCG LNM: 9/2/2014 (11/11/2014) NGA NTM: 10/17/2009 (11/29/2014)
11360	43rd	11/01/2008	1:456,394 (11360_1)	[L]NTM: ?
1115A	43rd	11/01/2008	1:456,394 (1115A_1)	[L]NTM: ?
11006	32nd	08/01/2005	1:875,000 (11006_1)	[L]NTM: ?
411	52nd	09/01/2007	1:2,160,000 (411_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	uncharted 66ft Obstruction	Obstruction	20.08 m	30° 03' 34.0" N	085° 45' 16.6" W	---

1 - Dangers To Navigation

1.1) uncharted 66ft Obstruction

DANGER TO NAVIGATION

Survey Summary

Survey Position:	30° 03' 34.0" N, 085° 45' 16.6" W
Least Depth:	20.08 m (= 65.89 ft = 10.982 fm = 10 fm 5.89 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2015-027.17:29:22.000 (01/27/2015)
Dataset:	H12718_DtoN12_AHB.000
FOID:	1C 0000001227 00001(1C1C000004CB0001)
Charts Affected:	11391_1, 11389_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

OBSTRN/remrks: H12718 DtoN 12 is an uncharted obstruction. Least depth was determined using verified tides.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12718_DtoN12_AHB.000	1C 0000001227 00001	0.00	000.0	Primary

Hydrographer Recommendations

Hydrographer recommends charting the new obstruction.

Cartographically-Rounded Depth (Affected Charts):

66ft (11391_1, 11389_1)

11fm (1115A_1, 11360_1, 11006_1, 411_1)

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	QUASOU - 6:least depth known
	SORDAT - 20150225
	SORIND - US,US,graph,H12718
	TECSOU - 3:found by multi-beam

VALSOU - 20.084 m

WATLEV - 3:always under water/submerged

Office Notes

This danger submission is preliminary. No data has been provided to AHB for verification. Feature will be reviewed and verified once the survey data has been submitted. All depths have been corrected to chart datum MLLW; the horizontal datum is NAD83.

The feature's depth (cartographically rounded) is at the cusp of the Danger to Navigation depth limit. Nevertheless, the submitted uncharted obstruction is the shoalest depth within the common charted area and located within the safety fairway. Defer the final chart disposition to Marine Chart Division compiler.

Feature Images

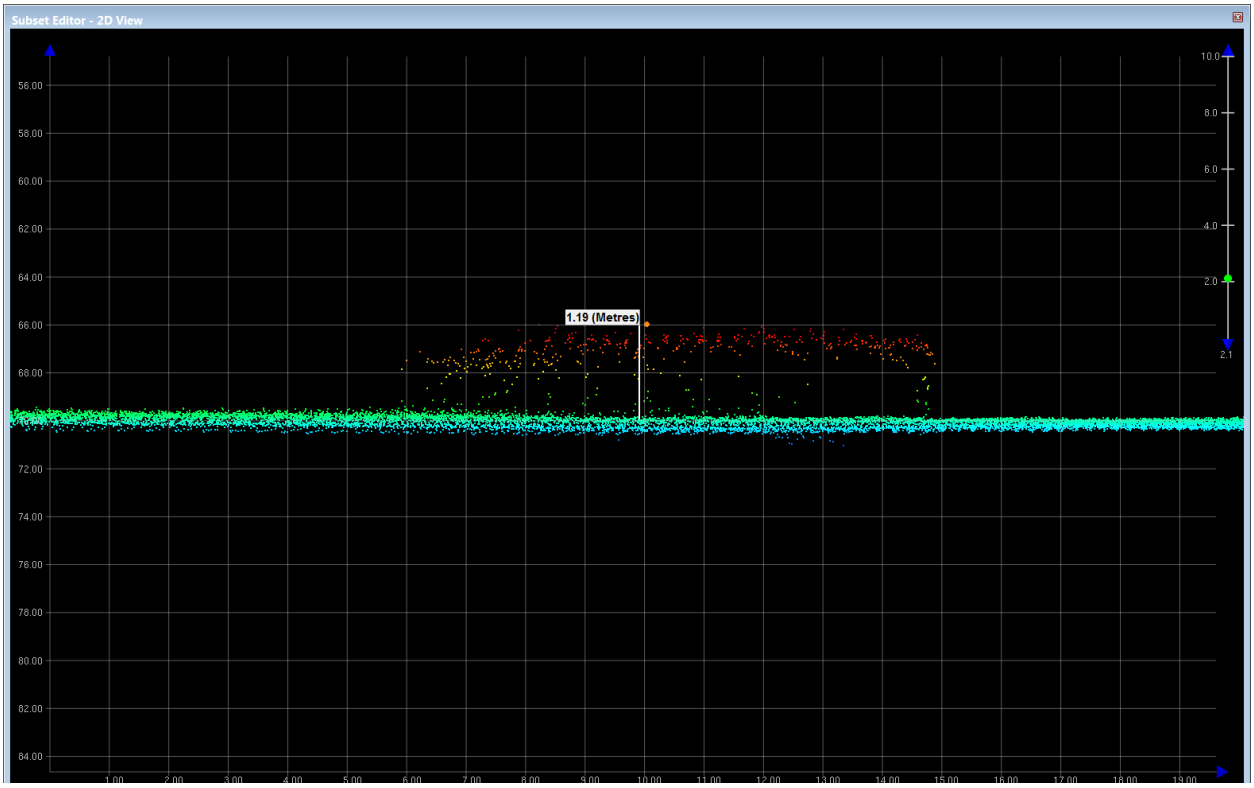

Figure 1.1.1

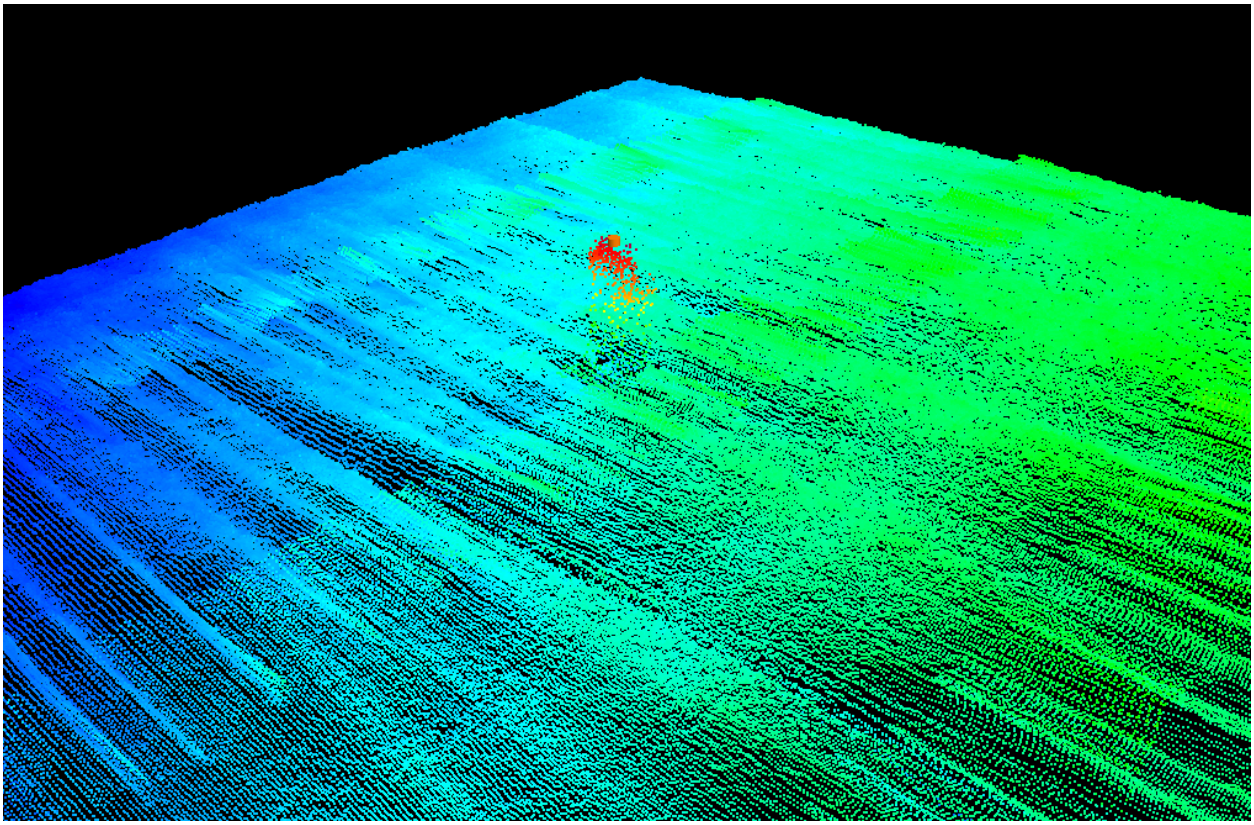

Figure 1.1.2

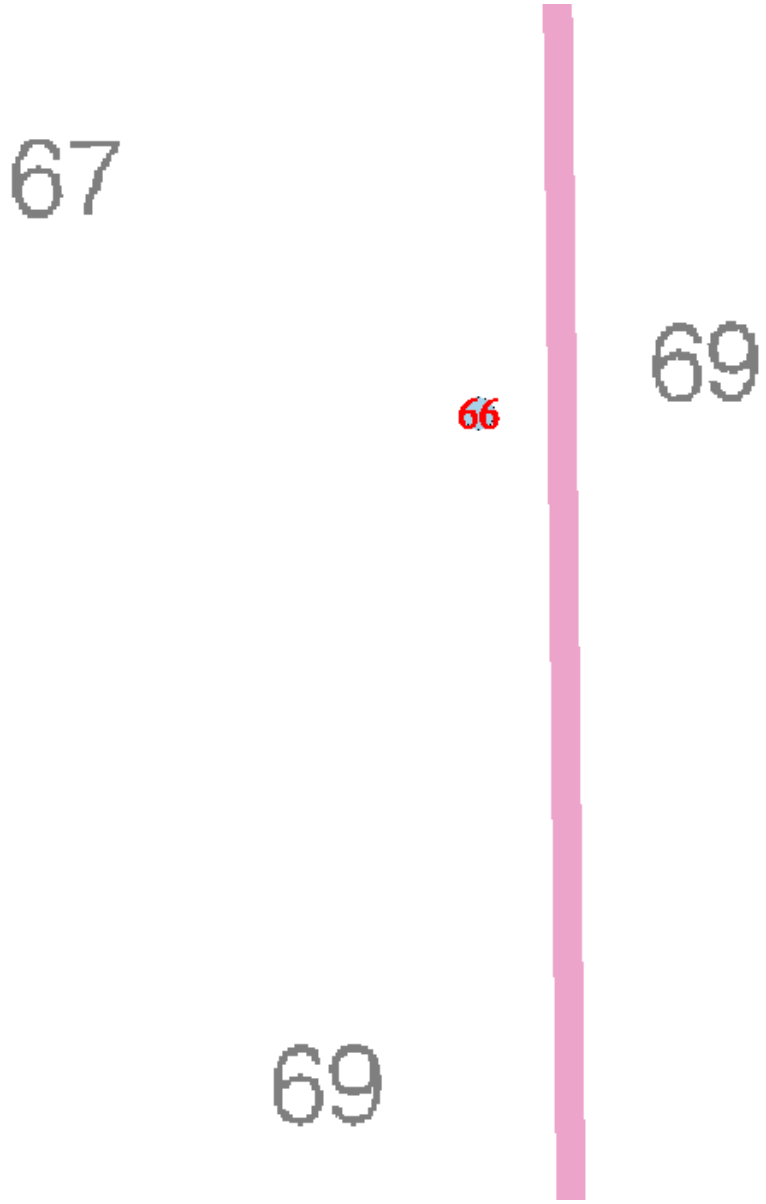

Figure 1.1.3

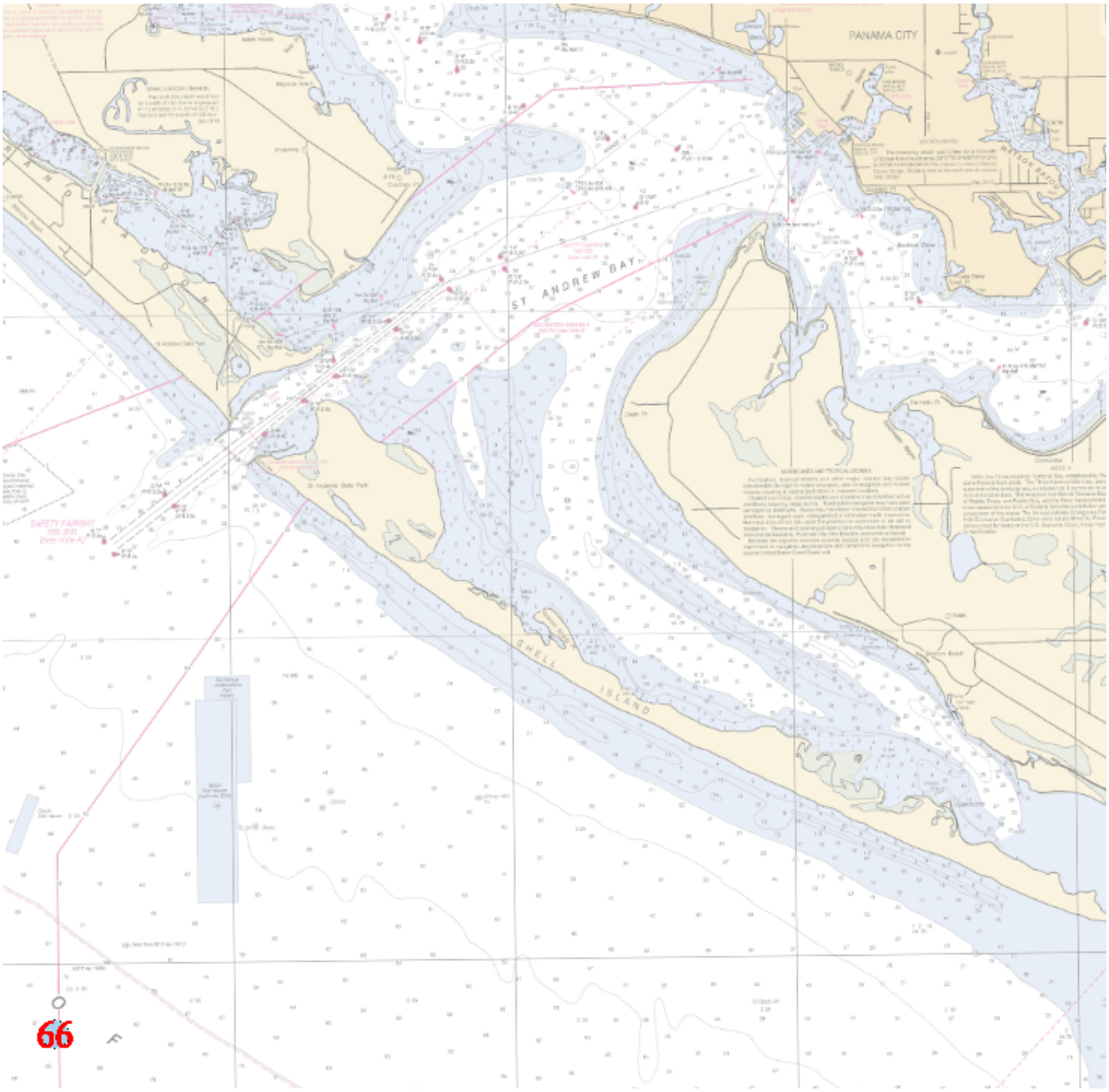

Figure 1.1.4

David Neff <david@etracinc.com>

H12718 DtoN #1 59ft OBSTRN submission to NDB

2 messages

Castle Parker - NOAA Federal <castle.e.parker@noaa.gov> Mon, Jan 26, 2015 at 4:57 AM
To: OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov>
Cc: Matthew Jaskoski - NOAA Federal <matthew.jaskoski@noaa.gov>, Michael Gonsalves - NOAA Federal <michael.gonsalves@noaa.gov>, Megan Greenaway - NOAA Federal <megan.greenaway@noaa.gov>, Mark Lathrop - NOAA Federal <mark.t.lathrop@noaa.gov>, Tim Osborn - NOAA Federal <tim.osborn@noaa.gov>, Tiffany Squyres - NOAA Federal <tiffany.squyres@noaa.gov>, David Neff <david@etracinc.com>

Good day,

Please find attached a zip file for survey H12718 DtoN #1 for submission to Nautical Data Branch (NDB) and Marine Chart Division (MCD). This danger submission contains one feature, an uncharted 59ft Obstruction.

The information originates from NOAA contract field unit eTrac, Inc., and was submitted to the Atlantic Hydrographic Branch (AHB) for review and processing. The contents of the attached WinZip file were generated at AHB. The attached zip file contains a DtoN Letter (PDF), associated image files, and a Pydro XML file.

If you have any questions, please direct them back to me via email or phone 757-441-6746 x115.

Thank you for your assistance with this matter.

Regards,

Gene Parker

Castle Eugene Parker

NOAA Office of Coast Survey

Atlantic Hydrographic Branch

Hydrographic Team Lead / Physical Scientist

castle.e.parker@noaa.gov

office (757) 441-6746 x115

H12718_DtoN1_59ftOBSTRN.zip
1687K

OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov> Mon, Jan 26, 2015 at 12:38 PM
To: Castle Parker - NOAA Federal <castle.e.parker@noaa.gov>
Cc: Matthew Jaskoski - NOAA Federal <matthew.jaskoski@noaa.gov>, Michael Gonsalves - NOAA Federal <michael.gonsalves@noaa.gov>, Megan Greenaway - NOAA Federal <megan.greenaway@noaa.gov>, Mark Lathrop - NOAA Federal <mark.t.lathrop@noaa.gov>, Tim Osborn - NOAA Federal <tim.osborn@noaa.gov>, Tiffany Squyres - NOAA Federal <tiffany.squyres@noaa.gov>, David Neff <david@etracinc.com>, _NOS OCS NSD Coast Pilot <coast.pilot@noaa.gov>, Benjamin K Evans - NOAA Federal <Benjamin.K.Evans@noaa.gov>, James Crocker - NOAA Federal <James.M.Crocker@noaa.gov>, Matt Kroll - NOAA Federal <Matt.Kroll@noaa.gov>, OCS NDB - NOAA Service Account <OCS.NDB@noaa.gov>, Tara Wallace - NOAA Federal <Tara.Wallace@noaa.gov>, Chris Libeau - NOAA Federal <Chris.Libeau@noaa.gov>, _NOS OCS PBA Branch <ocs.pba@noaa.gov>, _NOS OCS PBB Branch <ocs.pbb@noaa.gov>, _NOS OCS PBC Branch <ocs.pbc@noaa.gov>, _NOS OCS PBD Branch <ocs.pbd@noaa.gov>, _NOS OCS PBE Branch <ocs.pbe@noaa.gov>, _NOS OCS PBG Branch <ocs.pbg@noaa.gov>

L-115/15 and DD-25801 have been registered by the Nautical Data Branch and directed to Products Branch B for processing.

The DtoN reported is one obstruction in the Gulf of Mexico, approximately 7 NM south of St. Andrews Bay, FL.

The following charts are affected:
11391 kapp 140

11389 kapp 166

11360 kapp 48

11006 kapp 44

The following ENCs are affected:
US5FL66M

US3GC05M

US2GC09M

References:
H12718
OPR-J357-KR-14

This information was discovered by a NOAA contractor and was submitted by AHB.

Nautical Data Branch/Marine Chart Division/
Office of Coast Survey/National Ocean Service/
Contact: ocs.ndb@noaa.gov
NOAA NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

[Quoted text hidden]

David Neff <david@etracinc.com>

H12718 DtoN #2 Submission to NDB (37ft Obstruction)

2 messages

Castle Parker - NOAA Federal <castle.e.parker@noaa.gov> Fri, Jan 30, 2015 at 9:13 AM
To: OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov>
Cc: Matthew Jaskoski - NOAA Federal <matthew.jaskoski@noaa.gov>, Michael Gonsalves - NOAA Federal <michael.gonsalves@noaa.gov>, Megan Greenaway - NOAA Federal <megan.greenaway@noaa.gov>, Mark Lathrop - NOAA Federal <mark.t.lathrop@noaa.gov>, Tim Osborn - NOAA Federal <tim.osborn@noaa.gov>, Tiffany Squyres - NOAA Federal <tiffany.squyres@noaa.gov>, David Neff <david@etracinc.com>

Good day,

Please find attached a zip file for survey H12718 DtoN #2 for submission to Nautical Data Branch (NDB) and Marine Chart Division (MCD). This danger submission contains one feature, an uncharted 37ft Obstruction.

The information originates from NOAA contract field unit eTrac, Inc., and was submitted to the Atlantic Hydrographic Branch (AHB) for review and processing. The contents of the attached WinZip file were generated at AHB. The attached zip file contains a DtoN Letter (PDF), associated image files, and a Pydro XML file.

If you have any questions, please direct them back to me via email or phone 757-441-6746 x115.

Thank you for your assistance with this matter.

Regards,

Gene Parker

Castle Eugene Parker

NOAA Office of Coast Survey

Atlantic Hydrographic Branch

Hydrographic Team Lead / Physical Scientist

castle.e.parker@noaa.gov

office (757) 441-6746 x115

H12718_DtoN2_37ftOBSTRN.zip
1133K

OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov> Mon, Feb 2, 2015 at 6:53 AM
To: Castle Parker - NOAA Federal <castle.e.parker@noaa.gov>
Cc: Matthew Jaskoski - NOAA Federal <matthew.jaskoski@noaa.gov>, Michael Gonsalves - NOAA Federal <michael.gonsalves@noaa.gov>, Megan Greenaway - NOAA Federal <megan.greenaway@noaa.gov>, Mark Lathrop - NOAA Federal <mark.t.lathrop@noaa.gov>, Tim Osborn - NOAA Federal <tim.osborn@noaa.gov>, Tiffany Squyres - NOAA Federal <tiffany.squyres@noaa.gov>, David Neff <david@etracinc.com>, _NOS OCS NSD Coast Pilot <coast.pilot@noaa.gov>, Benjamin K Evans - NOAA Federal <Benjamin.K.Evans@noaa.gov>, James Crocker - NOAA Federal <James.M.Crocker@noaa.gov>, Matt Kroll - NOAA Federal <Matt.Kroll@noaa.gov>, OCS NDB - NOAA Service Account <OCS.NDB@noaa.gov>, Tara Wallace - NOAA Federal <Tara.Wallace@noaa.gov>, _NOS OCS PBA Branch <ocs.pba@noaa.gov>, _NOS OCS PBB Branch <ocs.pbb@noaa.gov>, _NOS OCS PBC Branch <ocs.pbc@noaa.gov>, _NOS OCS PBD Branch <ocs.pbd@noaa.gov>, _NOS OCS PBE Branch <ocs.pbe@noaa.gov>, _NOS OCS PBG Branch <ocs.pbg@noaa.gov>

L-139/15 and DD-25820 have been registered by the Nautical Data Branch and directed to Products Branch B for processing.

The DtoN reported is one obstruction in the Gulf of Mexico, approximately 7 NM south of St. Andrews Bay, FL.

The following charts are affected:
11391 kapp 140

11389 kapp 166

11360 kapp 48

11006 kapp 44

The following ENCs are affected:
US5FL66M

US3GC05M

US2GC09M

References:
H12718
OPR-J357-KR-14

This information was discovered by a NOAA contractor and was submitted by AHB.

Nautical Data Branch/Marine Chart Division/
Office of Coast Survey/National Ocean Service/
Contact: ocs.ndb@noaa.gov
NOAA NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

[Quoted text hidden]

H12718_DtoN2_37ftOBSTRN.zip
1133K

David Neff <david@etracinc.com>

H12718 DtoN #3 Uncharted 52ft Obstruction Submission to NDB

2 messages

Castle Parker - NOAA Federal <castle.e.parker@noaa.gov> Mon, Feb 2, 2015 at 9:23 AM
To: OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov>
Cc: Tim Osborn - NOAA Federal <tim.osborn@noaa.gov>, Matthew Jaskoski - NOAA Federal <matthew.jaskoski@noaa.gov>, Michael Gonsalves - NOAA Federal <michael.gonsalves@noaa.gov>, Megan Greenaway - NOAA Federal <megan.greenaway@noaa.gov>, Mark Lathrop - NOAA Federal <mark.t.lathrop@noaa.gov>, David Neff <david@etracinc.com>, Tiffany Squyres - NOAA Federal <tiffany.squyres@noaa.gov>

Good day,

Please find attached a zip file for survey H12718 DtoN #3 for submission to Nautical Data Branch (NDB) and Marine Chart Division (MCD). This danger submission contains one feature, an uncharted 52ft Obstruction.

The information originates from NOAA contract field unit eTrac, Inc., and was submitted to the Atlantic Hydrographic Branch (AHB) for review and processing. The contents of the attached WinZip file were generated at AHB. The attached zip file contains a DtoN Letter (PDF), associated image files, and a Pydro XML file.

If you have any questions, please direct them back to me via email or phone 757-441-6746 x115.

Thank you for your assistance with this matter.

Regards,

Gene Parker

Castle Eugene Parker

NOAA Office of Coast Survey

Atlantic Hydrographic Branch

Hydrographic Team Lead / Physical Scientist

castle.e.parker@noaa.gov

office (757) 441-6746 x115

H12718_DtoN3_52ftOBSTRN.zip
921K

OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov> Tue, Feb 3, 2015 at 6:12 AM
To: Castle Parker - NOAA Federal <castle.e.parker@noaa.gov>
Cc: Tim Osborn - NOAA Federal <tim.osborn@noaa.gov>, Matthew Jaskoski - NOAA Federal <matthew.jaskoski@noaa.gov>, Michael Gonsalves - NOAA Federal <michael.gonsalves@noaa.gov>, Megan Greenaway - NOAA Federal <megan.greenaway@noaa.gov>, Mark Lathrop - NOAA Federal <mark.t.lathrop@noaa.gov>, David Neff <david@etracinc.com>, Tiffany Squyres - NOAA Federal <tiffany.squyres@noaa.gov>, _NOS OCS NSD Coast Pilot <coast.pilot@noaa.gov>, Benjamin K Evans - NOAA Federal <Benjamin.K.Evans@noaa.gov>, James Crocker - NOAA Federal <James.M.Crocker@noaa.gov>, Matt Kroll - NOAA Federal <Matt.Kroll@noaa.gov>, OCS NDB - NOAA Service Account <OCS.NDB@noaa.gov>, Tara Wallace - NOAA Federal <Tara.Wallace@noaa.gov>, _NOS OCS PBA Branch <ocs.pba@noaa.gov>, _NOS OCS PBB Branch <ocs.pbb@noaa.gov>, _NOS OCS PBC Branch <ocs.pbc@noaa.gov>, _NOS OCS PBD Branch <ocs.pbd@noaa.gov>, _NOS OCS PBE Branch <ocs.pbe@noaa.gov>, _NOS OCS PBG Branch <ocs.pbg@noaa.gov>

L-161/15 and DD-25827 have been registered by the Nautical Data Branch and directed to Products Branch B for processing.

The DtoN reported is one 52-foot obstruction in the Gulf of Mexico, approximately 7 NM south of St. Andrews Bay, FL.

The following charts are affected:
11391 kapp 140

11389 kapp 166

11360 kapp 48

11006 kapp 44

The following ENCs are affected:
US5FL66M

US3GC05M

US2GC09M

References:
H12718
OPR-J357-KR-14

This information was discovered by a NOAA contractor and was submitted by AHB.

Nautical Data Branch/Marine Chart Division/
Office of Coast Survey/National Ocean Service/
Contact: ocs.ndb@noaa.gov
NOAA NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
[Quoted text hidden]

H12718_DtoN3_52ftOBSTRN.zip
921K

David Neff <david@etracinc.com>

H12718 DtoN #4 66ft Obstruction Submission to NDB

2 messages

Castle Parker - NOAA Federal <castle.e.parker@noaa.gov> Wed, Feb 11, 2015 at 5:35 AM
To: OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov>
Cc: Matthew Jaskoski - NOAA Federal <matthew.jaskoski@noaa.gov>, Michael Gonsalves - NOAA Federal <michael.gonsalves@noaa.gov>, Megan Greenaway - NOAA Federal <megan.greenaway@noaa.gov>, Mark Lathrop - NOAA Federal <mark.t.lathrop@noaa.gov>, David Neff <david@etracinc.com>, Tiffany Squyres - NOAA Federal <tiffany.squyres@noaa.gov>, Tim Osborn - NOAA Federal <tim.osborn@noaa.gov>

Good day,

Please find attached a zip file for survey H12718 DtoN #4 for submission to Nautical Data Branch (NDB) and Marine Chart Division (MCD). This danger submission contains one feature, an uncharted 66ft Obstruction.

The information originates from NOAA contract field unit eTrac, Inc., and was submitted to the Atlantic Hydrographic Branch (AHB) for review and processing. The contents of the attached WinZip file were generated at AHB. The attached zip file contains a DtoN Letter (PDF), associated image files, and a Pydro XML file.

If you have any questions, please direct them back to me via email or phone 757-441-6746 x115.

Thank you for your assistance with this matter.

Regards,

Gene Parker

Castle Eugene Parker

NOAA Office of Coast Survey

Atlantic Hydrographic Branch

Hydrographic Team Lead / Physical Scientist

castle.e.parker@noaa.gov

office (757) 441-6746 x115

H12718 DtoN 4 66ft OBSTRN.zip
1026K

OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov> Wed, Feb 11, 2015 at 10:05 AM
To: Castle Parker - NOAA Federal <castle.e.parker@noaa.gov>
Cc: Matthew Jaskoski - NOAA Federal <matthew.jaskoski@noaa.gov>, Michael Gonsalves - NOAA Federal <michael.gonsalves@noaa.gov>, Megan Greenaway - NOAA Federal <megan.greenaway@noaa.gov>, Mark Lathrop - NOAA Federal <mark.t.lathrop@noaa.gov>, David Neff <david@etracinc.com>, Tiffany Squyres - NOAA Federal <tiffany.squyres@noaa.gov>, Tim Osborn - NOAA Federal <tim.osborn@noaa.gov>, _NOS OCS NSD Coast Pilot <coast.pilot@noaa.gov>, Benjamin K Evans - NOAA Federal <Benjamin.K.Evans@noaa.gov>, James Crocker - NOAA Federal <James.M.Crocker@noaa.gov>, Matt Kroll - NOAA Federal <Matt.Kroll@noaa.gov>, OCS NDB - NOAA Service Account <OCS.NDB@noaa.gov>, Tara Wallace - NOAA Federal <Tara.Wallace@noaa.gov>, Pearce Hunt - NOAA Federal <Pearce.Hunt@noaa.gov>, _NOS OCS PBA Branch <ocs.pba@noaa.gov>, _NOS OCS PBB Branch <ocs.pbb@noaa.gov>, _NOS OCS PBC Branch <ocs.pbc@noaa.gov>, _NOS OCS PBD Branch <ocs.pbd@noaa.gov>, _NOS OCS PBE Branch <ocs.pbe@noaa.gov>, _NOS OCS PBG Branch <ocs.pbg@noaa.gov>

L-250/15 and DD-25863 have been registered by the Nautical Data Branch and directed to Products Branch B for processing.

The DtoN reported is one 66-foot obstruction in the Gulf of Mexico, approximately 7 NM south of St. Andrews Bay, FL.

The following charts are affected:
11391 kapp 140

11389 kapp 166

11360 kapp 48

11006 kapp 44

The following ENCs are affected:
US5FL66M

US3GC05M

US2GC09M

References:
H12718
OPR-J357-KR-14

This information was discovered by a NOAA contractor and was submitted by AHB.

Nautical Data Branch/Marine Chart Division/
Office of Coast Survey/National Ocean Service/
Contact: ocs.ndb@noaa.gov
NOAA NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
UNITED STATES DEPARTMENT OF COMMERCE

[Quoted text hidden]

H12718 DtoN 4 66ft OBSTRN.zip
1026K

David Neff <david@etracinc.com>

H12718 DtoN #5 65ft Obstruction submission to NDB

2 messages

Castle Parker - NOAA Federal <castle.e.parker@noaa.gov> Wed, Feb 11, 2015 at 11:06 AM
To: OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov>
Cc: Matthew Jaskoski - NOAA Federal <matthew.jaskoski@noaa.gov>, Michael Gonsalves - NOAA Federal <michael.gonsalves@noaa.gov>, Megan Greenaway - NOAA Federal <megan.greenaway@noaa.gov>, Mark Lathrop - NOAA Federal <mark.t.lathrop@noaa.gov>, Tim Osborn - NOAA Federal <tim.osborn@noaa.gov>, Tiffany Squyres - NOAA Federal <tiffany.squyres@noaa.gov>, David Neff <david@etracinc.com>

Good day,

Please find attached a zip file for survey H12718 DtoN #5 for submission to Nautical Data Branch (NDB) and Marine Chart Division (MCD). This danger submission contains one feature, an uncharted 65ft Obstruction.

The information originates from NOAA contract field unit eTrac, Inc., and was submitted to the Atlantic Hydrographic Branch (AHB) for review and processing. The contents of the attached WinZip file were generated at AHB. The attached zip file contains a DtoN Letter (PDF), associated image files, and a Pydro XML file.

If you have any questions, please direct them back to me via email or phone 757-441-6746 x115.

Thank you for your assistance with this matter.

Regards,

Gene Parker

Castle Eugene Parker

NOAA Office of Coast Survey

Atlantic Hydrographic Branch

Hydrographic Team Lead / Physical Scientist

castle.e.parker@noaa.gov

office (757) 441-6746 x115

H12718 DtoN 5 65ft OBSTRN.zip
1032K

OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov> Thu, Feb 12, 2015 at 8:03 AM
To: Castle Parker - NOAA Federal <castle.e.parker@noaa.gov>
Cc: Matthew Jaskoski - NOAA Federal <matthew.jaskoski@noaa.gov>, Michael Gonsalves - NOAA Federal <michael.gonsalves@noaa.gov>, Megan Greenaway - NOAA Federal <megan.greenaway@noaa.gov>, Mark Lathrop - NOAA Federal <mark.t.lathrop@noaa.gov>, Tim Osborn - NOAA Federal <tim.osborn@noaa.gov>, Tiffany Squyres - NOAA Federal <tiffany.squyres@noaa.gov>, David Neff <david@etracinc.com>, _NOS OCS NSD Coast Pilot <coast.pilot@noaa.gov>, Benjamin K Evans - NOAA Federal <Benjamin.K.Evans@noaa.gov>, James Crocker - NOAA Federal <James.M.Crocker@noaa.gov>, Matt Kroll - NOAA Federal <Matt.Kroll@noaa.gov>, OCS NDB - NOAA Service Account <OCS.NDB@noaa.gov>, Tara Wallace - NOAA Federal <Tara.Wallace@noaa.gov>, Pearce Hunt - NOAA Federal <Pearce.Hunt@noaa.gov>, _NOS OCS PBA Branch <ocs.pba@noaa.gov>, _NOS OCS PBB Branch <ocs.pbb@noaa.gov>, _NOS OCS PBC Branch <ocs.pbc@noaa.gov>, _NOS OCS PBD Branch <ocs.pbd@noaa.gov>, _NOS OCS PBE Branch <ocs.pbe@noaa.gov>, _NOS OCS PBG Branch <ocs.pbg@noaa.gov>, Chris Libeau - NOAA Federal <Chris.Libeau@noaa.gov>

L-256/15 and DD-25867 have been registered by the Nautical Data Branch and directed to Products Branch B for processing.

The DtoN reported is one 65-foot obstruction in the Gulf of Mexico, approximately 7 NM south of St. Andrews Bay, FL.

The following charts are affected:
11391 kapp 140

11389 kapp 166

11360 kapp 48

11006 kapp 44

The following ENCs are affected:
US5FL66M

US3GC05M

US2GC09M

References:
H12718
OPR-J357-KR-14

This information was discovered by a NOAA contractor and was submitted by AHB.

Nautical Data Branch/Marine Chart Division/
Office of Coast Survey/National Ocean Service/
Contact: ocs.ndb@noaa.gov

NOAA NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

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H12718 DtoN 5 65ft OBSTRN.zip
1032K

David Neff <david@etracinc.com>

H12718 DtoN #6-#11 Submission to NDB

OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov> Fri, Mar 6, 2015 at 1:01 PM
To: Castle Parker - NOAA Federal <castle.e.parker@noaa.gov>
Cc: Matthew Jaskoski - NOAA Federal <matthew.jaskoski@noaa.gov>, Michael Gonsalves - NOAA Federal <michael.gonsalves@noaa.gov>, Megan Greenaway - NOAA Federal <megan.greenaway@noaa.gov>, Mark Lathrop - NOAA Federal <mark.t.lathrop@noaa.gov>, Tim Osborn - NOAA Federal <tim.osborn@noaa.gov>, David Neff <david@etracinc.com>, Tiffany Squyres - NOAA Federal <tiffany.squyres@noaa.gov>, NSD Coast Pilot <coast.pilot@noaa.gov>, Benjamin K Evans - NOAA Federal <Benjamin.K.Evans@noaa.gov>, James Crocker - NOAA Federal <James.M.Crocker@noaa.gov>, Matt Kroll - NOAA Federal <Matt.Kroll@noaa.gov>, Nautical Data Branch <OCS.NDB@noaa.gov>, Tara Wallace - NOAA Federal <Tara.Wallace@noaa.gov>, Allison Wittrock - NOAA Federal <Allison.Wittrock@noaa.gov>, Pearce Hunt - NOAA Federal <Pearce.Hunt@noaa.gov>, _NOS OCS PBA Branch <ocs.pba@noaa.gov>, _NOS OCS PBB Branch <ocs.pbb@noaa.gov>, _NOS OCS PBC Branch <ocs.pbc@noaa.gov>, _NOS OCS PBD Branch <ocs.pbd@noaa.gov>, _NOS OCS PBE Branch <ocs.pbe@noaa.gov>, _NOS OCS PBG Branch <ocs.pbg@noaa.gov>

L-452/15 and DD-25923 have been registered by the Nautical Data Branch and directed to Products Branch B for processing.

The DtoNs reported are one area obstruction and five obstructions (point features) in the Gulf of Mexico, approximately 7 NM south of St. Andrews Bay, FL.

The following charts are affected:
11391 kapp 140

11390 kapp 141

11389 kapp 166

11360 kapp 48

11006 kapp 44

The following ENCs are affected:
US5FL66M

US3GC05M

US2GC09M

References:
H12718
OPR-J357-KR-14

This information was discovered by a NOAA contractor and was submitted by AHB.

Nautical Data Branch/Marine Chart Division/
Office of Coast Survey/National Ocean Service/
Contact: ocs.ndb@noaa.gov

NOAA NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

On Tue, Mar 3, 2015 at 12:59 PM, Castle Parker - NOAA Federal <castle.e.parker@noaa.gov> wrote:

> Good day,
>
> Please find attached a zip file for survey H12718 DtoN #6 through #11 for submission to Nautical Data Branch (NDB) and Marine Chart Division (MCD). This danger submission contains one area obstruction and four obstructions (point features).
>
> The information originates from NOAA contract field unit eTrac, Inc., and was submitted to the Atlantic Hydrographic Branch (AHB) for review and processing. The contents of the attached WinZip file were generated at AHB. The attached zip file contains a DtoN Letter (PDF), associated image files, and a Pydro XML file.
>
> If you have any questions, please direct them back to me via email or phone 757-441-6746 x115.
>
> Thank you for your assistance with this matter.
>
> Regards,
>
> Gene Parker
>
> *Castle Eugene Parker*
>
> *NOAA Office of Coast Survey*
>
> *Atlantic Hydrographic Branch*
>
> *Hydrographic Team Lead / Physical Scientist*
>
> *castle.e.parker@noaa.gov*
>
> *office (757) 441-6746 x115*

H12718 DtoN 6-11.zip
7534K

David Neff <david@etracinc.com>

H12718 DtoN #12 Submission to NDB

OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov> Fri, Apr 3, 2015 at 7:29 PM
To: Castle Parker - NOAA Federal <castle.e.parker@noaa.gov>
Cc: Matthew Jaskoski - NOAA Federal <matthew.jaskoski@noaa.gov>, Michael Gonsalves - NOAA Federal <michael.gonsalves@noaa.gov>, Megan Greenaway - NOAA Federal <megan.greenaway@noaa.gov>, Katrina Wyllie - NOAA Federal <katrina.wyllie@noaa.gov>, Paul Turner - NOAA Federal <paul.turner@noaa.gov>, David Neff <david@etracinc.com>, NSD Coast Pilot <coast.pilot@noaa.gov>, Benjamin K Evans - NOAA Federal <Benjamin.K.Evans@noaa.gov>, James Crocker - NOAA Federal <James.M.Crocker@noaa.gov>, Matt Kroll - NOAA Federal <Matt.Kroll@noaa.gov>, Nautical Data Branch <OCS.NDB@noaa.gov>, Tara Wallace - NOAA Federal <Tara.Wallace@noaa.gov>, Pearce Hunt - NOAA Federal <Pearce.Hunt@noaa.gov>, _NOS OCS PBA Branch <ocs.pba@noaa.gov>, _NOS OCS PBB Branch <ocs.pbb@noaa.gov>, _NOS OCS PBC Branch <ocs.pbc@noaa.gov>, _NOS OCS PBD Branch <ocs.pbd@noaa.gov>, _NOS OCS PBE Branch <ocs.pbe@noaa.gov>, _NOS OCS PBG Branch <ocs.pbg@noaa.gov>

L-607/15 and DD-26044 have been registered by the Nautical Data Branch and directed to Products Branch B for processing.

The DtoN reported is one 66-foot obstruction in the Gulf of Mexico, approximately 7 NM south of St. Andrews Bay, FL.

The following charts are affected:
11391 kapp 140

11389 kapp 166

11360 kapp 48

The following ENCs are affected:
US5FL66M

US3GC05M

References:
H12718
OPR-J357-KR-14

This information was discovered by a NOAA contractor and was submitted by AHB.

Nautical Data Branch/Marine Chart Division/
Office of Coast Survey/National Ocean Service/
Contact: ocs.ndb@noaa.gov
NOAA NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

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APPROVAL PAGE

H12718

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

- H12718_DR.pdf
- Collection of depth varied resolution BAGS
- Processed survey data and records
- H12717_H12718_H12719_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.

Digitally signed by Jasmine Cousins
DN: cn=Jasmine Cousins, o=NOAA, ou=Atlantic Hydrographic Branch, email=jasmine.cousins@noaa.gov, c=US
Date: 2016.03.14 10:44:24 -04'00'

Approved: _____

Lieutenant Commander Matthew Jaskoski, NOAA
Chief, Atlantic Hydrographic Branch