H13177

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

DESCRIPTIVE REPORT

Type of Survey:	Navigable Area
Registry Number:	H13177

LOCALITY

State(s):	Florida
General Locality:	Approaches to Tampa Bay, FL
Sub-locality:	6 NM West of Egmont Key

2018

CHIEF OF PARTY
Scott Melancon

LIBRARY & ARCHIVES

Date:

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

REGISTRY NUMBER:

HYDROGRAPHIC TITLE SHEET

H13177

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 Tampa Bay, FL**
Sub-Locality:	**6 NM West of Egmont Key**
Scale:	**20000**
Dates of Survey:	**10/18/2018 to 03/02/2019**
Instructions Dated:	**07/17/2018**
Project Number:	**OPR-J317-KR-18**
Field Unit:	**Oceaneering International Inc.**
Chief of Party:	**Scott Melancon**
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:

Any revisions to the Descriptive Report (DR) applied during office processing are shown in red italic text. The DR is maintained as a field unit product, therefore all information and recommendations within this report are considered preliminary unless otherwise noted. The final disposition of survey data is represented in the NOAA nautical chart products. All pertinent records for this survey are archived at the National Centers for Environmental Information (NCEI) and can be retrieved via https://www.ncei.noaa.gov/. Products created during office processing were generated in NAD83 UTM 17N, MLLW. All references to other horizontal or vertical datums in this report are applicable to the processed hydrographic data provided by the field unit.

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Descriptive Report to Accompany Survey H13177

Project: OPR-J317-KR-18

Locality: Approaches to Tampa Bay, FL

Sublocality: 6 NM West of Egmont Key

Scale: 1:20000

October 2018 - March 2019

Oceaneering International Inc.

Chief of Party: Scott Melancon

A. Area Surveyed

The survey area is located 6 NM West of Egmont Key, in the general locality of the Approaches to Tampa Bay, Florida.

A.1 Survey Limits

Data were acquired within the following survey limits:

Northwest Limit	Southeast Limit
27° 35' 54.67" N 82° 59' 43.2" W	27° 28' 50.08" N 82° 49' 21.24" W

Table 1: Survey Limits

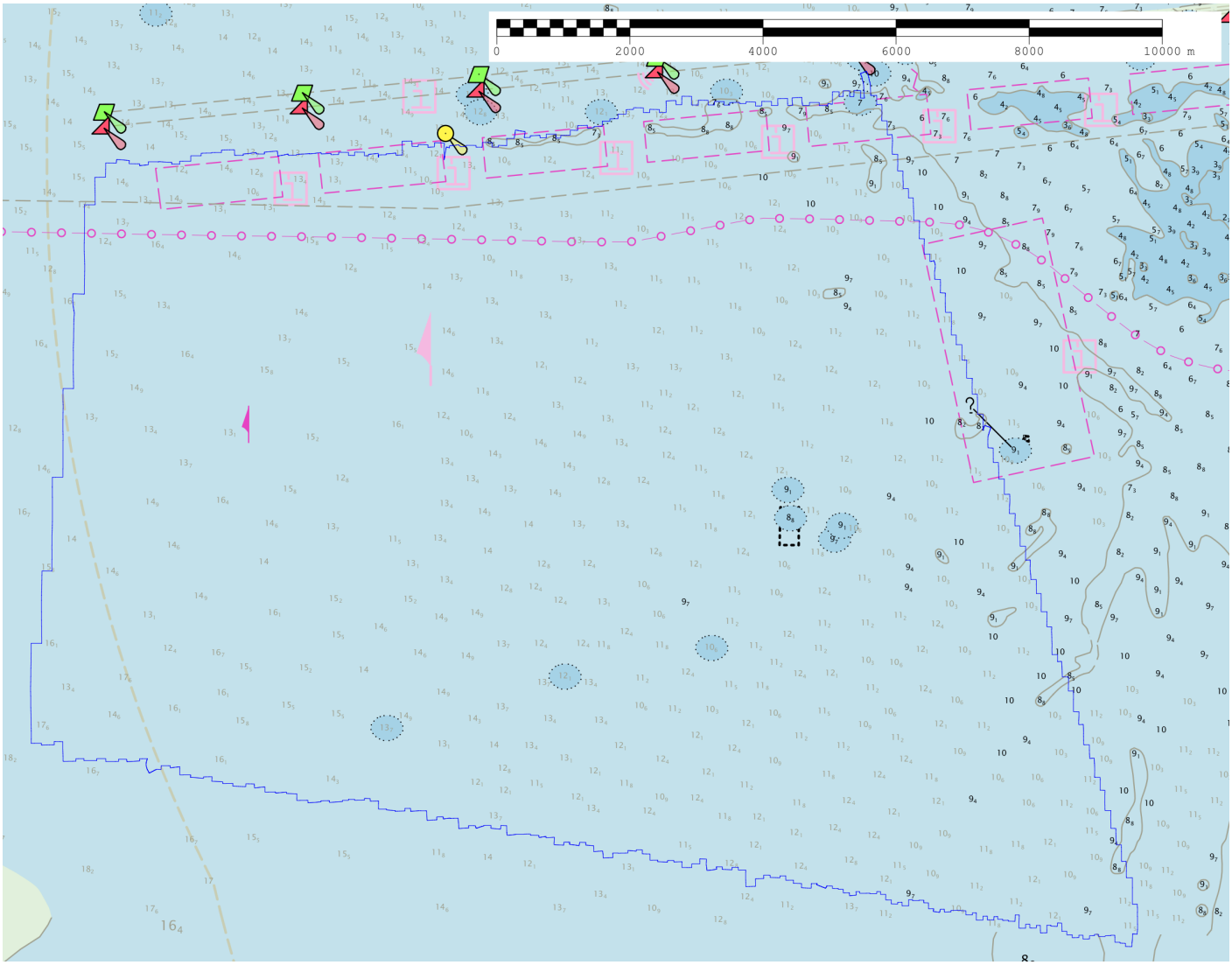


Figure 1: H13177 Survey Limits

Survey limits were aquired in accordance with the requirements in the Project Instructions and the HSSD (2018).

A.2 Survey Purpose

The purpose of the project is to provide contemporary surveys to update the National Ocean Service nautical charting products to support an increase in vessel traffic into Tampa Bay, FL. There is a lack of modern data in the area, which is subject to strong storm events that have the potential to cause shoaling.

A.3 Survey Quality

The entire survey is adequate to supersede previous data.

A.4 Survey Coverage

The following table lists the coverage requirements for this survey as assigned in the project instructions:

Water Depth	Coverage Required
All waters in survey area (except Sheet 4)	Complete Coverage
All waters in survey area	Report significant shoaling via weekly progress reports. PM/COR may adjust survey prioritization based on observed shoaling.
All waters in survey area	Acquire backscatter data during all multibeam data acquisition

Table 2: Survey Coverage

Survey coverage was in accordance with the requirements listed above and in the HSSD.

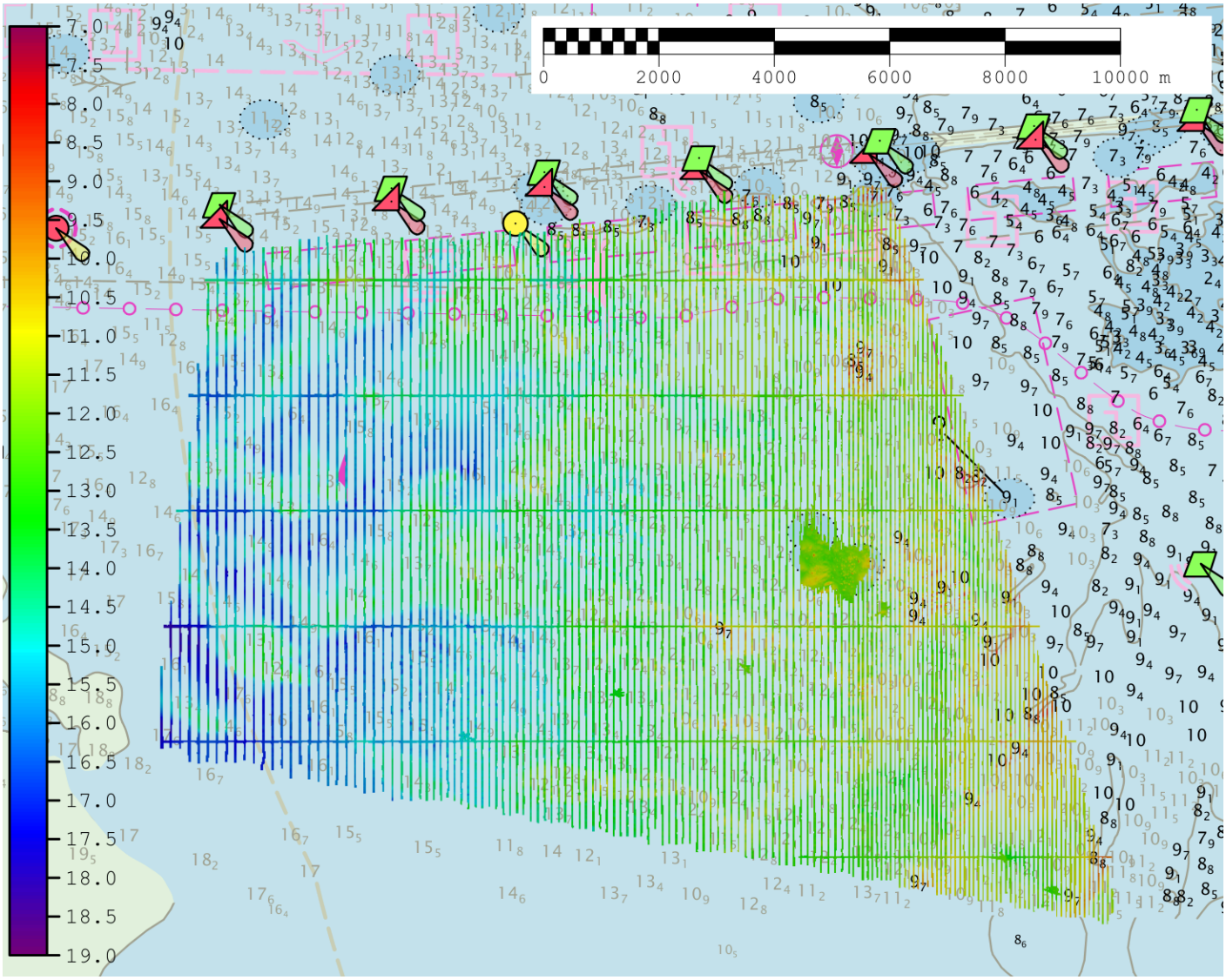


Figure 2: H13177 Survey Coverage

A.5 Survey Statistics

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

	HULL ID	*JQN00027J708*	*8237094*	*Total*
LNM	**SBES Mainscheme**	0	0	0
	MBES Mainscheme	0	0	0
	Lidar Mainscheme	0	0	0
	SSS Mainscheme	0	0	0
	SBES/SSS Mainscheme	0	0	0
	MBES/SSS Mainscheme	0	718.5	718.5
	SBES/MBES Crosslines	0	41.46	41.46
	Lidar Crosslines	0	0	0
Number of Bottom Samples				20
Number Maritime Boundary Points Investigated				0
Number of DPs				19
Number of Items Investigated by Dive Ops				0
Total SNM				44.31

Table 3: Hydrographic Survey Statistics

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

Survey Dates	Day of the Year
10/18/2018	291
10/19/2018	292

Survey Dates	Day of the Year
10/20/2018	293
10/21/2018	294
10/23/2018	296
10/24/2018	297
10/29/2018	302
10/30/2018	303
10/31/2018	304
11/01/2018	305
11/05/2018	309
11/06/2018	310
12/07/2018	341
12/08/2018	342
03/02/2019	61

Table 4: Dates of Hydrography

It was observed that there were several unit options for nautical miles within the CARIS program. However, 'area' only had one option for the nautical mile units as Square Int. Nautical Miles. To be consistent, Int. Nautical Miles was used as the unit for the LNM shown in Table 3. Detached Positions (DP) include CTD casts and lead line comparisons conducted within survey bounds, but not bottom samples because there is a separate entry for those.

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	***JQN00027J708***	***1237094***
LOA	9.14 meters	40.84 meters
Draft	0.762 meters	1.98 meters

Table 5: Vessels Used

The R/V Sea Scout (Hull ID 1237094) and R/V C-Wolf (Hull ID JQN00027J708) were used as the survey platforms for all data acquisition within H13177.

B.1.2 Equipment

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

Manufacturer	**Model**	**Type**
YSI	600-BCR-C-T	Conductivity, Temperature, and Depth Sensor
Sea-Bird Scientific	SBE 19plus	Conductivity, Temperature, and Depth Sensor
Teledyne TSS	Meridian Surveyor	Gyrocompass
Teledyne TSS	DMS05	Attitude System
CNAV	3050	Positioning System
Klein Marine Systems	System 5000V2	SSS
Kongsberg Maritime	EM 2040C	MBES
Kongsberg Maritime	EM 3002	MBES
EdgeTech	4200	SSS
CodaOctopus	F180	Positioning and Attitude System

Table 6: Major Systems Used

B.2 Quality Control

B.2.1 Crosslines

Multibeam/single beam echo sounder/side scan sonar crosslines acquired for this survey totaled 5.77% of mainscheme acquisition.

Crosslines were run generally perpendicular to mainscheme lines in order for quality control statistics to be generated after completion of mainscheme survey lines. The total crossline mileage was 41.46 nautical miles and total mainline mileage was 718.5 nautical miles. Multibeam fill-ins were included in the total mainline mileage. Investigation lines and SSS rerun lines for which MB was also acquired were not included.

Separate 1-meter mainline and crossline Combined Uncertainty and Bathymetric Estimator (CUBE) surfaces were generated and the surface difference tool within CARIS HIPS was used to evaluate crossline and mainscheme line agreement. The mainline surface was used as Surface 1 and the crossline surface as Surface 2. Statistical information about the difference surface was generated using the Compute Statistics tool (Figure 3). The analysis shows that greater than 99% of depth difference values are between -0.221 and 0.179 meters. This is well within the maximum allowable Total Vertical Uncertainty (TVU) for the depths of the comparison area of the mainline surface (7.02 – 18.98 meters), which ranges from ±0.508 to ±0.558 meters. It is evident from the histogram (Figure 3) that several depth differences exceed the maximum allowable TVU. Further examination indicates that depth differences greater than ±0.50 m are concentrated within 3 discrete areas (Figure 4) and generally associated with sea floor features.

The crossline surface, mainline surface, difference surface and exported ASCII file of histogram results are located in Separates\II_Digital_Data\Crossline_Comparison.

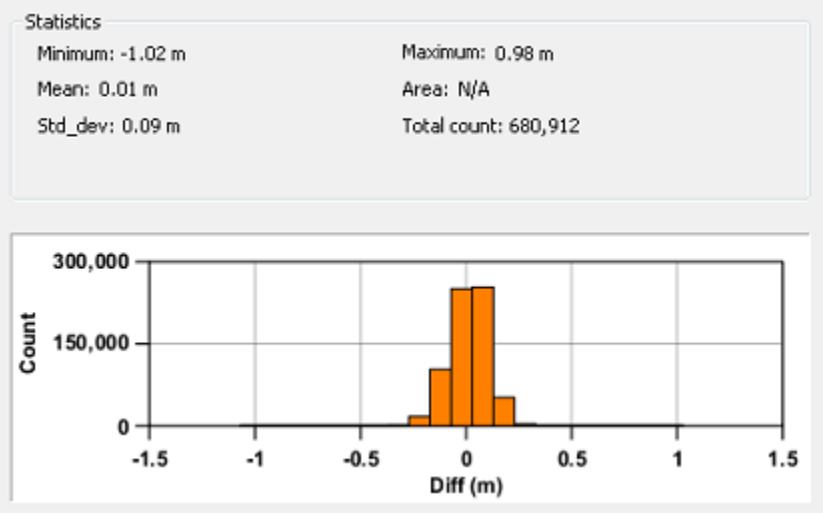


Figure 3: H13177 crossline comparison statistics and histogram output from CARIS compute statistics tool.

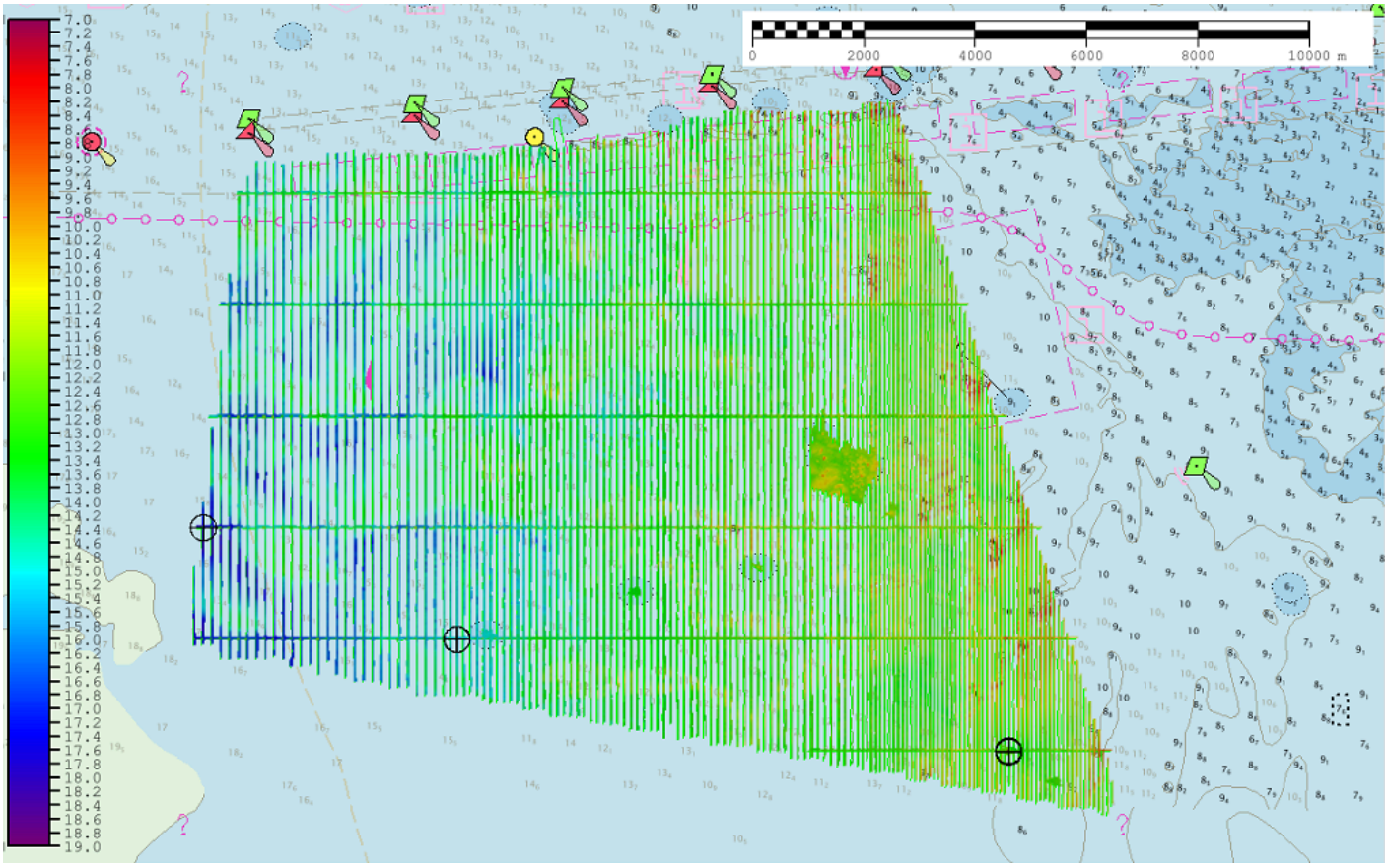


Figure 4: H13177 survey area overlain with black compass features that indicate where depth difference values between mainlines and crosslines are greater than ±50cm.

B.2.2 Uncertainty

The following survey specific parameters were used for this survey:

Method	Measured	Zoning
ERS via Constant Separation Model	0.1 meters	0.131 meters

Table 7: Survey Specific Tide TPU Values.

Hull ID	Measured - CTD	Measured - MVP	Surface
1237094	2 meters/second	n/a meters/second	0.8 meters/second
JQN00027J708	2 meters/second	n/a meters/second	0.8 meters/second

Table 8: Survey Specific Sound Speed TPU Values.

The Total Propagated Uncertainty (TPU) for each sounding was computed within CARIS, the MBES processing software. The vessel file stores static values of the estimated uncertainties associated with each individual sensor. The Compute TPU dialog contains placeholders for the user to specify tidal and sound speed uncertainty, as well as whether the sources of uncertainty are static (come from the vessel file) or were collected in real-time. This particular survey contains all static uncertainty sources. The above uncertainty estimates are combined with a DeviceModels.xml that contains individual sonar model characteristics to calculate the total TPU.

Currently there is no entry for static vertical uncertainty associated with a positioning system or the separation model within CARIS. The workaround is to enter these values in the Tide Measured and Zoning entry locations. Internal verification indicates the C-Nav™ 3050 systems have a vertical uncertainty of ~20 cm at the 95% confidence level. The 95% confidence level is expressed as 1.96 standard deviations from the mean. CARIS entries of uncertainty are assumed to be 1-sigma (one standard deviation from the mean) and this value of 20 cm is divided by 1.96 for a value of 10 cm to enter into CARIS. The 1-sigma VDATUM Maximum Combined Uncertainty (MCU) value for the separation model (13.1 cm) is provided in the project instructions.

An Uncertainty child layer is generated during the bathymetric surface creation process that shows the uncertainty at each node of the surface. HydrOffice QCTools was used to analyze the uncertainty of all un-finalized and finalized grids. It was observed that all uncertainty values are within specifications for all un-finalized surfaces (Figures 5-6) but the finalized surfaces contain less than 0.1% of values that do not meet specifications (Figures 7-8). Review indicates that this is due to the finalization parameter where the uncertainty is defined as the greater of either the standard deviation or uncertainty for a particular node.

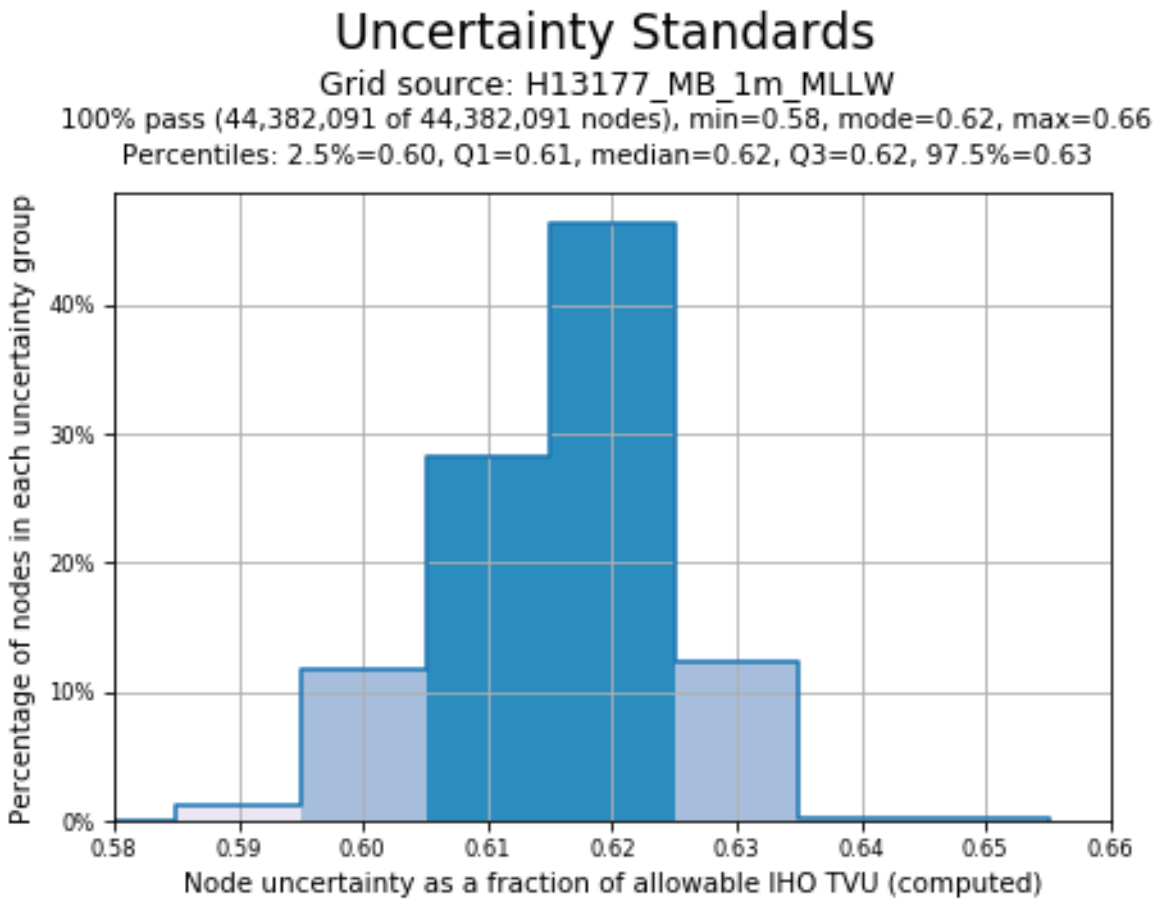


Figure 5: Uncertainty QA output from HydrOffice QCTools for surface H13177_MB_1m_MLLW.

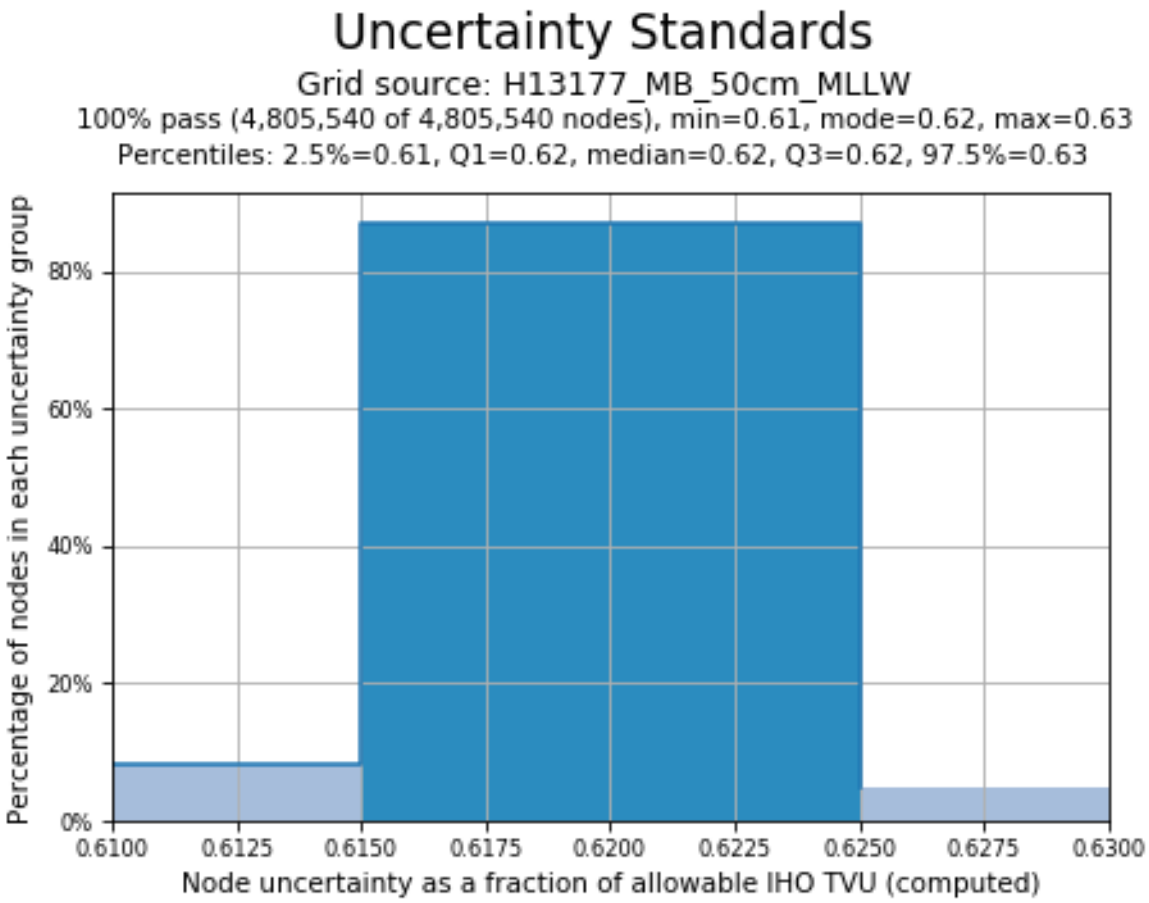


Figure 6: Uncertainty QA output from HydrOffice QCTools for surface H13177_MB_50cm_MLLW.

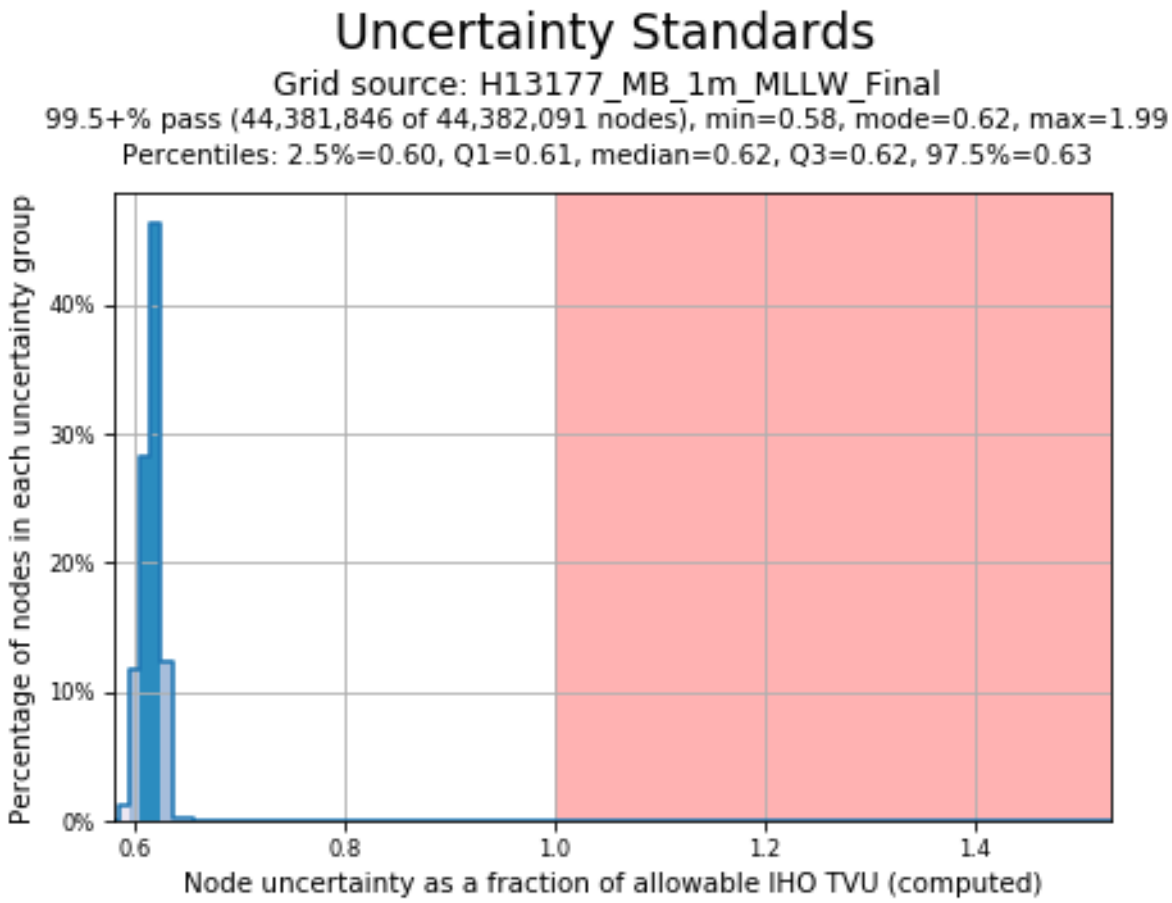


Figure 7: Uncertainty QA output from HydrOffice QCTools for surface H13177_MB_1m_MLLW_Final.

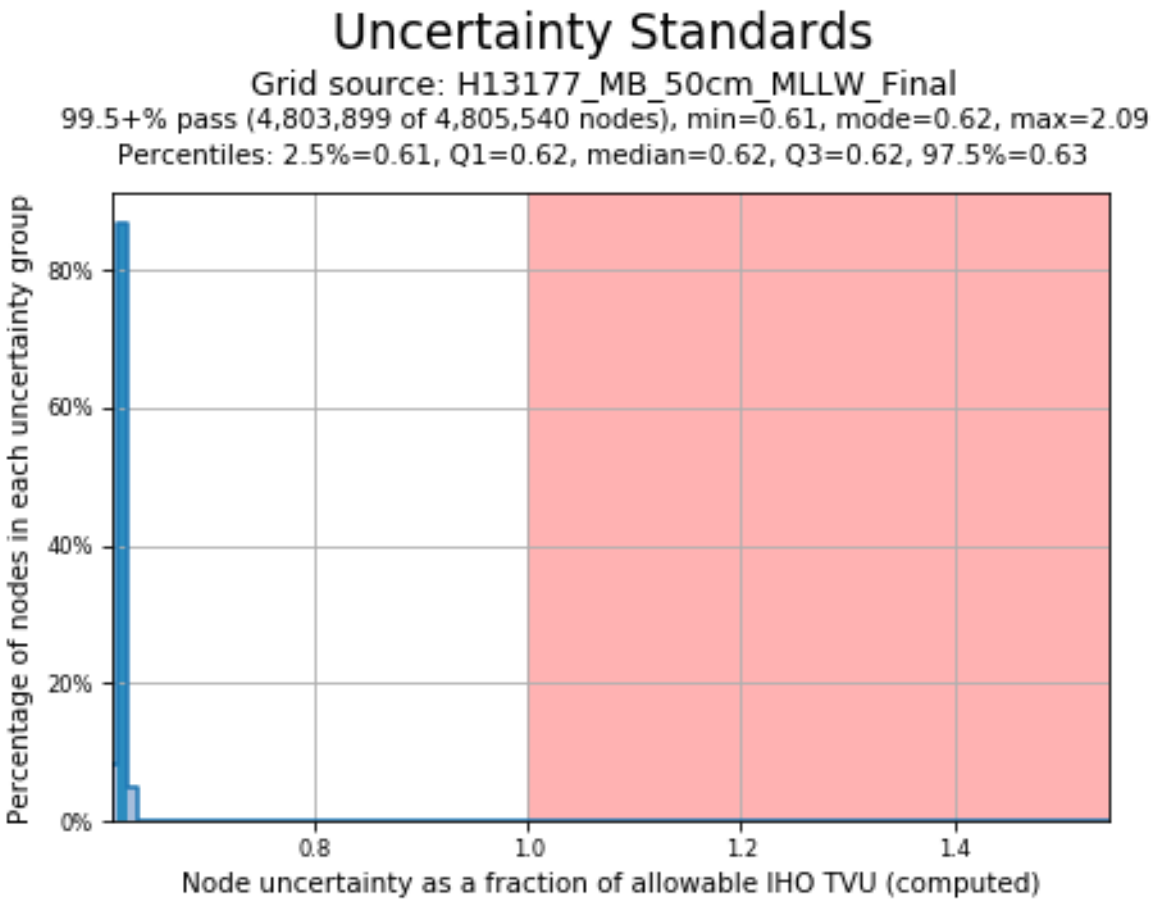


Figure 8: Uncertainty QA output from HydrOffice QCTools for surface H13177_MB_50cm_MLLW_Final.

B.2.3 Junctions

Survey H13177 junctions with four contemporary surveys: H13172, H13173, H13178, and H13179. Survey areas H13173, H13178, and H13179 were either not complete or partially complete at the time of this reporting and will be addressed in the respective Descriptive Reports. A preliminary junction analysis between H13177 and H13172 was conducted to ensure general agreement of depths. A difference surface between the depth layers of H13177 and the adjoining survey was generated. A more thorough evaluation will be conducted in the specific Sheet Descriptive Reports using finalized surfaces when available that addresses difference values greater than 2^0.5 * TVU, as outlined in the HSSD (2018).

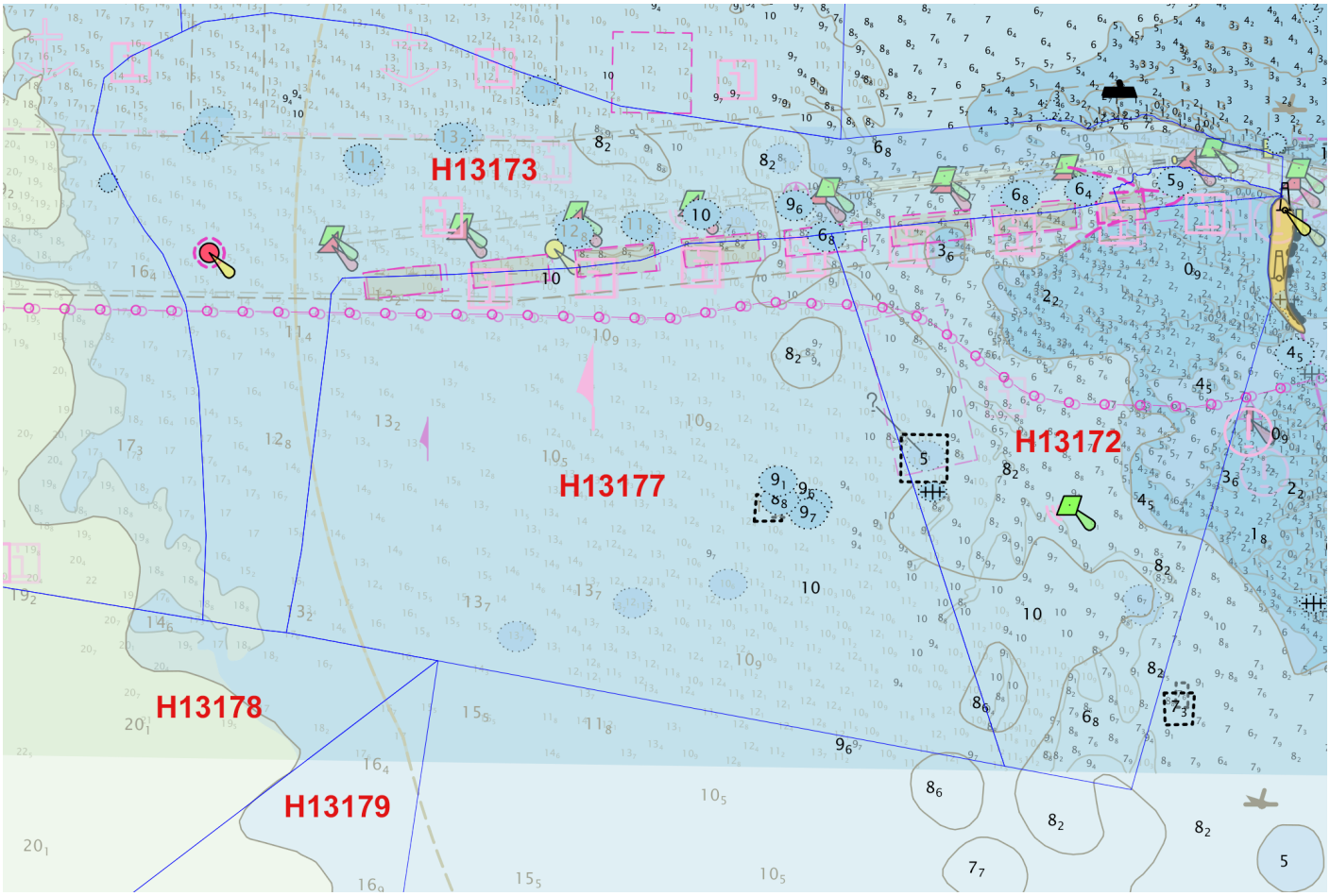


Figure 9: H13177 Survey Junctions

The following junctions were made with this survey:

Registry Number	Scale	Year	Field Unit	Relative Location
H13172	1:20000	2018	Oceaneering	E
H13173	1:20000	2018	Oceaneering	N
H13178	1:40000	2018	Oceaneering	SW
H13179	1:40000	2018	Oceaneering	SW

Table 9: Junctioning Surveys

H13172

Sheet H13177 junctions with H13172 to the east. The overlap consists of mainlines and crosslines that extend into the adjoining sheet. A difference surface was generated between the two surveys with

H13177_MB_1m_MLLW_Final as surface 1 and a preliminary 1-meter BAG surface of H13172 as surface 2. The difference surface indicates that data from H13177 and H13172 agree well (Figure 10) with greater than 99% of difference values between -0.27 and 0.13 meters.

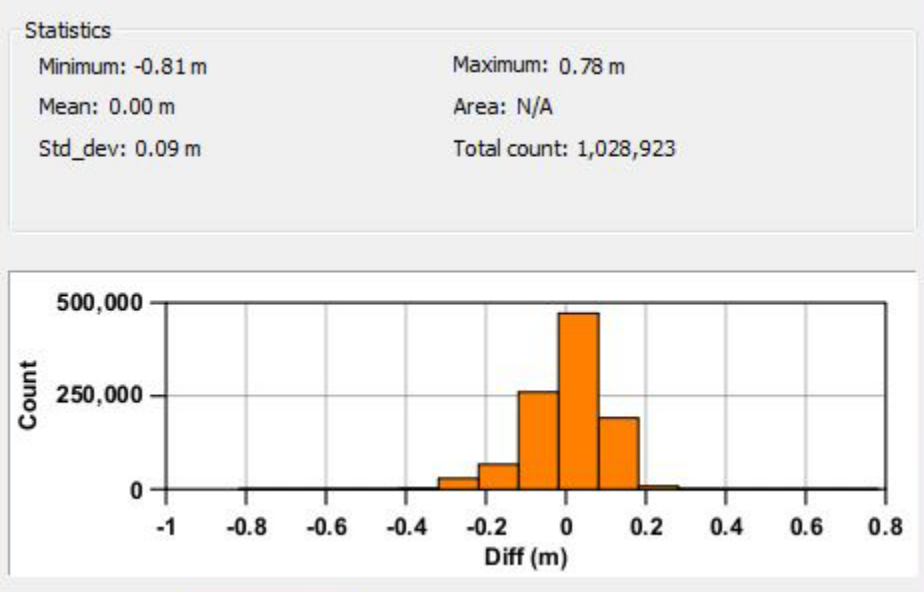


Figure 10: Histogram of depth difference values between overlapping data of H13177 and H13172.

H13173

The survey junction between H13177 and H13173 will be addressed in the Descriptive Report for H13173.

H13178

The survey junction between H13177 and H13178 will be addressed in the Descriptive Report for H13178.

H13179

The survey junction between H13177 and H13179 will be addressed in the Descriptive Report for H13179.

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

Sonar Settings

If necessary, the angle of the multibeam sonars were modified in order to moderate the effects of factors such as increased sea state or to increase coverage; any changes are documented in the acquisition logs.

B.2.6 Factors Affecting Soundings

Enviromental Factors

Weather, sea state, thermoclines, and fish/marine life were all temporary factors that affected the data periodically throughout the duration of the survey. These are noted in the acquisition and processing logs and reruns were collected when necessary.

B.2.7 Sound Speed Methods

Sound Speed Cast Frequency: Once per day and more often as necessary aboard the R/V C-Wolf and twice per day and more often as necessary aboard the R/V Sea Scout.

Sea-Bird Scientific SBE19 and SBE19plus Conductivity, Temperature, and Depth (CTD) sensors were used for speed of sound measurements through the water column. The water column sound speed profile was applied in Kongsberg's Seafloor Information System (SIS) MBES control software to correct the multibeam data in real-time. Endeco YSI sondes were used to determine the sound speed at the transducers. Sound speed data are located in Separates II Digital Data\Sound Speed Data Summary.

B.2.8 Coverage Equipment and Methods

Mainline coverage within the survey area consisted of Complete Coverage (100% side scan sonar with concurrent multibeam data) acquisition. The assigned Fish Haven area and associated debris area were surveyed with Object Detection MBES coverage.

Bathymetric and water column data were acquired with a Kongsberg EM2040C multibeam echo sounder aboard the R/V Sea Scout and bathymetry data was acquired with a Kongsberg EM3002 multibeam echo sounder aboard the R/V C-Wolf. Side scan sonar acoustic imagery was collected with a Klein 5000 V2 system aboard the R/V Sea Scout and an EdgeTech 4200 aboard the R/V C-Wolf.

B.2.9 Density

HydrOffice QCTools was used to analyze the density of all finalized surfaces. The density of all finalized surfaces meet the density requirements for which at least 95% of all nodes on the surface shall be populated with at least 5 soundings (Figures 11-12).

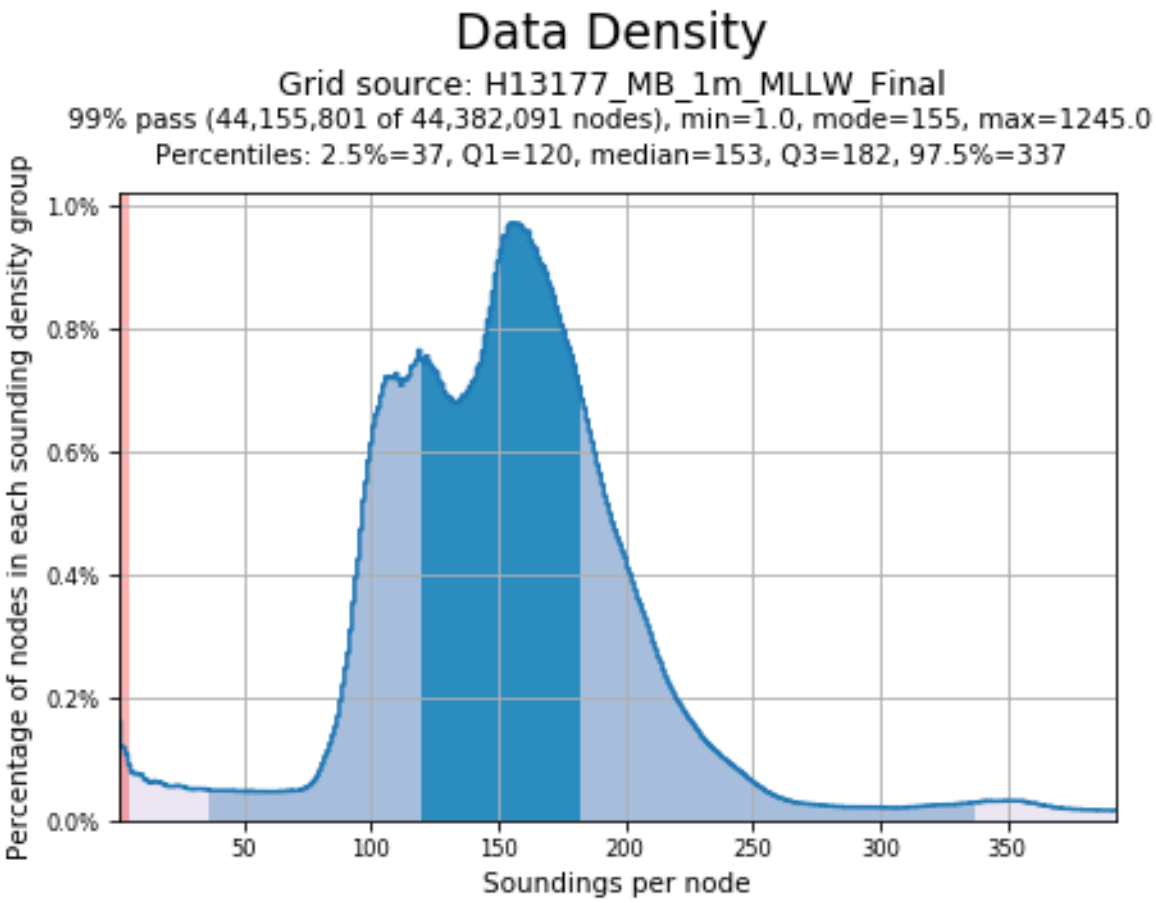


Figure 11: Statistical information about the density child layer of the H13177_MB_1m_MLLW_Final surface generated from HydrOffice QCTools.

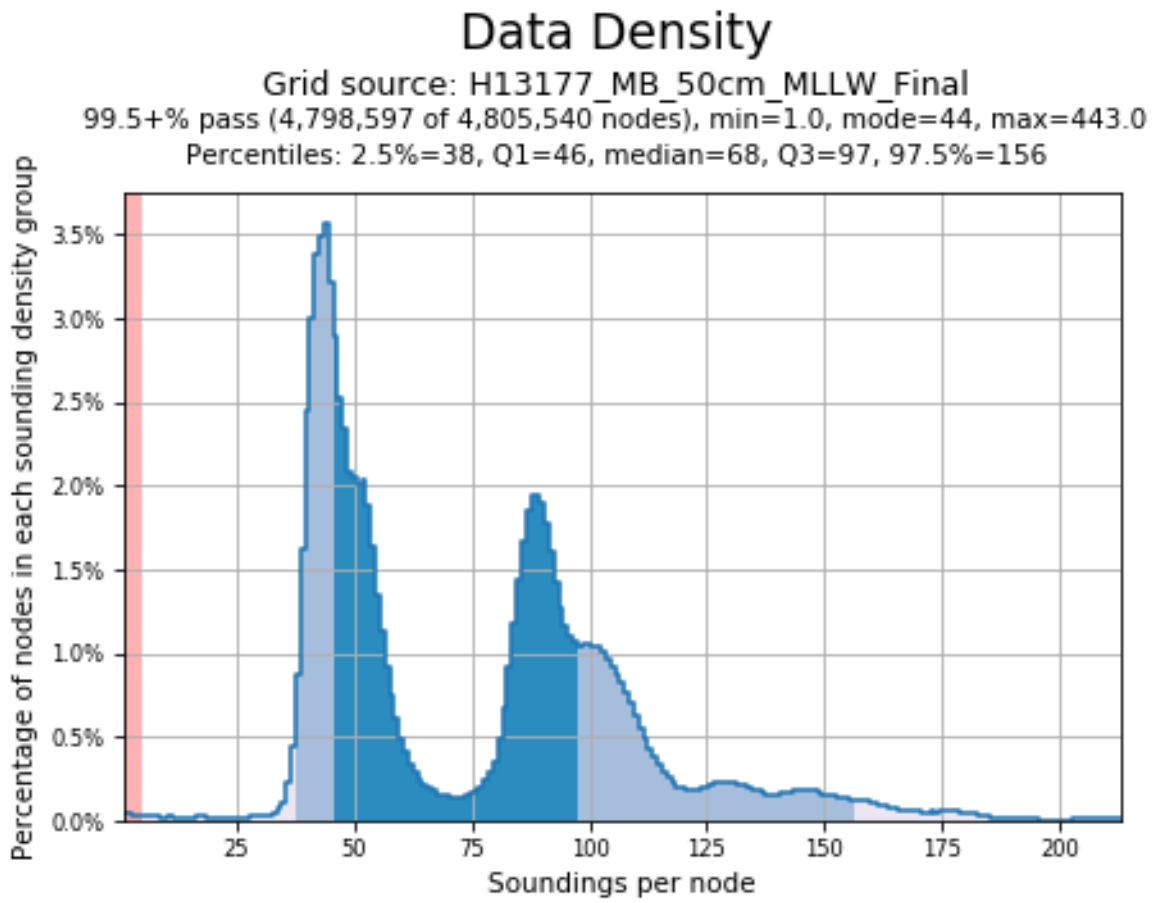


Figure 12: Statistical information about the density child layer of the H13177_MB_50cm_MLLW_Final surface generated from HydrOffice QCTools.

B.2.10 Holidays

HydrOffice QCTools was used to determine the existence of holidays within the H13177_MB_50cm_MLLW_Final Object Detection surface. Four holidays exist within the Composite Source File (CSF) boundaries of the Fish Haven area, two of which are associated with contacts within the Fish Haven. Three additional holidays exist within the larger user-delineated debris area as defined in the FFF, which are not associated with any significant features.

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

All equipment and survey methods were used as detailed in the DAPR. Backscatter was logged within each raw Kongsberg EM file.

B.5 Data Processing

B.5.1 Primary Data Processing Software

The following software program was the primary program used for bathymetric data processing:

Manufacturer	Name	Version
Teledyne	CARIS HIPS	10.4

Table 10: Primary bathymetric data processing software

The following software program was the primary program used for bathymetric data processing:

Manufacturer	Name	Version
QPS	Qimera	1.7.4

Table 11: Primary bathymetric data processing software

The following software program was the primary program used for imagery data processing:

Manufacturer	Name	Version
Chesapeake Technologies, Inc.	SonarWiz	V6005.0025

Table 12: Primary imagery data processing software

The following Feature Object Catalog was used: NOAA Extended Attribute Files V5_8.

CARIS HIPS version 10.4 was the primary software program used for bathymetric data processing. However, there was a period of time where there was an issue in CARIS with water column additional bathymetry not showing up in the right depth location. To continue moving forward, the water column data were reviewed in Qimera. Please note that although Table 11 states that Qimera was a primary program

used for processing bathymetric data, it would be considered a secondary processing software. The issue has since been fixed in CARIS. There was a zero entry in the SVC section of the vessel file that was causing a problem. This was removed and the data re-merged in CARIS.

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
H13177_MB_1m_MLLW	CARIS Raster Surface (CUBE)	1 meters	7.02 meters - 18.98 meters	NOAA_1m	Complete MBES
H13177_MB_1m_MLLW_Final	CARIS Raster Surface (CUBE)	1 meters	7.02 meters - 18.98 meters	NOAA_1m	Complete MBES
H13177_MB_50cm_MLLW	CARIS Raster Surface (CUBE)	0.5 meters	9.21 meters - 13.24 meters	NOAA_0.5m	Object Detection
H13177_MB_50cm_MLLW_Final	CARIS Raster Surface (CUBE)	0.5 meters	8.79 meters - 13.24 meters	NOAA_0.5m	Object Detection
H13177_SSSAB_1m_455kHz_1of1	SSS Mosaic	1 meters	-	N/A	100% SSS
H13177_SSSAB_1m_545kHz_1of1	SSS Mosaic	1 meters	-	N/A	200% SSS

Table 13: Submitted Surfaces

Side scan mosaic H13177_SSSAB_1m_545kHz_1of1 only contains data from investigations of significant contacts. It is not a full 200% coverage surface.

B.5.3 MBES Data Processing and Review

The data were filtered using a surface filter set to reject data greater than 1-meter away from the CUBE surface. The data were reviewed for additional outliers (fliers) using the standard deviation and depth layers, including the 'deep' and 'shoal' depth layers. Higher standard deviation is generally associated with bathymetric features, contacts and/or areas of bathymetric change. Noise can also be identified by high standard deviation. The Flier Finder utility within HydrOffice QCTools was used as an additional quality control tool to evaluate the surface for fliers. Identified fliers were manually rejected. The Fish Haven area and associated debris area were not filtered and were manually reviewed, as were all investigations of significant contacts.

Although all the survey lines imported into the right location and in the right directions, it was recognized that the gyro data did not originally import properly. According to CARIS support the software would have taken the next data available to correct by heading (CMG). Although there were no issues processing the data in that manner, the gyro data were re-imported properly using the H. Datagram in the last step of the CARIS conversion wizard and the data re-merged.

B.5.4 Fixed File Path

During post-processing, ASCII navigation files (time, lat, lon, GPS height) were imported into CARIS with an associated .info file, which contains information on the contents and formatting of the ASCII navigation files.

When projects processed in the above manner were copied from a network location to external or internal drives or from internal to external drives it was observed that the path of the *.info file remained fixed to the original path name. Upon opening the copied project, the CARIS program asked to update the navigation folder, but not the *.info file. Keeping the info file in with the ASCII navigation did not appear to change this. Certain editors such as navigation editor or swath editor could not be opened within CARIS and the lines became locked.

The workaround is to recreate the exact folder structure of the original project on the internal or external drive. However, it is recognized that this is an issue for submission because files are placed in the appropriate submission folders without regard for how the projects were originally set up. A request was logged with CARIS support and the information sent to the development team. Information from CARIS supports indicates that the Check Project process was not checking for an *.info file when using an ASCII file for auxiliary navigation. CARIS correspondence indicates that this has been fixed so that the check process will look for *.info missing files, enabling users to update their location using the Reset Raw Data Location dialog box. This fix should be available in both versions 10.4.10 and 11.1.0. Due to licensing limitations this has not been tested in-house and the workaround to maintain original path names and drive letters was used. The original path for this project is: N:\noaa\2018-OPR-J317-KR-18_193519-TampaBay \Sheets\H13177-Sheet8\Geo\Software_Projects\CARIS\H13177.

C. Vertical and Horizontal Control

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

C.1 Vertical Control

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

ERS Methods Used:

ERS via VDATUM

Ellipsoid to Chart Datum Separation File:

TampaBay_EC_poly_xyNAD83-MLLW_geoid12b.txt

C.2 Horizontal Control

The horizontal datum for this project is North American Datum 1983.

The projection used for this project is Projected UTM 17N.

The positioning systems aboard the vessels utilize Oceaneering C-Nav systems which deliver Precise Point Positioning (PPP). The C-Nav GPS recieve corrections through the C-Nav Subscription Services.

C.3 Additional Horizontal or Vertical Control Issues

C.3.1 GNSS Data Processing

GNSS data were not collected separately by the C-Nav systems on 11/05/2018. However, navigation and positioning information is collected within OII's proprietary software Hydomap for each line. The GNSS data collected for each line were processed separately within Hydromap and added to each line individually in CARIS, after which normal processing operations continued.

D. Results and Recommendations

D.1 Chart Comparison

A combination of sounding selection layers and user-defined depth ranges were used to compare surveyed soundings to charted depths using tools within the CARIS MBES processing software. The sounding selection layer was generated from the H13177_MB_1m_MLLW_Final surface using a shoal biased, single-defined radius of 150 meters, which provided sufficient soundings across the survey area with which to compare charted depths and contours. User-defined color maps were generated to match the contour intervals present on US5FL11M (Figure 13) and US4FL10M (Figure 14).

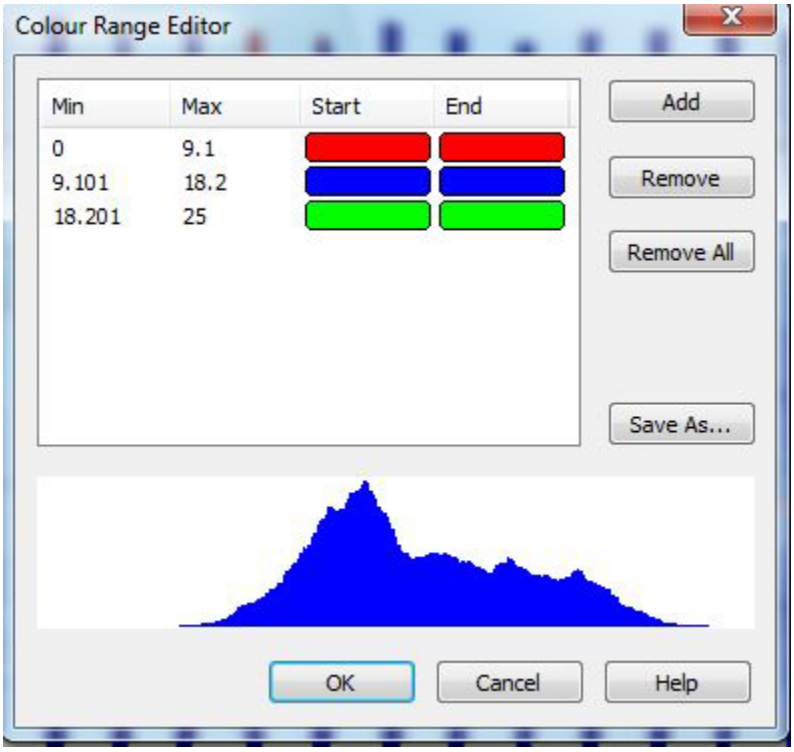


Figure 13: Color range used to compare H13177 surveyed depths to charted depths.

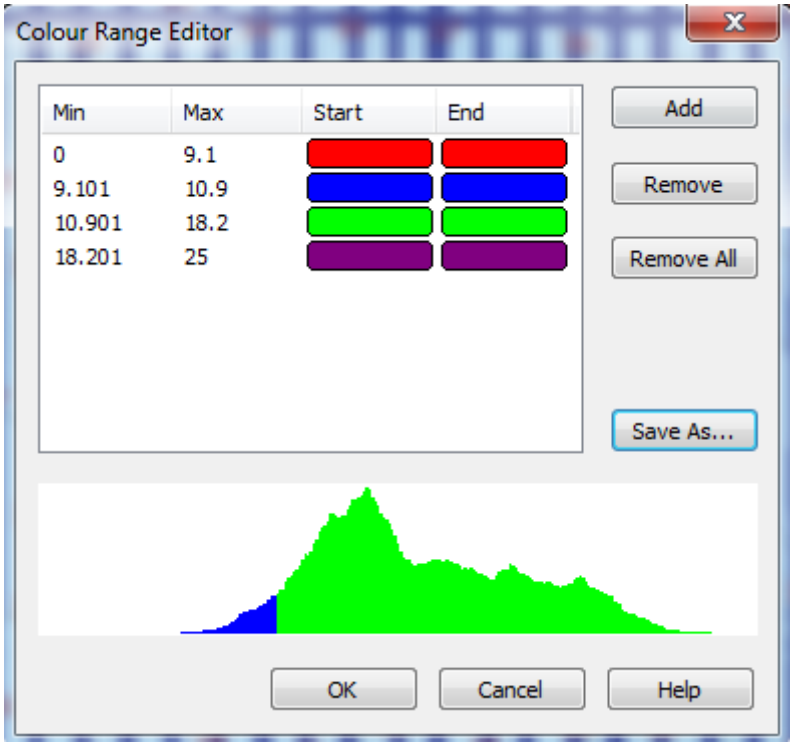


Figure 14: Color range used to compare H13177 surveyed depths to charted depths.

D.1.1 Electronic Navigational Charts

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

ENC	Scale	Edition	Update Application Date	Issue Date	Preliminary?
US5FL11M	1:40000	47	03/11/2019	04/16/2019	NO
US4FL18M	1:80000	20	03/05/2018	11/19/2018	NO
US4FL10M	1:80000	34	03/18/2019	04/24/2019	NO
US3GC07M	1:350000	34	03/11/2019	04/16/2019	NO

Table 14: Largest Scale ENCs

US5FL11M

NOAA Local Notice to Mariners (LNM) were reviewed subsequent to the date of the Project Instructions and before the end of the survey for RNC 11415. The last LNM reviewed for Chart: 11415, Current Edition: 13, Print Date: Nov. /2018, Tampa Bay Entrance; Manatee River Extension was LNM 08/19, 7th Dist posted on 2/14/2019 to Add an Obstruction in Feet. Two LNM were issued within the survey bounds, which both correspond to DtoNs submitted for this survey.

Surveyed soundings range from 23 to 62 feet. Surveyed depths are shallowest to the east and northeast and deepest to the west. The 9.10-m (29.86-ft) contours of US5FL11M are present within the H13177 survey area. In general, survey data indicate surveyed soundings that are 9.1 m (29.86 feet) or shallower appear to be near the charted contours, just shifted, generally towards the south/southwest (Figure 15-16).

Survey data indicate surveyed depths generally agree with charted depths within ±1 foot or are up to 2 feet deeper; in some isolated areas, surveyed soundings may be up to 4 - 13 feet deeper than charted depths (Figure 17-18). A few areas near the fish haven indicate surveyed depths to up to 3 feet shallower than charted depths (Figure 19). An area in the southwest portion of the survey area shows surveyed soundings deeper than 18.2 m (59.71 ft) (Figure 20); this contour is not present within the survey area.

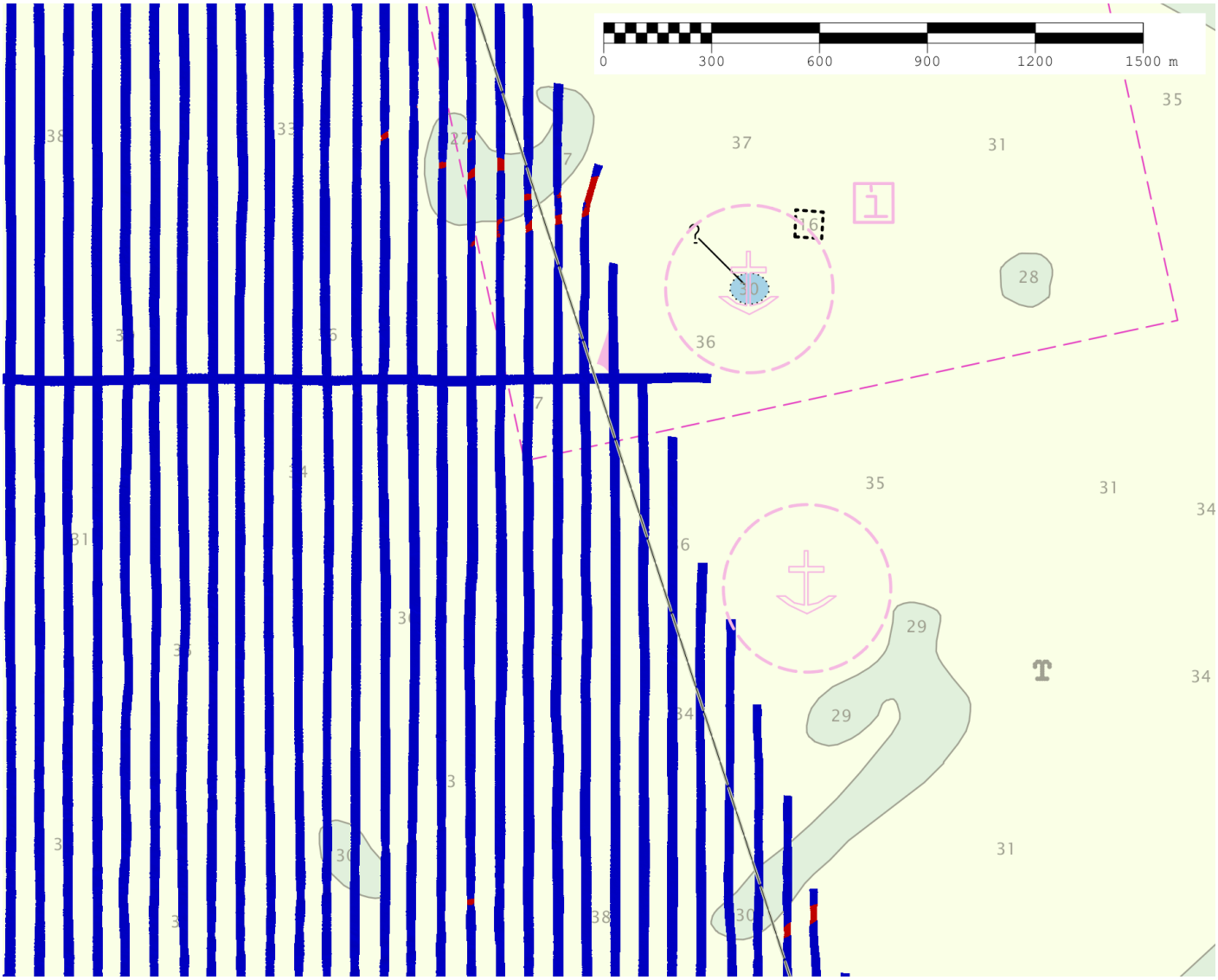


Figure 15: Comparison of surveyed depths to charted contours on US5FL11M. H13177 surface colored by color range chart shown in Figure 13.

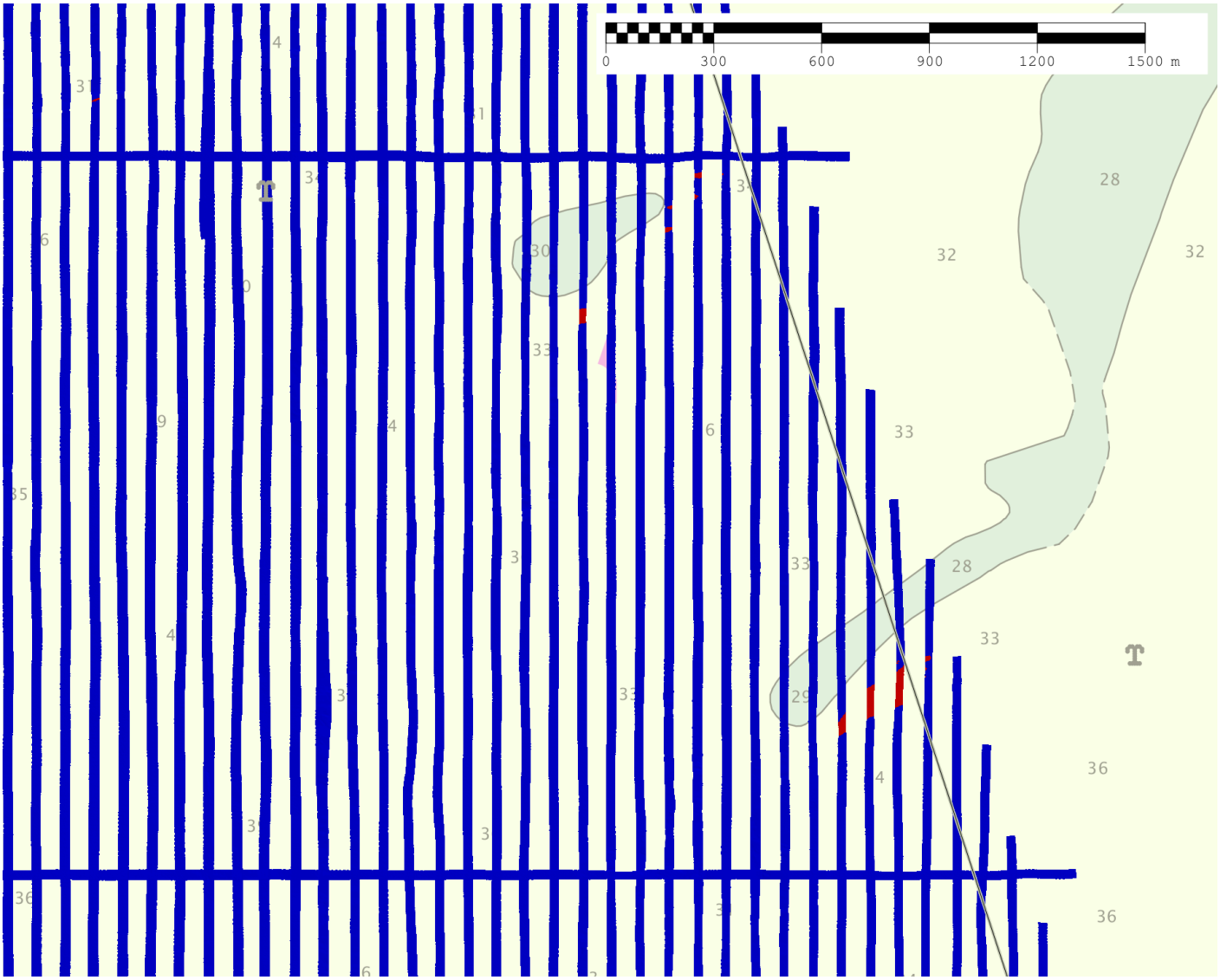


Figure 16: Comparison of surveyed depths to charted contours on US5FL11M. H13177 surface colored by color range chart shown in Figure 13.

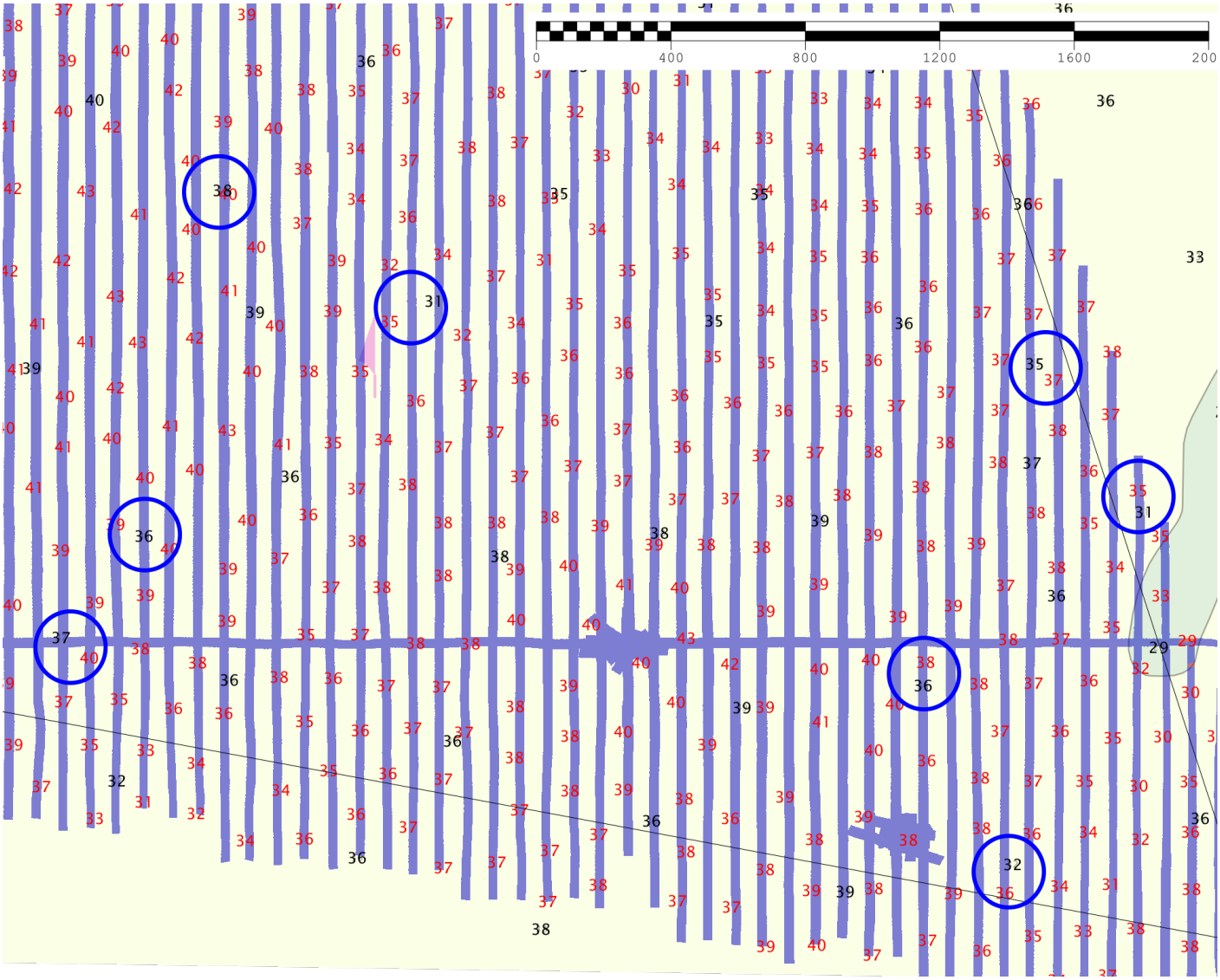


Figure 17: Comparison of southeastern portion of H13177 survey area to charted depths on US5FL11M. Selected soundings layer from H13177 in red, charted depths in black. H13177 surface colored by color range chart shown in Figure 13. Blue circles show areas where surveyed soundings are deeper than charted depths by up to 4 feet.

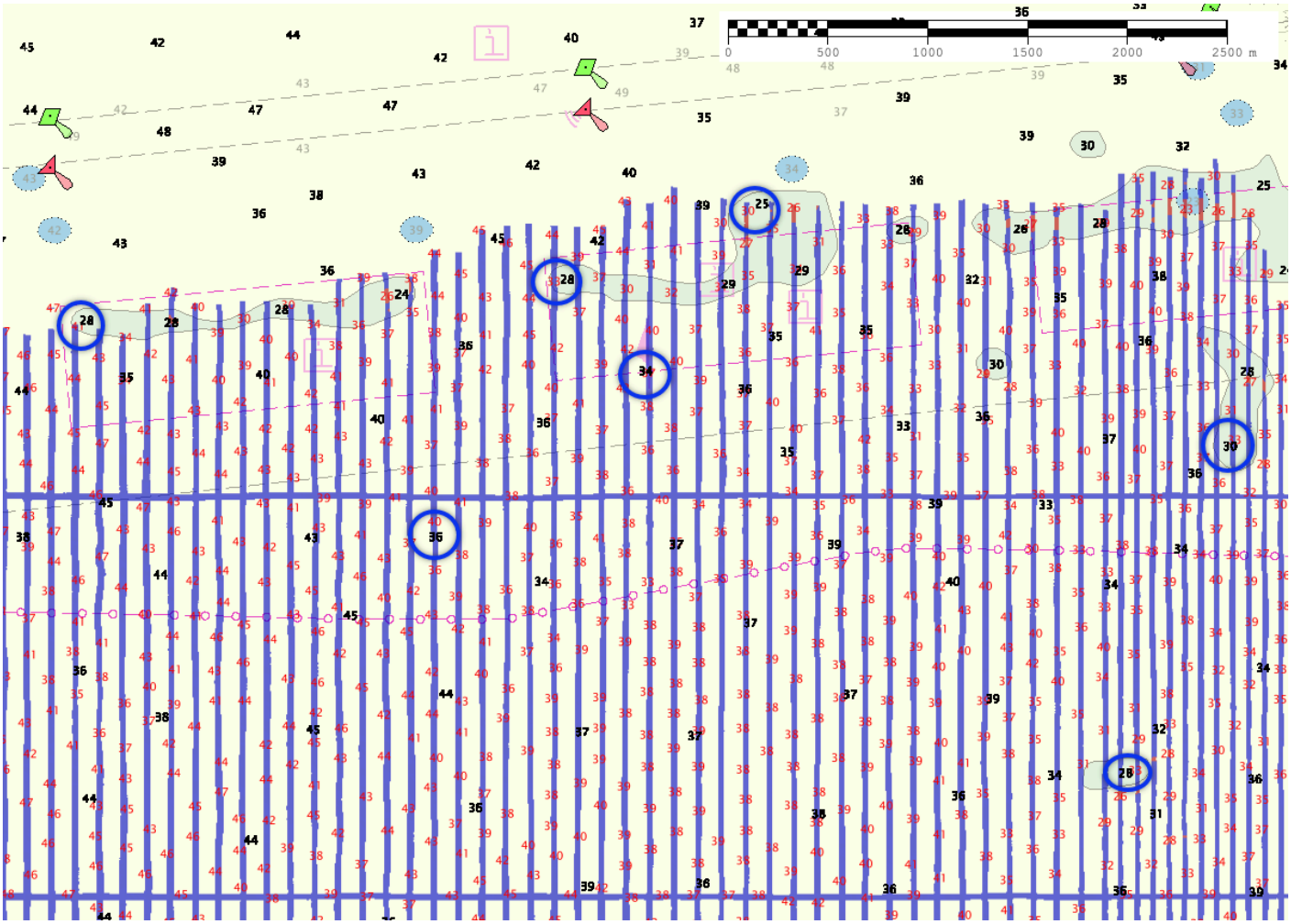


Figure 18: Comparison of southeastern portion of H13177 survey area to charted depths on US5FL11M. Selected soundings layer from H13177 in red, charted depths in black. H13177 surface colored by color range chart shown in Figure 13. Blue circles show areas where surveyed soundings are deeper than charted depths by up to 13 feet.

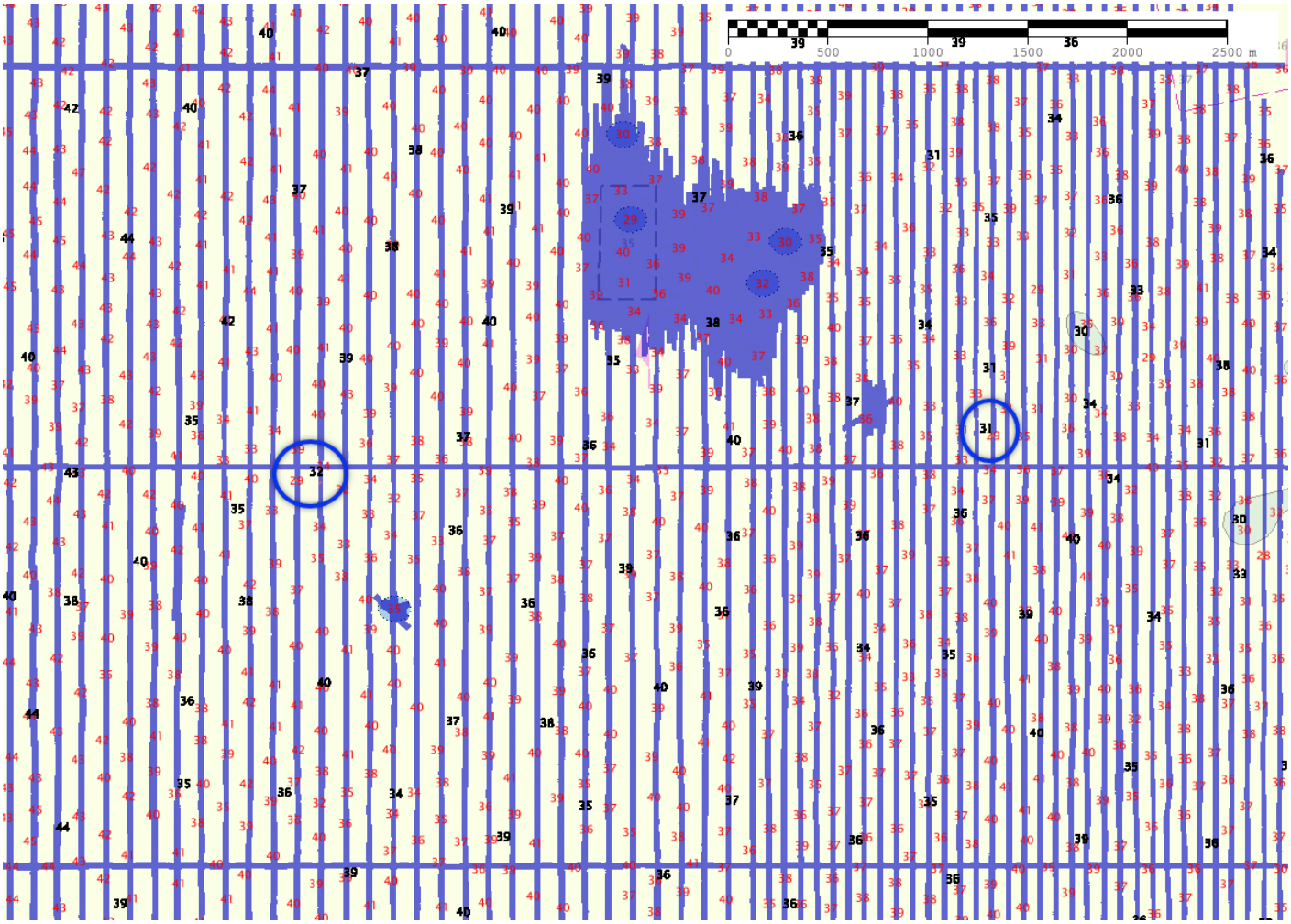


Figure 19: Comparison of southeastern portion of H13177 survey area to charted depths on US5FL11M. Selected soundings layer from H13177 in red, charted depths in black. H13177 surface colored by color range chart shown in Figure 13. Blue circles show surveyed soundings that are shallower than charted depths by up to 3 feet.

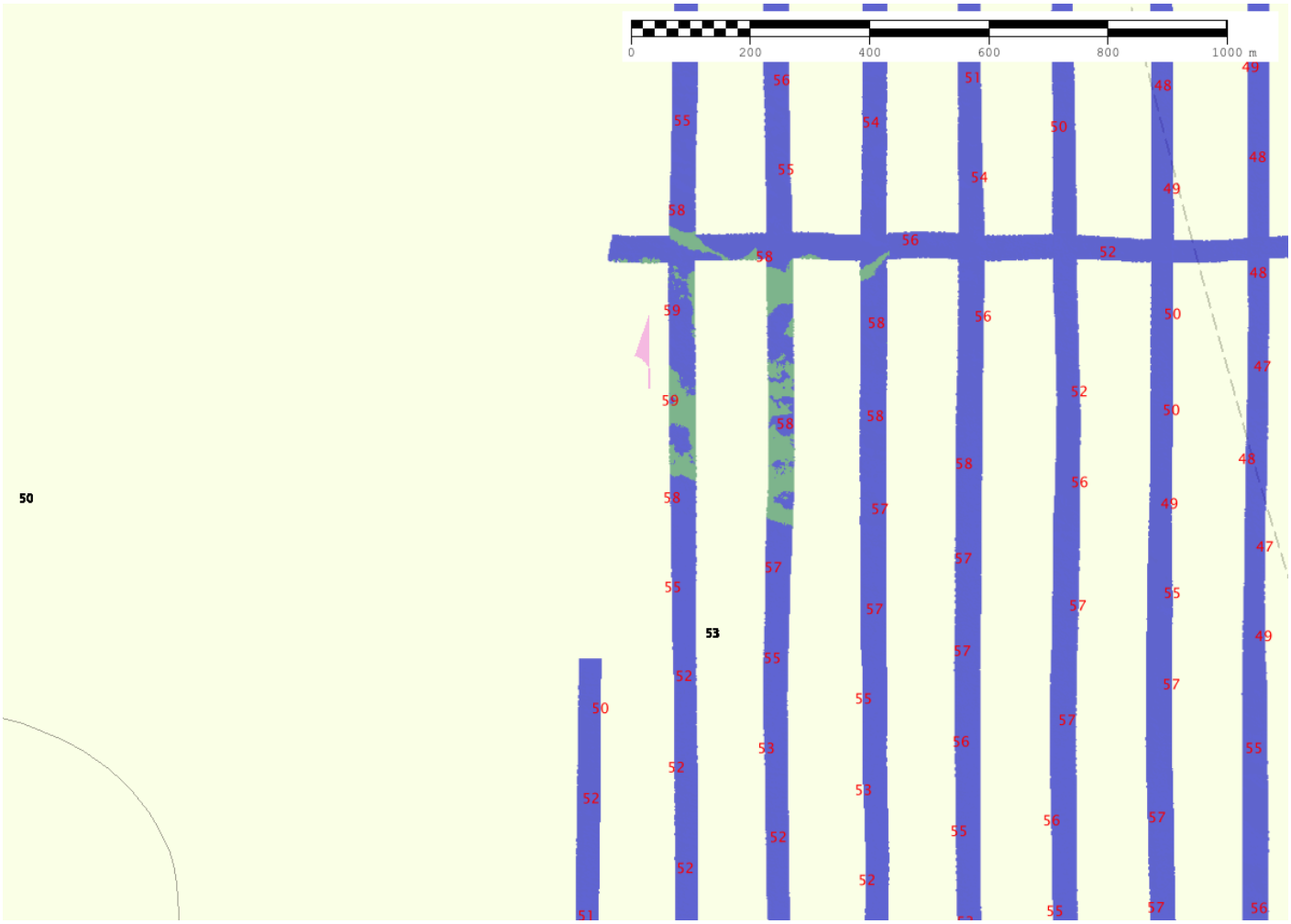


Figure 20: Comparison of surveyed depths to charted contours on US5FL11M. H13177 surface colored by color range chart shown in Figure 13. Surveyed soundings shown in green area are deeper than 18.2 m (59.71 ft).

US4FL18M

NOAA Local Notice to Mariners (LNM) were reviewed subsequent to the date of the Project Instructions and before the end of the survey for RNC 11424. The last LNM reviewed for Chart: 11424, Current Edition: 21, Print Date: Apr. /2019, Lemon Bay to Passage Key Inlet was LNM 47/18, 7th Dist posted on 11/15/2018 to Add an Obstruction in Feet. Two LNM were issued within the survey bounds but are not located on the ENC. The two LMNs correspond to DtoNs submitted for this survey.

US4FL18M does not fall within the assigned H13177 survey area but a small portion of the survey data in the southeast extends into the charted area where the nearest charted depth of 39 feet is between two charted 10.9-m (35.76-ft) contours. H13177 survey data indicate depths are 34 - 38 feet between the two charted 10.9-m (35.76-ft) contours.

US4FL10M

NOAA Local Notice to Mariners (LNM) were reviewed subsequent to the date of the Project Instructions and before the end of the survey for RNC 11412. The last LNM reviewed for Chart: 11412, Current Edition: 49, Print Date: Feb. /2019, Tampa Bay and St. Joseph Sound was LNM 08/19, 7th Dist posted on 2/14/2019 to Add an Obstruction in Feet. Two LNM were issued within the survey bounds, which both correspond to DtoNs submitted for this survey.

US4FL10M covers the entire assigned survey bounds of H13177. Due to the scale of chart US4FL10M, charted depths are slightly sparser than on US5FL11M. The charted depths on both charts generally agree well and the comparisons between surveyed data and US5FL11M are valid for ~~US5FL10M~~ *US4FL10M*. The 9.1-m (29.86-ft) and 10.9-m (35.76-ft) charted contours are present within the survey area on US4FL10M. The 9.1-m charted contours on US4FL10M are relatively similar to that of US5FL11M and follow the same trend but the 10.9-m contour does not exist on US5FL11M. Survey data indicate that while depths of a particular range do exist within the presently charted contours, the outline and shape of the contours has changed. Data also indicate that several isolated contours no longer exist, while new isolated contours are present (Figure 21).

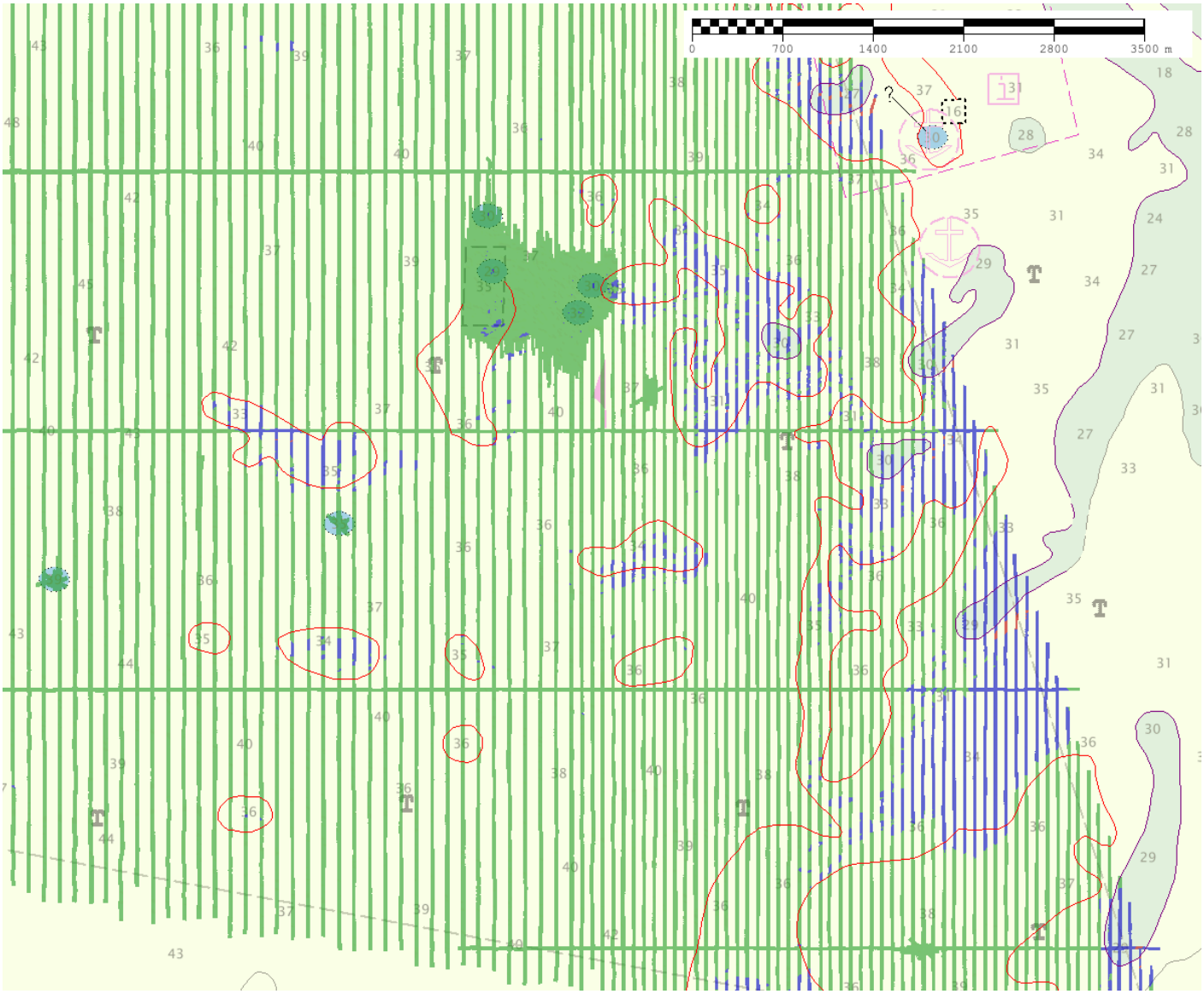


Figure 21: Comparison of H13177 to US4FL10M. US4FL10M 9.1-m contours in purple and 10.9-m contours in red. H13177 surface colored by color range chart shown in Figure 14.

US3GC07M

NOAA Local Notice to Mariners (LNM) were reviewed subsequent to the date of the Project Instructions and before the end of the survey for RNC 11420. The last LNM reviewed for Chart: 11420, Current Edition:32, Print Date: Oct. /2018, Havana to Tampa Bay was labeled as 'Not Yet Published' posted on 1/17/2019 to Add a Rock in Fathoms. Two LNM were issued within the survey bounds, both correspond to DtoNs submitted for this survey.

US3GC07M covers the entire bounds of survey H13177. Due to the scale of chart US3GC07M, charted depths are sparser than on US5FL11M. Review of the selected sounding layer and bathymetric surface

indicates that surveyed soundings are deeper than charted depths by up to 3.0 m (9.84 ft). The 9.1-m (29.86-ft) charted contours are present within the survey area. Survey data indicate that while depths of a particular range do exist within the presently charted contours, the outline and shape of the contours has changed. Data also indicate that several areas where surveyed soundings are 9.1-m (29.86-ft) or less fall outside the charted contour (Figure 22); these are better represented on US5FL11M.

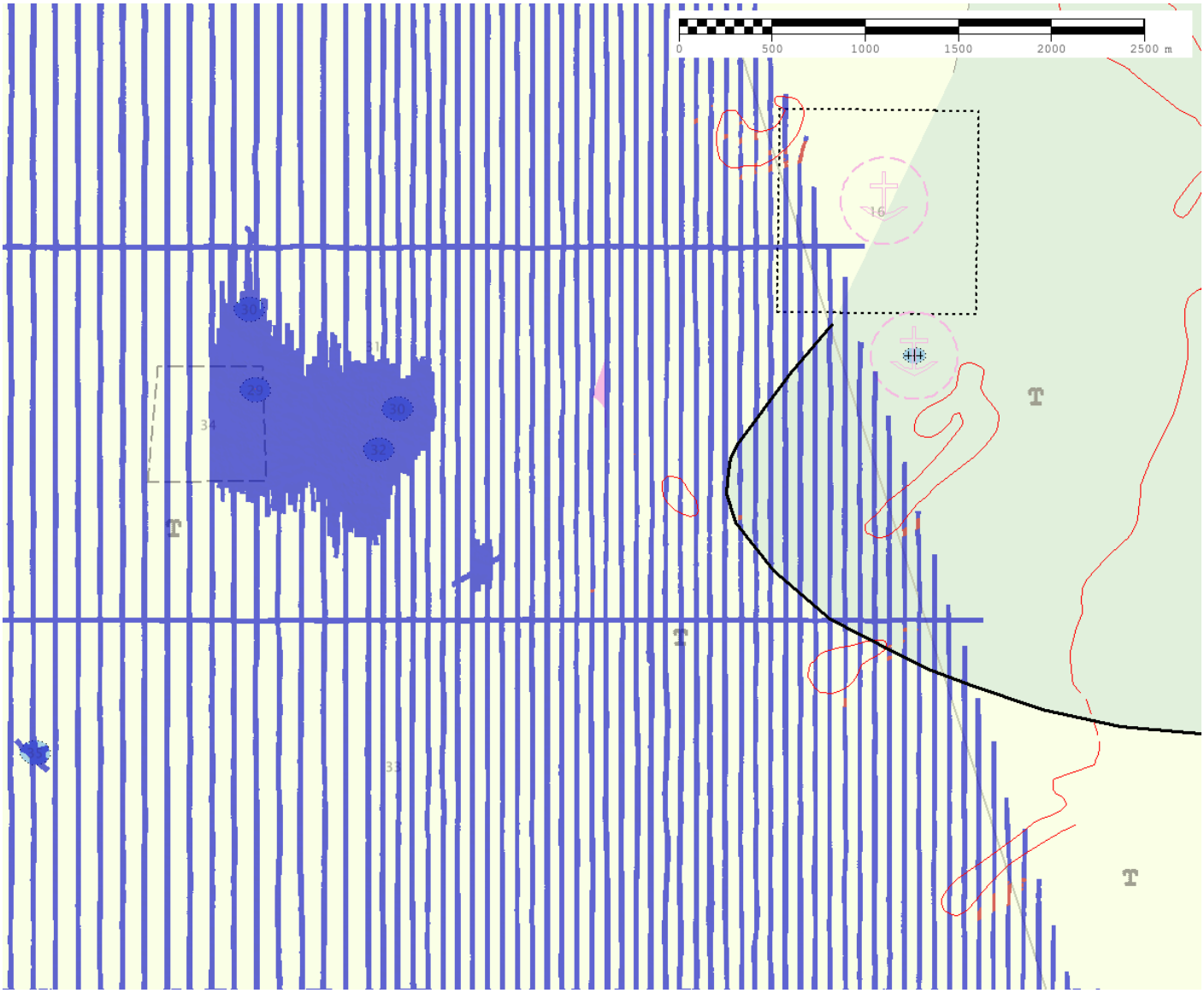


Figure 22: Comparison of H13177 survey depths and contours to US3GC07M and US5FL11M. US3GC07M charted depths and 9.1-m contours in black. H13177 surface colored by color range chart shown in Figure 13; US5FL11M 9.1-m charted contours colored in red.

D.1.2 Maritime Boundary Points

No Maritime Boundary Points were assigned for this survey.

D.1.3 Charted Features

Prior to commencing survey operations, the Composite Source File indicated six dumping grounds, one fish haven and one pipeline within survey bounds. All dumping grounds are located only partially within the survey bounds. Refer to the Final Feature File for additional information regarding all assigned, charted features.

D.1.4 Uncharted Features

An additional three features were added to the Final Feature File that were not addressed as Dangers to Navigation due to factors such as surrounding charted depths and features. Refer to the Final Feature File for additional information. Contacts observed within the multibeam data that were less than 1-meter in height were often 'Examined' to show that they had been reviewed; these remain 'Examined' in the CARIS project.

D.1.5 Shoal and Hazardous Features

Eight Danger to Navigation Reports were submitted for this survey within three separate submission packages; all were discrete obstructions. A large debris area east of the charted Fish Haven area was delineated in the second DtoN submission package. Refer to the Final Feature File and Supplemental Survey Records and Correspondence for additional information.

D.1.6 Channels

The survey area covers the southern portion of the safety fairway around Egmont Channel, which encompasses several charted dumping grounds and 9.1-m contours as shown on US5FL11M. Data indicate surveyed soundings are generally deeper than charted depths by 1 - 2 feet, but in one isolated area surveyed soundings may be up to 13 feet deeper than charted depths; this area is outside the survey bounds and will be addressed fully in the adjacent sheet, *H13173* (Figure 23).

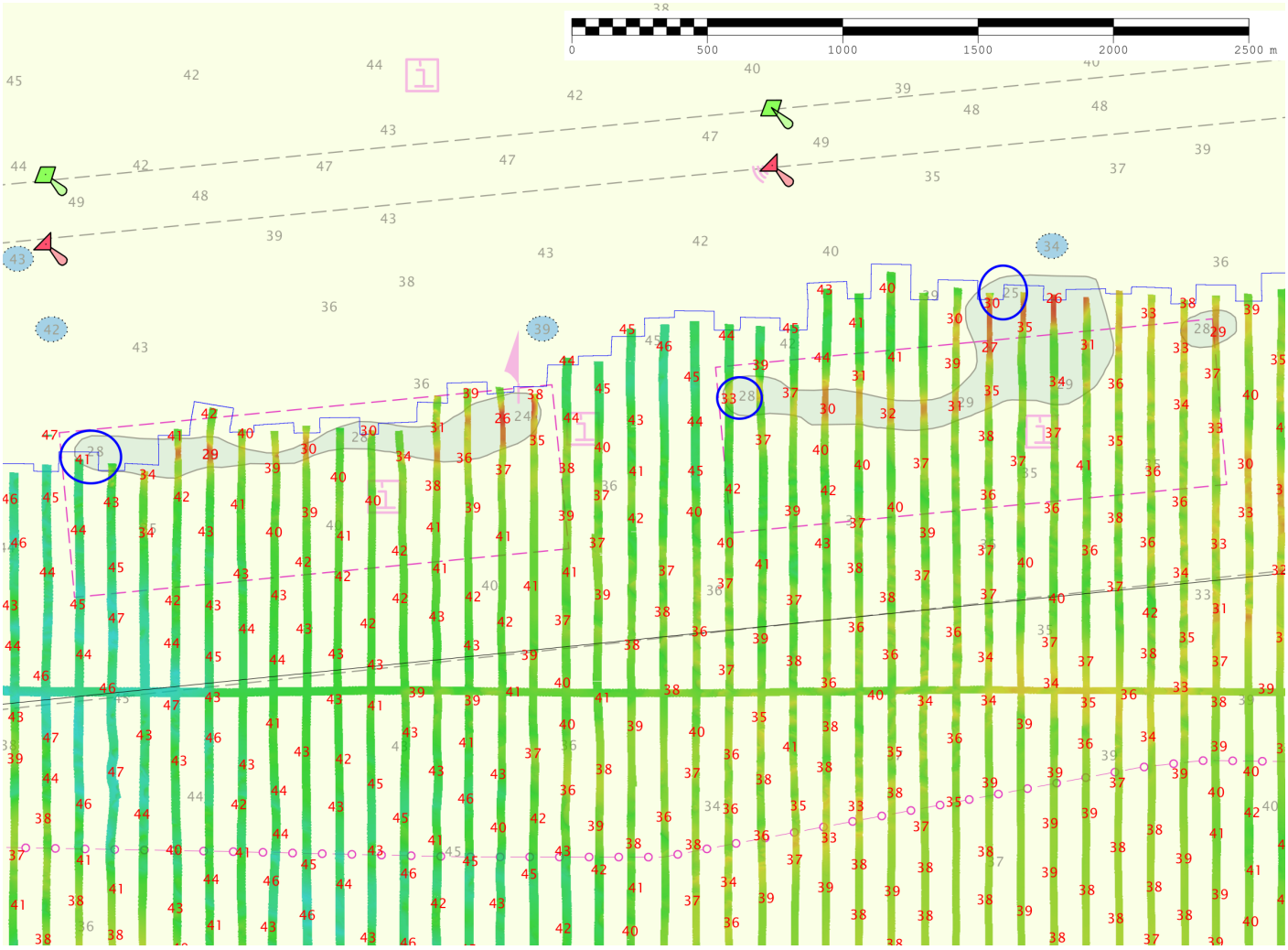


Figure 23: Fairway covering the northern portion H13177.

D.1.7 Bottom Samples

Twenty bottom samples were acquired within the bounds of H13177. It was recognized that this is three more than defined in the final Project Reference File (PRF). Review of field documents indicates that bottom samples 4 and 5, 14 and 15 and 18 and 19 were shown to be almost right next to one another and further review indicates that the original PRF file received on June 12, 2018 shows two bottom samples in approximately the same locations. Although bottom samples 14 and 15 were acquired very close to each other, samples 5 and 19 were moved during field operations. Refer to the Final Feature File for additional information.

D.2 Additional Results

D.2.1 Shoreline

Shoreline was not assigned in the Hydrographic Survey Project Instructions or Statement of Work for this particular Sheet.

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. The field noted that the vessel was offline because of a buoy between shotpoint 6 and 8 on line 8105. Review indicates that this may be the Scripps Wave Data Lighted Buoy, which is outside the survey area and will be addressed in the respective Sheet, *H13173*. The field also noted a buoy on line 8053 at shotpoint 69, but the field did not indicate that this was an ATON and the logs do not indicate the pictures were taken. Review of the SSS data does not indicate contacts at this location.

D.2.4 Overhead Features

No overhead features exist for this survey.

D.2.5 Submarine Features

One pipeline, labeled as 'Gulfstream Natural Gas System' in the CSF file, extends east-west through the northern portion of the survey area. Three potential exposures were identified along the pipeline and submitted to BSEE as per the HSSD (2018). At some points along the pipeline, surveyed soundings indicated shallower depths than surrounding charted depths. These are 'Examined' in the CARIS project. Refer to the Supplemental Survey Records and Correspondence, surfaces and Final Feature File for additional information.

D.2.6 Platforms

No platforms exist for this survey.

D.2.7 Ferry Routes and Terminals

No ferry routes or terminals exist for this survey.

D.2.8 Abnormal Seafloor and/or Environmental Conditions

Survey data identified two abnormal features located within the survey bounds. One anomalous feature located in the northwest portion of the survey area as well as a small debris area. Both the anomalous feature and debris area have 100% SSS coverage and partial MBES coverage. Examples of each feature are shown in Figures 24 and 25.

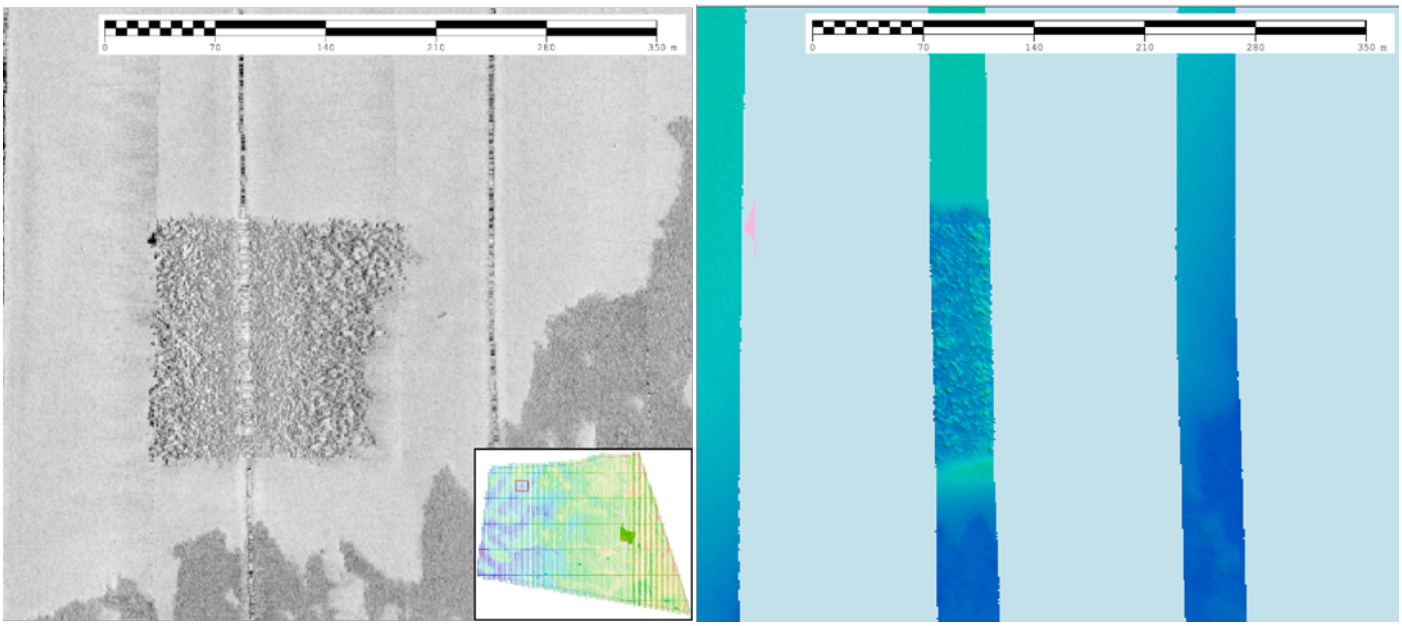


Figure 24: SSS and MBES showing anomalous feature.

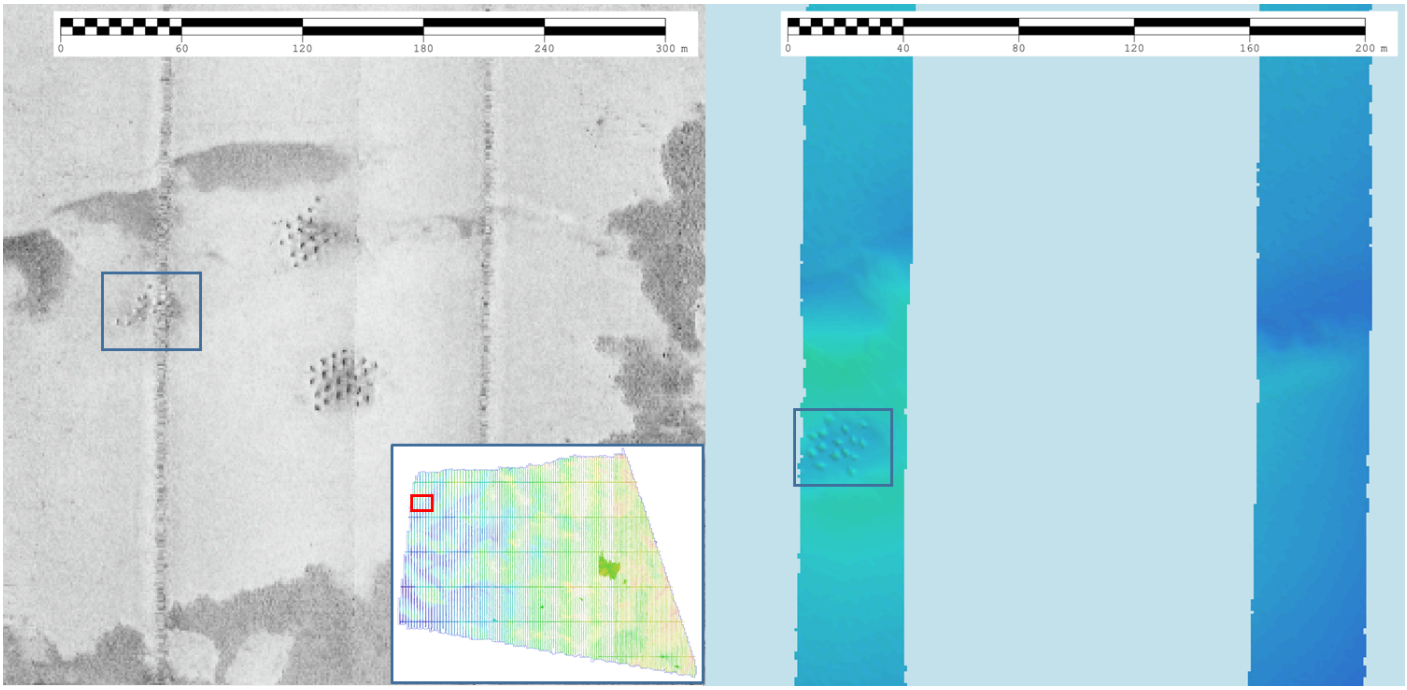


Figure 25: SSS and MBES showing northwestern debris area.

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.

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

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

Report Name	Report Date Sent
Horizontal and Vertical Control Report	2019-03-11
Data Acquisition and Processing Report	2019-05-28

Approver Name	Approver Title	Approval Date	Signature
Scott Melancon	Chief of Party	05/28/2019	Scott Melancon Digitally signed by Scott Melancon DN: cn=Scott Melancon, o, ou, email=smelancon@oceaneering.com, c=US Date: 2019.05.28 10:40:58 -05'00'
Nicole Galloway	Geoscientist	05/28/2019	
Conley Pomerenke	Geoscientist	05/28/2019	

F. Table of Acronyms

Acronym	Definition
AHB	Atlantic Hydrographic Branch
AST	Assistant Survey Technician
ATON	Aid to Navigation
AWOIS	Automated Wreck and Obstruction Information System
BAG	Bathymetric Attributed Grid
BASE	Bathymetry Associated with Statistical Error
CO	Commanding Officer
CO-OPS	Center for Operational Products and Services
CORS	Continually Operating Reference Staiton
CTD	Conductivity Temperature Depth
CEF	Chart Evaluation File
CSF	Composite Source File
CST	Chief Survey Technician
CUBE	Combined Uncertainty and Bathymetry Estimator
DAPR	Data Acquisition and Processing Report
DGPS	Differential Global Positioning System
DP	Detached Position
DR	Descriptive Report
DTON	Danger to Navigation
ENC	Electronic Navigational Chart
ERS	Ellipsoidal Referenced Survey
ERZT	Ellipsoidally Referenced Zoned Tides
FFF	Final Feature File
FOO	Field Operations Officer
FPM	Field Procedures Manual
GAMS	GPS Azimuth Measurement Subsystem
GC	Geographic Cell
GPS	Global Positioning System
HIPS	Hydrographic Information Processing System
HSD	Hydrographic Surveys Division
HSSD	Hydrographic Survey Specifications and Deliverables

Acronym	Definition
HSTP	Hydrographic Systems Technology Programs
HSX	Hypack Hysweep File Format
HTD	Hydrographic Surveys Technical Directive
HVCR	Horizontal and Vertical Control Report
HVF	HIPS Vessel File
IHO	International Hydrographic Organization
IMU	Inertial Motion Unit
ITRF	International Terrestrial Reference Frame
LNM	Linear Nautical Miles
MBAB	Multibeam Echosounder Acoustic Backscatter
MCD	Marine Chart Division
MHW	Mean High Water
MLLW	Mean Lower Low Water
NAD 83	North American Datum of 1983
NAIP	National Agriculture and Imagery Program
NALL	Navigable Area Limit Line
NM	Notice to Mariners
NMEA	National Marine Electronics Association
NOAA	National Oceanic and Atmospheric Administration
NOS	National Ocean Service
NRT	Navigation Response Team
NSD	Navigation Services Division
OCS	Office of Coast Survey
OMAO	Office of Marine and Aviation Operations (NOAA)
OPS	Operations Branch
MBES	Multibeam Echosounder
NWLON	National Water Level Observation Network
PDBS	Phase Differencing Bathymetric Sonar
PHB	Pacific Hydrographic Branch
POS/MV	Position and Orientation System for Marine Vessels
PPK	Post Processed Kinematic
PPP	Precise Point Positioning
PPS	Pulse per second

Acronym	Definition
PRF	Project Reference File
PS	Physical Scientist
PST	Physical Science Technician
RNC	Raster Navigational Chart
RTK	Real Time Kinematic
SBES	Singlebeam Echosounder
SBET	Smooth Best Estimate and Trajectory
SNM	Square Nautical Miles
SSS	Side Scan Sonar
SSSAB	Side Scan Sonar Acoustic Backscatter
ST	Survey Technician
SVP	Sound Velocity Profiler
TCARI	Tidal Constituent And Residual Interpolation
TPE	Total Propagated Error
TPU	Topside Processing Unit
USACE	United States Army Corps of Engineers
USCG	United Stated Coast Guard
UTM	Universal Transverse Mercator
XO	Executive Officer
ZDA	Global Positiong System timing message
ZDF	Zone Definition File

ABSTRACT OF TIMES OF HYDROGRAPHY
R/V *Sea Scout*

Project: OPR-J317-KR-18 Registry No.: H13177
Contractor Name: Oceaneering International, Inc.
Date: March 2019
Sheet Number: 8
Inclusive Dates: October 18, 2018 - December 8, 2018
Field Work is Complete

Time (UTC)

Julian Day	Start	End	Year
291	0333	2400	2018
292	0000	2400	2018
293	0000	2400	2018
294	0000	0911	2018
296	2000	2337	2018
297	0028	1034	2018
302	1028	2400	2018
303	0000	2400	2018
304	0000	2400	2018
305	0000	0157	2018
309	0715	2400	2018
310	0000	0245	2018
341	0120	1652	2018
341	2149	2400	2018
342	0000	1608	2018

ABSTRACT OF TIMES OF HYDROGRAPHY
R/V *C-Wolf*

Project: OPR-J317-KR-18 Registry No.: H13177
Contractor Name: Oceaneering International, Inc.
Date: March 2019
Sheet Number: 8
Inclusive Dates: March 2, 2019
Field Work is Complete

Time (UTC)

Julian Day	Start	End	Year
061	1304	1640	2019

OCEANEERING

Galloway, Nicole <ngalloway@oceaneering.com>

OPR-J317-KR-18 H13177 (Sheet 8) DtoN Submission 1

1 message

Galloway, Nicole <ngalloway@oceaneering.com> Tue, Oct 30, 2018 at 8:32 AM
To: ahb.dton@noaa.gov
Cc: Meredith Payne - NOAA Federal <meredith.payne@noaa.gov>, Kathryn Pridgen - NOAA Federal <kathryn.pridgen@noaa.gov>, Scott Melancon <smelancon@oceaneering.com>

Good morning,

Please see attached zip file for DtoN Submission 1 of H13177 (Sheet 8) of OPR-J317-KR-18, which contains information regarding two potential wrecks that are currently uncharted according to charts US4FL10M and US5FL11M.

Please let us know if you have any questions or need any additional information.
Thank you,
Nikki

--
Best regards,

Nicole Galloway
Geoscientist
Direct (+1) 337 761 6872
Mobile (+1) 603 978 7211
ngalloway@oceaneering.com
2155 Steppingstone Square | Chesapeake, VA | USA, Tel (+1)757 985 3714 | oceaneering.com

H13177_DtoN_Submission_1.zip
1683K

OCEANEERING

Galloway, Nicole <ngalloway@oceaneering.com>

OPR-J317-KR-18 H13177 (Sheet 8) DtoN Submission 2

1 message

Galloway, Nicole <ngalloway@oceaneering.com> Fri, Feb 1, 2019 at 10:51 AM
To: ahb.dton@noaa.gov
Cc: Meredith Payne - NOAA Federal <meredith.payne@noaa.gov>, Kathryn Pridgen - NOAA Federal <kathryn.pridgen@noaa.gov>, Scott Melancon <smelancon@oceaneering.com>, Ross Olivier <rolivier2@oceaneering.com>

Good morning,

Please see attached zip file for DtoN Submission 2 of H13177 (Sheet 8) of OPR-J317-KR-18, which contains information and images regarding the following:

- One obstruction located within a charted Fish Haven but with a shallower depth than currently charted.
- Two additional obstructions located in a larger debris area east of the charted Fish Haven.
- An area feature encompassing the extents of the debris area east of the charted Fish Haven (with a geoPNG SSS mosaic and MBES geotif) for information purposes.

Please let us know if you have any questions or need any additional information.
Thank you,
Nikki

--
Best regards,

Nicole Galloway
Geoscientist
Direct (+1) 337 761 6872
Mobile (+1) 603 978 7211
ngalloway@oceaneering.com

2155 Steppingstone Square | Chesapeake, VA | USA, Tel (+1)757 985 3714 | oceaneering.com

H13177_DtoN_Submission_2.zip
10815K

OCEANEERING

Galloway, Nicole <ngalloway@oceaneering.com>

OPR-J317-KR-18 H13177 (Sheet 8) DtoN Submission 3

1 message

Galloway, Nicole <ngalloway@oceaneering.com> Wed, Mar 13, 2019 at 2:18 PM
To: ahb.dton@noaa.gov
Cc: Meredith Payne - NOAA Federal <meredith.payne@noaa.gov>, Kathryn Pridgen - NOAA Federal <kathryn.pridgen@noaa.gov>, Scott Melancon <smelancon@oceaneering.com>

Good afternoon,

Please see attached zip file for DtoN Submission 3 of H13177 (Sheet 8) of OPR-J317-KR-18, which contains information and images regarding three obstructions observed within the survey area.

Please let us know if you have any questions or need any additional information.
Thank you,
Nikki

--
Best regards,

Nicole Galloway
Geoscientist
Direct (+1) 337 761 6872
Mobile (+1) 603 978 7211
ngalloway@oceaneering.com
2155 Steppingstone Square | Chesapeake, VA | USA, Tel (+1)757 985 3714 | oceaneering.com

H13177_DtoN_Submission_3.zip
3471K

OCEANEERING

Galloway, Nicole <ngalloway@oceaneering.com>

FW: H13177 DtoN #1 and #2 Submission to NDB

3 messages

Castle Parker - NOAA Federal <castle.e.parker@noaa.gov> Wed, Oct 31, 2018 at 8:45 AM
To: Nicole Galloway <ngalloway@oceaneering.com>

FYI,

Left you off the DtoN submission.

gp

Castle Eugene Parker

NOAA Office of Coast Survey

Atlantic Hydrographic Branch

Hydrographic Team Lead / Physical Scientist

castle.e.parker@noaa.gov

office (757) 364-7472

From: Castle Parker - NOAA Federal <castle.e.parker@noaa.gov>
Sent: Wednesday, October 31, 2018 8:44 AM
To: OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov>
Cc: Briana Hillstrom - NOAA Federal (Briana.Hillstrom@noaa.gov) <Briana.Hillstrom@noaa.gov>; Meredith Payne - NOAA Federal <meredith.payne@noaa.gov>; Kathryn Pridgen - NOAA Federal <kathryn.pridgen@noaa.gov>; Scott Melancon <smelancon@oceaneering.com>; Tim Osborn - NOAA Federal <tim.osborn@noaa.gov>
Subject: H13177 DtoN #1 and #2 Submission to NDB

Good day,

Please find attached compressed file related to H13177 DtoN Report #1 and #2, containing two uncharted 30ft obstructions located in the vicinity of 7nm west of Egmont Key. The submission to Nautical Data Branch (NDB) and Marine Chart Division (MCD) is intended for chart application.

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

If you have any questions, please contact me via email or phone 757-364-7472. 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) 364-7472

H13177_DtoN_1-2.zip
3411K

Galloway, Nicole <ngalloway@oceaneering.com> Wed, Oct 31, 2018 at 9:21 AM
To: Castle Parker - NOAA Federal <castle.e.parker@noaa.gov>

Thank-you!
[Quoted text hidden]
--
Best regards,

Nicole Galloway
Geoscientist
Direct (+1) 337 761 6872
Mobile (+1) 603 978 7211
ngalloway@oceaneering.com
2155 Steppingstone Square | Chesapeake, VA | USA, Tel (+1)757 985 3714 | oceaneering.com

---

Castle Parker - NOAA Federal <castle.e.parker@noaa.gov> Thu, Nov 1, 2018 at 7:00 AM
To: Nicole Galloway <ngalloway@oceaneering.com>

Hello Nikki,

Since I neglected to include you on the submission, NDB registration was not submitted to you. Here is the registration email.

Regards,

gp

Castle Eugene Parker

NOAA Office of Coast Survey

Atlantic Hydrographic Branch

Hydrographic Team Lead / Physical Scientist

castle.e.parker@noaa.gov

office (757) 364-7472

From: OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov>
Sent: Wednesday, October 31, 2018 5:46 PM
To: Castle E Parker <Castle.E.Parker@noaa.gov>
Cc: Briana Hillstrom - NOAA Federal <Briana.Hillstrom@noaa.gov>; Meredith Payne - NOAA Federal <meredith.payne@noaa.gov>; Kathryn Pridgen - NOAA Federal <kathryn.pridgen@noaa.gov>; Scott Melancon <smelancon@oceaneering.com>; Tim Osborn <Tim.Osborn@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>; Charles Porter - NOAA Federal <charles.porter@noaa.gov>; Chris Libeau <Chris.Libeau@noaa.gov>; James M Crocker <James.M.Crocker@noaa.gov>; Ken Forster <Ken.Forster@noaa.gov>; Kevin Jett - NOAA Federal <kevin.jett@noaa.gov>; Matt Kroll <Matt.Kroll@noaa.gov>; Michael Gaeta <Michael.Gaeta@noaa.gov>; NSD Coast Pilot <coast.pilot@noaa.gov>; PHB Chief <PHB.Chief@noaa.gov>; Tara Wallace <Tara.Wallace@noaa.gov>
Subject: Fwd: H13177 DtoN #1 and #2 Submission to NDB

DD-30039 has been registered by the Nautical Data Branch and directed to Products Branch B for processing.

The DtoNs reported are two obstructions approximately 7 nautical miles west of Egmont Key in the approaches to Tampa Bay, FL.

The following charts are affected:

11415 kapp 2981

11412 kapp 175

11424 kapp 176

11400 kapp 177

11420 kapp 374

4148 kapp 420

The following ENCs are affected:

US5FL11M

US4FL10M

US3GC07M

References:

H13177

OPR-J317-KR-18

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

---------- Forwarded message ---------
From: **Castle Parker - NOAA Federal** <castle.e.parker@noaa.gov>
Date: Wed, Oct 31, 2018 at 8:44 AM
Subject: H13177 DtoN #1 and #2 Submission to NDB
To: OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov>
Cc: Briana Hillstrom - NOAA Federal <Briana.Hillstrom@noaa.gov>, Meredith Payne - NOAA Federal <meredith.payne@noaa.gov>, Kathryn Pridgen - NOAA Federal <kathryn.pridgen@noaa.gov>, Scott Melancon <smelancon@oceaneering.com>, Tim Osborn - NOAA Federal <tim.osborn@noaa.gov>

Good day,

Please find attached compressed file related to H13177 DtoN Report #1 and #2, containing two uncharted 30ft obstructions located in the vicinity of 7nm west of Egmont Key. The submission to Nautical Data Branch (NDB) and Marine Chart Division (MCD) is intended for chart application.

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

If you have any questions, please contact me via email or phone 757-364-7472. 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) 364-7472

H13177_DtoN_1-2.zip
3411K

OCEANEERING

Galloway, Nicole <ngalloway@oceaneering.com>

H13177 DtoNs #3 and #4 Submission to NDB

2 messages

Castle Parker - NOAA Federal <castle.e.parker@noaa.gov> Wed, Feb 27, 2019 at 10:00 AM
To: OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov>
Cc: AHB Chief - NOAA Service Account <ahb.chief@noaa.gov>, Meredith Payne - NOAA Federal <meredith.payne@noaa.gov>, Kathryn Pridgen - NOAA Federal <kathryn.pridgen@noaa.gov>, Scott Melancon <smelancon@oceaneering.com>, rolivier2@oceaneering.com, Nicole Galloway <ngalloway@oceaneering.com>, Louis Licate - NOAA Federal <louis.licate@noaa.gov>

Good day,

Please find attached compressed file related to H13177 DtoN Report #3 and #4, containing an 29ft obstruction that exceeds the charted fish haven's authorized minimum depth and one uncharted 32ft obstructions located in the vicinity of 6.7nm west of Egmont Key. The submission to Nautical Data Branch (NDB) and Marine Chart Division (MCD) is intended for chart application.

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

If you have any questions, please contact me via email or phone 757-364-7472. 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) 364-7472

H13177_DtoN_3-4.zip
3055K

OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov> Wed, Feb 27, 2019 at 12:32 PM

To: Castle E Parker <Castle.E.Parker@noaa.gov>
Cc: AHB Chief <AHB.Chief@noaa.gov>, Meredith Payne - NOAA Federal <meredith.payne@noaa.gov>, Kathryn Pridgen - NOAA Federal <kathryn.pridgen@noaa.gov>, Scott Melancon <smelancon@oceaneering.com>, rolivier2@oceaneering.com, Nicole Galloway <ngalloway@oceaneering.com>, Louis Licate - NOAA Federal <louis.licate@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>, Charles Porter - NOAA Federal <charles.porter@noaa.gov>, Chris Libeau <Chris.Libeau@noaa.gov>, James M Crocker <James.M.Crocker@noaa.gov>, Ken Forster <Ken.Forster@noaa.gov>, Kevin Jett - NOAA Federal <kevin.jett@noaa.gov>, Matt Kroll <Matt.Kroll@noaa.gov>, Michael Gaeta <Michael.Gaeta@noaa.gov>, NSD Coast Pilot <coast.pilot@noaa.gov>, PHB Chief <PHB.Chief@noaa.gov>, Tara Wallace <Tara.Wallace@noaa.gov>

DD-30424 has been registered by the Nautical Data Branch and directed to Products Branch B for processing.

The DtoNs reported are two obstructions in the approaches to Tampa Bay, FL, west of Egmont Key.

The following charts have been assigned to the record:
11415 kapp 2981
11412 kapp 175
11424 kapp 176
11400 kapp 177
11420 kapp 374
4148 kapp 420

The following ENCs have been assigned to the record:
US5FL11M
US4FL10M
US3GC07M

References:
H13177
OPR-J317-KR-18

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

[Quoted text hidden]

H13177_DtoN_3-4.zip
3055K

OCEANEERING

Galloway, Nicole <ngalloway@oceaneering.com>

H13177 DtoN #6, #7, and #8 Submission to NDB

1 message

Castle Parker - NOAA Federal <castle.e.parker@noaa.gov> Fri, Mar 15, 2019 at 9:40 AM
To: OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov>
Cc: AHB Chief - NOAA Service Account <ahb.chief@noaa.gov>, Briana Hillstrom - NOAA Federal <Briana.Hillstrom@noaa.gov>, Meredith Payne - NOAA Federal <meredith.payne@noaa.gov>, Corey Allen - NOAA Federal <corey.allen@noaa.gov>, Nicole Galloway <ngalloway@oceaneering.com>, Scott Melancon <smelancon@oceaneering.com>

Good day,

Please find attached compressed file related to H13177 DtoN Report #6, #7, and #8 containing three uncharted obstructions located in the vicinity of 7.6nm to 10.3nm west of Passage Key Inlet. The submission to Nautical Data Branch (NDB) and Marine Chart Division (MCD) is intended for chart application.

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

If you have any questions, please contact me via email or phone 757-364-7472. 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) 364-7472

H13177_DtoN_6-7-8.zip
6626K

OCEANEERING

Galloway, Nicole <ngalloway@oceaneering.com>

H13177: Potential Pipeline Exposures 1 - 3

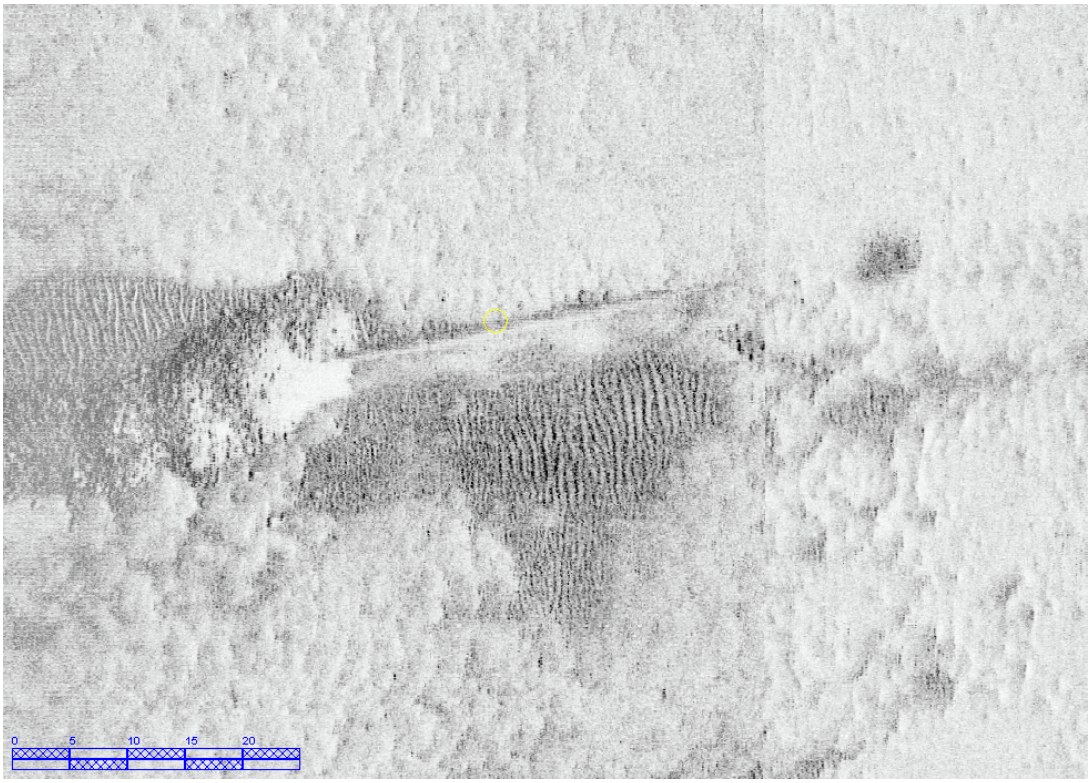
1 message

Galloway, Nicole <ngalloway@oceaneering.com> Wed, Apr 17, 2019 at 1:15 PM
To: pipelines@bsee.gov
Cc: Meredith Payne - NOAA Federal <meredith.payne@noaa.gov>, Kathryn Pridgen - NOAA Federal <kathryn.pridgen@noaa.gov>, Scott Melancon <smelancon@oceaneering.com>

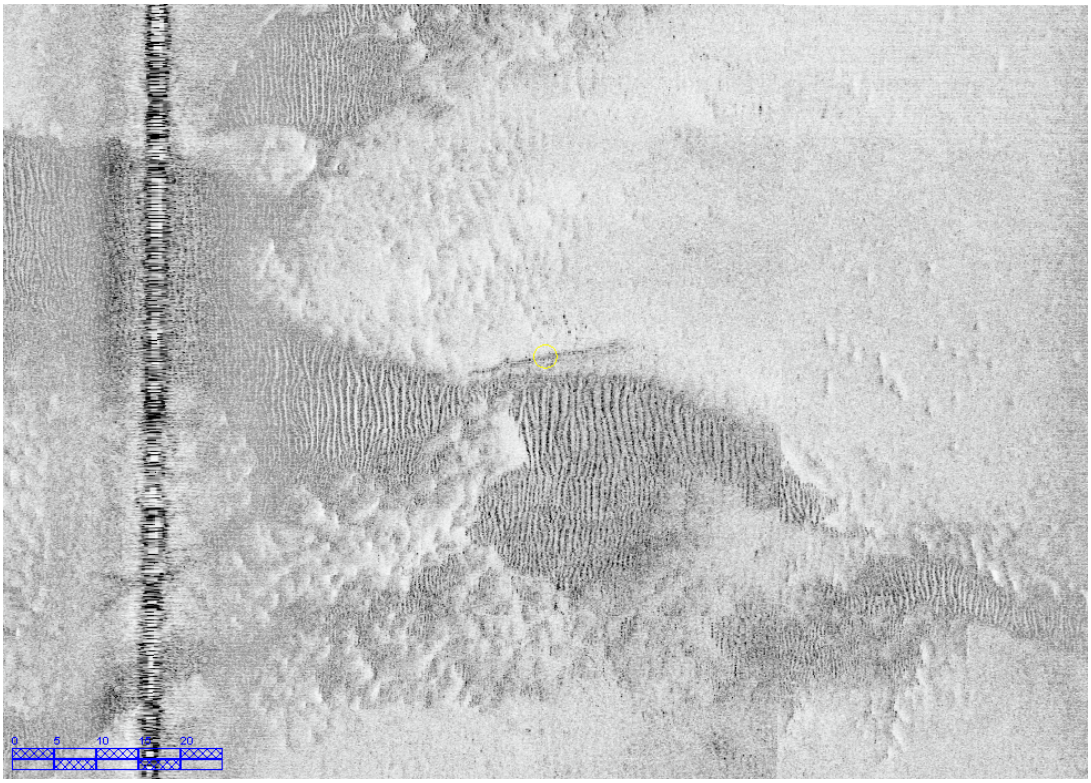
Good afternoon,

A NOAA Contractor surveying in the Gulf of Mexico has discovered three potential pipeline exposures along the charted supply pipe for the Gulf Stream Natural Gas System. Please see below information.

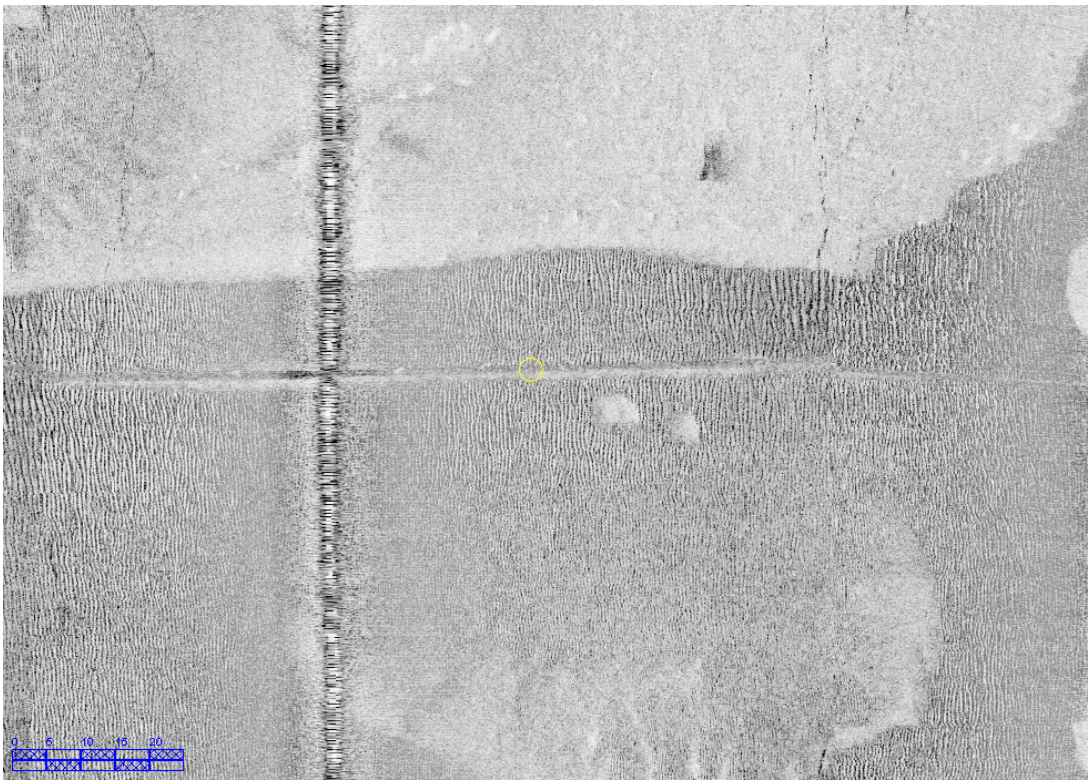
Exposure 1
Location (lat/lon): (27° 34.69515' / -082° 53.47937')
Furthest Distance from charted feature: 7.1 meters
Date: 10/20/2018
Time: 22:17:59
Depth: 12.3 meters (No direct MB coverage)



Exposure 2 - Line 8077
Location (lat/lon): (27° 34.64428' / -082° 53.77245')
Furthest Distance from charted feature: 11.2 meters
Date: 10/21/2018
Time: 03:00:24
Depth: 10.6-11.5 meters (No direct MB coverage)



Exposure 3 - Line 8100
Location (lat/lon): (27° 34.56626' / -082° 53.45900')
Furthest Distance from charted feature: 3.9 meters
Date: 10/29/2018
Time: 23:33:31
Depth: 13.75 meters



--
Best regards,

Nicole Galloway
Geoscientist

Direct (+1) 337 761 6872
Mobile (+1) 603 978 7211
ngalloway@oceaneering.com

2155 Steppingstone Square | Chesapeake, VA | USA, Tel (+1)757 985 3714 | oceaneering.com

OCEANEERING

Galloway, Nicole <ngalloway@oceaneering.com>

OPR-J317-KR-18 H13177 (Sheet 8) Final Survey Outline

1 message

Galloway, Nicole <ngalloway@oceaneering.com> Mon, Apr 8, 2019 at 9:32 AM
To: survey.outlines@noaa.gov
Cc: Meredith Payne - NOAA Federal <meredith.payne@noaa.gov>, Kathryn Pridgen - NOAA Federal <kathryn.pridgen@noaa.gov>, Scott Melancon <smelancon@oceaneering.com>

Good morning,

Attached is the final survey outline for H13177 (Sheet 8) of OPR-J317-KR-18 in S-57 format.
Please let us know if you have any questions.

Thank-you,
Nikki

--
Best regards,

Nicole Galloway
Geoscientist
Direct (+1) 337 761 6872
Mobile (+1) 603 978 7211
ngalloway@oceaneering.com
2155 Steppingstone Square | Chesapeake, VA | USA, Tel (+1)757 985 3714 | oceaneering.com

H13177_Final_Survey_Outline.000
48K

OCEANEERING

Galloway, Nicole <ngalloway@oceaneering.com>

[Send2NCEI] data submission confirmation for Reference ID: B87KUF

1 message

NODC.DataOfficer@noaa.gov <NODC.DataOfficer@noaa.gov> Wed, Apr 17, 2019 at 3:30 PM
To: ngalloway@oceaneering.com

Dear Nicole Galloway,

Thank you for submitting your data collection, titled "Sound Speed (CTD) collected from R/V C-Wolf; R/V Sea Scout in Approaches to Tampa, FL from 2018-10-18 to 2019-03-02", to the NOAA National Centers for Environmental Information (NCEI). Your submission package has been assigned Reference ID: B87KUF. After reviewing your data and metadata, NCEI will update you about the archival status of your submission package.

You will be notified if NCEI creates an archival information package (accession) of your data, including the unique identifier for that archival information package (the NCEI Accession number). When your data are archived, NCEI keeps an exact copy of the data and metadata you sent and will develop necessary tracking and discovery metadata. In addition, NCEI may create additional versions to ensure your data are preserved for long-term access.

Upon completion of these archival ingest actions, NCEI will publish your data online (including a copy of your original files). You will receive another email once your submission package (Reference ID: B87KUF) is published for global access. In addition, NCEI may include all or part of your data into one or more product databases, such as the World Ocean Database.

If you have any questions about NCEI archival processes, please contact NODC.DataOfficer@noaa.gov. Also, if at any time you wish to update your submission package, please send an e-mail to NODC.DataOfficer@noaa.gov with your request. Please remember to include your submission package Reference ID.

Thank you again for choosing to archive your data with the National Centers for Environmental Information (NCEI).

NCEI Data Officer Team
NOAA National Centers for Environmental Information
NOAA/NESDIS
1315 East-West Highway
Silver Spring, MD 20910
USA

OCEANEERING

Galloway, Nicole <ngalloway@oceaneering.com>

OPR-J317-KR-18 Coast Pilot Review

1 message

Galloway, Nicole <ngalloway@oceaneering.com> Mon, Apr 22, 2019 at 1:33 PM
To: OCS.NDB@noaa.gov, Coast.Pilot@noaa.gov
Cc: Meredith Payne - NOAA Federal <meredith.payne@noaa.gov>, Kathryn Pridgen - NOAA Federal <kathryn.pridgen@noaa.gov>, Scott Melancon <smelancon@oceaneering.com>

Good afternoon,

Please see attached Coast Pilot Review Report for Project OPR-J317-KR-18. Note that no changes were made as of the submission of deliverables for Sheets 1 and 2 of this project. There were no specific investigation items for OPR-J317-KR-18 with regard to the Coast Pilot and only one minor suggestion is addressed in this submission. We will continue to review the Coast Pilot information for the duration of the project will let you know if any updates are found.

Thank-you,
Nikki

--
Best regards,

Nicole Galloway
Geoscientist
Direct (+1) 337 761 6872
Mobile (+1) 603 978 7211
ngalloway@oceaneering.com
2155 Steppingstone Square | Chesapeake, VA | USA, Tel (+1)757 985 3714 | oceaneering.com

OPR-J317-KR-18_Coast Pilot Review Report.pdf
1183K

From:	OCS NDB - NOAA Service Account
To:	Castle E Parker
Cc:	AHB Chief; Briana Hillstrom - NOAA Federal; Meredith Payne - NOAA Federal; Corey Allen; Nicole Galloway; Scott Melancon; _NOS OCS PBA Branch; _NOS OCS PBB Branch; _NOS OCS PBC Branch; _NOS OCS PBD Branch; _NOS OCS PBE Branch; _NOS OCS PBG Branch; Charles Porter - NOAA Federal; Chris Libeau; James M Crocker; Ken Forster; Kevin Jett - NOAA Federal; Matt Kroll; Michael Gaeta; NSD Coast Pilot; PHB Chief; Tara Wallace
Subject:	Fwd: H13177 DtoN #6, #7, and #8 Submission to NDB
Date:	Monday, March 18, 2019 3:18:41 PM
Attachments:	H13177_DtoN_6-7-8.zip

DD-30535 has been registered by the Nautical Data Branch and directed to Products Branch B for processing.

The DtoNs reported are three obstructions in the approaches to Tampa Bay, FL, west of Passage Key Inlet.

The following charts have been assigned to the record:
11415 kapp 2981
11412 kapp 175
11424 kapp 176
11400 kapp 177
11420 kapp 374
4148 kapp 420

The following ENCs have been assigned to the record:
US5FL11M
US4FL10M
US3GC07M

References:
H13177
OPR-J317-KR-18

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

---------- Forwarded message ---------
From: **Castle Parker - NOAA Federal** <castle.e.parker@noaa.gov>
Date: Fri, Mar 15, 2019 at 9:41 AM
Subject: H13177 DtoN #6, #7, and #8 Submission to NDB
To: OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov>
Cc: AHB Chief - NOAA Service Account <ahb.chief@noaa.gov>, Briana Hillstrom - NOAA Federal <Briana.Hillstrom@noaa.gov>, Meredith Payne - NOAA Federal <meredith.payne@noaa.gov>, Corey Allen - NOAA Federal <corey.allen@noaa.gov>, Nicole Galloway <ngalloway@oceaneering.com>, Scott Melancon <smelancon@oceaneering.com>

Good day,

Please find attached compressed file related to H13177 DtoN Report #6, #7, and #8 containing three uncharted obstructions located in the vicinity of 7.6nm to 10.3nm west of Passage Key Inlet. The submission to Nautical Data Branch (NDB) and Marine Chart Division (MCD) is intended for chart application.

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

If you have any questions, please contact me via email or phone 757-364-7472. 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) 364-7472

APPROVAL PAGE

H13177

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 NCEI for archive

- Descriptive Report
- Data Acquisition and Processing Report
- Collection of Bathymetric Attributed Grids (BAGs)
- Processed survey data and records
- Geospatial PDF of survey products
- Collection of backscatter mosaics

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

Approved: Meghan Megovern Digitally signed by MCGOVERN.MEGHAN.ELIZABETH.1284020495 Date: 2021.06.01 19:29:54 -04'00'

Commander Meghan McGovern, NOAA
Chief, Atlantic Hydrographic Branch