

NOAA FORM 76-35A

U.S. DEPARTMENT OF COMMERCE

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE

Descriptive Report

Type of Survey Shallow Water Multibeam
Hydrographic and Side Scan Sonar Survey

Project No. OPR-J364-KR-09-B

Registry No. H12061

Locality

State Florida

General Locality Gulf of Mexico

Sub-locality Pensacola Bay Entrance

2010

George G. Reynolds

CHIEF OF PARTY

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HYDROGRAPHIC TITLE SHEET

REGISTRY NO.

H12061

State *Florida*

General Locality *Gulf of Mexico*

Sub-Locality *Pensacola Bay Entrance*

Scale *1:10,000*

Date of Survey *October 23, 2009 – February 23, 2010*

Instructions Dated *September 21, 2009*

Project No. *OPR-J364-KR-09-B*

Vessel *R/V Able II – Registration Number CT4788BB*

Chief of Party *George G. Reynolds*

Surveyed By *John G. Wetmur, Robert M. Wallace, Matthew T. Grennan, Bonnie L. Johnston, Michael D. Lincoln, Andrew W. Payson*

Soundings by echo sounder *Reson Seabat 7101*

Verification by *Michael J. Engels*

Soundings in *Meters (MLLW)*

REMARKS: *All Times Recorded in UTC**Data Recorded and Presented relative to UTM Zone 16 North**Original SOW modified by January 21, 2010 Amendment of Solicitation (Refer to Separate III of the Descriptive Report.)*

Contractor: *Ocean Surveys, Inc.
91 Sheffield St.
Old Saybrook, CT 06475*

Bold, Red, Italic notes were made during office processing.

THE INFORMATION PRESENTED IN THIS REPORT AND THE ACCOMPANYING BASE SURFACE REPRESENTS THE RESULTS OF A SURVEY PERFORMED BY OCEAN SURVEYS, INC. DURING THE PERIOD OF 23 OCTOBER 2009 TO 23 FEBRUARY 2010 AND CAN ONLY BE CONSIDERED AS INDICATING THE CONDITIONS EXISTING AT THAT TIME. REUSE OF THIS INFORMATION BY CLIENT OR OTHERS BEYOND THE SPECIFIC SCOPE OF WORK FOR WHICH IT WAS ACQUIRED SHALL BE AT THE SOLE RISK OF THE USER AND WITHOUT LIABILITY TO OSI.

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**Data filed with original field records.*

DESCRIPTIVE REPORT TO ACCOMPANY HYDROGRAPHIC SURVEY H12061

Project Number OPR-J364-KR-09-B

February 23, 2010

Ocean Surveys, Inc. – *R/V Able II*

Chief of Party: George G. Reynolds

INTRODUCTION

The purpose of this survey is to provide NOAA with modern, accurate hydrographic survey data to update the nautical charts of the Gulf of Mexico, at the entrance to Pensacola Bay, Florida.

A. AREA SURVEYED

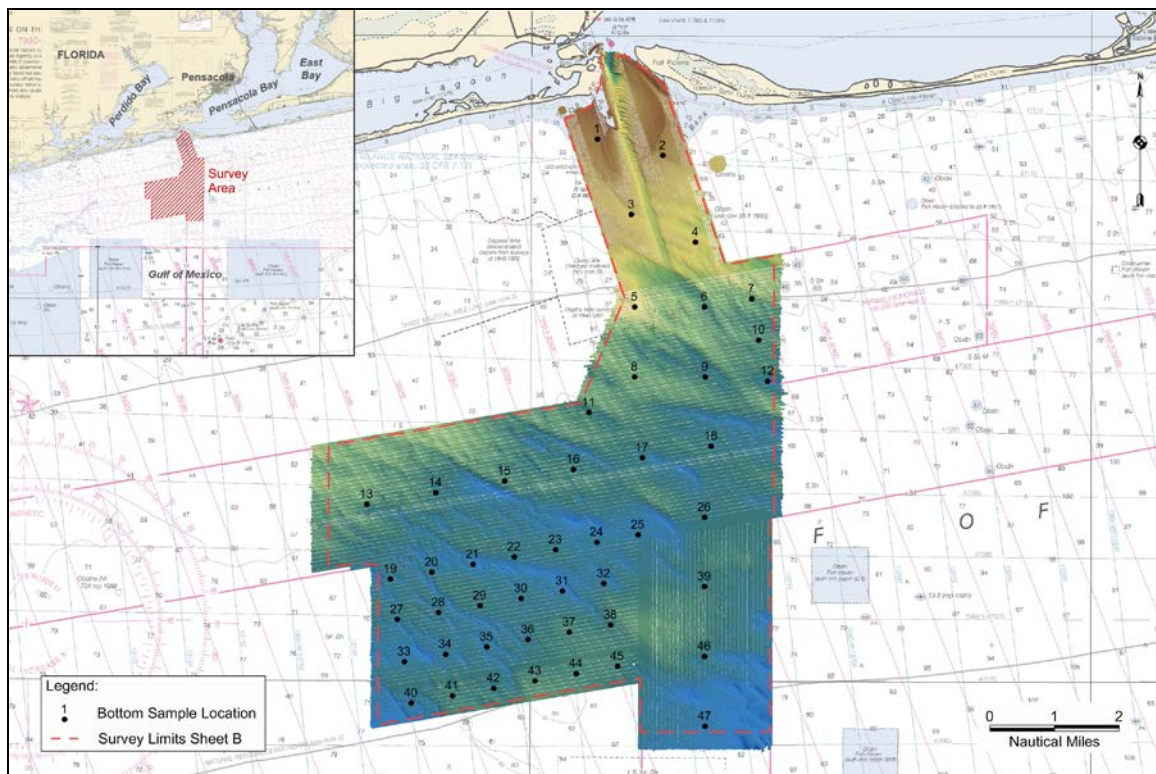


Figure 1. H12061 survey area overlain on RNC 11382. Multibeam colored by depth coverage image was developed from a 5-meter surface.

This survey provides hydrographic data for the Gulf of Mexico waters south of the Pensacola Bay Entrance, Florida. The survey limits are bound by the inshore 4-meter depth limit as specified in the Hydrographic Survey Project Letter Instructions (PLI). This survey junctions with contemporary Surveys H12060 to the west, H12062 to the south and H12157 to the east. The general locations of the survey limits are presented in Table 1. The survey area includes the Caucus Channel, Caucus Shoal, Middle Ground Shoal, East Bank and the shipwreck USS MASSACHUSETTS. Survey data were acquired to meet requirements specified in the contract Statement of Work (SOW, September 21, 2009; amended January 21, 2010), and NOS Hydrographic Surveys Specifications and Deliverables, April 2009 (HSSD 2009). Two hundred percent (200%) side scan sonar (SSS) coverage, with concurrent shallow water multibeam echo sounder (SWMB) coverage were collected with set line spacing to water depths of approximately 70 feet. Additional SWMB coverage was obtained as necessary to provide a least depth for all significant SSS contacts and assigned AWOIS investigation items. The final survey area covers 42.9 square nautical miles (Figure 1).

Table 1
General Location of Survey H12061

Northern Limit Latitude (N)	Southern Limit Latitude (N)	Western Limit Longitude (W)	Eastern Limit Longitude (W)
30-19-60	30-08-55	87-24-06	87-15-31

The mainscheme SSS/SWMB tracklines were generally oriented parallel to the long axis of individual reaches within the survey area (Figure 2). SSS tracklines were separated by one-half the distance required for 100% coverage plus an allowance for overlap and trackline maintenance. Trackline offset and accompanying SSS range scale settings are presented in Table 2. Survey trackline statistics are indicated in Table 3.

On-location system calibration was performed on October 23, 2009. Calibration data, mainscheme data, cross line data, significant target development, and bottom samples were acquired on the following dates: October 23-31, November 1-5, 12-20, 22-24, 29-30, December 3-7, 10, 13-14, 2009 and January 6-7, 9-15, 18-22, 25-31, February 1-3, 7-8, 10-11, 13, 17, 22, 23, 2010 [Calendar Day Numbers (DN) 296-309, 316-324, 326-328, 333-334, 337-341, 344, 347-348 (2009), and 006-015, 018-022, 025-028, 031-034, 038-039, 041-042, 044, 048 and 053-054 (2010)]. Forty-seven (47) bottom samples were acquired on February 20, 2001 (DN 051).

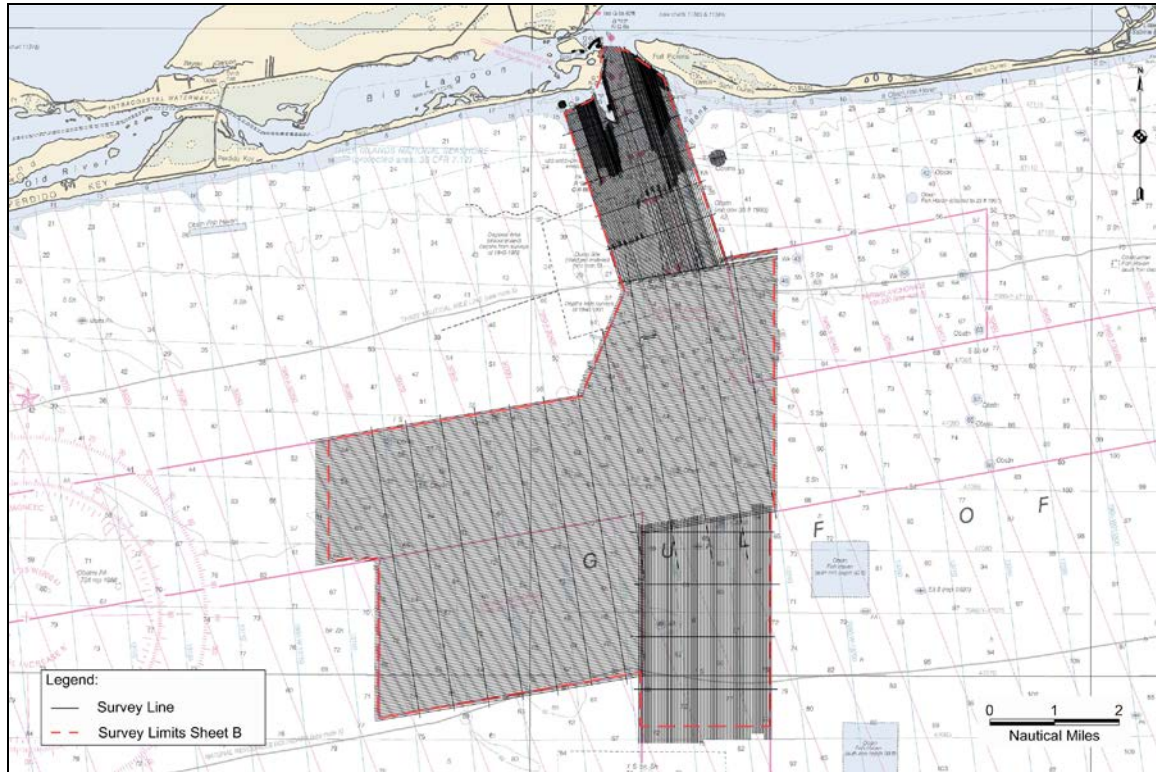


Figure 2. H12061 survey area with SSS/SWMB tracklines in black overlaid on RNC 11382. The project limits are depicted by a dashed red line.

Table 2
H12061 Survey Line Spacing

Water Depths (meters)	Trackline Offset (meters)	SSS Range Scale (meters)
1-10	20, 30	25, 37.5
10-25	40, 60	50, 75
> 25	60	75

Table 3
H12061 Survey Trackline Statistics

Concurrent MB/SSS Lineal NM	Multibeam Only Lineal NM	Additional Developments Lineal NM	Cross Lines Lineal NM	Square Nautical Miles Covered	Bottom Samples Acquired
1613	78.78	62.69	91.41	42.9	47

B. DATA ACQUISITION AND PROCESSING

Refer to OPR-J364-KR-09 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 included in this descriptive report.

B.1 Equipment

All survey operations were conducted from OSI's *R/V Able II*, a 7.6-meter fiberglass vessel, with a 3-meter beam and 0.8-meter draft. The vessel is powered by twin 150 HP outboard engines. Table 4 summarizes the primary equipment used to acquire SWMB and SSS data.

Table 4
H12061 Primary Survey Equipment

System	Manufacturer	Model/Version No.
Multibeam Echo Sounder	Reson	7101
Side Scan Sonar	Klein	3000
Sound Speed Profiler (primary)	Sea-Bird	SeaCAT SBE 19
Sound Speed Profiler (secondary)	Sea-Bird	SeaCAT SBE 19
Sound Speed Profiler (secondary)	Sea-Bird	SeaCAT SBE 19+
Sound Speed Sensor (Real-Time Surface Water Sound Speed)	Sea-Bird	MicroCAT SBE37
Primary Navigation DGPS	Applanix/Trimble	POS MV 320 V.4
Secondary Navigation DGPS (Position Integrity Alarm)	Trimble	MS750
Vessel Attitude and Heading	Applanix/Trimble	POS MV 320 V.4
Multibeam acquisition, trackline control, position fixing	HYPACK, Inc.	Survey (V 9.0- 9.1.0.0) and Hysweep (V 9.0.26.0)2009
SSS acquisition	Chesapeake Technology, Inc.	SonarWiz V4.04.0061
U.S.C.G. Differential Beacon Receivers (2)	Trimble	Probeacon
Survey GPS	Trimble	5700
Bar Check	OSI	Lead Disk
SSS Cable Payout Indicator	Hydrographic Consultants	SCC16"

**Data included with survey deliverables.*

All equipment was installed, calibrated and operated in accordance with the DAPR* with one exception. The primary Sea-Bird CTD used for Survey H12061 was, a SeaCAT SBE 19 CTD, S/N 1801. Comparison casts were initially conducted employing a secondary SeaCAT SBE 19 CTD, S/N 2864, but it was discovered that this CTD had been calibrated by the manufacturer 6 months and 16 days prior to the start of the survey. The comparison CTD (2864) was replaced on November 18, 2009 (DN 322) with SeaCAT SBE 19+ CTD, S/N 6107. Comparison casts between all three instruments were conducted on November 18 and 19, 2009 (DN 322 and DN 323). All comparisons “passed” employing the Weekly Comparison Cast function in NOAA’s Velocwin program.

The surface sound speed sensor (MicroCAT SBE37 S/N 6372) was calibrated six months and four days prior to the last day of data collection for Survey H12061. Post calibration of S/N 6372 was not required as per a March 17, 2010 email, which can be found in Appendix V**. All DQA surface sound speed comparisons employing the SBE37 (SN 6372) and the SBE19 CTDs “passed” per criteria in NOAA’s Velocwin program throughout the course of the survey.

B.2 Quality Control

B.2.1 System Calibration

An initial SWMB system calibration survey (patch test) was performed on October 23, 2009 (DN 296) in Pensacola Bay, north of the survey area. Calibration surveys were performed on November 13, 2009 (DN 317), January 20, 2010 (DN 020), and February 23, 2010 (DN 054) to verify the alignment values entered into the CARIS vessel configuration file (HVF). Transducer draft and echo sounder function was confirmed by means of bar checks and “spot checks” performed prior to and at weekly intervals during the course of the survey.

B.2.2 SWMB Cross Lines

A total of 91.41 nautical miles of cross line data were acquired on October 24–26, October 28–29, November 24 and December 10, 2009 (DNs 297-299, DN 301–302, DN 328, and DN 344) and represents 5.5% of the 1692 nautical miles (nm) of mainscheme SWMB lines. Cross lines over Caucus Channel, Caucus Shoal, and Middle Ground Shoal were re-run on December 10, 2009 (DN 344) to assess the level of change to the seafloor after the landfall of Hurricane Ida from November 7 to November 11, 2009 (DNs 311-315). See Section B.2.5 for additional details.

Statistical quality control information was generated by comparing each of the cross lines to the final combined 2-meter x 2-meter CARIS BASE (Bathymetry Associated with Statistical Error) surface. Cross line comparisons generated with the CARIS QC Report utility are presented in Separate IV***.

**Data included with survey deliverables.*

***Data attached to this report.*

****Filed with original field records.*

Cross line comparisons showed excellent agreement with the finalized BASE surface generated from the mainscheme survey lines. All cross line soundings considered in the analyses met IHO Order 1 uncertainty standards. Several cross lines run over Caucus Shoal and Middle Ground Shoal returned slightly higher standard deviation values in comparison to the final combined surface, which can be attributed to migrating sand waves prominent in and outside the channel. Overall, there was good agreement between overlapping line and day-to-day sounding coverage as observed in the BASE surface depth and standard deviation layers.

B.2.3 Data Quality Review

B.2.3.1 CARIS BASE Surface Standard Deviation and Uncertainty

The standard deviation and uncertainty BASE surfaces were reviewed to direct sounding editing and evaluated to search for systematic errors, sporadic noise (fish, water column disturbances, etc.), and areas that warranted additional investigation (bathymetric features). In general, the final combined uncertainty BASE surfaces generated from the higher of the standard deviation or uncertainty values were appropriate for the bathymetric relief observed in the survey area. Highest standard deviation values were observed along steep slopes of channel boundaries, shoal boundaries and in areas of presumed migrating sand. The CARIS QC BASE surface report utility was used to evaluate IHO uncertainty for the final combined 2-meter BASE surface. Results from the QC BASE surface report indicate that 100% of the nodes from the final combined 2-meter surface meet IHO Order 1 uncertainty specifications. QC BASE surface reports for all final surfaces are included in Separate IV*.

B.2.3.2 SSS Imagery and Contacts

Contacts with approximately 1-meter heights and greater were identified in 2 x 100% coverage SSS imagery and attributed with feature classifications and descriptive remarks if applicable. A custom CARIS ContactFeatures.hcf was created for feature classification when positioning contacts and is submitted with the session data. Contacts were classified according to SSS shadow height and surrounding depths as specified in the SOW and HSSD (Table 5). All contacts were correlated and evaluated in the CARIS HIPS/SIPS map window with respect to BASE surfaces, contours and charted information. Each significant contact was examined in the CARIS subset editor and a sounding was designated for the representative least depth of each contact (or Primary/Secondary contact pair). All significant contacts were developed with additional SWMB coverage, as needed, to meet the object detection sounding density as specified in the HSSD 2009. A tabulation of all side scan contacts, individual contact images, and supporting correlation tools (spreadsheet and database format) is presented in Separate V*. Isolated shoal features that were outstanding or navigationally significant with respect to the surrounding depths are represented and attributed in the S-57 feature file (i.e. OBSTRN, WRECKS).

**Filed with original field records.*

Table 5
Significant Contact Selection Criteria

Surrounding Depth or Area (meters)	Significant Contact Height (meters)
5-20	≥ 1.0
>20	10% of surrounding depth

B.2.4 Survey Junctions

Soundings from the three contemporary surveys that junction with H12061 (H12060 to the West, H12062 to the South and H12157 to the East) will be compared with those of H12061 upon completion of data processing for those survey areas. The results of these comparisons will be compiled and presented in each respective Descriptive Report for the remaining surveys under Project OPR-J364-KR-09. *Concur*

B.2.5 Unusual Conditions/Factors Affecting Soundings/Imagery

The sound speed profiles measured throughout the limits of Survey H12061 were variable, with changes up to 30 m/s in the water column. There were dramatic spatial and time-dependent changes, with surface sound speeds varying up to 15 m/s over very short horizontal distances. This variability is primarily attributed to the fresh water plume exiting Pensacola Bay with the outgoing tide. This variability caused refraction in the side scan imagery and, at times of severe refraction, appeared to influence the outer beams of the multibeam swath. To ensure that this phenomenon did not compromise the quality of the final dataset, various steps were taken by both the collection team and the processing team.

In areas of high refraction, flying the SSS fish a meter to a meter and a half below the threshold specified in the HSSD 2009 (8% of the SSS range) improved image quality. Confidence checks recorded throughout periods where the towfish was outside the specified depth range established that there was no degradation of image quality across the width of the SSS image. Contacts observed during these periods were subsequently investigated using the multibeam system. In some areas, flying the fish below the specified depth range did not help to improve image quality. In these areas, the range scale of the SSS was lowered and the line plan adjusted accordingly to ensure full 200% coverage.

The charted shoals bordering Caucus Channel, Caucus Shoal and Middle Ground, were surveyed four separate times in an attempt to acquire high quality SSS imagery. A minimum range of 25 meters was used following attempts to collect imagery over these shallow areas at higher range scales. However, refraction and surface noise still impacted a large portion of the side scan data over the shallowest regions of the survey area. After discussing this with the COTR, it was agreed that every effort had been made to survey the shoals and that OSI should proceed with the remaining survey work. As a result of the additional effort expended in attempting to acquire quality SSS imagery, a relatively dense multibeam dataset was acquired in this area. The original line plan called for set line spacing or “skunk stripe” multibeam coverage. However, the shallow shoals were eventually ensonified with nearly

100% multibeam coverage. The dense multibeam coverage further aided in identification and quantification of SSS contacts existing on the shoals. *Concur*

Throughout the processing phase of Survey H12061, care was taken to ensure that the area was fully developed with quality SSS imagery. High-frequency and low-frequency SSS data were converted and reviewed for refraction, surface noise, excessive motion or any other conditions that may impact the quality of the imagery prior to utilization. After the initial review, the SSS frequency which exhibited a higher quality image was selected, at the processors' discretion, to be fully processed for mainscheme SSS coverage. The frequency which was not utilized was placed in a subdirectory within each CARIS day folder. These data are not included in the digital deliverable.

Both high-frequency and low-frequency SSS data were fully processed for October 29, November 16 and November 24, 2009 (DN 302, DN 320 and DN 328). No significant contacts were observed on either October 29, 2009 (DN 302) or November 24, 2009 (DN 328). For this reason, both frequencies were processed to ensure that no significant contacts were left undetected due to refraction effects. On November 16, 2009 (DN 320), the low-frequency data were used to select contacts in offshore lines and high-frequency data were used to select contacts in nearshore lines. Each daily processing log makes note of which SSS frequency was employed for contact identification.

The variability in the sound speed profile also had an affect on the multibeam data. To overcome this problem, the field team took frequent sound speed casts to portray the sound speed conditions. On certain days, as many as 11 CTD casts were acquired. Casts were typically taken at both ends of a given survey area, as well as interspersed in the middle as appropriate. Surface sound speed values were displayed in the HYSWEEP survey window and recorded in the data file. The surface values were monitored throughout the survey for variations that indicated a new sound speed profile was needed.

The selected CARIS HIPS sound speed correction method was determined based on the spatial and temporal changes observed in the sound speed profiles over the course of the day. Based on the recommendation of the field team, some lines were corrected using individual casts. However, the majority of lines were sound speed corrected using CARIS HIPS' "Nearest in Distance Within Time" method. The day to day sound speed correction method is noted in the daily processing logs. Despite the efforts taken to reduce sound speed artifacts, refraction effects were evident in the outerbeams. Multibeam data within 50° from nadir were generally found to be within an acceptable level of uncertainty; therefore, a 50/50 beam filter was applied to all SWMB data.

Large schools of fish and numerous pods of dolphins were frequently seen in both the multibeam and SSS data (Figures 3 and 4). Fish and dolphins were noted in the acquisition log by the field team, and these areas were carefully reviewed during data processing. If seen on only one side scan line, the contact was designated as fish. If visible in 200% side scan coverage with a significant height, the contact was investigated with object detection multibeam coverage to verify or disprove the presence of a feature.

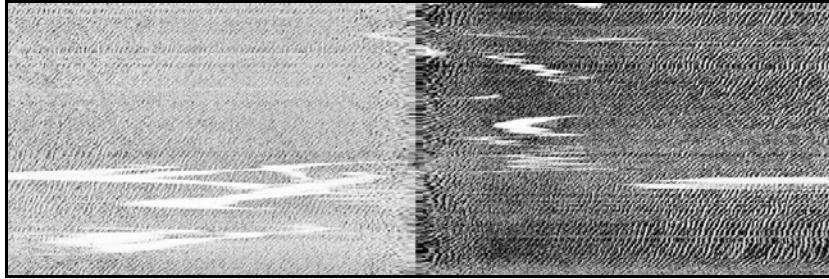


Figure 3. Example of dolphin activity captured in the side scan imagery.

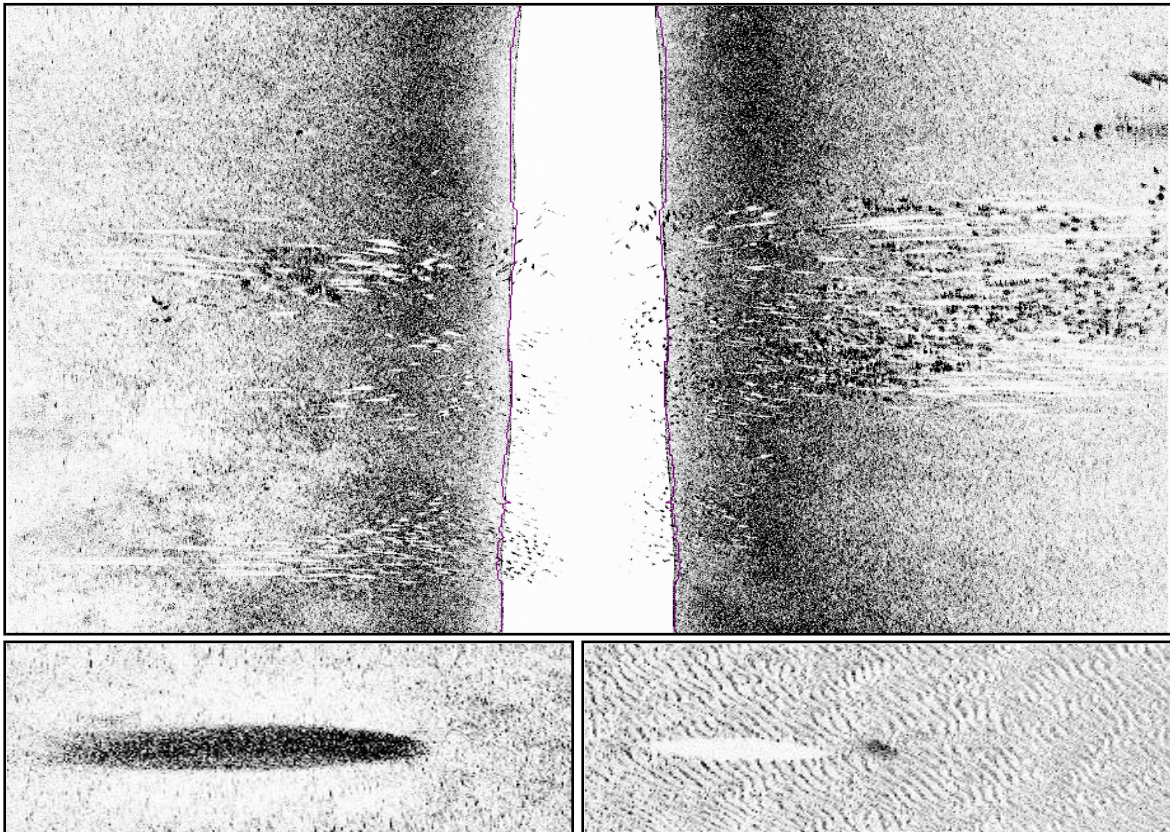


Figure 4. Examples of fish contacts captured in the side scan imagery.

Strong tidal currents were observed in Caucus Channel and at Pensacola Bay Entrance throughout the period of the survey. The current edition (37th, 2009) of Coast Pilot 5 states: "...diurnal velocity of the tidal current in Pensacola Bay Entrance in midchannel is about 1.7 knots at strength, although currents of up to 8 knots have been reported in the entrance." The field team surveyed the main channel, where current velocities are the strongest, during times of near slack or slack water in order to ensure vessel and crew safety and to minimize the potential negative effect of the high currents on survey data and SSS positioning.

On occasion there were brief Applanix TrueHeave outages of about 10 seconds or so (Figure 5). All data impacted by the outages were evaluated and soundings were rejected if heave amplitudes exceeded error tolerances for IHO Order 1.

Two SWMB mainscheme survey lines (2009AB2991934_176 and 2009AB3051402_159) were heave-corrected with standard POS MV heave data due to a higher frequency of TrueHeave outages during their acquisition. There were no indications of significant heave error observed in the CARIS BASE surface standard deviation or depth uncertainty layers.

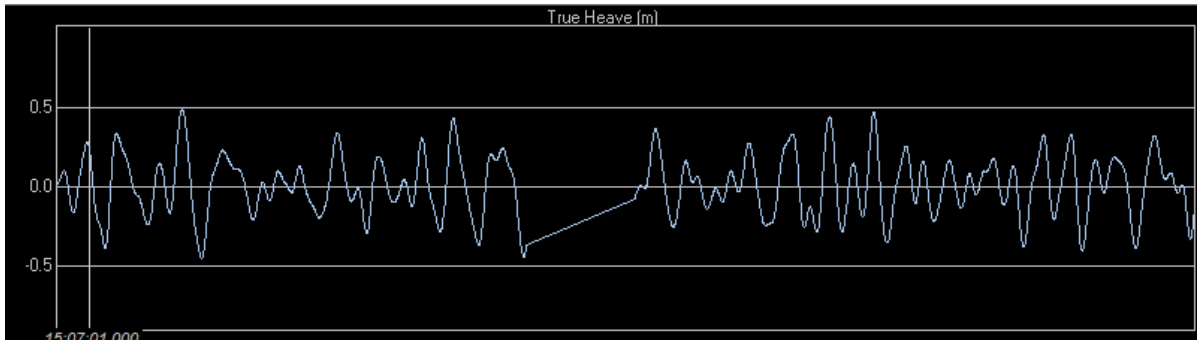


Figure 5. An example of a true heave outage from survey line 2009AB1231401_766 shown in CARIS HIPS Attitude Editor.

Numerous gaps were present in the preliminary tide data recorded by the Pensacola tide station (872-9840), the primary tide gauge for Survey H12061. These gaps were filled in the verified tide data provided by CO-OPS and downloaded from NOAA's Tides and Currents website. The gaps in preliminary tide data did not appear to have a significant impact on the tide-corrected multibeam data.

Tide data were highly susceptible to local meteorological conditions. There were at least 10 periods when the observed tide data differed from the predicted tide data by more than 0.5 meters and one instance where verified and predicted tides differed by more than 1 meter. Figure 12 (Section C.1.) illustrates a typical wind and/or barometric pressure-induced (assumed) offset between predicted and verified water levels at the Pensacola tide gauge location.

Based on cross line and standard deviation surface analysis results, verified tides appear to model the tides correctly for the majority of the survey period. However, in one area, a tide-induced offset is apparent in the final combined BASE surface standard deviation layer (Figure 6). Overlapping multibeam data collected from January 10 to January 12, 2010 (DNs 010-012) were approximately 0.15-0.2 meters deeper than the overlapping survey lines collected on multiple days (Figure 7). It should be noted that the magnitude of the tidal offset was minimal and that the final soundings are within the allowable IHO Order 1 error budget for survey depths of ≤ 20 meters (± 0.56 meters).

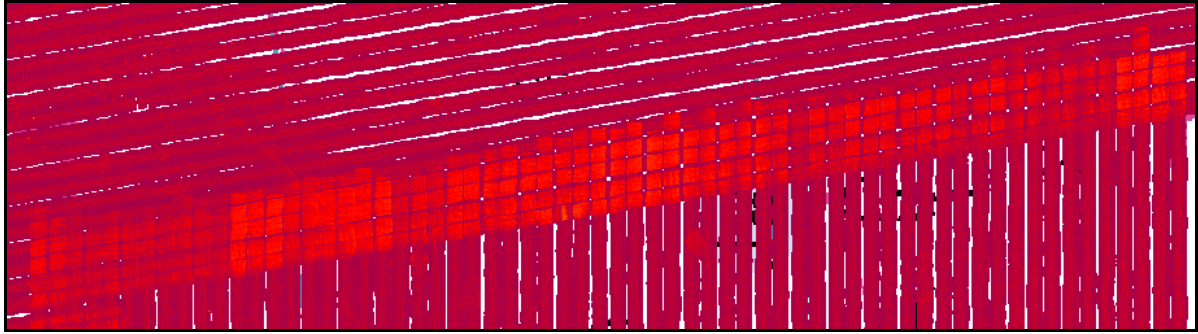


Figure 6. Tidal offset discrepancy between multibeam survey lines depicted on the standard deviation layer of the final combined 2-meter BASE surface.

OSI undertook a brief water level analysis in an attempt to understand and validate the vertical offset depicted in Figure 6 and Figure 7. Utilizing the Applanix POSPac MMS software, water level data, at the location of the survey vessel, were derived employing the Post-Processed Virtual Reference Station (PPVRS) technique. These water level data were compared to coincidental zone-corrected, verified water level data from the Pensacola tide gauge. The analysis in fact demonstrated that the departure of the PPVRS-derived water level data from the zone-corrected, verified water levels is generally consistent in magnitude and direction with the offset displayed in Figure 6 and Figure 7.

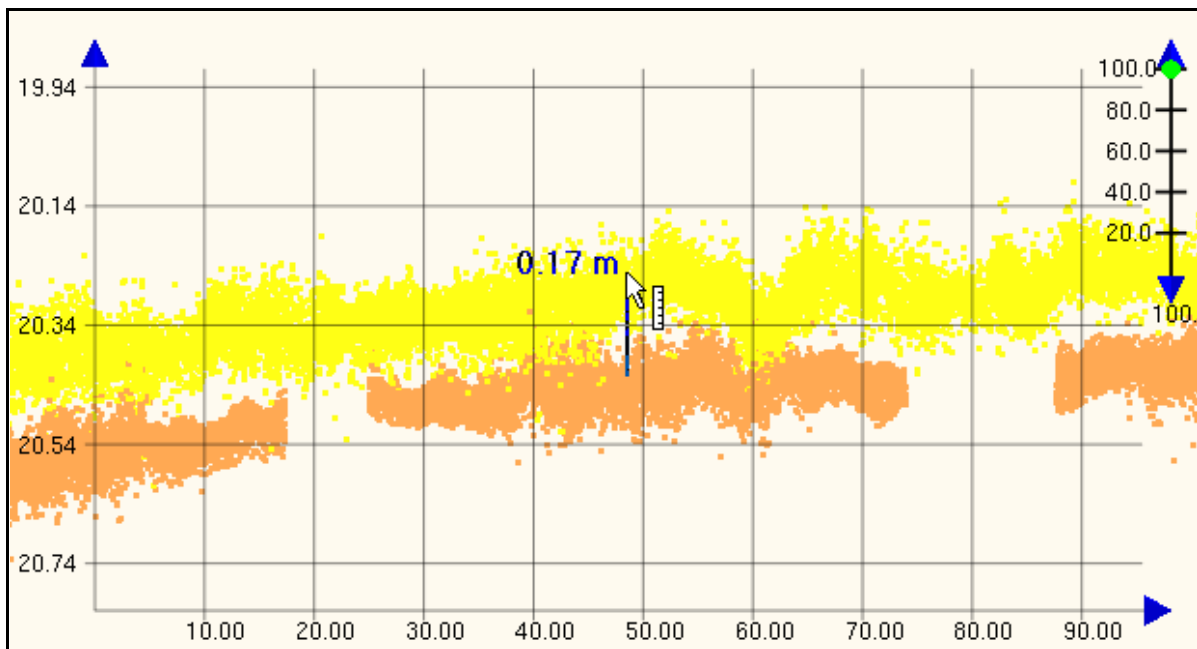


Figure 7. An example of the tidal offset between lines collected on January 11, 2010 (DN 011) (orange) and an overlapping perpendicular line collected on November 24, 2009 (DN 328) (yellow) displayed in CARIS HIPS Subset Editor. Depths and distances are in meters.

The bottom type for the majority of the H12061 survey area is fine sand. Depth changes and depositional features were observed at various times throughout the course of the survey, indicating that the sand and shoals in the area surrounding the entrance to Pensacola Bay are constantly shifting. Following Hurricane Ida, many areas in and surrounding Caucus Channel showed small differences in depth (approximately 20 centimeters) with sand wave migration changing the location of the crest shoal depths. Significant changes in measured depths were observed along the eastern edge of Caucus shoal, where it meets the channel. Vertical offsets, in this area, of ± 1 meter were common between data collected before and after Hurricane Ida (Figure 8). In particular, the presence of a large migrating shoal located at the junction of the Middle Ground and the East Bank shoals was apparent in the standard deviation layer of the final combined BASE surface. Over the course of the survey, the crest of the shoal had migrated horizontally back and forth approximately 40 meters from its originally surveyed location (Figure 9).

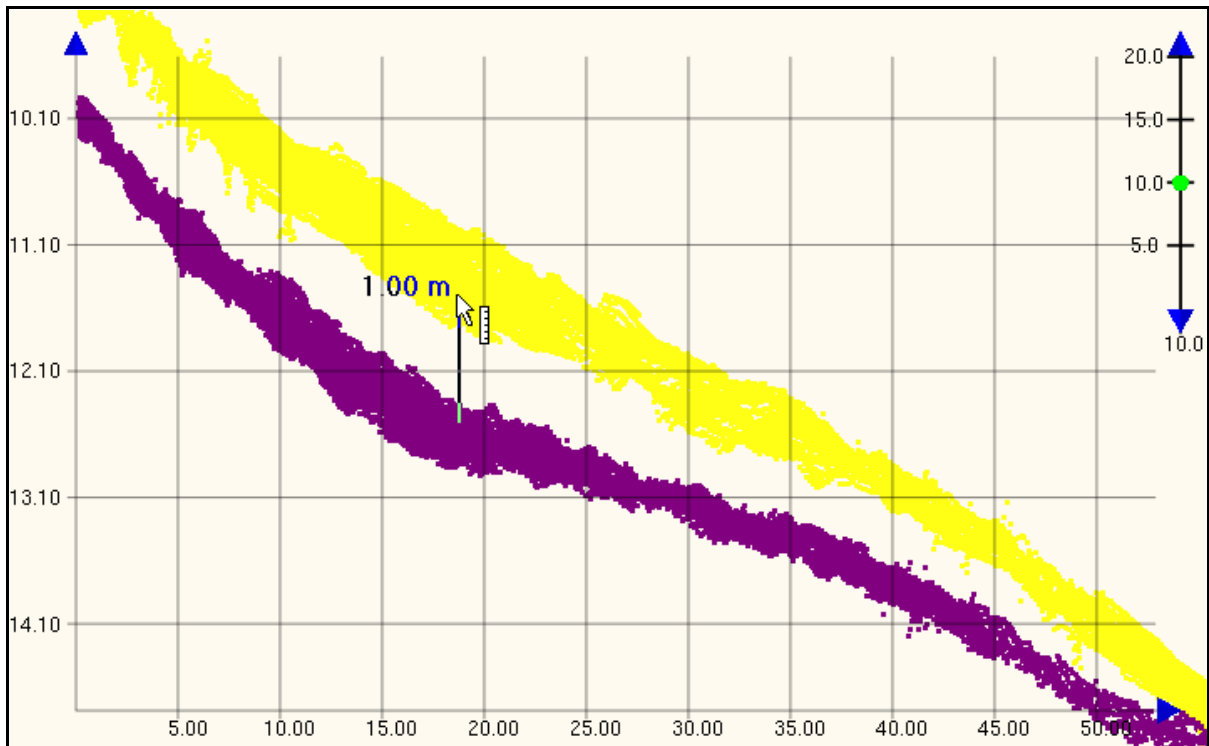


Figure 8. Vertical offset noted between data collected before (yellow) and after (purple) Hurricane Ida east of Perdido Key along the edge of Caucus Shoal. Depths and distances are in meters.

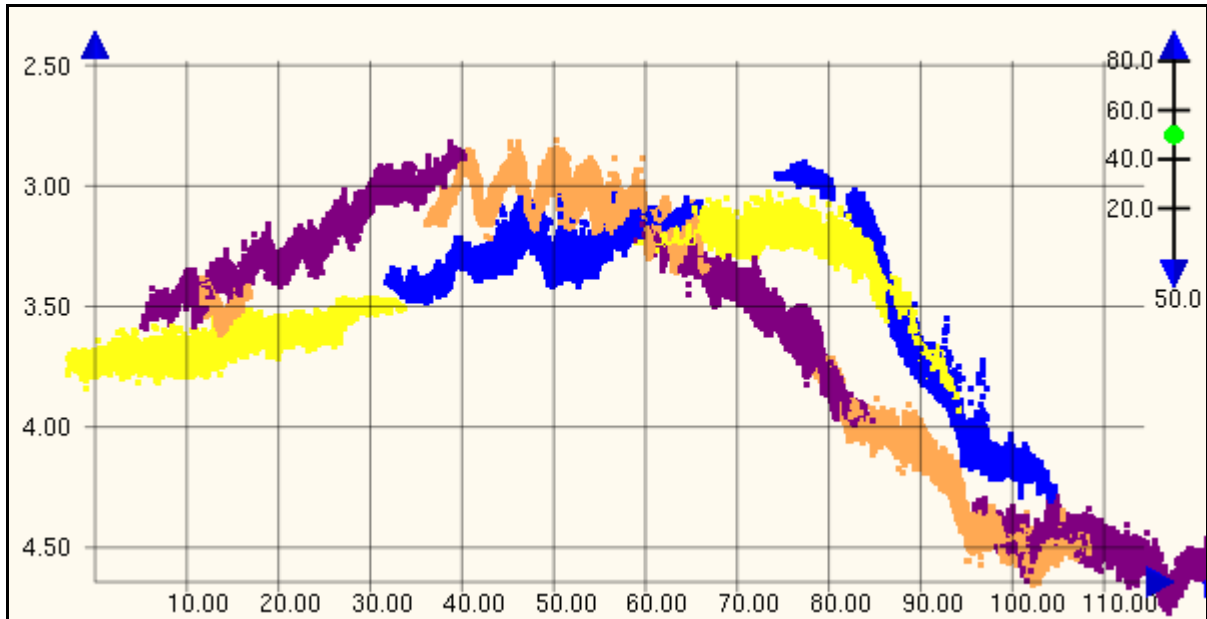


Figure 9: Evidence of the horizontal migration of a shoal between Middle Ground and East Bank. The survey lines are colored by day as follows: Yellow = October 26, 2009 (DN 299), Blue = January 20, 2010 (DN 020), Orange = November 14, 2009 (DN 318), and Purple = November 17, 2009 (DN 321). The crest of the shoal migrated between its originally surveyed position (yellow) to the interim position (orange-purple) and back to the last surveyed position (blue). The observed migration took place over the course of 77 days. Depths and distances are in meters.

B.2.6 Sounding Coverage, Equipment and Methods

As noted in Table 4, a Reson Model 7101 multibeam echo sounder was employed to acquire sounding data. The system was configured to operate using 511 beams. Due to the shallow conditions throughout the site, the multibeam system ping rate was maintained at a relatively high rate. The combination of the high beam number and ping rate ensured the system had no trouble meeting mainscheme along track and grid node density requirements at typical survey speeds.

One mainscheme SWMB survey line, 2009AB3191919_709, collected on November 15 (DN 319) exhibited intermittent along track coverage gaps approximately 6 meters in length. The coverage gaps were caused by brief interruptions of the Reson 7101 data stream while logging multibeam files in HYSWEEP. Most of the gaps occurred over Middle Ground Shoal in depths shallower than 4 meters, the inshore limit of hydrography, and did not coincide with any features in the 200% SSS coverage. Soundings from adjacent SWMB lines were re-accepted in CARIS Subset Editor to fill the BASE Surface holidays when possible. The majority of the data gaps did not span more than 3 nodes across when measured in a 2-meter BASE Surface, the required grid resolution for depths less than 20

meters per a modification to the HSSD coverage requirements documented in a September 16, 2009 email from the project COTR (See Appendix V*).

For contact developments requiring “Object Detection” coverage, the survey vessel was operated at a survey speed typically less than 6 knots. Multiple near-nadir passes were run for each contact development to make certain that extremely dense, high quality soundings were available for least depth determination.

B.3 Corrections to Echo Soundings

Preliminary patch test values were calculated in the field and final values were verified in CARIS HIPS.

Corrections to echo soundings were performed in accordance with the DAPR***;* however, additional multibeam echo sounder calibrations were completed due to variability in roll alignment noted during preliminary processing. The minute roll offset variation is attributed to the act of deploying and recovering the transducer pole each day. Once the irregular roll offset was revealed, a routine of acquiring roll calibration each day prior to data acquisition was instituted. The Hydrographic Vessel File (HVF) was updated when changes in the roll bias value were observed.

A “shallow water” draft configuration was utilized on two dates, November 18, 2009 (DN 322) and January 10, 2010 (DN 010). This configuration was employed during the investigation of AWOIS Items in depths shallower than 4 meters. In this configuration, the transducer was raised 1 foot (0.31 meters) higher than the nominal draft configuration of 0.905 meters. The Z value offset was updated in the HVF for each change in the draft with the appropriate date and time stamp.

All comparison casts taken with the Secondary CTD units were removed from the concatenated SVP files prior to sound speed correction of the multibeam data. The processors’ initials were appended to the end of the file name to indicate that the raw concatenated SVP file had been updated.

B.3.1 Static Draft Corrections

Static draft measurements were measured prior to survey operations each day and recorded in the acquisition log. The static draft was also measured before and after each fueling. The CARIS vessel configuration file was updated with daily time tags and static draft values. Static draft corrections were applied during the merge process. Generally, the static draft values did not vary more than 0.02 meters.

**Data attached to this report.*

***Data included with survey deliverables.*

B.4 Data Processing

B 4.1 Survey Coverage

This survey was conducted to develop 200% SSS coverage within the survey limits along with concurrent SWMB, aka “skunk stripe” bathymetry. Full multibeam coverage of the survey area was not required. All potentially significant features located with mainscheme SSS or SWMB were developed with high density, near nadir multibeam sonar data to meet the HSSD requirement of “Object Detection Coverage.”

B 4.2 Coverage BASE Surfaces and Mosaics

Survey H12061 was divided into multiple field sheets (Figure 10 and Table 6) based upon final BASE surface resolutions and the number of nodes (limited by CARIS HIPS) per field sheet (less than 25 million nodes). The required grid resolution for mainscheme multibeam bathymetry was 2 meters for depths less than 20 meters and 4 meters for depths of 20-40 meters, per email correspondence from NOAA dated September 16, 2009 (see Appendix V*). Surface H12061_A_1m, located at the entrance to Pensacola Bay, was generated at a 1-meter grid resolution due to the relatively high sounding density in Caucus Channel and over the surrounding shoals which allowed for a detailed depiction of the seafloor. Surfaces were generated in CARIS HIPS using the “Shallow Configuration” under the CUBE Parameters’ Advanced settings menu.

In addition to the five mainscheme multibeam surfaces listed in Table 6, 64 (sixty-four) small field sheets were created over features located during multibeam developments of side scan targets. The investigation item field sheets had approximate dimensions of 50 meters x 50 meters, with several field sheets made slightly larger where multiple features were located in close proximity to one another. BASE surfaces were generated using the CUBE algorithm and finalized within each field sheet at a grid resolution of 1-meter, which was the required grid size at depths less than 23 meters to demonstrate “Complete Multibeam Coverage” over side scan sonar target investigations, per the same email correspondence referenced in the above paragraph (see Appendix V*). The 1-meter BASE surfaces were generated with the CUBE algorithm, IHO Order 1, with CUBE parameter settings configured such that only soundings that fell within a fixed radial distance of 0.71 meters of a node were used to calculate sounding density. In the event that no feature was located following item investigation with multibeam development lines or the feature height was navigationally insignificant at the survey depth, a field sheet was not generated over that investigation area.

A 2-meter combined sounding field sheet is also included in the deliverables. This sheet, “H12061_Full_Combined_2m,” includes the gridded soundings from field sheets A-E and the 64 item investigation field sheets.

Employing the choice SSS imagery as discussed in Section B.2.5., a 1-meter resolution coverage mosaic field sheet was created for each 100% SSS coverage.

****Data attached to this report.***

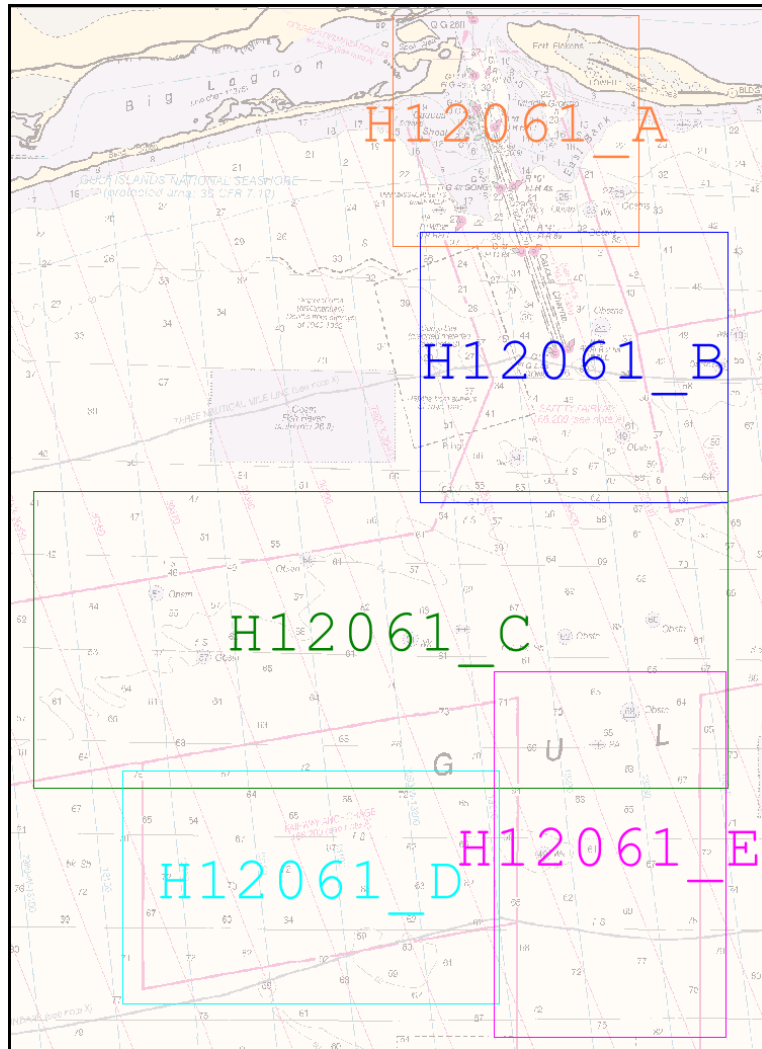


Figure 10. H12061 HIPS sub-area sounding field sheet layout.

Table 6
H12061 Field Sheets

Field Sheet Name	Resolution (meters)	Depth Range (meters)	Type
H12061_A	1	1-23	SWMB coverage
H12061_B	2	7-23	SWMB coverage
H12061_C	2	13-25	SWMB coverage
H12061_D	2	17-25	SWMB coverage
H12061_E	2	18-28	SWMB coverage
Item_1_FS_B	1	10-11	SWMB coverage
Item_2_FS_B	1	12-13	SWMB coverage
Item_3_FS_B	1	12-14	SWMB coverage
Item_4_FS_C	1	19-20	SWMB coverage
Item_5_FS_C	1	20-21	SWMB coverage

Field Sheet Name	Resolution (meters)	Depth Range (meters)	Type
Item_6_FS_C	1	20-21	SWMB coverage
Item_7_FS_C	1	17-19	SWMB coverage
Item_8_FS_C	1	20-22	SWMB coverage
Item_9_FS_C	1	19-20	SWMB coverage
Item_10_FS_C	1	20-22	SWMB coverage
Item_11_FS_C	1	21-22	SWMB coverage
Item_12_FS_C	1	18-20	SWMB coverage
Item_13_FS_C	1	21-22	SWMB coverage
Item_14_FS_C	1	22-23	SWMB coverage
Item_15_FS_C	1	16-19	SWMB coverage
Item_16_FS_C	1	20-21	SWMB coverage
Item_17_FS_C	1	21-22	SWMB coverage
Item_18_FS_C	1	21-22	SWMB coverage
Item_19_FS_C	1	20-22	SWMB coverage
Item_20_FS_C	1	14-16	SWMB coverage
Item_21_FS_C	1	20-23	SWMB coverage
Item_22_FS_C	1	21-23	SWMB coverage
Item_23_FS_C	1	17-19	SWMB coverage
Item_24_FS_C	1	16-17	SWMB coverage
Item_25_FS_C	1	16-18	SWMB coverage
Item_26_FS_C	1	17-19	SWMB coverage
Item_27_FS_C	1	15-18	SWMB coverage
Item_28_FS_C	1	16-19	SWMB coverage
Item_29_FS_C	1	17-20	SWMB coverage
Item_30_FS_C	1	18-21	SWMB coverage
Item_31_FS_C	1	20-23	SWMB coverage
Item_32_FS_C	1	22-23	SWMB coverage
Item_33_FS_C	1	19-21	SWMB coverage
Item_34_FS_C	1	19-21	SWMB coverage
Item_35_FS_C	1	20-21	SWMB coverage
Item_36_FS_C	1	13-16	SWMB coverage
Item_37_FS_C	1	14-16	SWMB coverage
Item_38_FS_D	1	21-23	SWMB coverage
Item_39_FS_D	1	22-23	SWMB coverage
Item_40_FS_D	1	20-21	SWMB coverage
Item_41_FS_D	1	19-21	SWMB coverage
Item_42_FS_D	1	21-22	SWMB coverage
Item_43_FS_D	1	21-23	SWMB coverage
Item_44_FS_D	1	18-19	SWMB coverage
Item_45_FS_D	1	18-21	SWMB coverage
Item_46_FS_D	1	18-21	SWMB coverage
Item_47_FS_D	1	20-21	SWMB coverage

Field Sheet Name	Resolution (meters)	Depth Range (meters)	Type
Item_48_FS_D	1	19-20	SWMB coverage
Item_49_FS_D	1	19-21	SWMB coverage
Item_50_FS_D	1	18-21	SWMB coverage
Item_51_FS_D	1	20-22	SWMB coverage
Item_52_FS_D	1	17-20	SWMB coverage
Item_53_FS_D	1	18-19	SWMB coverage
Item_54_FS_D	1	18-20	SWMB coverage
Item_55_FS_D	1	18-19	SWMB coverage
Item_56_FS_D	1	18-20	SWMB coverage
Item_57_FS_D	1	17-18	SWMB coverage
Item_58_FS_E	1	20-21	SWMB coverage
Item_59_FS_E	1	18-19	SWMB coverage
Item_60_FS_E	1	17-18	SWMB coverage
Item_61_FS_E	1	17-18	SWMB coverage
Item_62_FS_E	1	21-22	SWMB coverage
Item_63_FS_E	1	22-23	SWMB coverage
Item_64_FS_E	1	22-23	SWMB coverage
H12061_Full_Combined_2m	2	all	SWMB coverage
H12061_SSS_100	1	all	SSS coverage
H12061_SSS_200	1	all	SSS coverage

C. VERTICAL AND HORIZONTAL CONTROL

C.1 Vertical Control

The vertical datum for this project is Mean Lower Low Water (MLLW). The National Water Level Observation Network (NWLON) station at Pensacola, FL (872-9840) served as datum control for Survey H12061. *Concur*

The survey area is located within Zones CGM23, CGM26, CGM27, CGM27A, CGM28, and CGM29 as provided in the preliminary tidal zoning scheme included with the project SOW CD.

Zone CGM 23 was modified so as to include the inshore investigation lines of AWOIS Item 8443-7225. The original and modified zones can be seen in Figure 11, and the adjusted vertices of Zone CGM 23 are shown in Table 7.

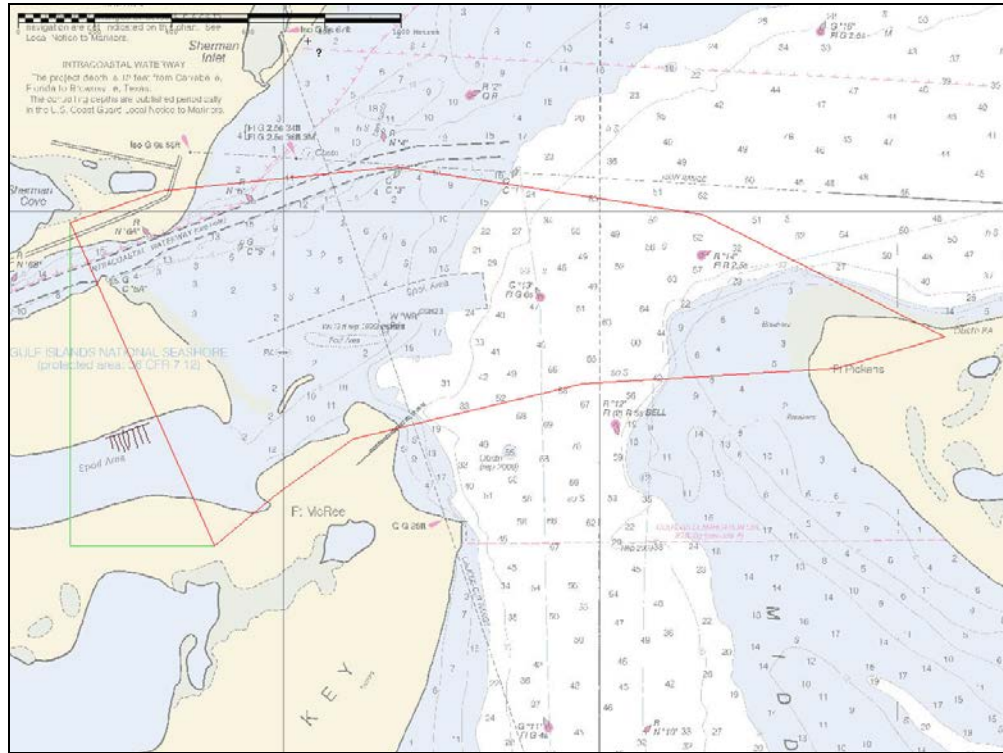


Figure 11. Original outline of Zone CGM 23 is shown in red. The adjusted portion is shown in green and the investigation lines for AWOIS Item 8443-7225 are shown in brown within the extended area of tide Zone CGM 23.

Table 7
Vertices of Zone CGM 23 with the added vertex shown in green.

Latitude (NAD 83)	Longitude (NAD 83)
30.327949	87.314739
30.326650	87.316817
30.325427	87.318511
30.325427	87.322416
30.333044	87.322416
30.333790	87.319977
30.334368	87.313575
30.333245	87.305255
30.330361	87.298682
30.329605	87.301612
30.329247	87.308503
30.327949	87.314739

OSI home office and field personnel monitored the posted preliminary tide data on the NOAA CO-OPS website. The NOAA Pensacola (872-9840) gauge experienced 65 preliminary data gaps of duration greater than one hour during the survey, with the largest gap of 13 hours and 54 minutes occurring on November 15, 2009 (DN 319). The majority of the gaps occurred outside periods of data acquisition. All gaps were filled by CO-OPS prior to issuance of verified tide data.

Observed tide values deviated from predicted tide values on occasion during the survey. These deviations appear to be dependent on local weather conditions and were only observed during periods of high winds and high surf (Figure 12).

Verified tides and zoning were applied during field operations.

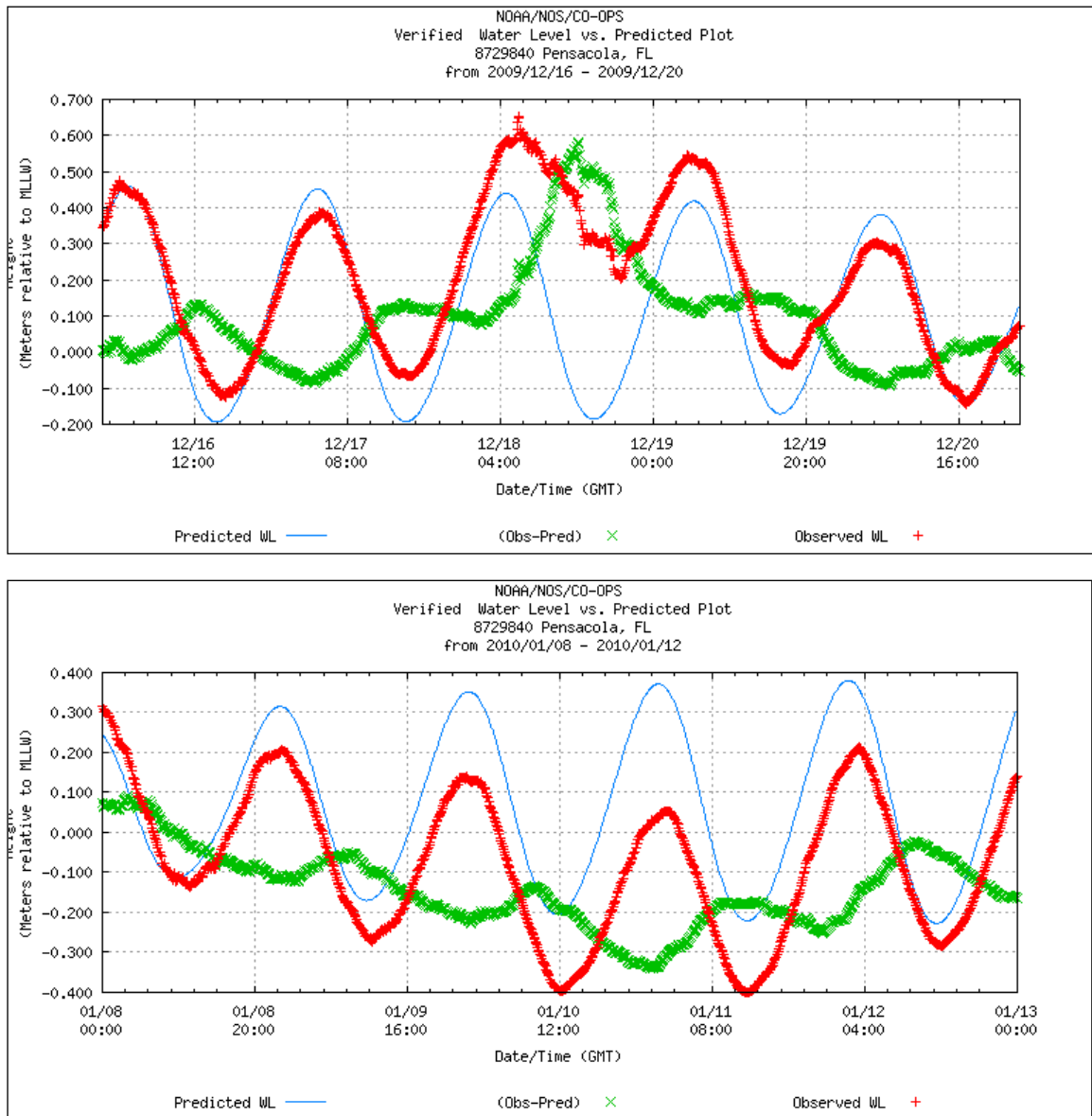


Figure 12. Top: Deviation of verified tide data from predicted tide during a period of strong onshore winds. Bottom: Deviation of verified tide data from predicted tide during a period of strong offshore winds.

C.2 Horizontal Control

The horizontal datum for this project is the North American Datum of 1983 (NAD83). All data products are referenced to Latitude/Longitude or Universal Transverse Mercator (UTM) Zone 16, meters.

All primary position data were acquired using an Applanix POS MV operating in Differential GPS (DGPS) mode. The unit was configured to receive USCG Differential beacon correctors from Eglin Air Force Base, FL. Differential beacon correctors from the U.S.

Coast Guard station in Mobile Point, AL, were used by the secondary navigation system to facilitate real-time horizontal control confidence checks.

OSI established a horizontal control point, “Sherman Cove Gas Dock PK,” adjacent to the survey vessel’s berth at Sherman Cove Marina in Pensacola, FL, using the National Geodetic Survey’s Online Positioning Users Service (OPUS) technology. The control point position was used as a reference for daily navigation system confidence checks. Refer to the DAPR* and Horizontal and Vertical Control Report (HVCR)* for additional details.

D. RESULTS AND RECOMMENDATIONS

D.1 Chart Comparison

Chart comparisons were performed in CARIS HIPS/SIPS, Notebook and Easy View using surface models, contours and soundings that were generated from the combined final BASE surface. The latest editions of the NOAA NOS Raster Nautical Charts (RNC) and Electronic Nautical Charts (ENC) were downloaded from the NOAA Coast Survey WWW site (<http://www.nauticalcharts.noaa.gov/>) weekly during survey operations, and when the survey was completed for final comparisons. The RNCs and ENCs used for final comparisons, summarized in Table 8, were downloaded on April 6, 2010 and are submitted with the survey data.

The Local Notice to Mariners (LNM) and Notice to Mariners (NM) issued during the survey period (October 23, 2009 to February 23, 2010) were reviewed for significant updates. Coast Guard District 8 LNM 13/2010 (March 31, 2010) was the final notice reviewed for this project. LNM/NM changes affecting aids to navigation (ATON) are discussed in Section D.2.3.

**Data included with survey deliverables.*

Table 8
H12061 Affected Charts

Chart Number	Scale	Edition	ENC
1115A	1: 456,394	43rd, Nov./08	US3GC05M
11382	1:80,000	40th, Feb./04	US4FL71M
11383	1:30,000	51st, Jan./06	US5FL72M
11384	1:10,000	35th, Oct./06	US5FL73M

D.1.1 General Chart Comparison

In general, charted and surveyed depths agreed within 3 feet (1 meter) outside of the Pensacola Bay Channel Entrance. However, larger discrepancies were observed at charted depths and along charted depth curves within the Caucus Channel and at the entrance to Pensacola Bay. Specific differences are discussed in the detailed chart comparisons below.

- Many uncharted obstructions were surveyed in the Safety Fairways and Anchorages. Positions and least depths were developed and are submitted with the S-57 feature file, H12061_S57_Features.000. *Concur - See Appendix II for final charting recommendations.*
- Encroaching shoals have reduced the charted clearance depths for Caucus Channel.
- A majority of the charted obstructions and wrecks within the survey area were included as AWOIS investigation items and are discussed in detail under Appendix II - Survey Feature Report. *Concur*
- High-resolution data from this survey provide more detailed delineations of depth areas and individual features.

D.1.2 Detailed Chart Comparison and Charted Features – *See Appendix II for all feature recommendations.*

The chart features listed below were common to Charts 11382, 11383 and 11384 with the exception of the smallest scale chart of 1115A. (Soundings in feet)

- H12061-1: Survey depths in the Pensacola Bay entrance differed by ± 10 feet in comparison to charted soundings and depth curves inside Buoys "10" and "11." For example, a depth of 58.3 feet (17.8 meters) at 30-19-31.52N, 87-18-33.62W was surveyed over a charted 67-foot sounding and a depth of 48.2 feet (14.7 meters) at 30-19-19.77N, 87-18-32.38W was surveyed over a charted 42-foot sounding (Figure 13).

Concur - Chart present survey depths.

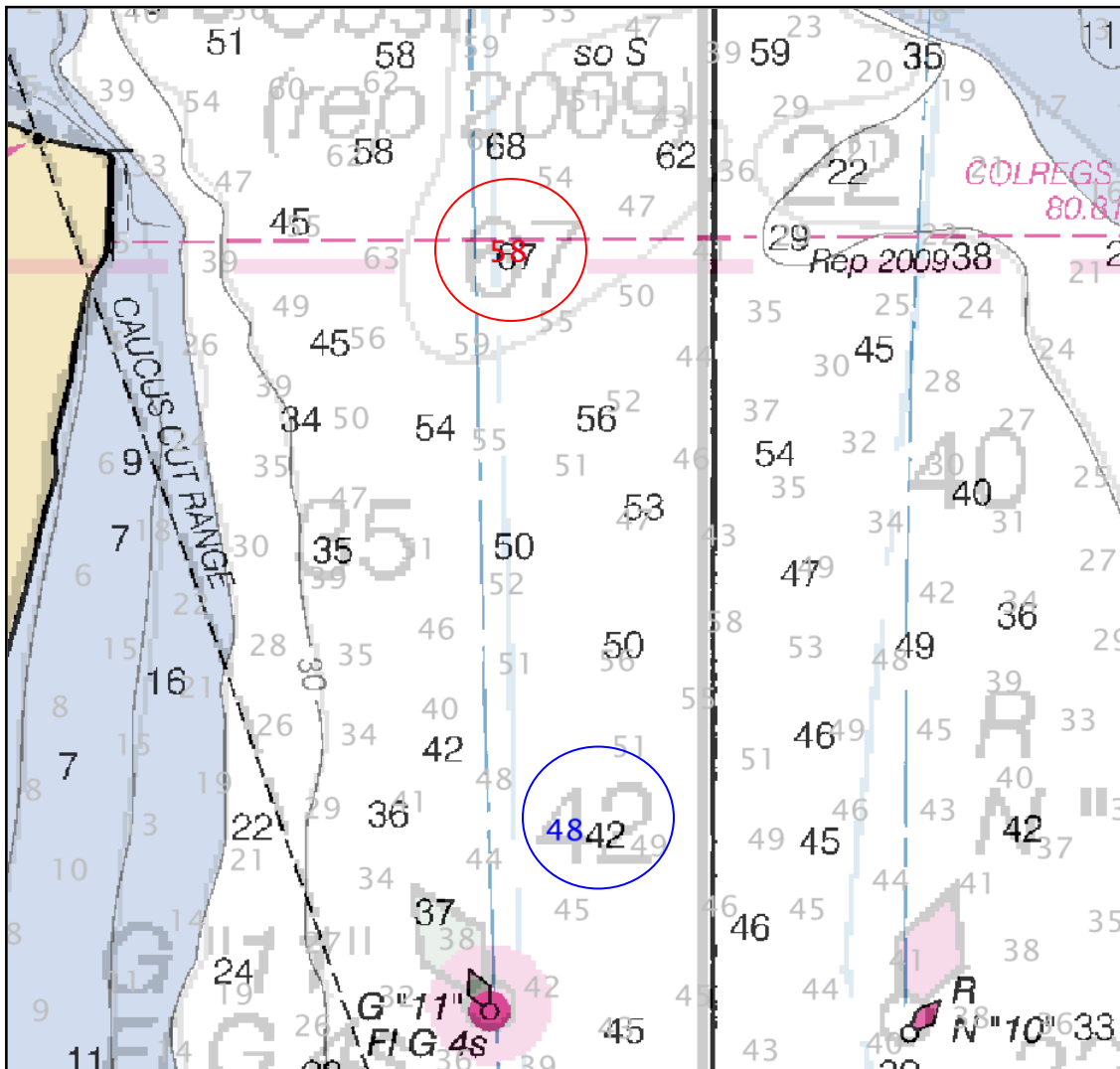


Figure 13. Discrepancies between survey depths and charted soundings at the Entrance to Pensacola Bay. Survey depths are shown in gray, red and blue overlain on RNCs 11384 and 11383. All depths are in feet.

- H12061-2: Shoaling was prevalent along and seaward of the 30-foot depth curve between Buoys “10” and “12.” Survey depths were up to 20 feet shallower than charted depths (Figure 14). An excerpt from the current Coast Pilot confirms that shoaling has been a concern in this area for more than two decades: “In November 1987-April 1988, shoaling was reported to exist at the entrance to the bay between Buoy 7 and Lighted Bell Buoy 12.” *Concur – Chart present survey depths.*

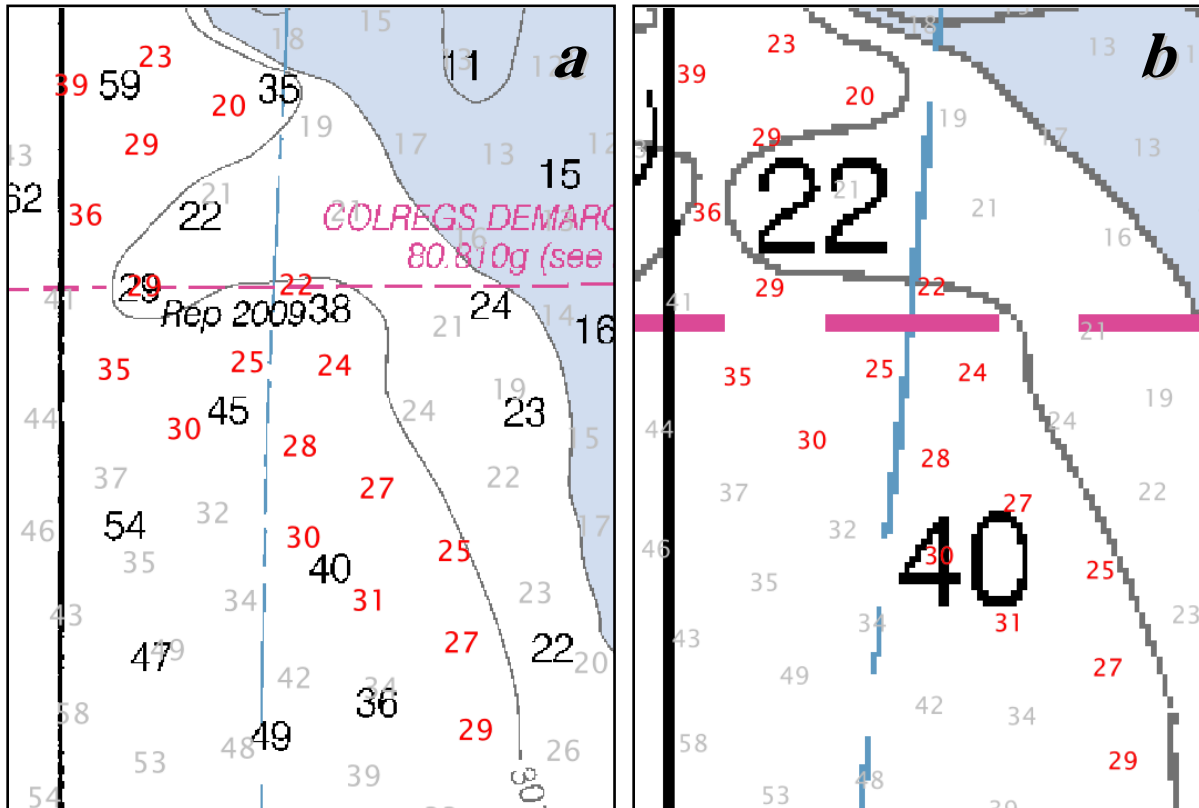


Figure 14. Survey soundings highlight shoal advancement beyond the charted 30-foot depth curve in comparison to RNC 11384 (a) and RNC 11383 (b). All depths are in feet with surveyed depths shown in red and grey. The red soundings were selected for emphasis.

- H12061-3: Survey depths on the eastern edge of Caucus Shoal were both significantly deeper and shallower than charted depths. Along the charted 12 and 18-foot depth curves, a deepening trend was noted ranging approximately between 30-18-15N, 87-18-22W to 30-18-33N, 87-18-28W with survey depths 10 to 14 feet deeper than charted. Depths then abruptly shoal in the vicinity of Buoy C "7," with survey depths up to 15 feet shallower than charted (Figure 15).
- *Concur – Chart present survey depths.*

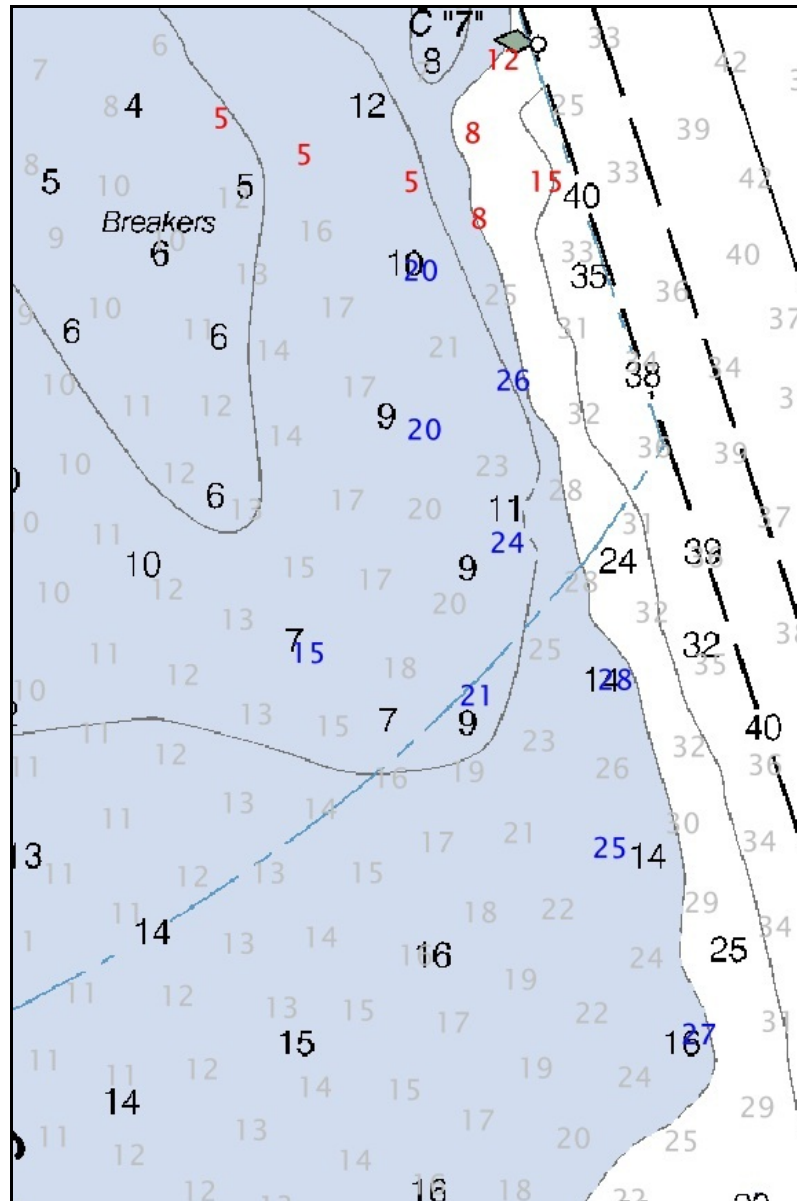


Figure 15. Large depth changes were observed over the eastern edge of Caucus shoal. Survey depths are in blue, red and grey overlain on RNC 11384. Soundings in blue were significantly deeper than charted depths and soundings in red were significantly shallower than charted depths. All depths are in feet.

- H12061-4: There was good agreement between survey and charted depths on the west side of Caucus Shoal, with surveyed depths slightly (2-3 feet) deeper than charted.
- H12061-5: Soundings from a drifting shoal in the vicinity of Lighted Bell Buoy "12," west of Fort Pickens, were submitted by OSI as a DTON on March 11, 2010 (See Appendix I* – DTON). Charted depth curves and soundings have since been updated on the RNC and ENC downloaded from the NOS nautical charts website on April 6, 2010 (Figure 16). Survey depths were over 30 feet shallower than charted.

Concur – Chart present survey depths.

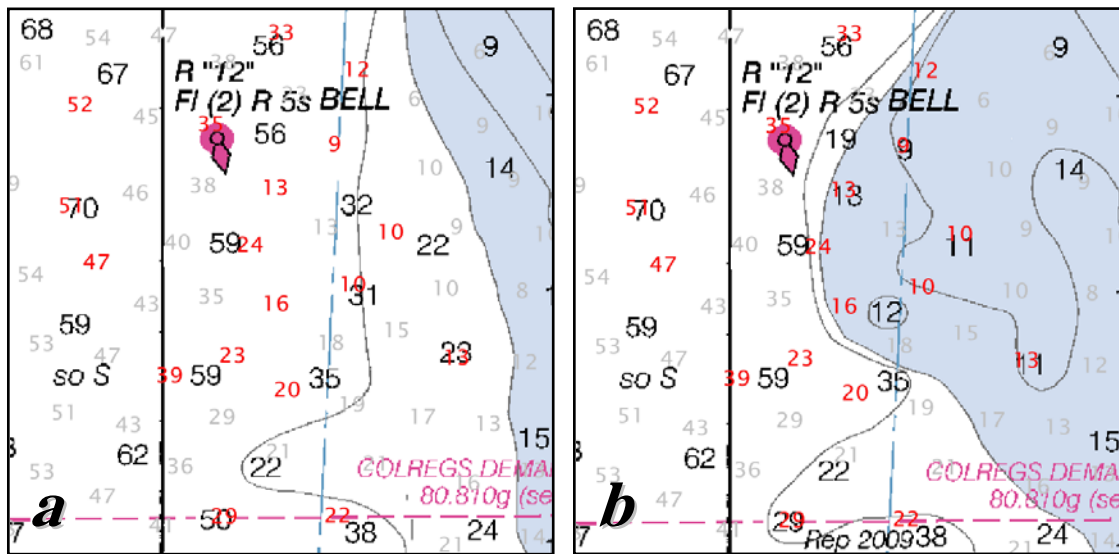


Figure 16. Survey depths compared with RNC 11384 downloaded from NOS website in October 2009 (a) and RNC 11384 downloaded in April 2010 (b). Survey depths are shown in grey and red. All depths are in feet.

**Data attached to this report.*

- H12061-6: Shoaling was observed along and seaward of an 18-foot depth curve where Middle Ground and East Bank shoals junction, approximate position of 30-18-16N, 87-17-47W. Survey depths were 3 to 8 feet shallower than charted (Figure 17).

Concur – Chart present survey depths.

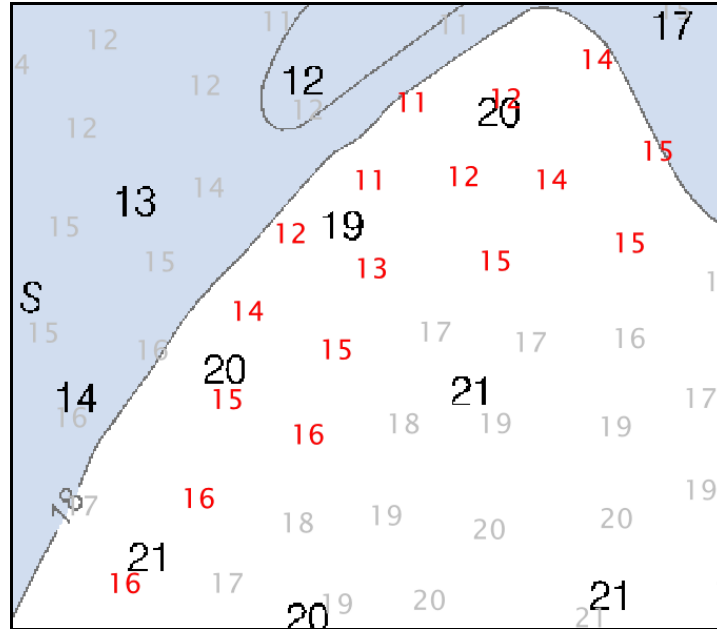


Figure 17. The 18-foot depth curve has advanced seaward of its charted location. Survey depths are shown in red and grey, with red soundings representing depths significantly shallower than charted depths on RNC 11384. All depths are in feet.

- H12061-7: The size of a basin located between Middle Ground and East Bank shoals, south of Fort Pickens, has been greatly compressed by shoaling from all sides as shown in Figure 18. The extents of the deep section in the midst of the shoal are defined by the 18-foot depth curve.

Concur – Chart present survey depths.

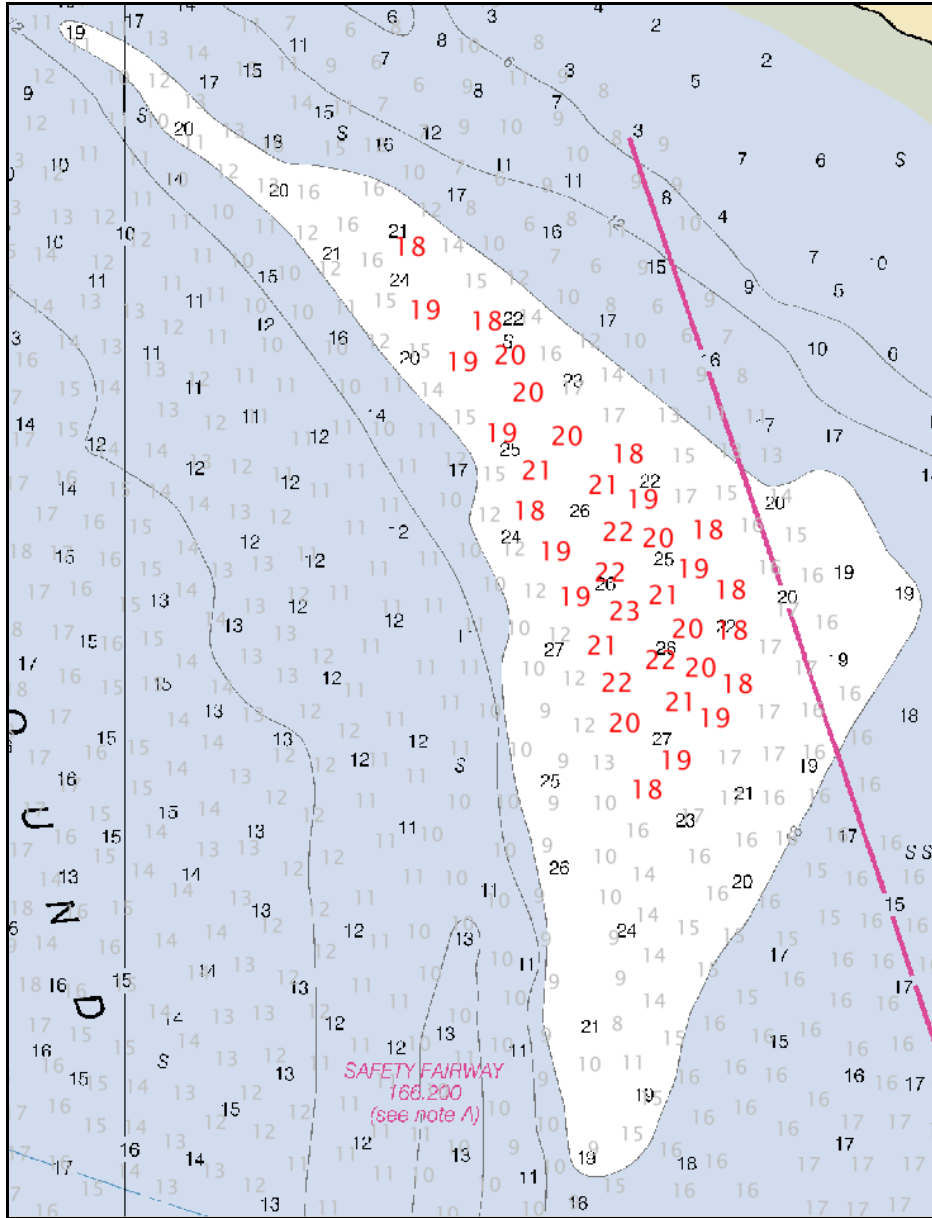


Figure 18. Survey depths shown in grey and red are overlain on RNC 11384. The red soundings highlight the new extents of the diminished deep section of Middle Ground shoal.

- H12061-8: A Wreck PA charted at 30-18-48.01N, 87-18-36.04W was disproved with 200% SSS and 100% SWMB. A least depth of 5.2 feet (1.6 meters) was surveyed at 30-18-46.95N, 87-18-35.88W. It is recommended that the wreck symbol be removed from the chart. See AWOIS Item #14302 under Appendix II* - Survey Feature Report for additional information.
- H12061-9: An Obstn PA charted at 30-18-26.42N, 87-17-41.98W was disproved with 200% SSS and 100% SWMB. The least depth surveyed within the search area was 9.3 feet (2.8 meters) at 30-18-28.42N, 87-17-42.65W. See AWOIS Item #14305 under Appendix II* - Survey Feature Report for additional information.
- H12061-10: A Wreck PA charted at 30-17-48.01N, 87-19-00.01W was disproved with 200% SSS and 100% SWMB. The least depth surveyed within the vicinity of the wreck area was 23.8 feet (7.25 meters) at 30-17-50.03N, 87-19-00.63W. See AWOIS Item #14303 under Appendix II* - Survey Feature Report for additional information.
- H12061-11: The wreck of the USS MASSACHUSETTS charted at 30-17-48.60N, 87-18-42.30W was surveyed with over 200% SSS and object detection SWMB coverage. A least depth of -0.49 feet (-0.15 meters) was obtained at 30-17-48.14N, 87-18-44.29W on the western-most turret using a fiberglass stadia rod. The Coast Pilot states that the wreck “is visible but cannot be seen for any distance offshore” and that it “is marked by a lighted bell buoy.” The buoy is actually positioned approximately 720 feet (220 meters) south of the USS MASSACHUSETTS wreck. It is recommended that the charted wreck be updated with the surveyed depth and position. See AWOIS Item #7082 under Appendix II* - Survey Feature Report for additional information.
- H12061-12: A charted Wk at 30-17-41.12N, 87-18-43.03W, and position marked by Massachusetts Wreck Lighted Bell Buoy WR2, was disproved with 200% SSS and 100% SWMB. The least depth within the AWOIS search area was 25.3 feet (7.7 meters) at 30-17-41.63N, 87-18-43.31W. It is recommended that the wreck feature be removed from the chart. See AWOIS Item #14316 under Appendix II* - Survey Feature Report for additional information.
- H12061-13: A 28-foot Obstn charted at 30-17-57.26N, 87-17-26.66W was disproved with 200% SSS and 100% SWMB. The least depth surveyed within the search area is 26.1 feet (8.0 meters) at 30-17-59.15N, 87-17-26.99W, shallower than the charted 28-foot obstruction. See AWOIS Item #14315 under Appendix II* - Survey Feature Report for additional information.
- H12061-14: Two (2) 35-foot Obstns charted at 30-16-30.88N, 87-16-57.92W and 30-16-30.32N, 87-17-04.84W, approximately 600 feet (190 meters) apart, were disproved with 200% SSS and 100% SWMB. The least depth surveyed within the obstruction area was 37.3 feet (11.4 meters) at 30-16-30.90N, 87-17-06.74W. See AWOIS Item #'s 7089 and 12468 under Appendix II* - Survey Feature Report for additional information.

**Data attached to this report.*

- H12061-15: An uncharted wreck with a least depth of 10.1 feet (3.07 meters) was developed at 30-18-50.91N, 87-19-25.93W. The wreck was found during investigation of AWOIS Item #7085 and was covered with 200% SSS and 100% SWMB. The dimensions measured approximately 164 feet x 33 feet x 7 feet (50 meters x 10 meters x 2 meters). A WRECKS object was created from the wreck's least depth position in the S57 Feature File (H12061_S57_Feature.000). It is recommended that the wreck be charted with the surveyed depth and position. See AWOIS Item #7085 under Appendix II* - Survey Feature Report for additional information.
- H12061-16: The western side of a charted Fairway Anchorage approximately centered at 30-15-55N, 87-14-06W is located inside H12061 survey limits. In general, survey soundings agreed within 3 feet (1 meter) with charted depths. No obstructions were found in the anchorage area although there were many fish contacts in the SSS imagery. A least depth of 40.4 feet (12.3 meters) at 30-16-17.72N, 87-16-28.15W was surveyed in the northwest corner of the anchorage. *Concur*
-
- H12061-17: The eastern side of a charted Dump Site (dredged material) approximately centered at 30-16-19N, 87-18-52W coincided with H12061 survey limits. The survey and charted depths within the spoil area agreed within 3 feet (1 meter), with no obstructions found. The surveyed portion of the dump site falls within the designated Safety Fairway. A least depth of 23.0 feet (7.0 meters) was developed at 30-16-57.19N, 87-18-43.77W. *Concur*

**Data attached to this report.*

The chart features listed below were common to Charts 11383 and 11384. (Soundings in feet)

- H12061-18: A 55-foot Obstrn (rep 2009) at 30-19-39.60N, 87-18-37.90W was added to the chart following submission of the first H12061 DTON Report (See Appendix I*). A linear feature, likely an abandoned dredge pipe, was identified in 200% SSS and 100% SWMB with a least depth of 55.5 feet (16.9 meters) developed at 30-19-39.57N, 87-18-37.87W (Figure 19).

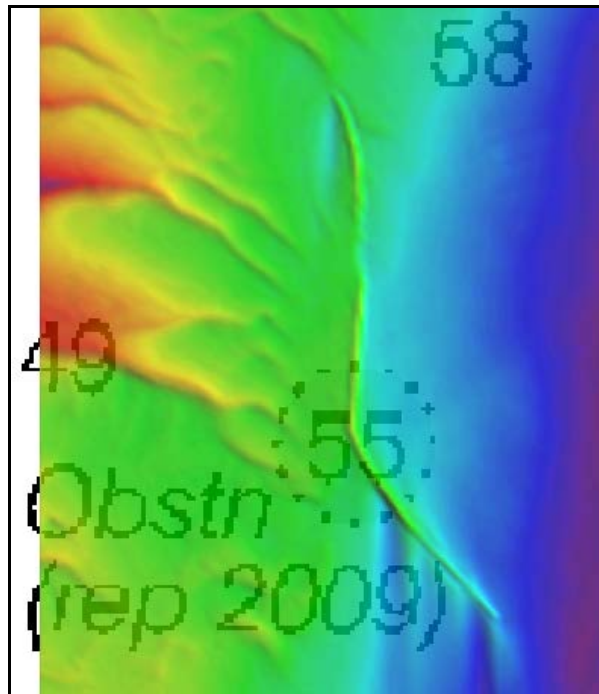


Figure 19. A linear obstruction located in the entrance to Pensacola Bay displayed in a 1-meter BASE surface colored by depth and overlain on RNC 11384.

- H12061-19: A Mooring Buoy PA charted at 30-18-26.40N, 87-17-35.41W was disproved with 200% SSS and 100% SWMB. Survey lines were run directly over the charted location and there was no buoy visible in the vicinity. *

**Data attached to this report.*

The chart features listed below were common to Charts 11383 and 11382. (Soundings in feet)

- H12061-20: Surveyed depths agreed well with charted soundings and the 60-foot depth curve. Differences between charted and surveyed depths did not exceed 3 feet (1 meter). *Concur*

- H12061-21: A 49-foot Obstn charted at 30-15-23.98N, 87-16-41.70W was disproved with 200% SSS and 100% SWMB. The least depth surveyed in the vicinity of the obstruction was 55.2 feet (16.8 meters) at 30-15-26.61N, 87-16-47.62W. See AWOIS Item #8732 under Appendix II* - Survey Feature Report for additional information.
- H12061-22: A 54-foot Wk charted at 30-15-10.09N, 87-18-04.31W was disproved with 200% SSS and 100% SWMB. The least depth surveyed within the vicinity of the wreck area is 61.7 feet (18.8 meters) at 30-15-11.70N, 87-18-02.87W. See AWOIS Item #8734 under Appendix II* - Survey Feature Report for additional information.
- H12061-23: A Piling charted at 30-15-18.00N, 87-18-43.00W (MORFAC object ENC US5FL72M) was disproved with 200% SSS and 100% SWMB. The piling was charted 400 feet (122 meters) west of the survey limits and the Safety Fairway.**

The chart features listed below were common to Charts 11382 and 1115A with soundings in feet and fathoms on the small scale chart.

- H12061-24: A 51-foot/8 ½-fathom Wk charted at 30-13-08.48N, 87-19-20.29W was verified with 200% SSS and 100% SWMB; however, the charted depth was disproved. A least depth of 59.4 feet/10 fathoms (18.1 meters) was developed at 30-13-08.70N, 87-19-22.53W with wreck dimensions of 160 feet x 40 feet x 5.1 feet (48.8 meters x 12.2 meters x 1.6 meters). It is recommended that the charted wreck be updated with the new position and least depth. See AWOIS Item #1772 under Appendix II* - Survey Feature Report for additional information.
- H12061-25: A 60-foot/10-fathom Obstn charted at 30-13-21.34N, 87-16-18.42W was disproved with 200% SSS and 100% SWMB. A least depth of 65.2 feet/10.9 fathoms (19.9 meters) at 30-13-17.77N, 87-16-15.76W was surveyed in the vicinity of the charted obstruction. See AWOIS Item #7080 under Appendix II* - Survey Feature Report for additional information.
- H12061-26: A wreck of unknown depth charted at 30-13-14.77N, 87-18-41.79W was disproved with 200% SSS and 100% SWMB. The least depth surveyed in the vicinity of the wreck was 64.3 feet/19.6 fathoms (19.6 meters) at 30-13-09.50N, 87-18-49.71W. See AWOIS Item #7081 under Appendix II* - Survey Feature Report for additional information.
- H12061-27: A 58-foot/9 ½-fathom Obstn charted at 30-12-22.06N, 87-16-35.85W was verified with a new position and depth. It was covered with 200% SSS and object detection multibeam. A least depth of 62.0 feet/10.3 fathoms (18.9 meters) was developed at 30-12-18.51N, 87-16-41.67W with object dimensions of 33 feet x 16 feet x 3.5 feet (10 meters x 4.9 meters x 1.1 meters). See AWOIS Item #7092 under Appendix II* - Survey Feature Report for additional information.

**Data attached to this report.*

***See Appendix II for final charting recommendations.*

- H12061-28: A 57-foot/9 ½-fathom Obstn at 30-12-56.34N, 87-21-55.98W was disproved at its charted location with 200% SSS and 100% SWMB; A 6-foot (1.8-meter) tall obstruction was developed with object detection coverage SWMB approximately 1000 feet (300 meters) west of the charted Obstn with a least depth of 53.9 feet/9.0 fathoms (16.4 meters) at 30-12-59.71N, 87-22-06.72W. See AWOIS Item #8595 under Appendix II* - Survey Feature Report for additional information.
- H12061-29: A 49-foot/8-fathom Wk charted at 30-10-47.14N, 87-17-40.73W was disproved with 200% SSS and 100% SWMB. The least depth surveyed within the vicinity of the charted wreck was 57.9 feet/9.7 fathoms (17.6 meters) at 30-10-50.49N, 87-17-37.02W. See AWOIS Item #8596 under Appendix II* - Survey Feature Report for additional information.
- H12061-30: A 62-foot Obstn located at 30-13-10.09N, 87-17-24.44W was verified with 200% SSS and 100% SWMB; however, the charted depth was disproved. A least depth of 65.7 feet/10.9 fathoms (20.0 meters) was developed at 30-13-09.27N, 87-17-26.81W with object dimensions of 7 feet x 6 feet x 2.3 feet (2.1 meters x 1.8 meters x 0.70 meters). See AWOIS Item #8597 under Appendix II* - Survey Feature Report for additional information.
- H12061-31: A Wk PA of unknown depth charted at 30-12-00.00N, 87-17-00.00W was disproved with 200% SSS and 100% SWMB. The least depth surveyed in the vicinity of the charted wreck position was 64.7 feet/10.8 fathoms (19.7 meters) at 30-11-59.98N, 87-16-53.99W. See AWOIS Item #14304 under Appendix II* - Survey Feature Report for additional information.
- H12061-30: The majority of charted depths and depth curves within a Fairway Anchorage approximately centered at 30-10-59N, 87-20-22W agreed well with survey depths, within 3 feet (1 meter). A least depth of 56.8 feet/9.5 fathoms (17.3 meters) was developed at 30-09-54.50N, 87-20-09.68W** on a 6-foot (2-meter) new obstruction covered with 200% SSS and object detection SWMB. The obstruction position falls outside a 60-foot/10-fathom depth curve, approx. 1000 feet west of a charted (RNC 11382) 59-foot sounding. In addition, there were two significant depth discrepancies within the charted Anchorage:
 - An obstruction with a least depth of 61.8 feet/10.3 fathoms (18.8 meters) was developed at 30-11-46.44N, 87-22-42.08W** in the northwest corner of the Fairway Anchorage in the vicinity of a charted (RNC 11382) 75-foot sounding.

**Data attached to this report.*

***See Appendix II for final charting recommendations.*

- A 3.6-foot (1.1-meter) tall obstruction with a least depth of 59.1 feet/9.9 fathoms (18.0 meters) was developed at 30-11-06.90N, 87-18-31.93W at the eastern side of the Anchorage, outside a 60-foot (10-fathom) depth curve and between charted (RNC 11382) 65 and 66 foot soundings. *
- H12061-31: A large number of 1-2 meter tall obstructions were identified inside the Fairway Anchorage. Although the majority of their least depths are not significantly shallower (greater than 5 feet) than the charted soundings, they could pose potential hazards for anchoring vessels (Figure 20). All obstructions with significant heights were included in the S57 Feature File (H12061_S57_Feature.000). *

**See Appendix II for final charting recommendations.*

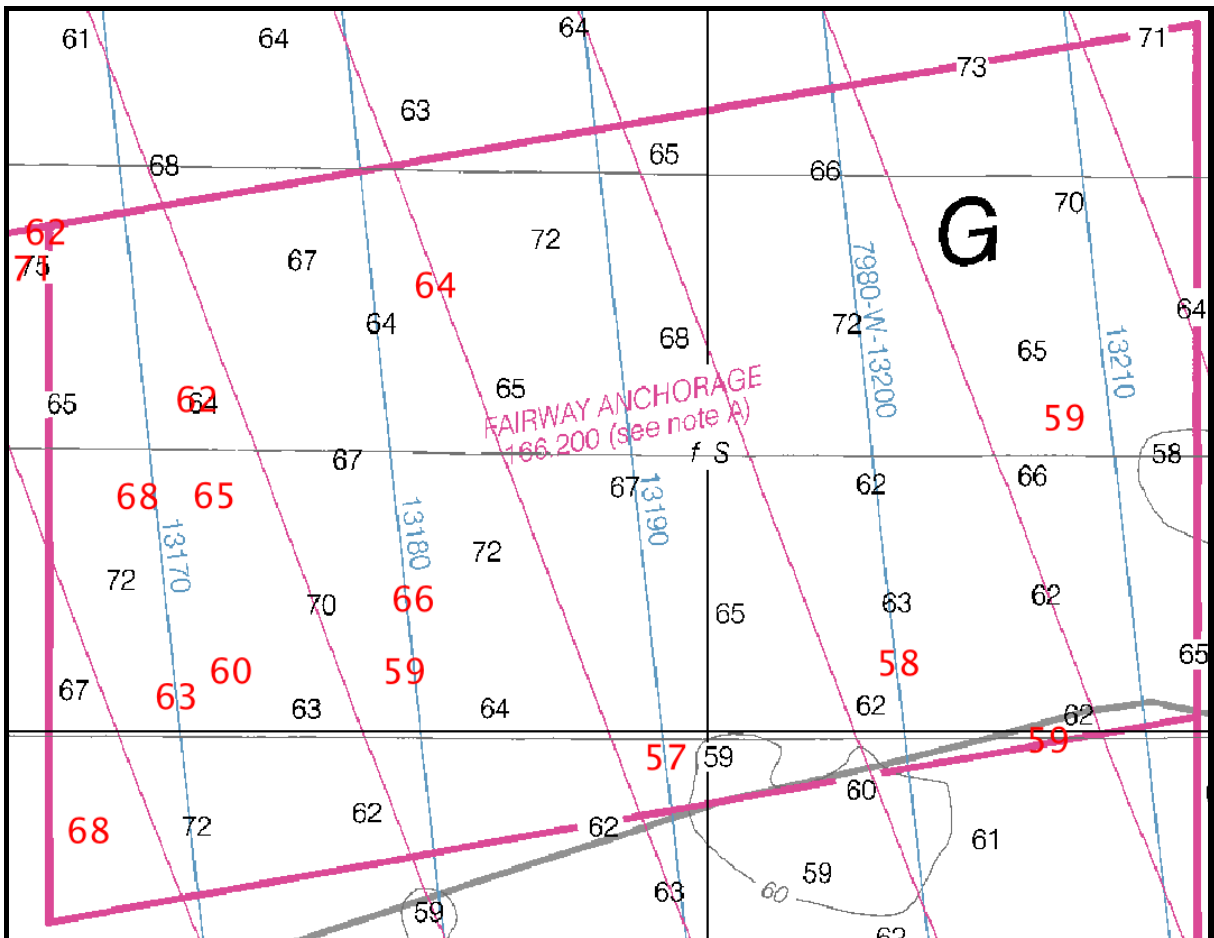


Figure 20. Least depth positions of obstructions surveyed within the Fairway Anchorage are shown in red with RNC 11382.

Chart 11382 (Soundings in feet)

- H12061-32: Overall, survey depths agreed with charted soundings and depth curves within 3 feet (1 meter). There were several areas where the natural depressions in the sea floor had expanded such that survey depths were up to 10 feet deeper than charted depths. There were three prominent instances where surveyed depths were significantly deeper than charted depths:
 - A new depression extends approximately between 30-13-18N, 87-18-31W to 30-13-46N, 87-19-34W in a SE to NW direction with depths greater than 70 feet (21 meters) and was surveyed between a 60-foot depth curve and charted 63-foot sounding in the Safety Fairway. *Concur*
 - A new depression extending SE to NW between the 30-12-45N, 87-20-15W to 30-13-17N, 87-21-19W with approximate depths of 70 feet (21 meters) was located between 62-, 65- and 64-foot soundings and a 60-foot depth curve in the Safety Fairway. *Concur*
 - A narrow depression with survey depths over 70 feet (21 meters) was developed at the approximate coordinates of 30-10-15N, 87-20-29W between charted 64- and 65-foot soundings in the southwestern Fairway Anchorage.

Concur

- H12061-33: A large number of 1-2 meter tall obstructions were identified in the Safety Fairway near the western bound of H12061's survey limits (Figure 21). Of the obstructions, three were submitted as DTON on March 26, 2010. The DTON Report is included in Appendix I*. The DTON have since been charted on ENC US4FL71M, but were not yet updated on RNC 11382. All obstructions with significant heights were included in the S57 Feature File (H12061_S57_Feature.000). The majority of the obstructions found in the Fairway had a strong side scan return and appeared to be tall, slender, triangular features (Figure 22).**

**Data attached to this report.*

***See Appendix I or II for final charting recommendations.*

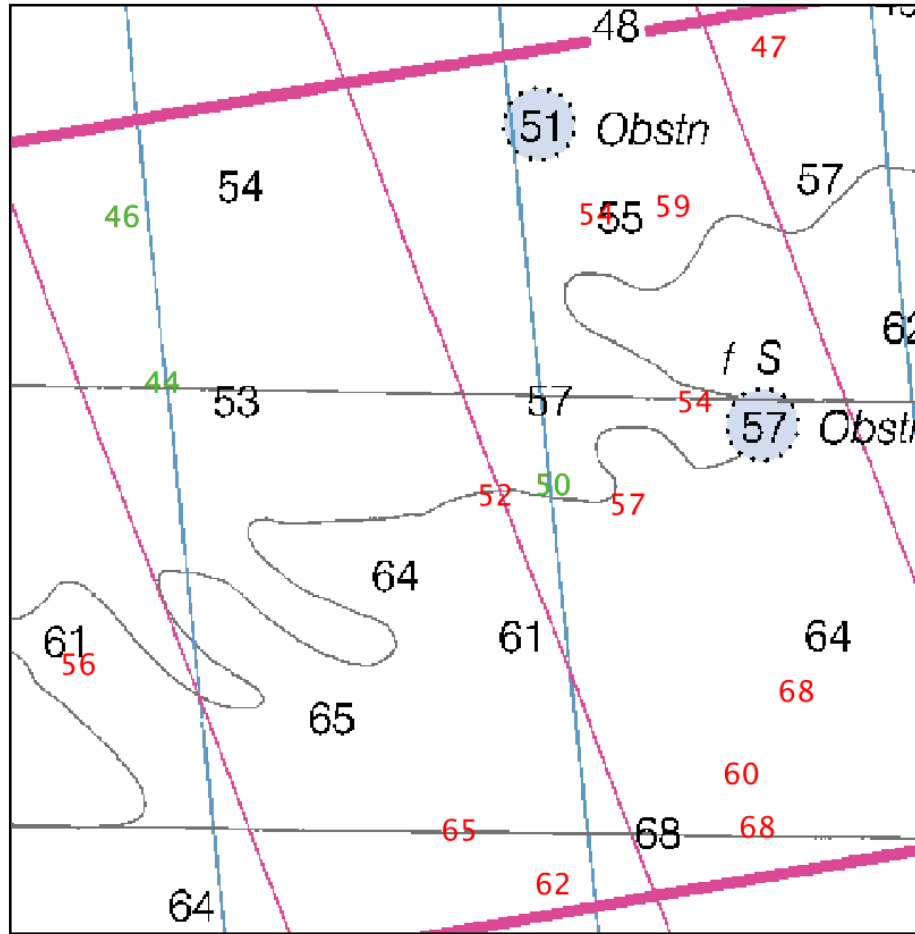


Figure 21. Least depth positions of obstructions surveyed within the Fairway Anchorage are shown in red and reported DTON least depths are in green with RNC 11382 in the background.

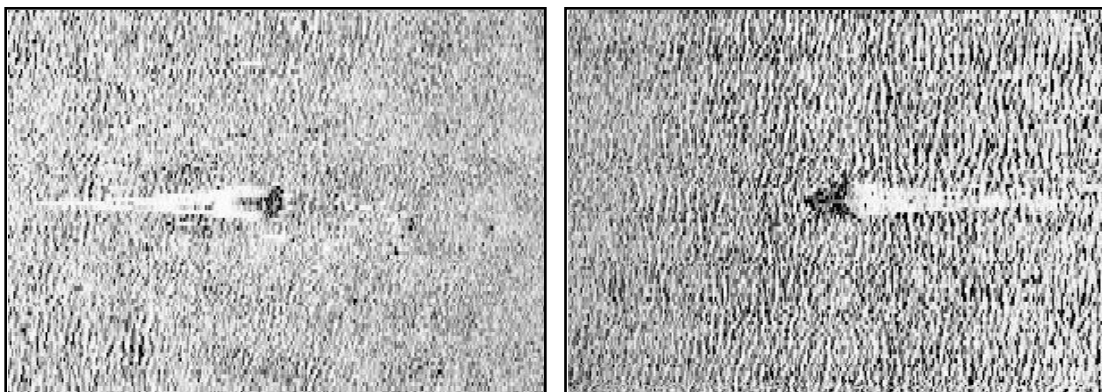


Figure 22. Side scan imagery featuring two triangular obstructions located in the Safety Fairway. Contact 341-15260006 is on the left and Contact 338-15470006 is on the right.

Chart 11384 (Soundings in feet)

- H12061-34: At the northern terminus of Caucus Channel, survey depths were up to 14 feet shallower than charted soundings (Figure 23). Significant discrepancies are listed below:
 - A 25-foot (7.6-meter) survey depth developed at 30-19-01.83N, 87-18-33.97W in the vicinity of a charted 39-foot sounding. **Concur**
 - A 31-foot (9.4-meter) survey depth developed at 30-19-04.50N, 87-18-31.66W in the vicinity of a charted 42-foot sounding. **Concur**
 - A 33-foot (10-meter) survey depth developed at 30-19-02.23N, 87-18-29.63W in the vicinity of a charted 42-foot sounding. **Concur**
 - A 35-foot (10.7-meter) survey depth developed at 30-19-02.04N, 87-18-25.66W over a charted 45-foot sounding. **Concur**

Chart present survey depths.

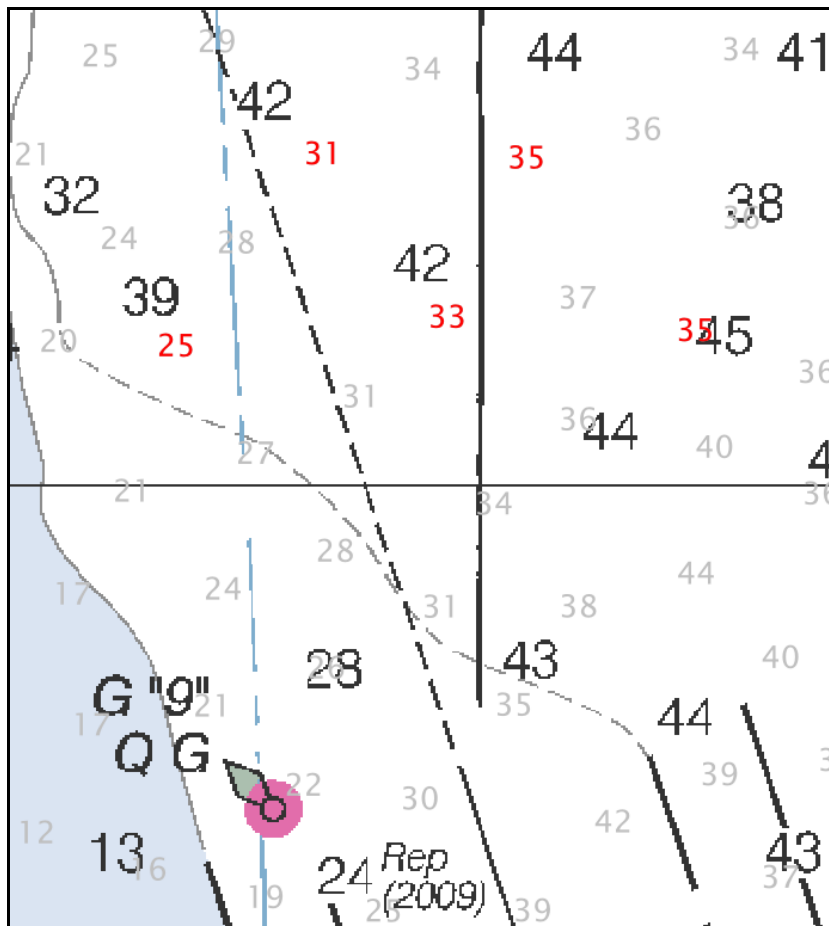


Figure 23. Survey depths are shown in grey and red in comparison with RNC 11384. The red soundings were selected to highlight significant depth discrepancies with the chart. All depths are in feet.

- H12061-35: Several depth discrepancies on the east side of the entrance to Pensacola Bay were specific to RNC 11384 (Figure 24). Overall survey depths were shallower in the vicinity of Buoy “12,” the following survey depths bear particular consideration:
 - A 51-foot (15.5-meter) sounding was developed at 30-19-40.04N, 87-18-31.70W over a charted 70-foot depth. **Concur**
 - A 39-foot (11.9-meter) sounding at 30-19-35.56N, 87-18-28.84W and a 23-foot (7-meter) sounding at 30-19-36.09N, 87-18-27.05W were surveyed alongside a charted 59-foot depth. **Concur**
 - A 20-foot (6.1-meter) sounding was developed at 30-19-35.18N, 87-18-25.47W, seaward of a charted 35-foot depth. **Concur**
 - A 30-foot (9.1-meter) sounding was developed at 30-19-29.20N, 87-18-26.43W, seaward of a charted 45-foot depth. **Concur**

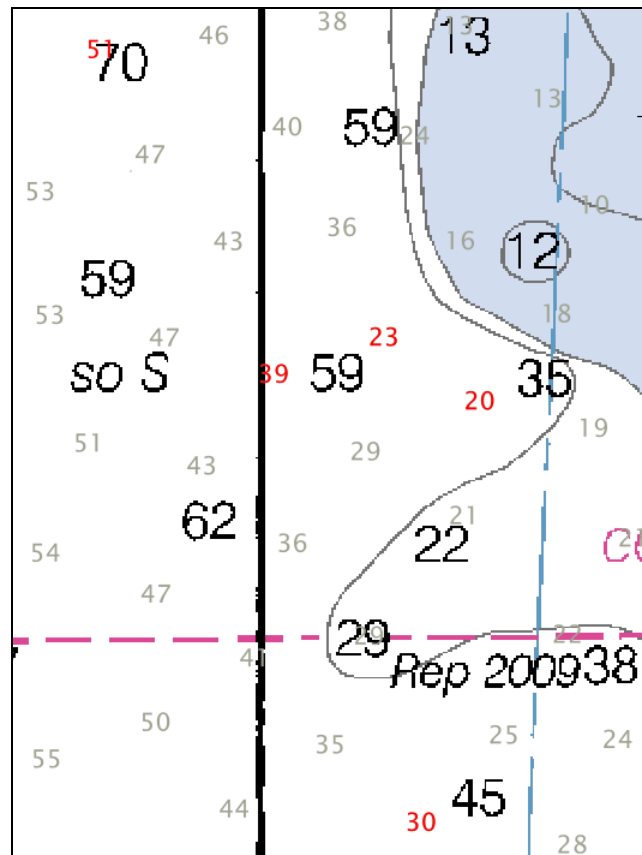


Figure 24. Survey depths are shown in grey and red in comparison with RNC 11384. The red soundings were selected to highlight significant depth discrepancies with the chart. All depths are in feet.

D.1.3 Controlling and Tabulated Depths

Widespread shoaling was observed in the Caucus Channel at the entrance to Pensacola Bay, Florida. A high-resolution bathymetric model (Figure 25) shows pervasive sand waves in the channel, indicating the dynamic nature of the seafloor and shifting sand deposits. *Concur*

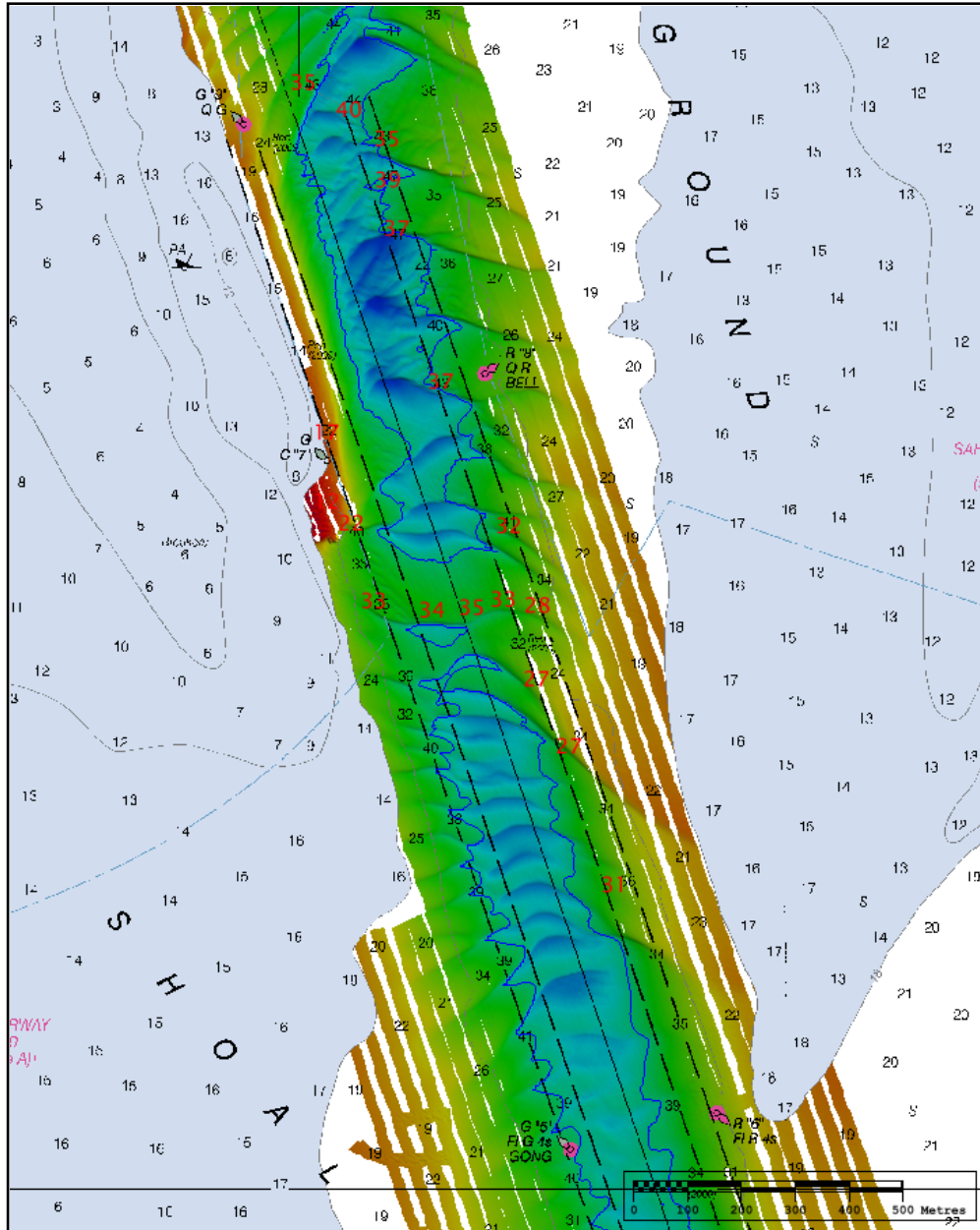


Figure 25. 1-meter resolution bathymetry model of Caucus Channel overlain with RNC11384 and selected survey depths in red.

Observed survey depths within the Left Outside Quarter, Left Inside Quarter, Right Outside Quarter, and Right Inside Quarter are less than controlling depths that are tabulated in the current release of RNC 11384 (Figure 26). *Concur with clarification - Current charts include Army Corps of Engineers survey depths from November 2010. The shoaling has been included in the new tabulations. No change in charting is recommended.*

CHART 11384

PENSACOLA HARBOR ENTRANCE CHANNEL						
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF JUL 2009						
CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)					PROJECT DIMENSIONS	
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET) / LENGTH (MILES) / DEPTH MLLW (FEET)
CAUCUS CHANNEL	B24.0	39.4	39.4	C33.4	1-09	A500 3.1 A35
BARRANGAS CHANNEL	47.5	48.7	48.1	47.3	1,7-09	A500 1.7 A35
PICKENS CHANNEL	49.6	45.5	45.5	D45.9	1-09	A500 2.8 A35

A. PROJECT DIMENSIONS OF 44 FEET FOR A WIDTH OF 800 FEET PROVIDED BY THE U.S. NAVY. AUTHORIZED USACE PROJECT IS 35 FEET FOR A WIDTH OF 500 FEET.
 B. 13.1 FEET ALONG THE CHANNEL EDGE.
 C. 23.9 FEET ALONG THE CHANNEL EDGE.
 D. EXCEPT FOR A 43 FT OBSTRUCTION REPORTED BY AN NOS SURVEY AT 30°19'57.7" N, 087°16'39.3" W.
 NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Figure 26. RNC 11384 Channel Tabulation

- The Left Outside Quarter is shallower than the controlling depth (24 feet) between buoys G "7" and G "9" (Figure 27). *Concur with clarification - Left Outside Quarter tabulation has been updated to a depth of 22.1 feet from US Army Corps of Engineers – Report of Nov 2010 survey. The shoaling has been included in the new tabulations. No change in charting is recommended.*

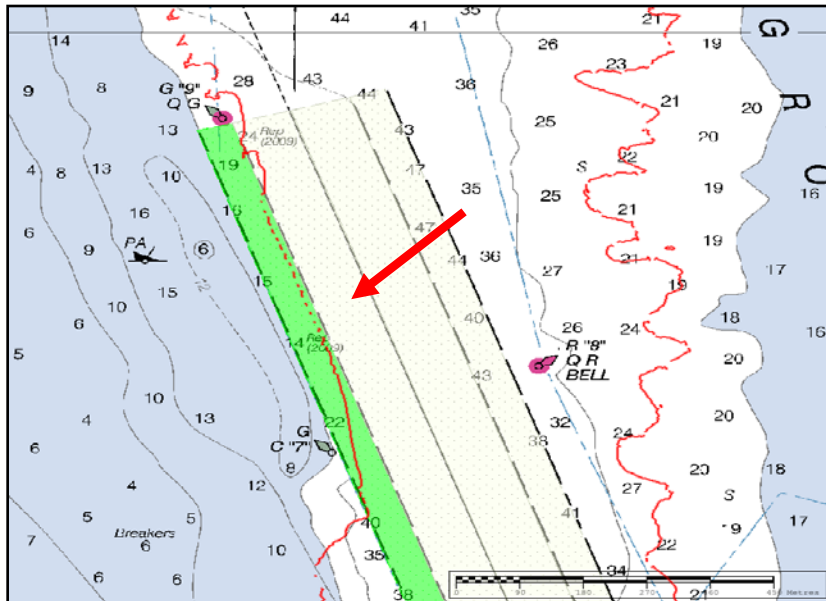


Figure 27. Shoaling in the left Outside Quarter of the Caucus Channel. The 24-foot depth curve is shown in red.

- A shoal with depths between 28-35 feet (8.5-10.6 meters) crosses the channel approximately 1300 feet (400 meters) seaward of buoys G “7” and R “8” in the vicinity of 30-18-30.50N, 87-18-19.50W; restricting the clearance depths (39.4 feet) for the inside quarters of the channel (Figure 28). *Concur with clarification - Inside Quarter tabulation has been updated to a depth of 31.3 to 33.6 feet from US Army Corps of Engineers – Report of Nov 2010 survey. The shoaling has been included in the new tabulations. No change in charting is recommended.*

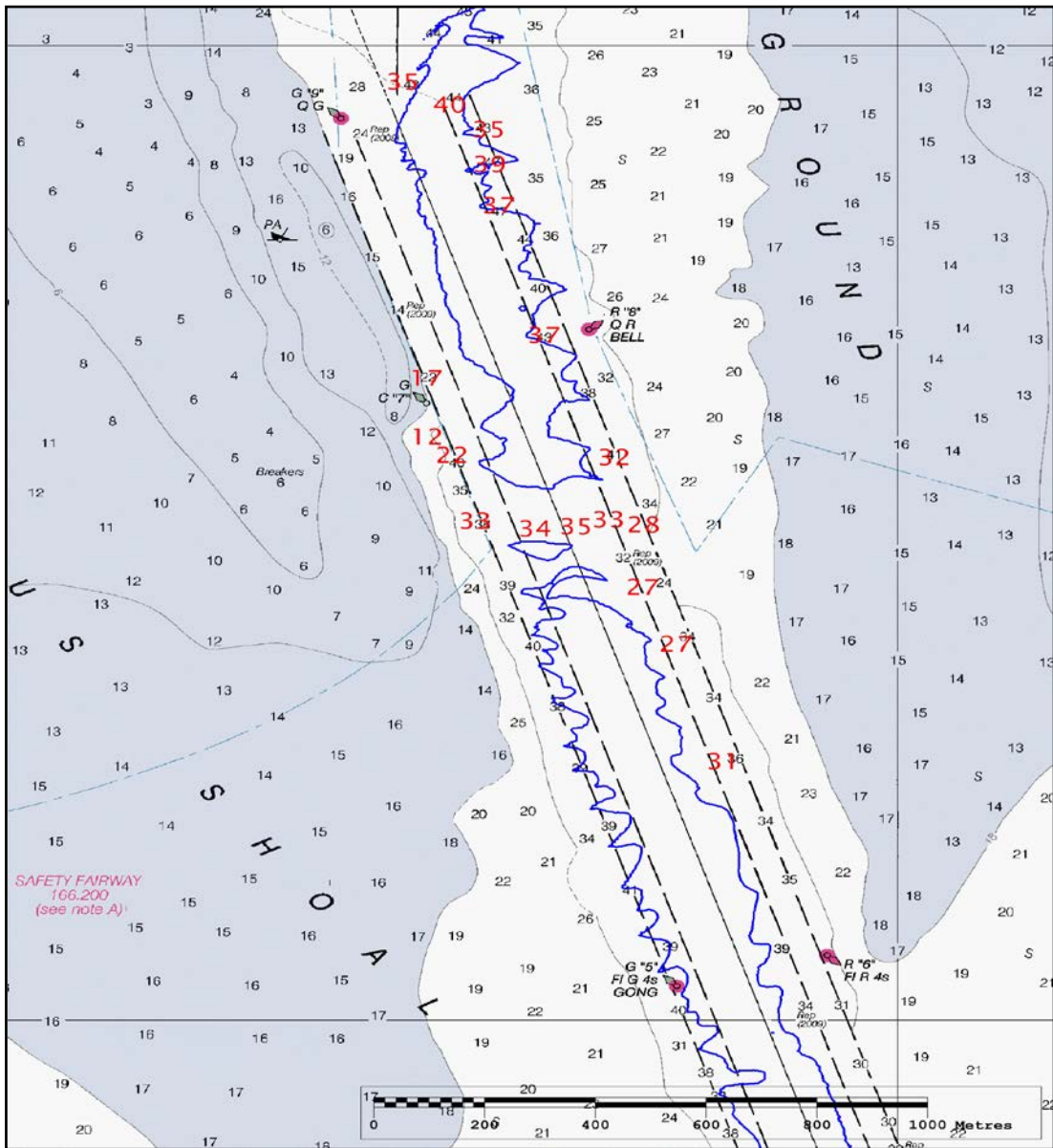


Figure 28. Widespread shoaling in the Caucus channel is represented as a series of selected survey depths in red and the controlling depth curve for the inside quarters of the Caucus Channel (39.4 feet, RNC 11384).

- The Right Outside Quarter is shallower than the controlling depth (33.4 feet) between buoy R “6” to buoy R “8,” with a 28-foot (8.5 meter) depth developed at 30-18-26.98N, 87-18-15.14W over the bound between the Right Inside Quarter and the Right Outside Quarter. *Right Outside Quarter tabulation has been updated to a depth of 29.3 feet from US Army Corps of Engineers – Report of Nov 2010 survey. No change in charting is recommended.*
- Many survey depths are shallower than depths that are charted within the channel. *Concur with clarification - Current charts include Army Corps of Engineers survey depths from November 2010. The shoaling has been included in the new tabulations. No change in charting is recommended.*

Survey depths were evaluated using the current largest scale nautical chart of the area (RNC 11384) and the channel tabulation. Selected depths with appropriate depth curves chosen to represent critical shoals and significant differences from charted and tabulated depths are submitted in CARIS HOB file format with a file name prefix of “H12061_Caucus_Channel.” *The chosen depths do not represent all instances of shoaling. Concur with clarification - Current charts include Army Corps of Engineers survey depths from November 2010. The shoaling has been included in the new tabulations. No change in charting is recommended.*

D.1.4 AWOIS Items *See Appendix II for all charting recommendations.*

There were ~~forty-five~~ *forty-six* (4546) AWOIS item investigations assigned within the survey area (Table 9). All AWOIS items were investigated to the fullest extent possible using the recommended search techniques (e.g. VS, S2, MB), except in instances where portions of the search area were unsafe for navigation.

Table 9
H12061 AWOIS Investigations

AWOIS Record	Latitude (N)	Longitude (W)	Description	Status
454	30-17-30.72	87-18-41.90	Wreck – <i>Bride of Lorne</i>	Disproved
458	30-19-06.72	87-18-47.90	Wreck – <i>Anna Pepina</i>	Disproved
1772	30-13-08.00	87-19-23.34	Sunken Barge	Verified
7075	30-18-01.72	87-16-39.89	Metal Blocks and Patio Chair	Disproved
7079	30-13-37.72	87-17-20.89	Obstruction	Disproved
7080	30-13-19.76	87-16-19.02	WWII Aircraft Wing	Disproved
7081	30-13-15.72	87-18-41.90	Burned Vessel Hull/Submerged Dangerous Wreck	Disproved
7082	30-17-48.62	87-18-42.20	Wreck of <i>USS Massachusetts</i>	Verified

AWOIS Record	Latitude (N)	Longitude (W)	Description	Status
7085	30-18-51.02	87-19-26.80	Submerged Wreck	Verified
7086	30-19-17.72	87-17-59.90	Sunken Barge	Disproved
7089	30-16-30.72	87-16-57.89	Sunken Car	Disproved
7090	30-17-27.72	87-17-14.89	Pile of Metal Blocks	Disproved
7092	30-12-20.72	87-16-34.89	Hunk of Metal	Verified
7093	30-19-48.71	87-18-54.90	Row of Rocks/Ruins of Jetty	Verified
7094	30-19-48.72	87-18-51.60	Dangerous, Submerged Wreck	Verified
7865	30-18-02.72	87-18-04.20	PD Wreck/Anchor	Disproved
7866	30-17-48.72	87-17-47.89	Small Wreck (Jon Boat)	Disproved
7867	30-19-24.72	87-18-29.90	Wreck	Disproved
7868	30-17-24.72	87-17-53.89	Wreck of <i>Ancient Age</i>	Disproved
8443	30-19-41.42	87-19-15.40	Awash Wreck	Disproved
8593	30-12-46.51	87-15-38.93	Sunken Car	Disproved
8595	30-12-56.26	87-21-58.66	Unknown 1-meter Obstruction	Disproved
8596	30-10-47.13	87-17-40.73	Sunken Barge	Disproved
8597	30-13-09.50	87-17-26.40	Unknown Obstruction	Verified
8730	30-17-28.82	87-17-07.48	Small Wreck with Debris	Disproved
8731	30-17-48.89	87-17-05.89	Small Wreck and Anchor	Disproved
8732	30-15-23.18	87-16-42.08	Sunken Car and Large Tank	Disproved
8733	30-17-14.19	87-16-51.37	Large Anchor	Verified
8734	30-15-09.30	87-18-04.80	Sunken Sail Boat	Disproved
8750	30-18-01.39	87-16-43.05	Metal Blocks	Verified
8773	30-19-41.00	87-19-06.00	Unidentified Ruin	Disproved
12464	30-19-48.00	87-19-00.00	Submerged Wreck PA	Disproved
12465	30-19-49.80	87-18-50.20	Dangerous Wreck PA	Disproved
12466	30-17-14.40	87-16-51.60	Large Anchor and Chain	Verified
12467	30-17-57.57	87-17-35.88	Large Mushroom Anchor	Disproved
12468	30-16-30.60	87-17-04.90	Metal Cribbing	Disproved
12469	30-17-20.77	87-17-26.01	Tires	Disproved
12470	30-17-25.04	87-17-13.25	Metal Pipe	Disproved
14302	30-18-48.00	87-18-36.00	Wreck PA	Disproved
14303	30-17-48.00	87-19-00.00	Wreck PA	Disproved
14304	30-12-00.00	87-17-00.00	Wreck PA	Disproved
14305	30-18-26.40	87-17-42.00	Obstruction PA	Disproved
14313	30-14-01.21	87-20-40.69	58-foot Obstruction	Disproved
14314	30-13-37.51	87-22-33.41	51-foot Obstruction	Disproved
14315	30-17-57.23	87-17-26.67	28-foot Obstruction	Disproved
14316	30-17-41.10	87-18-42.90	Wreck	Disproved

Four of the AWOIS items (Numbers 7093, 7094, 12464 and 12465) were located on a shallow sand flat near the mouth of Pensacola Bay, north of Fort McRee. Prior to surveying with multibeam and side scan sonar, the field team collected a number of hand soundings in the area to determine the safe passages around the flat. These soundings were collected for field use only, and they were not incorporated into the final data set. Figure 29 shows the location of the sand flat on RNC 11384 and where the hand soundings were collected. The deepest portion of the sand flat was then investigated with side scan and multibeam sonar systems, which proved to be a very narrow corridor (Figure 30). *Concur*

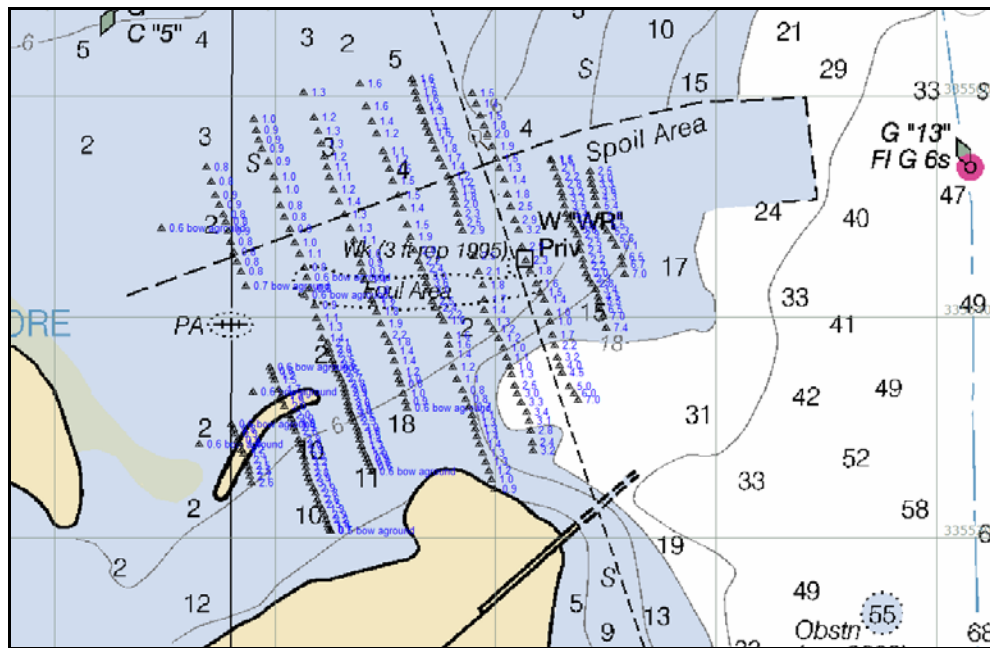


Figure 29. Approximate locations of hand soundings (blue) taken by the field team to determine safe passage for the subsequent SWMB/SSS investigation of AWOIS Item #'s 7093, 7094, 12464 and 12465. All charted depths are in feet and all hand-soundings are in meters.

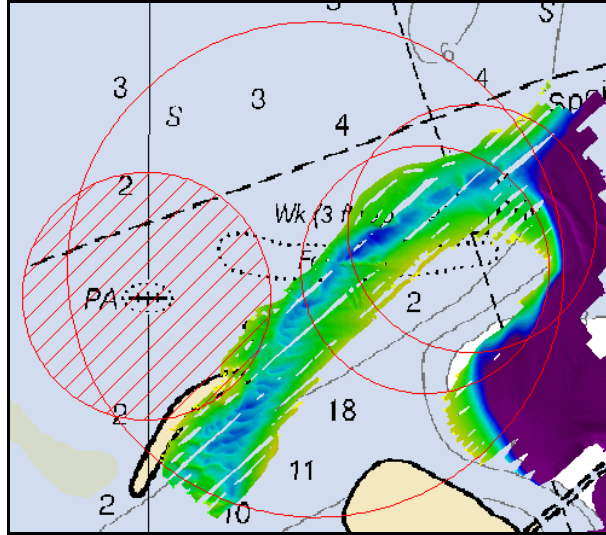


Figure 30. Multibeam coverage obtained over the sand flat north of Fort McRee. A 1-meter resolution BASE Surface colored by depth is overlain on RNC 11384 with the AWOIS search areas represented by the red circles. All depths are in feet.

See Appendix II* – Survey Feature Report, for complete reporting on AWOIS Item investigation.

**See Appendix II for charting recommendations.*

D.1.5 Danger to Navigation Reports

Three Danger to Navigation Reports were generated for 9 features. A summary is presented in Table 10 and copies of the reports are included in Appendix I. *Concur - See Appendix I for final charting recommendations.*

**Table 10
Dangers to Navigation**

Item #	Feature	Depth Feet	Depth Meters	Latitude (N)	Longitude (W)	Description
1	Shoal	28.9	8.8	30-19-31.92	87-18-27.50	Shoaling in Western Edge of Middle Ground Shoal
2	Obstruction	55.4	16.9	30-19-39.55	87-18-37.89	Obstruction in center of Pensacola Bay entrance
3	Sounding	8.84	2.69	30-19-41.66	87-18-24.11	Shoal sounding
4	Sounding	11.91	3.63	30-19-37.45	87-18-24.67	Shoal sounding
5	Sounding	13.69	4.17	30-19-40.51	87-18-25.80	Shoal sounding

Item #	Feature	Depth Feet	Depth Meters	Latitude (N)	Longitude (W)	Description
6	Sounding	18.78	5.72	30-19-41.90	87-18-25.58	Shoal sounding
7	Obstruction	46.0	14.0	30-13-25.16	87-23-37.43	Obstruction in Fairway Southwest of Pensacola Bay
8	Obstruction	43.8	13.4	30-13-02.39	87-23-31.05	Obstruction in Fairway Southwest of Pensacola Bay
9	Obstruction	50.2	15.3	30-12-48.37	87-22-29.11	Obstruction in Fairway Southwest of Pensacola Bay in vicinity of Chd (11362) 60-foot depth curve

D.2 Additional Results

D.2.1 Shoreline Verification

Shoreline verification was not required for this survey. *Concur.*

D.2.2 Comparison with Prior Surveys

A comparison with prior surveys was not required for this survey. *Concur.*

D.2.3 Aids to Navigation (ATON)

D.2.3.1 United States Coast Guard (USCG) ATON

The positions and condition of all charted ATON were verified by visual inspection and with detached positions. Detached positions were acquired by logging targets in HYPACK and entering a range and bearing offset. The surveyed positions and descriptions were compared to the most recent version of the USCG Light List (District 8, Version 4, 2010), downloaded from the USCG WWW site (<http://www.navcen.uscg.gov/pubs/LightLists/LightLists.htm>) and ENC US5FL73M (Table 11 through Table 23). Charted ATONs were verified for the largest scale, most recent release of RNC and ENC during chart comparisons. All ATON within Survey H12061 appear to serve their intended purpose.

Positions for the Pensacola Bay Entrance Buoys, including the Massachusetts Wreck Lighted Bell Buoy WR2, were surveyed on November 22, 2009 (DN 326). On December 16, 2009, LNM 50/09 reported that entrance buoy numbers 2, 3, 4, 6, and 8 were off station. LNM 51/09, dated December 23, 2009, reported the buoys were either "Reset" or "Watching Properly" at their originally charted positions. In addition, the March 17, 2010 LNM (11/10) reported Pensacola Bay Entrance Lighted Gong Buoy 5 as "Missing"; its status has remained unchanged through the current LNM, 15/2010.

One of the buoys that were reset by the USCG, Entrance Lighted Buoy 4, displayed a significant offset of 250 feet (75 meters) between the survey detached position (DP) and the charted buoy position (Figure 31). The remaining detached positions agreed within 100 feet (30 meters) of the charted buoy positions.



Figure 31. The detached position (cyan) is shown in reference to Buoy 4 on RNC 11384. The DP was obtained prior to Buoy 4 being reported as Off Station in LNM 50/09. The USCG has since reset the buoy to its charted position.

Table 11
Entrance Lighted Gong Buoy 1

Position Source	Latitude (N)	Longitude (W)
Light list #3920	30-16-15.72	87-17-32.90
Survey Position	30-16-15.60	87-17-33.94
US5FL73M	30-16-15.64	87-17-32.77

Table 12
Entrance Lighted Bell Buoy 2

Position Source	Latitude (N)	Longitude (W)
Light list #3925	30-16-16.75	87-17-23.51
Survey Position	30-16-16.65	87-17-24.57
US5FL73M	30-16-16.59	87-17-23.52

Table 13
Entrance Lighted Buoy 3

Position Source	Latitude (N)	Longitude (W)
Light list #3945	30-17-20.92	87-17-57.40
Survey Position	30-17-20.55	87-17-57.90
US5FL73M	30-17-21.01	87-17-57.17

Table 14
Entrance Lighted Buoy 4

Position Source	Latitude (N)	Longitude (W)
Light list #3950	30-17-21.92	87-17-48.10
Survey Position	30-17-22.72	87-17-51.09
US5FL73M	30-17-21.79	87-17-48.66

Table 15
Entrance Lighted Gong Buoy 5

Position Source	Latitude (N)	Longitude (W)
Light list #3960	30-18-02.10	87-18-12.89
Survey Position	30-18-01.45	87-18-12.89
US5FL73M	30-18-02.09	87-18-12.88

Table 16
Entrance Lighted Buoy 6

Position Source	Latitude (N)	Longitude (W)
Light list #3965	30-18-03.99	87-18-04.08
Survey Position	30-18-04.20	87-18-05.13
US5FL73M	30-18-03.99	87-18-04.08

Table 17
Entrance Buoy 7

Position Source	Latitude (N)	Longitude (W)
Light list #3970	30-18-38.00	87-18-27.50
Survey Position	30-18-37.35	87-18-27.24
US5FL73M	30-18-37.54	87-18-26.76

Table 18
Entrance Lighted Bell Buoy 8

Position Source	Latitude (N)	Longitude (W)
Light list #3975	30-18-42.52	87-18-18.00
Survey Position	30-18-42.10	87-18-17.69
US5FL73M	30-18-42.52	87-18-18.00

Table 19
Entrance Lighted Buoy 9

Position Source	Latitude (N)	Longitude (W)
Light list #3980	30-18-55.52	87-18-32.50
Survey Position	30-18-55.08	87-18-32.19
US5FL73M	30-18-55.52	87-18-32.47

Table 20
Entrance Buoy 10

Position Source	Latitude (N)	Longitude (W)
Light list #4035	30-19-15.75	87-18-24.24
Survey Position	30-19-15.62	87-18-24.20
US5FL73M	30-19-15.75	87-18-24.77

Table 21
Entrance Lighted Buoy 11

Position Source	Latitude (N)	Longitude (W)
Light list #4040	30-19-16.22	87-18-34.10
Survey Position	30-19-15.97	87-18-33.93
US5FL73M	30-19-16.20	87-18-34.11

Table 22
Entrance Lighted Bell Buoy 12

Position Source	Latitude (N)	Longitude (W)
Light list #4050	30-19-41.91	87-18-27.54
Survey Position	30-19-41.58	87-18-27.45
US5FL73M	30-19-41.91	87-18-27.54

Table 23
Massachusetts Wreck Lighted Bell Buoy WR2

Position Source	Latitude (N)	Longitude (W)
Light list #3955	30-17-41.12	87-18-43.03
Survey Position	30-17-41.12	87-18-44.97
US5FL73M	30-17-41.12	87-18-43.03

Caucus Channel Range Front Light position was verified on December 22, 2009 (DN 356) using the survey vessel's position and heading. The vessel was aimed at the range light and the position and heading were observed. The range light position was plotted with a line extending from the boat position along the observed heading. The procedure was repeated at a second location and the intersection of the two line extensions indicated the position of the range light (Figure 32). The range light was verified to be at its reported position of 30-19-33.94N, 087-18-44.16W.

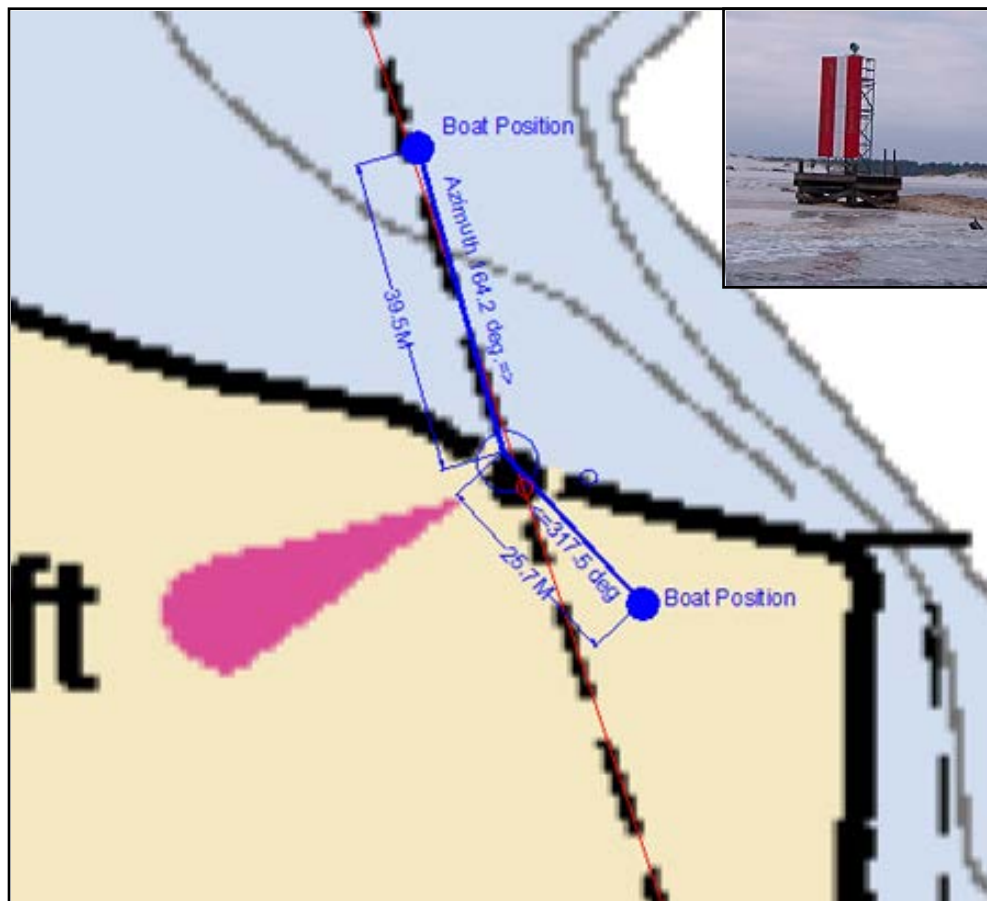


Figure 32. Verification of Caucus Channel Front Range Light position as charted on RNC 11382.

Caucus Channel and Fort Barrancas Channel range light alignments were verified on December 21, 2009 (DN 355). Navigation positions were logged while the survey vessel was piloted along the centerline of the channel by keeping the front and rear range lights aligned (Table 24). Based on real-time observations made by the field team and subsequent plotting of the trackline data, the range lights appear to be in alignment at their reported positions as seen in Figure 33.

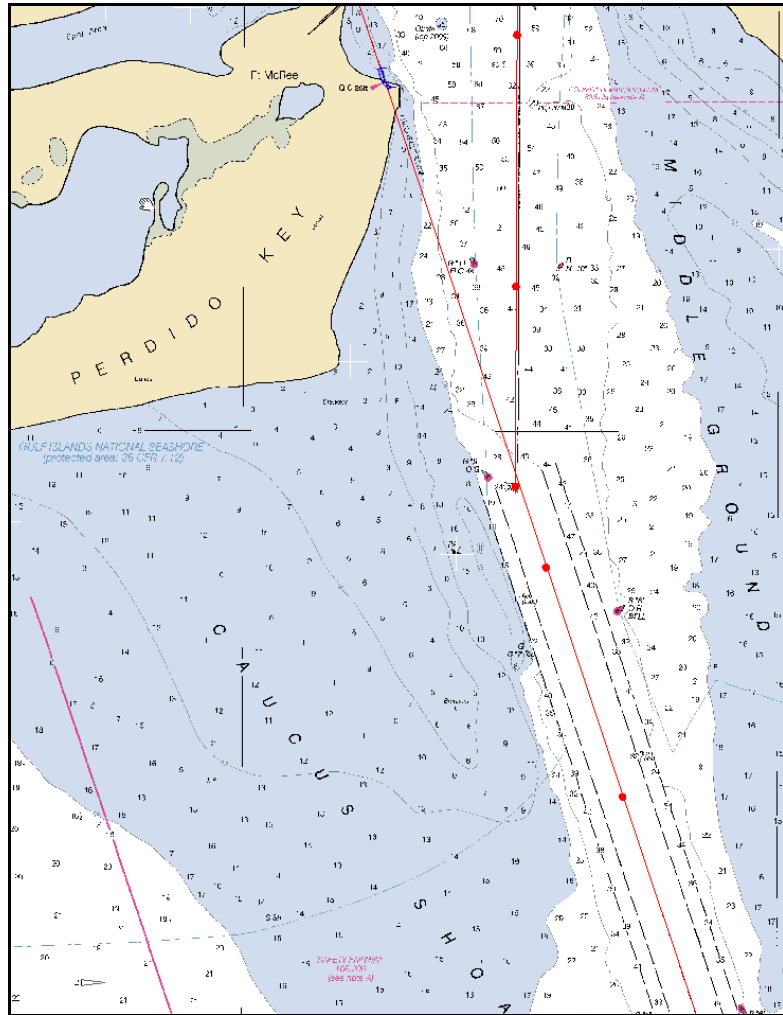


Figure 33. Verification of the Caucus Channel range light alignments. Red dots depict vessel positions with front and rear range lights aligned.

Table 24
Navigation Range Alignment Verification Positions

Range	Latitude (N)	Longitude (W)
Caucus Channel	30-17-25.61	087-17-54.11
Caucus Channel	30-17-51.21	087-18-04.24
Caucus Channel	30-18-24.44	087-18-17.21

Caucus Channel	30-18-46.70	087-18-25.92
Fort Barrancas Channel	30-18-54.55	087-18-29.33
Fort Barrancas Channel	30-19-14.01	087-18-29.36
Fort Barrancas Channel	30-19-38.49	087-18-29.30
Fort Barrancas Channel	30-19-56.43	087-18-29.21

All verified ATON lights and buoys were included as a separate CARIS HOB file titled H12061_ATON.hob and submitted under the S57 Features directory. *Concur*

D.2.3.2 Private Aids to Navigation

One charted private ATON was located outside the survey limits, but inside of an AWOIS item search area. The Fort McRee Daybeacon (RNC 11384, W “WR” Priv) is charted at 30-19-50.01N, 87-18-50.05W located on an extensive sand flat. A visual search was conducted in the area and no Aids to Navigation were observed in the area.

D.2.4 Restricted Data

Not applicable for this survey.

D.2.5 Other Data

D.2.5.1 Bottom Characteristics

Forty-seven (47) bottom samples were acquired to determine bottom characteristics. Bottom samples were spaced at approximately 2000-meter intervals in accordance with the SOW. Additional bottom samples were acquired at approximately 1200-meter intervals within the charted anchorages. A table listing the positions and descriptions of the bottom samples is included in Appendix V*. A position and description of each sample are provided as attributed SBDARE objects in the S-57 feature file. Digital images with identification reference numbers are submitted with the survey data and referenced in the S-57 PICREP attribute. *Concur*

D.2.6 S-57 Feature File

D.2.6.1 S-57 Chart Features File

Many uncharted obstructions and several wrecks were identified and delineated in the SSS data, SWMB data, and BASE surfaces. An S-57 feature file (H12061_S-57_Features.000/.hob) was created to emphasize navigationally significant objects discovered during the survey, update charted objects and to provide information for these objects that could not be portrayed in the BASE surfaces. All S-57 features were attributed in accordance with guidance provided in the SOW and HSSD. Table 25 describes the attribute mapping for the S-57 feature file. *Concur.*

**Data attached to this report.*

Table 25
S-57 Chart Features Attribute Mapping

S-57 Attribute	Value
VALSOU	Corrected least depth
TECSOU	Technique used to develop VALSOU
INFORM	Unique Critical Sounding ID
SORDAT	Survey Date
SORIND	Survey reference – registry ID
PICREP	Contact image file name
userid*	Unique Contact ID
remrks*	Acquisition or processing remarks
recomd*	Charting recommendations

*These attributes are available in the CARIS Notebook HOB file format.

D.2.6.2 S-57 Contact File

All contacts are submitted in an S-57 attributed Notebook HOB file of \$CSYMB objects. Table 26 describes the attribute mapping for the S-57 contact file.

Table 26
S-57 Contact Attribute Mapping

S-57 Attribute	Value
INFORM	Corrected least depth (m)
SORDAT	Survey Date
SORIND	Survey reference – registry ID
PICREP	Contact image file name
TXTDSC	Unique Critical Sounding ID (Line-beam-ping)
userid*	Unique Contact ID (Line-ping-offset)
remrks*	Acquisition or processing remarks
recomd*	Charting recommendations

*These attributes are available in the CARIS Notebook HOB file format.

D.2.6.3 S-57 Critical Sounding File

All critical soundings are submitted in an S-57 attributed Notebook HOB file of \$CSYMB objects. Table 27 describes the attribute mapping for the S-57 critical soundings file.

Table 27
S-57 Critical Soundings Attribute Mapping

S-57 Attribute	Value
INFORM	Corrected least depth (m)
SORDAT	Survey Date
SORIND	Survey reference – registry ID
PICREP	Contact or feature image file name
TXTDSC	Unique Contact ID (Line-ping-offset)
userid*	Unique Critical Sounding ID (Line-beam-ping)
remrks*	Acquisition or processing remarks
recomd*	Charting recommendations

*These attributes are available in the CARIS Notebook HOB file format.

E. APPROVAL SHEET**LETTER OF APPROVAL**
REGISTRY NO. H12061

This report and the accompanying data are respectfully submitted.

Field operations contributing to the accomplishment of Survey H12061 were conducted under my direct supervision with frequent personal checks of progress and adequacy. This report and associated data have been closely reviewed and are considered complete and adequate as per the Statement of Work.



George G. Reynolds
Ocean Surveys, Inc.
Chief of Party – H12061
August 18, 2010

H12061 DTON REPORT

Registry Number: H12061
State: Florida
Locality: Gulf of Mexico
Sub-locality: Pensacola Bay Entrance
Project Number: OPR-J364_KR-09-B
Survey Date: 02/23/2010

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
11384	36th	12/01/2010	1:10,000 (11384_1)	USCG LNM: 9/13/2011 (9/20/2011) NGA NTM: 4/24/1999 (10/1/2011)
11383	52nd	04/01/2011	1:30,000 (11383_1)	USCG LNM: 9/13/2011 (9/20/2011) NGA NTM: 8/7/2004 (10/1/2011)
11378	35th	03/01/2008	1:40,000 (11378_1)	[L]NTM: ?
11382	41st	05/01/2010	1:80,000 (11382_1)	USCG LNM: 9/13/2011 (9/20/2011) NGA NTM: 11/19/2005 (10/1/2011)
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	DTON #6	GP	[None]	30° 19' 41.9" N	087° 18' 25.6" W	---
1.2	DTON #9 - 52ft Obstrn	Obstruction	15.78 m	30° 12' 48.4" N	087° 22' 29.2" W	---
1.3	DTON #8	GP	[None]	30° 13' 02.8" N	087° 23' 30.6" W	---
1.4	DTON #7	GP	[None]	30° 13' 25.4" N	087° 23' 36.7" W	---
1.5	DTON #1	GP	[None]	30° 19' 31.9" N	087° 18' 27.3" W	---
1.6	DTON #4	GP	[None]	30° 19' 37.4" N	087° 18' 24.7" W	---
1.7	DTON #2 - Disproval	Obstruction	[None]	30° 19' 39.6" N	087° 18' 37.9" W	---

1.8	DTON #5	GP	[None]	30° 19' 40.5" N	087° 18' 25.8" W	---
1.9	DTON #3	GP	[None]	30° 19' 41.7" N	087° 18' 24.1" W	---

1 - Tree

1.1) DTON #6**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 30° 19' 41.9" N, 087° 18' 25.6" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Report_Features.000
FOID: US 0000002722 00001(022600000AA20001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: SOUNDG/remrks: Shoaling was observed in the vicinity of the western point of Santa Rose Island and U.S. Coast Guard buoy R "12".

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Report_Features.000	US 0000002722 00001	0.00	000.0	Primary

Hydrographer Recommendations

Selected soundings represent the approximate seaward extents of shoaling.

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)
Attributes: NINFOM - Do not chart.
 NTXTDS - H12061, Chart #11384, edition #36, 20101201
 SORDAT - 20100223
 SORIND - US,US,graph,H12061

Office Notes

SAR NOTE: This sounding was designated as representative of the newly surveyed depths. This is not a feature.

COMPILATION NOTE: MCD did not deem these as a DTON. Survey H-Cell will represent this area with CS sounding to represent the shoal.

1.2) DTON #9 - 52ft Obstrn

DANGER TO NAVIGATION

Survey Summary

Survey Position: 30° 12' 48.4" N, 087° 22' 29.2" W
Least Depth: 15.78 m (= 51.76 ft = 8.626 fm = 8 fm 3.76 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Report_Features.000
FOID: US 0000000168 00001(0226000000A80001)
Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

OBSTRN/remrks: Three (3) obstructions were surveyed within the fairway southwest of the entrance to Pensacola Bay. The least depths of the obstructions are colored in orange and overlain on Chart 11382. All depths are in feet. Two of the obstructions with least depths of 44 and 46 feet were located between charted depths of 53, 52 and 54 feet. The third obstruction with a least depth of 50 feet was positioned just inside the charted 60-foot depth curve.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Report_Features.000	US 0000000168 00001	0.00	000.0	Primary

Hydrographer Recommendations

Recommend charting a 50-ft Obstruction at the current survey location.

Cartographically-Rounded Depth (Affected Charts):

52ft (11382_1)

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

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: EXPSOU - 2:shoaler than range of depth of the surrounding depth area
NINFOM - Add obstruction.

QUASOU - 6:least depth known
SORDAT - 20100223
SORIND - US,US,graph,H12061
TECSOU - 2,3:found by side scan sonar,found by multi-beam
VALSOU - 15.775 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.

SAR NOTES: Item was submitted as a Danger to Navigation. This feature is apparent in two lines of mainscheme MBES and two lines of SSS. At the time of feature development however, the feature is not as shoal as it was during mainscheme.

COMPILATION NOTE: Delete 50ft Obstn and danger curve. Add 52ft Obstn and danger curve.

Feature Images

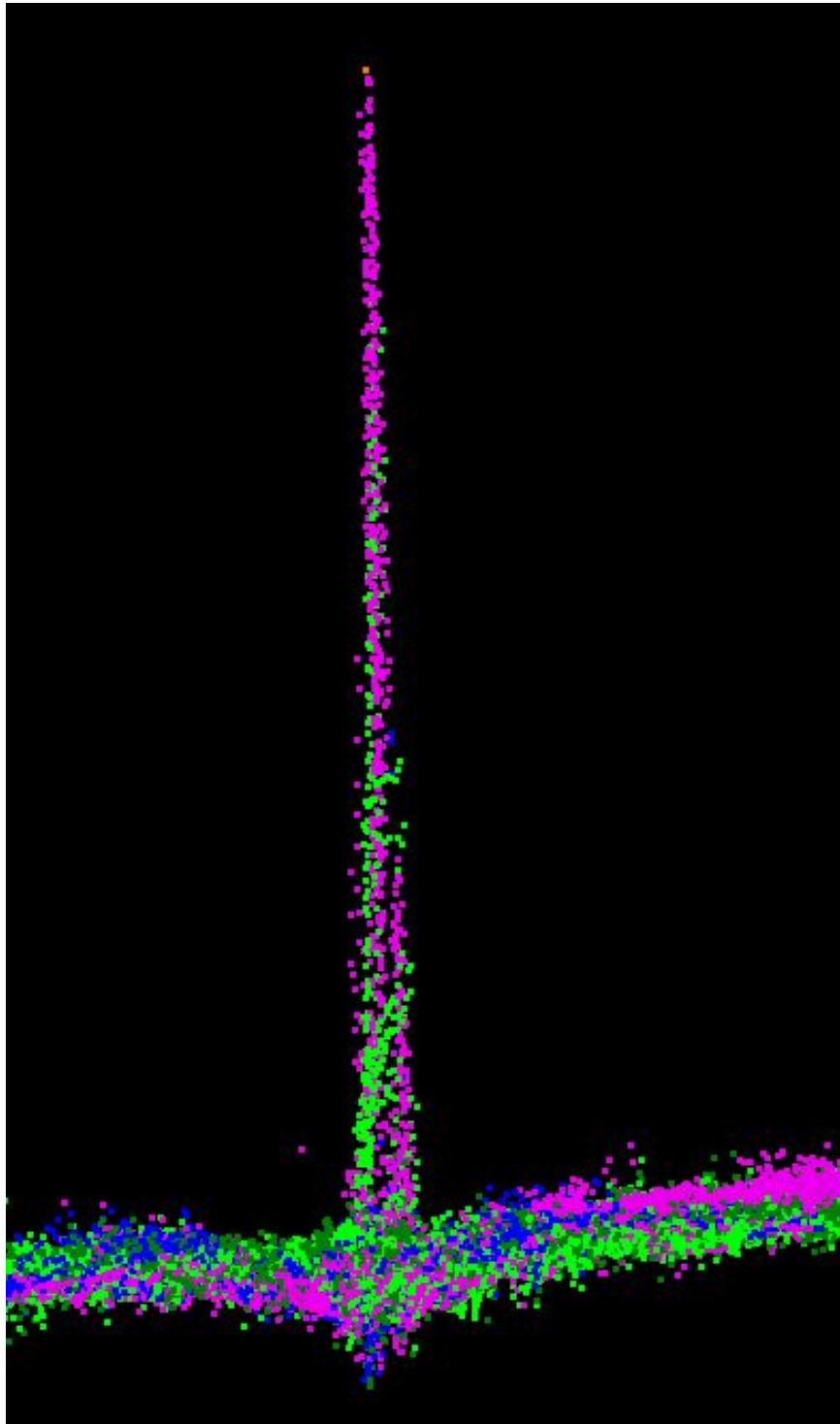


Figure 1.2.1

1.3) DTON #8

DANGER TO NAVIGATION

Survey Summary

Survey Position: 30° 13' 02.8" N, 087° 23' 30.6" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Report_Features.000
FOID: US 0000002719 00001(022600000A9F0001)
Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: OBSTRN/remrks: Unknown Signif Contact Resolved with Obj Det Cov SWMB; Desig Sndg is L.D.; Submitted as DTON

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Report_Features.000	US 0000002719 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)
Attributes: NINFOM - See H-Cell Report H12060 (2009-2010).
 NTXTDS - H12061, Chart #11384, edition #36, 20101201
 SORDAT - 20100223
 SORIND - US,US,graph,H12061

Office Notes

SAR NOTES: Item was submitted as a Danger to Navigation. This feature is apparent in two lines of mainscheme MBES and two lines of SSS. At the time of feature development however, the feature is not as shoal as it was during mainscheme. A new designated sounding was selected during SAR processing.

COMPILATION NOTE: Least depth of feature was determined by investigation on survey H12060 (2009-2010). See Descriptive Report for H12060 (2009-2010) for final charting recommendation.

1.4) DTON #7

DANGER TO NAVIGATION

Survey Summary

Survey Position: 30° 13' 25.4" N, 087° 23' 36.7" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Report_Features.000
FOID: US 0000002718 00001(022600000A9E0001)
Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: OBSTRN/remrks: Unknown Signif Contact Resolved with Obj Det Cov SWMB; Desig Sndg is L.D.; Submitted as DTON

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Report_Features.000	US 0000002718 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)
Attributes: NINFOM - See H-Cell Report H12060 (2009-2010).
 NTXTDS - H12061, Chart #11384, edition #36, 20101201
 SORDAT - 20100223
 SORIND - US,US,graph,H12061

Office Notes

SAR NOTES: Item was submitted as a Danger to Navigation and is charted correctly on the continual update Raster.

COMPILATION NOTE: Least depth of feature was determined by investigation on survey H12060 (2009-2010). See Descriptive Report for H12060 (2009-2010) for final charting recommendation.

1.5) DTON #1

DANGER TO NAVIGATION

Survey Summary

Survey Position: 30° 19' 31.9" N, 087° 18' 27.3" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Report_Features.000
FOID: US 0000002728 00001(022600000AA80001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: SOUNDG/remrks: Shoal encroaching on the Pensacola Entrance channel from Middle Ground Shoal (All depths greater than 30ft (9.14m) are in green). A shoal sounding of 28.9 feet (8.8 meters) was observed at 30-19-31.92, 087-18-27.50 on top of a charted depth of 50 feet (15.2 meters). The previous 30 foot contour has moved up to 130 feet west (red/green demarcation) of its previous charted position (Chart 11384_1).

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Report_Features.000	US 0000002728 00001	0.00	000.0	Primary

Hydrographer Recommendations

Recommend charting 28.9ft Shoal Soundings at current survey location.

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)
Attributes: NINFOM - Add sounding.
 NTXTDS - H12061, Chart #11384, edition #36, 20101201
 SORDAT - 20100223
 SORIND - US,US,graph,H12061

Office Notes

SAR NOTE: This sounding was designated as representative of the newly surveyed depths. This is not a feature.

COMPILATION NOTE: MCD did not deem these as a DTON. Survey H-Cell will represent this area with CS sounding to represent the shoal.

1.6) DTON #4**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 30° 19' 37.4" N, 087° 18' 24.7" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Report_Features.000
FOID: US 0000002727 00001(022600000AA70001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: SOUNDG/remrks: Shoaling was observed in the vicinity of the western point of Santa Rose Island and U.S. Coast Guard buoy R "12". Selected soundings represent the approximate seaward extents of shoaling.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Report_Features.000	US 0000002727 00001	0.00	000.0	Primary

Hydrographer Recommendations

Recommend charting 12ft sounding at surveyed location.

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)
Attributes: NINFOM - Do not chart.
 NTXTDS - H12061, Chart #11384, edition #36, 20101201
 SORDAT - 20100223
 SORIND - US,US,graph,H12061

Office Notes

SAR NOTE: This sounding was designated as representative of the newly surveyed depths. This is not a feature.

COMPILATION NOTE: MCD did not deem these as a DTON. Survey H-Cell will represent this area with CS sounding to represent the shoal.

1.7) DTON #2 - Disproval

DANGER TO NAVIGATION

Survey Summary

Survey Position: 30° 19' 39.6" N, 087° 18' 37.9" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Report_Features.000
FOID: US 0000002697 00001(022600000A890001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: A linear obstruction with a least depth of 55.4 feet (16.9 meters) was observed within the Pensacola Bay entrance channel at 30-19-39.55, 087-18-37.89. The obstruction has the following approximate dimensions of 120x5x1 (LxWxH meters) (Chart 11384_1).

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Report_Features.000	US 0000002697 00001	0.00	000.0	Primary

Hydrographer Recommendations

Recommend charting 55.4ft Obstruction at the current survey location.

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 TECSOU - 2,3:found by side scan sonar,found by multi-beam
 WATLEV - 3:always under water/submerged

Office Notes

SAR NOTES: Item was submitted as a Danger to Navigation and is charted correctly on the continual update Raster.

COMPILATION NOTE: Do not concur - Feature was submitted to MCD as a DtoN and charted. However, the feature is currently charted on Chart 11384, 36th., Ed., 20101201 and smaller scale charts. Office processing determined that the feature is insignificant when compared to the surrounding depth data (only 2 feet off seafloor) and does not pose a threat to surface navigation that warrants being charted as a dangerous obstruction. Delete 55ft Obstn (Rep 2009) and danger curve. Chart a 55ft depth.

1.8) DTON #5**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 30° 19' 40.5" N, 087° 18' 25.8" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Report_Features.000
FOID: US 0000002725 00001(022600000AA50001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: SOUNDG/remrks: Shoaling was observed in the vicinity of the western point of Santa Rose Island and U.S. Coast Guard buoy R "12".

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Report_Features.000	US 0000002725 00001	0.00	000.0	Primary

Hydrographer Recommendations

Selected soundings represent the approximate seaward extents of shoaling.

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)
Attributes: NINFOM - Do not chart.
 NTXTDS - H12061, Chart #11384, edition #36, 20101201
 SORDAT - 20100223
 SORIND - US,US,graph,H12061

Office Notes

SAR NOTE: This sounding was designated as representative of the newly surveyed depths. This is not a feature.

COMPILATION NOTE: MCD did not deem these as a DTON. Survey H-Cell will represent this area with CS sounding to represent the shoal.

1.9) DTON #3**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 30° 19' 41.7" N, 087° 18' 24.1" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Report_Features.000
FOID: US 0000002723 00001(022600000AA30001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: SOUNDG/remrks: Shoaling was observed in the vicinity of the western point of Santa Rose Island and U.S. Coast Guard buoy R "12".

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Report_Features.000	US 0000002723 00001	0.00	000.0	Primary

Hydrographer Recommendations

Selected soundings represent the approximate seaward extents of shoaling.

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)
Attributes: NINFOM - Add sounding.
 NTXTDS - H12061, Chart #11384, edition #36, 20101201
 SORDAT - 20100223
 SORIND - US,US,graph,H12061

Office Notes

SAR NOTE: This sounding was designated as representative of the newly surveyed depths. This is not a feature.

COMPILATION NOTE: MCD did not deem these as a DTON. Survey H-Cell will represent this area with CS sounding to represent the shoal.

H12061 AWOIS ITEMS REPORT

Registry Number: H12061
State: Florida
Locality: Gulf of Mexico
Sub-locality: Pensacola Bay Entrance
Project Number: OPR-J364_KR-09-B
Survey Date: 02/23/2010

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
11384	36th	12/01/2010	1:10,000 (11384_1)	USCG LNM: 9/13/2011 (9/20/2011) NGA NTM: 4/24/1999 (10/1/2011)
11383	52nd	04/01/2011	1:30,000 (11383_1)	USCG LNM: 9/13/2011 (9/20/2011) NGA NTM: 8/7/2004 (10/1/2011)
11378	35th	03/01/2008	1:40,000 (11378_1)	[L]NTM: ?
11382	41st	05/01/2010	1:80,000 (11382_1)	USCG LNM: 9/13/2011 (9/20/2011) NGA NTM: 11/19/2005 (10/1/2011)
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	AWOIS Item #1772 - 61ft Wk	Wreck	18.61 m	30° 13' 08.7" N	087° 19' 22.5" W	1772
1.2	AWOIS Item #8597 - Disproval	GP	[None]	30° 13' 09.3" N	087° 17' 26.8" W	8597
1.3	AWOIS Item #12466 - 39ft Obstrn	Obstruction	12.04 m	30° 17' 14.1" N	087° 16' 52.1" W	12466
1.4	AWOIS Item #8730 - Disproval	GP	[None]	30° 17' 28.6" N	087° 17' 07.5" W	---
1.5	AWOIS Item #7082 - USS MASSACHUSETTS	Wreck	-0.15 m	30° 17' 49.4" N	087° 18' 41.9" W	7082
1.6	AWOIS #8750 - 28ft Obstrn	Obstruction	8.75 m	30° 18' 01.6" N	087° 16' 42.0" W	8750
1.7	AWOIS #7085 - 10ft Wk	Wreck	3.07 m	30° 18' 50.9" N	087° 19' 25.9" W	7085

1.8	AWOIS #14303 - Disproval	AWOIS	[no data]	[no data]	[no data]	---
1.9	AWOIS #14313 - Disproval	AWOIS	[no data]	[no data]	[no data]	---
1.10	AWOIS #14314 - Disproval	AWOIS	[no data]	[no data]	[no data]	---
1.11	AWOIS #14302 - Disproval	AWOIS	[no data]	[no data]	[no data]	---
1.12	AWOIS #8730 - Disproval	AWOIS	[no data]	[no data]	[no data]	---
1.13	AWOIS #8731 - Disproval	AWOIS	[no data]	[no data]	[no data]	---
1.14	AWOIS #8732 - Disproval	AWOIS	[no data]	[no data]	[no data]	---
1.15	AWOIS #8733	AWOIS	[no data]	[no data]	[no data]	---
1.16	AWOIS #8734 - Disproval	AWOIS	[no data]	[no data]	[no data]	---
1.17	AWOIS #8773 - Disproval	AWOIS	[no data]	[no data]	[no data]	---
1.18	AWOIS #454 - Disproval	AWOIS	[no data]	[no data]	[no data]	---
1.19	AWOIS #458 - Disproval	AWOIS	[no data]	[no data]	[no data]	---
1.20	AWOIS #7080 - Disproval	AWOIS	[no data]	[no data]	[no data]	---
1.21	AWOIS #7081 - Disproval	AWOIS	[no data]	[no data]	[no data]	---
1.22	AWOIS #7086 - Disproval	AWOIS	[no data]	[no data]	[no data]	---
1.23	AWOIS #7089 - Disproval	AWOIS	[no data]	[no data]	[no data]	---
1.24	AWOIS #7090 - Disproval	AWOIS	[no data]	[no data]	[no data]	---
1.25	AWOIS #7092 - Disproval	AWOIS	[no data]	[no data]	[no data]	---
1.26	AWOIS #7093 - Charted Foul Area - Retain	AWOIS	[no data]	[no data]	[no data]	---
1.27	AWOIS #7094 - Disproval	AWOIS	[no data]	[no data]	[no data]	---
1.28	AWOIS #7075 - Disproval	AWOIS	[no data]	[no data]	[no data]	---
1.29	AWOIS #7079 - Disproval	AWOIS	[no data]	[no data]	[no data]	---
1.30	AWOIS #12464 - Disproval	AWOIS	[no data]	[no data]	[no data]	---
1.31	AWOIS #12465 - Disproval	AWOIS	[no data]	[no data]	[no data]	---
1.32	AWOIS #12467 - Disproval	AWOIS	[no data]	[no data]	[no data]	---
1.33	AWOIS #12468 - Disproval	AWOIS	[no data]	[no data]	[no data]	---
1.34	AWOIS #12469 - Disproval	AWOIS	[no data]	[no data]	[no data]	---
1.35	AWOIS #12470 - Disproval	AWOIS	[no data]	[no data]	[no data]	---
1.36	AWOIS #8443 - Disproval	AWOIS	[no data]	[no data]	[no data]	---
1.37	AWOIS #7865 - Disproval	AWOIS	[no data]	[no data]	[no data]	---
1.38	AWOIS #7866 - Disproval	AWOIS	[no data]	[no data]	[no data]	---
1.39	AWOIS #7867 - Disproval	AWOIS	[no data]	[no data]	[no data]	---
1.40	AWOIS #7868 - Disproval	AWOIS	[no data]	[no data]	[no data]	---
1.41	AWOIS #8593 - Disproval	AWOIS	[no data]	[no data]	[no data]	---
1.42	AWOIS #8595 - Disproval	AWOIS	[no data]	[no data]	[no data]	---
1.43	AWOIS #8596 - Disproval	AWOIS	[no data]	[no data]	[no data]	---

1.44	AWOIS #14304 - Disproval	AWOIS	[no data]	[no data]	[no data]	---
1.45	AWOIS #14305 - Disproval	AWOIS	[no data]	[no data]	[no data]	---
1.46	AWOIS #14315 - Disproval	AWOIS	[no data]	[no data]	[no data]	---
1.47	AWOIS #14316 - Disproval	AWOIS	[no data]	[no data]	[no data]	---

1 - S57DR_AWOIS

1.1) AWOIS Item #1772 - 61ft Wk

Primary Feature for AWOIS Item #1772

Search Position: 30° 13' 08.0" N, 087° 19' 23.3" W
Historical Depth: 15.54 m
Search Radius: 50
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

SURVEY REQUIREMENT COMMENTS

VERIFY THAT WRECK IS STILL IN SAME LOCATION USING SIDE SCAN SONAR. NO LEAST DEPTH IS REQUIRED UNLESS WRECK APPEARS SIGNIFICANTLY DIFFERENT THAN DESCRIBED (E.G., WRECK HAS COLLAPSED). CHECK SHADOW HEIGHT.

HISTORY

LNM18/86--8TH CGD; ALSO REF. CL483/86; NOAA ADVANCED INFO; 40 X 100 FT. BARGE SUNK IN PA LAT 30-13-03.34N, LONG 87-19-24.85W IN 60 FT OF WATER; LEAST DEPTH OF 48 FT. (ENTERED MSD 1/91)
FE288/86--OPR-J217-HFP-84; SUBMERGED WRECK LOCATED IN LAT. 30-13-08.24N, LONG. 87-19-24.21W, DIVER LL LD OF 47 FEET IN 61 FEET. DESCRIBED AS A HOPPER BARGE (SCATTERED DEBRIS IN BARGE) 120 X 40 FEET, RISING 15 FEET OFF SAND BOTTOM. SIDE WALLS ARE COLLAPSED. EVALUATOR RECOMMENDS CHARTING A DANGEROUS SUNKEN WRECK (47 WK) IN SURVEYED POSITION. LORAN-C RATES, 7980 CHAIN:

W=13202.0. Y=47085.9. (UP. 11/13/90, SJV)

H10383/91--OPR-J452-AHP; BARGE LOCATED BY SIDE SCAN SONAR IN POS. LAT.30-13-08N, LONG 87-19-23.34W WITH A DIVER, LEAD LINE LEAST DEPTH OF 16.1M (52.8FT). LORAN RATES ON BARGE: W:13202.1, X: 47086.0, Y:30393.3, Z:64084.4 (UPDATED 6.93 MCR)

DESCRIPTION

**** LTR, OIC HFP1 (PHIL KENUL) TO COMMANDER CGD8, MAY 5, 1986; OPR-J217; UNCHARTED WRECK IN APPROX. LAT. 30-13-03.54N, LONG. 87-19-24-85W; HOPPER BARGE 40X120X15 FT. IN 62.0 FT. DIVER LEAD LINE LD OF 47.6 FT (PRED. TIDES AT 1550 UTC 5/2/86). POSITION APPROX. WILL BE VERIFIED IN

NEAR FUTURE WHEN MORE ADEQUATE CONTROL IS ESTABLISHED.

Survey Summary

Survey Position: 30° 13' 08.7" N, 087° 19' 22.5" W
Least Depth: 18.61 m (= 61.05 ft = 10.175 fm = 10 fm 1.05 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Report_Features.000
FOID: US 0000002679 00001(022600000A770001)
Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

WRECKS/remrks: OBSTRN/remrks: AWOIS Item 1772 - Verified; Wreck Debris; Signif Contact Resolved with Obj Det Cov SWMB; Desig Sndg is L.D.

Listed in the DR as:

H12061-24: A 51-foot/8 ½-fathom Wk charted at 30-13-08.48N, 87-19-20.29W was verified with 200% SSS and 100% SWMB; however, the charted depth was disproved. A least depth of 59.4 feet/10 fathoms (18.1 meters) was developed at 30-13-08.70N, 87-19-22.53W with wreck dimensions of 160 feet x 40 feet x 5.1 feet (48.8 meters x 12.2 meters x 1.6 meters). It is recommended that the charted wreck be updated with the new position and least depth. See AWOIS Item #1772 under Appendix II - Survey Feature Report for additional information.

Listed in the Field Submitted Appendix II as:

Status: AWOIS Item #1772 was verified as a sunken barge that has been reduced to debris (Figure 1). It is charted as a wreck (RNC 11382 – Wk) with a known depth of 51 feet. The 50-meter search radius coincided with a portion of the charted wreck area. The full charted wreck area was covered with 200% SSS and 100% SWMB. Wreck debris was observed in each of the side scan coverages and was resolved with object detection multibeam coverage (Figure 2). A least depth of 59.4 feet (18.1 meters) was developed at 30-13-08.70N, 87-19- 22.53W with wreck dimensions of 160 feet x 40 feet x 5.1 feet (48.8 meters x 12.2 meters x 1.6 meters). The barge is included as a WRECKS object in the S-57 Feature File (H12061_S57_Features.000).

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Report_Features.000	US 0000002679 00001	0.00	000.0	Primary
AWOIS_EXPORT	AWOIS # 1772	30.11	044.9	Secondary (grouped)

Hydrographer Recommendations

It is recommended that the charted wreck be updated with the new position and least depth.

Cartographically-Rounded Depth (Affected Charts):

61ft (11382_1)

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

S-57 Data

Geo object 1: Wreck (WRECKS)
Attributes: CATWRK - 2:dangerous wreck
EXPSOU - 2:shoaler than range of depth of the surrounding depth area
NINFOM - Add wreck.
QUASOU - 6:least depth known
SORDAT - 20100223
SORIND - US,US,graph,H12061
TECSOU - 2,3:found by side scan sonar,found by multi-beam
VALSOU - 18.608 m
WATLEV - 3:always under water/submerged

Office Notes

SAR NOTE: This feature is apparent in two lines of mainscheme MBES and two lines of SSS. At the time of feature development however, the feature is not as shoal as it was during mainscheme.

COMPILATION NOTE: Delete 51ft Wk and danger curve. Add 61ft Wk and danger curve.

Feature Images

[Image file

T:\SarsInWork\H12061_J364_OS\AHB_H12061\PSS\images\AWOIS1772_61ftObstrn_2d.jpg does not exist.]

[Image file

T:\SarsInWork\H12061_J364_OS\AHB_H12061\PSS\images\AWOIS1772_61ftObstrn_3d.jpg does not exist.]

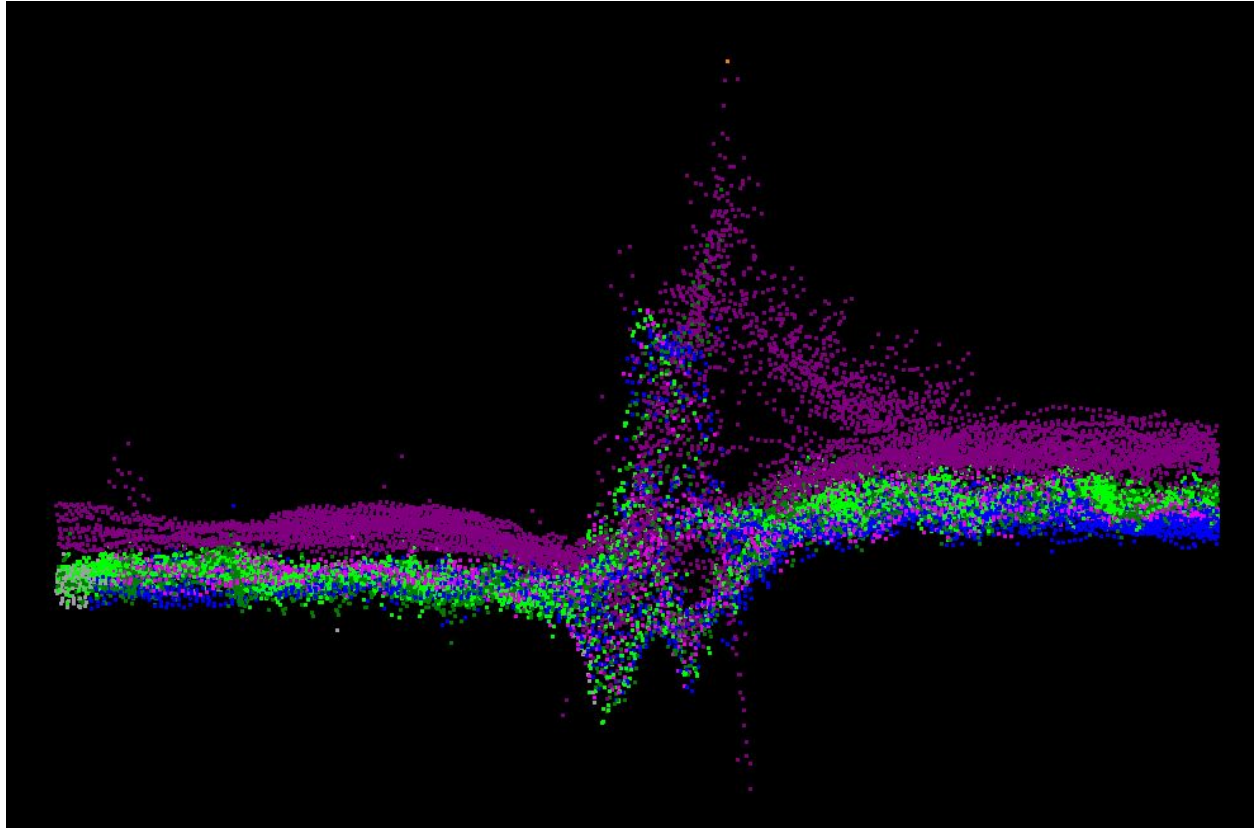


Figure 1.1.1

1.2) AWOIS Item #8597 - Disproval

Primary Feature for AWOIS Item #8597

Search Position: 30° 13' 09.5" N, 087° 17' 26.4" W
Historical Depth: 18.90 m
Search Radius: 50
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

HISTORY

H10383/91--OPR-J452-HE; UNKNOWN OSTRUCTION LOCATED BY SIDE SCAN ì
 SONAR IN POS. LAT.30-13-09.5N, LONG.87-17-26.4W WITH A COMPUTED ì
 LEAST DEPTH OF 18.9M IN 20.8M (68.2 FT) OF WATER. EVALUATOR ì
 RECOMMENDS TO CHART AS 18.9N OBSTR (A). (ENTERED 6.93 MCR)

Survey Summary

Survey Position: 30° 13' 09.3" N, 087° 17' 26.8" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Report_Features.000
FOID: US 0000002682 00001(022600000A7A0001)
Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: OBSTRN/remrks: AWOIS Item 8597 - Signif Contact Resolved with Obj Det Cov SWMB; Desig Sndg is L.D.

Listed in the DR as:

H12061-30: A 62-foot Obstn located at 30-13-10.09N, 87-17-24.44W was verified with 200% SSS and 100% SWMB; however, the charted depth was disproved. A least depth of 65.7 feet/10.9 fathoms (20.0 meters) was developed at 30-13-09.27N, 87-17-26.81W with object dimensions of 7 feet x 6 feet x 2.3 feet (2.1 meters x 1.8 meters x 0.70 meters). See AWOIS Item #8597 under Appendix II - Survey Feature Report for additional information

Listed in Field Submitted Appendix II as:

Status: AWOIS Item #8597 was verified as an unknown obstruction with an approximate height of 3 feet (1 meter) off the seafloor. It is charted as a 62-foot obstruction (RNC 11382 – Obstn). The 50-meter search radius coincided with a portion of the charted obstruction area; the entire obstruction area was covered with 200% SSS and 100% SWMB. The obstruction was observed in each of the side scan coverages and was resolved with object detection multibeam coverage (Figure 15). A least depth of 65.7 feet (20.0 meters) was developed at 30-13-09.27N, 87-17-26.81W with object dimensions of 7 feet x 6 feet x 2.3 feet (2.1 meters x 1.8 meters x 0.70 meters).

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Report_Features.000	US 0000002682 00001	0.00	000.0	Primary
AWOIS_EXPORT	AWOIS # 8597	12.94	236.6	Secondary (grouped)

Hydrographer Recommendations

The object height is not considered significant in comparison to the approximate surrounding depth of 68 feet (20.7 meters).

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Office Notes

SAR NOTE: Feature seen in MBES data and two lines of SSS.

COMPILATION NOTE: Concur with clarification. Office processing determined that the feature is insignificant when compared to the surrounding depth data (only 2 feet off seafloor) and does not pose a threat to surface navigation that warrants being charted as a dangerous obstruction. Delete 62ft Obstn and danger curve. Chart a 65ft depth.

Feature Images

[Image file T:\SarsInWork\H12061_J364_OSIAHB_H12061\PSS\images\AWOIS8597_66ft3d.jpg does not exist.]

1.3) AWOIS Item #12466 - 39ft Obstn

Primary Feature for AWOIS Item #12466

Search Position: 30° 17' 14.4" N, 087° 16' 51.6" W
Historical Depth: 10.67 m
Search Radius: 50
Search Technique: S2, MB
Technique Notes: GET UPDATED POSITION AND LEAST DEPTH

History Notes:

H-10387/1991--OPR-J452-HE - OBSTRUCTION DETERMINED TO BE A LARGE ANCHOR AND CHAIN RISING 6 FEET OFF THE BOTTOM AND COVERED BY A LEAST DEPTH OF 35 FEET. PUBLISHED IN LNM 33/91.

H11763, S-J917-NRT1-07; Entire AWOIS 12466 radius covered in 200% SSS coverage. No significant contacts were detected. Hydrographer recommends removing Obstruction from the chart. (Updated 11/5/09 KAK)

Survey Summary

Survey Position: 30° 17' 14.1" N, 087° 16' 52.1" W
Least Depth: 12.04 m (= 39.50 ft = 6.584 fm = 6 fm 3.50 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Report_Features.000
FOID: US 0000000156 00001(02260000009C0001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

OBSTRN/remrks: OBSTRN/remrks: AWOIS Item 8733 or 12466 - Verified; Signif Contact Resolved with Obj Det Cov SWMB; Desig Sndg is L.D.

Listed in the DR submitted Appendix II:

Status: AWOIS Item #8733 was verified. It was reported by prior Survey H10387 as a large anchor and is a duplicate of AWOIS Item #12466. The 50-meter search radius was covered with 200% SSS and 100% SWMB. The obstruction was observed in each of the side scan coverages and was resolved with object detection multibeam coverage (Figure 16). A least depth of 39.5 feet (12.0 meters) was developed at 30-17-14.06N, 87-16-52.08W. The object is included as an OBSTRN in the H12061 S-57 Feature File. The obstruction had been charted as a 35-foot obstruction (RNC 11384 – Obstn (rep cov 35 ft 1993)) at the start of data collection; however, it has since been removed from the chart.

Status: AWOIS Item #12466 was verified. It was reported as a large anchor and is a duplicate of AWOIS Item #8733. A least depth of 39.5 feet (12.0 meters) was developed at 30-17-14.06N, 87-16-52.08W. See AWOIS Item #8733 for investigation details.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Report_Features.000	US 0000000156 00001	0.00	000.0	Primary
AWOIS_EXPORT	AWOIS # 12466	16.74	231.4	Secondary (grouped)

Hydrographer Recommendations

verified

Cartographically-Rounded Depth (Affected Charts):

39ft (11384_1, 11383_1, 11378_1, 11382_1)

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

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: EXPSON - 2:shoaler than range of depth of the surrounding depth area
 NINFOM - Add obstruction.
 QUASOU - 6:least depth known
 SORDAT - 20100223
 SORIND - US,US,graph,H12061
 TECSOU - 2,3:found by side scan sonar,found by multi-beam
 VALSOU - 12.040 m
 WATLEV - 3:always under water/submerged

Office Notes

SAR NOTE: Feature seen in two lines of SSS and MBES data.

COMPILATION NOTE: AWOIS #12466 as discussed by the field unit is a duplicate of AWOIS #8733. The obstruction is not charted because it was formerly disproved by prior survey H11763 (2010) in error. See AWOIS #8733 for additional information. Add 39ft Obstrn and danger curve.

Feature Images

[Image file
T:\SarsInWork\H12061_J364_OS\AHB_H12061\PSS\images\AWOIS12466_39ftObstn_3d.jpg does not
exist.]

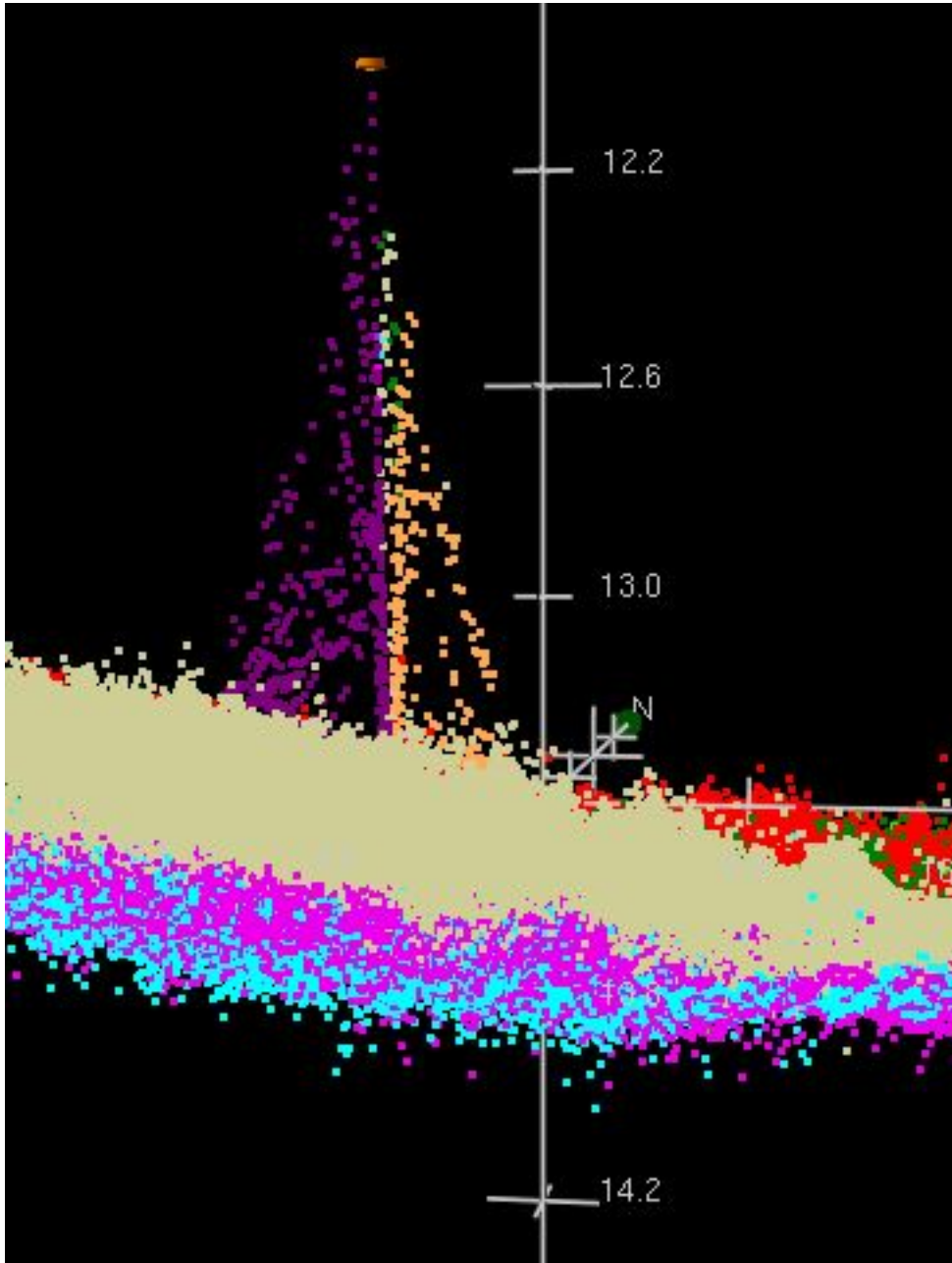


Figure 1.3.1

1.4) AWOIS Item #8730 - Disproval

Survey Summary

Survey Position: 30° 17' 28.6" N, 087° 17' 07.5" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Report_Features.000
FOID: US 0000000130 00001(0226000000820001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: Listed in DR submitted Appendix II as:

Status: AWOIS Item #8730 was disproved with 200% SSS and 100% SWMB. It was reported by prior Survey H10387 as a small wreck with several tires and metal debris nearby. There was no evidence of obstructions or wrecks within the 50-meter search radius which overlapped with the larger search radius of AWOIS Item #7090. The least depth surveyed within the search area was 33.0 feet (10.1 meters) at 30-17-29.25N, 87-17-06.54W, which agrees well with the charted depth despite the absence of a wreck in the side scan or multibeam data.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Report_Features.000	US 0000000130 00001	0.00	000.0	Primary

Hydrographer Recommendations

It is recommended that the obstruction remain uncharted and the AWOIS item be removed from the investigation list.

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)
Attributes: NINFOM - Disproved.
 NTXTDS - H12061, Chart#11384, edition#36, 20101201.
 SORDAT - 20100223
 SORIND - US,US,graph,H12061

Office Notes

SAR NOTE: Feature is a FOR INFORMATION AWOIS item. Item was not located. Item is not on the current chart edition.

COMPILATION NOTE: Feature not shown on chart #11384, edition #36, 20101201. No change in charting is recommended.

1.5) AWOIS Item #7082 - USS MASSACHUSETTS

Primary Feature for AWOIS Item #7082

Search Position: 30° 17' 48.6" N, 087° 18' 42.2" W
Historical Depth: [None]
Search Radius: 100
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

HISTORY

UNKNOWN SOURCE--FIRST CHARTED IN 1920.

CL1058/65--CPR, PROJECT CP-565; PENSACOLA BAR PILOTS REPORTED WRECK IS BARELY VISIBLE AT LW. SHOWS ONLY AS BREAKERS. IDENTIFIED AS "OLD BATTLESHIP MASSACHUSETTS". (BP 69037)

CL1810/76--CAS UNAVAILABLE.

H9968/81--OPR-J217-81; PSR ITEM NO. 164; LOCATED AS CHARTED (NO LAT. AND LONG. GIVEN IN D.R.). DIVER INVESTIGATED ON FEB. 21, 1982. TWO LARGE GUN TURRETS AWASH AT MOST STAGES OF TIDE. WRECK LYING GENERALLY E-W. EXTENDS APPROX. 200 FEET IN EITHER DIRECTION FROM TURRETS. A LOCAL DIVERS' GUIDE LISTS WRECK AS A WWI BATTLESHIP, 500 FEET LONG, SUNK BY THE NAVY IN 1927. EVALUATOR STATES "IRON CYLINDERS BARE 3 FEET AT MLW"; RECOMMENDS CHARTING AS SURVEYED. SURVEY POSITIONS NO. 10 AND NO. 11 LOCATED THE "CYLINDERS" AS OBSTRUCTIONS. POS. OF OBSTRUCTIONS SCALED FROM SMOOTH SHEET (1:10,000). POSITION OF SOUTHERNMOST OBSTRUCTION LISTED ABOVE. NORTHERNMOST OBSTRUCTION SCALED IN LAT. 30-17-48.1N, LONG. 87-18-42.1W; SOUTHERNMOST OBSTRUCTION (LISTED G.P.) SCALED IN LAT. 30-17-47.1N, LONG. 87-18-44.5W.

Survey Summary

Survey Position: 30° 17' 49.4" N, 087° 18' 41.9" W
Least Depth: -0.15 m (= -0.49 ft = -0.082 fm = 0 fm 5.51 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)

Dataset: H12061_Report_Features.000
FOID: US 0000002701 00001(022600000A8D0001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

WRECKS/remrks: WRECKS/remrks: AWOIS Item 7082 - Least Depth on USS MASSACHUSETTS; stadia rod sounding collected on western ball turret; Awash at MLLW; L.D. corrected with zoned verified tides.

Listed in DR as:

H12061-11: The wreck of the USS MASSACHUSETTS charted at 30-17-48.60N, 87-18-42.30W was surveyed with over 200% SSS and object detection SWMB coverage. A least depth of -0.49 feet (-0.15 meters) was obtained at 30-17-48.14N, 87-18-44.29W on the western-most turret using a fiberglass stadia rod. The Coast Pilot states that the wreck is visible but cannot be seen for any distance offshore and that it is marked by a lighted bell buoy. The buoy is actually positioned approximately 720 feet (220 meters) south of the USS MASSACHUSETTS wreck. It is recommended that the charted wreck be updated with the surveyed depth and position. See AWOIS Item #7082 under Appendix II - Survey Feature Report for additional information.

Listed in Field Submitted Appendix II as:

Status: AWOIS Item #7082 is the sunken 350-foot battleship, USS MASSACHUSETTS. The wreck was surveyed with over 200% SSS and object detection coverage SWMB. Two turrets were awash and their bounds were developed with the multibeam (Figure 3). A least depth of -0.49 feet (-0.15 meters) was obtained at 30-17-48.14N, 87-18-44.29W on the western-most turret using a fiberglass stadia rod and was tide corrected in CARIS HIPS using zoned verified tides. Figure 4 displays the position of the wreck least depth in reference to the charted RNC and ENC wreck position. The least depth on the wreck is offset from the charted wreck location (RNC 11384 USS Massachusetts awash at MLLW) by approximately 160 feet (50 meters). A WRECKS object was created from the wrecks least depth position in the S-57 Feature File (H12061_S57_Feature.000).

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Report_Features.000	US 0000002701 00001	0.00	000.0	Primary
AWOIS_EXPORT	AWOIS # 7082	3.51	227.0	Secondary (grouped)

Hydrographer Recommendations

It is recommended that the charted wreck be updated with the surveyed depth and position.

Cartographically-Rounded Depth (Affected Charts):

-1ft (11384_1, 11383_1, 11378_1, 11382_1)

0fm (1115A_1, 11360_1, 11006_1, 411_1)

S-57 Data

Geo object 1: Wreck (WRECKS)
Attributes: CATWRK - 5:wreck showing any portion of hull or superstructure
NINFOM - Add wreck.
QUASOU - 6:least depth known
SORDAT - 20100223
SORIND - US,US,graph,H12061
TECSOU - 2,3:found by side scan sonar,found by multi-beam
VALSOU - -0.150 m
WATLEV - 5:awash

Office Notes

SAR NOTE: Wreck was seen in MBES and SSS data. Least Depth was determined using a Stadia Rod and does not appear in the grid.

COMPILATION NOTE: Delete charted wreck. Add dangerous wreck awash.

Feature Images

[Image file
T:\SarsInWork\H12061_J364_OS\AHB_H12061\PSS\images\USS_Massachusetts_GridView.jpg does not exist.]

[Image file T:\SarsInWork\H12061_J364_OS\AHB_H12061\PSS\images\USS_Massachusetts_3d.jpg does not exist.]

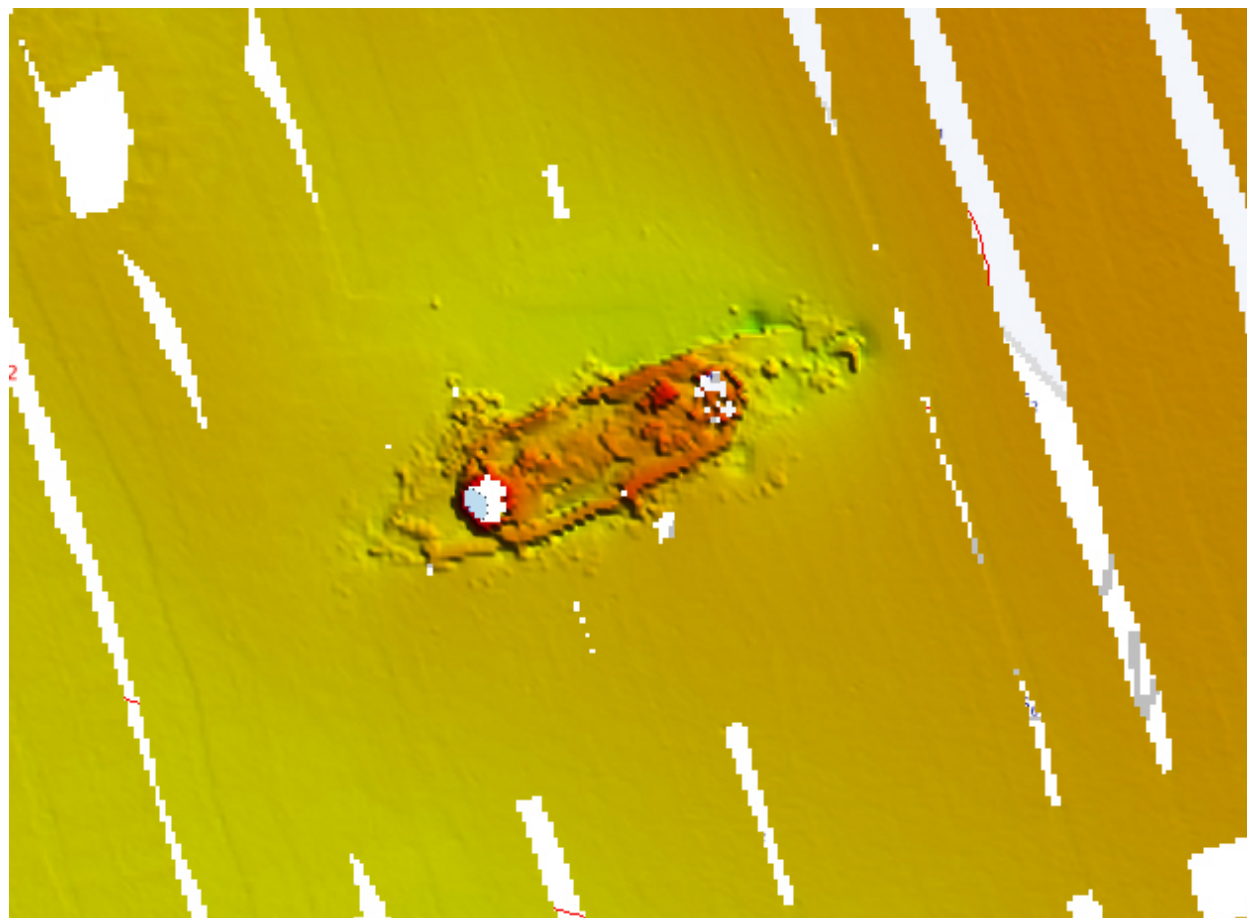


Figure 1.5.1

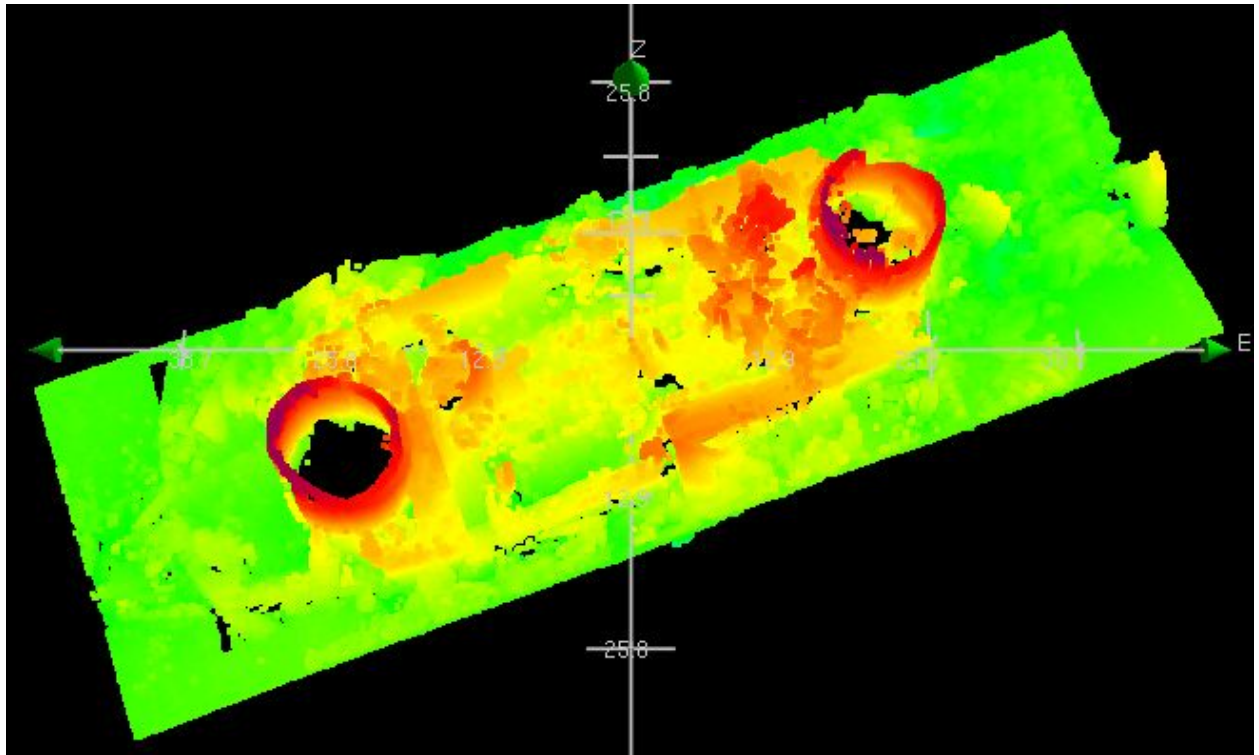


Figure 1.5.2

1.6) AWOIS #8750 - 28ft Obstrn

Primary Feature for AWOIS Item #8750

Search Position: 30° 18' 01.4" N, 087° 16' 43.1" W
Historical Depth: 8.53 m
Search Radius: 50
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

HISTORY

FE361SS/91-- OPR-J452-HE; WHILE SEARCHING FOR AWOIS ITEM NO. 7875, SEVERAL "METAL BLOCKS" WERE LOCATED IN LAT. 30-18-01.39N, LONG. 87-16-43.05W. FATHOMETER DEPTH OF 8.7 METERS (28.0 FEET). THESE WERE DOVE ON AND FOUND TO RISE LESS THAN ONE FOOT ABOVE THE BOTTOM. EVALUATOR RECOMMENDS CHARTING AS SURVEYED. (ENT 9/3/93, SJV)

Survey Summary

Survey Position: 30° 18' 01.6" N, 087° 16' 42.0" W
Least Depth: 8.75 m (= 28.71 ft = 4.786 fm = 4 fm 4.71 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Report_Features.000
FOID: US 0000000155 00001(02260000009B0001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

OBSTRN/remrks: OBSTRN/remrks: AWOIS Item 8750 and 7075 - Metal Blocks Vfd; Signif Contact Resolved with Obj Det Cov SWMB; Desig Sndg is L.D.

Listed in DR submitted Appendix II:

Status: AWOIS Item #8750 was verified with 200% SSS and 100% SWMB. It was reported as "several metal blocks" and it is charted as a 28-foot obstruction (RNC 11384 – Obstrn). The area defined by the 50-meter search radius includes the charted obstruction area and is within the larger search area of AWOIS Item #7075 (Figure 17). The obstruction was observed in each of the side scan coverages and was resolved with object detection multibeam coverage. A least depth of 28.7 feet (8.7 meters) was

developed at 30-18-01.61N, 87-16-41.95W. The object height of 2 feet (0.6 meters) is not significant in comparison to the average surrounding depth of 30 feet (9.1 meters) (Figure 18). It is recommended that the charted obstruction be updated with the new surveyed position.

Status: AWOIS Item #7075, a charted obstruction (RNC 11384 – Obstrn, depth unknown), was disproved with 200% SSS and 100% SWMB. It was initially reported as an old anchor then modified to several metal blocks and a patio chair by a subsequent survey. An obstruction, potentially the “metal blocks,” was located in the vicinity of a charted 28-foot obstruction (RNC 11384 – Obstrn). A least depth of 28.7 feet (8.75 meters) was developed at 30-18-01.61N, 87-16-41.95W; however, it is better correlated with AWOIS Item # 8750.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Report_Features.000	US 0000000155 00001	0.00	000.0	Primary
AWOIS_EXPORT	AWOIS # 8750	30.16	076.9	Secondary (grouped)

Hydrographer Recommendations

It is recommended that the charted obstruction at the center of AWOIS Item #7075's search area be removed from the chart and the charted 28-foot obstruction's position (AWOIS Item #8750) be updated with that of the new OBSTRN object included in the S-57 Feature file (H12061_S57_Features.000).

Cartographically-Rounded Depth (Affected Charts):

28ft (11384_1, 11383_1, 11378_1, 11382_1)

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

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: EXPSOU - 2:shoaler than range of depth of the surrounding depth area

INFORM - 2009AB3221813_1980- 137- 1054

NINFOM - Add obstruction.

QUASOU - 6:least depth known

SORDAT - 20100223

SORIND - US,US,graph,H12061

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

VALSOU - 8.752 m

WATLEV - 3:always under water/submerged

Office Notes

SAR NOTE: Feature seen in MBES data and two lines of SSS.

COMPILATION NOTE: This AWOIS feature is within the search radius for AWOIS #7075. See AWOIS #7075 for charting recommendation of that feature. Delete 28ft Obstrn and danger curve. Add 28ft Obstrn and danger curve.

Feature Images

[Image file

T:/SarsInWork/H12061_J364_OSI/AHB_H12061/PSS/images/AWOIS8750_28ftObstrn_3d.jpg does not exist.]

[Image file

T:/SarsInWork/H12061_J364_OSI/AHB_H12061/PSS/images/AWOIS8750_28ftObstrn_2d.jpg does not exist.]

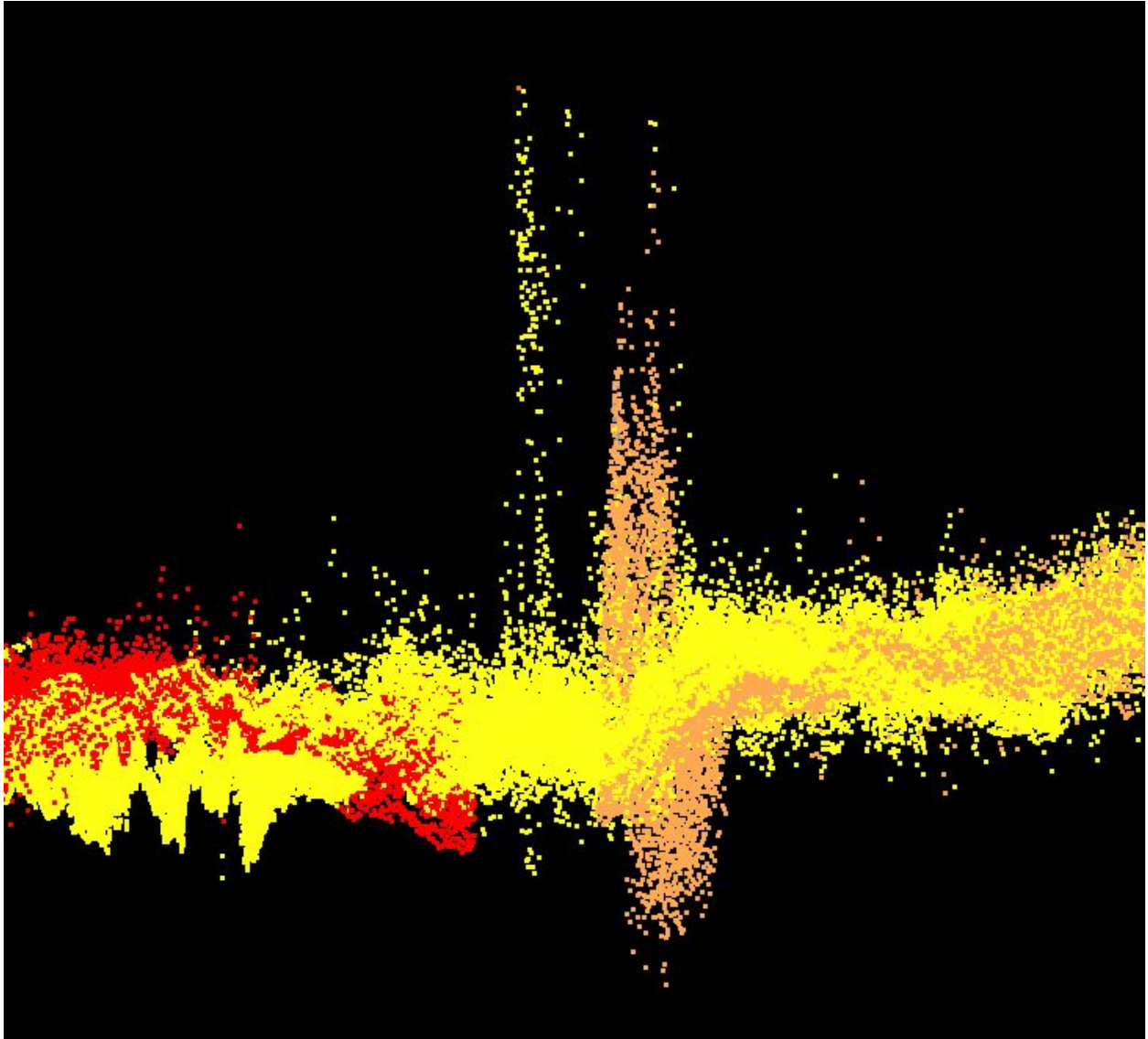


Figure 1.6.1

1.7) AWOIS #7085 - 10ft Wk

Primary Feature for AWOIS Item #7085

Search Position: 30° 18' 51.0" N, 087° 19' 26.8" W
Historical Depth: [None]
Search Radius: 100
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

HISTORY

SOURCE UNKNOWN--FIRST CHARTED AS VISIBLE WRECKS FROM A 1934 AIR PHOTO COMPILATION (FILE NUMBER UNKNOWN).

BP41339/46--PROJECT PH-1(45); LOCATED VISIBLE WRECK BARING 20 FEET MHW (SEE T-7012B).

CL498/46--COVER LETTER FOR PROJECT PH-1(45) ABOVE.

CL398/48--CPR; REVISED TO SUBM. LISTED POSITION (SCALED FROM CHART 11384, 1:10,000, 26TH ED., 1984) IS MOST SEAWARD WRECK IN LAT. 30-18-50.3N, LONG. 87-19-26.90W.

H9968/81--OPR-J217-81; PSR NO. 330; NOT INVESTIGATED. LOCAL DIVE SHOPS HAD NO KNOWLEDGE OF WRECK. DEPTHS IN AREA HAVE DEEPENED FROM 4 TO 13 FEET. HYDROGRAPHER PRESUMES WRECKS HAVE PROBABLY BEEN BROKEN UP AND DISPERSED BY SEA AND CURRENTS. HYDROGRAPHER RECOMMENDS REVISING WRECKS TO "PD". EVALUATOR RECOMMENDS CHARTING AS "ED".

Survey Summary

Survey Position: 30° 18' 50.9" N, 087° 19' 25.9" W
Least Depth: 3.07 m (= 10.07 ft = 1.679 fm = 1 fm 4.07 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Report_Features.000
FOID: US 0000000148 00001(0226000000940001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

WRECKS/remrks: WRECKS/remrks: AWOIS Item 7085 - Uncharted wreck. Signif Contact Resolved with Obj Det Cov SWMB; Desig and 200% SSS; Desig Sndg is L.D.

Listed in Field Submitted Appendix II as:

Status: AWOIS Item #7085 was verified with 200% SSS And 100% SWMB. The wreck is not charted and was recommended as an "ED," Existence Doubtful, wreck by the 1981 survey. The wreck was located at the center of the AWOIS search area defined by a 100- meter radius on the northwest corner of Caucus Shoal south of Perdido Key (Figure 4). A least depth of 10.1 feet (3.07 meters) was developed at 30-18-50.91N, 87-19-25.93W, obtained on the northeast corner of the wreck (Figure 5). The dimensions measured approximately 164 feet x 33 feet x 7 feet (50 meters x 10 meters x 2 meters). A WRECK object was created from the wreck's least depth position in the S-57 Feature File (H12061_S57_Feature.000).

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Report_Features.000	US 0000000148 00001	0.00	000.0	Primary
AWOIS_EXPORT	AWOIS # 7085	23.68	098.1	Secondary (grouped)

Hydrographer Recommendations

It is recommended that the wreck be charted with the surveyed depth and position.

Cartographically-Rounded Depth (Affected Charts):

10ft (11384_1, 11383_1, 11378_1, 11382_1)

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

S-57 Data

Geo object 1: Wreck (WRECKS)
Attributes: CATWRK - 2:dangerous wreck
 INFORM - 2009AB3091716_1830- 496- 861
 NINFOM - Add wreck.
 QUASOU - 6:least depth known
 SORDAT - 20100223
 SORIND - US,US,graph,H12061
 TECSOU - 2,3:found by side scan sonar,found by multi-beam
 VALSOU - 3.070 m
 WATLEV - 3:always under water/submerged

Office Notes

SAR NOTE: Feature seen in MBES data and four lines of SSS.

COMPILATION NOTE: Add 10 ft Wk and danger curve.

Feature Images

[Image file

T:\SarsInWork\H12061_J364_OS\AHB_H12061\PSS\images\AWOIS7085_10ftWreck_Add_2d.jpg does not exist.]

[Image file

T:\SarsInWork\H12061_J364_OS\AHB_H12061\PSS\images\AWOIS7085_10ftWreck_Add_3d.jpg does not exist.]

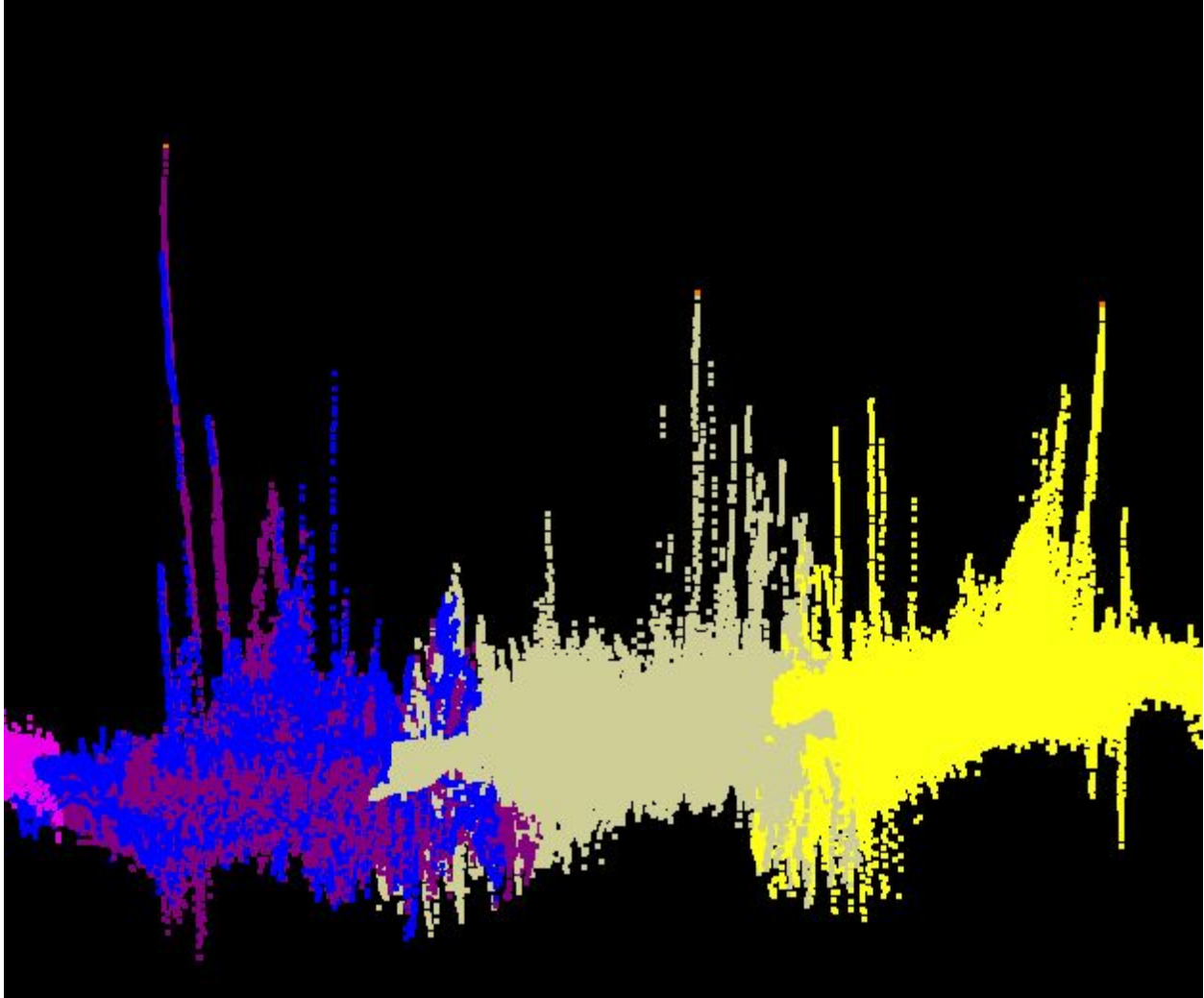


Figure 1.7.1

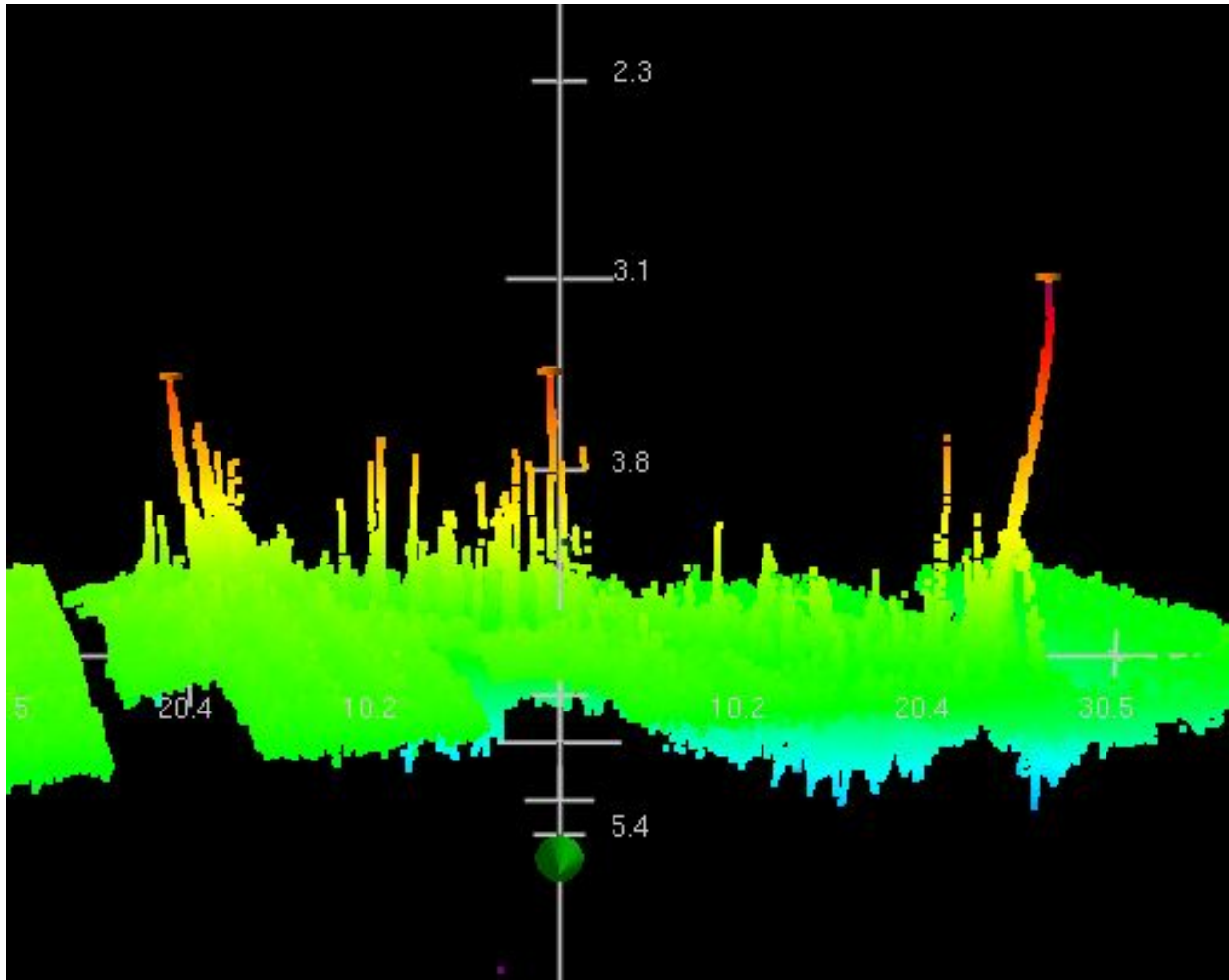


Figure 1.7.2

1.8) AWOIS #14303 - AWOIS #14303 - Disproval

No Primary Survey Feature for this AWOIS Item

Search Position: 30° 17' 48.0" N, 087° 19' 00.0" W
Historical Depth: [None]
Search Radius: 100
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

--8th CGD--09/08/1998: Fishing vessel sunk in Caucus Channel, FL. Will try to salvage. (ETR 09/08/08)
 --LNM 36/98-- (ETR 09/08/08)

Survey Summary

Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: Listed in the DR as:

H12061-10: A Wreck PA charted at 30-17-48.01N, 87-19-00.01W was disproved with 200% SSS and 100% SWMB. The least depth surveyed within the vicinity of the wreck area was 23.8 feet (7.25 meters) at 30-17-50.03N, 87-19-00.63W. See AWOIS Item #14303 under Appendix II - Survey Feature Report for additional information.

Listed in the Field Submitted Appendix II as:

Status: AWOIS Item #14303 was disproved with 200% SSS and 100% SWMB. It was identified as the wreck of the Sea Ray in the AWOIS file provided with the SOW and is charted as a wreck PA with an unknown depth (RNC 11384). No evidence of a wreck or obstruction was found by the side scan or multibeam sonar systems within the area defined by the 100-meter search radius. The least depth surveyed within the vicinity of the charted wreck area was 23.8 feet (7.25 meters) at 30-17-50.03N, 87-19-00.63W.

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 14303	0.00	000.0	Primary

Hydrographer Recommendations

It is recommended that the wreck symbol be removed from the chart and the AWOIS item be removed from the investigation list.

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Office Notes

SAR NOTE: There is no evidence of this feature in the SSS or MBES data.

COMPILATION NOTE: Concur - Delete wreck, PA.

1.9) AWOIS #14313 - AWOIS #14313 - Disproval

No Primary Survey Feature for this AWOIS Item

Search Position: 30° 14' 01.2" N, 087° 20' 40.7" W
Historical Depth: 17.68 m
Search Radius: 100
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

--H10383--NOS, 6/7/94: Divers identified several household type washing machines used to construct private artificial fishing reefs that litter the bottom in this area. Least depth of 58ft and height of 1.9ft off bottom was obtained at position 30/14/1.21N 87/20/40.69W. (ETR 09/08/08)

Survey Summary

Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: Listed in the DR as:

AWOIS Item #14313 - Disproved

Listed in the Field Submitted Appendix II as:

Status: AWOIS Item #14313 was disproved. It corresponds to a charted 58-foot obstruction (RNC 11382 – Obstn). The area defined by the 100-meter search radius and the entire charted obstruction area was covered with 200% SSS and 100% SWMB. No obstructions were found by the side scan or multibeam sonar systems. Two obstructions with approximate heights of 4 feet (1.2 meters) were surveyed roughly 1000 feet (300 meters) east of the charted obstruction and AWOIS search area (Figure 23). The least depth developed on the two objects is 54.9 feet (16.7 meters) at 30-14-02.90N, 87-20-28.38W (Figure 24), and they are included as OBSTRNs in the S-57 Feature File (H12061_S57_Feature.000).

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 14313	0.00	000.0	Primary

Hydrographer Recommendations

It is recommended that the charted obstruction be updated with the new position and least depth.

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Office Notes

SAR NOTE: There is no evidence of this feature in the SSS or MBES data.

COMPILATION NOTE: Concur - Delete 58 ft Obstn and danger curve.

1.10) AWOIS #14314 - AWOIS #14314 - Disproval

No Primary Survey Feature for this AWOIS Item

Search Position: 30° 13' 37.5" N, 087° 22' 33.4" W
Historical Depth: 15.54 m
Search Radius: 100
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

--H10383--NOS, 6/7/94: Divers identified an old automobile and a wire spool with a least depth of 50.82ft and height off bottom of 3.9ft located at 30/13/37.51N 87/22/33.12W. (ETR 09/08/08)

Survey Summary

Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: Listed in the DR as:

AWOIS Item #14314 - Disproved

Listed in the Field Submitted Appendix II as:

Status: AWOIS Item #14314, a charted 51-foot obstruction (RNC 11382 – Obstn), was disproved. The area defined by the 100-meter search radius and the entire charted obstruction area was covered with 200% SSS and 100% SWMB. No obstructions were found by the side scan or multibeam sonar systems. The least depth surveyed in the vicinity of the charted obstruction area was 53.4 feet (16.3 meters) at 30-13-33.60N, 87-22-33.73W.

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 14314	0.00	000.0	Primary

Hydrographer Recommendations

It is recommended that the obstruction symbol be removed from the chart and the AWOIS item be removed from the investigation list.

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Office Notes

SAR NOTE: There is no evidence of this feature in the SSS or MBES data.

COMPILATION NOTE: Delete 51ft Obsn and danger curve.

1.11) AWOIS #14302 - AWOIS #14302 - Disproval

No Primary Survey Feature for this AWOIS Item

Search Position: 30° 18' 48.0" N, 087° 18' 36.0" W
Historical Depth: [None]
Search Radius: 50
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

--8th CGD--08/01/04: 18ft P/C visible wreck on shoal. Salvaged before LNM. (ETR 09/08/08)

Survey Summary

Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: Listed in DR as:

H12061-8: A Wreck PA charted at 30-18-48.01N, 87-18-36.04W was disproved with 200% SSS and 100% SWMB. A least depth of 5.2 feet (1.6 meters) was surveyed at 30-18-46.95N, 87-18-35.88W. It is recommended that the wreck symbol be removed from the chart. See AWOIS Item #14302 under Appendix II - Survey Feature Report for additional information.

Listed in the Field Submitted Appendix II as:

Status: AWOIS Item #14302 was disproved. It is charted as a drying wreck situated on the east bank of Caucus Shoal, visible above water at MLLW (RNC 11384 - PA). The area defined by the 50-meter search radius was covered with 200% SSS and 100% SWMB. No evidence of a wreck was found by the side scan or multibeam sonar systems, particularly a wreck visible above chart datum. A least depth of 5.2 feet (1.6 meters) was surveyed at 30- 18-46.95N, 87-18-35.88W.

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 14302	0.00	000.0	Primary

Hydrographer Recommendations

It is recommended that the wreck symbol be removed from the chart and the AWOIS item resolved.

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Office Notes

SAR NOTE: There is no evidence of this feature in the SSS or MBES data.

COMPILATION NOTE: Concur - Delete visible wreck, PA.

1.12) AWOIS #8730 - AWOIS #8730 - Disproval

No Primary Survey Feature for this AWOIS Item

Search Position: 30° 17' 28.8" N, 087° 17' 07.5" W
Historical Depth: 10.06 m
Search Radius: 50
Search Technique: ES, MB
Technique Notes: GET UPDATED LEAST DEPTH AND POSITION

History Notes:

H10387/91--OPR-J452-HE; SIDE SCAN SONAR CONTACT INVEST. BY DIVERS AND DETERMINED TO BE A SMALL BOAT COVERED BY SAND WITH THE EXCEPTION OF RAILING AROUND THE BOW. SEVERAL TIRES AND METAL DEBRIS WERE FOUND IN THE VICINITY. LEAST DEPTH ON WRECK WAS 10.1M (33FT) IN POS. LAT.30-17-28.82N, LONG.087-17-07.48W; HEIGHT OFF THE THE BOTTOM WAS .3M (1.0FT). (ENTERED 8/93 MCR)

H11763, S-J917-NRT1-07; Entire AWOIS 8730 radius covered in 200% SSS coverage. No significant contacts were detected. Hydrographer recommends removing Wreck from chart. (Updated 11/5/09 KAK)

Survey Summary

Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: Listed in DR submitted Appendix II as:

Status: AWOIS Item #8730 was disproved with 200% SSS and 100% SWMB. It was reported by prior Survey H10387 as a small wreck with several tires and metal debris nearby. There was no evidence of obstructions or wrecks within the 50-meter search radius which overlapped with the larger search radius of AWOIS Item #7090. The least depth surveyed within the search area was 33.0 feet (10.1 meters) at 30-17-29.25N, 87-17-06.54W, which agrees well with the charted depth despite the absence of a wreck in the side scan or multibeam data.

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 8730	0.00	000.0	Primary

Hydrographer Recommendations

It is recommended that the obstruction remain uncharted and the AWOIS item be removed from the investigation list.

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Office Notes

SAR NOTE: Feature is a FOR INFORMATION AWOIS item. Item was not located. Item is not on the current chart edition.

COMPILATION NOTE: Feature not shown on chart #11384, edition #36, 20101201. No change in charting is recommended.

1.13) AWOIS #8731 - AWOIS #8731 - Disproval

No Primary Survey Feature for this AWOIS Item

Search Position: 30° 17' 48.9" N, 087° 17' 05.9" W
Historical Depth: 7.01 m
Search Radius: 50
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

H10387/91--OPR-J452-HE; SIDE SCAN SONAR CONTACT INVEST. BY DIVERS AND DETERMINED TO BE A SMALL BOAT AND AN ANCHOR. THE BOAT WAS ALMOST COMPLETELY COVERED AND THE ANCHOR WAS RECOVERED BY DIVERS. LEAST DEPTH WAS 7.0M (23FT) IN POS. LAT.30-17-48.89N, LONG.87-17-05.89W; HEIGHT OFF THE BOTTOM WAS .2M (.6FT). LORAN RATES ON WRECK WAS W-13225.1, X-47108.9, Y-30430.0, Z-64082.1. (ENTERED 8/93 MCR)

H11763, S-J917-NRT1-07; Entire AWOIS 8731 radius covered in 200% SSS coverage. No significant contacts were detected. Hydrographer recommends removing Wreck from chart. (Updated 11/5/09 KAK)

Survey Summary

Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: Listed in DR submitted Appendix II as:

Status: AWOIS Item #8731 was disproved. The area defined by the 50-meter search radius was covered with 200% SSS and 100% SWMB. No obstructions or wrecks were found by the side scan or multibeam sonar systems. The least depth surveyed within the search area is 33.6 feet (10.2 meters) at 30-17-48.80N, 87-17-06.15W

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 8731	0.00	000.0	Primary

Hydrographer Recommendations

It is recommended that the obstruction remain uncharted and the AWOIS item be removed from the investigation list.

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Office Notes

AR NOTE: Feature is a FOR INFORMATION AWOIS item. Item was not located. Item is not on the current chart edition.

COMPILATION NOTE: Feature not shown on chart #11384, edition #36, 20101201. No change in charting is recommended.

1.14) AWOIS #8732 - AWOIS #8732 - Disproval

No Primary Survey Feature for this AWOIS Item

Search Position: 30° 15' 23.2" N, 087° 16' 42.1" W
Historical Depth: 14.94 m
Search Radius: 200
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

HISTORY

H10387/91--OPR-J452-HE; SIDE SCAN SONAR CONTACT INVESTIGATED BY ì
DIVERS AND DETERMINED TO BE A CAR ALONG SIDE A LARGE TANK. A ì
LEAST DEPTH OF 15.1M (49FT) WAS OBTAINED ON THE TANK IN POS. ì
LAT.30-15-23.18N, LONG.87-16-42.08W; HEIGHT OFF THE BOTTOM OF ì
THE TANK WAS 1.8M (6FT). LORAN C RATES: W-13232.4, X-47097.3, ì
Y-30429.8, 64083.8. (ENTERED 8/93 MCR)

Survey Summary

Charts Affected: 11383_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: Listed in DR as:

H12061-21: A 49-foot Obstn charted at 30-15-23.98N, 87-16-41.70W was disproved with 200% SSS and 100% SWMB. The least depth surveyed in the vicinity of the obstruction was 55.2 feet (16.8 meters) at 30-15-26.61N, 87-16-47.62W. See AWOIS Item #8732 under Appendix II - Survey Feature Report for additional information.

Listed in the Field Submitted Appendix II as:

Status: AWOIS Item #8732 was disproved. It was reported as a sunken car along-side a large tank and is charted as a 49-foot obstruction (RNC 11383 - Obstn). The area defined by the 200-meter search radius included the charted obstruction area and was covered with 200% SSS and 100% SWMB. No obstructions of significant height were found by the side scan or multibeam sonar systems. The least depth surveyed within the AWOIS search area was 55.2 feet (16.8 meters) at 30-15-26.61N, 87-16-47.62W.

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 8732	0.00	000.0	Primary

Hydrographer Recommendations

It is recommended that the obstruction be removed from the chart and the AWOIS item be removed from the investigation list.

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Office Notes

SAR NOTE: There is no evidence of this feature in the SSS or MBES data.

COMPILATION NOTE: Delete 49ft Obstn and danger curve.

1.15) AWOIS #8733 - AWOIS #8733

No Primary Survey Feature for this AWOIS Item

Search Position: 30° 17' 14.2" N, 087° 16' 51.4" W
Historical Depth: 10.67 m
Search Radius: 50
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

HISTORY

H10387/91--OPR-J452-HE; SIDE SCAN SONAR CONTACT INVEST. BY DIVERS AND DETERMINED TO A LARGE ANCHOR, RISING 1.8M (6FT) OFF THE BOTTOM WITH A LEAST DEPTH OF 10.8M (35FT) IN POS. LAT.30-17-14.19N, LONG.87-16-51.37W. LORAN C: W-13233.1, X-47106.2, Y-30436.1, Z-64082.7. (ENTERED 8/93 MCR)

Survey Summary

Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: OBSTRN/remrks: AWOIS Item 8733 or 12466 - Verified; Signif Contact Resolved with Obj Det Cov SWMB; Desig Sndg is L.D.

Listed in the DR submitted Appendix II:

Status: AWOIS Item #8733 was verified. It was reported by prior Survey H10387 as a large anchor and is a duplicate of AWOIS Item #12466. The 50-meter search radius was covered with 200% SSS and 100% SWMB. The obstruction was observed in each of the side scan coverages and was resolved with object detection multibeam coverage (Figure 16). A least depth of 39.5 feet (12.0 meters) was developed at 30-17-14.06N, 87-16-52.08W. The object is included as an OBSTRN in the H12061 S-57 Feature File. The obstruction had been charted as a 35-foot obstruction (RNC 11384 – Obstrn (rep cov 35 ft 1993)) at the start of data collection; however, it has since been removed from the chart.

Status: AWOIS Item #12466 was verified. It was reported as a large anchor and is a duplicate of AWOIS Item #8733. A least depth of 39.5 feet (12.0 meters) was developed at 30-17-14.06N, 87-16-52.08W. See AWOIS Item #8733 for investigation details.

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 8733	0.00	000.0	Primary

Hydrographer Recommendations

Verified

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Office Notes

SAR NOTE: Feature seen in two lines of SSS and MBES data.

COMPILATION NOTE: AWOIS #12466 as discussed by the field unit is a duplicate of AWOIS #8733. The obstruction is not charted because it was formerly disproved by prior survey H11763 (2010) in error. AWOIS item #8733 is being updated by AWOIS #12466. See AWOIS #12466 for final charting recommendation of obstruction.

1.16) AWOIS #8734 - AWOIS #8734 - Disproval

No Primary Survey Feature for this AWOIS Item

Search Position: 30° 15' 09.3" N, 087° 18' 04.8" W
Historical Depth: 16.46 m
Search Radius: 50
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

HISTORY

H10387/91--OPR-J452-HE; SIDE SCAN SONAR CONTACT INVEST. BY ì
 DIVERS AND DETERMINED TO BE SAIL BOAT, APPROX. 25FT IN LENGTH AND ì
 RISING 1.5M (5FT) OFF THE BOTTOM. LEAST DEPTH DETERMINED TO BE ì
 16.5M (54FT) IN POS. LAT.30-15-09.3, LONG.87-18-04.8W. (ENTERED ì
 8/93 MCR)

Survey Summary

Charts Affected: 11383_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: Listed in the DR as:

H12061-22: A 54-foot Wk charted at 30-15-10.09N, 87-18-04.31W was disproved with 200% SSS and 100% SWMB. The least depth surveyed within the vicinity of the wreck area is 61.7 feet (18.8 meters) at 30-15-11.70N, 87-18-02.87W. See AWOIS Item #8734 under Appendix II - Survey Feature Report for additional information.

Listed in the Field Submitted Appendix II as:

Status: AWOIS Item #8734 was disproved. It was reported as a sunken sail boat and is charted as a 54-foot wreck (RNC 11383 - Wk). The area defined by the 50-meter search radius, which coincided with the charted wreck area, was covered with 200% SSS and 100% SWMB. No wrecks or obstructions were found by the side scan or multibeam sonar systems. The least depth surveyed within the vicinity of the charted wreck area is 61.7 feet (18.8 meters) at 30-15-11.70N, 87-18-02.87W.

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 8734	0.00	000.0	Primary

Hydrographer Recommendations

It is recommended that the wreck be removed from the chart and the AWOIS item be removed from the investigation list.

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Office Notes

SAR NOTE: There is no evidence of this feature in the SSS or MBES data.

COMPILATION NOTE: Delete 54ft Wk and danger curve.

1.17) AWOIS #8773 - AWOIS #8773 - Disproval

No Primary Survey Feature for this AWOIS Item

Search Position: 30° 19' 41.0" N, 087° 19' 06.0" W
Historical Depth: [None]
Search Radius: 50
Search Technique: VS,ES
Technique Notes: [None]

History Notes:

HISTORY

BP169162--AIR PHOTO REVISION, 1965; UNIDENTIFIED RUIN SHOWN;

CENTRAL POS. IN APPROX. POS. LAT.30-19-41N, LONG.87-19-06W (NAD 83).

FEATURE APPEARS TO BE APPROX. 100M IN LENGTH IN A 340 DEG T

ORIENTATION. POSITION SCALED FROM NOS CHT.11383 46TH ED, 1993. (ENTERED 11/93 MCR)

Survey Summary

Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: Listed in DR submitted Appendix II as:

Status: AWOIS Item #8773 was disproved. It was identified in the AWOIS database as unknown ruins located in a charted spoil area (RNC 11384) north of Perdido Key. A portion of the AWOIS search area defined by a 50-meter radius was investigated with SWMB up to the shallow depth limit of the system. The remainder of the search was conducted visually, which was listed as a valid means of investigation in the AWOIS database. No evidence of ruins or an obstruction was found with the multibeam system or with a visual search. Water visibility was approximately 8 feet at the time of the investigation. The following photos (Figures 19 - 21) were taken in the vicinity of Record 8773.

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 8773	0.00	000.0	Primary

Hydrographer Recommendations

It is recommended that the obstruction remain uncharted and the AWOIS item be removed from the investigation list.

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Office Notes

SAR NOTE: Feature is a FOR INFORMATION AWOIS item. Item was not located. Item is not on the current chart edition.

COMPILATION NOTE: Feature not shown on chart11384, edition#36, 20101201. No change in charting is recommended.

1.18) AWOIS #454 - AWOIS #454 - Disproval

No Primary Survey Feature for this AWOIS Item

Search Position: 30° 17' 30.7" N, 087° 18' 41.9" W
Historical Depth: [None]
Search Radius: 200
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

[None]

Survey Summary

Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: Listed in DR submitted Appendix II as:

Status: AWOIS Item #454 was disproved. It was identified as the wreck of the Bride of Lorne in the AWOIS database. The area defined by the 200-meter radius was covered with 200% SSS and 100% SWMB. No wrecks or obstructions were found by the side scan or multibeam sonar systems. The least depth surveyed within the AWOIS search area was 27.4 feet (8.35 meters) at 30-17-26.48N, 87-18-47.23W.

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 454	0.00	000.0	Primary

Hydrographer Recommendations

It is recommended that the obstruction remain uncharted and the AWOIS item be removed from the investigation list.

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Office Notes

SAR NOTE: Feature is a FOR INFORMATION AWOIS item. Item was not located. Item is not on the current chart edition.

COMPILATION NOTE: Item not shown on chart 11384, 36th., Edition, 20101201. No change in charting recommended.

1.19) AWOIS #458 - AWOIS #458 - Disproval**No Primary Survey Feature for this AWOIS Item**

Search Position: 30° 19' 06.7" N, 087° 18' 47.9" W
Historical Depth: [None]
Search Radius: 50
Search Technique: VS, S2, MB
Technique Notes: [None]

History Notes:

[None]

Survey Summary

Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:**Feature Correlation**

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 458	0.00	000.0	Primary

Hydrographer Recommendations

It is recommended that the obstruction remain uncharted and the AWOIS item be removed from the investigation list.

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Office Notes

SAR NOTE: Feature is a FOR INFORMATION AWOIS item. Item was not located. Item is not on the current chart edition.

COMPILATION NOTE: Feature not shown on chart 11384, 36th, Edition, 20101201. No change in charting recommended.

1.20) AWOIS #7080 - AWOIS #7080 - Disproval

No Primary Survey Feature for this AWOIS Item

Search Position: 30° 13' 19.8" N, 087° 16' 19.0" W
Historical Depth: 18.29 m
Search Radius: 300
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

SURVEY REQUIREMENT COMMENTS

IDENTIFY OBSTRUCTION AND ACQUIRE LEAST DEPTH AND POSITION

HISTORY

H9466/74WD--OPR-479-RU/HE-74; UNIDENTIFIED OBSTRUCTION, EXTENDS
3FT OFF BOTTOM, LOCATED IN LAT. 30-13-19N, LONG. 87-16-20W.

ESTIMATED HANG DEPTH-61FT, CLEARED BY 55FT. (ENTERED 1/89 SRB)

H10383/91--OPR-J452-HE; ONLY SIGNIFICANT SIDE SCAN SONAR
CONTACT IN THE SEARCH AREA WAS DIVER INVEST. AND PROVED
TO BE A WWII VINTAGE AIRCRAFT WING WITH LANDING GEAR STRUTS
STICKING STRAIGHT UP. LEAST DEPTH ON LANDING GEAR WAS 18.4M
(55FT) IN POS. LAT.30-13-19.76, LONG.87-16-19.022W. LORAN RATES:

W:13233.6, X:47087.1, Y:30424.9, Z:64084.7 (ENTERED 6/93 MCR)

Survey Summary

Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: Listed in the DR as:

H12061-25: A 60-foot/10-fathom Obstn charted at 30-13-21.34N, 87-16-18.42W was disproved with 200% SSS and 100% SWMB. A least depth of 65.2 feet/10.9 fathoms (19.9 meters) at 30-13-17.77N, 87-16-15.76W was surveyed in the vicinity of the charted obstruction. See AWOIS Item #7080 under Appendix II - Survey Feature Report for additional information.

Listed in the Field Submitted Appendix II as:

Status: AWOIS Item #7080, a charted 60-foot obstruction (RNC 11382 Obstn), was disproved. It was identified as a WWII Vintage Aircraft Wing by a survey completed in 1991. The area defined by the 300-meter search radius, which included the charted obstruction area, was covered with 200% SSS and 100% SWMB. No obstructions were found by the side scan or multibeam sonar systems. The least depth

surveyed within the AWOIS search area was 65.2 feet (19.9 meters) at 30-13-17.77N, 87-16-15.76W.

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 7080	0.00	000.0	Primary

Hydrographer Recommendations

It is recommended that the obstruction be removed from the chart and the AWOIS item be removed from the investigation list.

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Office Notes

SAR NOTE: There is no evidence of this feature in the SSS or MBES data.

COMPILATION NOTE: Delet 60ft Obstn and danger curve.

1.21) AWOIS #7081 - AWOIS #7081 - Disproval

No Primary Survey Feature for this AWOIS Item

Search Position: 30° 13' 15.7" N, 087° 18' 41.9" W
Historical Depth: [None]
Search Radius: 300
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

SURVEY REQUIREMENT COMMENTS

ACQUIRE LEAST DEPTH AND POSITION

HISTORY

H9466/74WD--OPR-479-RU/HE-74; DIVERS LOCATED THE BURNED REMAINS OF A VESSEL'S HULL EXTENDING 5FT OFF BOTTOM, HUNG 62FT (ESTIMATED). LOCATED IN LAT. 30-13-15N, LONG. 87-18-42W AND CHARTED AS SUBM DANG. WK (ENTERED 1/89 SRB)

H10383/91--OPR-J452-HE; SIDE SCAN SONAR CONTACT WITH UNDETERMINED HEIGHT FOUND GENERAL VICINITY OF ITEM. EVALUATOR RECOMMENDS THAT ITEM WAS NOT VERIFIED OR DISPROVED AND TO RETAIN AS CHARTED FROM PRIOR SURVEY. ADDITIONAL WORK IS RECOMMENDED. (ENTERED 6/93 MCR)

Survey Summary

Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: Listed in the DR as:

H12061-26: A wreck of unknown depth charted at 30-13-14.77N, 87-18-41.79W was disproved with 200% SSS and 100% SWMB. The least depth surveyed in the vicinity of the wreck was 64.3 feet/19.6 fathoms (19.6 meters) at 30-13-09.50N, 87-18-49.71W. See AWOIS Item #7081 under Appendix II - Survey Feature Report for additional information.

Listed in the Field Submitted Appendix II as:

Status: AWOIS Item #7081, a charted wreck of unknown depth (RNC 11382), was disproved. The area defined by the 300-meter search radius was covered with 200% SSS and 100% SWMB. No wrecks or obstructions were found by the side scan or multibeam sonar systems. One SSS contact was investigated with object detection multibeam coverage, but was found to be fish. The least depth surveyed within the

AWOIS search area was 64.3 feet (19.6 meters) at 30-13-09.50N, 87-18-49.71W.

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 7081	0.00	000.0	Primary

Hydrographer Recommendations

It is recommended that the wreck be removed from the chart and the AWOIS item be removed from the investigation list.

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Office Notes

SAR NOTE: There is no evidence of this feature in the SSS or MBES data.

COMPILATION NOTE: Concur - Delete dangerous sunken wreck.

1.22) AWOIS #7086 - AWOIS #7086 - Disproval

No Primary Survey Feature for this AWOIS Item

Search Position: 30° 19' 17.7" N, 087° 17' 59.9" W
Historical Depth: [None]
Search Radius: 100
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

HISTORY

LNM34/70--60-FOOT BARGE REP. SUNK IN APPROX. POS. LAT. 30-19-17N, LONG. 87-18-00W. UNMARKED. MARINERS ADVISED TO EXERCISE CAUTION IN AREA.

CL1810/76--CAS; PE/76; FATHOMETER, WIRE DRAG, AND DIVER SEARCHES NEGATIVE.

H9968/81--OPR-J217-81; PSR ITEM 309 (INFORMATION ITEM); NOT LOCATED; AREA SALVAGE COMPANIES AND LOCAL DIVE SHOPS HAD NO KNOWLEDGE OF WRECK. HYDROGRAPHER RECOMMENDS RETAINING WRECK AS CHARTED WITH "PD" NOTATION. EVALUATOR RECOMMENDS CHARTING AS "ED" SINCE SHIFTING SHOAL ("MIDDLE GROUND") MAY HAVE COVERED WRECK.

Survey Summary

Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: Listed in DR submitted Appendix II as:

Status: AWOIS Item #7086 was disproved with 200% SSS and 100% SWMB. It was reported as a sunken barge in 1970; no evidence of a wreck or obstruction was found with side scan or multibeam sonar systems. A least depth of 10.6 feet (3.2 meters) at 30-19- 16.47N, 87-17-58.38W was developed within the AWOIS search area defined by the 100- meter radius.

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 7086	0.00	000.0	Primary

Hydrographer Recommendations

It is recommended that the obstruction/wreck remain uncharted and the AWOIS item be removed from the investigation list.

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Office Notes

SAR NOTE: Feature is a FOR INFORMATION AWOIS item. Item was not located. Item is not on the current chart edition.

COMPILATION NOTE: Feature not shown on chart 11384, 36th. Edition, 20101201. No change in charting recommended.

1.23) AWOIS #7089 - AWOIS #7089 - Disproval

No Primary Survey Feature for this AWOIS Item

Search Position: 30° 16' 30.7" N, 087° 16' 57.9" W
Historical Depth: 10.67 m
Search Radius: 200
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

H9466/74WD--OPR-479-RU/HE-74; DIVER INVESTIGATION FOUND OLD CAR BODY EXTENDS 3FT OFF BOTTOM, HUNG AT 36FT, CLEARED BY 35FT. LOCATED IN LAT 30-16-30N, LONG 87-16-58W. (ENTERED 2/89 SRB)

H10387/91--OPR-J452-HE; HYDROGRAPHER REPORTED 200% SIDE SCAN SONAR INVEST. WITH NEGATIVE RESULTS. EVALUATOR CONCLUDES THAT 200% COVERAGE NOT ACCOMPLISHED DUE TO VERY LOW CONTRAST SONARGRAMS; RECOMMEND TO RETAIN AS CHARTED. (UPDATED 8/93 MCR)

Survey Summary

Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: Listed in DR as:

H12061-14: Two (2) 35-foot Obstns charted at 30-16-30.88N, 87-16-57.92W and 30-16-30.32N, 87-17-04.84W, approximately 600 feet (190 meters) apart, were disproved with 200% SSS and 100% SWMB. The least depth surveyed within the obstruction area was 37.3 feet (11.4 meters) at 30-16-30.90N, 87-17-06.74W. See AWOIS Item #'s 7089 and 12468 under Appendix II - Survey Feature Report for additional information.

Listed in the Field Submitted Appendix II as:

Status: AWOIS Item #7089 was disproved. It was reported as an old car body and charted as a 35-foot obstruction (RNC 11384 – Obstn). The area defined by the 200-meter search radius included the charted obstruction area and was covered with 200% SSS and 100% SWMB. No obstructions with significant heights were found by the side scan or multibeam sonar systems. The least depth developed within the search radius area was 37.6 feet (11.5 meters) at 30-16-30.12N, 87-17-05.02W, located over the adjacent charted 35-foot obstruction investigated as AWOIS Item #12468.

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 7089	0.00	000.0	Primary

Hydrographer Recommendations

It is recommended that the obstruction be removed from the chart and the AWOIS item be removed from the investigation list.

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Office Notes

SAR NOTE: There is no evidence of this feature in the SSS or MBES data.

COMPILATION NOTE: Delete 35 ft wire drag obstruction and danger curve.

1.24) AWOIS #7090 - AWOIS #7090 - Disproval

No Primary Survey Feature for this AWOIS Item

Search Position: 30° 17' 27.7" N, 087° 17' 14.9" W
Historical Depth: 7.62 m
Search Radius: 200
Search Technique: S2,MB
Technique Notes: [None]

History Notes:

H9466/74WD--OPR-479-RU/HE-74; PILE OF METAL BLOCKS EXTENDING 1FT OFF BOTTOM, HUNG AT 30FT (ESTIMATED), CLEARED IN ONE DIRECTION BY 25FT. LOCATED IN LAT 30-17-27N, LONG 87-17-15W. (ENTERED 2/89 SRB)

H10387/91--OPR-J452-HE; HYDROGRAPHER REPORTS 200% SIDE SCAN SONAR COVERAGE WITH NEGATIVE RESULTS. EVALUATOR CONCLUDES THAT 200% COVERAGE WAS NOT OBTAINED DUE TO VERY LOW CONTRAST SONAR GRAMS; RECOMMENDS TO RETAIN ITEM AS CHARTED. (UPDATED 8/92 MCR)

H11763, S-J917-NRT1-07; Entire AWOIS 7090 radius covered in 200% SSS coverage. No significant contacts were detected. Hydrographer recommends removing Obstruction from the chart. (Updated 11/5/09 KAK)

Survey Summary

Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: Listed in DR submitted Appendix II as:

Status: AWOIS Item #7090 was disproved. It was reported as a pile of metal blocks extending 1 foot off the bottom. The area defined by the 200-meter search radius was covered with 200% SSS and nearly complete SWMB. No obstructions were found by the side scan or multibeam sonar systems. The least depth surveyed within the search area was 31.8 feet (9.7 meters) at 30-17-31.68N, 87-17-20.40W.

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 7090	0.00	000.0	Primary

Hydrographer Recommendations

Disproved

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Office Notes

SAR NOTE: Feature is a FOR INFORMATION AWOIS item. Item was not located. Item is not on the current chart edition.

COMPILATION NOTE: Feature Not shown on chart 11384, edition #36, 20101201. No change in charting is recommended.

1.25) AWOIS #7092 - AWOIS #7092 - Disproval

No Primary Survey Feature for this AWOIS Item

Search Position: 30° 12' 20.7" N, 087° 16' 34.9" W
Historical Depth: 17.68 m
Search Radius: 200
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

HISTORY

H9466/74WD--OPR-479-RU/HE-74; HUNK OF METAL EXTENDING 3FT OFF

BOTTOM, HUNG AT 63FT, CLEARED BY 58FT. LOCATED IN LAT

30-12-20N, LONG 87-16-35W. (ENTERED 2/89 SRB)

H10383/91--OPR-J452-HE; A SIDE SCAN SONAR CONTACT OF UNDETERMINED HGT.

WAS FOUND ON SONARGRAMS DURING OFFICE PROCESSING. EVALUATOR

RECOMMENDS ITEM WAS NOT VERIFIED OR DISPROVED AND THAT ADDITIONAL

WORK IS RECOMMENDED; RETAIN AS CHARTED. (UPDATED 6/93 MCR)

Survey Summary

Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: OBSTRN/remrks: AWOIS 7092 - Verified; Signif Contact Resolved with Obj Det Cov SWMB; Desig Sndg is L.D.

Listed in the DR as:

H12061-27: A 58-foot/9 ½-fathom Obstrn charted at 30-12-22.06N, 87-16-35.85W was verified with a new position and depth. It was covered with 200% SSS and object detection multibeam. A least depth of 62.0 feet/10.3 fathoms (18.9 meters) was developed at 30-12-18.51N, 87-16-41.67W with object dimensions of 33 feet x 16 feet x 3.5 feet (10 meters x 4.9 meters x 1.1 meters). See AWOIS Item #7092 under Appendix II - Survey Feature Report for additional information.

Listed in the Field Submitted Appendix II as:

Status: AWOIS Item #7092 was verified with a new position. It was reported as a hunk of metal extending 3 feet off the bottom and charted as a 58-foot obstruction (RNC 11382 – Obstrn). The area defined by the 200-meter search radius coincided with the charted obstruction area and was covered with 200% SSS and 100% SWMB. The obstruction was observed in each of the side scan coverages and was resolved with object detection multibeam coverage (Figures 6 and 7). A least depth of 62 feet (18.9 meters) was developed at 30-12-18.51N, 87-16-41.67W with object dimensions of 33 feet x 16 feet x 3.5 feet (10

meters x 4.9 meters x 1.1 meters). The object is included as an OBSTRN in the S-57 Feature File (H12061_S57_Feature.000). It is recommended that the charted obstruction be updated with the new position and least depth.

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 7092	0.00	000.0	Primary
H12061_Report_Features.000	US 0000002683 00001	195.33	068.9	Secondary (grouped)
H12061_Report_Features_1.000	US 0000004093 00001	195.33	068.9	Secondary (grouped)

Hydrographer Recommendations

It is recommended that the charted obstruction be updated with the new position and least depth.

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Office Notes

SAR NOTE: This feature is apparent in two lines of mainscheme MBES and two lines of SSS. At the time of feature development however, the feature is not as shoal as it was during mainscheme.

COMPILATION NOTE: Concur with clarification - Office processing determined that the feature is insignificant when compared to the surrounding depth data (only 2 feet off seafloor) and does not pose a threat to surface navigation that warrants being charted as a dangerous obstruction. Delete 58ft wire drag Obstrn and danger curve. Chart 63ft depth.

1.26) AWOIS #7093 - AWOIS #7093 - Charted Foul Area - Retain

No Primary Survey Feature for this AWOIS Item

Search Position: 30° 19' 48.7" N, 087° 18' 54.9" W
Historical Depth: [None]
Search Radius: 200
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

BP41339/34--1934 AIR PHOTO COMPILATION, UPDATED TO 1946. ROW OF ROCKS, UNCOVERING AT MLLW CHARTED IN VICINITY OF LAT. 30-19-48N, LONG. 87-18-55W.

H9995/83--OPR-J217-HSB-81; ITEM 310; LOCATED. APPEARS TO BE REMAINS OF JETTY SHOWN ON PRIOR SURVEY. EVALUATOR RECOMMENDS CHARTED ROW OF ROCKS BE REVISED TO FOUL LIMITS AND CHARTED ACCORDING TO PRESENT SURVEY. AREA COVERED 1 FOOT AT MLLW ON PRESENT SURVEY. DIVERS FOUND DREDGE PIPES AND OTHER WRECKAGE FROM THE SHORE TO LAT. 30-19-53.75N, LONG. 87-19-13.2W OFFSHORE. (SEE AWOIS 7094, PSR NO.311) (ENTERED 2/3/89 SJV)

Survey Summary

Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

OBSTRN/remrks: Listed in DR (submitted Appendix II)

Status: AWOIS Item #7093 was verified as a row of rocks that are potentially the ruins of a breakwater. Due to the shallow depths west of lighted buoy G"13," it was not possible to obtain SSS and SWMB coverage over the entire AWOIS search area defined by a 200-meter radius. However, full coverage with 100% SWMB was obtained over the obstruction that was also visible in both SSS coverages. The charted Foul Area (RNC 11384) is significantly larger in size than the dimensions of the surveyed ruins (Figure 8). The obstruction's approximate dimensions measured 150 feet x 20 feet x 2.25 feet (48 meters x 6 meters x 0.7 meters) (Figure 9). A least depth of 4.87 feet (1.5 meters) was developed at 30-19-48.82N, 87-18-53.18W. The object is included as an OBSTRN in the S-57 Feature File (H12061_S57_Feature.000).

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 7093	0.00	000.0	Primary

Hydrographer Recommendations

It is recommended that the charted obstruction be updated with the surveyed position and least depth.

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 1:depth known
TECSOU - 3:found by multi-beam

Office Notes

SAR NOTE: This feature was seen in SSS and MBES data.

COMPILATION NOTE: During office processing it was determined that the Foul Area should be enlarged to incorporate AWOIS items #7094 and #12465. Both items were visually investigated with some sidescan and multibeam coverage. This feature was created as a row of rocks, uncovering at MLLW from compilation of Aerial Photography 1934 and updated in 1946. It is recommended that the charted FOUL AREA be retained and the limits be revised to incorporate the two AWOIS items #7094 and #12465.

1.27) AWOIS #7094 - AWOIS #7094 - Disproval

No Primary Survey Feature for this AWOIS Item

Search Position: 30° 19' 48.7" N, 087° 18' 51.6" W
Historical Depth: [None]
Search Radius: 100
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

BP41339/34--VISIBLE WRECK LOCATED BY AIR PHOTO COMPILATION UPDATED TO 1946.

CL398/48--CPR; WRECK NO LONGER VISIBLE; REVISED TO SUBMERGED.

H9995/83--OPR-J217-HSB-81; ITEM 311; FOUND ON MAIN SCHEME. HYDROGRAPHY IN LAT 30-19-48.01, LONG 87-18-51.70W. LD OF 1.0 FOOT BY SOUNDING POLE. EVALUATOR RECOMMENDS CHARTING A WRECK COVERED 1 FOOT AS SURVEYED AND DELETING PRESENTLY CHARTED DANGEROUS SUBM WRECK. (ENTERED 2/3/89 SJV)

Survey Summary

Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

Status: AWOIS Item #7094 was investigated to full potential given the shallow depths within the search area defined by the 100-meter radius. It was too shallow over the wreck position reported by prior Survey H9995 to survey with side scan or multibeam sonar. Item was observed as a result of a visual search within the assigned search radius. The exposed portion of the item measures about 0.5m x 1.0 m horizontally and has a verified tide-corrected least depth of 3.74 feet (1.14 meters) as measured with a fiberglass stadia rod. The exposed portion of the item was developed at 30-19-48.88N, 87-18-51.42W. The uncovered section of the item appears to be ferrous metal covered in algae. Record 7094 is in the vicinity of Records 12464 and 12465.

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 7094	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Wreck (WRECKS)
Attributes: CATWRK - 2:dangerous wreck
QUASOU - 6:least depth known
TECSOU - 5:found by lead-line

Office Notes

COMPILATION NOTES: The wreck falls within a charted FOUL AREA (AWOIS #7093). Wreck is not shown on chart #11384, Edition #36, 20101201. No change in charting is recommended. See AWOIS #7093 for additional charting information.

1.28) AWOIS #7075 - AWOIS #7075 - Disproval

No Primary Survey Feature for this AWOIS Item

Search Position: 30° 18' 01.7" N, 087° 16' 39.9" W
Historical Depth: [None]
Search Radius: 200
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

SURVEY REQUIREMENT COMMENTS

ACQUIRE LEAST DEPTH AND POSITION

HISTORY

H9466/74WD--OPR-479-RU/HE-74; OLD ANCHOR EXTENDS 6FT OFF BOTTOM, ESTIMATED HANG DEPTH 27FT, NOT CLEARED. LOCATED IN LAT. 30-18-01N, LONG. 87-16-40W. CHARTED AS SUBM OBSTRUCTION, NO LEAST DEPTH PROVIDED (ENTERED 1/89 SRB)

FE361SS/91-- OPR-J452-HE; TWO CONTACTS LOCATED BY SIDE SCAN SONAR WITHIN SEARCH AREA. NEITHER WAS THE ANCHOR SOUGHT. 25-METER DIVER CIRCLE SEARCH NEGATIVE. EVALUATOR RECOMMENDS RETAINING AS CHARTED AND CHARTING SEVERAL "METAL BLOCKS" LOCATED IN LAT. 30-18-01.39N, LONG. 87-16-43.05W. FATHOMETER DEPTH OF 8.7 METERS (28 FEET). THESE WERE DOVE ON AND FOUND TO RISE LESS THAN 1 FOOT ABOVE THE BOTTOM (SEE AWOIS NO. 8750). SECOND CONTACT FOUND TO BE A PATIO CHAIR LYING ON BOTTOM. NOT RECOMMENDED FOR CHARTING. (UP 9/3/93, SJV)

Survey Summary

Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: Status: AWOIS Item #7075, a charted obstruction (RNC 11384 – Obsn, depth unknown), was disproved with 200% SSS and 100% SWMB. It was initially reported as an old anchor then modified to several metal blocks and a patio chair by a subsequent survey. An obstruction, potentially the "metal blocks," was located in the vicinity of a charted 28-foot obstruction (RNC 11384 – Obsn). A least depth of 28.7 feet (8.75 meters) was developed at 30-18-01.61N, 87-16-41.95W; however, it is better correlated with AWOIS Item # 8750.

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 7075	0.00	000.0	Primary

Hydrographer Recommendations

It is recommended that the charted obstruction at the center of AWOIS Item #7075's search area be removed from the chart.

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Office Notes

SAR NOTE: There is a nearby feature that falls between the two charted obstns and within the two AWOIS radii. Defer to compilation for charting recommendation.

COMPILATION NOTE: Feature disproved at charted location, but feature resides in AWOIS #8750 that is included inside the 7075 radius. Delete charted obstruction. See AWOIS #8750 for charting recommendation on feature.

Feature Images

[Image file
T:/SarsInWork/H12061_J364_OSI/AHB_H12061/PSS/images/AWOIS8750_28ftObstrn_2d.jpg does not exist.]

1.29) AWOIS #7079 - AWOIS #7079 - Disproval

No Primary Survey Feature for this AWOIS Item

Search Position: 30° 13' 37.7" N, 087° 17' 20.9" W
Historical Depth: [None]
Search Radius: 300
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

SURVEY REQUIREMENT COMMENTS

IDENTIFY OBSTRUCTION AND ACQUIRE LEAST DEPTH AND POSITION

HISTORY

H9466/74WD--OPR-479-RU/HE-74; 60FT HANG, NOT INVESTIGATED AND NOT CLEARED, LOCATED IN LAT. 30-13-37N, LONG. 87-17-21W. CHARTED AS SUBM OBSTRUCTION. (ENTERED 1/89 SRB)

Survey Summary

Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: Listed in DR submitted Appendix II as:

Status: AWOIS Item #7079 was disproved. It was listed as an unknown obstruction in the AWOIS database. The area defined by the 300-meter search radius was covered with 200% SSS and 100% SWMB. No obstructions were found by the side scan or multibeam sonar systems. The least depth surveyed within the AWOIS search area is 63.1 feet (19.2 meters) at 30-13-38.24N, 87-17-16.42W in the vicinity of a charted 62-foot sounding (RNC 11382).

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 7079	0.00	000.0	Primary

Hydrographer Recommendations

It is recommended that the obstruction remain uncharted and the AWOIS item be removed from the investigation list.

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Office Notes

SAR NOTE: Feature is a FOR INFORMATION AWOIS item. Item was not located. Item is not on the current chart edition.

COMPILATION NOTE: Feature not shown on chart 11382, 41st., Edition, 20100501. No change in charting is recommended.

1.30) AWOIS #12464 - AWOIS #12464 - Disproval

No Primary Survey Feature for this AWOIS Item

Search Position: 30° 19' 48.0" N, 087° 19' 00.0" W
Historical Depth: [None]
Search Radius: 100
Search Technique: VS, S2, MB
Technique Notes: [None]

History Notes:

LNM09/97 - ADD SYMBOL: "SUBMERGED WRECK (PA)" (20FT P/C) (CGD8 019/97) AT 30-19-48.0N - 087-19 00.0W

Survey Summary

Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

WRECKS/remrks: Listed in the DR as:

AWOIS Item #12464 - Disproved

Listed in the Field Submitted Appendix II as:

Status: AWOIS Item #12464 was disproved. It was not possible to conduct a multibeam or side scan investigation due to the water depth (

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 12464	0.00	000.0	Primary

Hydrographer Recommendations

Disproved

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Office Notes

SAR NOTE: Do not concur with field unit. There is no MBES or SSS data over this feature.

COMPILATION NOTE: During office processing it was determined that visual inspection performed by field unit was adequate to disprove feature. Delete charted dangerous wreck, PA.

1.31) AWOIS #12465 - AWOIS #12465 - Disproval

No Primary Survey Feature for this AWOIS Item

Search Position: 30° 19' 49.8" N, 087° 18' 50.2" W
Historical Depth: [None]
Search Radius: 100
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

LNM06/95 - ADD SYMBOL "DANGEROUS WRECK (PA)" AND LEGEND: "(3 FT REP)" (DERELICT BARGE) (CGD8 018-95/NOS 155)

Survey Summary

Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: Listed in the DR as:

AWOIS Item #12465 - Disproved

Listed in the Field Submitted Appendix II as:

Status: AWOIS Item #12465, a charted wreck (RNC 11384 Wk, 3ft rep 1995) was disproved. The AWOIS search area accessible to the survey vessel was investigated with side scan and multibeam sonar. The remaining portion of the search area defined by a 100- meter radius was visually inspected, with visibility conditions exceeding water depth. A wreck, specifically a barge, was not found via SSS, SWMB, or visual investigation. Record 12465 is in the vicinity of Records 7094 and 12464. See photographs for Record 12464.

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 12465	0.00	000.0	Primary

Hydrographer Recommendations

Disproved

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Office Notes

SAR NOTE: There is no evidence of this feature in the SSS or MBES data.

COMPILATION: The wreck falls near a charted FOUL AREA (AWOIS #7093). A partial side scan sonar and multibeam investigation was performed over the charted Wk (3 ft rep 1995). The remaining area was visually investigated. It is recommended that the Wk (3 ft rep 1995) be deleted and the Foul Area be adjusted to incorporate the wreck area. See AWOIS #7093 for additional charting information.

1.32) AWOIS #12467 - AWOIS #12467 - Disproval

No Primary Survey Feature for this AWOIS Item

Search Position: 30° 17' 57.6" N, 087° 17' 35.9" W
Historical Depth: 7.62 m
Search Radius: 100
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

H-10387/1991--OPR-J452-HE - DIVERS FOUND A LARGE MUSHROOM ANCHOR, SHANK DOWN, BURIED IN THE SAND. A LEAST DEPTH OF 7.7 METERS (25 FT) AND A HEIGHT OFF THE BOTTOM OF .2 METERS (.7 FT) WAS OBTAINED AT THE FOLLOWING POSITION: 30°15'57.57"N 087°17'35.88"W. IT APPEARS THAT THE MCD CARTOGRAPHER MISTAKENLY ASSUMED THE OBSTRUCTION WAS THE SOUNDING VALUE TO THE RIGHT OF THE OBSTRUCTION LABEL ON THE SMOOTH SHEET INSTEAD OF THE CORRECT VALUE POSITIONED TO THE IMMEDIATE LEFT OF THE LABEL.

Survey Summary

Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: Listed in DR submitted Appendix II as:

Status: AWOIS Item #12467 was disproved. It was reported as a large anchor by prior Survey H10387. The area defined by the 100-meter search radius was covered with 200% SSS and 100% SWMB. No obstructions were found by the side scan or multibeam sonar systems. The least depth surveyed within the search area is 23.9 feet (7.3 meters) at 30-17- 58.02N, 87-17-39.04W. It is recommended that the obstruction remain uncharted and the AWOIS item be removed from the investigation list.

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 12467	0.00	000.0	Primary

Hydrographer Recommendations

Disproved.

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Office Notes

SAR NOTE: Feature is a FOR INFORMATION AWOIS item. Item was not located. Item is not on the current chart edition.

COMPILATION NOTE: Feature not shown on chart #11384, edition #36, 20101201. No change in charting is recommended.

1.33) AWOIS #12468 - AWOIS #12468 - Disproval

No Primary Survey Feature for this AWOIS Item

Search Position: 30° 16' 30.6" N, 087° 17' 04.9" W
Historical Depth: 10.67 m
Search Radius: 50
Search Technique: S2, MB
Technique Notes: PLEASE UPDATE DEPTH AND POSITION ON OBSTRUCTION

History Notes:

H10387/1991--OPR-J452-HE; OBSTRUCTION LOCATED IN POSITION 30 16 30.6N, 087 17 04.9W WITH A DIVER LEAST DEPTH OF 35 FEET. HEIGHT OFF THE BOTTOM WAS 2.0 FEET. OBSTRUCTION WAS FOUND TO BE METAL CRIBBING.

Survey Summary

Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 12468	0.00	000.0	Primary

Hydrographer Recommendations

It is recommended that the obstruction be removed from the chart and the AWOIS item be removed from the investigation list.

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Office Notes

SAR NOTE: There is no evidence of this feature in the SSS or MBES data.

COMPILATION NOTE: Concur - Delete 35ft Obstn and danger curve.

1.34) AWOIS #12469 - AWOIS #12469 - Disproval

No Primary Survey Feature for this AWOIS Item

Search Position: 30° 17' 20.8" N, 087° 17' 26.0" W
Historical Depth: 10.06 m
Search Radius: 50
Search Technique: S2, MB
Technique Notes: OBTAIN UPDATED POSITION AND LEAST DEPTH

History Notes:

H10387/91--OPR-J452-HE; IDENTIFIED THIS ITEM (TARGET #4 IN DR) AS SEVERAL TIRES TIED TOGETHER WITH A LEAST DEPTH OF 10.2 METERS (33 FEET). HEIGHT OFF THE BOTTOM WAS .5 METERS (1.6 FEET).

H11763, S-J917-NRT1-07; Entire AWOIS 12469 radius covered in 200% SSS coverage. No significant contacts were detected. Hydrographer recommends removing Obstruction from chart. (Updated 11/5/09 KAK)

Survey Summary

Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: Listed in DR submitted Appendix II as:

Status: AWOIS Item #12469 was disproved. It was reported as several tires on the bottom by prior Survey H10387. The area defined by the 50-meter search radius was covered with 200% SSS and 100% SWMB. No obstructions were found by the side scan or multibeam sonar systems. The least depth surveyed in the search area was 36.3 feet (11.1 meters) at 30- 17-21.02N, 87-17-26.21W.

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 12469	0.00	000.0	Primary

Hydrographer Recommendations

It is recommended that the obstruction remain uncharted and the AWOIS item be removed from the investigation list.

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Office Notes

SAR NOTE: Feature is a FOR INFORMATION AWOIS item. Item was not located. Item is not on the current chart edition.

COMPILATION NOTE: Feature not shown on chart #11384, edition #36, 20101201. No change in charting is recommended.

1.35) AWOIS #12470 - AWOIS #12470 - Disproval

No Primary Survey Feature for this AWOIS Item

Search Position: 30° 17' 25.0" N, 087° 17' 13.3" W
Historical Depth: 10.67 m
Search Radius: 50
Search Technique: S2, MB
Technique Notes: OBTAIN UPDATED POSITION AND LEAST DEPTH

History Notes:

H10387/91--OPR-J452-HE; IDENTIFIED THIS ITEM (TARGET #3 IN DR) AS A PIECE OF METAL PIPE PROTRUDING FROM THE BOTTOM WITH A LEAST DEPTH OF 10.8 METERS (36.0 FT). IT'S HEIGHT OFF THE BOTTOM WAS DETERMINED TO BE .2 METERS (.6 FEET).

H11763, S-J917-NRT1-07; Entire AWOIS 12470 radius covered in 200% SSS coverage. No significant contacts were detected. Hydrographer recommends removing Obstruction from the chart. (Updated 11/5/09 KAK)

Survey Summary

Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: Listed in DR submitted Appendix II as:

Status: AWOIS Item #12470 was disproved with 200% SSS and nearly complete SWMB. It was reported by prior Survey H10387 as a small piece of metal pipe. The area defined by the 50-meter search radius was nested inside the larger search radius of AWOIS Item # 7090. No evidence of a metal pipe or any obstructions of significant height were found with the side scan or multibeam sonar systems. A least depth of 33.8 feet (10.3 meters) at 30-17- 26.50N, 87-17-12.89W was surveyed within the search area, which agrees well with the surrounding charted depths (RNC 11384).

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 12470	0.00	000.0	Primary

Hydrographer Recommendations

It is recommended that the obstruction remain uncharted and the AWOIS item be removed from the investigation list.

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Office Notes

SAR NOTE: Feature is a FOR INFORMATION AWOIS item. Item was not located. Item is not on the current chart edition.

COMPILATION NOTE: Not shown on chart 11384, edition #36, 20101201. No change in charting is recommended.

1.36) AWOIS #8443 - AWOIS #8443 - Disproval

No Primary Survey Feature for this AWOIS Item

Search Position: 30° 19' 41.4" N, 087° 19' 15.4" W
Historical Depth: [None]
Search Radius: 50
Search Technique: VS
Technique Notes: [None]

History Notes:

HISTORY

CL1810/76;CAS, OPR-511-PE-76; WRECK PROTRUDING 3 FT ABOVE MLW;
 LOCATED IN POS. LAT.30-19-40.7N, LONG.87-19-15.5W (NAD 27). THE
 WRECK IS 30 FT IN LENGTH AND WITHIN 30 FT OF THE SHORE. (ENTERED
 4/93 MCR)
 CL701/79--USPS; WRECK NO LONGER VISIBLE.
 LNM35/79--REFERENCE TO CL701/79.

Survey Summary

Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: Listed in DR submitted Appendix II as:

Status: AWOIS Item #8443 was disproved. It was reported in 1976 as a drying wreck located in a charted spoil area (RNC 11384) north of Perdido Key. A portion of the AWOIS search area defined by a 50-meter radius was investigated with SWMB; however, a visual search was all that was required. No evidence of a wreck was found with the multibeam sonar system or with a visual search. Water visibility was approximately 8 feet at the time of the investigation. AWOIS Items #8443 and #8773 are both located within a charted Spoil Area (RNC 11384). The following photos (Figures 10-12) were taken in the vicinity of Record 8443.

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 8443	0.00	000.0	Primary

Hydrographer Recommendations

It is recommended that the obstruction remain uncharted and the AWOIS item be removed from the investigation list.

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Office Notes

SAR NOTE: Feature is a FOR INFORMATION AWOIS item. Item was not located. Item is not on the current chart edition.

COMPILATION NOTE: Feature falls within a charted Spoil Area. Not shown on chart #11384, edition #36, 20101201. No change in charting is recommended.

1.37) AWOIS #7865 - AWOIS #7865 - Disproval

No Primary Survey Feature for this AWOIS Item

Search Position: 30° 18' 02.7" N, 087° 18' 04.2" W
Historical Depth: [None]
Search Radius: 100
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

SURVEY REQUIREMENT COMMENTS
SEARCH AREA INDICATED ON PSR.

HISTORY

LN42/83--8TH CGD;(363-83);UNKNOWN 16 FT. PLEASURE CRAFT IS REPORTED SUNK APPROXIMATELY 150 FT. SOUTH OF PENSACOLA BAY LIGHTED BUOY 4 IN PA LAT 30-18-02N, LONG 87-18-05W (NAD27); CHARTING STATED THAT REPORTED POSITION FALLS WITHIN CAUCUS CHANNEL LIMITS; SCALED POSITION (150 FT. SOUTH OF BUOY) IS PA LAT 30-18-02N, LONG 87-18-04.3W (NAD27).

LN48/83--8TH CGD; WRECK COULD NOT BE LOCATED; PA ON CHART REVISED TO PD. (ENTERED MSD 10/90)

H10387/91--OPR-J452-HE; HYDROGRAPHER REPORTS 200% SIDE SCAN SONAR COVERAGE WITH NEGATIVE RESULTS AND THAT THE COE IS DREDGING THE CAUCUS CHANNEL TO 44FT. IN ADDITION, THE C.O.E. PROVIDED DOCUMENTATION (IN DR) THAT AFTER A DREDGE SURVEY DISPROVES THE WRECK. EVALUATOR RECOMMENDS DELETION FROM THE CHARTS. (UPDATED 8/93 MCR)

DESCRIPTION

**** TELECON WITH COE, 12/19/90; CHANNEL IN PROCESS OF BEING DREDGED TO 44 FT. DEPTH BY 800 FT WIDTH; DREDGE PULLED UP AN ANCHOR IN VICINITY OF THE CHARTED POSITION OF THIS ITEM; NO FURTHER INVESTIGATION DONE AT THIS TIME; DREDGING SCHEDULED TO BE COMPLETED BY JUNE 1991. (ENTERED MSD 12/90)

**** TELECON WITH COAST GUARD, 12/20/90; WHITE HULLED VESSEL; POSITION DETERMINED BY COAST GUARD STATION PENSACOLA, PROBABLY BY

LORAN. (ENTERED MSD 12/90)

Survey Summary

Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: Listed in DR submitted Appendix II as:

Status: AWOIS Item #7865 was disproved. It was initially reported in 1983 as the wreck of a small pleasure craft in Caucus Channel, which has since been dredged by the Army Corps of Engineers (ACOE). The area defined by the 100-meter search radius was covered with 200% SSS and 100% SWMB. No evidence of a wreck was found with the side scan or multibeam sonar systems. Lighted Buoy R "6" was located within the AWOIS search area and the buoy block was the only SSS contact developed with object detection coverage.

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 7865	0.00	000.0	Primary

Hydrographer Recommendations

It is recommended that the wreck remain uncharted and the AWOIS item be removed from the investigation list.

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Office Notes

SAR NOTE: Feature is a FOR INFORMATION AWOIS item. Item was not located. Item is not on the current chart edition.

COMPILATION NOTE: Feature not shown on chart11384, edition#36, 20101201. No change in charting is recommended.

1.38) AWOIS #7866 - AWOIS #7866 - Disproval**No Primary Survey Feature for this AWOIS Item**

Search Position: 30° 17' 48.7" N, 087° 17' 47.9" W
Historical Depth: [None]
Search Radius: 200
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

LNM37/89--8TH CGD; (173-89); 15 FT. JOHN BOAT REPORTED SUNK IN PA LAT 30-17-48N, LONG 87-17-48W. (ENTERED MSD 10/90)

H10387/91--OPR-J452-HE; HYDROGRAPHER REPORTS 200% SIDE SCAN SONAR COVERAGE WITH NEGATIVE RESULTS. EVALUATOR STATES 200% SSS COVERAGE NOT ACCOMPLISHED DUE TO VERY LOW CONTRAST ON THE SONARGRAMS; RECOMMENDS TO RETAIN AS CHARTED. (UPDATED 8/93 MCR)

DESCRIPTION

**** TELECON WITH COAST GUARD, 12/20/90; WRECK REPORTED BY COAST GUARD STATION PENSACOLA; PROBABLY LOCATED BY LORAN. ENTERED MSD 12/90)

Survey Summary

Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: Listed in DR submitted Appendix II as:

Status: AWOIS Item #7866 was disproved. It was originally reported in 1989 as a small wreck PA. The area defined by the 200-meter search radius was covered with 200% SSS and 100% SWMB. No evidence of a wreck was found with the side scan or multibeam sonar systems.

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 7866	0.00	000.0	Primary

Hydrographer Recommendations

It is recommended that the wreck remain uncharted and the AWOIS item be removed from the investigation list.

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Office Notes

SAR NOTE: Feature is a FOR INFORMATION AWOIS item. Item was not located. Item is not on the current chart edition.

COMPILATION NOTE: Feature not shown on chart #11384, edition#36, 20101201. No change in charting is recommended.

1.39) AWOIS #7867 - AWOIS #7867 - Disproval

No Primary Survey Feature for this AWOIS Item

Search Position: 30° 19' 24.7" N, 087° 18' 29.9" W
Historical Depth: [None]
Search Radius: 100
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

SURVEY REQUIREMENT COMMENTS

SEARCH A 500M RADIUS, BUT ONLY TO THE 15 FT. CURVE. MAY BE DISPROVED WITH DOCUMENTATION FROM COE. TALK WITH COE, THEN CONTACT N/CG241 BEFORE INVESTIGATING THIS ITEM.

HISTORY

LNM22/89--8TH CGD; (086-89); ADD OBSTRUCTION (AUTO BODY AND DEBRIS) IN PA 30-19-24N, LONG 87-18-30W (NAD27). (ENTERED MSD 10/90)

H10387/91--OPR-J452-HE; HYDROGRAPHER REPORTS 200% SIDE SCAN SONAR PERFORMED WITH NEGATIVE RESULTS AND THAT THE COE IS DREDGING CAUCUS CHANNEL TO 44FT. EVALUATOR STATES THAT THE COE PROVIDED DOCUMENTATION THAT A AFTER DREDGE SURVEY DISPROVES THE WRECK AND RECOMMENDS TO DELETE WRECK FROM THE CHARTS. (UPDATED 8/93 MCR)

DESCRIPTION

**** TELECON WITH COE, 12/19/90: CHANNEL IS BEING DREDGED TO NEW 800 FT CHANNEL WIDTH AND 44 FT PROJECT DEPTH; WORK WILL BE COMPLETED BY JUNE 1991. (ENTERED MSD 12/90)

Survey Summary

Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: Listed in DR submitted Appendix II as:

Status: AWOIS Item #7867 was disproved. It was originally reported in 1989 as the wreck of a car with debris, position approximate. The channel has since been dredged by the ACOE. The area defined by the

100-meter search radius was covered with 200% SSS and 100% SWMB. No obstructions or wrecks were found with the side scan or multibeam sonar systems.

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 7867	0.00	000.0	Primary

Hydrographer Recommendations

It is recommended that the obstruction remain uncharted and the AWOIS item be removed from the investigation list.

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Office Notes

SAR NOTE: Feature is a FOR INFORMATION AWOIS item. Item was not located. Item is not on the current chart edition.

COMPILATION NOTE: Feature not shown on chart 11384, edition#36, 20101201. No change in charting recommended.

1.40) AWOIS #7868 - AWOIS #7868 - Disproval

No Primary Survey Feature for this AWOIS Item

Search Position: 30° 17' 24.7" N, 087° 17' 53.9" W
Historical Depth: [None]
Search Radius: 500
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

HISTORY

LNM29/86--8TH CGD; (204-86); 27 FT. FISHING VESSEL, ANCIENT AGE, IS REPORTED SUNK IN CAUCUS CHANNEL APPROXIMATELY 200 YARDS WEST OF PENSACOLA BAY ENTRANCE LIGHTED BUOY 2 IN PA LAT 30-17-24N, LONG 87-17-54W (NAD27); POSITION IS IN A SAFETY FAIRWAY.

LNM34/86--8TH CGD; VESSEL COULD NOT BE LOCATED; CHART REVISED TO PD. (ENTERED MSD 10/90)

H10387/91--OPR-J452-HE; HYDROGRAPHER REPORTS 200% SIDE SCAN SONAR INVESTIGATION WITH NEGATIVE RESULTS AND THAT THE COE IS DREDGING CAUCUS CHANNEL TO 44FT. EVALUATOR STATES THAT THE COE HAS PROVIDED DOCUMENTATION THAT AN AFTER DREDGE SURVEY DISPROVES THE WRECK; EVAL. RECOMMENDS TO DELETE FROM THE CHARTS. (UPDATED 8/93 MCR)

DESCRIPTION

**** TELECON WITH COE, 12/19/90; CHANNEL IS BEING DREDGED TO NEW 800 FT WIDTH AND 44 FT PROJECT DEPTH. WORK WILL BE COMPLETED BY JUNE 1991. (ENTERED MSD 12/90)

**** TELECON WITH COAST GUARD, 12/20/90; POSITION OF WRECK PROBABLY DETERMINED BY LORAN. (ENTERED MSD 12/90)

Survey Summary

Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: Listed in DR submitted Appendix II as:

Status: AWOIS Item #7868 was disproved. It was reported, originally in 1986, as the wreck of a 27-foot fishing vessel named the Ancient Age sunk in Caucus Channel which has since been dredged by the ACOE. The area defined by the 500-meter search radius was covered with 200% SSS and 100% SWMB. No evidence of a wreck was found with the side scan or multibeam sonar systems. It is not charted.

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 7868	0.00	000.0	Primary

Hydrographer Recommendations

Disproved

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Office Notes

SAR NOTE: Feature is a FOR INFORMATION AWOIS item. Item was not located. Item is not on the current chart edition.

COMPILATION NOTE: Feature not shown on chart #11384, edition #36, 20101201. No change in charting is recommended.

1.41) AWOIS #8593 - AWOIS #8593 - Disproval

No Primary Survey Feature for this AWOIS Item

Search Position: 30° 12' 46.5" N, 087° 15' 38.9" W
Historical Depth: 20.42 m
Search Radius: 50
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

HISTORY

H10375/91--OPR-J452-HE; SIDE SCAN SONAR CONTACT DETERMINED BY ì
 DIVERS TO BE A CAR BODY, SURROUNDED BY DEBRIS IN POS. ì
 LAT.30-12-46.51N, LONG.87-15-38.93W. LEAST DEPTH BY DIVERS WAS 67 ì
 FT (20.5M). (ENTERED 6/93 MCR)

Survey Summary

Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: Listed in DR submitted Appendix II as:

Status: AWOIS Item #8593 was disproved. It was reported by prior Survey H10375 as a car body with debris. The area defined by the 50-meter search radius was covered with 200% SSS and 100% SWMB. No evidence of a car was found by the side scan or multibeam sonar systems. The least depth surveyed within the AWOIS area was 70.3 feet (21.4 meters) at 30- 12-46.14N, 87-15-40.36W.

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 8593	0.00	000.0	Primary

Hydrographer Recommendations

It is recommended that the obstruction remain uncharted and the AWOIS item be removed from the investigation list.

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Office Notes

SAR NOTE: Feature is a FOR INFORMATION AWOIS item. Item was not located. Item is not on the current chart edition.

COMPILATION NOTE: Feature not shown on chart11382, edition#41, 20100501. No change in charting is recommended.

1.42) AWOIS #8595 - AWOIS #8595 - Disproval

No Primary Survey Feature for this AWOIS Item

Search Position: 30° 12' 56.3" N, 087° 21' 58.7" W
Historical Depth: 17.37 m
Search Radius: 200
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

HISTORY

H10383/91--OPR-J452-AHP; UNKNOWN OBSTR. LOCATED BY SIDE SCAN SONAR IN POS. LAT.30-12-56.26N, LONG.87-21-58.66W. TARGET WAS 1.0M OFF THE BOTTOM IN 18.7M (61.4FT). EVALUATOR RECOMMENDS TO CHART AS A 17.6M OBSTR. (A). (ENTERED 6/93 MCR)

Survey Summary

Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: Listed in the DR as:

H12061-28: A 57-foot/9 ½-fathom Obstrn at 30-12-56.34N, 87-21-55.98W was disproved at its charted location with 200% SSS and 100% SWMB; A 6-foot (1.8-meter) tall obstruction was developed with object detection coverage SWMB approximately 1000 feet (300 meters) west of the charted Obstrn with a least depth of 53.9 feet/9.0 fathoms (16.4 meters) at 30-12-59.71N, 87-22-06.72W. See AWOIS Item #8595 under Appendix II - Survey Feature Report for additional information.

Listed in the Field Submitted Appendix II as:

Status: AWOIS Item #8595 was disproved. It is charted as a 57-foot obstruction (RNC 11382 - Obstrn). The area defined by the 200-meter search radius included the charted obstruction area and was covered with 200% SSS and 100% SWMB. No wrecks or obstructions were found by the side scan or multibeam sonar systems within the search area. However, a 6-foot (1.8-meter) tall obstruction was developed with object detection multibeam coverage approximately 1000 feet (300 meters) to the west of the charted obstruction with a least depth of 53.9 feet (16.4 meters) at 30-12-59.71N, 87-22-06.72W (Figures 13 and 14). This new obstruction is included as an OBSTRN object in the S-57 Feature File (H12061_S57_Feature.000).

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 8595	0.00	000.0	Primary

Hydrographer Recommendations

It is recommended that the charted obstruction be updated with the new position and least depth.

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Office Notes

AR NOTE: There is no evidence of this feature in the SSS or MBES data. The new feature is apparent in two lines of mainscheme MBES and two lines of SSS. At the time of feature development however, the feature is no longer evident. Feature should be considered disproved.

COMPILATION NOTE: Concur - Delete 57 Obstns and danger curve.

1.43) AWOIS #8596 - AWOIS #8596 - Disproval

No Primary Survey Feature for this AWOIS Item

Search Position: 30° 10' 47.1" N, 087° 17' 40.7" W
Historical Depth: [None]
Search Radius: 50
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

HISTORY

H10383/91--OPR-J452-HE; A BARGE WAS DISCOVERED BY SIDE SCAN SONAR IN POS. LAT.30-10-47.13N, LONG.87-17-40.73W WITH A DIVER LEAST DEPTH OF 14.9M (49 FT) MLLW IN 17.8M (58.4FT) OF WATER. LORAN C RATES ON BARGE: W:13216.0, X:47074.3, Y:30399.6, Z:64085.6; (ENTERED 6.93 MCR)

Survey Summary

Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: H12061-29: A 49-foot/8-fathom Wk charted at 30-10-47.14N, 87-17-40.73W was disproved with 200% SSS and 100% SWMB. The least depth surveyed within the vicinity of the charted wreck was 57.9 feet/9.7 fathoms (17.6 meters) at 30-10-50.49N, 87-17-37.02W. See AWOIS Item #8596 under Appendix II - Survey Feature Report for additional information.

Listed in the Field Submitted Appendix II as:

Status: AWOIS Item #8596 was disproved. It was reported as a sunken barge and is charted as a 49-foot wreck (RNC 11382 Wk). The area defined by the 50-meter search radius was covered with 200% SSS and 100% SWMB. No wrecks or obstructions were found by the side scan or multibeam sonar systems. The least depth surveyed within the vicinity of the charted wreck area was 57.9 feet (17.6 meters) at 30-10-50.49N, 87-17-37.02W.

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 8596	0.00	000.0	Primary

Hydrographer Recommendations

It is recommended that the wreck be removed from the chart and the AWOIS item be removed from the investigation list.

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Office Notes

SAR NOTE: There is no evidence of this feature in the SSS or MBES data.

COMPILATION NOTE: Delete 49ft Wk and danger curve.

1.44) AWOIS #14304 - AWOIS #14304 - Disproval**No Primary Survey Feature for this AWOIS Item**

Search Position: 30° 11' 60.0" N, 087° 16' 60.0" W
Historical Depth: [None]
Search Radius: 100
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

--8th CGD-- 04/28/03: 22ft F/V sunk. Probably fiber glass. Adrift. (ETR 09/08/08)

--LNM17/03-- (ETR 09/08/08)

Survey Summary

Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: Listed in the DR as:

H12061-31: A Wk PA of unknown depth charted at 30-12-00.00N, 87-17-00.00W was disproved with 200% SSS and 100% SWMB. The least depth surveyed in the vicinity of the charted wreck position was 64.7 feet/10.8 fathoms (19.7 meters) at 30-11-59.98N, 87-16-53.99W. See AWOIS Item #14304 under Appendix II - Survey Feature Report for additional information.

Listed in the Field Submitted Appendix II as:

Status: AWOIS Item #14304 was disproved. It is charted (RNC 11382) as a dangerous wreck PA of unknown depth. The charted wreck area and the area defined by the 100-meter search radius were covered with 200% SSS and 100% SWMB. No evidence of a wreck was found by the side scan or multibeam sonar systems. The least depth surveyed within the vicinity of the charted wreck was 64.7 feet (19.7 meters) at 30-11-59.98N, 87-16-53.99W which agrees well with the nearest charted sounding of 65 feet.

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 14304	0.00	000.0	Primary

Hydrographer Recommendations

It is recommended that the wreck symbol be removed from the chart and the AWOIS item be removed from the investigation list.

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Office Notes

SAR NOTE: There is no evidence of this feature in the SSS or MBES data.

COMPILATION NOTE: Delete dangerous sunken wreck, PA

1.45) AWOIS #14305 - AWOIS #14305 - Disproval**No Primary Survey Feature for this AWOIS Item**

Search Position: 30° 18' 26.4" N, 087° 17' 42.0" W
Historical Depth: [None]
Search Radius: 100
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

--LNM28/05--8thCGD, 07/12/05: Obstn PA. 12ft mooring ball. (ETR 09/08/08)

Survey Summary

Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:**Feature Correlation**

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 14305	0.00	000.0	Primary

Hydrographer Recommendations

It is recommended that the obstruction symbol be removed from the chart and the AWOIS item be removed from the investigation list.

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Office Notes

SAR NOTE: There is no evidence of this feature in the SSS or MBES data.

COMPILATION NOTE: Delete Obstn, Pa.

1.46) AWOIS #14315 - AWOIS #14315 - Disproval

No Primary Survey Feature for this AWOIS Item

Search Position: 30° 17' 57.2" N, 087° 17' 26.7" W
Historical Depth: 8.53 m
Search Radius: 100
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

Appears on 1995 edition of chart 11384 and not on 1993 edition of chart. Chart histories missing for 1994 and item not mentioned in 1993 or 1995 chart histories. (ETR 09/08/08)

Survey Summary

Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: Listed in the DR as:

H12061-13: A 28-foot Obstrn charted at 30-17-57.26N, 87-17-26.66W was disproved with 200% SSS and 100% SWMB. The least depth surveyed within the search area is 26.1 feet (8.0 meters) at 30-17-59.15N, 87-17-26.99W, shallower than the charted 28-foot obstruction. See AWOIS Item #14315 under Appendix II - Survey Feature Report for additional information.

Listed in the Field Submitted Appendix II as:

Status: AWOIS Item #14315 was disproved. It is represented as a charted 28-foot obstruction (RNC 11384 - Obstrn). The area defined by the 100-meter search radius was covered with 200% SSS and 100% SWMB. No obstructions were found by the side scan or multibeam sonar systems. The least depth surveyed within the search area is 26.1 feet (8.0 meters) at 30-17-59.15N, 87-17-26.99W, shallower than the charted 28-foot obstruction, but representative of a shoaling trend, not a discrete feature. The majority of the depths surveyed within the search radius were shallower than 28 feet.

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 14315	0.00	000.0	Primary

Hydrographer Recommendations

It is recommended that the obstruction symbol be removed from the chart and the AWOIS item be removed from the investigation list.

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Office Notes

SAR NOTE: There is no evidence of this feature in the SSS or MBES data.

COMPILATION NOTE: Delete 28ft Obsn and danger curve.

1.47) AWOIS #14316 - AWOIS #14316 - Disproval**No Primary Survey Feature for this AWOIS Item**

Search Position: 30° 17' 41.1" N, 087° 18' 42.9" W
Historical Depth: [None]
Search Radius: 50
Search Technique: S2, MB
Technique Notes: [None]

History Notes:

--LNM42/90--Relocated LBB WR2 to 30/17/41.1N 87/18/42.9W. (ETR 09/08/08)

Wreck appears on chart when buoy moved to this location. Buoy marks USS Massachusetts north at 30/17/48N 87/18/42W. (ETR 09/08/08)

Survey Summary

Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: Listed in DR as:

H12061-12: A charted Wk at 30-17-41.12N, 87-18-43.03W, and position marked by Massachusetts Wreck Lighted Bell Buoy WR2, was disproved with 200% SSS and 100% SWMB. The least depth within the AWOIS search area was 25.3 feet (7.7 meters) at 30-17-41.63N, 87-18-43.31W. It is recommended that the wreck feature be removed from the chart. See AWOIS Item #14316 under Appendix II - Survey Feature Report for additional information.

Listed in the Field Submitted Appendix II as:

Status: AWOIS Item #14316 is charted as a dangerous wreck (RNC 11384 - Wk) with a lighted buoy marking its position. The search area defined by the 50-meter radius was covered with 200% SSS and 100% SWMB. Along with the buoy block (WR2) several objects were located within the search radius, all with insignificant heights (

Feature Correlation

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 14316	0.00	000.0	Primary

Hydrographer Recommendations

It is recommended that the wreck feature be removed from the chart.

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Office Notes

SAR NOTE: There is no evidence of a wreck in the SSS or MBES data though there are some small obstructions in the vicinity.

COMPILATION NOTE: During office processing it was confirmed that this item is not a wreck. Delete dangerous sunken wreck and danger curve.

H12061 CHARTED FEATURES REPORT

Registry Number: H12061
State: Florida
Locality: Gulf of Mexico
Sub-locality: Pensacola Bay Entrance
Project Number: OPR-J364_KR-09-B
Survey Date: 02/23/2010

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
11384	36th	12/01/2010	1:10,000 (11384_1)	USCG LNM: 9/13/2011 (9/20/2011) NGA NTM: 4/24/1999 (10/1/2011)
11383	52nd	04/01/2011	1:30,000 (11383_1)	USCG LNM: 9/13/2011 (9/20/2011) NGA NTM: 8/7/2004 (10/1/2011)
11378	35th	03/01/2008	1:40,000 (11378_1)	[L]NTM: ?
11382	41st	05/01/2010	1:80,000 (11382_1)	USCG LNM: 9/13/2011 (9/20/2011) NGA NTM: 11/19/2005 (10/1/2011)
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	Jetty	GP	[None]	30° 19' 42.1" N	087° 18' 48.6" W	---
1.2	Charted Piling	GP	[None]	30° 15' 18.0" N	087° 18' 43.0" W	---
1.3	Jetty	GP	[None]	30° 19' 33.0" N	087° 18' 42.5" W	---

1 - S57DR_Charted

1.1) Jetty

Survey Summary

Survey Position: 30° 19' 42.1" N, 087° 18' 48.6" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Report_Features.000
FOID: US 0000000094 00001(02260000005E0001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Report_Features.000	US 0000000094 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)
Attributes: NINFOM - See H-Cell Report.
 NTXTDS - H12061, Chart#11384, edition #36, 20101201
 SORDAT - 20100223
 SORIND - US,US,graph,H12061

Office Notes

SAR NOTE: Based on orthoimagery, feature is currently charted correctly on the Raster Chart, but does not agree with the ENC feature.

COMPILATION NOTE: Revise shoreline as per latest NGS Remote Sensing Division, Project Number FL0703A, GC# = GC10824.

Feature Images

[Image file T:\SarsInWork\H12061_J364_OSI\AHB_H12061\PSS\images\ChartedJetty.jpg does not exist.]



Figure 1.1.1

1.2) Charted Piling

Survey Summary

Survey Position: 30° 15' 18.0" N, 087° 18' 43.0" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None]; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Report_Features.000
FOID: US 0000000132 00001(0226000000840001)
Charts Affected: 11383_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: Listed in the DR as:

H12061-23: A Piling charted at 30-15-18.00N, 87-18-43.00W (MORFAC object ENC US5FL72M) was disproved with 200% SSS and 100% SWMB. The piling was charted 400 feet (122 meters) west of the survey limits and the Safety Fairway.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Report_Features.000	US 0000000132 00001	0.00	000.0	Primary

Hydrographer Recommendations

Disproved

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)
Attributes: NINFOM - Delete Piling.
 NTXTDS - H12061, Chart#11383, edition#52, 201104201
 SORDAT - 20100223
 SORIND - US,US,graph,H12061

Office Notes

SAR NOTE: There is no evidence of this feature in the SSS or MBES data.

COMPILATION NOTE: Delete Piling.

1.3) Jetty

Survey Summary

Survey Position: 30° 19' 33.0" N, 087° 18' 42.5" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Report_Features.000
FOID: US 0000000091 00001(02260000005B0001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Report_Features.000	US 0000000091 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)
Attributes: NINFOM - See H-Cell Report.
 NTXTDS - H12061, Chart#11384, edition#36, 20101201
 SORDAT - 20100223
 SORIND - US,US,graph,H12061

Office Notes

SAR NOTE: Shoreline along charted jetty appears to have changed compared to the current chart. See ortho-imagery. The Shoreline construction as portrayed in the ENC US 5FL73M does not exist in the ortho-image. The rock jetty is on the north side of this point of land. The charted shoreline requires updating.

COMPILATION NOTE: Revise shoreline as per latest NGS Remote Sensing Division, Project Number FL0703A, GC# = GC10824.

Feature Images

[Image file T:\SarsInWork\H12061_J364_OSIAHB_H12061\PSS\images\SHORELINE_2.jpg does not exist.]

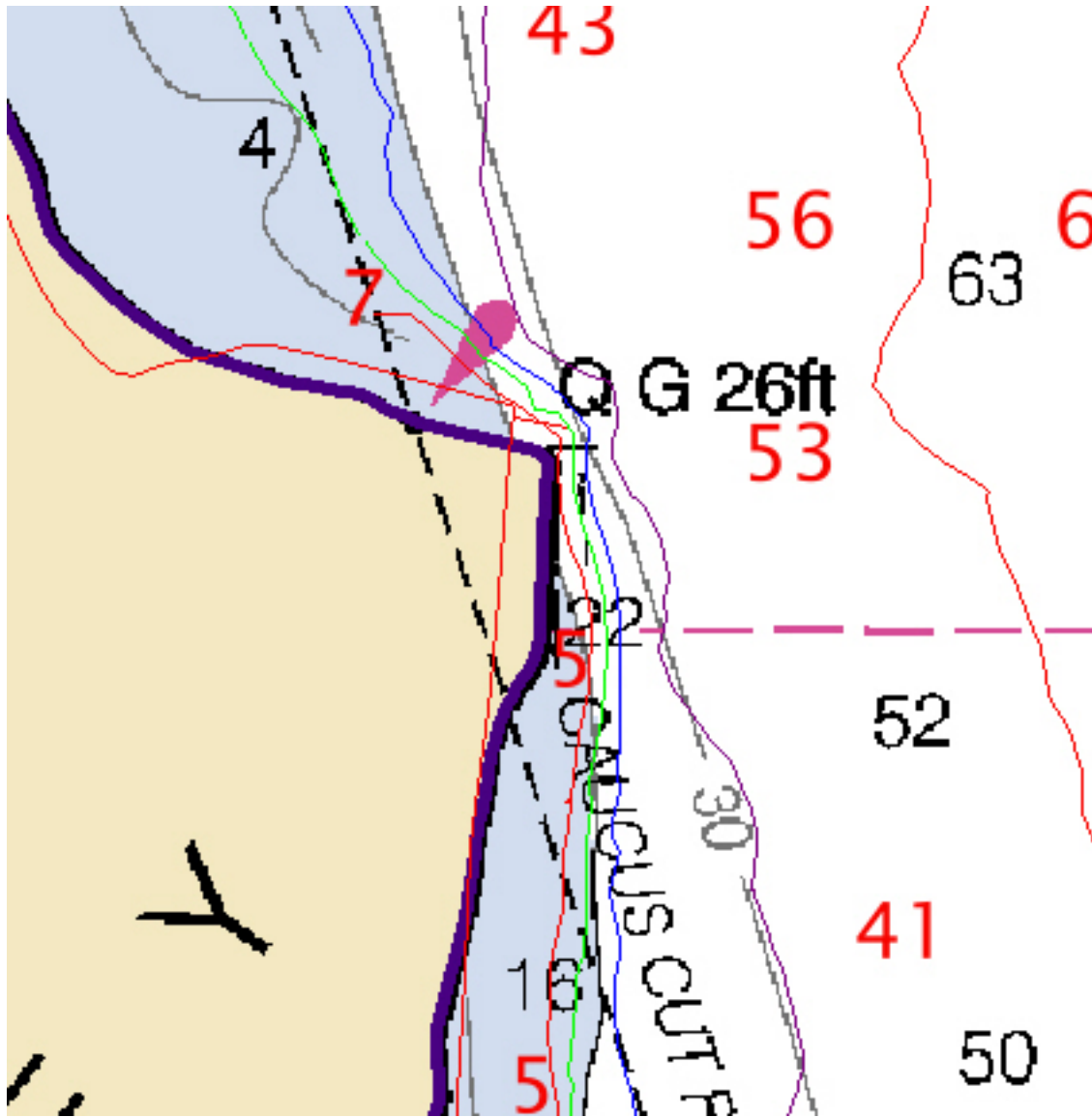


Figure 1.3.1

H12061ATONS REPORT

Registry Number: H12061
State: Florida
Locality: Gulf of Mexico
Sub-locality: Pensacola Bay Entrance
Project Number: OPR-J364_KR-09-B
Survey Date: 02/23/2010

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
11384	36th	12/01/2010	1:10,000 (11384_1)	USCG LNM: 9/13/2011 (9/20/2011) NGA NTM: 4/24/1999 (10/1/2011)
11383	52nd	04/01/2011	1:30,000 (11383_1)	USCG LNM: 9/13/2011 (9/20/2011) NGA NTM: 8/7/2004 (10/1/2011)
11378	35th	03/01/2008	1:40,000 (11378_1)	[L]NTM: ?
11382	41st	05/01/2010	1:80,000 (11382_1)	USCG LNM: 9/13/2011 (9/20/2011) NGA NTM: 11/19/2005 (10/1/2011)
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	Private Aid	GP	[None]	30° 19' 50.0" N	087° 18' 50.0" W	---
1.2	Charted Mooring buoy PA	GP	[None]	30° 18' 26.4" N	087° 17' 35.4" W	---

1 - ATONS

1.1) Private Aid

Survey Summary

Survey Position: 30° 19' 50.0" N, 087° 18' 50.0" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Report_Features.000
FOID: US 0000000089 00001(0226000000590001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: One charted private ATON was located outside the survey limits, but inside of an AWOIS item search area. The Fort McRee Daybeacon (RNC 11384, W ■WR■ Priv) is charted at 30-19-50.01N, 87-18-50.05W located on an extensive sand flat. A visual search was conducted in the area and no Aids to Navigation were observed in the area.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Report_Features.000	US 0000000089 00001	0.00	000.0	Primary

Hydrographer Recommendations

Disproved

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)
Attributes: NINFOM - Delete aid to navigation.
 NTXTDS - H12061, Chart #11384, edition #36, 20101201
 SORDAT - 20100223
 SORIND - US,US,graph,H12061

Office Notes

SAR: Based upon the visual inspection and 200% SSS coverage, considered as not existing and recommend to delete from chart.

COMPILATION: Delete charted aid to navigation W "WR" Priv.

1.2) Charted Mooring buoy PA

Survey Summary

Survey Position: 30° 18' 26.4" N, 087° 17' 35.4" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Report_Features.000
FOID: US 0000000099 00001(0226000000630001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

\$CSYMB/remrks: Listed in DR as:

H12061-19: A Mooring Buoy PA charted at 30-18-26.40N, 87-17-35.41W was disproved with 200% SSS and 100% SWMB. Survey lines were run directly over the charted location and there was no buoy visible in the vicinity.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Report_Features.000	US 0000000099 00001	0.00	000.0	Primary

Hydrographer Recommendations

Disproved

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)

Office Notes

SAR NOTE: There is no evidence of this feature in the SSS or MBES data.

COMPILATION NOTE: Delete charted mooring buoy, PA.

QUASOU - 6:least depth known

SORDAT - 20100223

SORIND - US,US,graph,H12061

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

VALSOU - 16.730 m

WATLEV - 3:always under water/submerged

Office Notes

SAR NOTE: Feature was seen in SSS and MBES data.

COMPILATION NOTE: There are two obstructions in this area. Only one was charted due to chart scale. It is recommended that an obstruction with a depth of 55 feet be charted. Add 55 Obstns and danger curve.

H12061 UNCHARTED FEATURES REPORT

Registry Number: H12061
State: Florida
Locality: Gulf of Mexico
Sub-locality: Pensacola Bay Entrance
Project Number: OPR-J364_KR-09-B
Survey Dates: 02/23/2010 - 07/19/2010

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
11382	41st	05/01/2010	1:80,000 (11382_1)	USCG LNM: 9/13/2011 (9/20/2011) NGA NTM: 11/19/2005 (10/1/2011)
1115A	43rd	11/01/2008	1:456,394 (1115A_1)	[L]NTM: ?
11360	43rd	11/01/2008	1:456,394 (11360_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	68ft Obstns	Obstruction	20.84 m	30° 09' 38.9" N	087° 22' 31.5" W	---
1.2	57ft Obstn	Obstruction	17.33 m	30° 09' 54.5" N	087° 20' 09.7" W	---
1.3	59ft Obstns	Obstruction	17.94 m	30° 09' 58.3" N	087° 18' 35.8" W	---
1.4	63ft Obstn	Obstruction	19.31 m	30° 10' 07.5" N	087° 22' 10.1" W	---
1.5	67ft Obstn	Obstruction	20.50 m	30° 10' 13.0" N	087° 21' 56.5" W	---
1.6	58ft Obstns	Obstruction	17.79 m	30° 10' 14.6" N	087° 19' 12.5" W	---
1.7	68ft Obstn	Obstruction	20.66 m	30° 10' 50.1" N	087° 22' 19.5" W	---
1.8	65ft Obstn	Obstruction	19.77 m	30° 10' 50.3" N	087° 22' 00.8" W	---
1.9	57ft Obstn	Obstruction	17.48 m	30° 11' 00.9" N	087° 18' 20.9" W	---
1.10	62ft Obstn	Obstruction	19.04 m	30° 11' 10.8" N	087° 22' 05.0" W	---
1.11	71ft Obstn	Obstruction	21.80 m	30° 11' 33.9" N	087° 19' 28.5" W	---
1.12	61ft Obstn	Obstruction	18.82 m	30° 11' 53.6" N	087° 22' 29.3" W	---

1.13	57ft Obstn	Obstruction	17.57 m	30° 12' 49.6" N	087° 17' 40.3" W	---
1.14	47ft Obstn	Obstruction	14.54 m	30° 13' 48.4" N	087° 21' 55.2" W	---
1.15	55ft Obstns	Obstruction	16.73 m	30° 14' 02.9" N	087° 20' 28.4" W	---

1 - S57DR_UnCharted

1.1) 68ft Obstns

Survey Summary

Survey Position: 30° 09' 38.9" N, 087° 22' 31.5" W
Least Depth: 20.84 m (= 68.39 ft = 11.398 fm = 11 fm 2.39 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Report_Features.000
FOID: US 0000000160 00001(0226000000A00001)
Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

OBSTRN/remrks: OBSTRN/remrks: Unknown Signif Contact Resolved with Obj Det Cov SWMB; Desig Sndg is L.D.

Listed in the DR as:

H12061-31: A large number of 1-2 meter tall obstructions were identified inside the Fairway Anchorage. Although the majority of their least depths are not significantly shallower (greater than 5 feet) than the charted soundings, they could pose potential hazards for anchoring vessels (Figure 20). All obstructions with significant heights were included in the S57 Feature File (H12061_S57_Feature.000).

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Report_Features.000	US 0000000160 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

68ft (11382_1)

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

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: EXPSON - 2:shoaler than range of depth of the surrounding depth area
NINFOM - Add obstructions.

QUASOU - 6:least depth known
SORDAT - 20100223
SORIND - US,US,graph,H12061
TECSOU - 2,3:found by side scan sonar,found by multi-beam
VALSOU - 20.844 m
WATLEV - 3:always under water/submerged

Office Notes

SAR NOTE: Feature was seen in multiple lines of SSS and MBES.

COMPILATION NOTE: Two obstruction are seen on the bottom. Due to chart scale only one can be charted It is recommended that an obstruction with a depth of 68 feet be charted. Add 68ft Obstns.

Feature Images

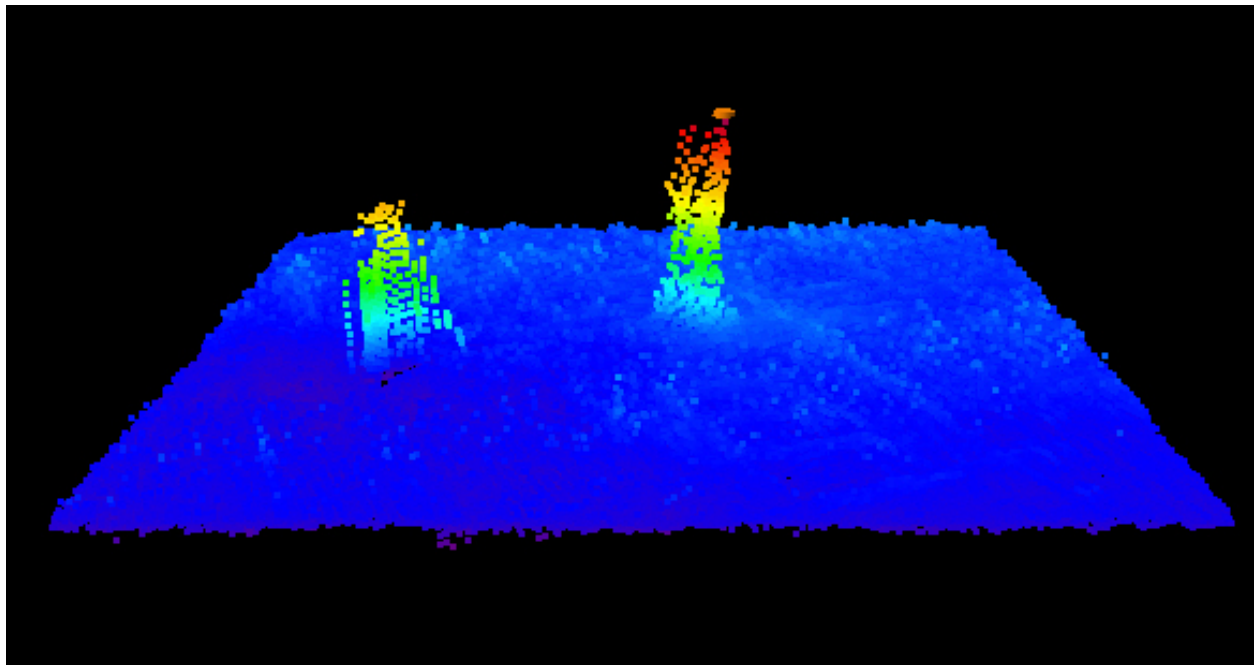


Figure 1.1.1

1.2) 57ft Obstrn

Survey Summary

Survey Position: 30° 09' 54.5" N, 087° 20' 09.7" W
Least Depth: 17.33 m (= 56.86 ft = 9.476 fm = 9 fm 2.86 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Report_Features.000
FOID: US 0000000162 00001(0226000000A20001)
Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

OBSTRN/remrks: OBSTRN/remrks: Unknown Signif Contact Resolved with Obj Det Cov SWMB; Desig Sndg is L.D.

Listed in the DR as:

H12061-31: A large number of 1-2 meter tall obstructions were identified inside the Fairway Anchorage. Although the majority of their least depths are not significantly shallower (greater than 5 feet) than the charted soundings, they could pose potential hazards for anchoring vessels (Figure 20). All obstructions with significant heights were included in the S57 Feature File (H12061_S57_Feature.000).

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Report_Features.000	US 0000000162 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

57ft (11382_1)

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

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: EXPSON - 2:shoaler than range of depth of the surrounding depth area
 NINFOM - Add obstruction.

QUASOU - 6:least depth known
SORDAT - 20100223
SORIND - US,US,graph,H12061
TECSOU - 2,3:found by side scan sonar,found by multi-beam
VALSOU - 17.330 m
WATLEV - 3:always under water/submerged

Office Notes

SAR NOTE: Feature seen in MBES data and three lines of SSS.

COMPILATION NOTE: Add 57 ft Obstn and danger curve.

Feature Images

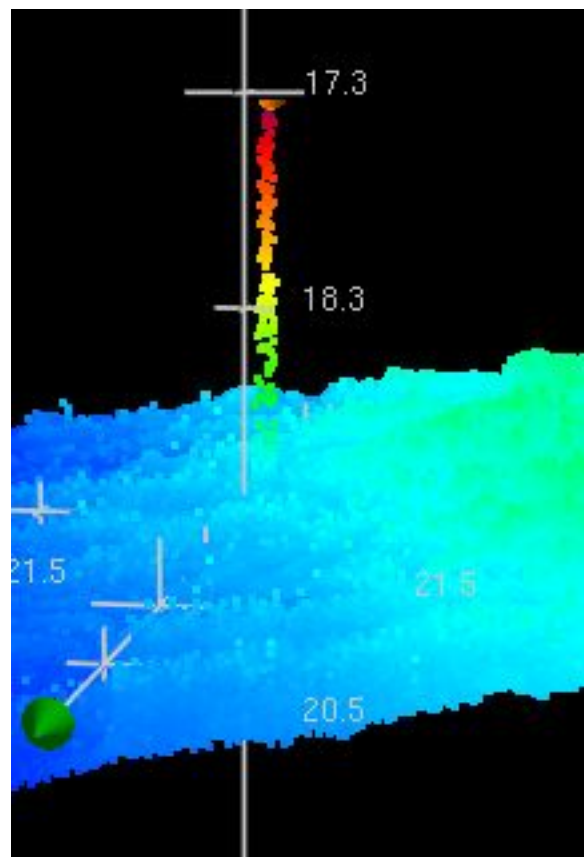


Figure 1.2.1

1.3) 59ft Obstns

Survey Summary

Survey Position: 30° 09' 58.3" N, 087° 18' 35.8" W
Least Depth: 17.94 m (= 58.86 ft = 9.810 fm = 9 fm 4.86 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Report_Features.000
FOID: US 0000001379 00001(0226000005630001)
Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

OBSTRN/remrks: OBSTRN/remrks: Unknown Signif Contact Resolved with Obj Det Cov SWMB; Desig Sndg is L.D.

Listed in the DR as:

H12061-31: A large number of 1-2 meter tall obstructions were identified inside the Fairway Anchorage. Although the majority of their least depths are not significantly shallower (greater than 5 feet) than the charted soundings, they could pose potential hazards for anchoring vessels (Figure 20). All obstructions with significant heights were included in the S57 Feature File (H12061_S57_Feature.000).

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Report_Features.000	US 0000001379 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

59ft (11382_1)

9 $\frac{3}{4}$ fm (1115A_1, 11360_1, 11006_1, 411_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: EXPSON - 2:shoaler than range of depth of the surrounding depth area
 NINFOM - Add Obstns.

QUASOU - 6:least depth known
SORDAT - 20100223
SORIND - US,US,graph,H12061
TECSOU - 2,3:found by side scan sonar,found by multi-beam
VALSOU - 17.940 m
WATLEV - 3:always under water/submerged

Office Notes

SAR NOTE: Feature seen in MBES data and two lines of SSS.

COMPILATION NOTE: There are two obstructions in this area. Only one was charted due to chart scale. It is recommended that an obstruction with a depth of 59 feet be charted. Add 59ft Obstns and danger curve.

Feature Images

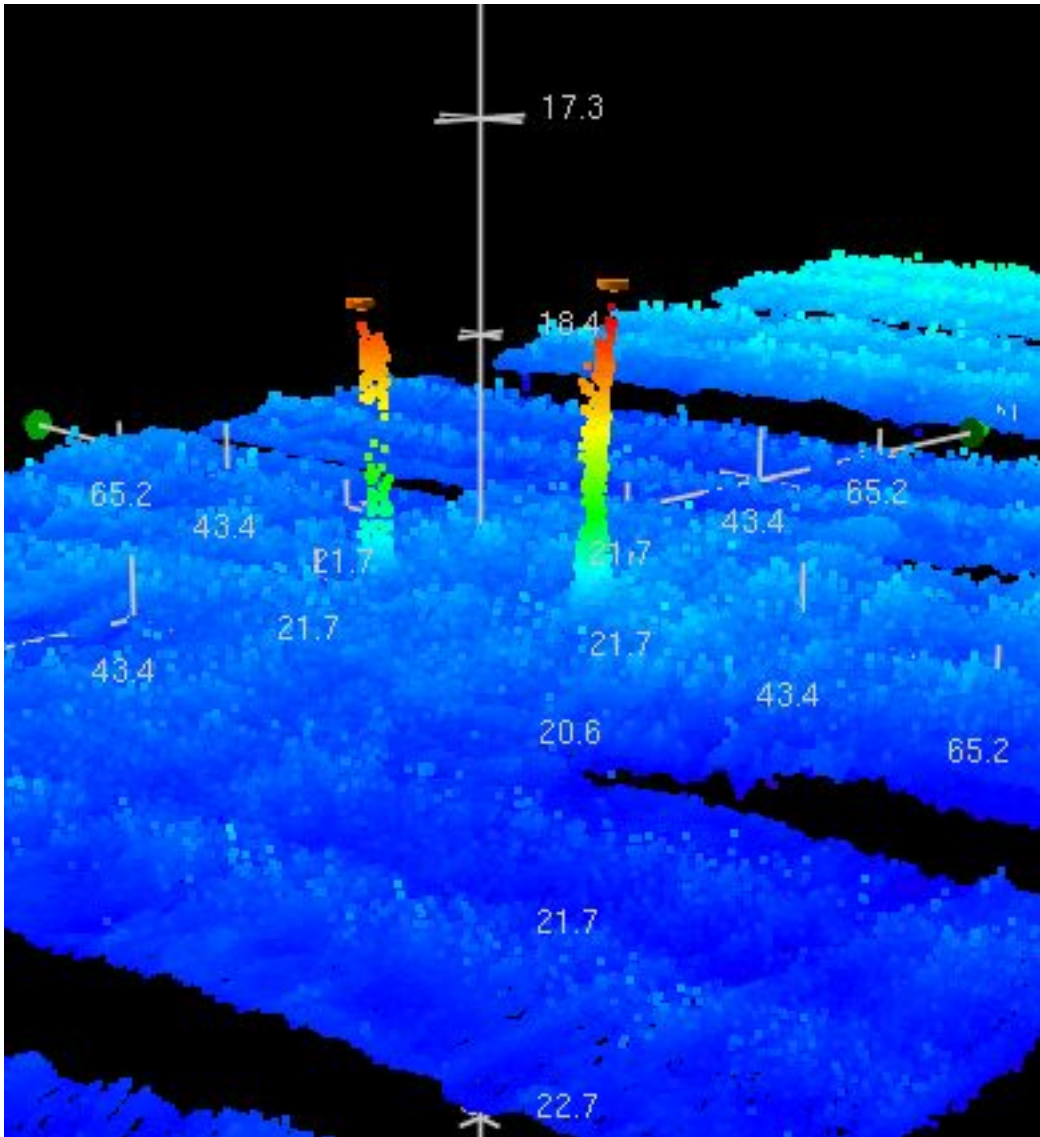


Figure 1.3.1

1.4) 63ft Obstrn

Survey Summary

Survey Position: 30° 10' 07.5" N, 087° 22' 10.1" W
Least Depth: 19.31 m (= 63.35 ft = 10.559 fm = 10 fm 3.35 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Report_Features.000
FOID: US 0000001378 00001(0226000005620001)
Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

OBSTRN/remrks: Contact w/Signif Ht; Area Resolved with 200% SWMB

Listed in the DR as:

H12061-31: A large number of 1-2 meter tall obstructions were identified inside the Fairway Anchorage. Although the majority of their least depths are not significantly shallower (greater than 5 feet) than the charted soundings, they could pose potential hazards for anchoring vessels (Figure 20). All obstructions with significant heights were included in the S57 Feature File (H12061_S57_Feature.000).

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Report_Features.000	US 0000001378 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

63ft (11382_1)

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

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: EXPSON - 2:shoaler than range of depth of the surrounding depth area
 NINFOM - Add obstruction.

QUASOU - 6:least depth known
SORDAT - 20100223
SORIND - US,US,graph,H12061
TECSOU - 2,3:found by side scan sonar,found by multi-beam
VALSOU - 19.310 m
WATLEV - 3:always under water/submerged

Office Notes

SAR NOTE: Feature seen in MBES data and two lines of SSS.

COMPILATION NOTE: Add 63ft Obstn and danger curve.

Feature Images

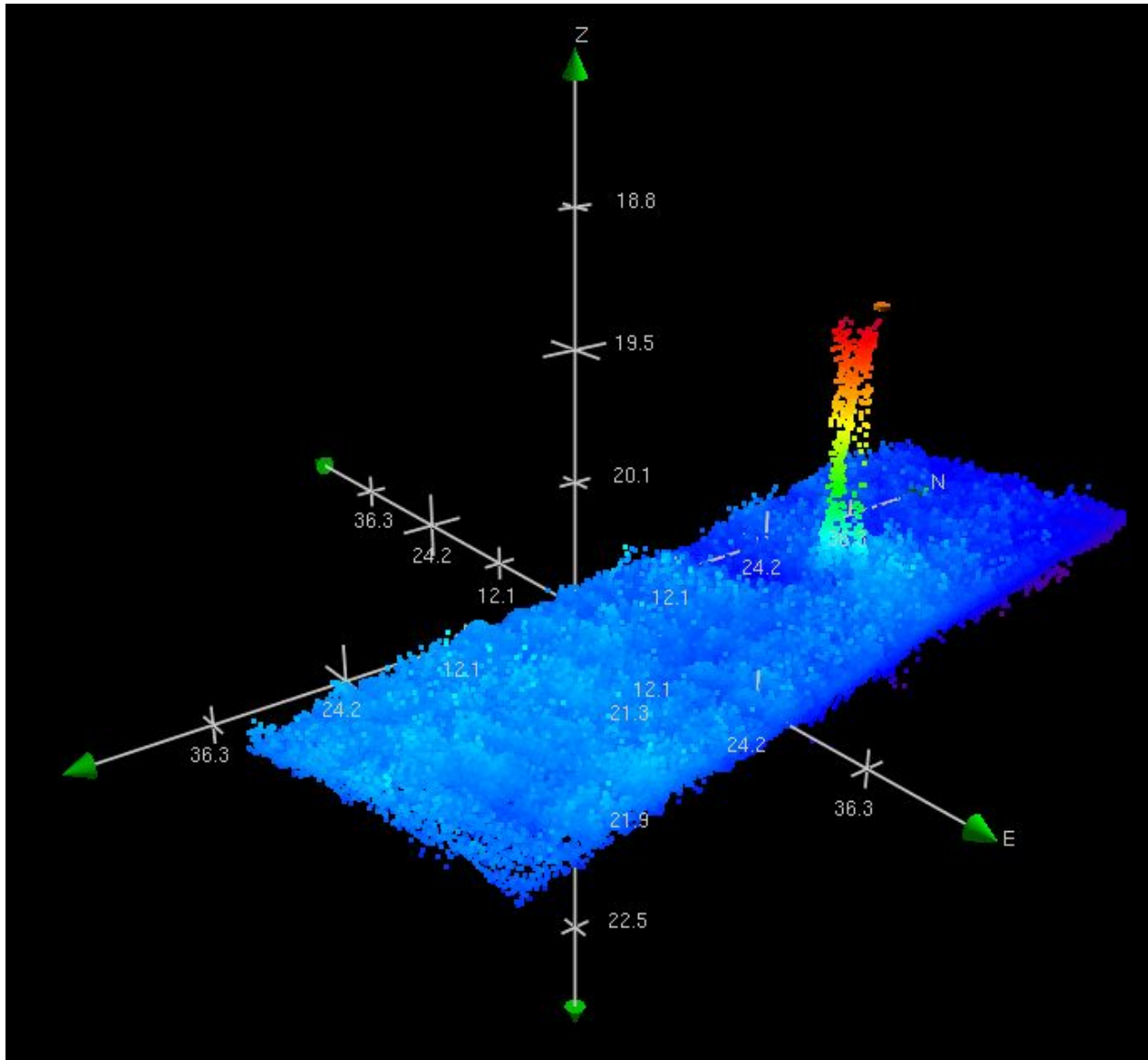


Figure 1.4.1

1.5) 67ft Obstn

Survey Summary

Survey Position: 30° 10' 13.0" N, 087° 21' 56.5" W
Least Depth: 20.50 m (= 67.24 ft = 11.207 fm = 11 fm 1.24 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Report_Features.000
FOID: US 0000000164 00001(0226000000A40001)
Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

OBSTRN/remrks: Unknown Signif Contact Resolved with Obj Det Cov SWMB; Desig Sndg is L.D.

H12061-31: A large number of 1-2 meter tall obstructions were identified inside the Fairway Anchorage. Although the majority of their least depths are not significantly shallower (greater than 5 feet) than the charted soundings, they could pose potential hazards for anchoring vessels (Figure 20). All obstructions with significant heights were included in the S57 Feature File (H12061_S57_Feature.000).

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Report_Features.000	US 0000000164 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

67ft (11382_1)

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

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: EXPSOU - 2:shoaler than range of depth of the surrounding depth area
 NINFOM - Add obstruction.
 QUASOU - 6:least depth known
 SORDAT - 20100223

SORIND - US,US,graph,H12061

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

VALSOU - 20.496 m

WATLEV - 3:always under water/submerged

Office Notes

SAR NOTE: This feature is apparent in two lines of mainscheme MBES and two lines of SSS. At the time of feature development however, the feature is not as shoal as it was during mainscheme.

COMPILATION NOTE: Add 67ft Obstr.

Feature Images

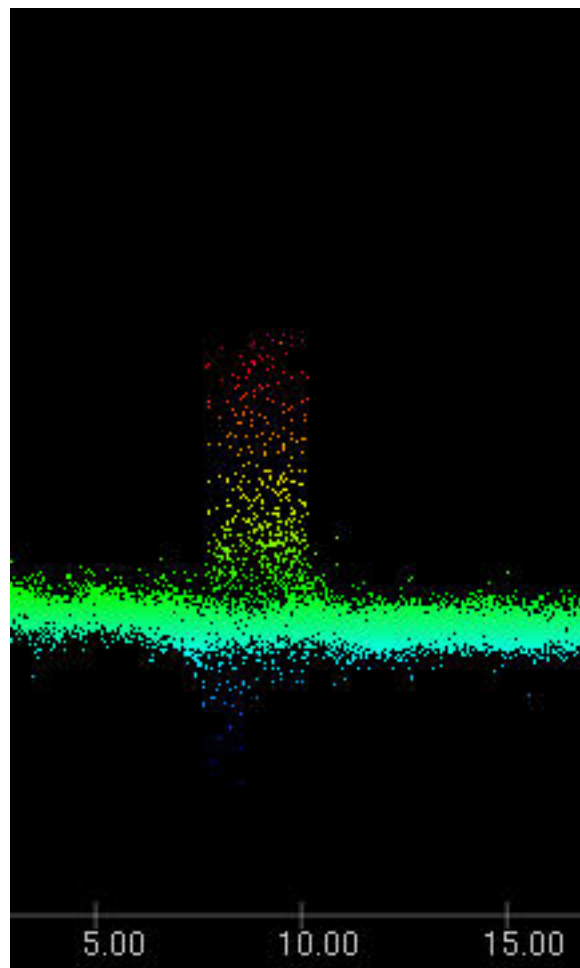


Figure 1.5.1

1.6) 58ft Obstns

Survey Summary

Survey Position: 30° 10' 14.6" N, 087° 19' 12.5" W
Least Depth: 17.79 m (= 58.37 ft = 9.728 fm = 9 fm 4.37 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Report_Features.000
FOID: US 0000000152 00001(0226000000980001)
Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

OBSTRN/remrks: OBSTRN/remrks: 2 unknown signif contacts resolved w/object detection coverage; Desig Sndg is L.D.

Listed in the DR as:

H12061-31: A large number of 1-2 meter tall obstructions were identified inside the Fairway Anchorage. Although the majority of their least depths are not significantly shallower (greater than 5 feet) than the charted soundings, they could pose potential hazards for anchoring vessels (Figure 20). All obstructions with significant heights were included in the S57 Feature File (H12061_S57_Feature.000).

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Report_Features.000	US 0000000152 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

58ft (11382_1)

9 $\frac{3}{4}$ fm (1115A_1, 11360_1, 11006_1, 411_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: EXPSON - 2:shoaler than range of depth of the surrounding depth area
 NINFOM - Add obstruction.

QUASOU - 6:least depth known
SORDAT - 20100223
SORIND - US,US,graph,H12061
TECSOU - 2,3:found by side scan sonar,found by multi-beam
VALSOU - 17.790 m
WATLEV - 3:always under water/submerged

Office Notes

SAR NOTE: Feature seen in MBES data and two lines of SSS

COMPILATION NOTE: There are several obstructions in this area. Only one was charted due to chart scale. It is recommended that an obstruction with a depth of 58 feet be charted. Add 58ft Obstns and danger curve.

Feature Images

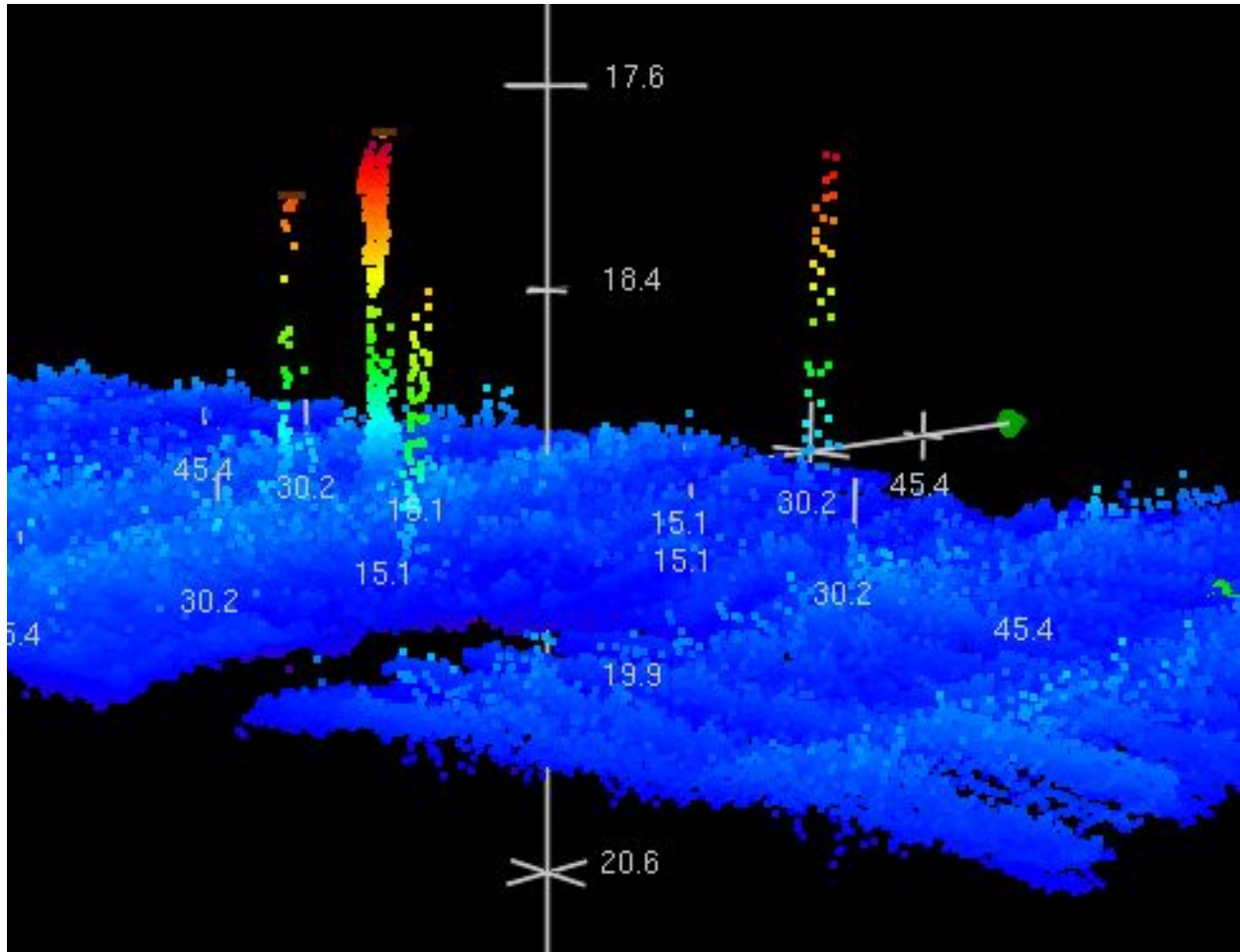


Figure 1.6.1

1.7) 68ft Obstn

Survey Summary

Survey Position: 30° 10' 50.1" N, 087° 22' 19.5" W
Least Depth: 20.66 m (= 67.79 ft = 11.299 fm = 11 fm 1.79 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Report_Features.000
FOID: US 0000000166 00001(0226000000A60001)
Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

OBSTRN/remrks: Unknown Contact w/Signif Ht; Area Resolved with 200% SWMB

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Report_Features.000	US 0000000166 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

68ft (11382_1)

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

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: EXPSOU - 2:shoaler than range of depth of the surrounding depth area
 NINFOM - Add obstruction.
 QUASOU - 6:least depth known
 SORDAT - 20100223
 SORIND - US,US,graph,H12061
 TECSOU - 2,3:found by side scan sonar,found by multi-beam
 VALSOU - 20.663 m

WATLEV - 3:always under water/submerged

Office Notes

SAR NOTE: Feature was seen in 2 lines of SSS and MBES data.

COMPILATION NOTE: Add 68ft Obstr.

Feature Images

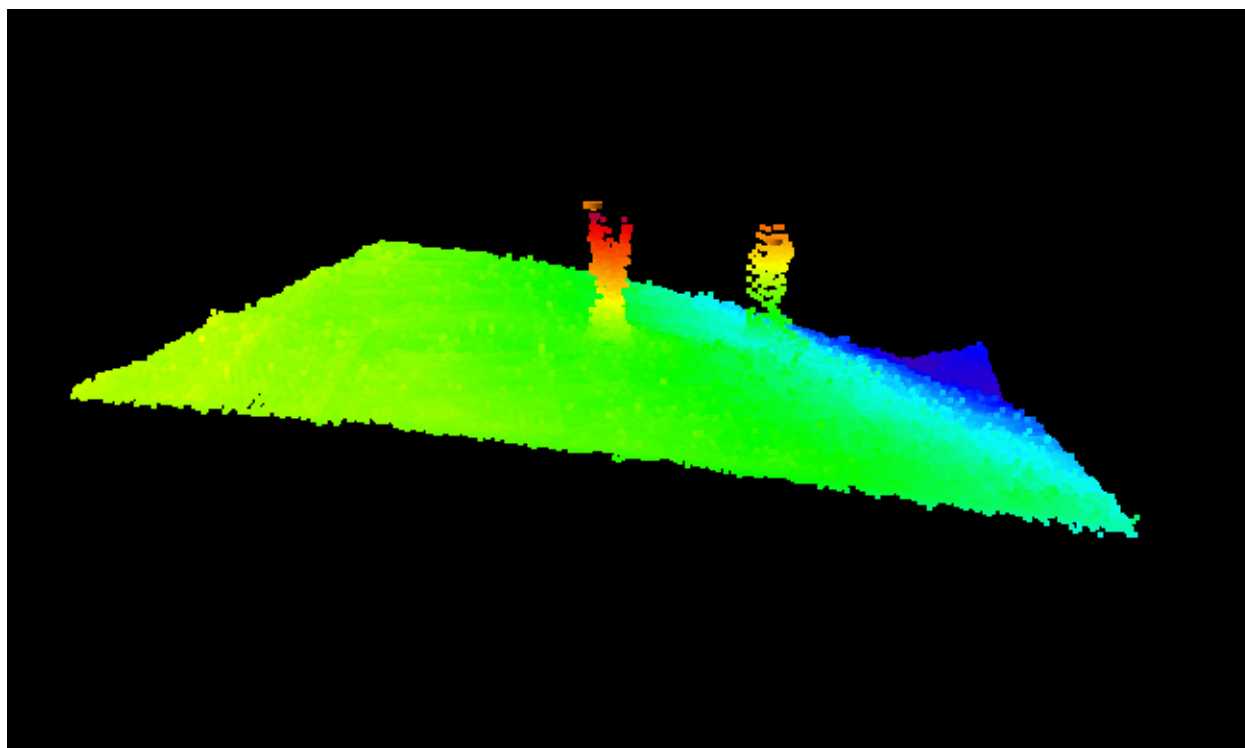


Figure 1.7.1

1.8) 65ft Obstrn

Survey Summary

Survey Position: 30° 10' 50.3" N, 087° 22' 00.8" W
Least Depth: 19.77 m (= 64.86 ft = 10.810 fm = 10 fm 4.86 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Report_Features.000
FOID: US 0000000165 00001(0226000000A50001)
Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

OBSTRN/remrks: Unknown Contact w/Signif Ht; Area Resolved with 200% SWMB.

H12061-31: A large number of 1-2 meter tall obstructions were identified inside the Fairway Anchorage. Although the majority of their least depths are not significantly shallower (greater than 5 feet) than the charted soundings, they could pose potential hazards for anchoring vessels (Figure 20). All obstructions with significant heights were included in the S57 Feature File (H12061_S57_Feature.000).

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Report_Features.000	US 0000000165 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

65ft (11382_1)

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

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: EXPSOU - 2:shoaler than range of depth of the surrounding depth area
 NINFOM - Add obstruction.
 QUASOU - 6:least depth known
 SORDAT - 20100223

SORIND - US,US,graph,H12061

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

VALSOU - 19.770 m

WATLEV - 3:always under water/submerged

Office Notes

SAR NOTE: Feature was seen in SSS and MBES data.

COMPILATION NOTE: Add 65ft Obstrn and danger curve.

Feature Images

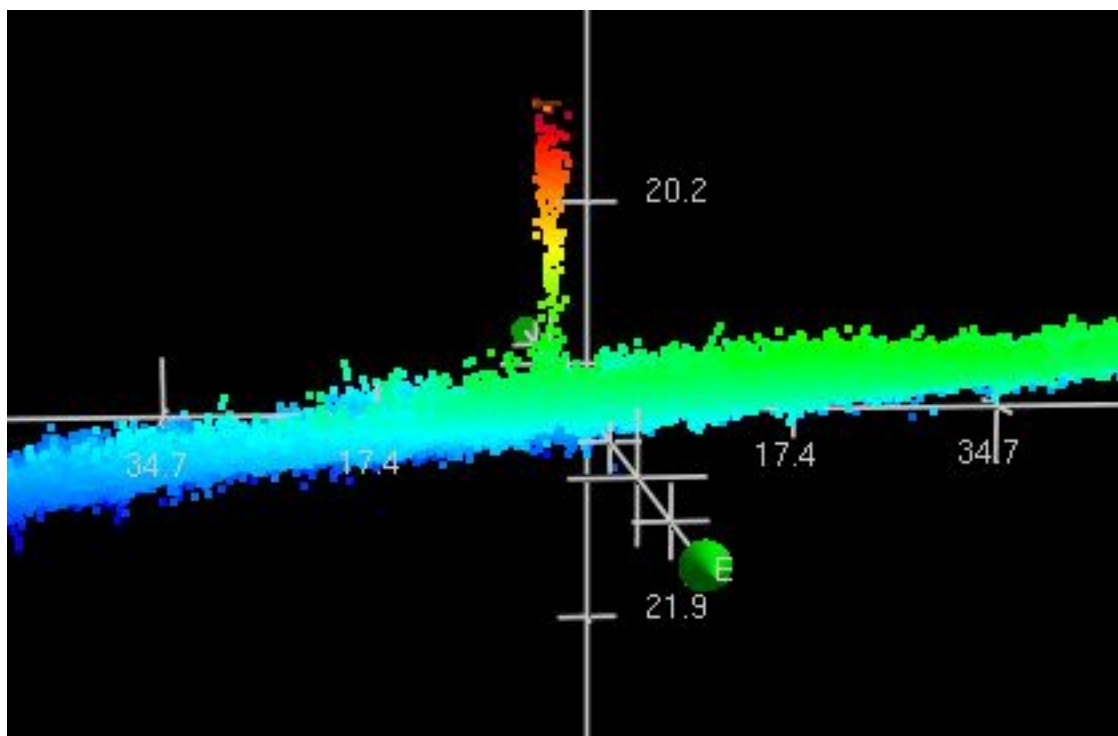


Figure 1.8.1

1.9) 57ft Obstn

Survey Summary

Survey Position: 30° 11' 00.9" N, 087° 18' 20.9" W
Least Depth: 17.48 m (= 57.35 ft = 9.559 fm = 9 fm 3.35 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Report_Features.000
FOID: US 0000000159 00001(02260000009F0001)
Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

OBSTRN/remrks: Unknown Signif Contact Resolved with Obj Det Cov SWMB; Desig Sndg is L.D.

H12061-31: A large number of 1-2 meter tall obstructions were identified inside the Fairway Anchorage. Although the majority of their least depths are not significantly shallower (greater than 5 feet) than the charted soundings, they could pose potential hazards for anchoring vessels (Figure 20). All obstructions with significant heights were included in the S57 Feature File (H12061_S57_Feature.000).

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Report_Features.000	US 0000000159 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

57ft (11382_1)

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

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: EXPSOU - 2:shoaler than range of depth of the surrounding depth area
 NINFOM - Add obstruction.
 QUASOU - 6:least depth known
 SORDAT - 20100223

SORIND - US,US,graph,H12061

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

VALSOU - 17.481 m

WATLEV - 3:always under water/submerged

Office Notes

SAR NOTE: This feature is apparent in two lines of mainscheme MBES and two lines of SSS. At the time of feature development however, the feature is not as shoal as it was during mainscheme.

COMPILATION NOTE: Add 57ft Obstn and danger curve.

Feature Images

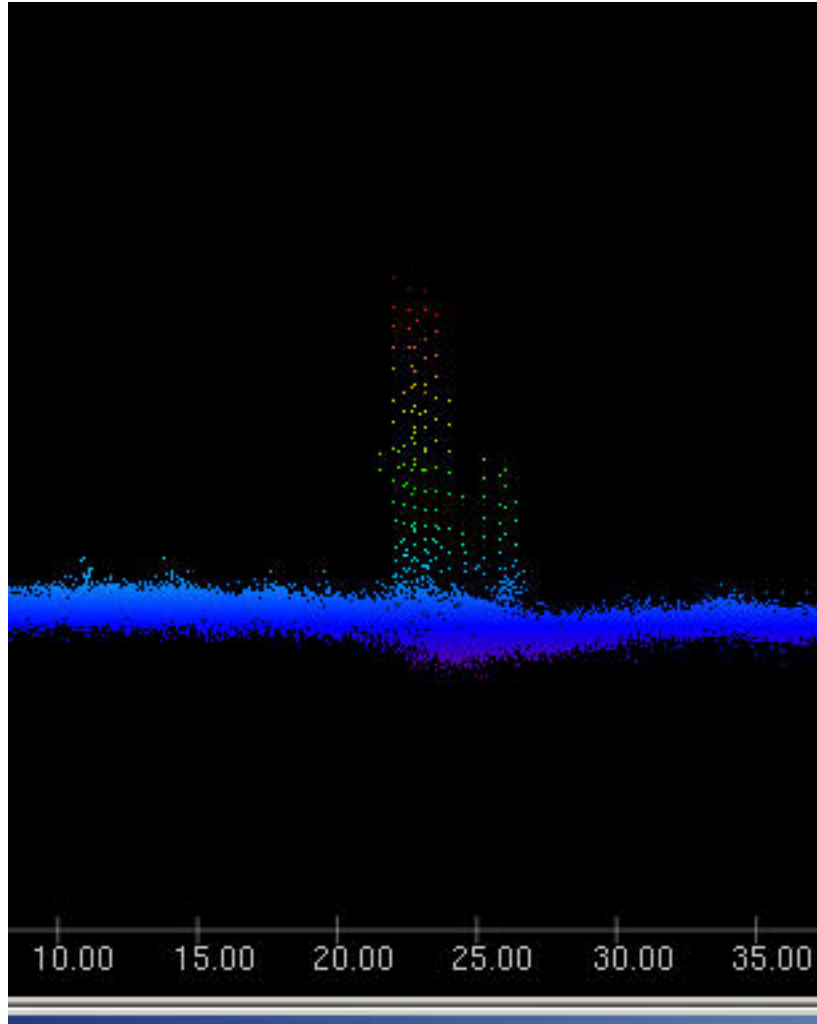


Figure 1.9.1

1.10) 62ft Obstrn

Survey Summary

Survey Position: 30° 11' 10.8" N, 087° 22' 05.0" W
Least Depth: 19.04 m (= 62.47 ft = 10.411 fm = 10 fm 2.47 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Report_Features.000
FOID: US 0000000150 00001(0226000000960001)
Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

OBSTRN/remrks: Signif Contact Resolved with Obj Det Cov SWMB; Desig Sndg is L.D.

Listed in the DR as:

H12061-31: A large number of 1-2 meter tall obstructions were identified inside the Fairway Anchorage. Although the majority of their least depths are not significantly shallower (greater than 5 feet) than the charted soundings, they could pose potential hazards for anchoring vessels (Figure 20). All obstructions with significant heights were included in the S57 Feature File (H12061_S57_Feature.000).

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Report_Features.000	US 0000000150 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

62ft (11382_1)

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

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: NINFOM - Add obstruction.
 QUASOU - 6:least depth known

SORDAT - 20100223

SORIND - US,US,graph,H12061

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

VALSOU - 19.040 m

WATLEV - 3:always under water/submerged

Office Notes

SAR NOTE: Feature was seen in MBES data and on two lines of SSS.

COMPILATION NOTE: Add 62ft Obstn and danger curve.

Feature Images

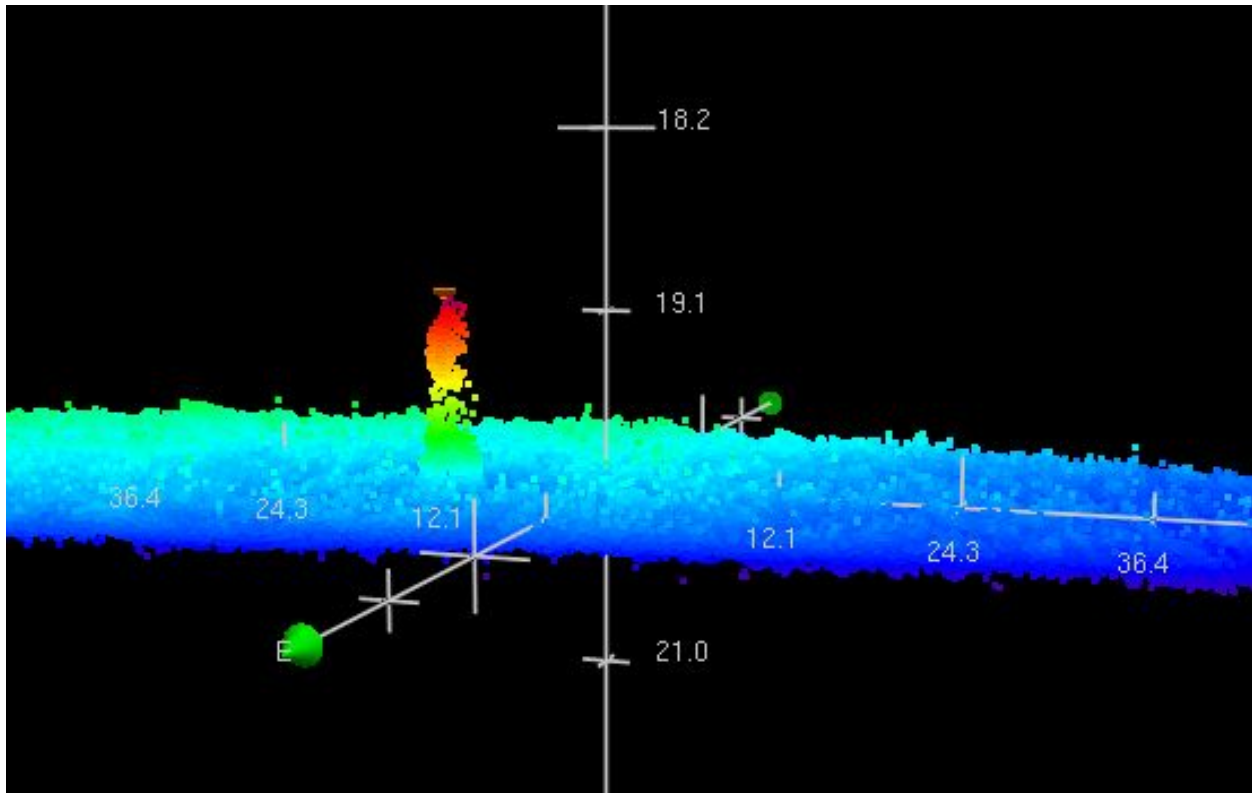


Figure 1.10.1

1.11) 71ft Obstn

Survey Summary

Survey Position: 30° 11' 33.9" N, 087° 19' 28.5" W
Least Depth: 21.80 m (= 71.51 ft = 11.919 fm = 11 fm 5.51 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Report_Features.000
FOID: US 0000000167 00001(0226000000A70001)
Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

OBSTRN/remrks: Unknown Contact w/Signif Ht; Area Resolved with 200% SWMB.

H12061-31: A large number of 1-2 meter tall obstructions were identified inside the Fairway Anchorage. Although the majority of their least depths are not significantly shallower (greater than 5 feet) than the charted soundings, they could pose potential hazards for anchoring vessels (Figure 20). All obstructions with significant heights were included in the S57 Feature File (H12061_S57_Feature.000).

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Report_Features.000	US 0000000167 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

71ft (11382_1)

12fm (1115A_1, 11360_1, 11006_1, 411_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: EXPSOU - 2:shoaler than range of depth of the surrounding depth area
 NINFOM - Add obstruction
 QUASOU - 6:least depth known
 SORDAT - 20100223

SORIND - US,US,graph,H12061

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

VALSOU - 21.797 m

WATLEV - 3:always under water/submerged

Office Notes

SAR NOTE: Feature was seen in two lines of SSS and MBES.

COMPILATION NOTE: Chart a 7ft Obstn.

Feature Images

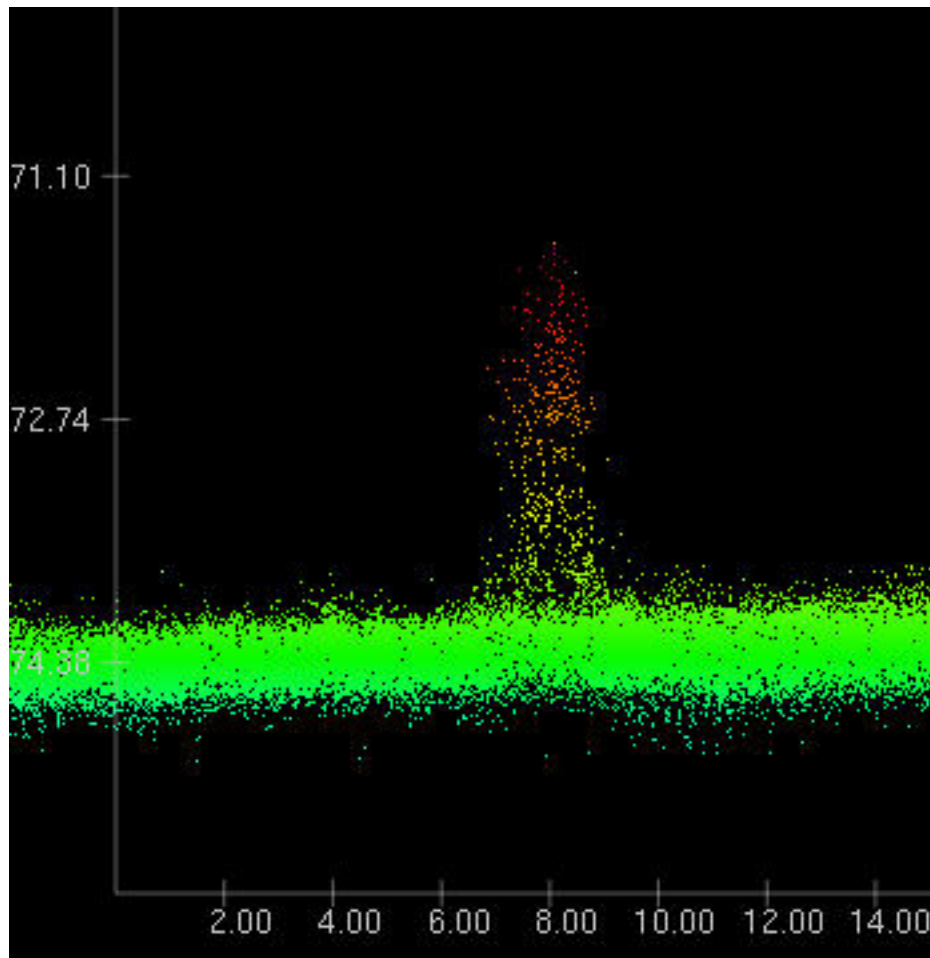


Figure 1.11.1

1.12) 61ft Obstn

Survey Summary

Survey Position: 30° 11' 53.6" N, 087° 22' 29.3" W
Least Depth: 18.82 m (= 61.75 ft = 10.291 fm = 10 fm 1.75 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Report_Features.000
FOID: US 0000000151 00001(0226000000970001)
Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

OBSTRN/remrks: Signif Contact Resolved with Obj Det Cov SWMB; Desig Sndg is L.D.

H12061-33: A large number of 1-2 meter tall obstructions were identified in the Safety Fairway near the western bound of H12061's survey limits (Figure 21). Of the obstructions, three were submitted as DTON on March 26, 2010. The DTON Report is included in Appendix I. The DTON have since been charted on ENC US4FL71M, but were not yet updated on RNC 11382. All obstructions with significant heights were included in the S57 Feature File (H12061_S57_Feature.000). The majority of the obstructions found in the Fairway had a strong side scan return and appeared to be tall, slender, triangular features.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Report_Features.000	US 0000000151 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

61ft (11382_1)

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

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: EXPSOU - 2:shoaler than range of depth of the surrounding depth area
 NINFOM - Add obstruction.

QUASOU - 6:least depth known
SORDAT - 20100223
SORIND - US,US,graph,H12061
TECSOU - 2,3:found by side scan sonar,found by multi-beam
VALSOU - 18.820 m
WATLEV - 3:always under water/submerged

Office Notes

SAR NOTE: Feature was seen in MBES data and on two lines of SSS.

COMPILATION NOTE: Add 61ft Obstn and danger curve.

Feature Images

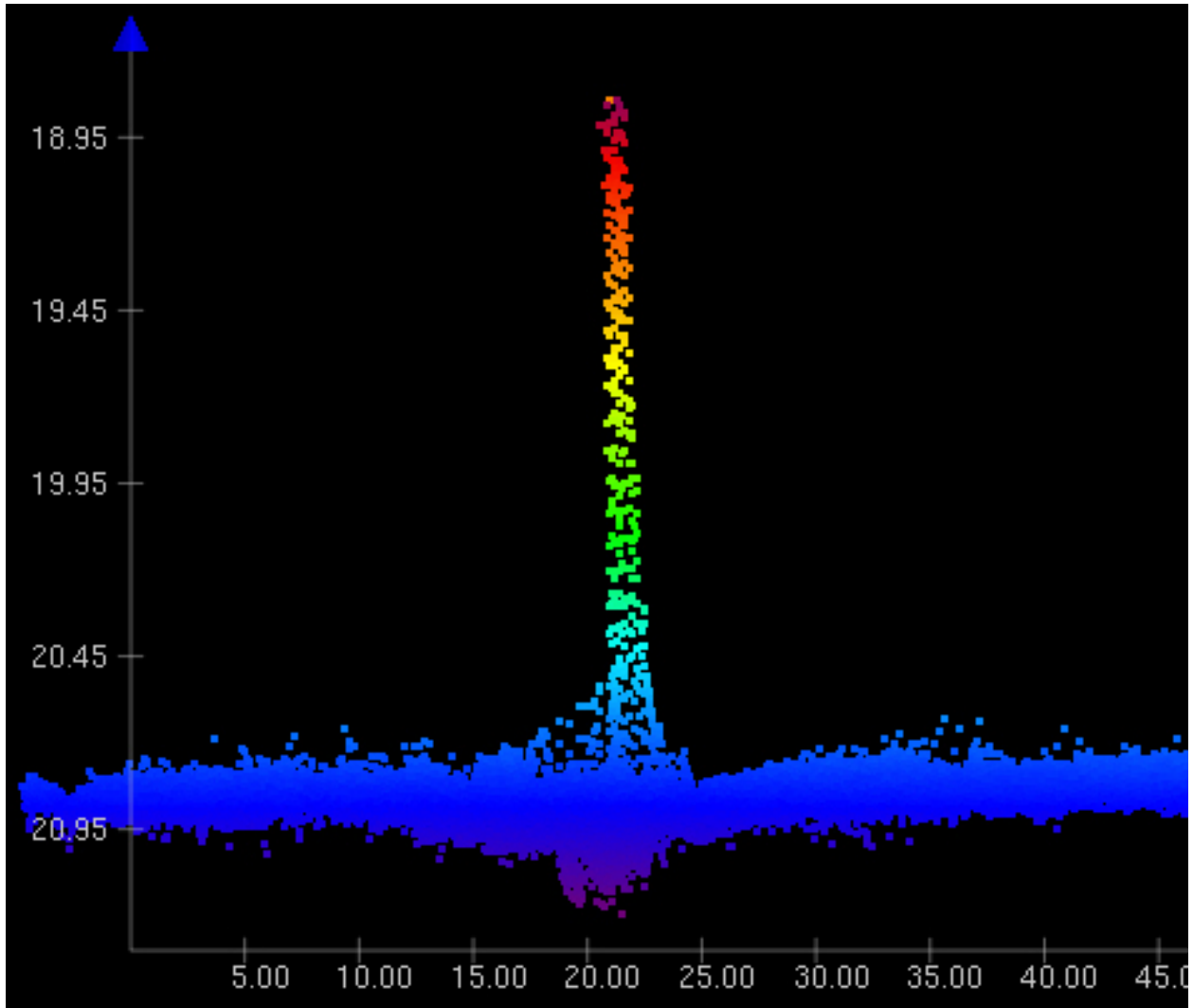


Figure 1.12.1

1.13) 57ft Obstn

Survey Summary

Survey Position: 30° 12' 49.6" N, 087° 17' 40.3" W
Least Depth: 17.57 m (= 57.65 ft = 9.608 fm = 9 fm 3.65 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Report_Features.000
FOID: US 0000000149 00001(0226000000950001)
Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

OBSTRN/remrks: Signif Contact Resolved with Obj Det Cov SWMB; Desig Sndg is L.D.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Report_Features.000	US 0000000149 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

57ft (11382_1)

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

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: EXPSOU - 2:shoaler than range of depth of the surrounding depth area
 NINFOM - Add obstruction.
 QUASOU - 6:least depth known
 SORDAT - 20100223
 SORIND - US,US,graph,H12061
 TECSOU - 2,3:found by side scan sonar,found by multi-beam
 VALSOU - 17.572 m

WATLEV - 3:always under water/submerged

Office Notes

SAR NOTE: This feature is apparent in two lines of mainscheme MBES and two lines of SSS.

COMPILATION NOTE: Add 57ft Obstn and danger curve.

Feature Images

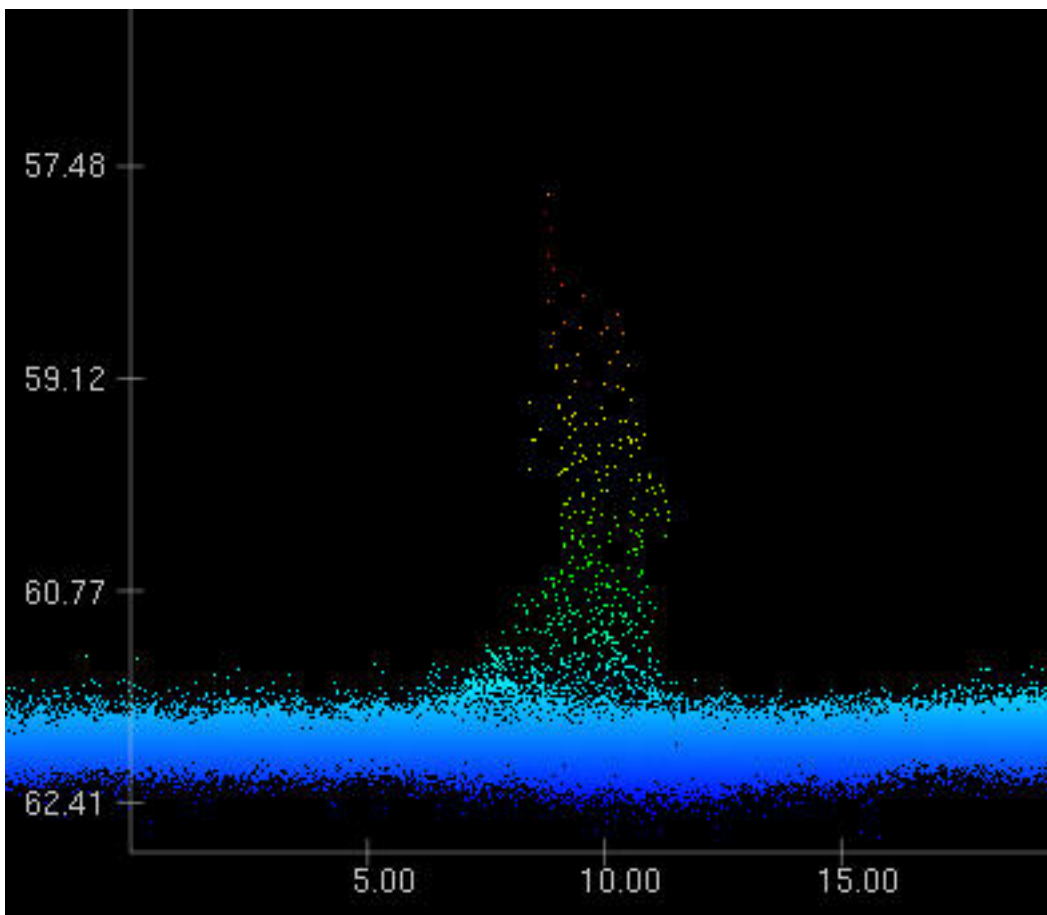


Figure 1.13.1

1.14) 47ft Obstn

Survey Summary

Survey Position: 30° 13' 48.4" N, 087° 21' 55.2" W
Least Depth: 14.54 m (= 47.70 ft = 7.951 fm = 7 fm 5.70 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Report_Features.000
FOID: US 0000000154 00001(02260000009A0001)
Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

OBSTRN/remrks: Signif Contact Resolved with Obj Det Cov SWMB; Desig Sndg is L.D.

H12061-33: A large number of 1-2 meter tall obstructions were identified in the Safety Fairway near the western bound of H12061's survey limits (Figure 21). Of the obstructions, three were submitted as DTON on March 26, 2010. The DTON Report is included in Appendix I. The DTON have since been charted on ENC US4FL71M, but were not yet updated on RNC 11382. All obstructions with significant heights were included in the S57 Feature File (H12061_S57_Feature.000). The majority of the obstructions found in the Fairway had a strong side scan return and appeared to be tall, slender, triangular features.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Report_Features.000	US 0000000154 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

47ft (11382_1)

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

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: INFORM - 2010AB0421847_10133- 353- 398
 NINFOM - Add obstruction.

QUASOU - 6:least depth known
SORDAT - 20100223
SORIND - US,US,graph,H12061
TECSOU - 2,3:found by side scan sonar,found by multi-beam
VALSOU - 14.540 m
WATLEV - 3:always under water/submerged

Office Notes

SAR NOTE: Feature seen in MBES data and two lines of SSS.

COMPILATION NOTE: Add 47ft Obstn and danger curve.

Feature Images

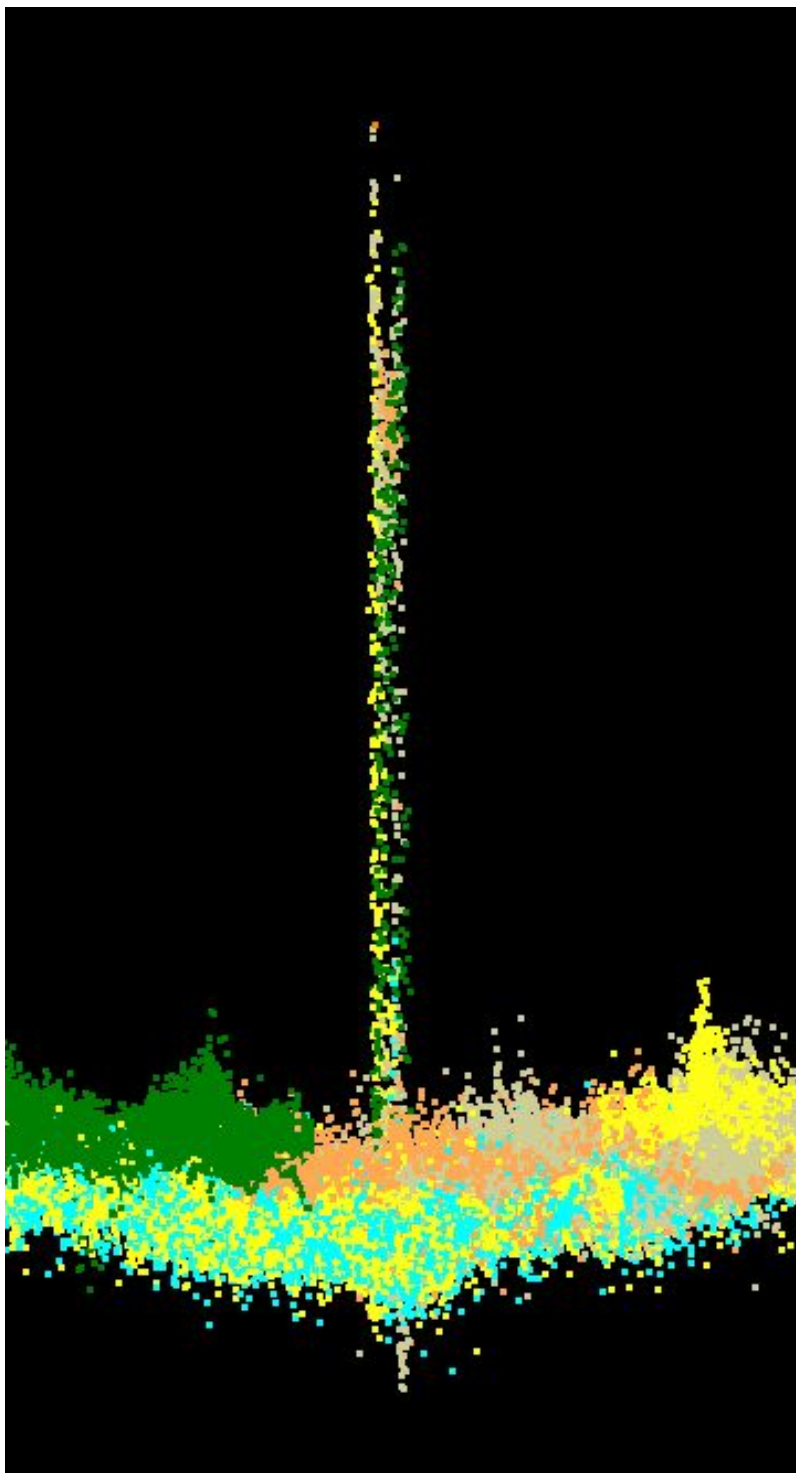


Figure 1.14.1

1.15) 55ft Obstns

Survey Summary

Survey Position: 30° 14' 02.9" N, 087° 20' 28.4" W
Least Depth: 16.73 m (= 54.89 ft = 9.148 fm = 9 fm 0.89 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-200.18:02:13.000 (07/19/2010)
Dataset: H12061_Report_Features.000
FOID: US 0000000157 00001(02260000009D0001)
Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

OBSTRN/remrks: OBSTRN/remrks: Significant Ct Resolved with Obj Det Cov; Desig Sndg is L.D.

H12061-33: A large number of 1-2 meter tall obstructions were identified in the Safety Fairway near the western bound of H12061's survey limits (Figure 21). Of the obstructions, three were submitted as DTON on March 26, 2010. The DTON Report is included in Appendix I. The DTON have since been charted on ENC US4FL71M, but were not yet updated on RNC 11382. All obstructions with significant heights were included in the S57 Feature File (H12061_S57_Feature.000). The majority of the obstructions found in the Fairway had a strong side scan return and appeared to be tall, slender, triangular features.

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Report_Features.000	US 0000000157 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

55ft (11382_1)

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

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: EXPSON - 2:shoaler than range of depth of the surrounding depth area
 NINFOM - Add obstructions.

QUASOU - 6:least depth known
SORDAT - 20100223
SORIND - US,US,graph,H12061
TECSOU - 2,3:found by side scan sonar,found by multi-beam
VALSOU - 16.730 m
WATLEV - 3:always under water/submerged

Office Notes

SAR NOTE: Feature was seen in SSS and MBES data.

COMPILATION NOTE: There are two obstructions in this area. Only one was charted due to chart scale. It is recommended that an obstruction with a depth of 55 feet be charted. Add 55ft Obstns and danger curve.

Feature Images

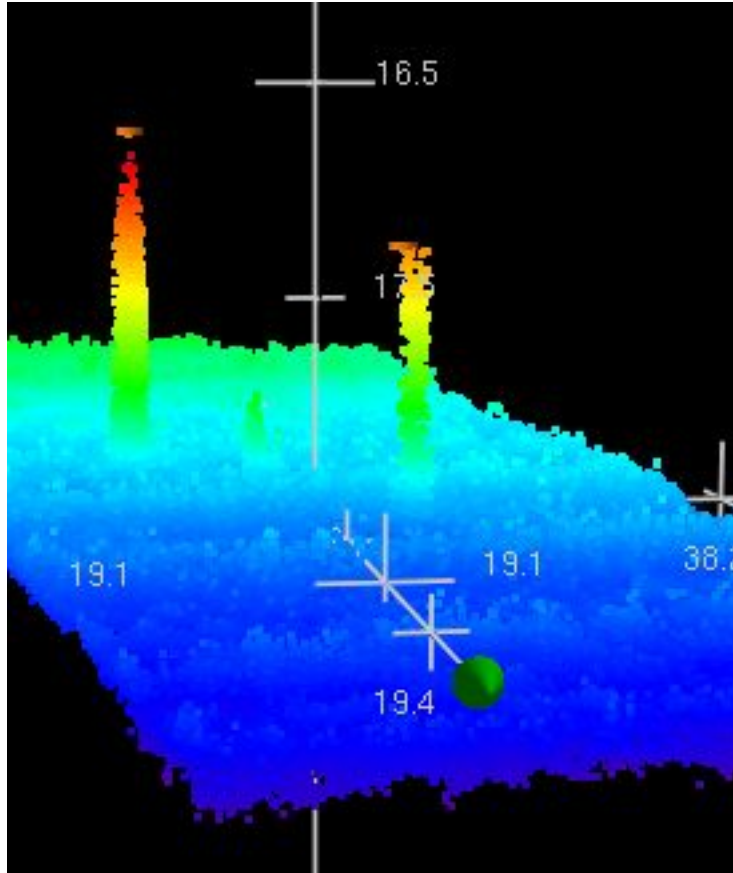


Figure 1.15.1

H12061 SEABED CHARACTERISTICS REPORT

Registry Number:

State:

Locality:

Sub-locality:

Project Number:

Survey Dates: 02/16/2002 - 02/23/2010

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
11384	36th	12/01/2010	1:10,000 (11384_1)	USCG LNM: 9/13/2011 (9/20/2011) NGA NTM: 4/24/1999 (10/1/2011)
11383	52nd	04/01/2011	1:30,000 (11383_1)	USCG LNM: 9/13/2011 (9/20/2011) NGA NTM: 8/7/2004 (10/1/2011)
11378	35th	03/01/2008	1:40,000 (11378_1)	[L]NTM: ?
11382	41st	05/01/2010	1:80,000 (11382_1)	USCG LNM: 9/13/2011 (9/20/2011) NGA NTM: 11/19/2005 (10/1/2011)
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	Retain seabed characteristic - Sand	GP	[None]	30° 17' 43.7" N	087° 18' 29.8" W	---
1.2	Retain seabed characteristic - Sand	GP	[None]	30° 17' 46.2" N	087° 17' 52.5" W	---
1.3	Retain seabed characteristic - Sand	GP	[None]	30° 17' 48.0" N	087° 17' 22.3" W	---
1.4	Retain seabed characteristic - Sand	GP	[None]	30° 17' 53.7" N	087° 18' 53.9" W	---
1.5	Retain seabed characteristic - Sand	GP	[None]	30° 17' 53.7" N	087° 18' 23.4" W	---
1.6	Retain seabed characteristic - Sand	GP	[None]	30° 18' 03.0" N	087° 17' 16.0" W	---
1.7	Retain seabed characteristic - Sand	GP	[None]	30° 18' 04.1" N	087° 17' 52.3" W	---

1.8	Add seabed characteristic - Sand - Silt/Ooze	GP	[None]	30° 18' 09.4" N	087° 17' 38.8" W	---
1.9	Retain seabed characteristic - Sand - Shell	GP	[None]	30° 18' 12.7" N	087° 18' 56.4" W	---
1.10	Retain seabed characteristic - Sand	GP	[None]	30° 18' 15.0" N	087° 17' 55.2" W	---
1.11	Retain seabed characteristic - Sand - Shell	GP	[None]	30° 18' 20.4" N	087° 17' 28.6" W	---
1.12	Retain seabed characteristic - Sand	GP	[None]	30° 18' 23.7" N	087° 17' 45.6" W	---
1.13	Add seabed characteristic - Sand - Silt	GP	[None]	30° 18' 24.5" N	087° 18' 49.1" W	---
1.14	Retain seabed characteristic - Sand	GP	[None]	30° 18' 26.0" N	087° 19' 03.5" W	---
1.15	Retain seabed characteristic - Sand	GP	[None]	30° 18' 33.2" N	087° 19' 16.8" W	---
1.16	Retain seabed characteristic - Sand	GP	[None]	30° 18' 35.7" N	087° 18' 09.2" W	---
1.17	Retain seabed characteristic - Sand	GP	[None]	30° 18' 39.0" N	087° 17' 58.2" W	---
1.18	Retain seabed characteristic - Sand	GP	[None]	30° 18' 50.8" N	087° 17' 44.5" W	---
1.19	Retain seabed characteristic - Sand	GP	[None]	30° 18' 53.0" N	087° 18' 16.0" W	---
1.20	Retain seabed characteristic - Mud	GP	[None]	30° 19' 04.2" N	087° 18' 38.7" W	---
1.21	Retain seabed characteristic - Sand	GP	[None]	30° 19' 07.8" N	087° 17' 42.3" W	---
1.22	Retain seabed characteristic - Sand	GP	[None]	30° 19' 07.9" N	087° 18' 11.5" W	---
1.23	Retain seabed characteristic - Sand	GP	[None]	30° 19' 16.1" N	087° 17' 49.9" W	---
1.24	Retain seabed characteristic - Sand	GP	[None]	30° 19' 16.8" N	087° 17' 59.2" W	---
1.25	Retain seabed characteristic - Sand	GP	[None]	30° 19' 23.7" N	087° 18' 09.9" W	---
1.26	Add seabed characteristic - Sand	GP	[None]	30° 19' 35.7" N	087° 18' 31.3" W	---
1.27	Retain seabed characteristic - Sand	GP	[None]	30° 19' 40.6" N	087° 18' 47.1" W	---
1.28	Add seabed characteristic - Sand	GP	[None]	30° 09' 18.6" N	087° 16' 52.3" W	---
1.29	Add seabed characteristic - Sand - Shell	GP	[None]	30° 11' 04.1" N	087° 21' 37.7" W	---
1.30	Add seabed characteristic - Sand	GP	[None]	30° 11' 24.2" N	087° 19' 25.3" W	---
1.31	Add seabed characteristic - Sand - Shell	GP	[None]	30° 11' 28.8" N	087° 16' 53.0" W	---
1.32	Add seabed characteristic - Sand	GP	[None]	30° 12' 44.3" N	087° 22' 55.0" W	---
1.33	Add seabed characteristic - Sand - Shell	GP	[None]	30° 13' 06.4" N	087° 20' 27.8" W	---
1.34	Add seabed characteristic - Sand - Shell	GP	[None]	30° 13' 28.5" N	087° 18' 00.3" W	---
1.35	Add seabed characteristic - Sand - Shell	GP	[None]	30° 14' 39.8" N	087° 15' 45.9" W	---
1.36	Add seabed characteristic - Sand	GP	[None]	30° 14' 43.5" N	087° 18' 08.7" W	---
1.37	Retain seabed characteristic - fine Sand	GP	[None]	30° 15' 06.0" N	087° 18' 01.0" W	---
1.38	Add seabed characteristic - Sand	GP	[None]	30° 15' 18.0" N	087° 15' 55.6" W	---
1.39	Retain seabed characteristic - Shell	GP	[None]	30° 15' 19.3" N	087° 16' 43.1" W	---
1.40	Retain seabed characteristic - Shell	GP	[None]	30° 15' 27.6" N	087° 17' 32.8" W	---
1.41	Retain seabed characteristic - Sand	GP	[None]	30° 15' 30.0" N	087° 17' 33.4" W	---
1.42	Add seabed characteristic - Sand - Shell	GP	[None]	30° 15' 48.7" N	087° 16' 54.0" W	---
1.43	Add seabed characteristic - Sand	GP	[None]	30° 15' 56.4" N	087° 16' 03.5" W	---

1.44	Retain seabed characteristic - Sand - Shell	GP	[None]	30° 16' 33.4" N	087° 17' 53.7" W	---
1.45	Retain seabed characteristic - Sand	GP	[None]	30° 16' 37.1" N	087° 17' 22.7" W	---
1.46	Add seabed characteristic - Sand	GP	[None]	30° 16' 48.8" N	087° 17' 03.7" W	---
1.47	Retain seabed characteristic - Sand	GP	[None]	30° 16' 59.5" N	087° 17' 26.3" W	---
1.48	Retain seabed characteristic - Sand	GP	[None]	30° 17' 01.3" N	087° 16' 56.9" W	---
1.49	Retain seabed characteristic - Sand	GP	[None]	30° 17' 01.9" N	087° 18' 02.9" W	---
1.50	Add seabed characteristic - Sand	GP	[None]	30° 17' 14.5" N	087° 18' 12.3" W	---
1.51	Delete seabed characteristics - fine Sand	GP	[None]	30° 13' 05.5" N	087° 21' 58.7" W	---
1.52	Delete seabed characteristics - fine Sand	GP	[None]	30° 10' 59.5" N	087° 19' 59.2" W	---
1.53	Delete seabed characteristics - fine Sand	GP	[None]	30° 14' 25.9" N	087° 18' 37.4" W	---
1.54	Delete seabed characteristics - fine Sand Shell	GP	[None]	30° 13' 02.9" N	087° 17' 59.1" W	---
1.55	Retain seabed characteristics - Hard	GP	[None]	30° 16' 58.6" N	087° 17' 22.2" W	---
1.56	Delete seabed characteristics - fine Sand	GP	[None]	30° 14' 58.4" N	087° 17' 21.1" W	---
1.57	Delete seabed characteristics - fine Sand	GP	[None]	30° 10' 03.8" N	087° 16' 59.5" W	---

1 - BottomSamples

1.1) Retain seabed characteristic - Sand

Survey Summary

Survey Position: 30° 17' 43.7" N, 087° 18' 29.8" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-274.00:00:00.000 (10/01/2006)
Dataset: H12061_Features_ALL.000
FOID: US 0000916139 00001(0226000DFAAB0001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916139 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: NATSUR - 4:sand
 NINFOM - Retain seabed characteristics
 SORDAT - 20061000
 SORIND - US,US,graph,Chart 11384

Office Notes

Retain seabed characteristic.

1.2) Retain seabed characteristic - Sand

Survey Summary

Survey Position: 30° 17' 46.2" N, 087° 17' 52.5" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-274.00:00:00.000 (10/01/2006)
Dataset: H12061_Features_ALL.000
FOID: US 0000916153 00001(0226000DFAB90001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916153 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: NATSUR - 4:sand
 NINFOM - Retain seabed characteristics
 SORDAT - 20061000
 SORIND - US,US,graph,Chart 11384

Office Notes

Retain seabed characteristic.

1.3) Retain seabed characteristic - Sand

Survey Summary

Survey Position: 30° 17' 48.0" N, 087° 17' 22.3" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-274.00:00:00.000 (10/01/2006)
Dataset: H12061_Features_ALL.000
FOID: US 0000916137 00001(0226000DFAA90001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916137 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: NATSUR - 4:sand
 NINFOM - Retain seabed characteristics
 SORDAT - 20061000
 SORIND - US,US,graph,Chart 11384

Office Notes

Retain seabed characteristic.

1.4) Retain seabed characteristic - Sand

Survey Summary

Survey Position: 30° 17' 53.7" N, 087° 18' 53.9" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-274.00:00:00.000 (10/01/2006)
Dataset: H12061_Features_ALL.000
FOID: US 0000916136 00001(0226000DFAA80001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916136 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: NATSUR - 4:sand
 NINFOM - Retain seabed characteristics
 SORDAT - 20061000
 SORIND - US,US,graph,Chart 11384

Office Notes

Retain seabed characteristic.

1.5) Retain seabed characteristic - Sand

Survey Summary

Survey Position: 30° 17' 53.7" N, 087° 18' 23.4" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-274.00:00:00.000 (10/01/2006)
Dataset: H12061_Features_ALL.000
FOID: US 0000916142 00001(0226000DFAAE0001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916142 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: NATSUR - 4:sand
 NINFOM - Retain seabed characteristics
 SORDAT - 20061000
 SORIND - US,US,graph,Chart 11384

Office Notes

Retain seabed characteristic.

1.6) Retain seabed characteristic - Sand

Survey Summary

Survey Position: 30° 18' 03.0" N, 087° 17' 16.0" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-274.00:00:00.000 (10/01/2006)
Dataset: H12061_Features_ALL.000
FOID: US 0000916156 00001(0226000DFABC0001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916156 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: NATSUR - 4:sand
 NINFOM - Retain seabed characteristics
 SORDAT - 20061000
 SORIND - US,US,graph,Chart 11384

Office Notes

Retain seabed characteristic.

1.7) Retain seabed characteristic - Sand

Survey Summary

Survey Position: 30° 18' 04.1" N, 087° 17' 52.3" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-274.00:00:00.000 (10/01/2006)
Dataset: H12061_Features_ALL.000
FOID: US 0000916141 00001(0226000DFAAD0001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916141 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: NATSUR - 4:sand
 NINFOM - Retain seabed characteristics
 SORDAT - 20061000
 SORIND - US,US,graph,Chart 11384

Office Notes

Retain seabed characteristic.

1.8) Add seabed characteristic - Sand - Silt/Ooze

Survey Summary

Survey Position: 30° 18' 09.4" N, 087° 17' 38.8" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Features_ALL.000
FOID: US 0000916114 00001(0226000DFA920001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

SBDARE/remrks: B-2 fine/silt yellowish orange sand

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916114 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: COLOUR - 6,11:yellow,orange
 NATQUA - 1:fine
 NATSUR - 4,3:sand,silt
 NINFOM - Add seabed characteristics
 SORDAT - 20100223
 SORIND - US,US,graph,H12061

Office Notes

Add seabed characteristic.

1.9) Retain seabed characteristic - Sand - Shell

Survey Summary

Survey Position: 30° 18' 12.7" N, 087° 18' 56.4" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-274.00:00:00.000 (10/01/2006)
Dataset: H12061_Features_ALL.000
FOID: US 0000916147 00001(0226000DFAB30001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916147 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: NATSUR - 4,17:sand,shells
 NINFOM - Retain seabed characteristics
 SORDAT - 20061000
 SORIND - US,US,graph,Chart 11384

Office Notes

Retain seabed characteristic.

1.10) Retain seabed characteristic - Sand

Survey Summary

Survey Position: 30° 18' 15.0" N, 087° 17' 55.2" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-274.00:00:00.000 (10/01/2006)
Dataset: H12061_Features_ALL.000
FOID: US 0000916149 00001(0226000DFAB50001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916149 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: NATSUR - 4:sand
 NINFOM - Retain seabed characteristics
 SORDAT - 20061000
 SORIND - US,US,graph,Chart 11384

Office Notes

Retain seabed characteristic.

1.11) Retain seabed characteristic - Sand - Shell

Survey Summary

Survey Position: 30° 18' 20.4" N, 087° 17' 28.6" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-274.00:00:00.000 (10/01/2006)
Dataset: H12061_Features_ALL.000
FOID: US 0000916130 00001(0226000DFAA20001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916130 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: NATSUR - 4,17:sand,shells
 NINFOM - Retain seabed characteristics
 SORDAT - 20061000
 SORIND - US,US,graph,Chart 11384

Office Notes

Retain seabed characteristic.

1.12) Retain seabed characteristic - Sand

Survey Summary

Survey Position: 30° 18' 23.7" N, 087° 17' 45.6" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-274.00:00:00.000 (10/01/2006)
Dataset: H12061_Features_ALL.000
FOID: US 0000916144 00001(0226000DFAB00001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916144 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: NATSUR - 4:sand
 NINFOM - Retain seabed characteristics
 SORDAT - 20061000
 SORIND - US,US,graph,Chart 11384

Office Notes

Retain seabed characteristic.

1.13) Add seabed characteristic - Sand - Silt

Survey Summary

Survey Position: 30° 18' 24.5" N, 087° 18' 49.1" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Features_ALL.000
FOID: US 0000916129 00001(0226000DFAA10001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

SBDARE/remrks: B-1 fine/silt yellowish orange sand

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916129 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: COLOUR - 6,11:yellow,orange
 NATQUA - 1:fine
 NATSUR - 4,3:sand,silt
 NINFOM - Add seabed characteristics
 SORDAT - 20100223
 SORIND - US,US,graph,H12061

Office Notes

Add seabed characteristic.

1.14) Retain seabed characteristic - Sand

Survey Summary

Survey Position: 30° 18' 26.0" N, 087° 19' 03.5" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-274.00:00:00.000 (10/01/2006)
Dataset: H12061_Features_ALL.000
FOID: US 0000916159 00001(0226000DFABF0001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916159 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: NATQUA - 10:hard
 NATSUR - 4:sand
 NINFOM - Retain seabed characteristics
 SORDAT - 20061000
 SORIND - US,US,graph,Chart 11384

Office Notes

Retain seabed characteristic.

1.15) Retain seabed characteristic - Sand

Survey Summary

Survey Position: 30° 18' 33.2" N, 087° 19' 16.8" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-274.00:00:00.000 (10/01/2006)
Dataset: H12061_Features_ALL.000
FOID: US 0000916155 00001(0226000DFABB0001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916155 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: NATSUR - 4:sand
 NINFOM - Retain seabed characteristics
 SORDAT - 20061000
 SORIND - US,US,graph,Chart 11384

Office Notes

Retain seabed characteristic.

1.16) Retain seabed characteristic - Sand

Survey Summary

Survey Position: 30° 18' 35.7" N, 087° 18' 09.2" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-274.00:00:00.000 (10/01/2006)
Dataset: H12061_Features_ALL.000
FOID: US 0000916131 00001(0226000DFAA30001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916131 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: NATSUR - 4:sand
 NINFOM - Retain seabed characteristics
 SORDAT - 20061000
 SORIND - US,US,graph,Chart 11384

Office Notes

Retain seabed characteristic.

1.17) Retain seabed characteristic - Sand

Survey Summary

Survey Position: 30° 18' 39.0" N, 087° 17' 58.2" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-274.00:00:00.000 (10/01/2006)
Dataset: H12061_Features_ALL.000
FOID: US 0000916134 00001(0226000DFAA60001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916134 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: NATSUR - 4:sand
 NINFOM - Retain seabed characteristics
 SORDAT - 20061000
 SORIND - US,US,graph,Chart 11384

Office Notes

Retain seabed characteristic.

1.18) Retain seabed characteristic - Sand

Survey Summary

Survey Position: 30° 18' 50.8" N, 087° 17' 44.5" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-274.00:00:00.000 (10/01/2006)
Dataset: H12061_Features_ALL.000
FOID: US 0000916138 00001(0226000DFAAA0001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916138 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: NATSUR - 4:sand
 NINFOM - Retain seabed characteristics
 SORDAT - 20061000
 SORIND - US,US,graph,Chart 11384

Office Notes

Retain seabed characteristic.

1.19) Retain seabed characteristic - Sand

Survey Summary

Survey Position: 30° 18' 53.0" N, 087° 18' 16.0" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-274.00:00:00.000 (10/01/2006)
Dataset: H12061_Features_ALL.000
FOID: US 0000916135 00001(0226000DFAA70001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916135 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: NATSUR - 4:sand
 NINFOM - Retain seabed characteristics
 SORDAT - 20061000
 SORIND - US,US,graph,Chart 11384

Office Notes

Retain seabed characteristic.

1.20) Retain seabed characteristic - Mud

Survey Summary

Survey Position: 30° 19' 04.2" N, 087° 18' 38.7" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-274.00:00:00.000 (10/01/2006)
Dataset: H12061_Features_ALL.000
FOID: US 0000916157 00001(0226000DFABD0001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916157 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: NATSUR - 1:mud
 NINFOM - Retain seabed characteristics
 SORDAT - 20061000
 SORIND - US,US,graph,Chart 11384

Office Notes

Retain seabed characteristic.

1.21) Retain seabed characteristic - Sand

Survey Summary

Survey Position: 30° 19' 07.8" N, 087° 17' 42.3" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-274.00:00:00.000 (10/01/2006)
Dataset: H12061_Features_ALL.000
FOID: US 0000916158 00001(0226000DFABE0001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916158 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: NATSUR - 4:sand
 NINFOM - Retain seabed characteristics
 SORDAT - 20061000
 SORIND - US,US,graph,Chart 11384

Office Notes

Retain seabed characteristic.

1.22) Retain seabed characteristic - Sand

Survey Summary

Survey Position: 30° 19' 07.9" N, 087° 18' 11.5" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-274.00:00:00.000 (10/01/2006)
Dataset: H12061_Features_ALL.000
FOID: US 0000916150 00001(0226000DFAB60001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916150 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: NATSUR - 4:sand
 NINFOM - Retain seabed characteristics
 SORDAT - 20061000
 SORIND - US,US,graph,Chart 11384

Office Notes

Retain seabed characteristic.

1.23) Retain seabed characteristic - Sand

Survey Summary

Survey Position: 30° 19' 16.1" N, 087° 17' 49.9" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-274.00:00:00.000 (10/01/2006)
Dataset: H12061_Features_ALL.000
FOID: US 0000916132 00001(0226000DFAA40001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916132 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: NATSUR - 4:sand
 NINFOM - Retain seabed characteristics
 SORDAT - 20061000
 SORIND - US,US,graph,Chart 11384

Office Notes

Retain seabed characteristic.

1.24) Retain seabed characteristic - Sand

Survey Summary

Survey Position: 30° 19' 16.8" N, 087° 17' 59.2" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-274.00:00:00.000 (10/01/2006)
Dataset: H12061_Features_ALL.000
FOID: US 0000916154 00001(0226000DFABA0001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916154 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: NATSUR - 4:sand
 NINFOM - Retain seabed characteristics
 SORDAT - 20061000
 SORIND - US,US,graph,Chart 11384

Office Notes

Retain seabed characteristic.

1.25) Retain seabed characteristic - Sand

Survey Summary

Survey Position: 30° 19' 23.7" N, 087° 18' 09.9" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-274.00:00:00.000 (10/01/2006)
Dataset: H12061_Features_ALL.000
FOID: US 0000916146 00001(0226000DFAB20001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916146 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: NATSUR - 4:sand
 NINFOM - Retain seabed characteristics
 SORDAT - 20061000
 SORIND - US,US,graph,Chart 11384

Office Notes

Retain seabed characteristic.

1.26) Add seabed characteristic - Sand

Survey Summary

Survey Position: 30° 19' 35.7" N, 087° 18' 31.3" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-274.00:00:00.000 (10/01/2006)
Dataset: H12061_Features_ALL.000
FOID: US 0000916133 00001(0226000DFAA50001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916133 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: INFORM - Soft
 NATSUR - 4:sand
 NINFOM - Retain seabed characteristics
 SORDAT - 20061000
 SORIND - US,US,graph,Chart 11384

Office Notes

Add seabed characteristic.

1.27) Retain seabed characteristic - Sand

Survey Summary

Survey Position: 30° 19' 40.6" N, 087° 18' 47.1" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-274.00:00:00.000 (10/01/2006)
Dataset: H12061_Features_ALL.000
FOID: US 0000916145 00001(0226000DFAB10001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916145 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: NATSUR - 4:sand
 NINFOM - Retain seabed characteristics
 SORDAT - 20061000
 SORIND - US,US,graph,Chart 11384

Office Notes

Retain seabed characteristic.

1.28) Add seabed characteristic - Sand

Survey Summary

Survey Position: 30° 09' 18.6" N, 087° 16' 52.3" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Features_ALL.000
FOID: US 0000916119 00001(0226000DFA970001)
Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

SBDARE/remrks: B-47 light brown fine sand

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916119 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: COLOUR - 8:brown
 NATQUA - 1:fine
 NATSUR - 4:sand
 NINFOM - Add seabed characteristics
 SORDAT - 20100223
 SORIND - US,US,graph,H12061

Office Notes

Add seabed characteristic.

1.29) Add seabed characteristic - Sand - Shell

Survey Summary

Survey Position: 30° 11' 04.1" N, 087° 21' 37.7" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Features_ALL.000
FOID: US 0000916122 00001(0226000DFA9A0001)
Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

SBDARE/remrks: B-28 fine light brown sand with shells

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916122 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: COLOUR - 8:brown
 NATQUA - 1:fine
 NATSUR - 4,17:sand,shells
 NINFOM - Add seabed characteristics
 SORDAT - 20100223
 SORIND - US,US,graph,H12061

Office Notes

Add seabed characteristic.

1.30) Add seabed characteristic - Sand

Survey Summary

Survey Position: 30° 11' 24.2" N, 087° 19' 25.3" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Features_ALL.000
FOID: US 0000916121 00001(0226000DFA990001)
Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

SBDARE/remrks: B-31 light brown fine sand

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916121 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: COLOUR - 8:brown
 NATQUA - 1:fine
 NATSUR - 4:sand
 NINFOM - Add seabed characteristics
 SORDAT - 20100223
 SORIND - US,US,graph,H12061

Office Notes

Add seabed characteristic.

1.31) Add seabed characteristic - Sand - Shell

Survey Summary

Survey Position: 30° 11' 28.8" N, 087° 16' 53.0" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Features_ALL.000
FOID: US 0000916126 00001(0226000DFA9E0001)
Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

SBDARE/remrks: B-39 yellowish orange fine sand and shells

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916126 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: COLOUR - 6,11:yellow,orange
 NATQUA - 1:fine
 NATSUR - 4,17:sand,shells
 NINFOM - Add seabed characteristics
 SORDAT - 20100223
 SORIND - US,US,graph,H12061

Office Notes

Add seabed characteristic.

1.32) Add seabed characteristic - Sand

Survey Summary

Survey Position: 30° 12' 44.3" N, 087° 22' 55.0" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Features_ALL.000
FOID: US 0000916118 00001(0226000DFA960001)
Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

SBDARE/remrks: B-13 yellowish orange fine sand

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916118 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: COLOUR - 6,11:yellow,orange
 NATQUA - 1:fine
 NATSUR - 4:sand
 NINFOM - Add seabed characteristics
 SORDAT - 20100223
 SORIND - US,US,graph,H12061

Office Notes

Add seabed characteristic.

1.33) Add seabed characteristic - Sand - Shell

Survey Summary

Survey Position: 30° 13' 06.4" N, 087° 20' 27.8" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Features_ALL.000
FOID: US 0000916125 00001(0226000DFA9D0001)
Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

SBDARE/remrks: B-15 medium light brown sand with shells

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916125 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: COLOUR - 8:brown
 NATQUA - 2:medium
 NATSUR - 4,17:sand,shells
 NINFOM - Add seabed characteristics
 SORDAT - 20100223
 SORIND - US,US,graph,H12061

Office Notes

Add seabed characteristic.

1.34) Add seabed characteristic - Sand - Shell

Survey Summary

Survey Position: 30° 13' 28.5" N, 087° 18' 00.3" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Features_ALL.000
FOID: US 0000916117 00001(0226000DFA950001)
Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

SBDARE/remrks: B-17 medium brown sand with shells

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916117 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: COLOUR - 8:brown
 NATQUA - 2:medium
 NATSUR - 4,17:sand,shells
 NINFOM - Add seabed characteristics
 SORDAT - 20100223
 SORIND - US,US,graph,H12061

Office Notes

Add seabed characteristic.

1.35) Add seabed characteristic - Sand - Shell

Survey Summary

Survey Position: 30° 14' 39.8" N, 087° 15' 45.9" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Features_ALL.000
FOID: US 0000916128 00001(0226000DFAA00001)
Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

SBDARE/remrks: B-12 medium light brown sand and shells

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916128 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: COLOUR - 8:brown
 NATQUA - 2:medium
 NATSUR - 4,17:sand,shells
 NINFOM - Add seabed characteristics
 SORDAT - 20100223
 SORIND - US,US,graph,H12061

Office Notes

Add seabed characteristic.

1.36) Add seabed characteristic - Sand

Survey Summary

Survey Position: 30° 14' 43.5" N, 087° 18' 08.7" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Features_ALL.000
FOID: US 0000916116 00001(0226000DFA940001)
Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

SBDARE/remrks: B-8 light brown medium/fine sand

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916116 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: COLOUR - 8:brown
 NATQUA - 2,1:medium,fine
 NATSUR - 4:sand
 NINFOM - Add seabed characteristics
 SORDAT - 20100223
 SORIND - US,US,graph,H12061

Office Notes

Add seabed characteristic.

1.37) Retain seabed characteristic - fine Sand

Survey Summary

Survey Position: 30° 15' 06.0" N, 087° 18' 01.0" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2002-047.00:00:00.000 (02/16/2002)
Dataset: H12061_Features_ALL.000
FOID: US 0000916161 00001(0226000DFAC10001)
Charts Affected: 11383_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916161 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: NATQUA - 1: fine
 NATSUR - 4: sand
 NINFOM - Retain seabed characteristics.
 SORDAT - 20020216
 SORIND - US,US,graph,Chart 11383

Office Notes

Retain seabed characteristic.

1.38) Add seabed characteristic - Sand

Survey Summary

Survey Position: 30° 15' 18.0" N, 087° 15' 55.6" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Features_ALL.000
FOID: US 0000916124 00001(0226000DFA9C0001)
Charts Affected: 11383_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

SBDARE/remrks: B-10 light brown fine sand

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916124 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: COLOUR - 8:brown
 NATQUA - 1:fine
 NATSUR - 4:sand
 NINFOM - Add seabed characteristics
 SORDAT - 20100223
 SORIND - US,US,graph,H12061

Office Notes

Add seabed characteristic.

1.39) Retain seabed characteristic - Shell

Survey Summary

Survey Position: 30° 15' 19.3" N, 087° 16' 43.1" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2002-047.00:00:00.000 (02/16/2002)
Dataset: H12061_Features_ALL.000
FOID: US 0000916160 00001(0226000DFAC00001)
Charts Affected: 11383_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916160 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: NATQUA - 4:broken
 NATSUR - 17:shells
 NINFOM - Retain seabed characteristics
 SORDAT - 20020216
 SORIND - US,US,graph,Chart 11383

Office Notes

Retain seabed characteristic.

1.40) Retain seabed characteristic - Shell

Survey Summary

Survey Position: 30° 15' 27.6" N, 087° 17' 32.8" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2002-047.00:00:00.000 (02/16/2002)
Dataset: H12061_Features_ALL.000
FOID: US 0000916162 00001(0226000DFAC20001)
Charts Affected: 11383_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916162 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: NATSUR - 17:shells
 NINFOM - Retain seabed characteristics.
 SORDAT - 20020216
 SORIND - US,US,graph,Chart 11383

Office Notes

Retain seabed characteristic.

1.41) Retain seabed characteristic - Sand

Survey Summary

Survey Position: 30° 15' 30.0" N, 087° 17' 33.4" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2002-047.00:00:00.000 (02/16/2002)
Dataset: H12061_Features_ALL.000
FOID: US 0000916163 00001(0226000DFAC30001)
Charts Affected: 11383_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916163 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: NATSUR - 4:sand
 NINFOM - Retain seabed characteristics.
 SORDAT - 20020216
 SORIND - US,US,graph,Chart 11383

Office Notes

Retain seabed characteristic.

1.42) Add seabed characteristic - Sand - Shell

Survey Summary

Survey Position: 30° 15' 48.7" N, 087° 16' 54.0" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Features_ALL.000
FOID: US 0000916115 00001(0226000DFA930001)
Charts Affected: 11383_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

SBDARE/remrks: B-6 fine light brown sand with shells

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916115 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: COLOUR - 8:brown
 NATQUA - 1:fine
 NATSUR - 4,17:sand,shells
 NINFOM - Add seabed characteristics
 SORDAT - 20100223
 SORIND - US,US,graph,H12061

Office Notes

Add seabed characteristic.

1.43) Add seabed characteristic - Sand

Survey Summary

Survey Position: 30° 15' 56.4" N, 087° 16' 03.5" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Features_ALL.000
FOID: US 0000916120 00001(0226000DFA980001)
Charts Affected: 11383_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

SBDARE/remrks: B-7 fine light brown sand

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916120 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: COLOUR - 8:brown
 NATQUA - 1:fine
 NATSUR - 4:sand
 NINFOM - Add seabed characteristics
 SORDAT - 20100223
 SORIND - US,US,graph,H12061

Office Notes

Add seabed characteristic.

1.44) Retain seabed characteristic - Sand - Shell

Survey Summary

Survey Position: 30° 16' 33.4" N, 087° 17' 53.7" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-274.00:00:00.000 (10/01/2006)
Dataset: H12061_Features_ALL.000
FOID: US 0000916152 00001(0226000DFAB80001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916152 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: NATSUR - 4,17:sand,shells
 NINFOM - Retain seabed characteristics
 SORDAT - 20061000
 SORIND - US,US,graph,Chart 11384

Office Notes

Retain seabed characteristic

1.45) Retain seabed characteristic - Sand

Survey Summary

Survey Position: 30° 16' 37.1" N, 087° 17' 22.7" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-274.00:00:00.000 (10/01/2006)
Dataset: H12061_Features_ALL.000
FOID: US 0000916143 00001(0226000DFAAF0001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916143 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: NATSUR - 4:sand
 NINFOM - Retain seabed characteristics
 SORDAT - 20061000
 SORIND - US,US,graph,Chart 11384

Office Notes

Retain seabed characteristic

1.46) Add seabed characteristic - Sand

Survey Summary

Survey Position: 30° 16' 48.8" N, 087° 17' 03.7" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Features_ALL.000
FOID: US 0000916123 00001(0226000DFA9B0001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

SBDARE/remrks: B-4 fine yellowish orange sand

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916123 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: COLOUR - 6,11:yellow,orange
 NATQUA - 1:fine
 NATSUR - 4:sand
 NINFOM - Add seabed characteristics
 SORDAT - 20100223
 SORIND - US,US,graph,H12061

Office Notes

Add seabed characteristic.

1.47) Retain seabed characteristic - Sand

Survey Summary

Survey Position: 30° 16' 59.5" N, 087° 17' 26.3" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-274.00:00:00.000 (10/01/2006)
Dataset: H12061_Features_ALL.000
FOID: US 0000916151 00001(0226000DFAB70001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916151 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: NATSUR - 4:sand
 NINFOM - Retain seabed characteristics
 SORDAT - 20061000
 SORIND - US,US,graph,Chart 11384

Office Notes

Retain seabed characteristic

1.48) Retain seabed characteristic - Sand

Survey Summary

Survey Position: 30° 17' 01.3" N, 087° 16' 56.9" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-274.00:00:00.000 (10/01/2006)
Dataset: H12061_Features_ALL.000
FOID: US 0000916148 00001(0226000DFAB40001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916148 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: NATSUR - 4:sand
 NINFOM - Retain seabed characteristics
 SORDAT - 20061000
 SORIND - US,US,graph,Chart 11384

Office Notes

Retain seabed characteristic

1.49) Retain seabed characteristic - Sand

Survey Summary

Survey Position: 30° 17' 01.9" N, 087° 18' 02.9" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-274.00:00:00.000 (10/01/2006)
Dataset: H12061_Features_ALL.000
FOID: US 0000916140 00001(0226000DFAAC0001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916140 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: NATSUR - 4:sand
 NINFOM - Retain seabed characteristics
 SORDAT - 20061000
 SORIND - US,US,graph,Chart 11384

Office Notes

Retain seabed characteristic

1.50) Add seabed characteristic - Sand

Survey Summary

Survey Position: 30° 17' 14.5" N, 087° 18' 12.3" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: H12061_Features_ALL.000
FOID: US 0000916127 00001(0226000DFA9F0001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

SBDARE/remrks: B-3 fine yellowish orange sand

Feature Correlation

Source	Feature	Range	Azimuth	Status
H12061_Features_ALL.000	US 0000916127 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: COLOUR - 6,11:yellow,orange
 NATQUA - 1:fine
 NATSUR - 4:sand
 NINFOM - Add seabed characteristics
 SORDAT - 20100223
 SORIND - US,US,graph,H12061

Office Notes

Add seabed characteristic.

1.51) Delete seabed characteristics - fine Sand

Survey Summary

Survey Position: 30° 13' 05.5" N, 087° 21' 58.7" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: new_feature_transfers_272012.000
FOID: US 0000075761 00001(0226000127F10001)
Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
new_feature_transfers_272012.000	US 0000075761 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)
Attributes: NINFOM - Delete seabed characteristics.
 NTXTDS - H12061, Chart #11382, edition#41, 20100501
 SORDAT - 20100223
 SORIND - US,US,graph,H12061

Office Notes

Delete seabed characteristics.

1.52) Delete seabed characteristics - fine Sand

Survey Summary

Survey Position: 30° 10' 59.5" N, 087° 19' 59.2" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: new_feature_transfers_272012.000
FOID: US 0000075758 00001(0226000127EE0001)
Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
new_feature_transfers_272012.000	US 0000075758 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)
Attributes: NINFOM - Delete seabed characteristics.
 NTXTDS - H12061, Chart #11382, edition#41, 20100501
 SORDAT - 20100223
 SORIND - US,US,graph,H12061

Office Notes

Delete seabed characteristics.

1.53) Delete seabed characteristics - fine Sand

Survey Summary

Survey Position: 30° 14' 25.9" N, 087° 18' 37.4" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: new_feature_transfers_272012.000
FOID: US 0000075757 00001(0226000127ED0001)
Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
new_feature_transfers_272012.000	US 0000075757 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)
Attributes: NINFOM - Delete seabed characteristics.
 NTXTDS - H12061, Chart #11382, edition#41, 20100501
 SORDAT - 20100223
 SORIND - US,US,graph,H12061

Office Notes

Delete seabed characteristics.

1.54) Delete seabed characteristics - fine Sand Shell

Survey Summary

Survey Position: 30° 13' 02.9" N, 087° 17' 59.1" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: new_feature_transfers_272012.000
FOID: US 0000075760 00001(0226000127F00001)
Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
new_feature_transfers_272012.000	US 0000075760 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)
Attributes: NINFOM - Delete seabed characteristics.
 NTXTDS - H12061, Chart #11382, edition#41, 20100501
 SORDAT - 20100223
 SORIND - US,US,graph,H12061

Office Notes

Delete seabed characteristics.

1.55) Retain seabed characteristics - Hard

Survey Summary

Survey Position: 30° 16' 58.6" N, 087° 17' 22.2" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-274.00:00:00.000 (10/01/2006)
Dataset: new_feature_transfers_272012.000
FOID: US 0000075756 00001(0226000127EC0001)
Charts Affected: 11384_1, 11383_1, 11378_1, 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
new_feature_transfers_272012.000	US 0000075756 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Seabed area (SBDARE)
Attributes: NATQUA - 10:hard
 NINFOM - Retain seabed characteristics
 SORDAT - 20061000
 SORIND - US,US,graph,Chart 11384

Office Notes

Retain seabed characteristics.

1.56) Delete seabed characteristics - fine Sand

Survey Summary

Survey Position: 30° 14' 58.4" N, 087° 17' 21.1" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: new_feature_transfers_272012.000
FOID: US 0000075762 00001(0226000127F20001)
Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
new_feature_transfers_272012.000	US 0000075762 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)
Attributes: NINFOM - Delete seabed characteristics.
 NTXTDS - H12061, Chart #11382, edition#41, 20100501
 SORDAT - 20100223
 SORIND - US,US,graph,H12061

Office Notes

Delete seabed characteristics.

1.57) Delete seabed characteristics - fine Sand

Survey Summary

Survey Position: 30° 10' 03.8" N, 087° 16' 59.5" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2010-054.00:00:00.000 (02/23/2010)
Dataset: new_feature_transfers_272012.000
FOID: US 0000075759 00001(0226000127EF0001)
Charts Affected: 11382_1, 1115A_1, 11360_1, 11006_1, 411_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
new_feature_transfers_272012.000	US 0000075759 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Cartographic symbol (\$CSYMB)
Attributes: NINFOM - Delete seabed characteristics.
 NTXTDS - H12061, Chart #11382, edition#41, 20100501
 SORDAT - 20100223
 SORIND - US,US,graph,H12061

Office Notes

Delete seabed characteristics.

Appendix III

Final Progress Sketch
and
Survey Outline

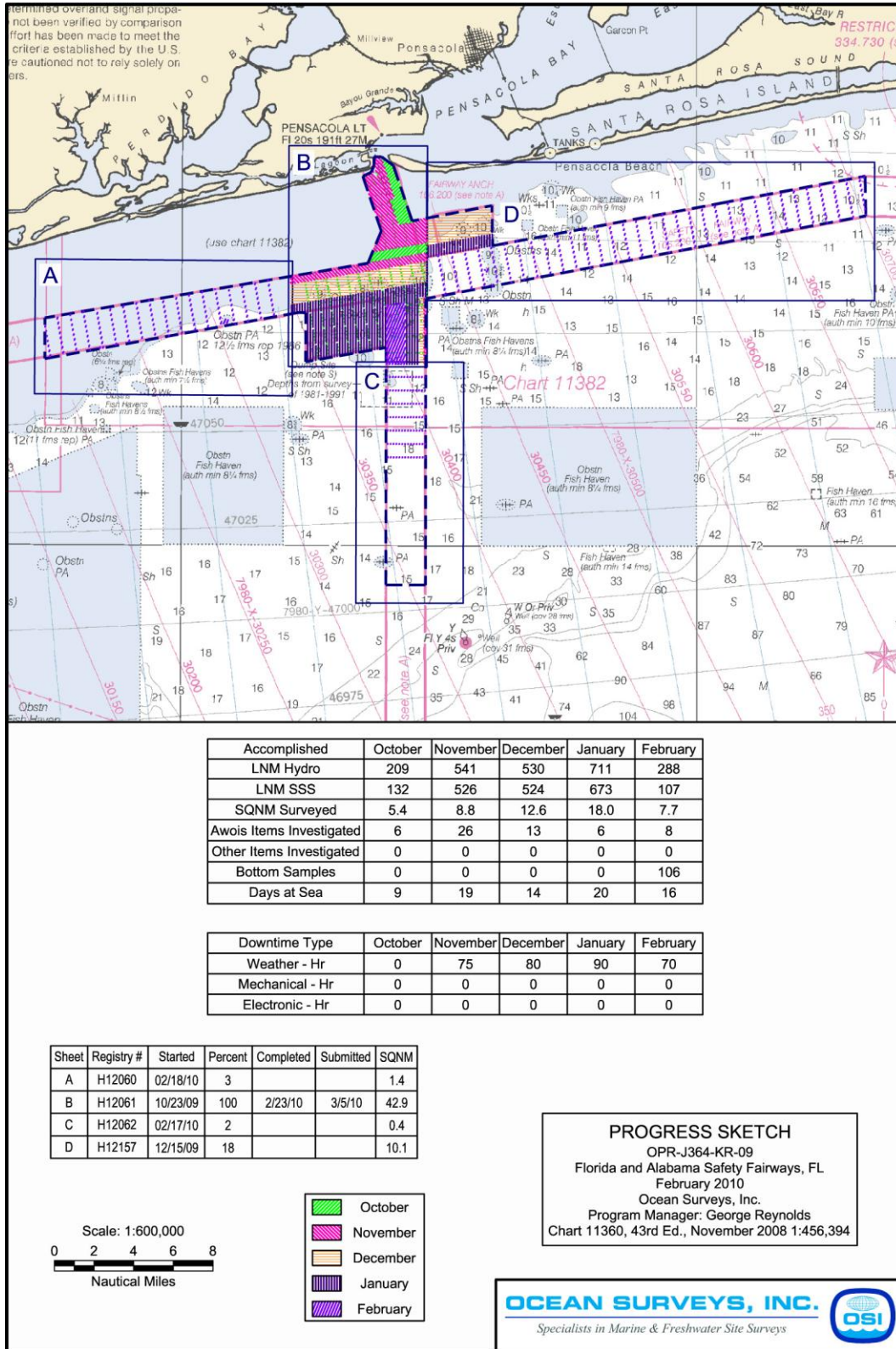


Figure 1. Final Progress Sketch.

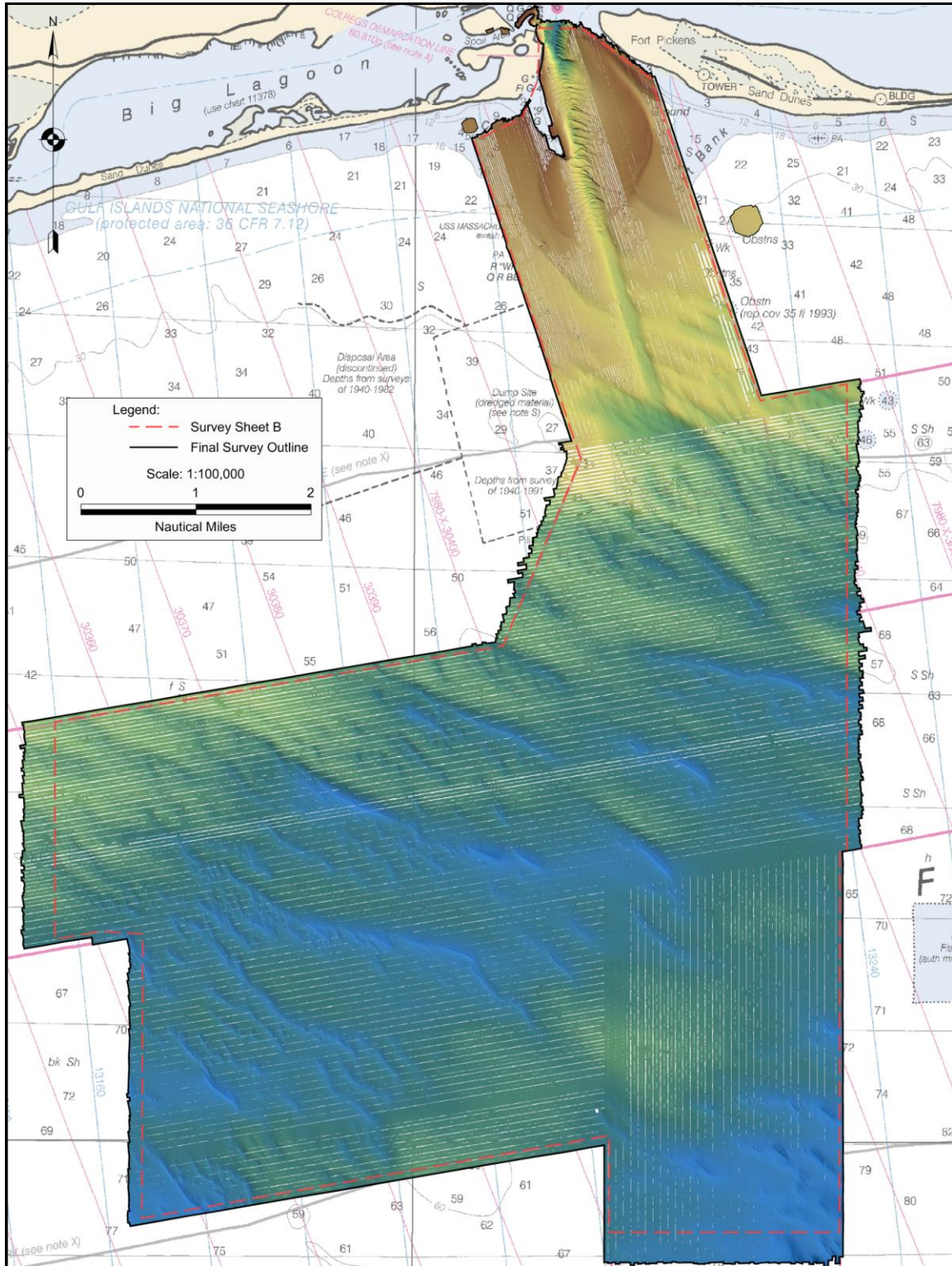


Figure 2. Final Survey Outline.

Appendix IV

Tides and Water Levels

Abstract of Times of Hydrography

The following table, "Abstract of Times of Hydrography," summarizes the days in which data were collected that contribute to the final accepted data set.

Date	Julian Day	Min. Time UTC	Max. Time UTC
10/23/2009	296	19:49:53	22:47:52
10/24/2009	297	20:55:08	23:04:39
10/25/2009	298	13:06:32	23:23:52
10/26/2009	299	12:43:15	23:19:45
10/27/2009	300	17:49:19	18:16:56
10/28/2009	301	12:41:09	20:36:28
10/29/2009	302	14:43:27	22:47:10
10/30/2009	303	13:47:46	22:31:07
10/31/2009	304	12:37:18	22:47:27
11/1/2009	305	12:43:29	22:53:55
11/2/2009	306	13:18:53	22:52:27
11/3/2009	307	15:02:13	23:03:14
11/4/2009	308	12:46:57	22:46:54
11/5/2009	309	12:52:11	22:31:20
11/12/2009	316	13:49:09	22:54:06
11/13/2009	317	12:28:57	23:02:43
11/14/2009	318	15:20:15	23:15:03
11/15/2009	319	12:32:02	23:24:18
11/16/2009	320	13:30:19	21:34:12
11/17/2009	321	12:57:13	22:56:58
11/18/2009	322	16:27:58	23:31:36
11/19/2009	323	12:28:44	22:58:24
11/20/2009	324	15:42:37	22:23:45
11/22/2009	326	17:42:06	20:59:11
11/23/2009	327	12:49:56	23:19:28
11/24/2009	328	14:29:39	21:44:50
11/29/2009	333	15:25:57	22:46:13
11/30/2009	334	12:55:00	22:22:29
12/3/2009	337	14:48:14	22:32:44
12/4/2009	338	12:34:18	22:53:53
12/5/2009	339	15:30:10	22:54:35
12/6/2009	340	12:46:30	22:44:28

Date	Julian Day	Min. Time UTC	Max. Time UTC
12/7/2009	341	15:20:19	22:59:01
12/10/2009	344	14:17:09	23:21:14
12/13/2009	347	16:04:00	22:17:26
12/14/2009	348	13:51:56	22:34:41
1/6/2010	6	13:12:22	22:27:32
1/7/2010	7	12:56:48	22:07:53
1/9/2010	9	13:14:13	13:52:59
1/10/2010	10	13:20:04	21:01:27
1/11/2010	11	13:11:15	23:27:27
1/12/2010	12	13:12:53	23:05:07
1/13/2010	13	14:50:25	23:56:13
1/14/2010	14	13:14:25	23:07:07
1/15/2010	15	15:04:28	22:12:20
1/18/2010	18	13:34:59	23:19:18
1/19/2010	19	13:11:06	23:16:08
1/20/2010	20	12:54:51	20:48:09
1/21/2009	21	14:09:12	15:12:13
1/22/2009	22	14:01:09	17:11:45
1/25/2010	25	17:58:22	17:58:28
1/26/2010	26	17:32:41	22:03:37
1/27/2010	27	13:21:21	23:30:57
1/28/2010	28	13:56:38	23:23:19
1/31/2010	31	15:40:45	23:43:05
2/1/2010	32	12:58:04	20:56:14
2/2/2010	33	13:10:53	23:42:03
2/3/2010	34	13:24:20	23:10:25
2/7/2010	38	13:51:03	23:10:30
2/8/2010	39	13:30:45	22:13:01
2/10/2010	41	14:30:21	22:28:35
2/11/2010	42	13:22:37	22:33:55
2/13/2010	44	15:06:14	23:27:04
2/17/2010	48	17:11:19	17:20:21
2/22/2010	53	22:26:48	22:35:50
2/23/2010	54	14:28:20	15:29:24

The COTR was notified via e-mail and telephone communications that the OSI field team was ready to commence survey operations. The COTR subsequently instructed CO-OPS to begin providing OSI with verified tides. Email correspondence concerning the tide gauge follows.

From: George Reynolds
To: "kathleen.jamison"
Subject: Pensacola tide gauge 8729840
Date: Wednesday, September 09, 2009 9:06:12 AM
Attachments: 8729840 Pensacola.docx

Hi Kathleen,

We have begun to monitor the Co-Ops tide gages that will support the Pensacola Project and noticed that Pensacola Gauge 8729840 appears to have a problem.

Preliminary water level records have been inconsistent since approximately August 18, 2009 for both data collection platforms (see attachment).

The Dauphin Island tide gauge (8735180) appears to be working correctly.

Regards
George

From: kathleen.jamison [mailto:Kathleen.Jamison@noaa.gov]
Sent: Friday, November 13, 2009 10:07 AM
To: George Reynolds
Subject: Re: Pensacola Tide Gauge

George,

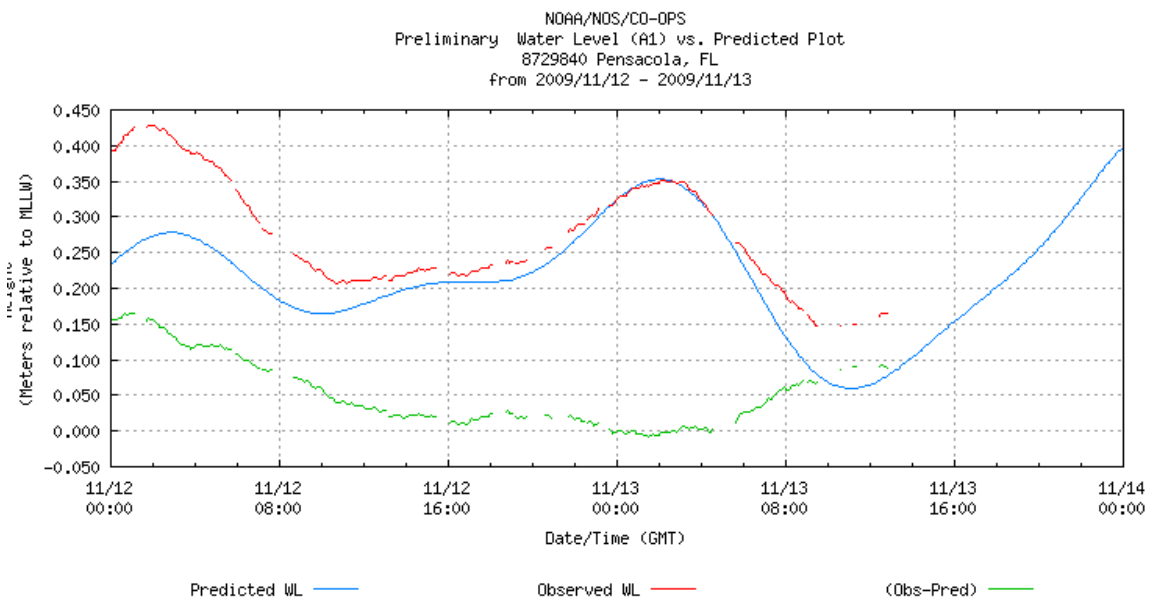
Thanks for the update -- I've told co-ops of the issue. I'll let you know what they say.

Kathleen

George Reynolds wrote:

Hi Kathleen,

The Pensacola tide gauge (8729840) has experienced “interruptions” in observed preliminary data over the past couple of days.



Please notify CO-OPS of this situation.

Regards
George

From: George Reynolds [ggr@oceansurveys.com]
Sent: Friday, November 13, 2009 2:43 PM
To: 'kathleen.jamison'
Subject: RE: [Fwd: Re: [Fwd: Pensacola Tide Gauge]]

Kathleen,

The storm kept us off the water until yesterday (see list below). So the days in question are 11/12 and 11/13/2009.

11/07/09 No Survey Ops (Storm IDA)
11/08/09 No Survey Ops (Storm IDA)
11/09/09 No Survey Ops (Storm IDA)
11/10/09 No Survey Ops (Storm IDA)
11/11/09 No Survey Ops (Storm IDA)
11/12/09 13:00 to 23:00 Survey Ops
11/13/09 13:00 to 23:00 Survey Ops

George

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

From: kathleen.jamison [mailto:Kathleen.Jamison@noaa.gov]
Sent: Friday, November 13, 2009 10:20 AM
To: George Reynolds
Subject: [Fwd: Re: [Fwd: Pensacola Tide Gauge]]

I probably should have asked -- were you surveying during the time when the gauge was experiencing the interruptions?

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

Subject: Re: [Fwd: Pensacola Tide Gauge]
Date: Fri, 13 Nov 2009 10:10:26 -0500
From: Carolyn Lindley <Carolyn.Lindley@noaa.gov>
Reply-To: Carolyn.Lindley@noaa.gov
Organization: National Ocean Service
To: kathleen.jamison <Kathleen.Jamison@noaa.gov>
CC: NOS.COOPS.HPT@noaa.gov
References: <4AFD75E4.7050405@noaa.gov>

Hi Kathleen,

The interruptions are likely due to Ida. We should know on Monday whether the gaps are fillable. Sounds like the contractor didn't survey when the station was down which is good. We will monitor and discuss with our field crews if the gauge doesn't come back online by next week.

Thanks,
Carolyn

kathleen.jamison wrote:

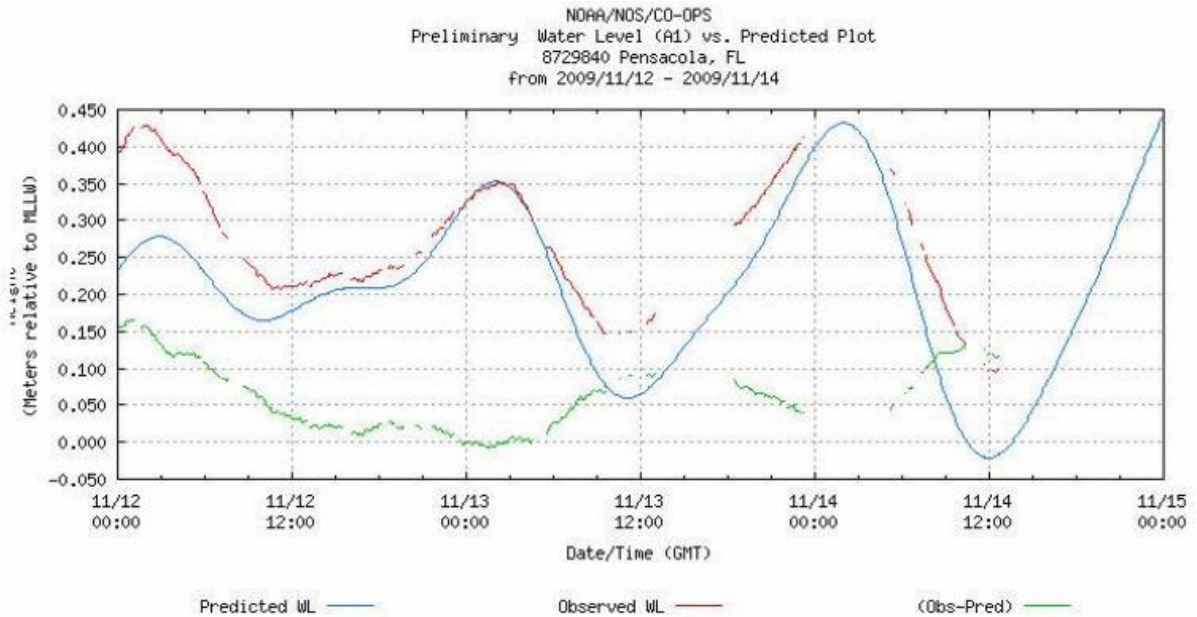
Hi, OSI just informed me that there have been interruptions in the Pensacola Tide Gauge for a couple days -- they were monitoring it pretty closely but pulled in during and after Ida.
-Kathleen

From: George Reynolds [ggr@oceansurveys.com]
 Sent: Saturday, November 14, 2009 9:15 AM
 To: 'kathleen.jamison'
 Subject: Pensacola Tide Gauge functioning poorly

Hi Kathleen,

The Pensacola gauge continues to exhibit erratic operation.

George



The preliminary Pensacola tide data interruptions are continuing. The data gaps are increasing in duration and frequency.

```
8729840 20091113 12:54 0.079 0.169 0.183
8729840 20091113 13:00 0.081 0.173 0.190
```

5 hour data gap during survey ops

```
8729840 20091113 18:24 0.211 0.294 0.312
8729840 20091113 18:30 0.214 0.294 0.314
```

Tide Data					
Station	Date	Time	Pred 6	Acoustc	Backup
DCP#:			1	1	2
Units:			Meters	Meters	Meters
Data%:	MLLW	GMT	100.00	39.167	39.167
Maximum:			0.438	0.412	0.419
Minimum:			-0.021	0.095	-0.243

8729840	20091113	00:00	0.324	0.324	0.333
8729840	20091113	00:06	0.327	0.328	0.337
8729840	20091113	00:12	0.329	0.329	0.342
8729840	20091113	00:18	0.331	0.330	0.342
8729840	20091113	00:24	0.333	0.329	0.342
8729840	20091113	00:30	0.336	0.334	0.343
8729840	20091113	00:36	0.338	0.337	0.346
8729840	20091113	00:42	0.340	0.341	0.354
8729840	20091113	00:48	0.341	0.341	0.352
8729840	20091113	00:54	0.343	0.340	0.351
8729840	20091113	01:00	0.345	0.340	0.348
8729840	20091113	01:06	0.346	0.342	0.351
8729840	20091113	01:12	0.347	0.344	0.354
8729840	20091113	01:18	0.349	0.343	0.353
8729840	20091113	01:24	0.350	0.344	0.355
8729840	20091113	01:30	0.351	0.342	-0.035
8729840	20091113	01:36	0.351	0.345	-0.032
8729840	20091113	01:42	0.352	0.347	0.359
8729840	20091113	01:48	0.352	0.346	0.356
8729840	20091113	01:54	0.353	0.346	0.352
8729840	20091113	02:00	0.353	0.347	0.358
8729840	20091113	02:06	0.353	0.351	0.361
8729840	20091113	02:12	0.353	0.352	0.359
8729840	20091113	02:18	0.352	0.351	0.360
8729840	20091113	02:24	0.352	0.350	0.360
8729840	20091113	02:30	0.351	0.350	0.345
8729840	20091113	02:36	0.350	0.351	0.350
8729840	20091113	02:42	0.349	0.349	0.359
8729840	20091113	02:48	0.348	0.347	0.357
8729840	20091113	02:54	0.346	0.347	0.352
8729840	20091113	03:00	0.345	0.349	0.357
8729840	20091113	03:06	0.343	0.350	0.358
8729840	20091113	03:12	0.341	0.349	-0.029
8729840	20091113	03:18	0.339	0.344	0.113
8729840	20091113	03:24	0.337	0.339	0.351
8729840	20091113	03:30	0.334	0.339	0.346
8729840	20091113	03:36	0.332	0.337	0.345
8729840	20091113	03:42	0.329	0.336	0.344
8729840	20091113	03:48	0.326	0.331	0.341
8729840	20091113	03:54	0.323	0.326	0.338
8729840	20091113	04:00	0.320	0.323	0.337
8729840	20091113	04:06	0.317	0.320	0.334
8729840	20091113	04:12	0.313	0.317	0.326
8729840	20091113	04:18	0.309	0.310	0.322
8729840	20091113	04:24	0.306	0.305	0.319
8729840	20091113	04:30	0.302	0.304	0.312
8729840	20091113	04:36	0.298		
8729840	20091113	04:42	0.294		
8729840	20091113	04:48	0.289		
8729840	20091113	04:54	0.285		
8729840	20091113	05:00	0.280		
8729840	20091113	05:06	0.276		
8729840	20091113	05:12	0.271		
8729840	20091113	05:18	0.266		
8729840	20091113	05:24	0.262		

8729840	20091113	05:30	0.257		
8729840	20091113	05:36	0.252	0.264	0.274
8729840	20091113	05:42	0.247	0.263	0.279
8729840	20091113	05:48	0.241	0.263	0.278
8729840	20091113	05:54	0.236	0.260	0.272
8729840	20091113	06:00	0.231	0.258	0.270
8729840	20091113	06:06	0.226	0.253	0.265
8729840	20091113	06:12	0.221	0.247	0.261
8729840	20091113	06:18	0.215	0.242	0.256
8729840	20091113	06:24	0.210	0.239	0.252
8729840	20091113	06:30	0.205	0.236	0.247
8729840	20091113	06:36	0.200	0.233	0.245
8729840	20091113	06:42	0.194	0.228	0.242
8729840	20091113	06:48	0.189	0.222	0.236
8729840	20091113	06:54	0.184	0.220	0.232
8729840	20091113	07:00	0.179	0.219	0.236
8729840	20091113	07:06	0.174	0.217	0.235
8729840	20091113	07:12	0.169	0.216	0.227
8729840	20091113	07:18	0.164	0.209	0.222
8729840	20091113	07:24	0.159	0.207	0.221
8729840	20091113	07:30	0.154	0.205	0.217
8729840	20091113	07:36	0.149	0.204	0.216
8729840	20091113	07:42	0.144	0.202	0.219
8729840	20091113	07:48	0.140	0.198	0.214
8729840	20091113	07:54	0.135	0.196	0.210
8729840	20091113	08:00	0.131	0.189	0.206
8729840	20091113	08:06	0.126	0.183	0.201
8729840	20091113	08:12	0.122	0.181	-0.191
8729840	20091113	08:18	0.118	0.182	-0.103
8729840	20091113	08:24	0.114	0.179	0.193
8729840	20091113	08:30	0.110	0.176	0.191
8729840	20091113	08:36	0.106	0.171	0.186
8729840	20091113	08:42	0.103	0.171	0.188
8729840	20091113	08:48	0.099	0.169	0.186
8729840	20091113	08:54	0.096		
8729840	20091113	09:00	0.093	0.162	0.177
8729840	20091113	09:06	0.089	0.159	0.173
8729840	20091113	09:12	0.086	0.157	0.176
8729840	20091113	09:18	0.084	0.153	0.171
8729840	20091113	09:24	0.081	0.148	0.164
8729840	20091113	09:30	0.079	0.147	0.163
8729840	20091113	09:36	0.076		
8729840	20091113	09:42	0.074		
8729840	20091113	09:48	0.072		
8729840	20091113	09:54	0.070		
8729840	20091113	10:00	0.068		
8729840	20091113	10:06	0.067		
8729840	20091113	10:12	0.065		
8729840	20091113	10:18	0.064		
8729840	20091113	10:24	0.063		
8729840	20091113	10:30	0.062		
8729840	20091113	10:36	0.061	0.147	0.166
8729840	20091113	10:42	0.061		
8729840	20091113	10:48	0.060		
8729840	20091113	10:54	0.060		

8729840	20091113	11:00	0.060		
8729840	20091113	11:06	0.060		
8729840	20091113	11:12	0.060	0.150	0.163
8729840	20091113	11:18	0.060	0.150	0.164
8729840	20091113	11:24	0.060		
8729840	20091113	11:30	0.061		
8729840	20091113	11:36	0.061		
8729840	20091113	11:42	0.062		
8729840	20091113	11:48	0.063		
8729840	20091113	11:54	0.064		
8729840	20091113	12:00	0.065		
8729840	20091113	12:06	0.066		
8729840	20091113	12:12	0.067		
8729840	20091113	12:18	0.069		
8729840	20091113	12:24	0.070	0.161	0.177
8729840	20091113	12:30	0.072	0.164	0.178
8729840	20091113	12:36	0.074	0.166	0.180
8729840	20091113	12:42	0.075	0.166	0.178
8729840	20091113	12:48	0.077	0.165	0.178
8729840	20091113	12:54	0.079	0.169	0.183
8729840	20091113	13:00	0.081	0.173	0.190
8729840	20091113	13:06	0.083		
8729840	20091113	13:12	0.085		
8729840	20091113	13:18	0.087		
8729840	20091113	13:24	0.089		
8729840	20091113	13:30	0.092		
8729840	20091113	13:36	0.094		
8729840	20091113	13:42	0.096		
8729840	20091113	13:48	0.099		
8729840	20091113	13:54	0.101		
8729840	20091113	14:00	0.103		
8729840	20091113	14:06	0.106		
8729840	20091113	14:12	0.108		
8729840	20091113	14:18	0.111		
8729840	20091113	14:24	0.113		
8729840	20091113	14:30	0.116		
8729840	20091113	14:36	0.118		
8729840	20091113	14:42	0.121		
8729840	20091113	14:48	0.124		
8729840	20091113	14:54	0.126		
8729840	20091113	15:00	0.129		
8729840	20091113	15:06	0.131		
8729840	20091113	15:12	0.134		
8729840	20091113	15:18	0.136		
8729840	20091113	15:24	0.139		
8729840	20091113	15:30	0.141		
8729840	20091113	15:36	0.144		
8729840	20091113	15:42	0.146		
8729840	20091113	15:48	0.149		
8729840	20091113	15:54	0.151		
8729840	20091113	16:00	0.154		
8729840	20091113	16:06	0.156		
8729840	20091113	16:12	0.159		
8729840	20091113	16:18	0.161		
8729840	20091113	16:24	0.163		

8729840	20091113	16:30	0.166		
8729840	20091113	16:36	0.168		
8729840	20091113	16:42	0.171		
8729840	20091113	16:48	0.173		
8729840	20091113	16:54	0.175		
8729840	20091113	17:00	0.178		
8729840	20091113	17:06	0.180		
8729840	20091113	17:12	0.182		
8729840	20091113	17:18	0.185		
8729840	20091113	17:24	0.187		
8729840	20091113	17:30	0.190		
8729840	20091113	17:36	0.192		
8729840	20091113	17:42	0.194		
8729840	20091113	17:48	0.197		
8729840	20091113	17:54	0.199		
8729840	20091113	18:00	0.202		
8729840	20091113	18:06	0.204		
8729840	20091113	18:12	0.206		
8729840	20091113	18:18	0.209		
8729840	20091113	18:24	0.211	0.294	0.312
8729840	20091113	18:30	0.214	0.294	0.314
8729840	20091113	18:36	0.217	0.296	0.318
8729840	20091113	18:42	0.219	0.296	0.315
8729840	20091113	18:48	0.222	0.297	0.317
8729840	20091113	18:54	0.224	0.296	0.314
8729840	20091113	19:00	0.227	0.300	0.319
8729840	20091113	19:06	0.230	0.304	0.323
8729840	20091113	19:12	0.233	0.309	0.326
8729840	20091113	19:18	0.235	0.310	0.327
8729840	20091113	19:24	0.238	0.311	0.331
8729840	20091113	19:30	0.241	0.313	0.332
8729840	20091113	19:36	0.244	0.315	0.335
8729840	20091113	19:42	0.247	0.318	0.334
8729840	20091113	19:48	0.250	0.318	0.335
8729840	20091113	19:54	0.253	0.318	0.335
8729840	20091113	20:00	0.256	0.322	0.338
8729840	20091113	20:06	0.259	0.326	0.344
8729840	20091113	20:12	0.262	0.329	0.347
8729840	20091113	20:18	0.266	0.333	0.350
8729840	20091113	20:24	0.269	0.336	0.355
8729840	20091113	20:30	0.272	0.335	0.356
8729840	20091113	20:36	0.276	0.338	0.358
8729840	20091113	20:42	0.279	0.342	0.361
8729840	20091113	20:48	0.283	0.345	0.364
8729840	20091113	20:54	0.286	0.347	0.365
8729840	20091113	21:00	0.290	0.350	0.368
8729840	20091113	21:06	0.293	0.354	0.372
8729840	20091113	21:12	0.297	0.359	0.375
8729840	20091113	21:18	0.301	0.360	0.376
8729840	20091113	21:24	0.304	0.364	0.382
8729840	20091113	21:30	0.308	0.366	0.382
8729840	20091113	21:36	0.312	0.369	0.382
8729840	20091113	21:42	0.316	0.370	0.384
8729840	20091113	21:48	0.319	0.374	0.387
8729840	20091113	21:54	0.323	0.378	0.395

8729840	20091113	22:00	0.327		
8729840	20091113	22:06	0.331	0.378	0.387
8729840	20091113	22:12	0.335	0.381	0.396
8729840	20091113	22:18	0.339	0.387	0.402
8729840	20091113	22:24	0.343	0.391	0.402
8729840	20091113	22:30	0.346	0.396	0.407
8729840	20091113	22:36	0.350	0.397	0.411
8729840	20091113	22:42	0.354	0.396	0.405
8729840	20091113	22:48	0.358	0.400	0.408
8729840	20091113	22:54	0.362	0.404	0.411
8729840	20091113	23:00	0.365	0.404	0.411
8729840	20091113	23:06	0.369		
8729840	20091113	23:12	0.373	0.412	0.419
8729840	20091113	23:18	0.376		
8729840	20091113	23:24	0.380		
8729840	20091113	23:30	0.383		
8729840	20091113	23:36	0.387		
8729840	20091113	23:42	0.390		
8729840	20091113	23:48	0.393		
8729840	20091113	23:54	0.396		
8729840	20091114	00:00	0.399		
8729840	20091114	00:06	0.402		
8729840	20091114	00:12	0.405		
8729840	20091114	00:18	0.408		
8729840	20091114	00:24	0.410		
8729840	20091114	00:30	0.413		
8729840	20091114	00:36	0.415		
8729840	20091114	00:42	0.418		
8729840	20091114	00:48	0.420		
8729840	20091114	00:54	0.422		
8729840	20091114	01:00	0.423		
8729840	20091114	01:06	0.425		
8729840	20091114	01:12	0.426		
8729840	20091114	01:18	0.428		
8729840	20091114	01:24	0.429		
8729840	20091114	01:30	0.430		
8729840	20091114	01:36	0.431		
8729840	20091114	01:42	0.431		
8729840	20091114	01:48	0.432		
8729840	20091114	01:54	0.432		
8729840	20091114	02:00	0.432		
8729840	20091114	02:06	0.432		
8729840	20091114	02:12	0.431		
8729840	20091114	02:18	0.431		
8729840	20091114	02:24	0.430		
8729840	20091114	02:30	0.429		
8729840	20091114	02:36	0.428		
8729840	20091114	02:42	0.426		
8729840	20091114	02:48	0.424		
8729840	20091114	02:54	0.423		
8729840	20091114	03:00	0.421		
8729840	20091114	03:06	0.418		
8729840	20091114	03:12	0.416		
8729840	20091114	03:18	0.413		
8729840	20091114	03:24	0.410		

8729840	20091114	03:30	0.407		
8729840	20091114	03:36	0.404		
8729840	20091114	03:42	0.400		
8729840	20091114	03:48	0.396		
8729840	20091114	03:54	0.392		
8729840	20091114	04:00	0.388		
8729840	20091114	04:06	0.384		
8729840	20091114	04:12	0.379		
8729840	20091114	04:18	0.374		
8729840	20091114	04:24	0.369		
8729840	20091114	04:30	0.364		
8729840	20091114	04:36	0.359		
8729840	20091114	04:42	0.354		
8729840	20091114	04:48	0.348		
8729840	20091114	04:54	0.342		
8729840	20091114	05:00	0.336		
8729840	20091114	05:06	0.330		
8729840	20091114	05:12	0.324	0.369	0.375
8729840	20091114	05:18	0.317	0.366	0.370
8729840	20091114	05:24	0.311	0.362	0.368
8729840	20091114	05:30	0.304		
8729840	20091114	05:36	0.298		
8729840	20091114	05:42	0.291		
8729840	20091114	05:48	0.284		
8729840	20091114	05:54	0.277		
8729840	20091114	06:00	0.270		
8729840	20091114	06:06	0.263		
8729840	20091114	06:12	0.255	0.322	0.330
8729840	20091114	06:18	0.248		
8729840	20091114	06:24	0.241	0.313	0.322
8729840	20091114	06:30	0.233	0.305	0.315
8729840	20091114	06:36	0.226	0.299	0.309
8729840	20091114	06:42	0.219	0.295	0.303
8729840	20091114	06:48	0.211		
8729840	20091114	06:54	0.204		
8729840	20091114	07:00	0.196		
8729840	20091114	07:06	0.189		
8729840	20091114	07:12	0.182		
8729840	20091114	07:18	0.174	0.268	0.278
8729840	20091114	07:24	0.167	0.262	0.272
8729840	20091114	07:30	0.160		
8729840	20091114	07:36	0.152	0.253	0.263
8729840	20091114	07:42	0.145	0.246	0.258
8729840	20091114	07:48	0.138	0.240	0.253
8729840	20091114	07:54	0.131	0.236	0.250
8729840	20091114	08:00	0.124	0.231	0.244
8729840	20091114	08:06	0.118	0.228	0.238
8729840	20091114	08:12	0.111	0.221	0.236
8729840	20091114	08:18	0.104	0.218	0.234
8729840	20091114	08:24	0.098	0.217	0.234
8729840	20091114	08:30	0.091	0.211	0.227
8729840	20091114	08:36	0.085	0.206	0.219
8729840	20091114	08:42	0.079	0.200	0.214
8729840	20091114	08:48	0.073	0.193	0.206
8729840	20091114	08:54	0.067	0.187	0.203

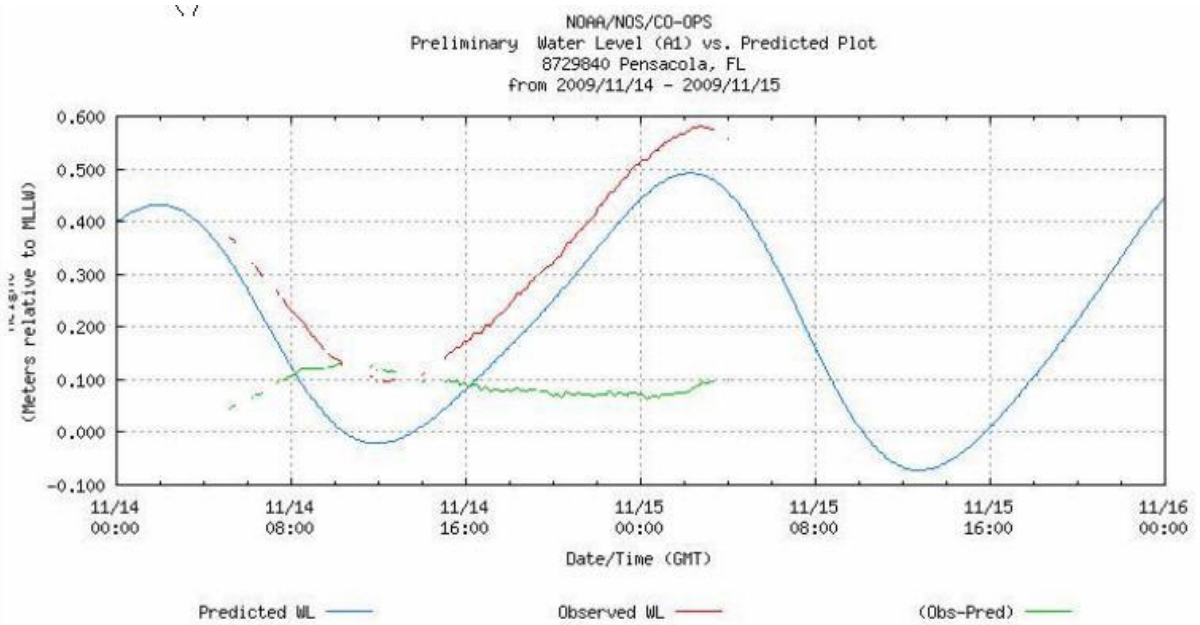
8729840	20091114	09:00	0.062	0.182	0.199
8729840	20091114	09:06	0.056	0.176	0.188
8729840	20091114	09:12	0.051	0.172	0.184
8729840	20091114	09:18	0.046	0.167	0.181
8729840	20091114	09:24	0.041	0.162	0.180
8729840	20091114	09:30	0.036	0.158	0.175
8729840	20091114	09:36	0.031		
8729840	20091114	09:42	0.027	0.150	0.165
8729840	20091114	09:48	0.023	0.146	0.163
8729840	20091114	09:54	0.019	0.143	0.158
8729840	20091114	10:00	0.015	0.141	0.156
8729840	20091114	10:06	0.011	0.138	0.151
8729840	20091114	10:12	0.007	0.136	-0.125
8729840	20091114	10:18	0.004	0.131	-0.243
8729840	20091114	10:24	0.001		
8729840	20091114	10:30	-0.002		
8729840	20091114	10:36	-0.004		
8729840	20091114	10:42	-0.007		
8729840	20091114	10:48	-0.009		
8729840	20091114	10:54	-0.011		
8729840	20091114	11:00	-0.013		
8729840	20091114	11:06	-0.015		
8729840	20091114	11:12	-0.016		
8729840	20091114	11:18	-0.018		
8729840	20091114	11:24	-0.019		
8729840	20091114	11:30	-0.020		
8729840	20091114	11:36	-0.020	0.105	0.122
8729840	20091114	11:42	-0.021	0.105	0.122
8729840	20091114	11:48	-0.021		
8729840	20091114	11:54	-0.021	0.097	0.114
8729840	20091114	12:00	-0.021		
8729840	20091114	12:06	-0.021		
8729840	20091114	12:12	-0.021	0.098	0.121
8729840	20091114	12:18	-0.020	0.097	0.119
8729840	20091114	12:24	-0.019	0.095	0.117
8729840	20091114	12:30	-0.018	0.096	0.118
8729840	20091114	12:36	-0.017	0.100	0.121
8729840	20091114	12:42	-0.016	0.100	0.120
8729840	20091114	12:48	-0.015		

From: George Reynolds [ggr@oceansurveys.com]
 Sent: Sunday, November 15, 2009 10:34 AM
 To: kathleen Jamison
 Subject: Pensacola Tide Gauge

Importance: High

Kathleen,

Real time Preliminary water level data has not been available from the Pensacola station (8729840) since 10:00 PM Local time last night (04:00 GMT 11/15/09).



Tide Data

Station	Date	Time	Pred 6	Acoustic	Backup
8729840	20091114	20:24	0.492	0.577	0.581
8729840	20091114	20:30	0.491	0.578	0.582
8729840	20091114	20:36	0.491	0.579	0.579
8729840	20091114	20:42	0.490	0.581	0.581
8729840	20091114	20:48	0.488	0.583	0.582
8729840	20091114	20:54	0.487	0.579	0.578
8729840	20091114	21:00	0.485	0.578	0.576
8729840	20091114	21:06	0.484	0.577	0.577
8729840	20091114	21:12	0.481	0.576	0.577
8729840	20091114	21:18	0.479	0.575	0.578
8729840	20091114	21:24	0.476		

8729840	20091114	21:30	0.474		
8729840	20091114	21:36	0.470		
8729840	20091114	21:42	0.467		
8729840	20091114	21:48	0.464		
8729840	20091114	21:54	0.460		
8729840	20091114	22:00	0.456	0.557	0.559
8729840	20091114	22:06	0.451		
8729840	20091114	22:12	0.447		
8729840	20091114	22:18	0.442		
8729840	20091114	22:24	0.437		
8729840	20091114	22:30	0.432		
8729840	20091114	22:36	0.426		
8729840	20091114	22:42	0.421		
8729840	20091114	22:48	0.415		
8729840	20091114	22:54	0.409		
8729840	20091114	23:00	0.402		
8729840	20091114	23:06	0.396		
8729840	20091114	23:12	0.389		
8729840	20091114	23:18	0.383		
8729840	20091114	23:24	0.376		
8729840	20091114	23:30	0.368		
8729840	20091114	23:36	0.361		
8729840	20091114	23:42	0.354		
8729840	20091114	23:48	0.346		
8729840	20091114	23:54	0.338		
8729840	20091115	00:00	0.330		
8729840	20091115	00:06	0.322		
8729840	20091115	00:12	0.314		
8729840	20091115	00:18	0.306		
8729840	20091115	00:24	0.298		
8729840	20091115	00:30	0.289		
8729840	20091115	00:36	0.281		
8729840	20091115	00:42	0.272		
8729840	20091115	00:48	0.263		
8729840	20091115	00:54	0.255		
8729840	20091115	01:00	0.246		
8729840	20091115	01:06	0.237		
8729840	20091115	01:12	0.228		
8729840	20091115	01:18	0.220		
8729840	20091115	01:24	0.211		
8729840	20091115	01:30	0.202		
8729840	20091115	01:36	0.193		
8729840	20091115	01:42	0.184		
8729840	20091115	01:48	0.176		
8729840	20091115	01:54	0.167		
8729840	20091115	02:00	0.158		
8729840	20091115	02:06	0.150		
8729840	20091115	02:12	0.141		
8729840	20091115	02:18	0.133		
8729840	20091115	02:24	0.125		
8729840	20091115	02:30	0.116		
8729840	20091115	02:36	0.108		
8729840	20091115	02:42	0.100		
8729840	20091115	02:48	0.092		
8729840	20091115	02:54	0.084		

8729840	20091115	03:00	0.077
8729840	20091115	03:06	0.069
8729840	20091115	03:12	0.062
8729840	20091115	03:18	0.055
8729840	20091115	03:24	0.048
8729840	20091115	03:30	0.041
8729840	20091115	03:36	0.034
8729840	20091115	03:42	0.027
8729840	20091115	03:48	0.021
8729840	20091115	03:54	0.015
8729840	20091115	04:00	0.009
8729840	20091115	04:06	0.003
8729840	20091115	04:12	-0.003
8729840	20091115	04:18	-0.008
8729840	20091115	04:24	-0.013
8729840	20091115	04:30	-0.018
8729840	20091115	04:36	-0.023
8729840	20091115	04:42	-0.027
8729840	20091115	04:48	-0.032
8729840	20091115	04:54	-0.036
8729840	20091115	05:00	-0.040
8729840	20091115	05:06	-0.043
8729840	20091115	05:12	-0.047
8729840	20091115	05:18	-0.050
8729840	20091115	05:24	-0.053
8729840	20091115	05:30	-0.056
8729840	20091115	05:36	-0.058
8729840	20091115	05:42	-0.061
8729840	20091115	05:48	-0.063
8729840	20091115	05:54	-0.064
8729840	20091115	06:00	-0.066
8729840	20091115	06:06	-0.068
8729840	20091115	06:12	-0.069
8729840	20091115	06:18	-0.070
8729840	20091115	06:24	-0.071
8729840	20091115	06:30	-0.071
8729840	20091115	06:36	-0.072
8729840	20091115	06:42	-0.072
8729840	20091115	06:48	-0.072
8729840	20091115	06:54	-0.071
8729840	20091115	07:00	-0.071
8729840	20091115	07:06	-0.070
8729840	20091115	07:12	-0.070
8729840	20091115	07:18	-0.069
8729840	20091115	07:24	-0.068
8729840	20091115	07:30	-0.066
8729840	20091115	07:36	-0.065
8729840	20091115	07:42	-0.063
8729840	20091115	07:48	-0.061
8729840	20091115	07:54	-0.059

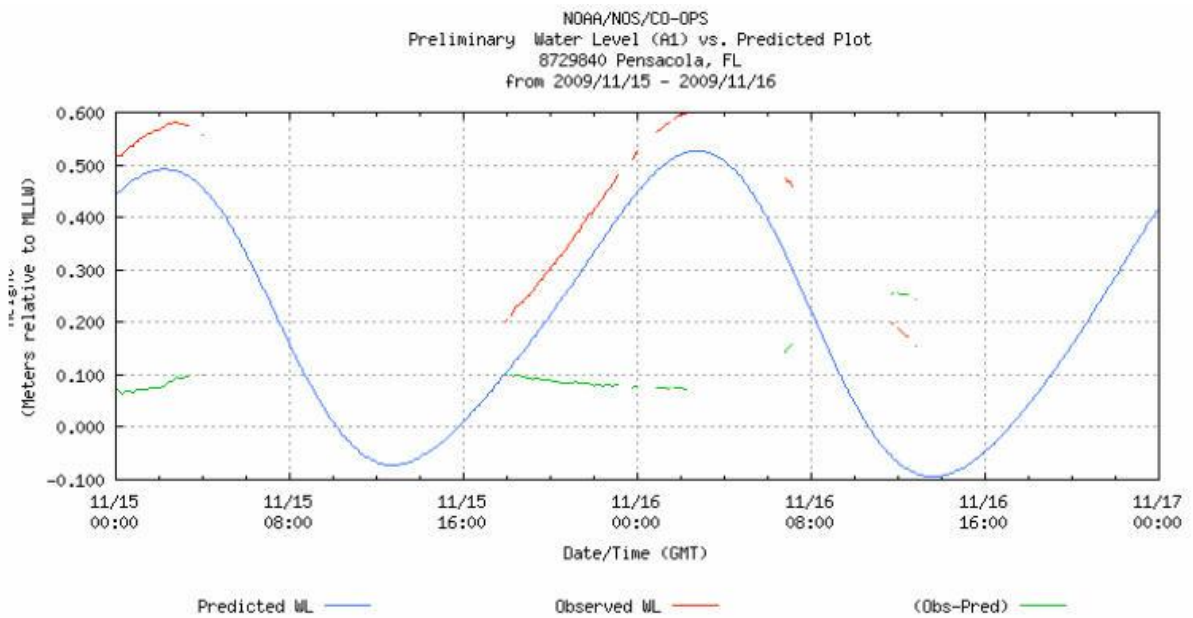
From: Kathleen. Jamison
To: George Reynolds
Subject: Re: Pensacola Tide Gauge Status
Sent: Nov 16, 2009 10:09 AM

Co-ops said they will know by COB today whether the gaps are fillable.

George Reynolds wrote:

Kathleen,

Attached is the tide plot from the Pensacola graph.



George

From: Kathleen. Jamison
To: George Reynolds
Subject: [Fwd: Re: Pensacola Tide Gauge]
Sent: Nov 16, 2009 10:50 AM

George -- looks like the gaps will be filled.

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

Subject: Re: Pensacola Tide Gauge
Date: Mon, 16 Nov 2009 10:42:27 -0500
From: Carolyn Lindley <Carolyn.Lindley@noaa.gov>
Reply-To: Carolyn.Lindley@noaa.gov
Organization: National Ocean Service
To: kathleen.jamison <Kathleen.Jamison@noaa.gov>
CC: NOS.COOPS.HPT@noaa.gov, Janet Culp <Janet.Culp@noaa.gov>
References: <4B01676D.3020603@noaa.gov> <4B016894.9070005@noaa.gov>
<4B016B0C.2030700@noaa.gov>

Just got word that gaps will be filled and data will be verified shortly.

Thanks,
Carolyn

kathleen.jamison wrote:

Thanks, Carolyn

Carolyn Lindley wrote:

Hi Kathleen,
We should know by COB today whether the data gaps are fillable.
Thanks,
Carolyn

--

Kathleen Jamison
Physical Scientist, Data Acquisition Control Branch Hydrographic Surveys
Division NOAA Kathleen.Jamison@noaa.gov 301.713.2700 x109

From: kathleen.jamison [mailto:Kathleen.Jamison@noaa.gov]
 Sent: Wednesday, December 09, 2009 1:46 PM
 To: George Reynolds
 Subject: Re: Dauphin Island Tide Gauge Data Gap

Hi George,

Co-ops said that the data gap will likely be filled on Monday when the sensor data is processed and verified.

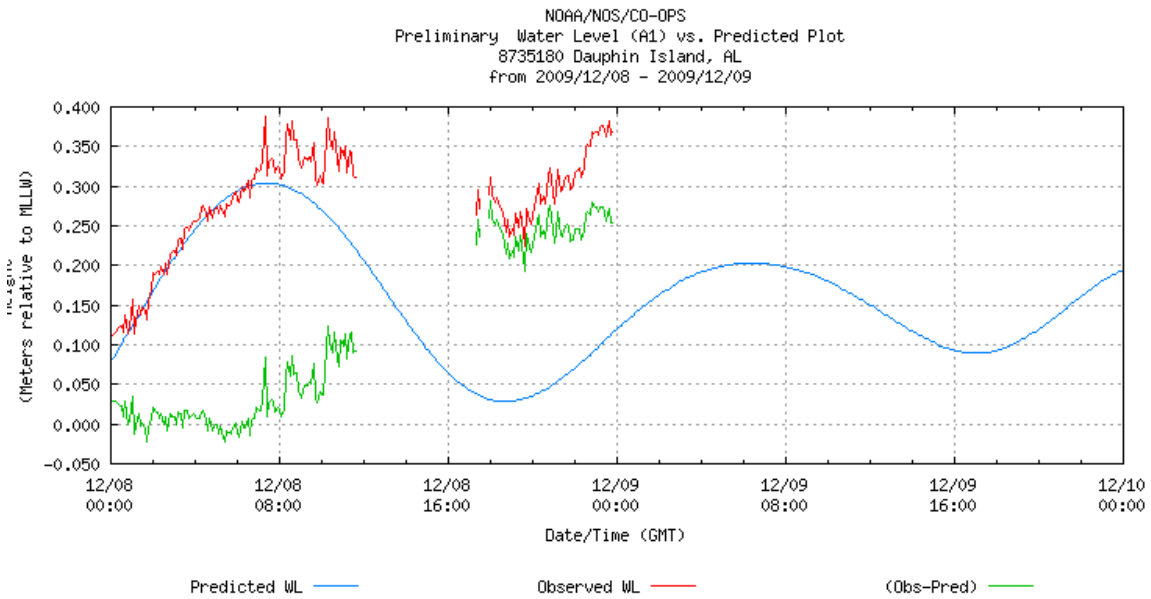
-Kathleen

George Reynolds wrote:

Hi Kathleen,

The Dauphin Island gauge is reporting an approximate 6 hour data gap between 1136 GMT and 1748 GMT on 12/8/09.

Regards
 George



8735180	20091208	11:24	0.227	0.342	0.378
8735180	20091208	11:30	0.224	0.314	
8735180	20091208	11:36	0.220	0.312	
8735180	20091208	11:42	0.216		
8735180	20091208	11:48	0.213		
8735180	20091208	11:54	0.209		

8735180	20091208	12:00	0.206	
8735180	20091208	12:06	0.202	
8735180	20091208	12:12	0.198	
8735180	20091208	12:18	0.194	
8735180	20091208	12:24	0.191	
8735180	20091208	12:30	0.187	
8735180	20091208	12:36	0.183	
8735180	20091208	12:42	0.179	
8735180	20091208	12:48	0.175	
8735180	20091208	12:54	0.171	
8735180	20091208	13:00	0.168	
8735180	20091208	13:06	0.164	
8735180	20091208	13:12	0.160	
8735180	20091208	13:18	0.156	
8735180	20091208	13:24	0.152	
8735180	20091208	13:30	0.148	
8735180	20091208	13:36	0.144	
8735180	20091208	13:42	0.141	
8735180	20091208	13:48	0.137	
8735180	20091208	13:54	0.133	
8735180	20091208	14:00	0.129	
8735180	20091208	14:06	0.126	
8735180	20091208	14:12	0.122	
8735180	20091208	14:18	0.118	
8735180	20091208	14:24	0.115	
8735180	20091208	14:30	0.111	
8735180	20091208	14:36	0.108	
8735180	20091208	14:42	0.104	
8735180	20091208	14:48	0.101	
8735180	20091208	14:54	0.097	
8735180	20091208	15:00	0.094	
8735180	20091208	15:06	0.091	
8735180	20091208	15:12	0.088	
8735180	20091208	15:18	0.084	
8735180	20091208	15:24	0.081	
8735180	20091208	15:30	0.078	
8735180	20091208	15:36	0.075	
8735180	20091208	15:42	0.073	
8735180	20091208	15:48	0.070	
8735180	20091208	15:54	0.067	
8735180	20091208	16:00	0.065	
8735180	20091208	16:06	0.062	
8735180	20091208	16:12	0.059	
8735180	20091208	16:18	0.057	
8735180	20091208	16:24	0.055	
8735180	20091208	16:30	0.053	
8735180	20091208	16:36	0.050	
8735180	20091208	16:42	0.048	
8735180	20091208	16:48	0.046	
8735180	20091208	16:54	0.045	
8735180	20091208	17:00	0.043	
8735180	20091208	17:06	0.041	
8735180	20091208	17:12	0.040	
8735180	20091208	17:18	0.038	0.264
8735180	20091208	17:24	0.037	0.295

8735180	20091208	17:30	0.036	0.272	
8735180	20091208	17:36	0.034		
8735180	20091208	17:42	0.033		
8735180	20091208	17:48	0.032		
8735180	20091208	17:54	0.031	0.290	
8735180	20091208	18:00	0.031	0.312	0.346

From: George Reynolds [ggr@oceansurveys.com]
Sent: Monday, December 21, 2009 4:53 PM
To: 'Mark.T.Lathrop'
Cc: kathleen Jamison
Subject: FW: Pensacola On-Line Preliminary Tide Data unavailable

Hi Mark,

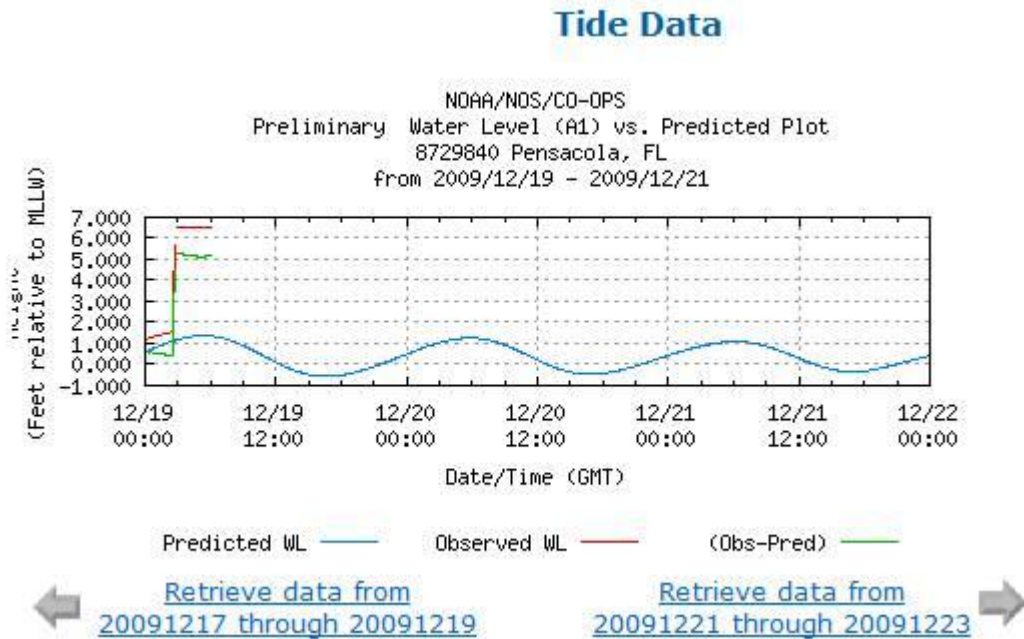
With Kathleen out of the office this week I thought we would pass along the following Pensacola gauge report to you as well.

Thanks
George

Hi Kathleen,

The on-Line preliminary tide data has been unavailable since Saturday December 19 @ 02:30 GMT for the Pensacola Station (8729840).

Regards
George



From: Mark.T.Lathrop [mailto:Mark.T.Lathrop@noaa.gov]
Sent: Tuesday, December 22, 2009 9:49 AM
To: George Reynolds
Subject: Re: Pensacola Tide Gauge

George,

I have forwarded your message to CO-OPS. Unfortunately, the snowstorm shut down our office yesterday so we were not able to respond until today.

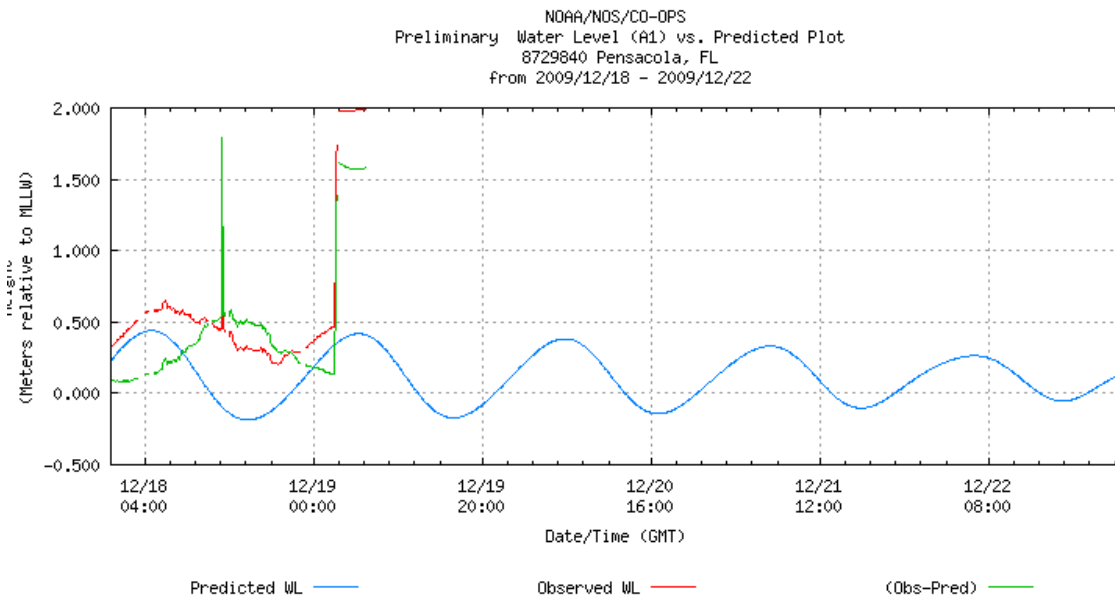
Mark

George Reynolds wrote:

Kathleen, Mark

Data from the Pensacola tide gauge has not posted since 0700 GMT on 12/19/09.

Regards
George



From: kathleen.jamison
To: George Reynolds
Subject: [Fwd: Re: [Fwd: Pensacola Tide Gauge]]
Date: Tuesday, December 29, 2009 11:50:30 AM

George,
Not sure if Mark Lathrop forwarded this to you while I was gone.
Kathleen

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

Subject: Re: [Fwd: Pensacola Tide Gauge]
Date: Tue, 22 Dec 2009 13:35:46 -0500
From: Thomas Landon <Thomas.Landon@noaa.gov>
To: Mark.T.Lathrop <Mark.T.Lathrop@noaa.gov>
CC: _NOS CO-OPS OET Team <nos.coops.oetteam@noaa.gov>, Kathleen
Jamison <Kathleen.Jamison@noaa.gov>, _NOS CO-OPS DMAT
<nos.co-ops.dmat@noaa.gov>, "_NOS.CO-OPS.HTP"
<NOS.COOPS.HPT@noaa.gov>
References: <4B30DBCE.6000809@noaa.gov>

Our O&M contractor on the Gulf Coast has been notified, provided a quote for repairs, and has been authorized to proceed. I do not have a "by when" date that repairs will be made, but it should only be a matter of a couple days.
Tom

Mark.T.Lathrop wrote:
CO-OPS,

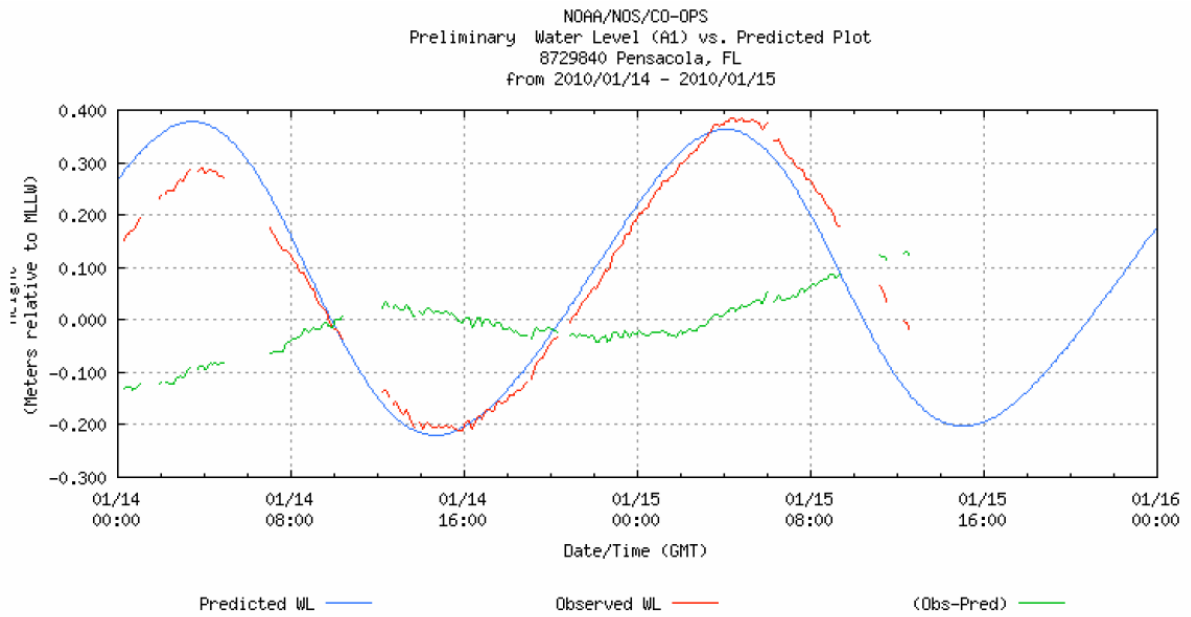
Please see the message below from our contractor, OSI, who is currently surveying off Pensacola.

Thanks,
Mark

From: George Reynolds
To: "kathleen.jamison"
Subject: Pensacola Tide Gauge Data Gaps 1/15/10
Date: Friday, January 15, 2010 10:03:05 AM

Hi Kathleen,
The Pensacola tide gauge appears to be experiencing data gaps ranging from six minutes to two hours.

George

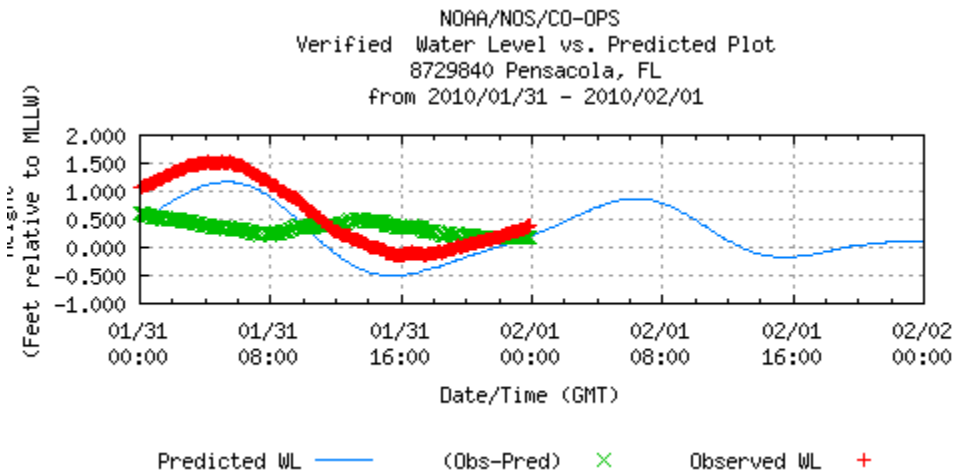
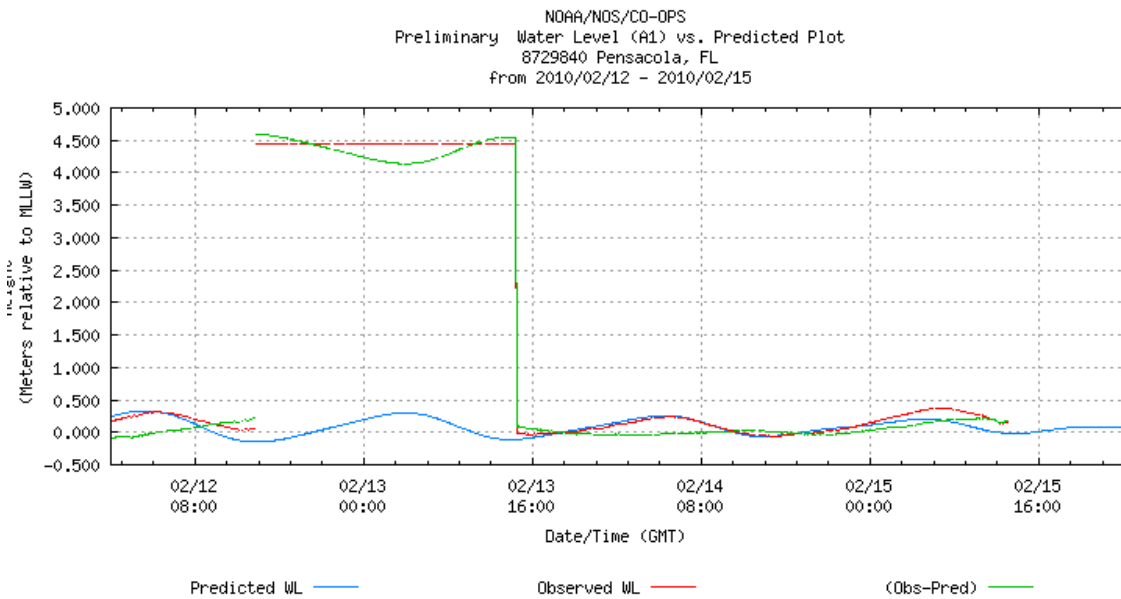


From: George Reynolds [mailto:ggr@oceansurveys.com]
Sent: Monday, February 15, 2010 8:24 AM
To: kathleen Jamison
Subject: Pensacola Tide Gauge

Hi Kathleen,

The Pensacola gage reported a data gap from 1348GMT 2/12/10 to 1424GMT 2/13/10. The gage appears to be working correctly this morning.

Regards
George

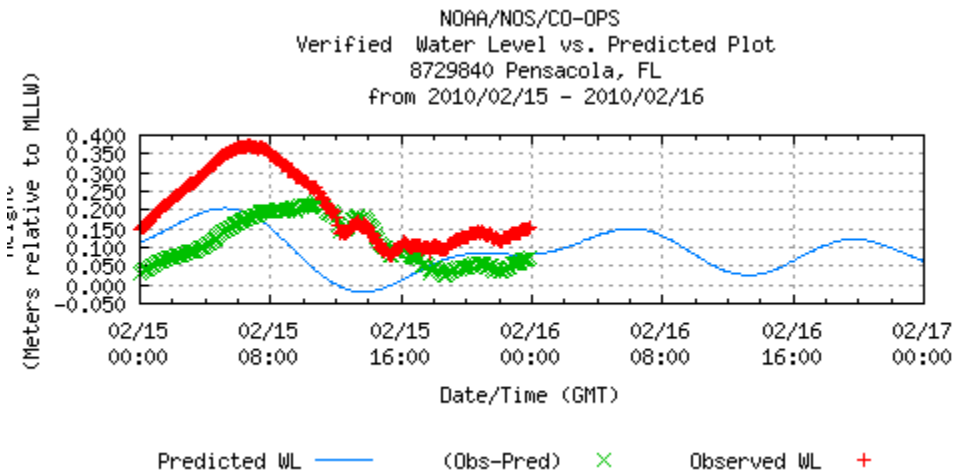
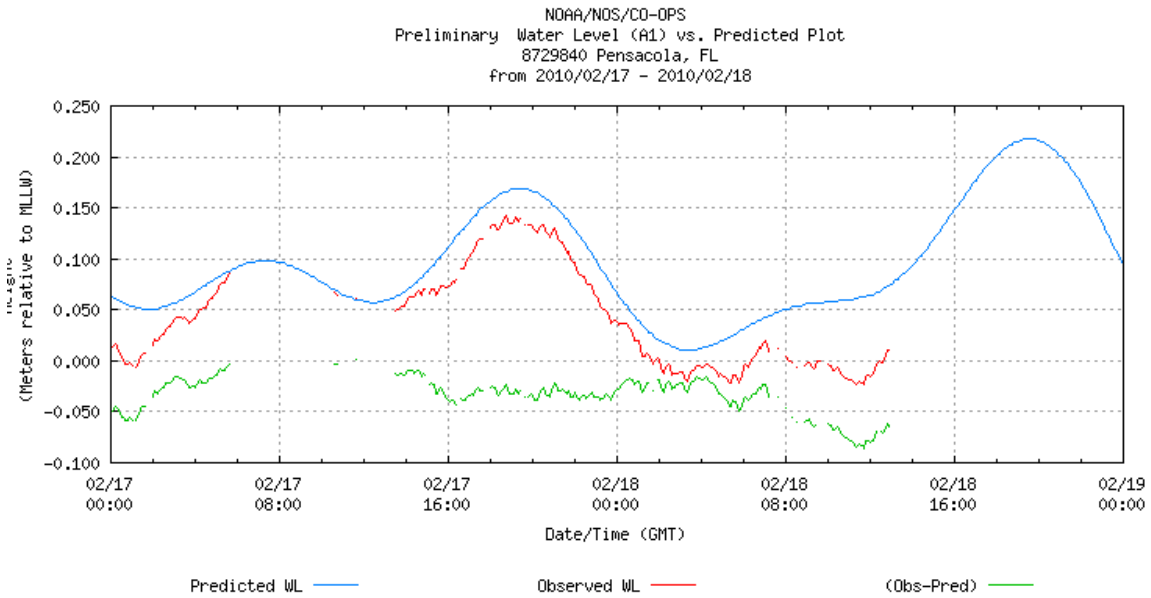


From: George Reynolds [ggr@oceansurveys.com]
Sent: Thursday, February 18, 2010 12:09 PM
To: kathleen Jamison
Subject: FW: Pensacola and Dauphin Island Tide Gauge Status and Forecast 2/18/10

Hi Kathleen,

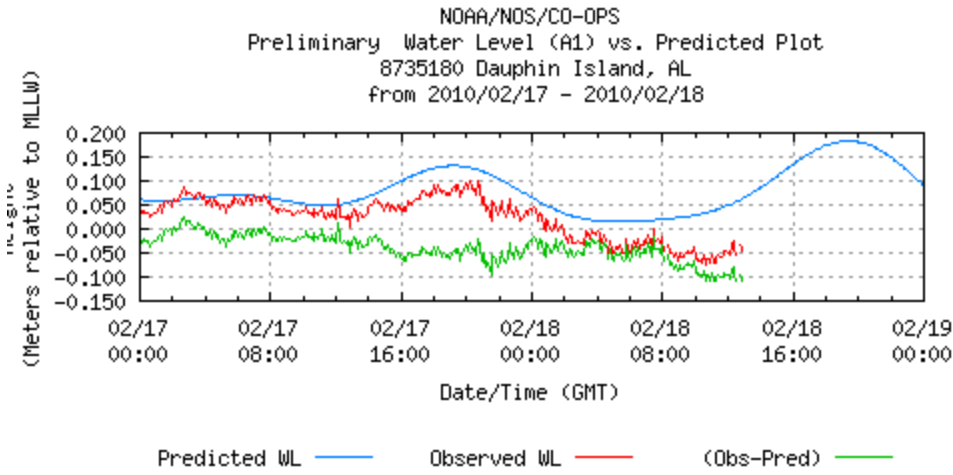
The Pensacola gauge is reporting intermittent data gaps. A large gap occurs between 0542 GMT on 2/17/10 and 1324 GMT on 2/17/10.

Regards
George

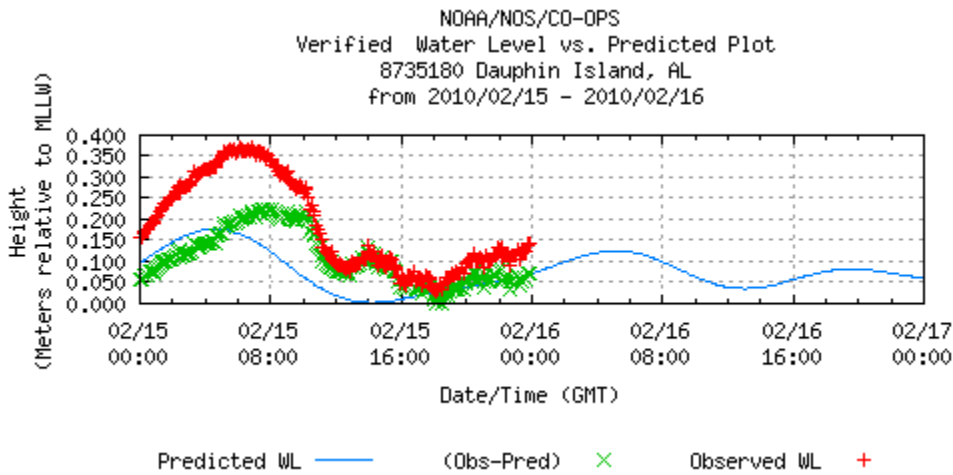


Verified tides are available through 2/15/10 (DN 046).

DAUPHIN ISLAND



Preliminary tides are available through today (DN049).



Verified tides are available through 2/15/10 (DN 046).

Appendix V

Supplemental Survey Records and Correspondence

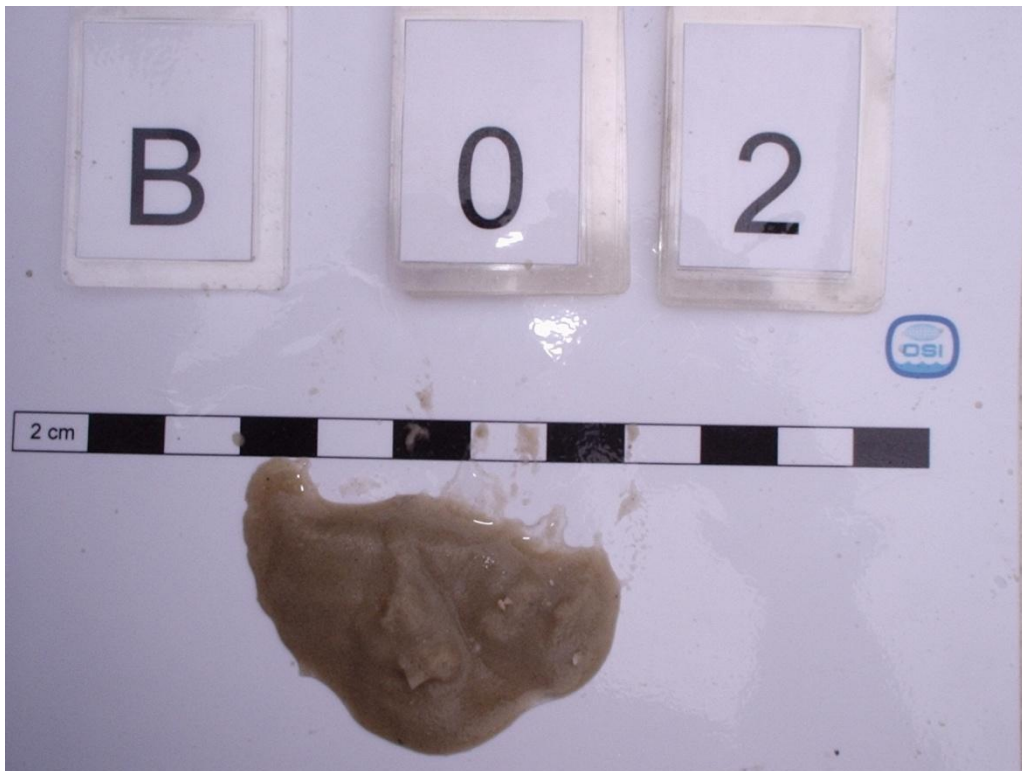
Bottom Samples

Bottom samples were obtained at required grid node locations (i.e. 2000 meters across site and 1200 meters in anchorages in water depth less than 100 feet per the HSSD 2009). Sediment grab locations are included as a separate S-57 feature file (H12061_Bottom_Samples.hob).

OSI Bottom Sample Designation	Latitude, N (NAD83)	Longitude, W (NAD83)	Depth (meters)	Description
B-01	30-18-24.49	87-18-49.15	4.3	Fine, Yellowish Orange, Sand and Silt
B-02	30-18-09.40	87-17-38.82	6.1	Fine, Yellowish Orange, Sand and Silt
B-03	30-17-14.54	87-18-12.32	10.7	Fine, Yellowish Orange, Sand
B-04	30-16-48.85	87-17-03.69	11.6	Fine, Yellowish Orange, Sand
B-05	30-15-48.49	87-18-08.66	11.3	Fine, Yellowish Orange, Sand
B-06	30-15-48.67	87-16-54.04	18.8	Fine, Light Brown, Sand with Shells
B-07	30-15-56.38	87-16-03.45	18	Fine, Light Brown, Sand
B-08	30-14-43.54	87-18-08.67	17	Medium to Fine, Light Brown, Sand
B-09	30-14-43.75	87-16-52.83	19.9	Medium to Fine, Light Brown, Sand with Shells
B-10	30-15-17.98	87-15-55.59	18.5	Fine, Light Brown, Sand
B-11	30-14-10.23	87-18-57.14	20.1	Fine, Light Brown/Gray, Sand
B-12	30-14-39.82	87-15-45.91	21.8	Medium, Light Brown, Sand and Shells
B-13	30-12-44.32	87-22-54.96	18.4	Fine, Yellowish Orange, Sand
B-14	30-12-55.15	87-21-41.69	19.8	Fine, Light Brown, Sand
B-15	30-13-06.42	87-20-27.77	18.6	Medium, Light Brown, Sand with Shells
B-16	30-13-17.63	87-19-13.86	19.7	Medium, Light Brown, Sand with Shells
B-17	30-13-28.49	87-18-00.26	21.1	Medium, Brown, Sand with Shells

OSI Bottom Sample Designation	Latitude, N (NAD83)	Longitude, W (NAD83)	Depth (meters)	Description
B-18	30-13-39.24	87-16-46.33	20.5	Medium, Light Brown, Sand with Shells
B-19	30-11-34.80	87-22-29.33	21	Medium, Light Brown, Sand with Shells
B-20	30-11-41.54	87-21-44.87	21	Medium/Fine, Light Brown, Sand and Shells
B-21	30-11-48.88	87-21-00.87	22.6	Medium/Fine, Light Brown, Sand
B-22	30-11-55.83	87-20-16.71	21	Medium/Fine, Light Brown, Sand
B-23	30-12-02.79	87-19-32.63	20.5	Medium, Light Brown, Sand with Shells
B-24	30-12-09.63	87-18-48.35	21.7	Fine, Light Brown, Sand
B-25	30-12-16.70	87-18-04.36	21.7	Medium, Light Brown, Sand with Shells
B-26	30-12-32.96	87-16-53.11	20.4	Medium, Light Brown, Sand with Shells
B-27	30-10-57.30	87-22-22.21	21.8	Fine, Light Brown, Sand
B-28	30-11-04.07	87-21-37.73	21.2	Fine, Light Brown, Sand with Shells
B-29	30-11-10.42	87-20-53.64	20.1	Fine, Light Brown, Sand
B-30	30-11-17.26	87-20-09.33	21.2	Medium/Fine, Light Brown, Sand and Shells
B-31	30-11-24.23	87-19-25.33	22.1	Fine, Light Brown, Sand
B-32	30-11-31.25	87-18-41.00	21.5	Medium, Light Brown, Sand and Shells
B-33	30-10-18.21	87-22-14.32	21.9	Fine, Light Brown, Sand
B-34	30-10-25.10	87-21-30.24	22.4	Fine, Light Brown, Sand
B-35	30-10-32.01	87-20-45.87	21.6	Fine, Light Brown, Sand
B-36	30-10-38.94	87-20-01.81	20.9	Fine, Yellowish Orange, Sand
B-37	30-10-45.83	87-19-17.70	19.3	Fine, Yellowish Orange, Sand
B-38	30-10-52.76	87-18-33.31	19.8	Fine, Yellowish Orange, Sand
B-39	30-11-28.77	87-16-53.04	20.1	Fine, Yellowish Orange, Sand and Shells

OSI Bottom Sample Designation	Latitude, N (NAD83)	Longitude, W (NAD83)	Depth (meters)	Description
B-40	30-09-39.67	87-22-06.82	22	Fine, Yellowish Orange, Sand
B-41	30-09-46.67	87-21-22.75	19.3	Fine, Yellowish Orange, Sand
B-42	30-09-53.68	87-20-38.44	21.4	Fine, Yellowish Orange, Sand
B-43	30-10-00.53	87-19-54.40	18.5	Fine, Yellowish Orange, Sand
B-44	30-10-07.46	87-19-10.13	19.1	Fine, Light Brown, Sand and Shells
B-45	30-10-14.33	87-18-26.11	19.6	Fine, Yellow/Light Brown, Sand and Shells
B-46	30-10-23.54	87-16-52.93	20.4	Fine, Yellowish Orange, Sand
B-47	30-09-18.61	87-16-52.32	22.7	Fine, Light Brown, Sand



















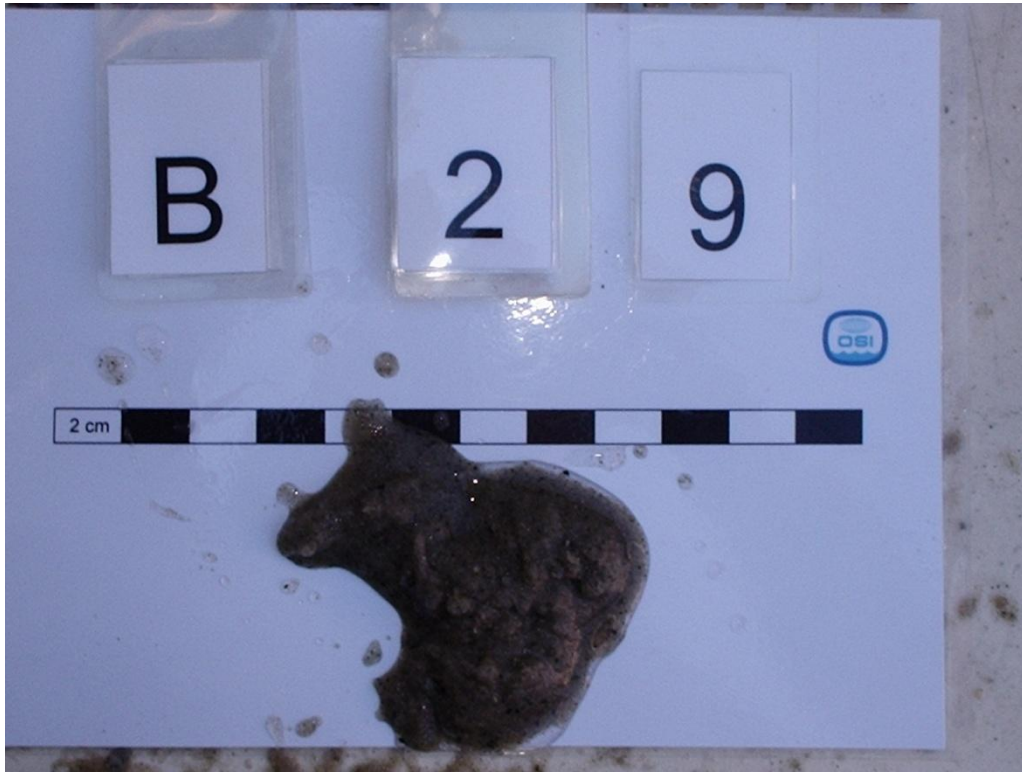






























Correspondence

E-mail correspondence between OSI and the COTR follows.

From: kathleen.jamison [mailto:Kathleen.Jamison@noaa.gov]
Sent: Wednesday, September 16, 2009 3:59 PM
To: George Reynolds
Subject: Specs & Deliverables requirements

Hi George,

After discussing the multibeam resolution requirements detailed in the 2009 Specs & Deliverables, 5.1.2, and taking into consideration your concerns about meeting some of the coverage specifications, we have decided on the following minimum requirements for your current project in the Gulf of Mexico:

For main scheme multibeam bathymetry acquired concurrently with 200% side scan coverage ("skunk stripe"):

- * Grid resolutions of 2m for depths less than 20 meters and 4m for depths 20 - 40 meters are acceptable.
- * Minimum sounding density shall be 3 soundings per node.
- * Small holidays in the multibeam coverage due to mid-water targets or attitude dynamics are acceptable where adjacent soundings show no evidence of significant shoaling, and the 200% side scan coverage does not indicate the presence of a feature.

For multibeam developments of targets identified in side scan sonar:

- * Coverage as per the "Complete Multibeam Coverage" specification (Section 5.1.2.2) over the feature and the immediate surrounding seabed.

Regarding tools for demonstrating sounding density:

- * You may use any method to evaluate the density and resolution requirements you would like, provided that you can demonstrate these results to NOAA.
- * For the purposes of this requirement, NOAA will not differentiate between the soundings actually falling within the square grid cell, and the soundings within the circular capture radius (provided the maximum sounding propagation distance is set to no greater than the grid resolution divided by $\sqrt{2}$, as required by the Specs and Deliverables)
- * We note that the density layer feature in CARIS may be helpful.

Also very important:

- 1) The exemptions to the Specs & Deliverables listed above apply only to survey OPR-J364-KR-09. Any future projects must adhere to requirements detailed in the latest version of the Specs & Deliverables. Exemptions are granted only on a case-by-case basis.
- 2) All deviations from the Specs & Deliverables must be detailed in the Descriptive Report and DAPR as appropriate.

Please let me know if you have any further questions.

--

Kathleen Jamison
Physical Scientist, Data Acquisition Control Branch Hydrographic Surveys
Division NOAA Kathleen.Jamison@noaa.gov 301.713.2700 x109

From: "kathleen.jamison" <Kathleen.Jamison@noaa.gov>
Date: Fri, 23 Oct 2009 14:35:37
To: George Reynolds <ggr@oceansurveys.com>
Subject: Re: Pensacola Inlet Questions

George,

Here are the answers to your questions:

1) & 2) Yes, the assigned AWOIS items outside of the main survey area are still to be investigated. AWOIS search radii are independent of survey limits. The 4m inshore boundary rule for the regular survey area doesn't apply for AWOIS items. Safety is the number one guiding principle when investigating AWOIS items in shallow areas. As a general rule, the full area (as defined by the search radius in the AWOIS database) must be surveyed even if some or all falls outside the survey limits. However, this only applies if the area can be surveyed safely.

This is particularly important for items for which a portion of the search area falls inshore of the survey limits, such as the item (#436) located in the shallow area of Caucus Shoal. Please only survey the portion of the search area in which it is safe to operate, and explain any area that is not covered in the DR. For any of these AWOIS items that are located in areas shoaler than the survey limits, we would not second-guess the decision of the hydrographer and vessel operator if they determined that it was not safe to survey the portion of the search area inshore of the 4m contour. Additionally, note that some items may be investigated using visual inspection (VS) in the case where MB or SSS are too dangerous. For the items where only MB, S2 or S4 are listed as investigation technique options, use your best judgement -- if MB or SSS would be too dangerous, then a visual inspection, even if not listed as an option in the AWOIS database, would be better than nothing. The point of AWOIS items is often to confirm the existence of a charted feature, and this can sometimes be done with a visual inspection.

3) The coverage area for the main survey is contained within the limits of the project area as shown on the Project CD and as illustrated in the Project Instructions. When I wrote the instructions, I included a USCG request from over two years ago to survey "from LB12 through the turn and toward the Pensacola-Mobile cut." I was assuming that they meant part of the area that had been assigned, but upon a closer look, I'd like to get this confirmed. I'll contact our regional navigation manager down there next week to find out exactly what the Coast Guard meant (sometimes they speak a different language from us NOAA folk). But as far as you are concerned, the survey area does not change, it is as you have it on the Project CD (with 4m curve as the inshore limit of the main survey).

I hope this answers your questions. I'll be in the office for all of next week for any questions you might have as you get started on the survey. Here's hoping for good weather!

Kathleen

George Reynolds wrote:
Hi Kathleen,

Thanks for your schedule update. By the way, there is no rush regarding the answers to our questions; we have several days of work to do before we commence data collection operations.

Regards
George

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

From: kathleen.jamison [mailto:Kathleen.Jamison@noaa.gov]
Sent: Thursday, October 22, 2009 4:41 PM
To: George Reynolds
Subject: Re: Pensacola Inlet Questions

Hi George,

Sorry to just get back to you now. I'll need tomorrow morning to check on all three of these questions.

Another thing -- while we are on Continuing Resolution (CR) for FY10 at NOAA, we aren't able to schedule any new trips. I'd still like to come down the first week after Thanksgiving, but I may have to postpone, or book with just a week or two notice. I'm sorry about the inconvenience, but rest assured we will find a good time that works for everyone.

I'll get back in touch by tomorrow afternoon.

Kathleen

George Reynolds wrote:

Hi Kathleen,

We have a few questions to clarify survey tasks near Pensacola inlet.

Attached are two PDFs that can be referenced when considering the questions below.

1. There are 18 AWOIS items located outside of the assigned survey limits, six of which are well inside the inlet in very shallow or no water locations. At least one AWOIS item (#436) appears to fall within the survey area but on a very shallow area of Caucus Shoal. Please confirm that coverage for AWOIS items that fall outside of our survey area limits is required?

2. Is the offshore 4M contour an acceptable stopping point for the survey of Caucus Shoal?
3. Per the Project Instructions "Purpose and Location" section: "Additionally, the US Coast Guard has requested a survey at the entrance to Pensacola Bay due to shoaling from LB12 through the turn and toward the Pensacola-Mobile cut." Our assigned survey area does not extend north of LB12. (Note: The geographic name "Pensacola-Mobile Cut" is not shown on the RNC or ENC charts). Is coverage of this area required? If so please provide new survey boundary limits.

Thanks

George

--

Kathleen Jamison
Physical Scientist, Data Acquisition Control Branch Hydrographic Surveys
Division NOAA Kathleen.Jamison@noaa.gov 301.713.2700 x109

From: kathleen.jamison
To: Castle.E.Parker; George Reynolds
Subject: DTON for shoaling
Date: Tuesday, January 12, 2010 4:20:28 PM

Hi Gene,

George Reynolds with OSI had a question regarding a DTON submission for shoaling in a channel. Since the whole channel is shoaler than charted depths by about 5 feet, I recommend a DTON submission, but I'm not sure how you would like OSI to submit this, since it is not the typical DTON submission with a single GP or with clear bounding GP coordinates.

Please advise.

--

Kathleen Jamison
Physical Scientist, Data Acquisition Control Branch
Hydrographic Surveys Division
NOAA
Kathleen.Jamison@noaa.gov
301.713.2700 x109

From: kathleen.jamison [mailto:Kathleen.Jamison@noaa.gov]
Sent: Wednesday, January 13, 2010 11:06 AM
To: George Reynolds; Tim Osborn
Subject: Re: Draft for Caucus Channel DTON

George,

I spoke with Gene Parker at AHB, and he said that for a federal channel, the protocol is actually to consult the Navigation Manager, who will then be in contact with the USACE. If the channel depths are to be updated, they need to come from a letter from the USACE, who will officially update their tab tables. Therefore, my recommendation is that you send exactly what you wrote in the DTON (except it is not called a DTON at this point, it will just be a letter, which will likely be included as part of the letter that USACE sends back to us). You can ask the Nav Manager if they want the HOB files, or just a list of GPs of the shoal depth locations. I'm not sure of the software capabilities of the Nav Manager or USACE. I counted about 15 points -- You certainly do not want to submit any more than 15 points.

Even if it does not get submitted eventually as a DTON, you will certainly want to keep what you wrote up already and the HOB files, as they will certainly be needed as part of the Descriptive Report and as part of your submitted files when you deliver the data to AHB.

The Nav Manager down there is Tim Osborn. He can be reached at tim.osborn@noaa.gov, phone: 337-291-2111. His office is out of Lafayette, LA. I've also cc'd him on this email.

Kathleen

George Reynolds wrote:

Hi Kathleen,

As I mentioned sand waves and extensive shoaling were observed in the Caucus Channel during survey H12061. Due to the complexity and extent of shoaling in a charted channel, is there a preferred data format for this complex DTON. To date we have prepared data for a range of densities and the following information is available for review and submission as CARIS HOB files.

10-meter resolution shoal biased depths were processed from a 1-meter resolution BASE surface for the following densities:

1. A DTON depths HOB file represents shoaling that limits the clearance depths within the channel quarters and significant differences with charted soundings.
2. A HOB file of selected depths was compiled to represent overall shoaling within the channel.
3. Separate HOB files were created for each channel quarter for depths that do not meet the tabulated controlling depths.

Depth curves were compiled from a 5-meter resolution product surface at the following intervals:

1. Left Outside Quarter 24 feet (7.3 meters)
2. Left Inside Quarter 39.4 feet (12 meters)
3. Right Inside Quarter 39.4 feet (12 meters)
4. Right Outside Quarter 34.3 feet (10.2 meters)

A HOB file of all 10-meter resolution shoal biased depths and additional high-resolution data are available and can be provided on DVD. If another data format would be better suited for this task please let me know.

Regards,
George

--

Kathleen Jamison
Physical Scientist, Data Acquisition Control Branch
Hydrographic Surveys Division
NOAA
Kathleen.Jamison@noaa.gov
301.713.2700 x109

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. Contract ID Code	Page	of Pages
2. Amendment/Modification No. 001	3. Effective Date Jan 21, 2010	4. Requisition/Purchase Req. No. NCNJ3000-10-05092	5. Project No. (if applicable)			
6. Issued By ACQUISITION & GRANTS OFFICE /OFA6 1335 EAST-WEST HWY., SSMC-1 RM 6300 SILVER SPRING, MD 20910 CATHERINE A. PERREN 301-713-0820 164		Code AJF00012	7. Administered By (if other than Item 6) NOS/NMFS/OAR ACQUISITION DIVISION /OFA65 1305 EAST-WEST HWY., SSMC-4 RM 7141 SILVER SPRING, MD 20910		Code AJF50012	
8. Name and Address of Contractor (No. Street, County, and Zip Code) OCEAN SURVEYS, INC. 41 SHEFFIELD STREET OLD SAYBROOK CT 064752306			(X)	9A. Amendment of Solicitation No.		
Vendor ID: 00012711 DUNS: 084798149 CAGE: 3Y156				9B. Date (See Item 11)		
Code			X	10A. Modification of Contract/Order No. DG133C-08-CQ-0007 T002		
Facility Code				10B. Date (See Item 13) Jul 28, 2009		
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS						
The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.						
12. Accounting and Appropriation Data (if required) See Schedule 511S 0.00						
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACT/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.						
<input type="checkbox"/> A. This change order is issued pursuant to: (Specify authority) The changes set forth in item 14 are made in the Contract Order No. in item 10A. <input checked="" type="checkbox"/> B. The above numbered Contract/Order is modified to reflect the administrative changes (such as changes in paying office, appropriation date, etc.) set forth in item 14 pursuant to the authority of FAR 43.103 (b) <input type="checkbox"/> C. This supplemental agreement is entered into pursuant to authority of: <input type="checkbox"/> Other: Specify type of modification and authority)						
E. IMPORTANT: Contractor <input checked="" type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.						
14. Description of Amendment/Modification (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) The above referenced task order is hereby modified as follows: Add 14 square nautical miles to the east side of the survey area and remove 14 square nautical miles from the west side of the survey area.						
Except as provided herein, all terms and conditions of the document referenced in item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.						
15A. Name and Title of Signer (Type or Print)			16A. Name and title of Contracting Officer (Type or Print)			
			JOHN WHITFIELD 301-713-0820 X135 CONTRACT SPECIALIST john.whitfield@noaa.gov			
15B. Contractor/Officer			15C. Date Signed		16B. United States of America	
_____ (Signature of person authorized to sign)			30/05		16C. Date Signed 1/28/10	
NSN 7540-01-152-8070 PREVIOUS EDITIONS UNUSABLE			STANDARD FORM 30 (REV. 0-83) Prescribed by GSA FAR (48 CFR) 53.243			

SCHEDULE					
Item No.	Supplies/Services	Quantity	Unit	Unit Price	Amount
0001	<p>An an independent contractor and not as an agent of the Government, provide hydrographic survey of the Florida and Alabama Safety Fairways in the Gulf of Mexico using Side Scan Sonar and Multibeam Sonar.</p> <p>The following equipment is being added to this task order:</p> <p>Klein 5000 V1 Side Scan Sonar</p> <hr/> <p>Contractor Signature Date</p> <hr/> <p>Contractor _____ Date _____</p> <p>Accounting and Appropriation Data: 14.09.Z8K6BHS.P00.0013.010301031.100900030 0000000.25130000.000000 US\$ 3,013,668.43</p>	1	EA	3,013,668.43	3,013,668.43

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

From: kathleen.jamison [mailto:Kathleen.Jamison@noaa.gov]
Sent: Wednesday, March 17, 2010 12:10 PM
To: George Reynolds; Castle.E.Parker; Benjamin K Evans
Subject: Re: Pensacola Topics

George,

See embedded remarks below.

-Kathleen

George Reynolds wrote:

Hi Kathleen,

Just a couple of discussion topics that we would like your input on.

Data collection for Pensacola Sheet B is complete and we are compiling the final deliverables. We have also completed the DAPR for Sheet B data which were obtained from a small boat, thus the Sheet B DAPR covers only small boat operations. The remaining Sheets (A, C and D) will be completed using both small and large vessels. We are planning to write a separate DAPR that will cover large vessel operations. This approach will allow us to complete and deliver Sheet B products independently of Sheets A, C and D. Is this approach acceptable?

I spoke with Gene Parker about this one. He suggested that, along with the DR for Sheet B, you should submit a DAPR now, since it is really only Section A - equipment and vessels specs, offsets, system bias calibrations, etc - that will change. Then, you would submit an appended DAPR along with Sheets A, C and D. The appended DAPR would stand on record as the "final" DAPR with the small AND large boat information. That way there would be just one DAPR on the project, not two, which would cause less confusion down the line. AHB would prefer this option, since a staggered sheet submission is generally better anyway, as it allows the branch to review the initial sheet and report submission and reply with feedback.

As you know the specs and deliverables requires that sound speed profilers "must be recalibrated when the survey is complete if the completion date is later than six months from the date of last re-calibration." The sound speed instruments we employed during Sheet B operations are just outside the six-month window for re-calibration; one unit was 4 days and the 2nd unit was 12 days beyond the re-calibration due date on the last day of Sheet B data collection operations. (We are replacing both units with newly calibrated instruments for Sheets A, C and D). The Sheet B instruments passed the VelociWin comparison cast criteria throughout the survey including the last day of data collection operations. Given this information we request that NOAA extend the six-month re-calibration criteria by 12 days

for Sheet B. This extension will allow us to move forward with the Sheet B DR without having to wait 4 to 6 weeks for Sea-Bird to issue re-calibration reports.

Along the same lines, it would be better to submit Sheet B and the DR as soon as possible to AHB rather than wait out the 4-6 weeks to get the calibration reports back for the small boat instruments. So, for this time only, you may forgo the re-calibration of the small boat CTDs, since they are only 4 and 12 days over the 6-month window and you are not planning to use them during the large boat operations. Instead, if you already have the newly calibrated instruments for Sheets A, C, and D, you could do a single comparison of the Sheet B instruments to the newly calibrated instruments to see that they provide the same results.

The Pensacola tide gage is reporting inconsistent data. No survey data are currently being impacted; however, now may be a good time to service the gage if CO-OPS thinks it is appropriate.

Co-ops said thanks for letting them know and they will keep an eye on it. If the issue doesn't resolve itself, HPT will determine whether the gaps are fillable or if they need to do any gauge repairs.

Regards,

George

--

Kathleen Jamison

Physical Scientist, Data Acquisition Control Branch Hydrographic Surveys Division NOAA

Kathleen.Jamison@noaa.gov 301.713.2700 x109



MARINE AND FRESHWATER
SURVEY SERVICES

OCEAN SURVEYS, INC.

91 SHEFFIELD STREET
OLD SAYBROOK CT 06475

TEL. (860) 388-4631 FAX (860) 388-5879
www.oceansurveys.com

March 25, 2010

Mr. Timothy R. Osborn
NOAA Office of Coast Survey
646 Cajundome Blvd.
Lafayette, LA 70506

Dear Mr. Osborn:

As you know, Ocean Surveys, Inc. is under contract with NOAA and recently completed a multibeam and side scan survey in the vicinity of the Pensacola Harbor Entrance. This is a followup letter to our earlier communications regarding the shoaling in Caucus Channel.

Project Specific Information:

Hydrographic Survey Registry Number: H12061

State: Florida

General Locality: Gulf of Mexico

Sub Locality: Pensacola

Project Number OPR-J364-KR-09

Survey Dates: October 25 – December 10, 2009

Depths are corrected to Mean Lower Low Water datum using verified zoned tides. Horizontal positions are referenced to the North American Datum of 1983 (NAD83).

Charts Affected:

Chart Number	Scale	Edition	ENC
11382	1:80,000	40 th , Feb./04	US4FL71M
11383	1:30,000	51 st , Jan./06	US5FL72M
11384	1:10,000	34 th , Oct./03	US5FL73M

Widespread shoaling was observed in the Caucus Channel at the entrance to Pensacola Bay, Florida. A high-resolution bathymetric model (Figure 4) shows pervasive sand waves in the channel, indicating the dynamic nature of the seafloor and shifting sand deposits.

Observed survey depths within the Left Outside Quarter, Left Inside Quarter, Right Outside Quarter, and Right Inside Quarter are less than controlling depths that are tabulated in the current release of NOS Chart 11384 (Figure 1). The Left Outside Quarter is shallower than the controlling depth (24 feet) for the distance between Buoys G “7” and G”9.” A shoal with depths between 28-35 feet crosses the channel approximately 400 meters seaward of Buoys G “7” and R “8,” restricting the clearance depths for the inside quarters of the channel (Figure 3). The Right Outside Quarter is shallower than the controlling depth (33.4 feet) from approximately 500 meters seaward of Buoy R “6” to Buoy R “8.” Many survey depths are shallower than depths that are charted within the channel.

- OLD SAYBROOK, CT
- NEW ORLEANS, LA
- ANNAPOLIS, MD
- NORTHBROOK, IL

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Survey depths were evaluated in the context of the current largest scale nautical chart of the area (NOS 11384) and the channel tabulation. Depths were selected to represent critical shoals and significant differences from charted and tabulated depths and do not represent all instances of shoaling.

CHART 11384

PENSACOLA HARBOR ENTRANCE CHANNEL								
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF JUL 2009								
CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (MILES)	DEPTH MLLW (FEET)
CAUCUS CHANNEL	B24.0	39.4	39.4	C33.4	1-09	A500	3.1	A35
BARRANGAS CHANNEL	47.5	48.7	48.1	47.3	1,7-09	A500	1.7	A35
PICKENS CHANNEL	43.6	45.5	45.5	D45.9	1-09	A500	2.8	A35

A. PROJECT DIMENSIONS OF 44 FEET FOR A WIDTH OF 800 FEET PROVIDED BY THE U.S. NAVY. AUTHORIZED USACE PROJECT IS 35 FEET FOR A WIDTH OF 500 FEET.
 B. 13.1 FEET ALONG THE CHANNEL EDGE.
 C. 23.9 FEET ALONG THE CHANNEL EDGE.
 D. EXCEPT FOR A 43 FT OBSTRUCTION REPORTED BY AN NOS SURVEY AT 30°19'57.7" N, 087°16'39.3" W.
 NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Figure 1. NOS Chart 11384 Channel Tabulation.

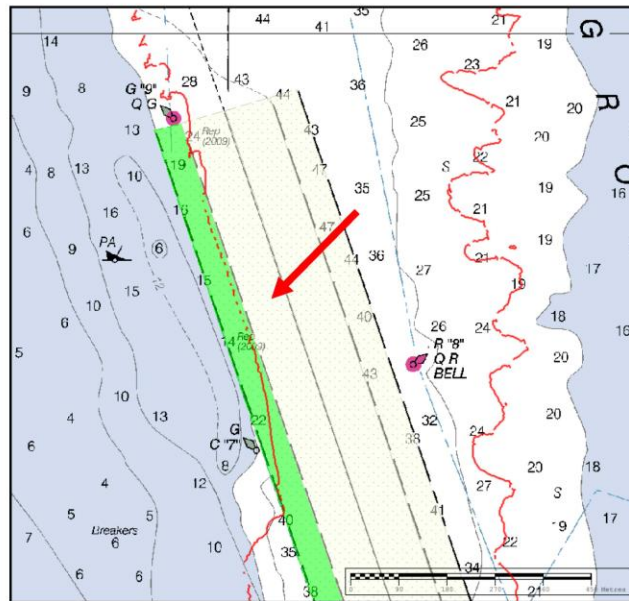


Figure 2. Shoaling in the left Outside Quarter of the Caucus Channel. The 24-foot depth curve is shown in red.

NOAA
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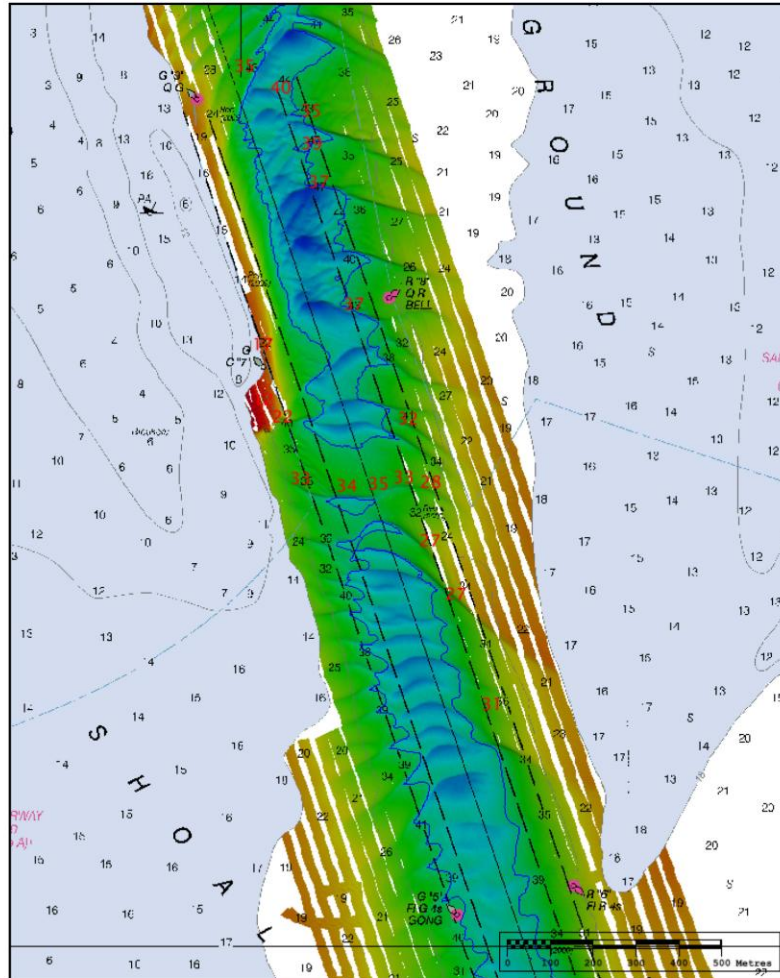


Figure 4. 1-meter resolution bathymetry model of Caucus Channel overlain with NOS Chart 11384 and selected depths.

If you need any further information or data products, please contact me at your earliest convenience.

Regards,

George Reynolds
Vice President

GGR/lf

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

From: kathleen.jamison [mailto:Kathleen.Jamison@noaa.gov]
Sent: Friday, April 30, 2010 5:31 PM
To: George Reynolds
Subject: Re: Answers

As per our phone discussion:

1) The "exceptions" we have given for the FY09 work does not apply to the FY10 survey work. If adjustments need to be made to the FY10 project requirements that conflict with the 2010 Specs & Deliverables, that will be done on a case-by-case basis.

2) We concur with each of your statements below (#1-4).

3) #4 is the only topic that also applies to the 2010 survey sheets - you do not need to add cross lines just to reach the 4% if you are doing re-runs or fill-ins to the original line spacing. If your cross lines do not meet the 4% requirement, please explain this in the DR briefly - you can cite this email as documented permission from your COTR (that goes for any variation from the specs that is discussed and approved by your COTR - just document it!).

Have a great weekend - tell your crew to stay safe and listen to the Coast Guard - I'll be keeping my eye on what's happening to Pensacola regarding the spill, but please let me know if you hear of any useful information from the scene.

Regards,
Kathleen

George Reynolds wrote:

> Hi Kathleen,
>
> Thanks for following up on our discussion topics.
>
> For your reference, the following is a copy of our notes from the meeting
> aboard the Ferrel.
>
> 1. In water depths of greater than 20 meters, occasional SSS refraction
> is not a concern assuming that line spacing results in "Complete multibeam
> coverage".
>
> 2. In water depths of ?20m, refraction is acceptable only if, by means
> of confidence checks along the line, we are able to determine that we can

- > see features across the entire record. This will not apply in the event
- > that the refraction is sporadic as we will not have a "standard" by which to
- > judge the effects of refraction. "Complete multibeam coverage" will not
- > suffice to replace the object detection capabilities of the SSS in >20m.
- > Only "object detection multibeam coverage" would serve in place of SSS.
- >
- > 3. During skunk stripe SSS/MB surveying the multibeam density
- > requirement in water depths 20M and less is 5 soundings/1m cell with cell
- > size increasing to 5% of water depth after 20m per "complete multibeam
- > coverage" standards. Due to our "exception", we are required to populate
- > cells with three soundings (<20m water = 2m cell, >20m water =4m cell).
- Per
- > "complete multibeam coverage" standards, holidays may span no more than 3
- > nodes (cells). Therefore, with the exception of the cases presented
- below,
- > we are allowed 6m of along track holiday in <20m and 12m of along track
- > holiday in >20m before we have to go back and fill-in the holiday. NOAA
- > suggested that "common sense" should also be one of the tools that we use
- > when making decisions on this subject.
- >
- > Larger holidays than described above may be acceptable if:
- > Exception 1: We have overlapping coverage from adjacent swaths that
- > populate some of the cells that would have been populated by the swath
- that
- > experienced the blowout.
- > Exception 2: We have partial coverage within the blowout area and
- are
- > able to confidently retain some of the soundings within the blowout.
- >
- > Again, common sense should prevail.
- >
- > 4. Tie line percentage requirement applies to the planned or proposed
- > line plan, not the actual line plan implemented. In other words, if we
- plan
- > on line spacing for 100M SSS and end up having to do in-fills to meet
- > coverage requirements due to site conditions (i.e refraction), no
- > additional tie lines are required to reach the 4% lineal nautical miles
- run
- > for the additional trackline miles.
- >
- > If you have any questions on the above please let me know.
- >
- > Looking forward to talking with you later today.
- >

> Regards
> George
>
>
> -----Original Message-----
> From: kathleen.jamison [mailto:Kathleen.Jamison@noaa.gov]
> Sent: Friday, April 30, 2010 9:15 AM
> To: George Reynolds
> Subject: Answers
>
> Hi George,
>
> I will give you a call shortly to follow up on this email. Now that you
> have worked out the degraded imagery issues in Sheet A (to where
> contacts can be reliably observed in the imagery), I'd like to clarify
> which questions you still would like official answers on.
>
> For now, I can confirm two issues that we discussed last week and/or on
> our site visit:
>
> 1) Modification to Project Instructions permitting substitution of
> "Complete" multibeam echosounder coverage for 200% side scan sonar with
> concurrent "Set Line Spacing" multibeam in depths greater than 20 m.
>
> 2) Task award for OPR-J364-KR-10. The official word from the
> contracting office is "on or before May 22," although I have emphasized
> to them that this area is a priority, and to award the task order as
> soon as possible, so I'm hoping for something closer to May 15, although
> of course I cannot say for sure.
>
> Will you be suspending operations or making modifications in the spill
> aftermath? I had thought there wouldn't be much worry in Pensacola, at
> least in the near term while the oil will hit land in Louisiana and
> doesn't seem to be moving north east, but then I read that Pensacola is
> constructing a boom for the bay. Needless to say, the spill is causing
> quite the stir around here as we scramble to make our resources
> available to the Coast Guard!

--

Kathleen Jamison
Physical Scientist, Data Acquisition Control Branch
Hydrographic Surveys Division
NOAA
Kathleen.Jamison@noaa.gov
301.713.2700 x109

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

From: "kathleen.jamison" <Kathleen.Jamison@noaa.gov>

Date: Thu, 15 Jul 2010 11:42:22

To: George Reynolds <ggr@oceansurveys.com>

Cc: Lori Knell <Lori.Knell@noaa.gov>

Subject: Visit on Tuesday

Hi George,

Thanks so much for providing such a great office visit experience earlier this week. I believe we were able to accomplish quite a bit, and I appreciate your gathering Bob and Bonnie to help out with everything.

Here are a few answers to the DR Questions (with input from Gene Parker at AHB):

Q. Should OSI include charting recommendations for item investigations other than AWOIS items?

A. Yes, the hydrographer (OSI) should make charting recommendations whenever it would be helpful.

Q. Should the title sheet state "feet" or "meters" at the bottom of the page?

A. It should be listed as "meters" – all processing is done in metric, and should only be converted to feet or fathoms following H-Cell compilation at the production branch.

Q. Is there any reason to continue putting the bold blue registry number on the cover page? It is not required in the Specs & Deliverables or the Statement of Work.

A. No, it is not mandatory – this is a relic from the hard copy days when the DR was placed in a folder horizontally for reference.

Q. Should OSI submit difference surfaces (images, graphics and explanations) in the DR for survey junctions?

A. Yes – the images and graphics often say more than the text.

Q. Is there any requirement for OSI to make Coast Pilot or ATON Report (for MCD) submissions?

A. No, there is no requirement for contractors to make submit separate Coast Pilot or ATON Reports. A SAR question flagged as a yellow "Not Applicable" does not affect the SAR score.

Q. How much should the "correspondence" section in Appendix 5 contain?

A. Only pertinent and relative information, e.g., where the production branch or the COTR provides guidance regarding "exceptions" or changes in

deliverables as required by the Statement of Work or Specs & Deliverables. Do not include information regarding DTONs in Appendix 5 – Appendix 1 DTON Report is sufficient.

Let me know if there's a question I missed, or if you have any further questions. I'm also going to start cc'ing Lori Knell on these emails, since she will be taking over my COTR duties while I am on my detail.

--

Kathleen Jamison

Physical Scientist, Data Acquisition Control Branch Hydrographic Surveys
Division NOAA Kathleen.Jamison@noaa.gov 301.713.2700 x109

Subject:
Fwd: Re: Fwd: Pensacola Image
From:
"CDR Rick Brennan, NOAA" <richard.t.brennan@noaa.gov>
Date:
1/12/2012 11:43 AM
To:
Norris A Wike <Norris.A.Wike@noaa.gov>, Edward.Owens@noaa.gov

Norris,

Attached is the preliminary shoreline from RSD. Please include this in your HCell (SS) and note the Project Number, GC# and the estimated delivery date of this GC in your HCell Report.

Rick

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

Subject: Re: Fwd: Pensacola Image
Date: Thu, 12 Jan 2012 09:58:31 -0500
From: Mike Espey <mike.espey@noaa.gov>
To: Corey Allen <corey.allen@noaa.gov>
CC: richard.t.brennan <richard.t.brennan@noaa.gov>, Marc S Moser <marc.s.moser@noaa.gov>

All,

Please see attached "preliminary data" for the AOI indicated in Corey's diagram. Please let me know if more is needed to meet your needs.

Project Number = FL0703A (preliminary/clipped to AHB AOI)
GC# = GC10824
estimated submission date of final data from NGS to MCD = Apr 30, 2012

-Mike

On 1/10/2012 3:04 PM, Corey Allen wrote:

> Mike,
> Thanks again for your call this morning and your continued support. I was able to discuss with CDR Brennan in greater detail their procedures, and as we suspected his preferred way forward will be to compile this survey using "draft" shoreline. AHB will be able to reference in the HCell metadata information about your forthcoming product to MCD to placate any concerns they may have about receiving the interim product.
>
> Please find attached a graphic that is slightly expanded in scope to the originally requested area. Please let me know if this expanded area presents any problems. If you are able to extract

a MHW line for the newly requested area, CDR Brennan has asked that you also provide the Project Number, GC#, and an estimated submission date from NGS to MCD to further clarify the source information AHB will provide to MCD.

>

> Again thanks for the support and please don't hesitate to contact me or CDR Brennan if you have any additional questions.

>

> Regards, Corey

>

> ----- Forwarded message -----

> From: CDR Rick Brennan, NOAA <richard.t.brennan@noaa.gov>

> Date: Tue, Jan 10, 2012 at 2:23 PM

> Subject: Re: Pensacola Image

> To: Corey Allen <corey.allen@noaa.gov>

>

>

> Corey,

>

> I think a little bigger would be better. See the attached PDF.

>

> Rick

>

>

> On 1/10/2012 1:57 PM, Corey Allen wrote:

>>

>>

>> --

>> J. Corey Allen

>> Physical Scientist, Operations Branch

>> National Oceanic & Atmospheric Administration

>> Corey.Allen@noaa.gov

>> 301.713.2777 x103 (Office)

>> 301.717.7271 (Cellular)

>> 301.713.4533 (Fax)

>>

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> --

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> LCDR Rick Brennan, NOAA

> Chief, Atlantic Hydrographic Branch

> 439 West York Street

> Norfolk, VA 23510

> Office: 757-441-6746

> Cell: 443-994-3301

>
> Learn about "America's Seventh Service":
> www.noaacorps.noaa.gov
>
> Learn about NOAA's Office of Coast Survey:
> www.nauticalcharts.noaa.gov
>
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>
>
> --
> J. Corey Allen
> Physical Scientist, Operations Branch
> National Oceanic & Atmospheric Administration
> Corey.Allen@noaa.gov
> 301.713.2777 x103 (Office)
> 301.717.7271 (Cellular)
> 301.713.4533 (Fax)
>

Attachments:

FL0703A preliminary_2012-01-12.zip 27 bytes

This Document is for Office Process use only and is intended to supplement, not supersede or replace, information/recommendations in the Descriptive or H-Cell Reports.

H12061 AHB COMPILATION LOG

General Survey Information	
REGISTRY No.	<i>H12061</i>
PROJECT No.	<i>OPR-J364-KR-09-B</i>
FIELD UNIT	<i>OCEAN SURVEYS, INC.</i>
DATE OF SURVEY	<i>20091023 - 20100223</i>
LARGEST SCALE CHART	<i>12384, Edition 36, 20101201, 1:10,000</i>
ADDITIONAL CHARTS	<i>11382, Edition 41, 20100501, 1:80000</i> <i>11383, Edition 52, 20110401, 1;30,000</i>
SOUNDING UNITS	<i>(FEET)</i>
COMPILER	<i>NORRIS A. WIKE</i>

Source Grids	File Name
Surfaces	
<i>Combined</i>	<i>H12061_4m_Combined.csar</i>
<i>Interpolated TIN</i>	<i>H12061_12m_InterpTIN.csar</i>
<i>Shifted Interpolated TIN</i>	<i>H12061_12m_InterpTIN_Shifted.csar</i>
Final HOBs	
<i>Survey Scale Soundings</i>	<i>H12061_SS_Soundings.hob</i>
<i>Chart Scale Soundings</i>	<i>H12061_CS_Soundings.hob</i>
<i>Contour Layer</i>	<i>H12061_Contours.hob</i>
<i>Feature Layer</i>	<i>H12061_Features.hob</i>
<i>Meta-Objects Layer</i>	<i>H12061_MetaObjects.hob</i>
<i>Blue Notes</i>	<i>H12061_BlueNotes.hob</i>
<i>Bottom Samples</i>	<i>H12061_BottomSamples.hob</i>
<i>Shoreline</i>	<i>H12061_Shoreline.hob</i>

Meta-Objects Attribution	
Acronym	Value
M_COVR	
CATCOV	<i>1 – coverage available</i>
SORDAT	<i>20100223</i>
SORIND	<i>US,US,graph,H12061</i>
M_QUAL	
CATZOC	<i>1 – zone of confidence A1</i>
INFORM	<i>R/V ABLE II</i>
POSACC	<i>1.524m</i>
SORDAT	<i>2010223</i>
SORIND	<i>US,US,graph,H12061</i>
SUREND	<i>20100223</i>
SURSTA	<i>20091023</i>
DEPARE	
DRVALV 1	<i>1.0 FT</i>
DRVALV 2	<i>88.0 FT</i>
SORDAT	<i>20100223</i>
SORIND	<i>US,US,graph,H12061</i>

SPECIFICATIONS:

- I. COMBINED SURFACE:
 - a. Number of ESAR Final Grids: **12**
 - b. Resolution of Combined (m): **4 m**

- II. SURVEY SCALE SOUNDINGS (SS):
 - a. Attribute Name: **Depth**
 - b. Selection criteria: **Radius, Shoal bias**
 - c. Radius value is: **mm at map scale**
 - i. Use single-defined radius: **1**
 - ii. And/Or use radius table file: **H12061_SS_SSR_10k.txt**

0.000000	5.48641	1.5
5.486411	18.2880	1.7

H12061_SS_SSR_30k.txt

0.000000	10.0584	1.0
10.05841	27.4320	1.1

H12061_SS_SSR_80k.txt

0.000000	14.9352	1.0
14.93521	30.0000	1.2
 - d. Queried Depth of All Soundings
 - i. Minimum: **2.0177 ft**
 - ii. Maximum: **86.9990 ft**

- III. INTERPOLATED TIN SURFACE:
 - a. Resolution (m): **12M**
 - b. Interpolation method: **Natural Neighbor**
 - c. Shift value: **-0.75 ft**

- IV. CONTOURS:
 - a. Attribute Name: **Depth contours**
 - b. Use a Depth List: **H12061_depth_contours.txt**

1.8288
3.6576
5.4864
9.1440
18.2880
 - c. Output Options: **Create contour lines**
 - i. Line Object: **DEPCNT**
 - ii. Value Attribute: **VALDCO**

- V. FEATURES:
 - a. Number of Chart Features: **51** [all features included in H-Cell]
 - b. Number of Non-Chart Features: **27** [all features submitted by field & not included in H-Cell]

- VI. CHART SURVEY SOUNDINGS (CS):
 - a. Number of ENC CS Soundings: **1220**
 - b. Attribute Name: **Depth**
 - c. Selection criteria: **Radius, Shoal bias**
 - d. Radius value is: **Distance on the ground (m)**
 - i. Use single-defined radius: **NA**

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ii. And/Or use radius table file:

<i>H12061_CS_SSR_10k.txt</i>		
<i>0.000000</i>	<i>5.7150</i>	<i>120</i>
<i>5.715001</i>	<i>9.1440</i>	<i>130</i>
<i>9.144001</i>	<i>27.6610</i>	<i>140</i>
<i>H12061_CS_SSR_30k.txt</i>		
<i>0.000000</i>	<i>18.2880</i>	<i>400</i>
<i>18.28801</i>	<i>27.4320</i>	<i>400</i>
<i>H12061_CS_SSR_80k.txt</i>		
<i>0.000000</i>	<i>18.2880</i>	<i>700</i>
<i>18.28801</i>	<i>36.5760</i>	<i>1000</i>
<i>NA</i>		
<i>1191</i>		

Enable Filter:

e. Number Survey CS Soundings:

VII. NOTES: