

**H11583**

NOAA FORM 76-35A

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

**DESCRIPTIVE REPORT**

*Type of Survey* **Hydrographic / SSS & SWMB**

*Registry No.* **H11583**

**LOCALITY**

*State* **MISSISSIPPI-ALABAMA**

*General Locality* **Gulf of Mexico**

*Sub-locality* **7 NM South of  
Mobile Point**

**2006 - 2007**

CHIEF OF PARTY  
**Scott Cholmondeley**  
**TerraSond Ltd**

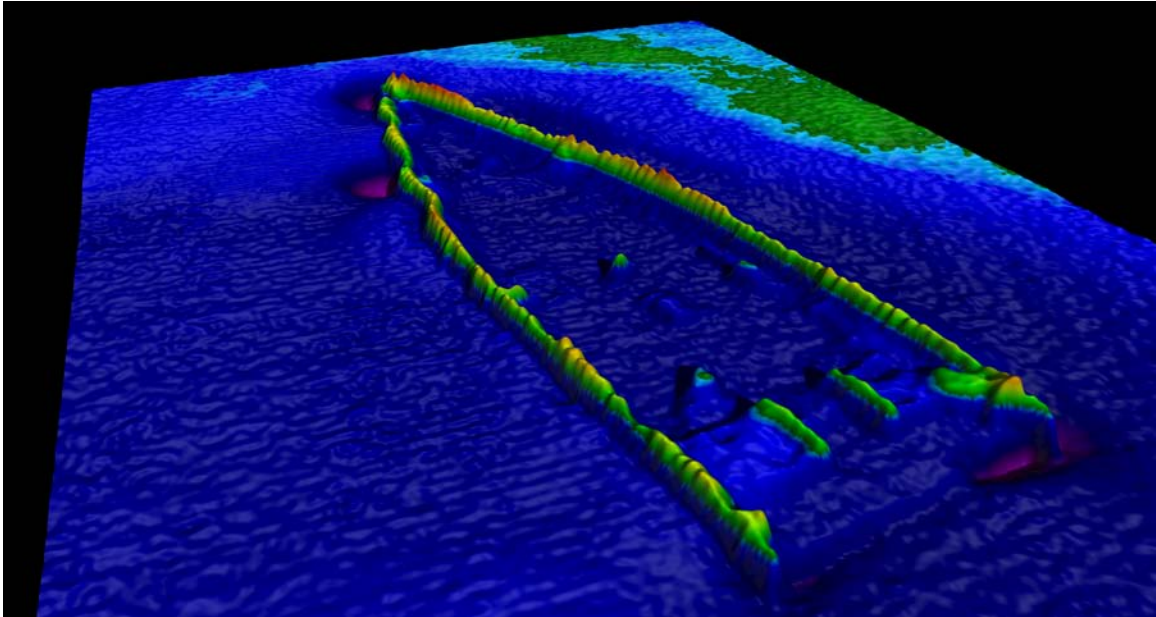
LIBRARY & ARCHIVES

DATE

<p style="text-align: center;">U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION</p> <p style="text-align: center;">HYDROGRAPHIC TITLE SHEET</p>	<p>REGISTER NO.</p> <p style="text-align: center;">H-11583</p>
<p>INSTRUCTIONS - The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.</p>	<p>FIELD NO.</p> <p style="text-align: center;">OPR-J364-KR-06</p>
<p>State _____ <u>Mississippi-Alabama</u> _____</p> <p>General Locality _____ <u>Gulf of Mexico</u> _____</p> <p>Locality _____ <u>7 NM South of Mobile Point</u> _____</p> <p>Scale _____ <u>N/A</u> _____</p> <p>Instructions dated _____ <u>June, 2006</u> _____</p> <p>Vessel(s) _____ <u>R/V Davidson, Bella Marie</u> _____</p> <p>Chief of party _____ <u>Scott Cholmondeley</u> _____</p> <p>Surveyed by _____</p> <p>Soundings taken by echo sounder, hand lead, pole _____ <u>Multibeam Echosounder, Side Scan Sonar</u> _____</p> <p>Graphic record scaled by _____</p> <p>Graphic record checked by _____</p> <p>Protracted by _____</p> <p>Verification by _____</p> <p>Soundings in fathoms feet at MLW MLLW _____ <u>Meters at MLLW</u> _____</p>	
<p>REMARKS: _____</p> <p style="text-align: center;">Contract No.: DG133C05CQ1079</p> <p style="text-align: center;">Contractor:</p> <p style="text-align: center;">TerraSond Ltd.</p> <p style="text-align: center;">1617 South Industrial Way</p> <p style="text-align: center;">Palmer, Alaska 99645</p> <p style="text-align: center;">907-745-7215</p> <p style="text-align: center;">Date of Survey: June 8, 2006 - March 9, 2007</p> <p style="text-align: center;">All times are recorded in UTC</p>	

**DESCRIPTIVE REPORT**

**OPR-J364-KR-06**



**H-11583**

**SHEET D**

**STATE: MISSISSIPPI-ALABAMA**

**LOCALITY: GULF OF MEXICO**

**SUBLOCALITY: 7 NM SOUTH OF MOBILE POINT**

**YEAR: 2006**

**TERRASOND**

**TABLE OF CONTENTS**

<b>Section</b>	<b>Page</b>
A Area Surveyed.....	1
B Data Acquisition and Processing .....	3
C Vertical and Horizontal Control.....	8
D Results and Recommendations .....	9
E Approval Sheet.....	51

**Appendices**

- I Danger to Navigation Reports
- II Survey Feature Report
- III Progress Sketch
- IV Tide and Water Levels
- V Supplemental Survey Records and Correspondence

**Separates**

- I Acquisition and Processing Logs \*
- II Sound Velocity Profile Data\*
- III Hydrographic Survey Letter Instructions/Statement of Work\*
- IV Crossline Comparisons\*
- V Side Scan Contact Listings and Images of Significant Contacts\*

*\*Data filed with original field records.*

*Bold, italic, red notes in the Descriptive Report were made during office processing*



## **Descriptive Report to Accompany Hydrographic Survey H-11583**

Sheet D

June 8, 2006 - March 9, 2007

TerraSond Ltd.

Lead Hydrographer: Scott Cholmondeley

### **AREA SURVEYED**

This survey was conducted in accordance with Statement of Work, Shallow Water Multibeam Sonar and Side Scan Sonar Survey Services, OPR-J364-KR-06, 7 nautical miles (NM) south of Mobile Point, AL, Gulf of Mexico, Mississippi-Alabama; dated April 5, 2006.

The purpose of this survey was to provide NOAA with modern, accurate hydrographic survey data to update the nautical charts of this area. The project area covers approximately 41.3 square nautical miles and is oriented roughly parallel to and 7 nautical miles south of Horn Island, a barrier island in the Gulf of Mexico.

The project area is approximately 32 nautical miles south of the Port of Mobile, AL, at the head of Mobile Bay. Mobile, 28 miles north of the bay entrance, is one of the largest and most important seaports on the Gulf of Mexico. A fully equipped ocean terminal, excellent transportation facilities, large shipyards, and all kinds of marine supplies are available in Mobile. Foreign exports include marine supplies, paper products, lumber, wood pulp, flour, aluminum, chemicals, grain, soybeans, coal and bunker fuel, iron and steel products, and fertilizer. Foreign imports include bauxite, mahogany, crude rubber, sugar, newsprint, seafood, rubber, pig iron, ores, molasses, automobiles, fishmeal, frozen foods, and chemicals. Coastal trade consists mainly of petroleum products, shell, lumber, iron and steel products, chemicals, and food products. Inland waterway transportation facilities for handling iron and steel products, ore, sugar, grain and coal serve the Warrior, Tombigbee and Alabama River systems with connections to the Mississippi River.

31 nautical miles to the northwest of the project area is the Port of Pascagoula, MS. Pascagoula is ranked as one of the top 20 ports in the United States for short tonnage imports and exports. The Port of Pascagoula has access to U.S. Highway 90 and Interstate 10. The port is also served by the CSXT and Mississippi Export Railroad. The port's main import is oil, followed by machinery as a distant second. The port exports fertilizers, meat, oil and paper. Pascagoula is also one of the gateways to the Mississippi River.

The ports of Mobile and Pascagoula, and the ships that use them, rely heavily on the accuracy of the nautical charts for this area.

Full bottom coverage, consisting of 200% side scan sonar coverage supplemented with shallow-water multibeam echosounder coverage, was achieved within the limits of hydrography for this survey. The side scan and multibeam imagery were used to locate and determine the least depth over obstructions, wrecks, and shoals as well as to determine the least depths over the entire project area. This survey area has a maximum depth of 70 feet and a minimum depth of 18 feet below the Mean Lower Low Water (MLLW) tidal datum.

For complete survey limits, see Figure 1.

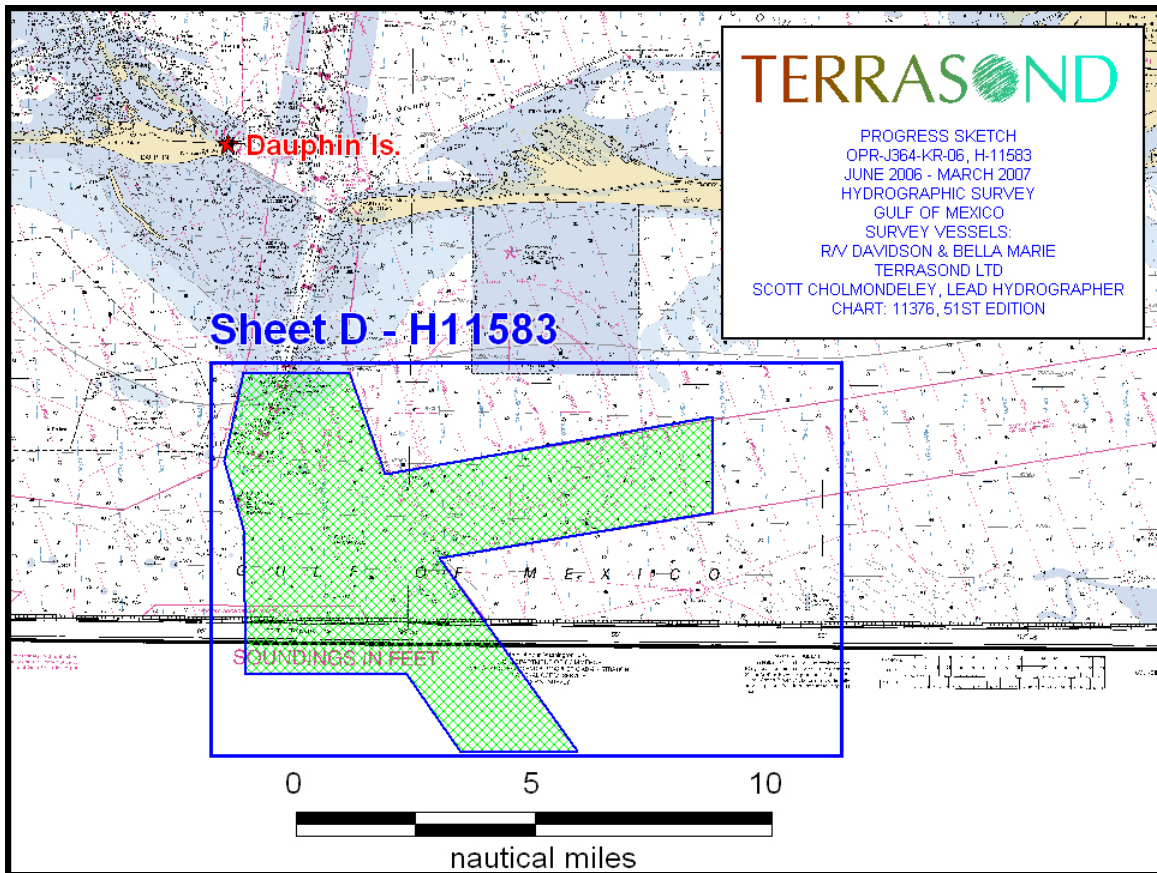


Figure 1 - Overview of H-11583 with Chart 11376, 51<sup>st</sup> Edition, Feb. 2006.

**A. DATA ACQUISITION AND PROCESSING *SEE ALSO THE EVALUATION REPORT.***

**B.1 Equipment**

Bathymetry and side scan imagery for this survey were acquired using the hydrographic survey vessels *R/V Davidson* and *Bella Marie*.

***R/V Davidson***

The *R/V Davidson* is a steel hull vessel, 53.3 meters length overall with an 11.6 meter beam and a 5.4 meter draft. Major systems used on the *R/V Davidson* are listed in the following table.

<b>VESSEL <i>R/V Davidson</i></b> <b>LOA: 53.3m, BEAM 11.6m, DRAFT: 5.4m</b>	
<b>Equipment</b>	<b>Manufacturer &amp; Model</b>
Multibeam Sonar	Reson 8101
Side Scan Sonar	EdgeTech 4200-FS
Positioning	Primary -- Seatex Seapath 200 RTK
Sound Speed	Sea Sciences LTV50 Acrobat Towed Vehicle and Applied Microsystems SV&P Smart Sensor
Vessel Attitude	Seatex MRU-5

Equipment performance details are provided in the Data Acquisition and Processing Report (DAPR),\* Sections A. Equipment and B. Quality Control.

***\*Data filed with original field records.***

***Bella Marie***

The *Bella Marie* is an aluminum hulled catamaran hydrographic survey vessel, 11.9 m in length with a 4.3 m beam and a 0.75 m draft. Major systems used on the *Bella Marie* are listed in the following table.

<b>VESSEL <i>Bella Marie</i></b> <b>LOA: 11.9m, BEAM 4.3m, DRAFT: 0.75m</b>	
<b>Equipment</b>	<b>Manufacturer &amp; Model</b>
Multibeam sonar	Reson 8124
Side Scan Sonar	EdgeTech 4200-FS
Positioning	Seatex Seapath 200 RTK
Sound speed	Applied Microsystems SV&P Smart Sensor and Odom Digibar Pro
Vessel attitude	Seatex MRU-5

Equipment performance details are provided in the Data Acquisition and Processing Report (DAPR), \*

Sections A. Equipment and B. Quality Control.

***\*Data filed with original field records.***

## **B2. Quality Control**

### **Side Scan Sonar**

Daily confidence checks of the side scan sonar operation were conducted by recording a screen shot of the side scan record which included the side scan image and all operational settings. The confidence checks were performed when distinctive bottom features (e.g. trawl scars, submerged vessels, etc.) were continuously visible in the record from the maximum range of one channel to the maximum range of the other channel. A rub test was performed on both channels of the side scan transducer prior to deployment to ensure adequate signal return.

Data for this sheet were collected at various range scales depending on environmental conditions. Strong thermoclines were common throughout the survey area due to localized heating of the surface waters and freshwater runoff. While surveying with the *R/V Davidson*, the towfish was positioned below the layer when significant thermoclines were encountered whenever practical. This periodically resulted in a towfish height that was less than that required in the specifications for the 100m range scale. When this occurred, adjacent swath records were carefully examined to ensure the side scan coverage specified in the statement of work was achieved. Refer to “Separate I: ACQUISITION AND PROCESSING LOGS” \* for range scales for individual lines. While surveying with the *Bella Marie*, which used a fixed-mount side scan array, line spacing and side scan range scale were reduced when thermoclines were encountered to ensure adequate coverage was achieved.

### **Shallow Water Multibeam**

No conditions with the potential for adversely affecting data integrity were encountered with the multibeam suites used during this survey.

Multibeam confidence checks were conducted on the *R/V Davidson* and the *Bella Marie* to verify proper operation of the multibeam suite on a weekly basis, weather permitting. The *R/V Davidson* performed the checks by comparing nadir beam depths with lead line depths. The *Bella Marie* performed the confidence checks using standardized bar check procedures. The results of these comparisons and the line acquisition logs detailing aspects of quality control for each survey line are contained in “Separate I: ACQUISITION AND PROCESSING LOGS” \* of this report.

A detailed discussion of multibeam system calibrations, patch tests, data acquisition, and processing is provided in the Data Acquisition and Processing Report (DAPR) \* for this project.

### **Crosslines**

417 lines totaling 763.8 lineal nautical miles of mainscheme lines and forty (40) crosslines totaling 42.4 lineal nautical miles of crosslines were run during the 2006 survey of H-11583. The ratio of the lineal nautical miles of crosslines to the lineal nautical miles of mainscheme lines, at 5.5%, exceeds the 5% required by “NOAA

*\*Data filed with original field records.*

Hydrographic Surveys Specifications and Deliverables”, Section 5.5.3. A total of 25 crossings were analyzed using CARIS HIPS, in conjunction with Microsoft Excel, and comparisons were good. The crossings varied spatially and temporally.

A comprehensive explanation of the crossline analysis process is in the Data Acquisition and Processing Report (DAPR). \* The reports generated from the crossline analysis are in “Separate V: CROSSLINE COMPARISONS.” \*

### Contemporary Survey Junctions *See also the Evaluation Report.*

The westerly limits of this survey junctions the easterly limits of H-11547 (2004, Scale 1:20,000), the easterly limits of this survey junctions westerly limits of H-11584 (2004, Scale 1:20,000), the southerly limits of this survey junctions the northerly limits of H-11602 (2004, Scale 1:20,000). The soundings generally agree between the surveys. There are no recommendations and no adjustments were made.

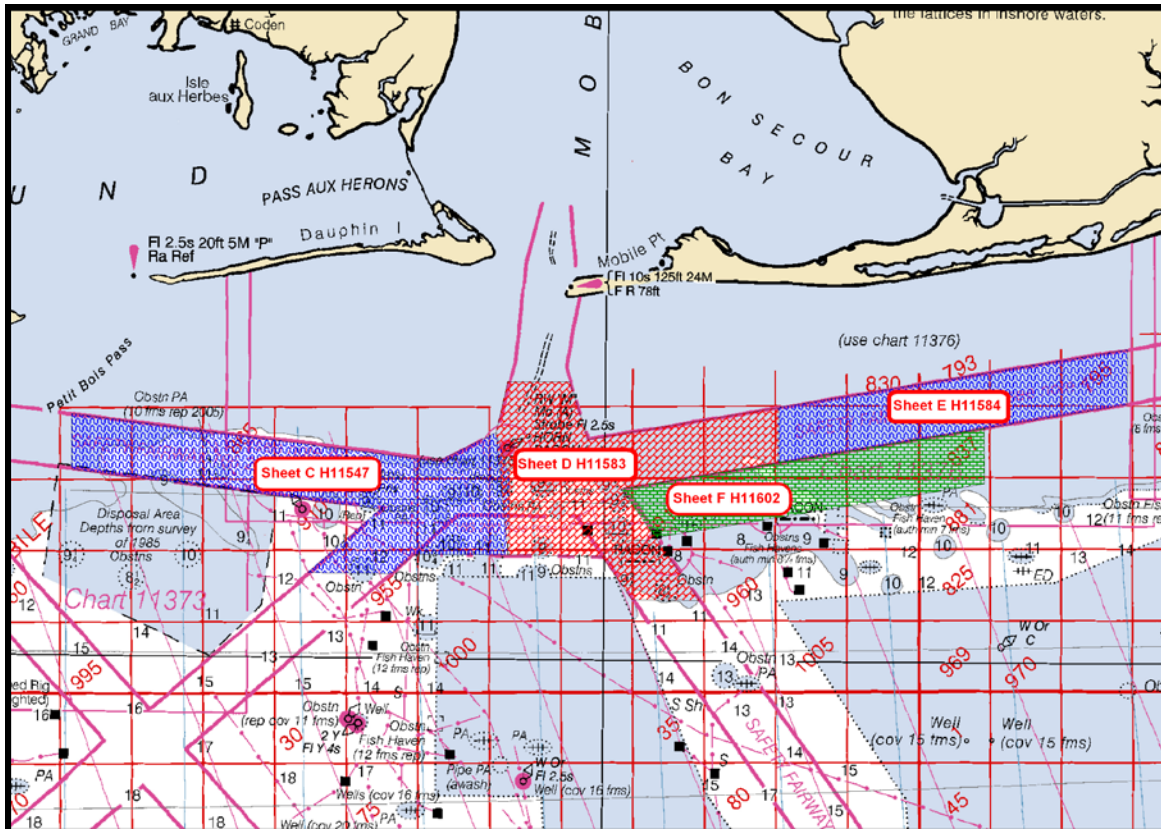


Figure 2 - Overview of survey area showing the junction locations of H-11547, H-11583, H-11584 and H-11602.

### B3. Corrections to Echo Soundings

Hydrographic Survey H-11583 was performed in conjunction with nine other surveys in Projects OPR-J364-KR-06 and S-J977-KR-TE. Any change to the corrections to echo soundings affects all surveys in the area and is described in detail in the Data Acquisition and Processing Report (DAPR) \*accompanying this report.

*\*Data filed with original field records.*

Sounding data were reduced using zoning provided by NOAA/CO-OPS under the project instructions and verified tides from the National Water Level Observation Network (NWLON) station at Dauphin Island, AL (873-8151, 873-8150) and the Pascagoula NOAA Lab, MS water level station (874-1533). Refer to the Horizontal and Vertical Control Report (HVCR) \*for tidal zoning methods and operations.

#### **B4. Data Processing**

The final depth information for this survey was submitted as a collection of CARIS BASE surfaces which best represented the seafloor at the time of the 2006 survey. All possible measures were taken to ensure the data was correctly processed and the appropriate designated soundings, representing the least depth of significant contacts, were selected and retained in the finalized surfaces.

The submittal of several grids of varying resolution was unnecessary for H-11583 due to the shallow depths and relatively flat bottom throughout the survey area. A grid spacing of 2 meters was used for all BASE surfaces and Digital Terrain Models (DTM).

In accordance with the statement of work, line spacing was set to achieve the desired side scan sonar coverage. This was not optimal for shallow water multibeam (SWMB) coverage and resulted in SWMB coverage gaps as the outer beams of adjacent lines did not meet and the use of a grid resolution smaller than two meters resulted in data holidays which could preclude features from inclusion on the surface.

A CARIS BASE uncertainty surface was submitted, which covers the entire survey area, where the finalized uncertainty is the greater of the standard deviation and *a priori* uncertainty. One sun-illuminated DTM created from the final elevation surface was submitted in addition to the BASE surface. The naming conventions for each grid are:

**CARIS BASE Uncertainty Surface:** H11583\_1\_OF\_1.hns

**Sun-Illuminated Elevation DTM:** H11583\_1\_OF\_1.tif

The Data Acquisition and Processing Report Sections A: EQUIPMENT – DATA COLLECTION; and B: QUALITY CONTROL\* contain a detailed discussion of the steps followed when acquiring and processing the 2006 survey data.

*\*Data filed with original field records.*



**B. VERTICAL AND HORIZONTAL CONTROL *SEE ALSO THE EVALUATION REPORT.***

Sounding data were tide adjusted using verified tide levels for the National Water Level Observation Network (NWLON) station at Dauphin Island, AL (873-8151, 873-8150) and the Pascagoula NOAA Lab, MS water level station (874-1533) tide stations through March 9, 2007. Verified data from the Dauphin Island and Pascagoula gauges were downloaded from the NOAA internet Hydro Hot list (<http://co-ops.nos.noaa.gov/hydro.shtml>). The final zoning methodology is described in detail in the project wide Horizontal and Vertical Control Report.\*

*Approved tides were applied during field processing.*

The horizontal control datum used for this survey is the North American Datum of 1983 (NAD 83). The projection used was UTM, Zone 16 North.

Sounding position control was determined using the Global Positioning System (GPS). The United States Coast Guard differential GPS (DGPS) stations *Mobile Point, AL, StaID 26* and *English Turn, LA, StaID 28*, were used to provide navigation correctors. A summary of weekly DGPS confidence checks is provided in Separate I: ACQUISITION AND PROCESSING LOGS\* included with this report.

*\*Data filed with field records.*



## C. RESULTS AND RECOMMENDATIONS *SEE ALSO THE EVALUATION REPORT.*

### D1. Chart Comparison

In the absence of a paper smooth sheet, sounding data from the 2006 survey used for chart comparison were produced using CARIS HIPS & SIPS Field Sheet Editor. The final edited data were decimated to a 10m<sup>2</sup> binned surface and populated with the shoalest sounding value within the limits of each bin. In order to replicate traditional smooth sheet sounding selection criteria, a shoal-biased sounding selection using a 60m radius was applied to each binned surface. The soundings were then compared to the largest scale chart and Electronic Navigation Chart (ENC) covering the surveyed area. The results of this comparison are discussed in the following pages.

No Local Notice to Mariners (LNM) affected the survey area. LNM number 06 (Weekly Edition-February 2007) was the last notice reviewed for this project. There was one Danger to Navigation (DTON) report submitted for the 2006 survey. The DTON report is included in Appendix I. to this report.

#### Raster Chart Comparison - Survey Area H-11583

All charted features were investigated using side scan and multibeam sonar. The survey generally agrees with the largest scale nautical charts covering the survey area. Figure 3 shows the survey limits and the intersections between Chart 1115A, 41<sup>st</sup> Edition; Chart 11377, 6<sup>th</sup> Edition; and Chart 11376, 51<sup>st</sup> Edition.

The following pages detail discrepancies found between charted features and the 2006 survey data. The hydrographer recommends that 92 uncharted features be added, 9 charted features be removed and 5 charted features be updated to reflect the data produced by the 2006 survey. Additionally, 4 charted soundings are recommended for update by the hydrographer. The 2006 survey also produced sounding data that support changing the position and orientation of depth contours throughout the survey area.

The 2006 survey data are compared to the following raster charts.

Chart	Scale	Edition Number	Edition Date	Issue Date
1115A	1:456,394	41 <sup>st</sup>	3/1/2005	1/27/2007
11377	1:40,000	6 <sup>th</sup>	2/1/2006	1/27/2007
11376	1:80,000	51 <sup>st</sup>	2/1/2006	1/27/2007

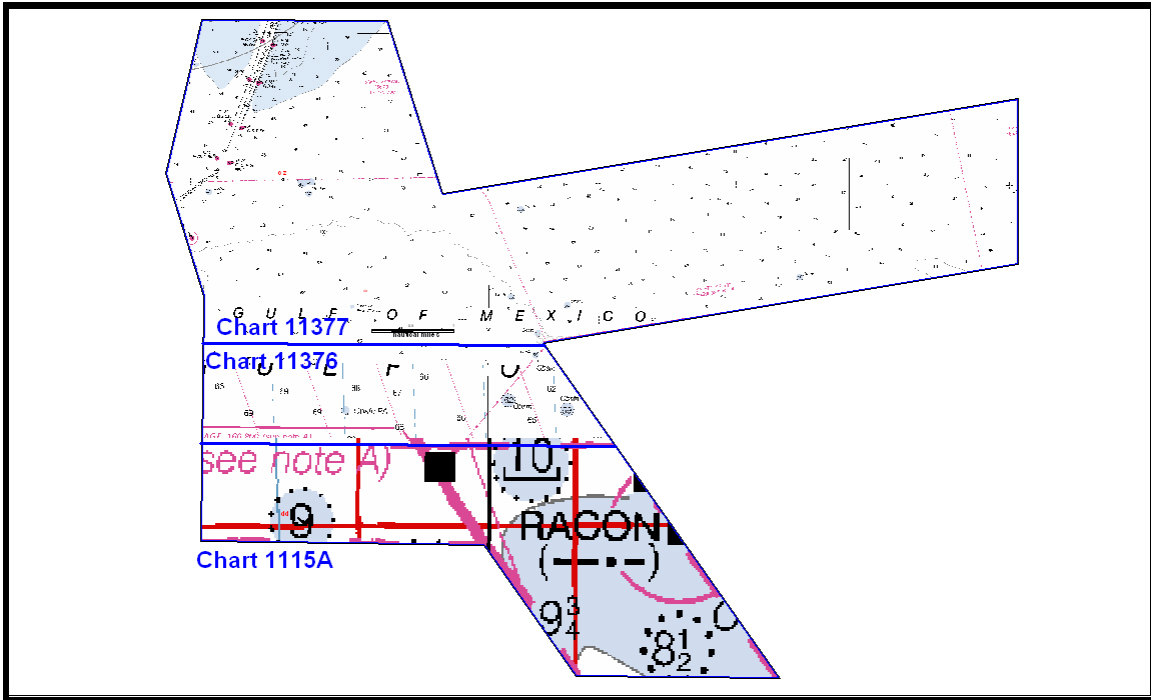


Figure 3 – Overview of the survey limits for H-11583 showing the areas covered by Charts 11377, 6<sup>th</sup> Edition, 11376, 51<sup>st</sup> Edition; and 1115A, 41<sup>st</sup> Edition.

**New Features Sheet H-11583**

The 2006 survey identified 92 features not currently charted. These features are described in detail in Table 1 and Figures 4 - 6. The hydrographer recommends adding the new features to the chart based on the 2006 survey data.

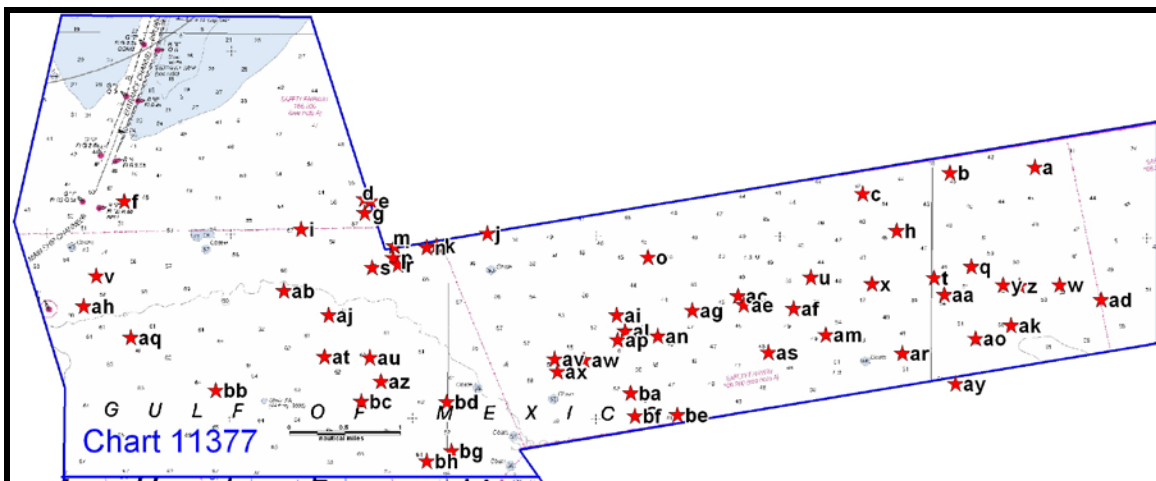


Figure 4 – Overview of survey area H-11583, covered by Chart 11377, 6<sup>th</sup> Edition, where uncharted features are identified in the 2006 survey. Refer to Table 1 for survey sounding information.

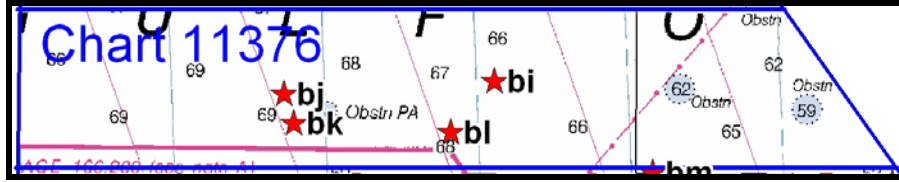


Figure 5 - Overview of survey area H-11583, covered by Chart 11376, 51<sup>st</sup> Edition, where uncharted features are identified in the 2006 survey. The chart soundings are in feet. Refer to Table 1 for survey sounding information.

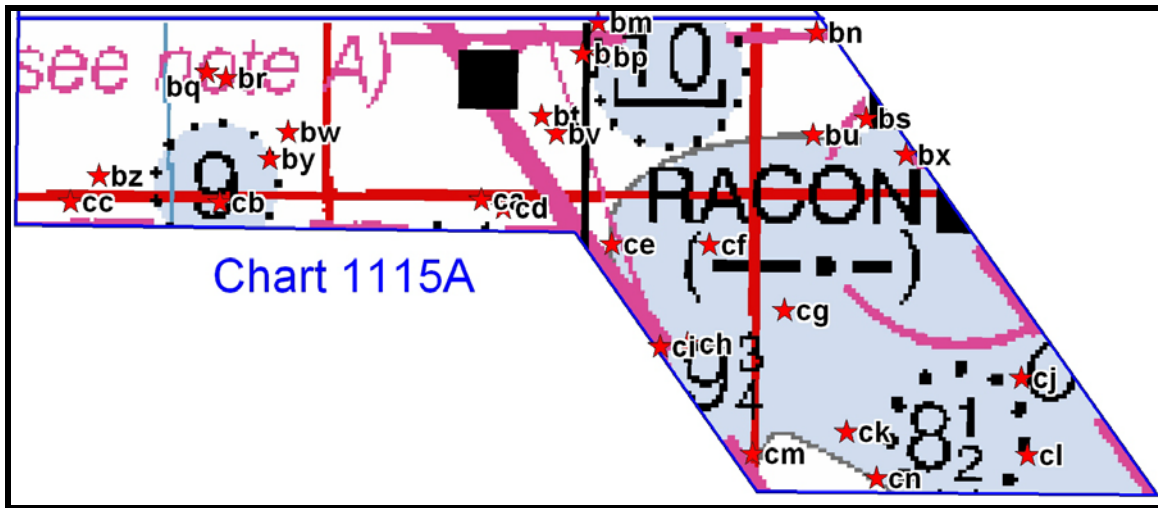


Figure 6 - Overview of survey area H-11583, covered by Chart 1115A, 41<sup>st</sup> Edition, where uncharted features are identified in the 2006 survey. Refer to Table 1 for survey sounding information.

Table 1 – Uncharted features identified by the 2006 survey. The feature letter is keyed to the graphical display shown in Figures 4 – 6. Charts 11377, 6<sup>th</sup> Edition; 11376, 51<sup>st</sup> Edition; and 1115A, 41<sup>st</sup> Edition.

Feature Letter	Chart	Latitude N	Longitude W	2006 Sounding Value (feet)	Fig.	Comment	AWOIS Record No.
a	11377	30° 08' 51.64"	87° 53' 55.90"	39	4	Add OBSTN <i>Chart 39 Obstn</i>	N/A
b	11377	30° 08' 48.63"	87° 54' 49.12"	37	4	Add OBSTN <i>Chart 37 Obstn</i>	N/A
c	11377	30° 08' 36.61"	87° 55' 43.042.98"	40	4	Add OBSTN <i>Chart 40 Obstn</i>	N/A
d	11377	30° 08' 31.6"	88° 00' 53.0"	54	4	Add OBSTN*	N/A
e	11377	30° 08' 30.4"	88° 00' 48.9"	53	4	Add OBSTN <i>Chart 53 Obstn</i>	N/A
f	11377	30° 08' 28.9"	88° 03' 22.0"	45	4	Add OBSTN*	N/A
g	11377	30° 08' 24.023.97"	88° 00' 52.71"	52	4	Add OBSTN <i>Chart 52 Obstn</i>	N/A
h	11377	30° 08' 16.81"	87° 55' 21.72"	42	4	Add OBSTN <i>Chart 42 Obstn</i>	N/A
i	11377	30° 08' 15.1"	88° 01' 31.9"	53	4	Add OBSTN*	N/A

Feature Letter	Chart	Latitude N	Longitude W	2006 Sounding Value (feet)	Fig.	Comment	AWOIS Record No.
j	11377	30° 08' 13.6"	87° 59' 36.4"	53	4	Add OBSTN*	N/A
k	11377	30° 08' 06.876"	88° 00' 07.659"	51	4	Add OBSTN <i>Chart 51 Obstn</i>	N/A
l	11377	30° 08' 06.53"	88° 00' 34.436"	46	4	Add OBSTN <i>Chart 46 Obstn</i>	N/A
m	11377	30° 08' 06.3"	88° 00' 33.7"	48	4	Add OBSTN*	8710
n	11377	30° 08' 05.7"	88° 00' 13.6"	53	4	Add OBSTN*	N/A
o	11377	30° 08' 01.35"	87° 57' 56.01"	43	4	Add OBSTN <i>Chart 43 Obstn</i>	N/A
p	11377	30° 07' 59.8"	88° 00' 34.6"	57	4	Add OBSTN*	N/A
q	11377	30° 07' 57.985"	87° 54' 35.034.96"	46	4	Add OBSTN <i>Chart 46 Obstn</i>	N/A
r	11377	30° 07' 56.3"	88° 00' 31.8"	55	4	Add OBSTN*	N/A
s	11377	30° 07' 54.44"	88° 00' 47.546"	56	4	Add OBSTN <i>Chart 56 Obstn</i>	N/A
t	11377	30° 07' 51.45"	87° 54' 58.328"	4544	4	Add OBSTN <i>Chart 44 Obstn</i>	N/A
u	11377	30° 07' 51.218"	87° 56' 14.71"	44	4	Add OBSTN <i>Chart 44 Obstn</i>	N/A
v	11377	30° 07' 48.62"	88° 03' 38.84"	52	4	Add OBSTN <i>Chart 52 Obstn</i>	N/A
w	11377	30° 07' 48.4"	87° 53' 40.3"	49	4	Add OBSTN*	N/A
x	11377	30° 07' 48.01"	87° 55' 36.94"	45	4	Add OBSTN <i>Chart 45 Obstn</i>	N/A
y	11377	30° 07' 47.8"	87° 54' 15.2"	50	4	Add OBSTN*	N/A
z	11377	30° 07' 47.7"	87° 54' 05.0"	49	4	Add OBSTN*	N/A
aa	11377	30° 07' 42.7"	87° 54' 52.0"	49	4	Add OBSTN*	N/A
ab	11377	30° 07' 41.6"	88° 01' 42.1"	57	4	Add OBSTN <i>Chart 57 Obstn</i>	7398
ac	11377	30° 07' 40.762"	87° 56' 59.93"	42	4	Add OBSTN <i>Chart 42 Obstn</i>	N/A
ad	11377	30° 07' 40.33"	87° 53' 14.25"	45	4	Add OBSTN <i>Chart 45 Obstn</i>	N/A
ae	11377	30° 07' 36.2"	87° 56' 56.4"	44	4	Add OBSTN	N/A
af	11377	30° 07' 34.329"	87° 56' 25.43"	44	4	Add OBSTN <i>Chart 44 Obstn</i>	N/A
ag	11377	30° 07' 33.01"	87° 57' 28.54"	41	4	Add OBSTN <i>Chart 41 Obstn</i>	N/A
ah	11377	30° 07' 32.2"	88° 03' 46.8"	56	4	Add OBSTN*	N/A
ai	11377	30° 07' 29.8"	87° 58' 15.2"	46	4	Add OBSTN*	N/A
aj	11377	30° 07' 28.6"	88° 01' 14.2"	60	4	Add OBSTN*	N/A

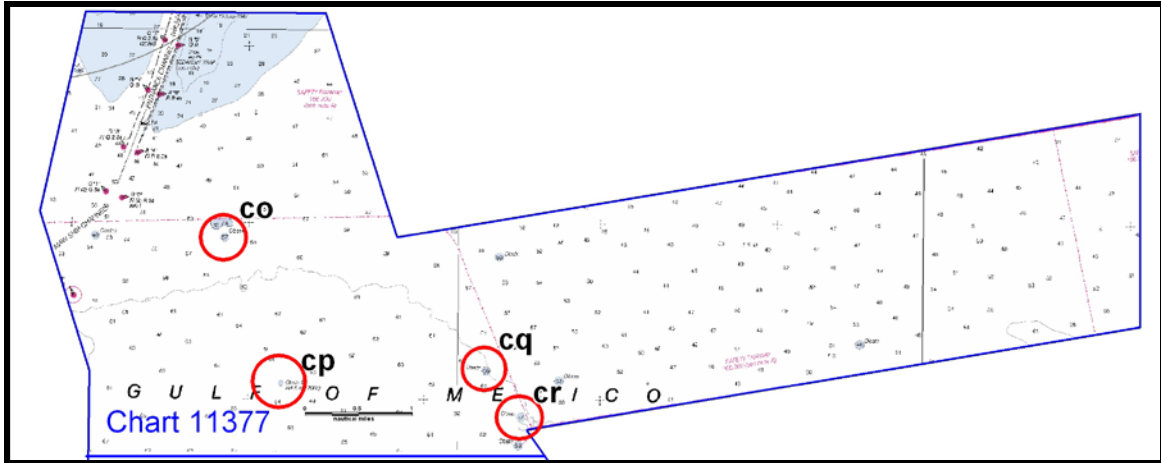
Feature Letter	Chart	Latitude N	Longitude W	2006 Sounding Value (feet)	Fig.	Comment	AWOIS Record No.
ak	11377	30° 07' 25.9"	87° 54' 09.9"	54	4	Add OBSTN*	N/A
al	11377	30° 07' 21.5"	87° 58' 09.8"	46	4	Add OBSTN*	N/A
am	11377	30° 07' 20.3"	87° 56' 05.3"	50	4	Add OBSTN*	N/A
an	11377	30° 07' 19.0"	87° 57' 49.9"	43	4	Add OBSTN*	N/A
ao	11377	30° 07' 18.7"	87° 54' 32.0"	49	4	Add OBSTN*	N/A
ap	11377	30° 07' 16.8"	87° 58' 14.6"	48	4	Add OBSTN*	N/A
aq	11377	30° 07' 15.4"	88° 03' 17.4"	58	4	Add OBSTN*	N/A
ar	11377	30° 07' 10.6 <sup>1</sup> "	87° 55' 17.4 <sup>1</sup> "	43	4	Add OBSTN <i>Chart 43 Obstn</i>	N/A
as	11377	30° 07' 10.5 <sup>48</sup> "	87° 56' 40.9 <sup>87</sup> "	<del>44</del> 43	4	Add OBSTN <i>Chart 43 Obstn</i>	N/A
at	11377	30° 07' 06.4"	88° 01' 16.7"	58	4	Add OBSTN*	N/A
au	11377	30° 07' 06.0"	88° 00' 48.4"	60	4	Add OBSTN*	N/A
av	11377	30° 07' 05.9"	87° 58' 53.6"	51	4	Add OBSTN*	N/A
aw	11377	30° 07' 05.6 <sup>59</sup> "	87° 58' 35.5 <sup>49</sup> "	51	4	Add OBSTN <i>Chart 51 Obstn</i>	N/A
ax	11377	30° 06' 59.1 <sup>4</sup> "	87° 58' 52.0 <sup>51.98</sup> "	50	4	Add OBSTN <i>Chart 50 Obstn</i>	N/A
ay	11377	30° 06' 54.5 <sup>48</sup> "	87° 54' 44.3 <sup>27</sup> "	44	4	Add OBSTN <i>Chart 44 Obstn</i>	N/A
az	11377	30° 06' 52.8"	88° 00' 41.5"	61	4	Add OBSTN*	N/A
ba	11377	30° 06' 47.9"	87° 58' 06.3"	48	4	Add OBSTN*	N/A
bb	11377	30° 06' 47.5"	88° 02' 24.2"	60	4	Add OBSTN*	N/A
bc	11377	30° 06' 42.3"	88° 00' 53.7"	61	4	Add OBSTN*	N/A
bd	11377	30° 06' 42.1"	88° 00' 00.4"	59	4	Add OBSTN*	N/A
be	11377	30° 06' 36.3"	87° 57' 37.2"	48	4	Add OBSTN*	N/A
bf	11377	30° 06' 35.8 <sup>78</sup> "	87° 58' 03.3 <sup>29</sup> "	<del>49</del> 48	4	Add OBSTN <i>Chart 48 Obstn</i>	N/A
bg	11377	30° 06' 15.9 <sup>89</sup> "	87° 59' 57.2 <sup>18</sup> "	59	4	Add OBSTN <i>Chart 59 Obstn</i>	N/A
bh	11376	30° 06' 09.9 <sup>4</sup> "	88° 00' 12.5 <sup>46</sup> "	61	5	Add OBSTN <i>Chart 61 Obstn</i>	N/A
bi	11376	30° 05' 37.5"	88° 00' 54.6"	66	5	Add OBSTN*	N/A
bj	11376	30° 05' 32.1"	88° 02' 15.9"	69	5	Add OBSTN*	7403
bk	11376	30° 05' 20.0 <sup>4</sup> "	88° 01' 11.4 <sup>5</sup> "	62	5	Add OBSTN <i>Chart 62 Obstn</i>	N/A
bl	11376	30° 05' 07.0"	87° 59' 53.0"	63	5	Add OBSTN*	N/A
bm	1115A	30° 05' 04.2 <sup>18</sup> "	87° 58' 20.6 <sup>2</sup> "	<del>60</del> 59	6	Add OBSTN <i>Chart 59 Obstn</i>	N/A
bn	1115A <i>11376</i>	30° 04' 55.7 <sup>4</sup> "	87° 59' 59.7 <sup>3</sup> "	61	6	Add OBSTN <i>Chart 61 Obstns</i>	N/A

Feature Letter	Chart	Latitude N	Longitude W	2006 Sounding Value (feet)	Fig.	Comment	AWOIS Record No.
bo	1115A	30° 04' 54.5"	87° 59' 51.4"	62	6	Add OBSTN*	N/A
bp	1115A	30° 04' 47.6"	88° 02' 37.9"	67	6	Add OBSTN*	7504
bq	1115A	30° 04' 46.4"	88° 01' 31.4"	62	6	Add OBSTN*	N/A
br	1115A	30° 04' 45.5 <del>49</del> "	88° 02' 30.1 <del>06</del> "	<del>64</del> 63	6	Add OBSTN <i>Chart 63 Obstns</i>	N/A
bs	1115A	30° 04' 32.5 <del>5</del> "	87° 57' 59.3 <del>29</del> "	42	6	Add OBSTN <i>Chart 42 Obstns</i>	N/A
bt	1115A	30° 04' 32.4"	88° 00' 16.6"	63	6	Add OBSTN*	N/A
bu	1115A	30° 04' 26.3 <del>2</del> "	87° 58' 21.9 <del>86</del> "	<del>47</del> 46	6	Add OBSTN <i>Chart 46 Obstn</i>	N/A
bv	1115A	30° 04' 26.0"	88° 00' 10.1"	61	6	Add OBSTN*	N/A
bw	1115A	30° 04' 25.7"	88° 02' 03.4"	67	6	Add OBSTN*	N/A
bx	1115A	30° 04' 19.7	87° 57' 42.4	43	6	Add OBSTN*	N/A
by	1115A	30° 04' 15.8"	88° 02' 11.6"	66	6	Add OBSTN*	N/A
bz	1115A	30° 04' 09.1"	88° 03' 23.2"	66	6	Add OBSTN*	N/A
ca	1115A	30° 04' 01.6"	88° 00' 41.6"	61	6	Add OBSTN*	N/A
cb	1115A	30° 03' 59.7"	88° 02' 32.3"	69	6	Add OBSTN*	7379
cc	1115A	30° 03' 59.4"	88° 03' 35.3"	66	6	Add OBSTN*	N/A
cd	1115A	30° 03' 58.7"	88° 00' 32.5"	61	6	Add OBSTN*	N/A
ce	1115A 11376	30° 03' 45.8 <del>3</del> "	87° 59' 46.5 <del>49</del> "	54	6	Add OBSTN <i>Chart 54 Obstn</i>	N/A
cf	1115A 11376	30° 03' 45.8 <del>77</del> "	87° 59' 05.3 <del>0</del> "	51	6	Add OBSTN <i>Chart 51 Obstn</i>	N/A
cg	1115A	30° 03' 22.1"	87° 58' 33.4"	53	6	Add OBSTN*	N/A
ch	1115A	30° 03' 09.3"	87° 59' 13.8"	56	6	Add OBSTN*	N/A
ci	1115A 11376	30° 03' 08.2 <del>1</del> "	87° 59' 25.3 <del>1</del> "	51	6	Add OBSTN <i>Chart 51 Obstn</i>	N/A
cj	1115A 11376	30° 02' 57.9 <del>1</del> "	87° 56' 52.8 <del>76</del> "	47	6	Add OBSTN <i>Chart 47 Obstn</i>	N/A
ck	1115A	30° 02' 37.3"	87° 58' 06.7"	55	6	Add OBSTN*	N/A
cl	1115A	30° 02' 29.3"	87° 56' 49.8"	53	6	Add OBSTN*	N/A
cm	1115A	30° 02' 29.2 <del>17</del> "	87° 58' 46.2 <del>15</del> "	48	6	Add OBSTN <i>Chart 8 fm Obstn</i>	N/A
cn	1115A	30° 02' 20.6"	87° 57' 53.8"	57	6	Add OBSTN*	N/A

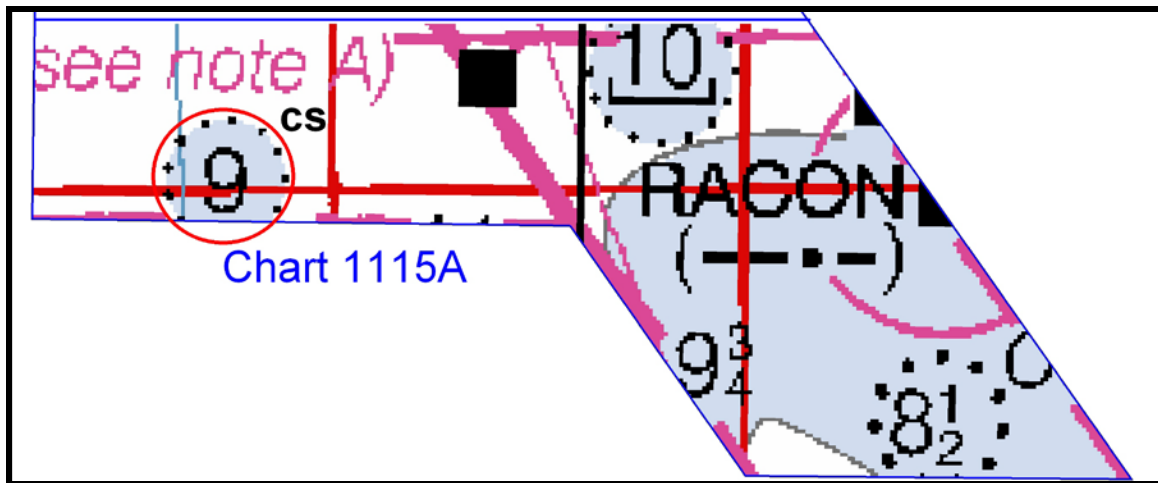
*\* See bluenotes for final charting recommendations.*

**Changed Features: Sheet H-11583**

Figures 7-8 delineate areas in survey area H-11583 in which features found by the 2006 survey are significantly different and/or horizontally offset from the corresponding charted features (circled in red).



*Figure 7 – Overview of survey area H-11583, covered by Chart 11377, 6<sup>th</sup> Edition, where features identified in the 2006 survey are significantly different and/or horizontally offset from the corresponding charted features.*



*Figure 8 - Overview of survey area H-11583, covered by Chart 1115A, 41<sup>st</sup> Edition, where features identified in the 2006 survey are significantly different and/or horizontally offset from the corresponding charted features.*



**Table 2 – Charted features within the H-11583 survey area where the 2006 survey identified features which are significantly different from those on the chart (Figures 7-8, Table 3).**

Feature Letter	Figure	Latitude N	Longitude W	Charted Depth (ft)	Survey Sounding (ft)	Vertical Difference (ft)	Horizontal Offset (ft)
co	7	30° 08' 03"	88° 02' 31"	57	51.2	5.8	N/A*
cp	7	30° 06' 42"	88° 01' 54"	44	61.0	-17	180ft*
cq	7	30° 06' 50"	87° 59' 42"	55	60.0	-5.0	1250ft*
cr	7	30° 06' 24"	87° 59' 19"	57	60.4	-3.4	820ft*
cs	8	30° 03' 12"	88° 02' 36"	9 Fath (54 ft)	68.9	-14.9	N/A*

**Table 3 – Recommendation for changed features described in figures 7-8 and Table 2. These features are included in the automated Wreck and Obstruction Information System investigation listing for H-11583.**

Feature Letter	Chart	Recommendation	AWOIS Record No.
co	11377	Change to OBSTN	8755, 8756, 8754, 8757*
cp	11377	Remove PA and update depth	13391*
cq	11377	Update charted location and Depth	8706*
cr	11377	Update charted location and Depth	8709*
cs	1115A	Charted Symbol is much shoaler than 2006 surveyed obstruction	7379*

*\*See Bluenotes for final charting recommendations.*



### Disproved Features: Sheet H-11583

There are nine features recommended for removal from the charts covering survey area H-11583. This recommendation is based on side-scan and multibeam data analysis. The positions and charted sounding values are described in Table 4 and Figures 9-11.

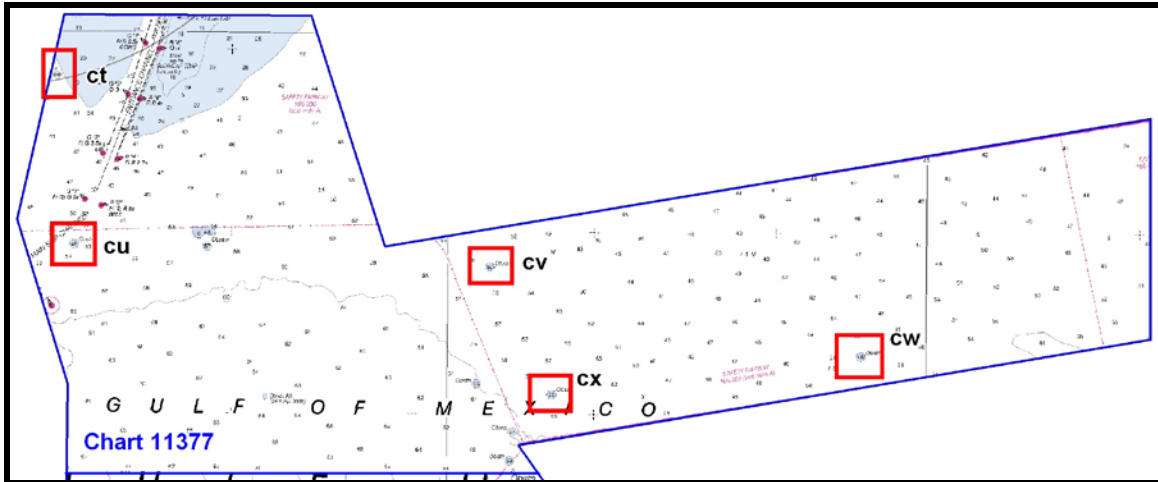


Figure 9 - Overview of survey area H-11583, covered by Chart 11377, 6<sup>th</sup> Edition, showing five of the nine charted features which are unsupported by the 2006 survey data. The features, marked by red squares, are recommended for removal. Charted soundings are in feet.

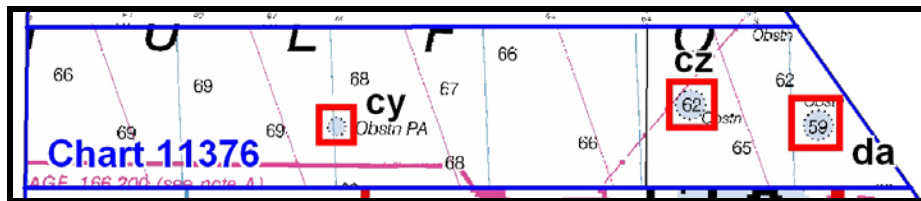


Figure 10 - Overview of survey area H-11583, covered by Chart 11376, 51<sup>st</sup> Edition, showing three of the nine charted features which are unsupported by the 2006 survey data. The features, marked by red squares, are recommended for removal. Charted soundings are in feet.

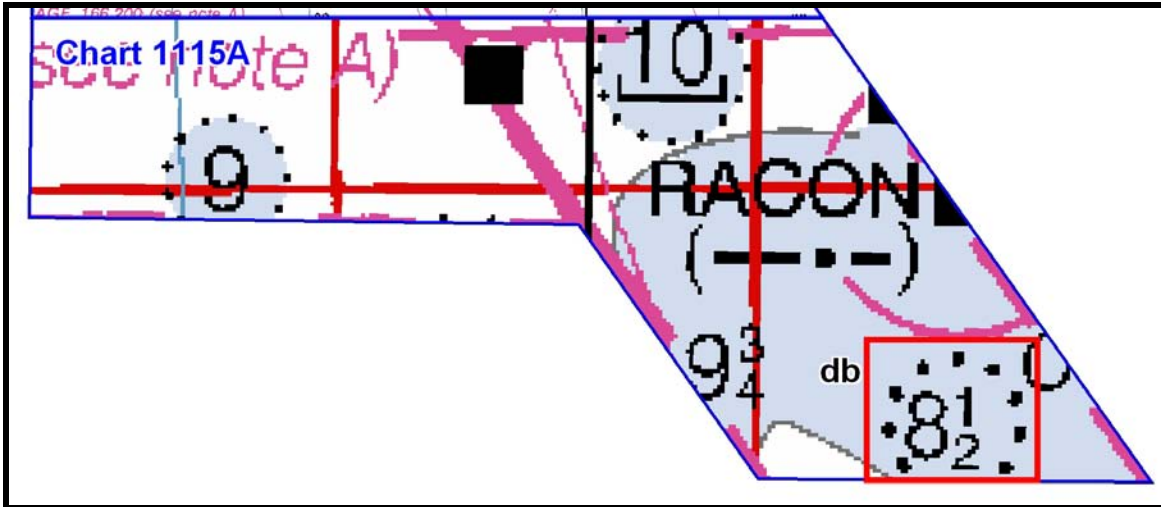


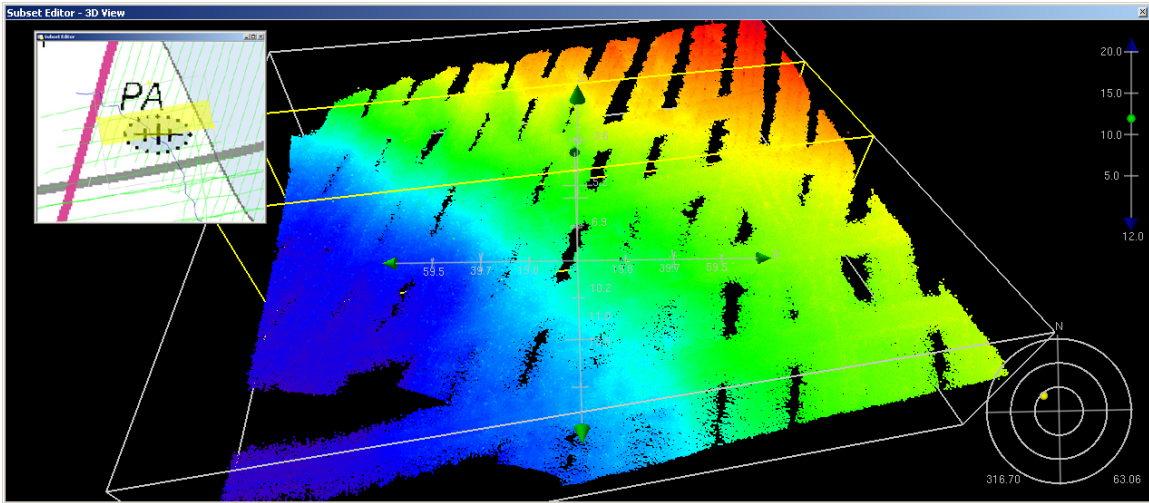
Figure 11 - Overview of survey area H-11583, covered by Chart 1115A, 41<sup>st</sup> Edition, showing one of the nine charted features which is unsupported by the 2006 survey data. The feature, marked by red square, is recommended for removal. Charted soundings are in fathoms.

Table 4 – Charted features within the survey limits of H-11583 that are recommended for removal from the indicated raster charts. The feature letter is keyed to the graphical display in Figures 9 – 11.

*\*See Bluenotes for final charting recommendations.*

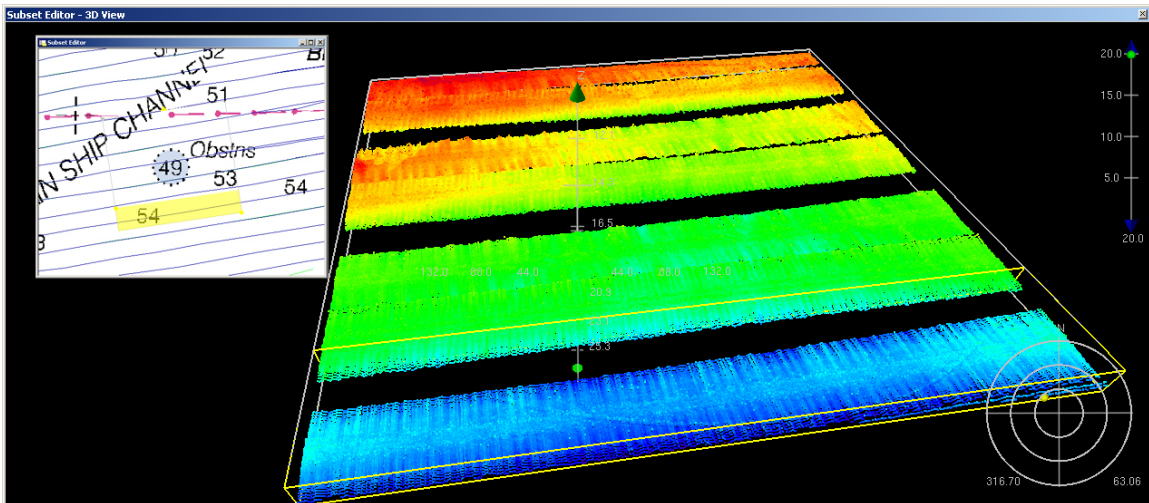
Feature Letter	Latitude N	Longitude W	Chart	Charted Sounding Value (ft)	AWOIS Item	Figure
ct	30° 9' 36"	88° 4' 7.32"	11377	N/A	N/A	9*
cu	30° 8' 03"	88° 3' 55"	11377 <del>6</del>	49 ft	N/A	9*
cv	30° 7' 54"	87° 59' 33"	11377	50 ft	N/A	9*
cw	30° 7' 05"	87° 55' 39"	11377	48 ft	N/A	9*
cx	30° 6' 44"	87° 58' 54"	11377	53 ft	8707	9*
cy	30° 5' 26"	88° 1' 59"	11376	N/A	N/A	10*
cz	30° 5' 34"	87° 59' 42"	11376	62 ft	N/A	10*
da	30° 5' 28"	87° 58' 54"	11376	59 ft	N/A	10*
db	30° 2' 36"	87° 57' 21"	1115A	8.5 Fm (51 ft)	N/A	11*

Figures 12-16 include images from CARIS HIPS & SIPS Subset Editor 3D view of the features recommended for removal from Chart 11377, 6<sup>th</sup> Edition. Each image is keyed to Table 3.



*Figure 12 - CARIS HIPS & SIPS Subset Editor 3D view of feature “ct” from Figure 9. The color scale represents depth. The consistency of color and lack of anomalous data in the figure indicate the charted feature is no longer present. \**

*\*See Bluenotes for final charting recommendations.*



*Figure 13 - CARIS HIPS & SIPS Subset Editor 3D view of feature “cu” from Figure 9. The color scale represents depth. The consistency of color and lack of anomalous data in the figure indicate the charted feature is no longer present. \**

*\*See Bluenotes for final charting recommendations.*

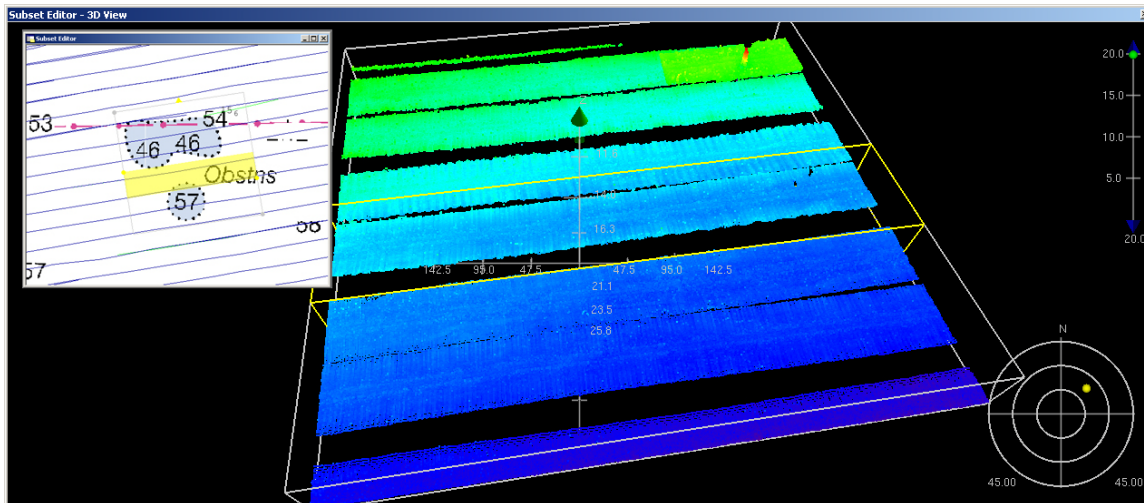


Figure 14 - CARIS HIPS & SIPS Subset Editor 3D view of feature “cv” from Figure 9. The color scale represents depth. The consistency of color and lack of anomalous data in the figure indicate the charted feature is no longer present. \*

*\*See Bluenotes for final charting recommendations.*

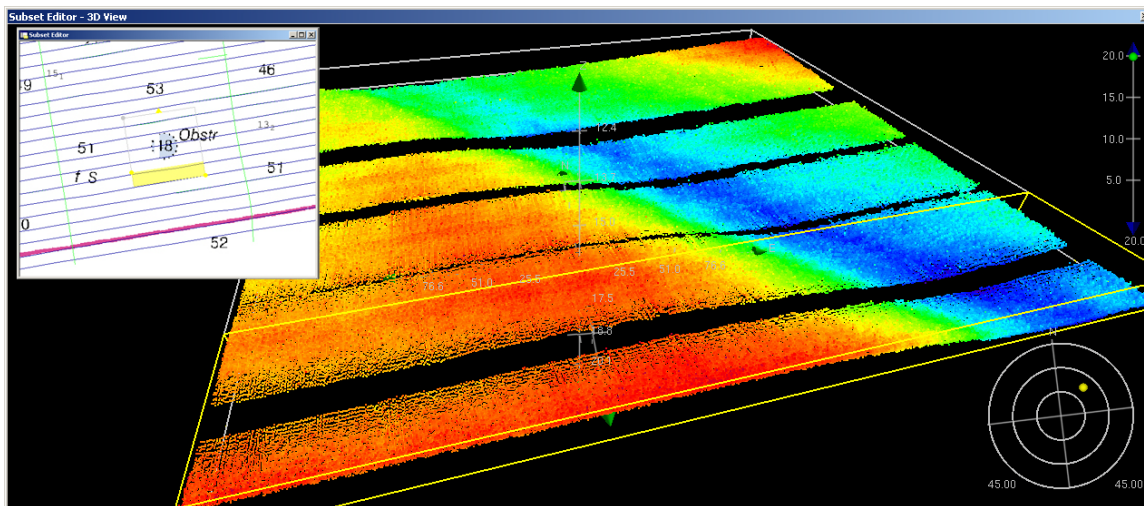
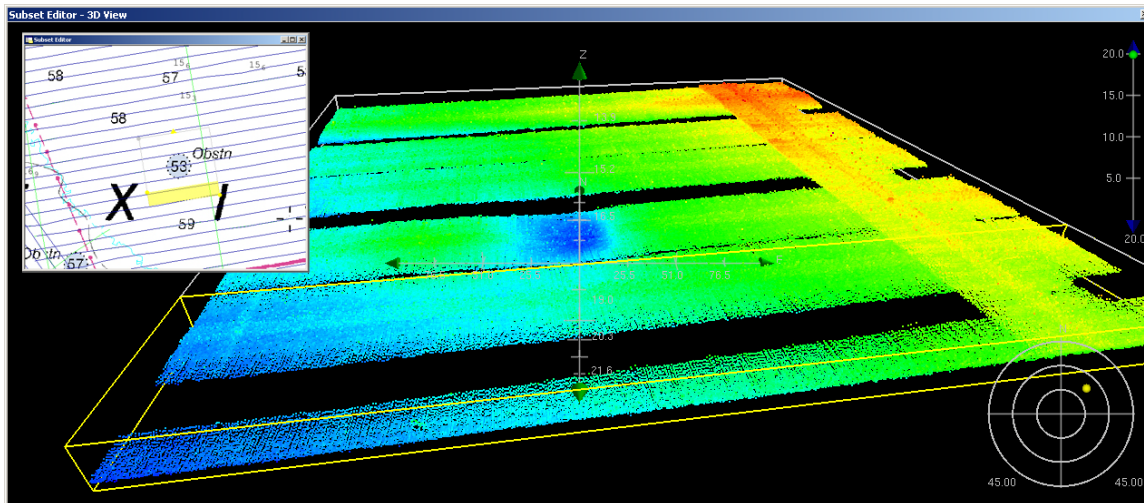


Figure 15 - CARIS HIPS & SIPS Subset Editor 3D view of feature “cw” from Figure 9. The color scale represents depth. The consistency of color and lack of anomalous data in the figure indicate the charted feature is no longer present. \*

*\*See Bluenotes for final charting recommendations.*

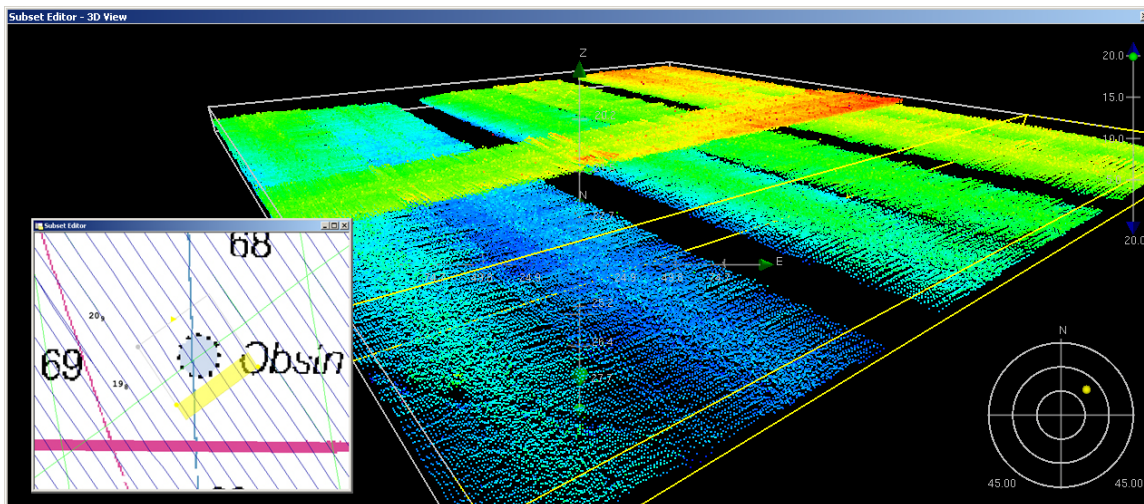




*Figure 16 - CARIS HIPS & SIPS Subset Editor 3D view of feature “cx” from Figure 9. The color scale represents depth. The consistency of color and lack of anomalous data in the figure indicate the charted feature is no longer present. \**

*\*See Bluenotes for final charting recommendations.*

Figures 17-19 include images from CARIS HIPS & SIPS Subset Editor 3D View of the features recommended for removal from Chart 11376, 51<sup>st</sup> Edition. Each image is keyed to Table 3.



*Figure 17 - CARIS HIPS & SIPS Subset Editor 3D view of feature “cy” from Figure 10. The color scale represents depth. The consistency of color and lack of anomalous data in the figure indicate the charted feature is no longer present. \**

*\*See Bluenotes for final charting recommendations.*

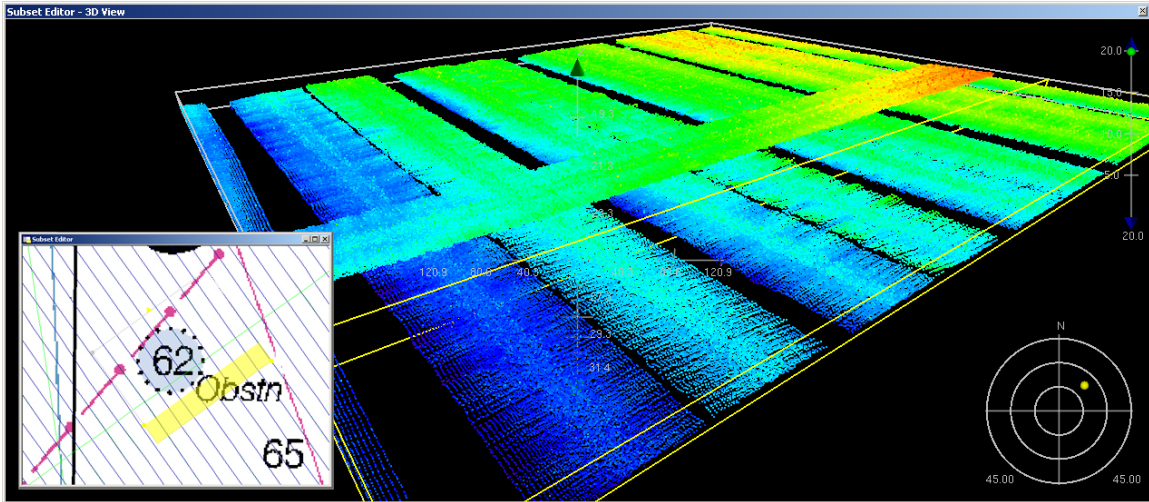


Figure 18 - CARIS HIPS & SIPS Subset Editor 3D view of feature “cz” from Figure 10. The color scale represents depth. The consistency of color and lack of anomalous data in the figure indicate the charted feature is no longer present. \*

*\*See Bluenotes for final charting recommendations.*

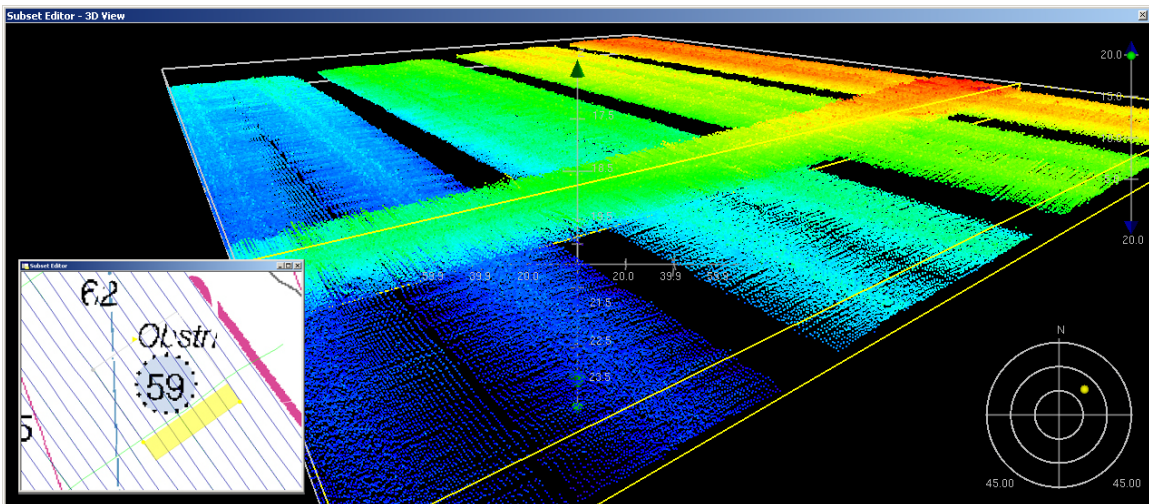
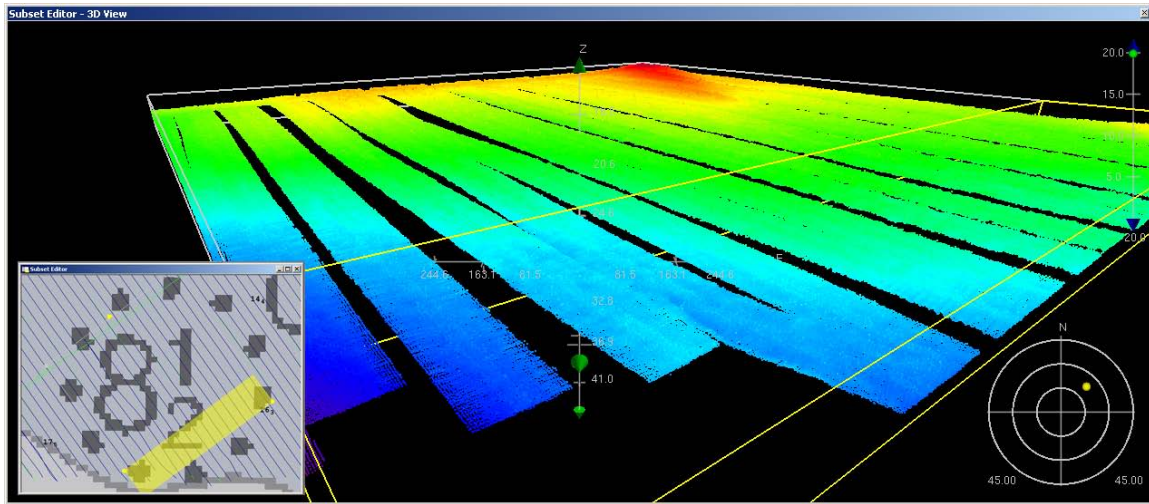


Figure 19 - CARIS HIPS & SIPS Subset Editor 3D view of feature “da” from Figure 10. The color scale represents depth. The consistency of color and lack of anomalous data in the figure indicate the charted feature is no longer present. \*

*\*See Bluenotes for final charting recommendations.*

Figure 20 includes an image from CARIS HIPS & SIPS Subset Editor 3D View of the feature recommended for removal from Chart 1115A, 41<sup>st</sup> Edition. The image is keyed to Table 3.



*Figure 20 - CARIS HIPS & SIPS Subset Editor 3D view of feature “db” from Figure 11. The color scale represents depth. The consistency of color and lack of anomalous data in the figure indicate the charted feature is no longer present. \**

*\*See Bluenotes for final charting recommendations.*

**Soundings: Sheet H-11583**

The 2006 survey soundings are in general agreement with the charted soundings on the largest scale charts available for survey area H-11583. Table 4 and Figure 21 describe four areas in which the 2006 survey soundings are significantly shoaler than the charted soundings. The hydrographer recommends updating the chart to reflect the 2006 survey data. *Concur*

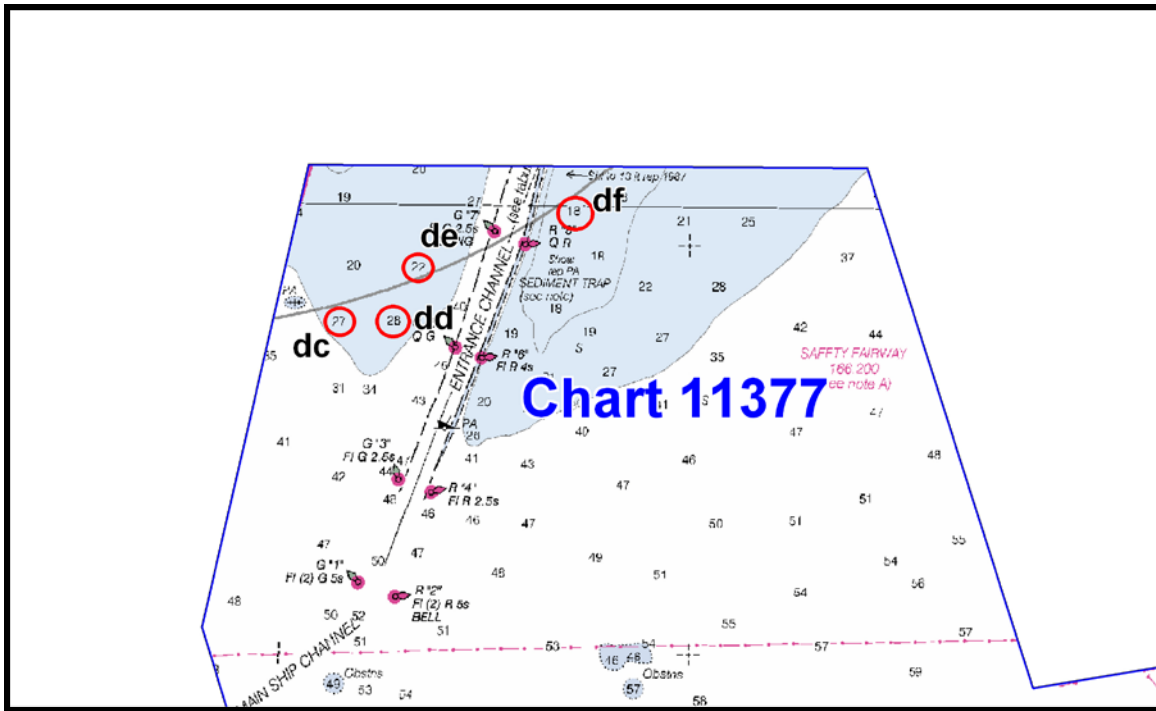


Figure 21 – Overview of survey area H-11583, covered by Chart 11377, 6<sup>th</sup> Edition, where the 2006 survey soundings are significantly shoaler than the charted soundings. Charte soundings are in feet.

Table 5 – Areas within the survey limits of H-11583 where the 2006 survey soundings are significantly shoaler than the charted soundings. The soundings are indexed by their feature letter to their location in Figure 21.

Feature Letter	Latitude N	Longitude W	Chart	Sounding on Chart (ft)	Survey Sounding (ft)	Difference (ft)
dc	30° 9' 31.0"	88° 3' 53.6"	11377	27*	24	3
dd	30° 9' 32.2"	88° 3' 38.4"	11377	28*	20	8
de	30° 9' 45.0"	88° 3' 31.5"	11377	22*	20	2
df	30° 9' 58.7"	88° 2' 48.6"	11377	18*	14 <b>12</b>	4

*\*Concur with clarification - It is recommended that the above discussed charted soundings be superseded by present survey depths.*



### Trends and Changeable Areas: Sheet H-11583

The 2006 survey data were used to generate depth contours for comparison with contours appearing on Chart 11377, 6<sup>th</sup> Edition and Chart 1115A, 41<sup>st</sup> Edition. Three areas were identified where the charted contours varied significantly from the contours generated by the 2006 data (Figures 22-24). The hydrographer recommends updating the chart contours to reflect changes identified by the 2006 survey. **Concur**

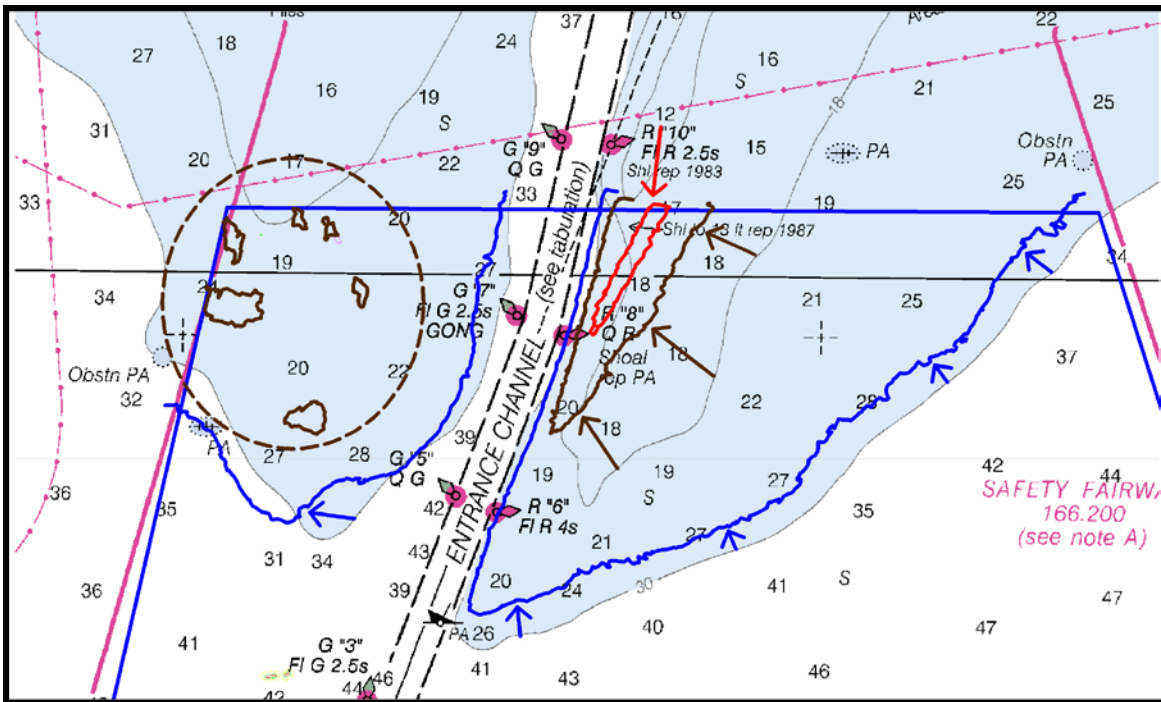


Figure 22 – Overview of survey area H-11583, in the vicinity of 30.18N and 88.04W, covered by Chart 11377, 6<sup>th</sup> Edition, where the 12 foot (red), 18 foot (brown), and 30 foot (blue) depth contours based on the 2006 survey soundings vary significantly from the corresponding charted contours. The arrows indicate the relative direction and distance of the change from the charted contours. Charted soundings are in feet.

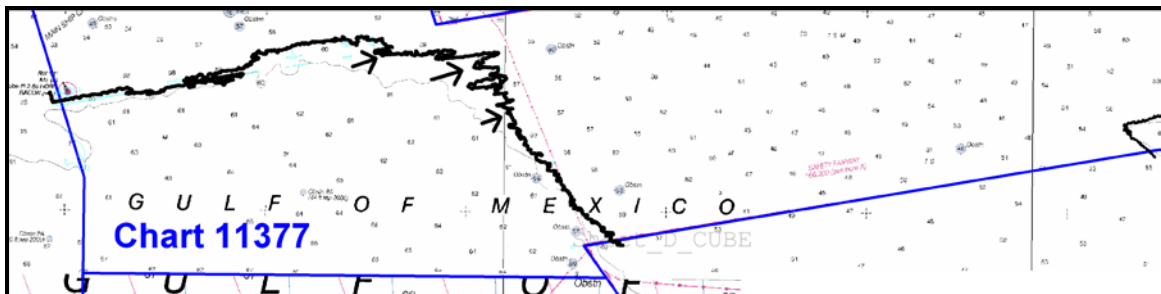
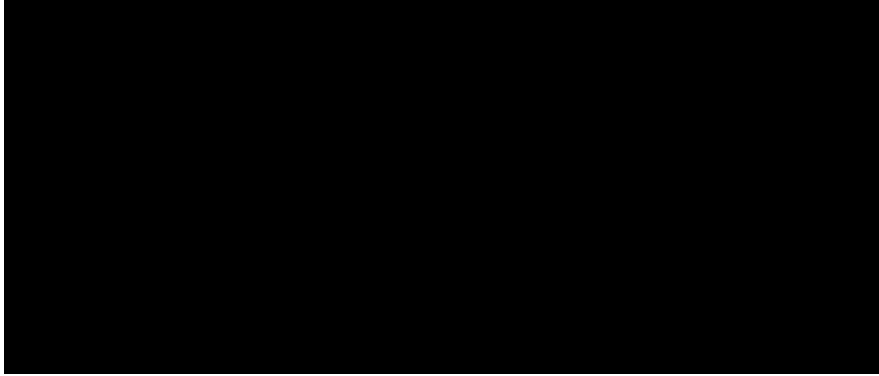


Figure 23 - Overview of survey area H-11583, in the vicinity of 30.12N and 88.06W, covered by Chart 11377, 6<sup>th</sup> Edition, where the 60 foot (black) depth contour based on the 2006 survey soundings vary significantly from the corresponding charted contour. The arrows indicate the relative direction and distance of the change from the charted contour. Charted soundings are in feet.



*Figure 24 – Overview of survey area H-11583, in the vicinity of 30.07N and 87.98W, covered by Chart 1115A, 41<sup>st</sup> Edition, where 10 fathom (black) depth contour based on the 2006 survey soundings vary significantly from the corresponding charted contours. The arrows indicate the relative direction and distance of the change from the charted contour. Charted soundings are in fathoms.*

### Electronic Navigational Chart (ENC) Comparison - Survey Area H-11583

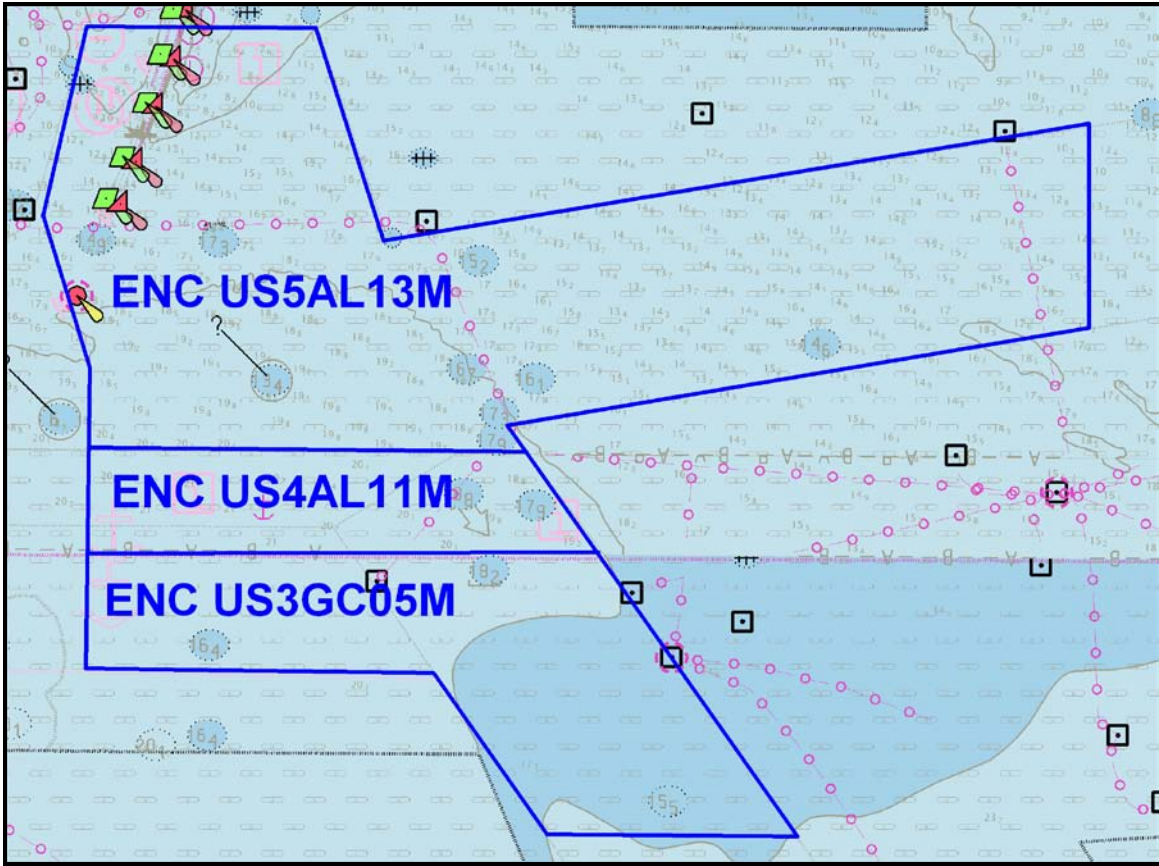
All charted features were investigated using side scan and multibeam sonar. The survey agrees, in general, with the largest scale ENC's covering the survey area. Figure 25 shows the survey limits and the intersections between ENC US4AL11M, 13<sup>th</sup> Edition; ENC US5AL13M, 11<sup>th</sup> Edition; and ENC US3GC05M, 8<sup>th</sup> Edition.

The following pages detail discrepancies found between charted features and the 2006 survey data. The hydrographer recommends that 92 uncharted features be added, 9 charted features be removed and 5 charted features be updated with the 2006 survey data. Additionally, 4 charted soundings are recommended for update by the hydrographer. The 2006 survey also produced sounding data that support changing the position and orientation of depth contours throughout the survey area. \*

*\*See section D of this report and/or Bluenotes for final charting recommendations.*

The 2006 survey data are compared to the following ENC's.

Cell Name	Chart	Scale	Edition Number	Issue Date
US4AL11M	11376	1:80,000	13	1/22/2007
US5AL13M	11377	1:40,000	11	12/26/2006
US3GC05M	1115A	1:456,394	8	03/09/2007



*Figure 25– Overview of the survey limits of H-11583 showing the areas covered by ENC’s US5AL13M, 13<sup>th</sup> Edition; US4AL11M, 11<sup>th</sup> Edition; and US3GC05M, 8<sup>th</sup> Edition.*

### New Features: Survey Area H-11583

The 2006 survey identified 92 features that do not appear on the largest scale ENC's covering the survey area. Detailed descriptions of the features are contained in Table 5 and Figures 26 - 28. The hydrographer recommends updating the ENC's with data from the 2006 survey. \*

*\*See section D of this report and Bluenotes for final charting recommendations.*

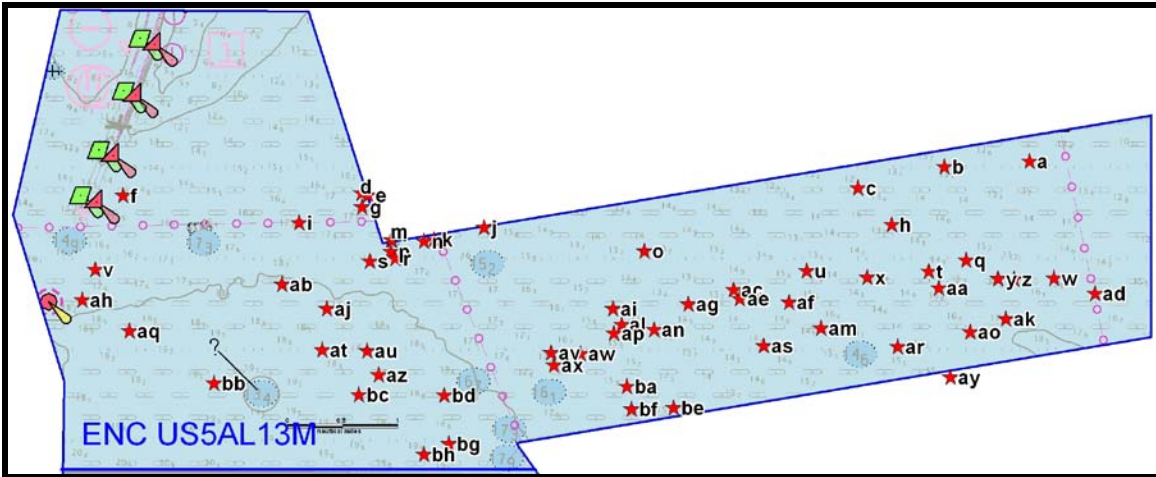


Figure 26 - Overview of survey area H-11583, covered by ENC US5AL13M, 11<sup>th</sup> Edition, where uncharted features are identified in the 2006 survey. The chart soundings are in feet. Refer to Table 6 for survey sounding information.

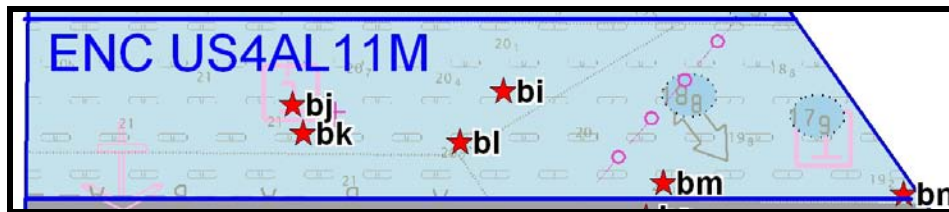


Figure 27 - Overview of survey area H-11583, covered by ENC US4AL11M, 13<sup>th</sup> Edition, where uncharted features are identified in the 2006 survey. The chart soundings are in feet. Refer to Table 6 for survey sounding information.

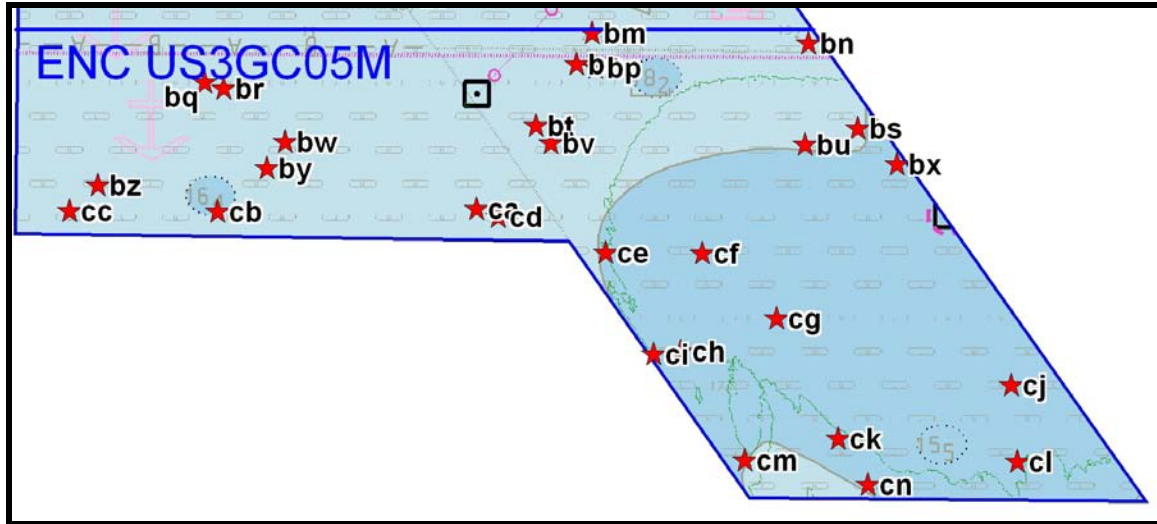


Figure 28- Overview of survey area H-11583, covered by ENC US3GC05M, 8<sup>th</sup> Edition, where uncharted features are identified in the 2006 survey. The chart soundings are in feet. Refer to Table 6 for survey sounding information.

Table 6 – Uncharted features in survey area H-11583 identified by the 2006 survey. The feature letter corresponds to an area marked with a red star on the figure indicated.

Feature Letter	ENC Cell Name	Latitude N	Longitude W	2006 Sounding Value (meters)	Comment	Figure	AWOIS Record No.
a	US5AL13M	30° 08' 51.6"	87° 53' 55.9"	11.9	Add OBSTN*	26	N/A
b	US5AL13M	30° 08' 48.6"	87° 54' 49.1"	11.3	Add OBSTN*	26	N/A
c	US5AL13M	30° 08' 36.6"	87° 55' 43.0"	12.2	Add OBSTN*	26	N/A
d	US5AL13M	30° 08' 31.6"	88° 00' 53.0"	16.5	Add OBSTN*	26	N/A
e	US5AL13M	30° 08' 30.4"	88° 00' 48.9"	16.3	Add OBSTN*	26	N/A
f	US5AL13M	30° 08' 28.9"	88° 03' 22.0"	13.8	Add OBSTN*	26	N/A
g	US5AL13M	30° 08' 24.0"	88° 00' 52.7"	15.9	Add OBSTN*	26	N/A
h	US5AL13M	30° 08' 16.8"	87° 55' 21.7"	12.8	Add OBSTN*	26	N/A
i	US5AL13M	30° 08' 15.1"	88° 01' 31.9"	16.2	Add OBSTN*	26	N/A
j	US5AL13M	30° 08' 13.6"	87° 59' 36.4"	16.2	Add OBSTN*	26	N/A
k	US5AL13M	30° 08' 06.8"	88° 00' 07.6"	15.5	Add OBSTN*	26	N/A



Feature Letter	ENC Cell Name	Latitude N	Longitude W	2006 Sounding Value (meters)	Comment	Figure	AWOIS Record No.
l	US5AL13M	30° 08' 06.5"	88° 00' 34.4"	14.1	Add OBSTN*	26	N/A
m	US5AL13M	30° 08' 06.3"	88° 00' 33.7"	14.5	Add OBSTN*	26	8710
n	US5AL13M	30° 08' 05.7"	88° 00' 13.6"	16.2	Add OBSTN*	26	N/A
o	US5AL13M	30° 08' 01.3"	87° 57' 56.0"	13.1	Add OBSTN*	26	N/A
p	US5AL13M	30° 07' 59.8"	88° 00' 34.6"	17.5	Add OBSTN*	26	N/A
q	US5AL13M	30° 07' 57.9"	87° 54' 35.0"	14.1	Add OBSTN*	26	N/A
r	US5AL13M	30° 07' 56.3"	88° 00' 31.8"	16.9	Add OBSTN*	26	N/A
s	US5AL13M	30° 07' 54.4"	88° 00' 47.5"	17.1	Add OBSTN*	26	N/A
t	US5AL13M	30° 07' 51.4"	87° 54' 58.3"	13.6	Add OBSTN*	26	N/A
u	US5AL13M	30° 07' 51.2"	87° 56' 14.7"	13.5	Add OBSTN*	26	N/A
v	US5AL13M	30° 07' 48.6"	88° 03' 38.8"	15.9	Add OBSTN*	26	N/A
w	US5AL13M	30° 07' 48.4"	87° 53' 40.3"	14.8	Add OBSTN*	26	N/A
x	US5AL13M	30° 07' 48.0"	87° 55' 36.9"	13.8	Add OBSTN*	26	N/A
y	US5AL13M	30° 07' 47.8"	87° 54' 15.2"	15.2	Add OBSTN*	26	N/A
z	US5AL13M	30° 07' 47.7"	87° 54' 05.0"	14.8	Add OBSTN*	26	N/A
aa	US5AL13M	30° 07' 42.7"	87° 54' 52.0"	14.8	Add OBSTN*	26	N/A
ab	US5AL13M	30° 07' 41.6"	88° 01' 42.1"	17.5	Add OBSTN*	26	7398
ac	US5AL13M	30° 07' 40.7"	87° 56' 59.9"	12.9	Add OBSTN*	26	N/A
ad	US5AL13M	30° 07' 40.3"	87° 53' 14.2"	13.7	Add OBSTN*	26	N/A
ae	US5AL13M	30° 07' 36.2"	87° 56' 56.4"	13.3	Add OBSTN*	26	N/A
af	US5AL13M	30° 07' 34.3"	87° 56' 25.4"	13.5	Add OBSTN*	26	N/A

Feature Letter	ENC Cell Name	Latitude N	Longitude W	2006 Sounding Value (meters)	Comment	Figure	AWOIS Record No.
ag	US5AL13M	30° 07' 33.0"	87° 57' 28.5"	12.5	Add OBSTN*	26	N/A
ah	US5AL13M	30° 07' 32.2"	88° 03' 46.8"	17.2	Add OBSTN*	26	N/A
ai	US5AL13M	30° 07' 29.8"	87° 58' 15.2"	14.0	Add OBSTN*	26	N/A
aj	US5AL13M	30° 07' 28.6"	88° 01' 14.2"	18.4	Add OBSTN*	26	N/A
ak	US5AL13M	30° 07' 25.9"	87° 54' 09.9"	16.4	Add OBSTN*	26	N/A
al	US5AL13M	30° 07' 21.5"	87° 58' 09.8"	14.1	Add OBSTN*	26	N/A
am	US5AL13M	30° 07' 20.3"	87° 56' 05.3"	15.1	Add OBSTN*	26	N/A
an	US5AL13M	30° 07' 19.0"	87° 57' 49.9"	13.1	Add OBSTN*	26	N/A
ao	US5AL13M	30° 07' 18.7"	87° 54' 32.0"	15.0	Add OBSTN*	26	N/A
ap	US5AL13M	30° 07' 16.8"	87° 58' 14.6"	14.5	Add OBSTN*	26	N/A
aq	US5AL13M	30° 07' 15.4"	88° 03' 17.4"	17.8	Add OBSTN*	26	N/A
ar	US5AL13M	30° 07' 10.6"	87° 55' 17.4"	13.2	Add OBSTN*	26	N/A
as	US5AL13M	30° 07' 10.5"	87° 56' 40.9"	13.3	Add OBSTN*	26	N/A
at	US5AL13M	30° 07' 06.4"	88° 01' 16.7"	17.7	Add OBSTN*	26	N/A
au	US5AL13M	30° 07' 06.0"	88° 00' 48.4"	18.3	Add OBSTN*	26	N/A
av	US5AL13M	30° 07' 05.9"	87° 58' 53.6"	15.6	Add OBSTN*	26	N/A
aw	US5AL13M	30° 07' 05.6"	87° 58' 35.5"	15.6	Add OBSTN*	26	N/A
ax	US5AL13M	30° 06' 59.1"	87° 58' 52.0"	15.3	Add OBSTN*	26	N/A
ay	US5AL13M	30° 06' 54.5"	87° 54' 44.3"	13.3	Add OBSTN*	26	N/A
az	US5AL13M	30° 06' 52.8"	88° 00' 41.5"	18.5	Add OBSTN*	26	N/A
ba	US5AL13M	30° 06' 47.9"	87° 58' 06.3"	14.6	Add OBSTN*	26	N/A



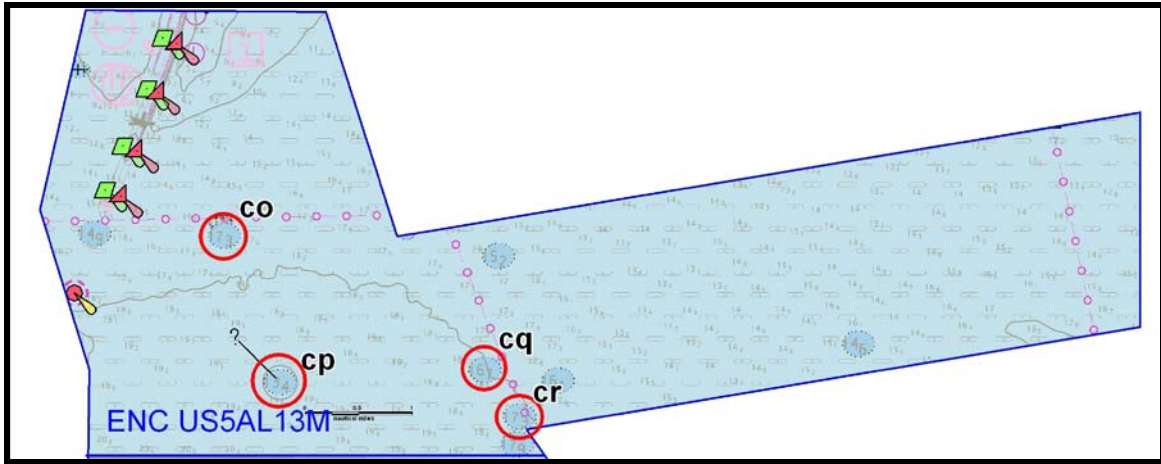
Feature Letter	ENC Cell Name	Latitude N	Longitude W	2006 Sounding Value (meters)	Comment	Figure	AWOIS Record No.
bb	US5AL13M	30° 06' 47.5"	88° 02' 24.2"	18.4	Add OBSTN*	26	N/A
bc	US5AL13M	30° 06' 42.3"	88° 00' 53.7"	18.5	Add OBSTN*	26	N/A
bd	US5AL13M	30° 06' 42.1"	88° 00' 00.4"	17.9	Add OBSTN*	26	N/A
be	US5AL13M	30° 06' 36.3"	87° 57' 37.2"	14.6	Add OBSTN*	26	N/A
bf	US5AL13M	30° 06' 35.8"	87° 58' 03.3"	14.8	Add OBSTN*	26	N/A
bg	US5AL13M	30° 06' 15.9"	87° 59' 57.2"	18.1	Add OBSTN*	26	N/A
bh	US5AL13M	30° 06' 09.9"	88° 00' 12.5"	18.6	Add OBSTN*	26	N/A
bi	US4AL11M	30° 05' 37.4"	88° 00' 54.5"	19.8	Add OBSTN*	27	N/A
bj	US4AL11M	30° 05' 32.1"	88° 02' 15.9"	20.9	Add OBSTN*	27	7403
bk	US4AL11M	30° 05' 22.5"	88° 02' 11.7"	19.8	Add OBSTN*	27	7378
bl	US4AL11M	30° 05' 20.0"	88° 01' 11.4"	18.9	Add OBSTN*	27	N/A
bm	US4AL11M	30° 05' 07.0"	87° 59' 53.0"	19.3	Add OBSTN*	27	N/A
bn	US4AL11M	30° 05' 04.2"	87° 58' 20.6"	18.2	Add OBSTN*	27	N/A
bo	US3GC05M	30° 04' 55.7"	87° 59' 59.7"	18.7	Add OBSTN*	28	N/A
bp	US3GC05M	30° 04' 54.5"	87° 59' 51.4"	18.8	Add OBSTN*	28	N/A
bq	US3GC05M	30° 04' 47.6"	88° 02' 37.9"	20.5	Add OBSTN*	28	7504
br	US3GC05M	30° 04' 45.5"	88° 02' 30.1"	19.4	Add OBSTN*	28	N/A
bs	US3GC05M	30° 04' 32.5"	87° 57' 59.3"	12.9	Add OBSTN*	28	N/A
bt	US3GC05M	30° 04' 32.4"	88° 00' 16.6"	19.1	Add OBSTN*	28	N/A
bu	US3GC05M	30° 04' 26.3"	87° 58' 21.9"	14.2	Add OBSTN*	28	N/A
bv	US3GC05M	30° 04' 26.0"	88° 00' 10.1"	18.5	Add OBSTN*	28	N/A

Feature Letter	ENC Cell Name	Latitude N	Longitude W	2006 Sounding Value (meters)	Comment	Figure	AWOIS Record No.
bw	US3GC05M	30° 04' 25.7"	88° 02' 03.4"	20.3	Add OBSTN*	28	N/A
bx	US3GC05M	30° 04' 19.7"	87° 57' 42.4"	13.2	Add OBSTN*	28	N/A
by	US3GC05M	30° 04' 15.8"	88° 02' 11.6"	20.7	Add OBSTN*	28	N/A
bz	US3GC05M	30° 04' 09.1"	88° 03' 23.2"	20.0	Add OBSTN*	28	N/A
ca	US3GC05M	30° 04' 01.6"	88° 00' 41.6"	18.7	Add OBSTN*	28	N/A
cb	US3GC05M	30° 03' 59.7"	88° 02' 32.3"	21.0	Add OBSTN*	28	7379
cc	US3GC05M	30° 03' 59.4"	88° 03' 35.3"	20.0	Add OBSTN*	28	N/A
cd	US3GC05M	30° 03' 58.7"	88° 00' 32.5"	18.7	Add OBSTN*	28	N/A
ce	US3GC05M	30° 03' 45.8"	87° 59' 46.5"	16.4	Add OBSTN*	28	N/A
cf	US3GC05M	30° 03' 45.8"	87° 59' 05.3"	15.5	Add OBSTN*	28	N/A
cg	US3GC05M	30° 03' 22.1"	87° 58' 33.4"	16.3	Add OBSTN*	28	N/A
ch	US3GC05M	30° 03' 09.3"	87° 59' 13.8"	17.1	Add OBSTN*	28	N/A
ci	US3GC05M	30° 03' 08.2"	87° 59' 25.3"	15.5	Add OBSTN*	28	N/A
cj	US3GC05M	30° 02' 57.9"	87° 56' 52.8"	14.4	Add OBSTN*	28	N/A
ck	US3GC05M	30° 02' 37.3"	87° 58' 06.7"	16.7	Add OBSTN*	28	N/A
cl	US3GC05M	30° 02' 29.3"	87° 56' 49.8"	16.3	Add OBSTN*	28	N/A
cm	US3GC05M	30° 02' 29.2"	87° 58' 46.2"	14.6	Add OBSTN*	28	N/A
cn	US3GC05M	30° 02' 20.6"	87° 57' 53.8"	17.5	Add OBSTN*	28	N/A

*\*See section D of this report and/or Bluenotes for final charting recommendations.*

**Changed Features: Sheet H-11583**

Figures 29-30 and Tables 7-8 describe areas within the limits of H-11583 where features identified in the 2006 survey are significantly shoaler and/or horizontally offset from the corresponding features appearing on ENC's US5AL13M, 11<sup>th</sup> Edition; US4AL11M, 13<sup>th</sup> Edition; and US3GC05M, 8<sup>th</sup> Edition.



*Figure 29 - Overview of survey area H-11583, covered by ENC US5AL13M, 11<sup>th</sup> Edition, where features identified in the 2006 survey are significantly shoaler and/ or horizontally offset from the corresponding charted features.*



*Figure 30 - Overview of survey area H-11583, covered by ENC US3GC05M, 8<sup>th</sup> Edition, where features identified in the 2006 survey are significantly shoaler and/ or horizontally offset from the corresponding charted features.*

**Table 7 – Comparison between the charted features (Figures 29-30) and the 2006 survey results. ENC's US5AL13M, 13<sup>th</sup> Edition; US4AL11M, 11<sup>th</sup> Edition; and US3GC05M, 8<sup>th</sup> Edition.**

<b>Feature Letter</b>	<b>Figure</b>	<b>Latitude N</b>	<b>Longitude W</b>	<b>Charted Depth (m)</b>	<b>2006 Survey Sounding (m)</b>	<b>Vertical Difference (m)</b>	<b>Horizontal Offset (m)</b>
co	27	30° 08' 03"	88° 02' 31"	14	15.6	-1.6	n/a*
cp	27	30° 06' 42"	88° 01' 54"	13.3	18.6	-5.3	55m*
cq	27	30° 06' 50"	87° 59' 42"	16.7	16.9	-0.2	380m*
cr	27	30° 06' 24"	87° 59' 19"	17.3	16.2	0.9	250m*
cs	27	30° 03' 12"	88° 02' 36"	16.4	21	-5.6	n/a*

*\*See Bluenotes for final charting recommendations.*

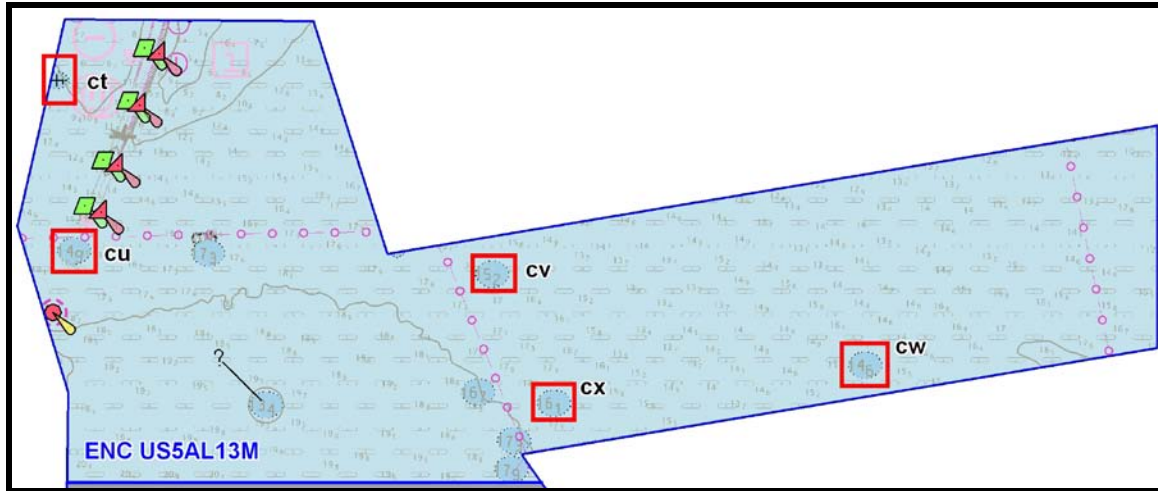
**Table 8 – Recommendation for changed features described on Figure 29-30 and Table 6. These features are included in the Automated Wreck and Obstruction Information System investigation listing for H-11583.**

<b>Feature Letter</b>	<b>Chart</b>	<b>Recommendation</b>	<b>AWOIS Record No.</b>
co	US5AL13M	Change to OBSTN and Update Depth	8755, 8756, 8754, 8757*
cp	US5AL13M	Remove PA and update depth	13391*
cq	US5AL13M	Update charted location and Depth	8706*
cr	US5AL13M	Update charted location and Depth	8709*
cs	US3GC05M	Charted Symbol is much shallower than 2006 surveyed obstruction	7379*

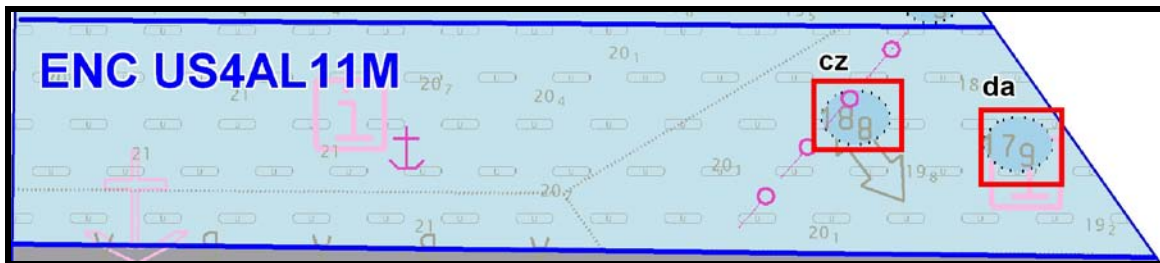
*\*See Bluenotes for final charting recommendations.*

**Disproved Features: Sheet H-11583**

There are nine features recommended for removal from the ENC's covering the H-11583 survey area. This recommendation is based on side-scan sonar and multibeam data analysis. The position and depth information for these features are shown in Figures 31-33 and Table 9.



*Figure 31– Overview of the H-11583 survey area, covered by ENC US5AL13M, 11<sup>th</sup> Edition, showing five of the nine charted features which are unsupported by the 2006 survey data. The features, marked by red squares, are recommended for removal.*



*Figure 32– Overview of the H-11583 survey area, covered by ENC US4AL11M, 13<sup>th</sup> Edition, showing five of the nine charted features which are unsupported by the 2006 survey data. The features, marked by red squares, are recommended for removal.*

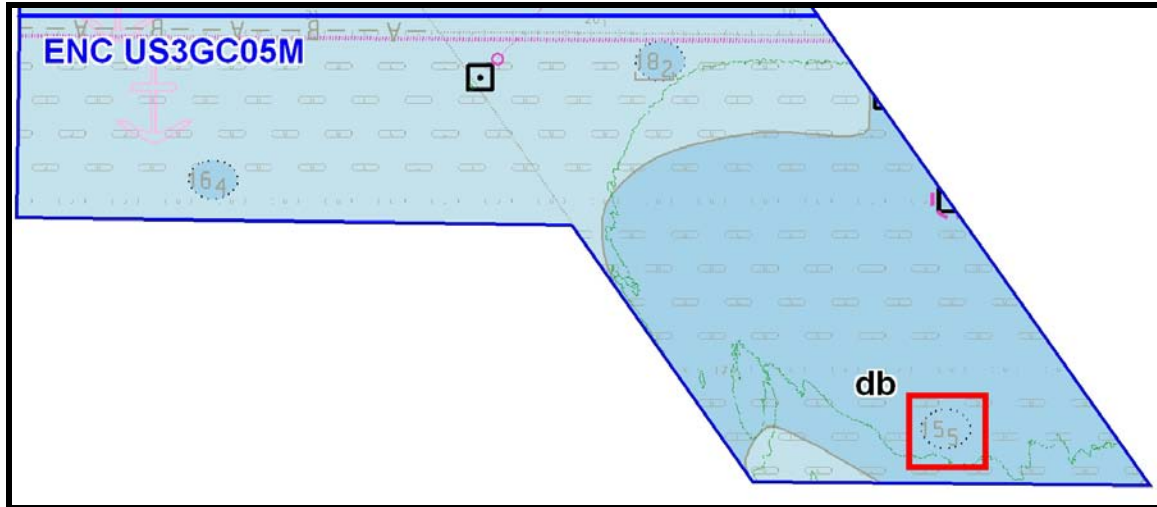


Figure 33– Overview of the H-11583 survey area, covered by ENC US3GC05M, 8<sup>th</sup> Edition, showing five of the nine charted features which are unsupported by the 2006 survey data. The features, marked by red squares, are recommended for removal.

Table 9 – Features appearing on the ENC’s covering survey area H-11583 that are not supported by the 2006 survey and are recommended for removal. ENC’s US5AL13M, US4AL11M and US3GC05M.

Feature Letter	Latitude N	Longitude W	Chart	Charted Sounding Value (m)	AWOIS Record No.
ct	30° 9' 36"	88° 4' 7.32"	US5AL13M	N/A	N/A*
cu	30° 8' 03"	88° 3' 55"	US5AL13M	14.9	N/A*
cv	30° 7' 54"	87° 59' 33"	US5AL13M	15.2	N/A*
cw	30° 7' 05"	87° 55' 39"	US5AL13M	14.6	N/A*
cx	30° 6' 44"	87° 58' 54"	US4AL11M	16.1	8707*
cz	30° 5' 34"	87° 59' 42"	US4AL11M	18.8	N/A*
da	30° 5' 28"	87° 58' 54"	US4AL11M	17.9	N/A*
db	30° 2' 36"	87° 57' 21"	US3GC05M	15.5	N/A*

*\*See Bluenotes for final charting recommendations.*

Figures 33 through 41 include images from CARIS HIPS & SIPS Subset Editor 3D view of the features recommended for removal from the ENC’s covering survey area H-11583. Each image is referenced to a specific ENC in Table 9 and Figure 31-33.



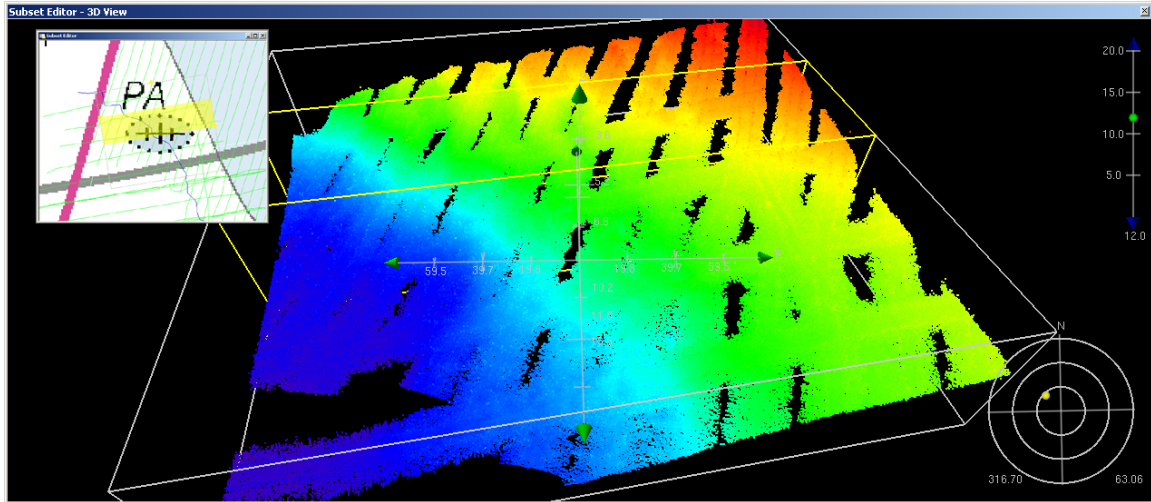


Figure 34- CARIS HIPS & SIPS Subset Editor 3D view of feature “ct” from Figure 31. The color scale represents depth. The consistency of color and lack of anomalous data in the figure indicate the charted feature is no longer present.

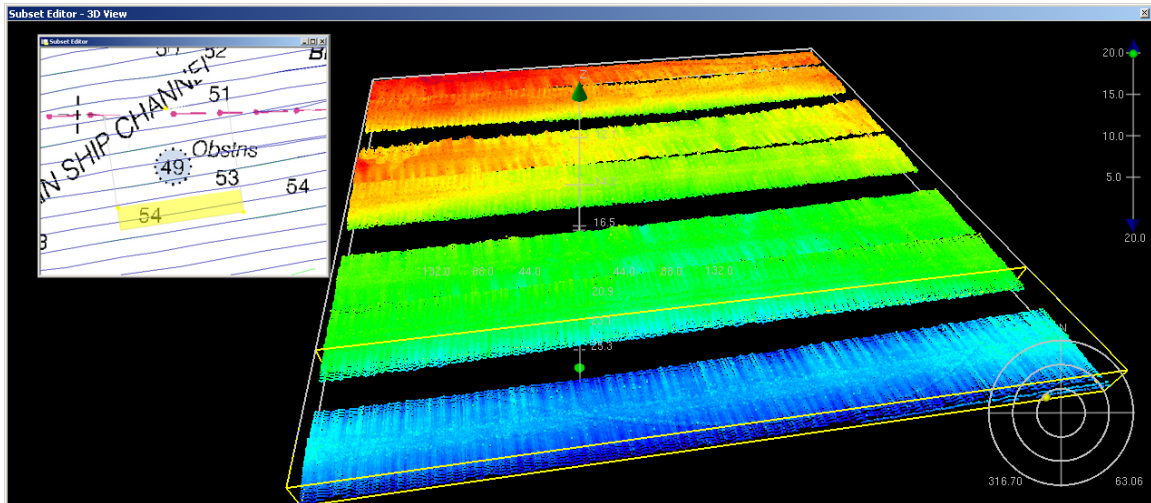
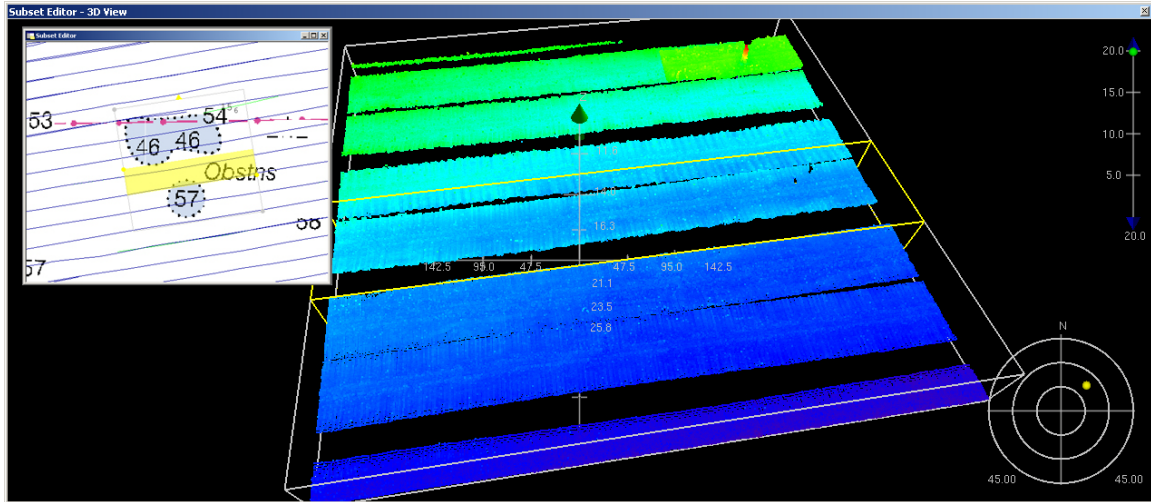
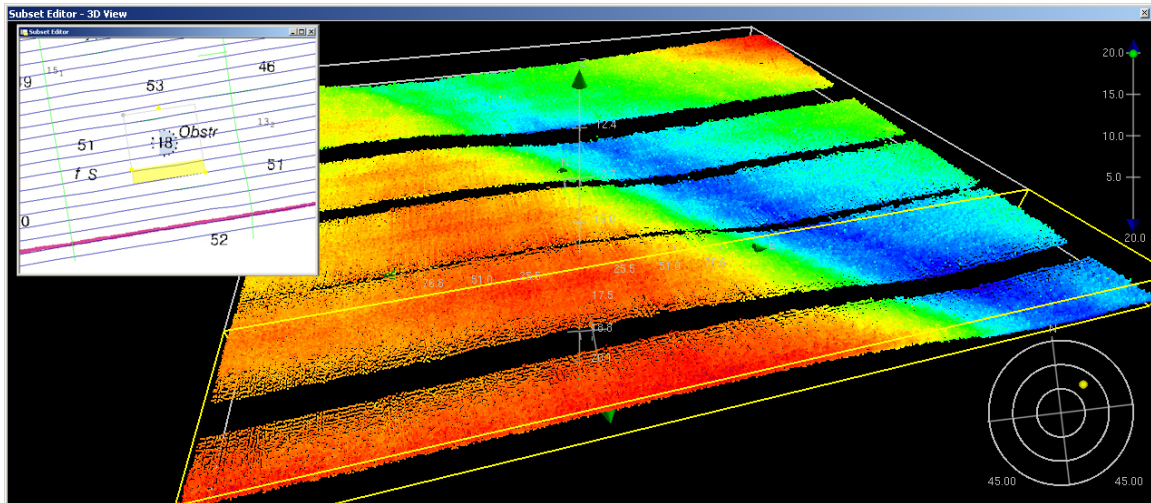


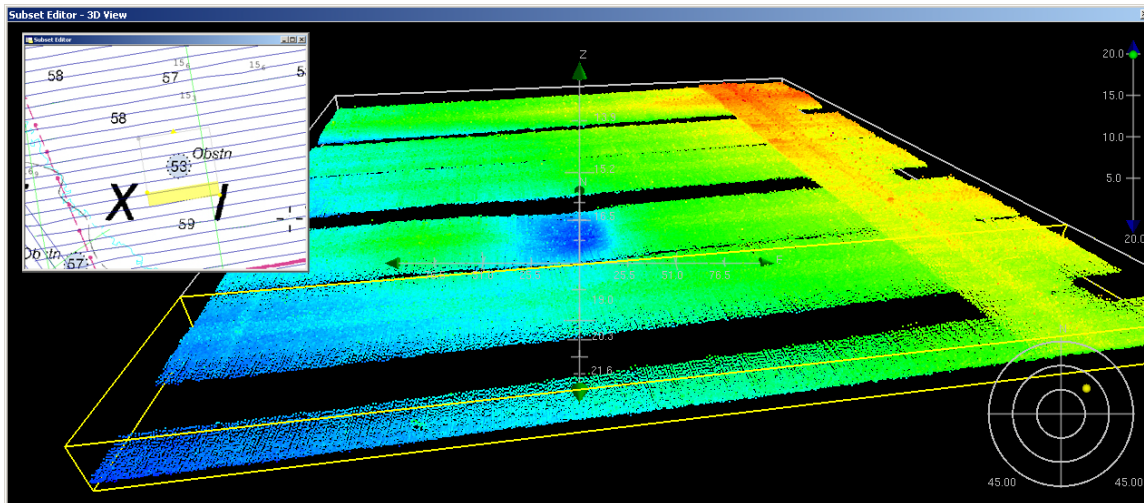
Figure 35- CARIS HIPS & SIPS Subset Editor 3D view of feature “cu” from Figure 31. The color scale represents depth. The consistency of color and lack of anomalous data in the figure indicate the charted feature is no longer present.



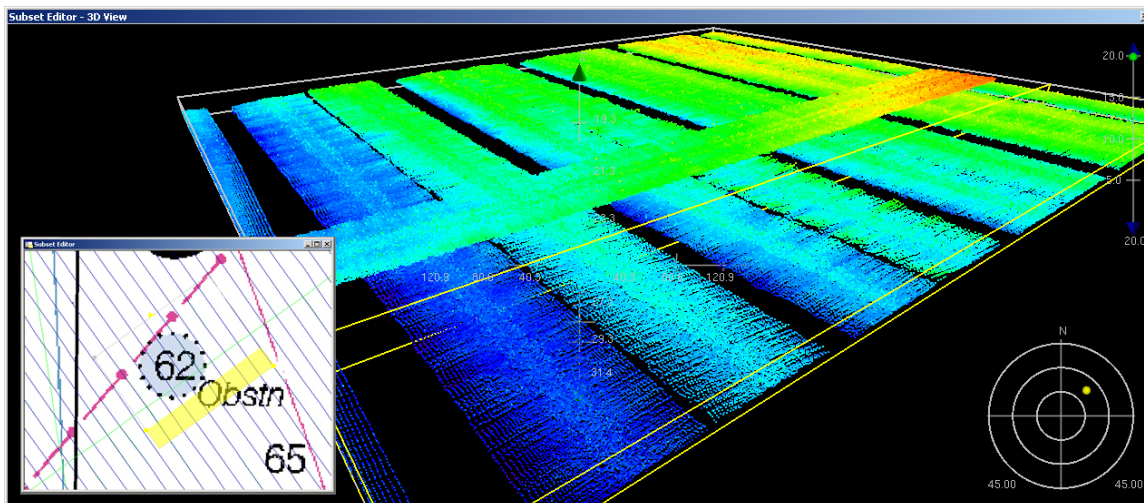
*Figure 36- CARIS HIPS & SIPS Subset Editor 3D view of feature “cv” from Figure 31. The color scale represents depth. The consistency of color and lack of anomalous data in the figure indicate the charted feature is no longer present.*



*Figure 37- CARIS HIPS & SIPS Subset Editor 3D view of feature “cw” from Figure 31. The color scale represents depth. The consistency of color and lack of anomalous data in the figure indicate the charted feature is no longer present.*

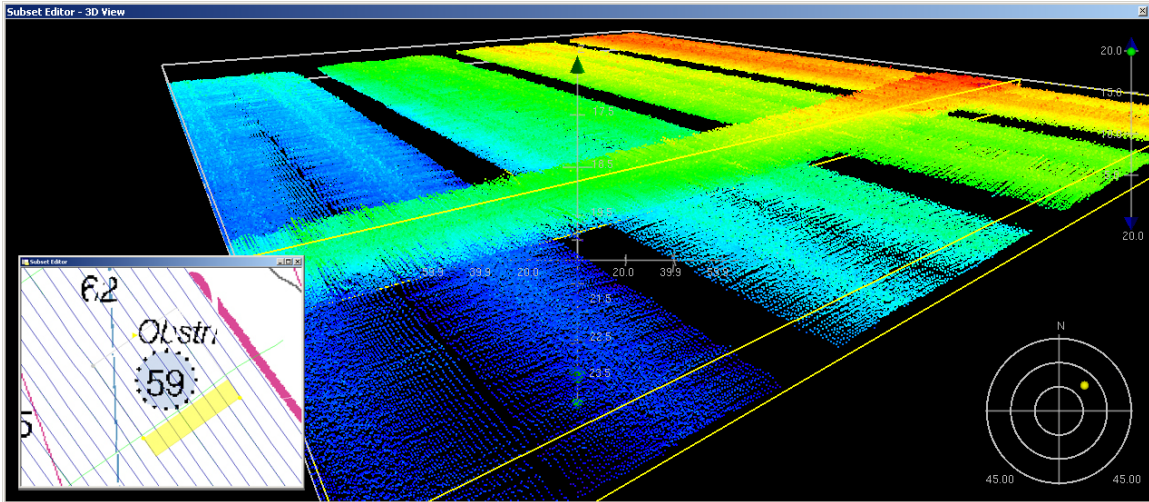


*Figure 38- CARIS HIPS & SIPS Subset Editor 3D view of feature “cx” from Figure 31. The color scale represents depth. The consistency of color and lack of anomalous data in the figure indicate the charted feature is no longer present.*

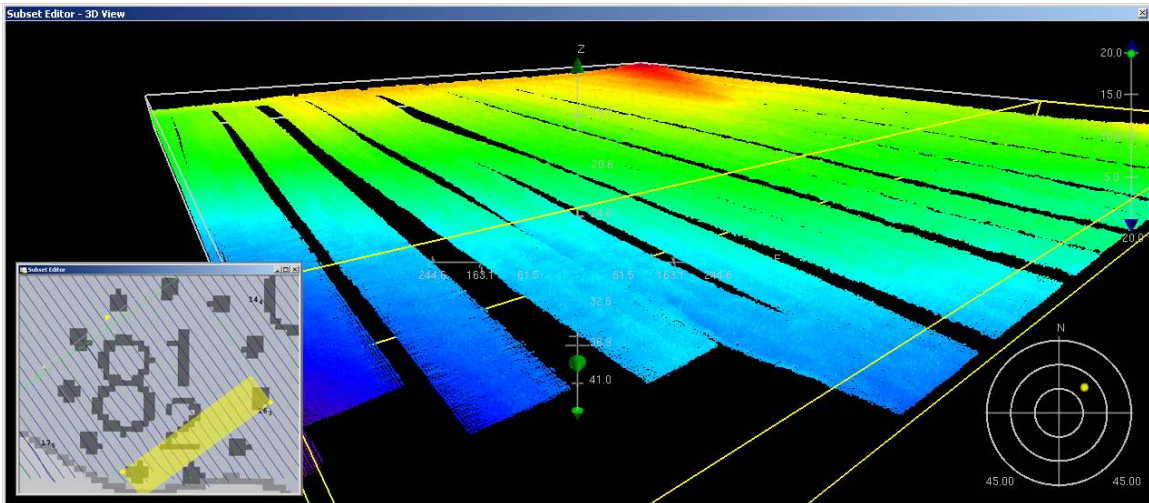


*Figure 39- CARIS HIPS & SIPS Subset Editor 3D view of feature “cz” from Figure 32. The color scale represents depth. The consistency of color and lack of anomalous data in the figure indicate the charted feature is no longer present.*





*Figure 40- CARIS HIPS & SIPS Subset Editor 3D view of feature “da” from Figure 32. The color scale represents depth. The consistency of color and lack of anomalous data in the figure indicate the charted feature is no longer present.*



*Figure 41- CARIS HIPS & SIPS Subset Editor 3D view of feature “db” from Figure 33. The color scale represents depth. The consistency of color and lack of anomalous data in the figure indicate the charted feature is no longer present.*

**Soundings: Sheet H-11583**

The 2006 survey soundings are in general agreement with the charted soundings on the largest scale ENC's available for survey area H-11583. Figure 42 and Table 10 describe four areas where the 2006 survey depths are significantly shoaler than the depths found on the ENC's.

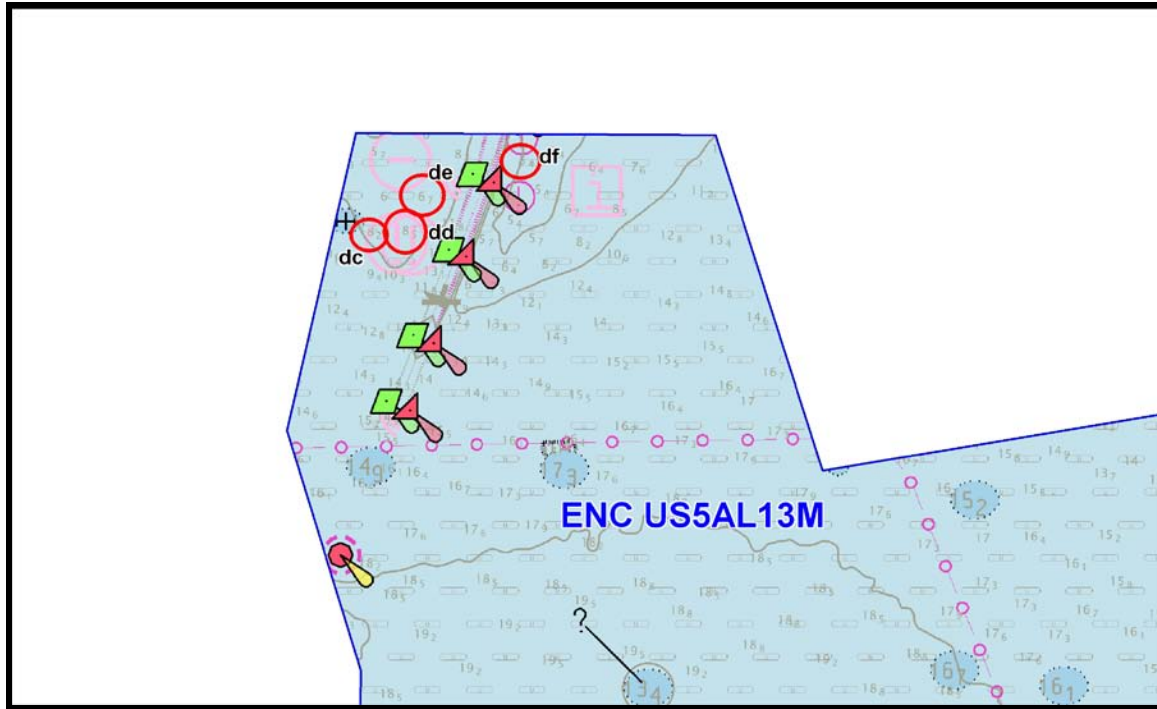


Figure 42 - Overview of survey area H-11583, covered by ENC US5AL13M, 11<sup>th</sup> Edition, where the 2006 survey soundings are significantly shoaler than the charted soundings. Charted soundings are in meters.

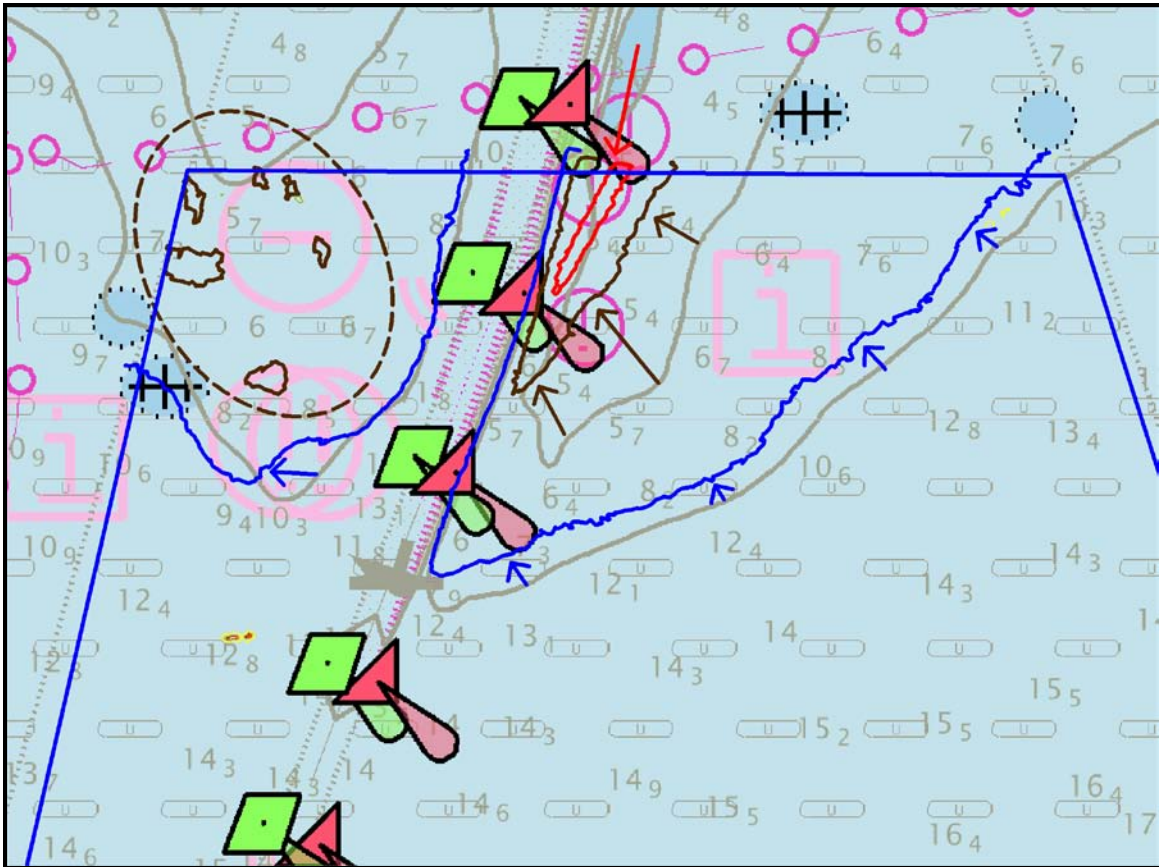
Table 10 - Areas within the survey limits of H-11583 where the 2006 survey soundings are significantly shoaler than the charted soundings. The soundings are indexed by their feature letter to their location in Figure 42.

*\*Chart present survey depths.*

Feature Letter	Latitude N	Longitude W	ENC Cell Name	Sounding on Chart (m)	2006 Survey Sounding (m)	Difference (m)
dc	30° 9' 31.0"	88° 3' 53.6"	US5AL13M	8.2	6.6	1.6*
dd	30° 9' 32.2"	88° 3' 38.4"	US5AL13M	8.5	5.9	2.6*
de	30° 9' 45.0"	88° 3' 31.5"	US5AL13M	6.7	5.9	0.8*
df	30° 9' 58.7"	88° 2' 48.6"	US5AL13M	5.4	3	2.4*

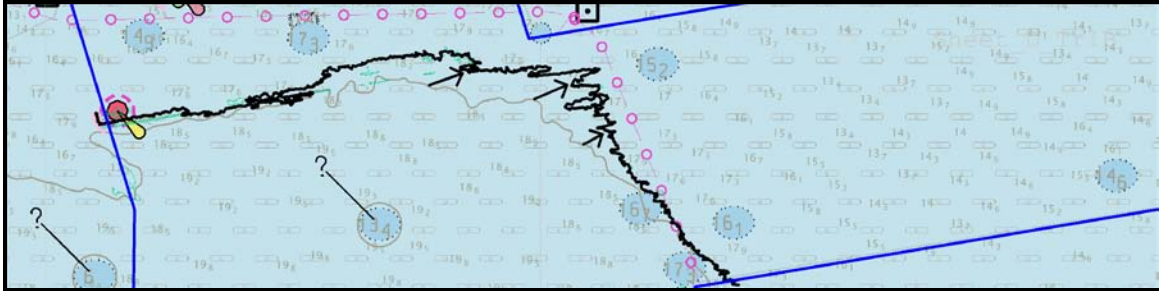
### Trends and Changeable Areas: Survey Area H-11583

The 2006 survey data were used to generate depth contours for comparison with the contours appearing on ENC US5AL13M, 11<sup>th</sup> Edition; ENC US4AL11M 13<sup>th</sup> Edition; and ENC US3GC05M, 8<sup>th</sup> Edition. Three areas were identified where the charted contours vary significantly from the contours generated by the 2006 data (Figures 43-45). The hydrographer recommends updating the chart contours to reflect changes identified by the 2006 survey.

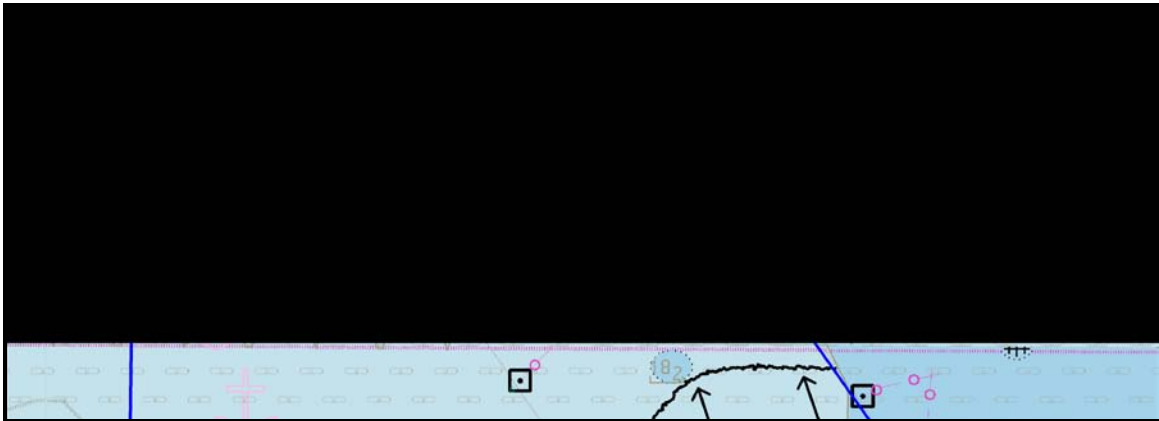


*Figure 43 –Overview of survey area H-11583, in the vicinity of 30.18N and 88.04W, covered by ENC US5AL13M, 11<sup>th</sup> Edition, where the 3.6m (red), 5.5m (brown), and 9.1m (blue) depth contours based on the 2006 survey soundings vary significantly from the corresponding charted contours. The arrows indicate the relative direction and distance of the change from the charted contours.*





**Figure 44- Overview of survey area H-11583, in the vicinity of 30.12N and 88.06W, covered by ENC US5AL13M, 11<sup>th</sup> Edition, where the 18.3m (black) depth contour based on the 2006 survey soundings vary significantly from the corresponding charted contour. The arrows indicate the relative direction and distance of the change from the charted contour.**



**Figure 45 - Overview of survey area H-11583, in the vicinity of 30.07N and 87.98W, covered by ENC US3GC05M, 6th Edition, where 91.4m (black) depth contour based on the 2006 survey soundings vary significantly from the corresponding charted contours. The arrows indicate the relative direction and distance of the change from the charted contour.**

**AWOIS Items Summary: Sheet H-11583**

This survey involved a full investigation of 29 Automated Wreck and Obstruction Information System (AWOIS) items. The table below is a summary of the items and the investigation results. Refer to Appendix II: SURVEY FEATURE REPORT for AWOIS Item Investigation Reports and associated graphics files.

*\*See Bluenotes for final charting recommendations.*

*\*\* Item not shown on chart 11377, 7<sup>th</sup>. Edition, Oct /08. Disproved by earlier surveys.*

*No change in charting.*

<b>AWOIS Record</b>	<b>Description</b>	<b>Comment</b>
3624**	SNDG	Shoaling not found
3625**	SNDG	Shoaling not found
3646**	WRECK	Wreck not found.
3647**	OBSTN	Item not found
3648**	SNDG	Item not found.
7132**	OBSTN	Item not found
7350*	OBSTN	Item not found
7378**	OBSTN	Two items found. One to North measures 1.9m by 3.5m with a height of 0.6m and a least depth of 20.8m. Other item measures 2.1m by 2.6m with a height of 0.5m and a least depth of 19.8m
7379*	OBSTN PA	Item measures 2.3m by 3.7m with a height of 1.5m at a least depth of 21.0m. Recommend a least depth of 11.4 fathoms.
7398	OBSTN	Item measures 1.2m by 3.0m with a height of 0.9m at a least depth of 17.4m. <i>Chart 57 Obstn and danger curve.</i>
7399	OBSTN	Item not found. <i>Disproved by 200% sides scan and multibeam. Do not chart.</i>
7400	OBSTN	Item not found <i>Disproved by 200% sides scan and multibeam. Do not chart.</i>
7401	OBSTN	Item not found. <i>Disproved by 200% sides scan and multibeam. Do not chart.</i>
7403	OBSTN	Item measures 1.9m by 3.5m with a height of 0.7m at a least depth of 20.8m. <i>Disproved by 200% sides scan and multibeam. Do not chart.</i>

<b>AWOIS Record</b>	<b>Description</b>	<b>Comment</b>
7504	SNDG	Item closest in proximity to AWOIS coordinates measured 2.5m by 4.3m with a height of 1.7m at a least depth of 20.5m located at Lat. 30°04'47.56"N Long. 088°02'37.93"W. Second item at Lat 30°04'45.49"N Long 088°02'30.06"W measured 1.6m by 5.5m with a height of 1.4m at a least depth of 19.4m <i>Disproved by 200% sides scan and multibeam. Shoaler item in vicinity. Do not chart.</i>
8222*	OBSTN 49	Item not found. Recommend removing Obstn 49 from chart.
8223*	OBSTN 49	Item not found. Recommend removing Obstn 49 from chart.
8706*	OBSTN 55	Item not found. Recommend removing Obstn 55 from chart.
8707*	OBSTN 53	Item not found. Recommend removing Obstn 53 from chart.
8708*	OBSTN 48	Item not found. Recommend removing Obstn 48 from chart.
8709*	OBSTN 57	Item found just outside 200m radius of charted coordinates. Measures 1.5m by 7.5m with a height of 3.0m at a least depth of 16.2m. Recommend moving Obstn to Lat. 30°06'16.01"N Long. 087°59'20.42"W and charting at a depth of 52 ft.
8710*	WELL	Submerged well found. Recommend charting at Lat. 30°08'06.53"N Long. 088°00'34.37"W.
8754 *	OBSTN 46	Item measures 1.6m by 4.6m with a height of 2.1m at a depth of 15.6m. Recommend moving Obstn 46 to Lat. 30°08'15.69"N Long. 088°02'24.27"W and charting a least depth of 51 ft.
8755*	OBSTN 46	Item not found. Recommend removing Obstn 46 from chart.
8756*	OBSTN 46	Item not found. Recommend removing Obstn 46 from chart.
8757*	OBSTN 57	Item not found. Recommend removing Obstn 57 from chart
143333*	Stranded Wreck (PA)	Item not found. Recommend removing Stranded Wreck (PA) from chart.
11624	OBSTN	Item not found <i>Disproved by 200% sides scan and multibeam. Do not chart.</i>
13391*	Obstruction PA (44ft rep 2005)	Two items found. One measures 3.0m by 4.0m and a height of 1.8m with a least depth of 18.6m. Second item measures 2.0m by 3.8m and a height of 1.2m with a least depth 18.4m. Recommend charting with a least depth of 60 ft.

## D2. Additional Results

### Aids to Navigation

All the floating aids to navigation in this survey appear as charted, match the Light List and chart characteristics and serve their intended purpose. *Concur*

### Drilling Structures

There were six drilling structures, production platforms or well heads within the survey limits of H-11583.

Description	Latitude	Longitude
EOGR-MO-914-A 1 platform	30° 04' 40.10002" N	88° 00' 45.68000" W**
MOGMO959A 1 platform	30° 04' 01.09999" N	87° 57' 18.20002" W*
MO872A 1 platform	30° 09' 13.60001" N	87° 53' 37.90000" W**
MO-872-A platform	30° 09' 14.82001" N	87° 53' 37.32000" W**
MO-870-2 Satellite well	30° 07' 42.48001" N	88° 00' 32.58000" W**
EOGR-MO-870-2 1 platform	30° 08' 07.19999" N	87° 57' 49.60001" W**

*\*See Bluenotes for final charting recommendations.*

*\*\*Chart Platforms in present survey location.*

### Comparison with Prior Surveys

A comparison with prior surveys was not required under this task order. See Section D1 for a comparison to the nautical charts.

### Bottom Samples

Thirty-eight (38) bottom samples were collected in support of the 2006 survey. The samples were distributed geographically to obtain a full representation of the bottom characteristics as specified in NOAA Hydrographic Surveys Specifications and Deliverables, Section 7.1. A table listing the position and description of the bottom samples obtained is included in Appendix V to this report.

### Bridges and Overhead Cables

There were no bridges or overhead cables in the survey area.

### Submarine Cables and Pipelines

There were no charted submarine cables or pipelines located in the survey area and the side scan sonar and multibeam echosounder surveys did not produce any images that indicated the potential presence of any uncharted pipelines or cables.

# LETTER OF APPROVAL

REGISTRY NO. H-11583

This report and the accompanying digital data are respectfully submitted.

Field operations contributing to the accomplishment of survey H-11583 were conducted under my direct supervision with frequent personal checks of progress and adequacy. This report, digital data, and accompanying records have been closely reviewed and are considered complete and adequate as per the Statement of Work. Other reports submitted with this survey include the Data Acquisition and Processing Report and the Horizontal and Vertical Control Report.

I believe this survey is complete and adequate for its intended purpose.



**Scott Cholmondeley, Hydrographer**  
TerraSond Ltd.

Date 06/06/2007



## **APPENDIX I**

### **Danger to Navigation Reports**



## Danger to Navigation Report

Report of Danger to Navigation

Sheet: D

Registry No.: H11583

State: Mississippi-Alabama

General Locality: Gulf of Mexico

Sub Locality: 7 NM South of Mobile Point

Survey Dates: June 8<sup>th</sup>, 2006 – March 24<sup>th</sup>, 2007

Depths are reduced to Mean Lower Low Water (MLLW) using verified tides. Positions are based on the NAD83 horizontal datum.

The DTONs in this report result from comparison of 2006 survey data to the largest scale chart(s) covering the survey area.

Affected nautical charts:

Chart	Scale	Edition Number	Edition Date	Issue Date
<b>11377</b>	1:40,000	6	2/1/2006	1/27/2007
<b>11376</b>	1:80,000	51	2/1/2006	1/27/2007
<b>1115A</b>	1:456,394	41	3/1/2005	1/27/2007

ENC	Chart	Scale	Edition Number	Issue Date
<b>US5AL13M</b>	11377	1:40,000	11	12/26/2006
<b>US4AL11M</b>	11376	1:80,000	13	1/22/2007
<b>US3GC05M</b>	1115A	1:456,394	8	03/09/2007

**Comments:** During office review of H-11583 the following 2006 soundings were proved uncharted, and are recommended for addition.

**Table 1 - Uncharted features in survey area H-11583 identified by the 2006 survey.**

Feature Letter	Chart	Latitude N	Longitude W	Sounding Value (feet)	Comment
a	11377	30° 08' 51.6"	87° 53' 55.9"	39	Add OBSTN*
b	11377	30° 08' 48.6"	87° 54' 49.1"	37	Add OBSTN*
c	11377	30° 08' 36.6"	87° 55' 43.0"	40	Add OBSTN*
d	11377	30° 08' 31.6"	88° 00' 53.0"	54	Add OBSTN*
e	11377	30° 08' 30.4"	88° 00' 48.9"	53	Add OBSTN*
f	11377	30° 08' 28.9"	88° 03' 22.0"	45	Add OBSTN*
g	11377	30° 08' 24.0"	88° 00' 52.7"	52	Add OBSTN*

Feature Letter	Chart	Latitude N	Longitude W	Sounding Value (feet)	Comment
h	11377	30° 08' 16.8"	87° 55' 21.7"	42	Add OBSTN*
i	11377	30° 08' 15.1"	88° 01' 31.9"	53	Add OBSTN*
j	11377	30° 08' 13.6"	87° 59' 36.4"	53	Add OBSTN*
k	11377	30° 08' 06.8"	88° 00' 07.6"	51	Add OBSTN*
l	11377	30° 08' 06.5"	88° 00' 34.4"	46	Add OBSTN*
m	11377	30° 08' 06.3"	88° 00' 33.7"	48	Add OBSTN*
n	11377	30° 08' 05.7"	88° 00' 13.6"	53	Add OBSTN
o	11377	30° 08' 01.3"	87° 57' 56.0"	43	Add OBSTN*
p	11377	30° 07' 59.8"	88° 00' 34.6"	57	Add OBSTN*
q	11377	30° 07' 57.9"	87° 54' 35.0"	46	Add OBSTN*
r	11377	30° 07' 56.3"	88° 00' 31.8"	55	Add OBSTN*
s	11377	30° 07' 54.4"	88° 00' 47.5"	56	Add OBSTN*
t	11377	30° 07' 51.4"	87° 54' 58.3"	45	Add OBSTN*
u	11377	30° 07' 51.2"	87° 56' 14.7"	44	Add OBSTN*
v	11377	30° 07' 48.6"	88° 03' 38.8"	52	Add OBSTN*
w	11377	30° 07' 48.4"	87° 53' 40.3"	49	Add OBSTN*
x	11377	30° 07' 48.0"	87° 55' 36.9"	45	Add OBSTN*
y	11377	30° 07' 47.8"	87° 54' 15.2"	50	Add OBSTN*
z	11377	30° 07' 47.7"	87° 54' 05.0"	49	Add OBSTN*
aa	11377	30° 07' 42.7"	87° 54' 52.0"	49	Add OBSTN*
ab	11377	30° 07' 41.6"	88° 01' 42.1"	57	Add OBSTN*
ac	11377	30° 07' 40.7"	87° 56' 59.9"	42	Add OBSTN*
ad	11377	30° 07' 40.3"	87° 53' 14.2"	45	Add OBSTN*
ae	11377	30° 07' 36.2"	87° 56' 56.4"	44	Add OBSTN*
af	11377	30° 07' 34.3"	87° 56' 25.4"	44	Add OBSTN*
ag	11377	30° 07' 33.0"	87° 57' 28.5"	41	Add OBSTN*
ah	11377	30° 07' 32.2"	88° 03' 46.8"	56	Add OBSTN*

Feature Letter	Chart	Latitude N	Longitude W	Sounding Value (feet)	Comment
ai	11377	30° 07' 29.8"	87° 58' 15.2"	46	Add OBSTN*
aj	11377	30° 07' 28.6"	88° 01' 14.2"	60	Add OBSTN*
ak	11377	30° 07' 25.9"	87° 54' 09.9"	54	Add OBSTN*
al	11377	30° 07' 21.5"	87° 58' 09.8"	46	Add OBSTN*
am	11377	30° 07' 20.3"	87° 56' 05.3"	50	Add OBSTN*
an	11377	30° 07' 19.0"	87° 57' 49.9"	43	Add OBSTN*
ao	11377	30° 07' 18.7"	87° 54' 32.0"	49	Add OBSTN*
ap	11377	30° 07' 16.8"	87° 58' 14.6"	48	Add OBSTN*
aq	11377	30° 07' 15.4"	88° 03' 17.4"	58	Add OBSTN*
ar	11377	30° 07' 10.6"	87° 55' 17.4"	43	Add OBSTN*
as	11377	30° 07' 10.5"	87° 56' 40.9"	44	Add OBSTN*
at	11377	30° 07' 06.4"	88° 01' 16.7"	58	Add OBSTN*
au	11377	30° 07' 06.0"	88° 00' 48.4"	60	Add OBSTN*
av	11377	30° 07' 05.9"	87° 58' 53.6"	51	Add OBSTN*
aw	11377	30° 07' 05.6"	87° 58' 35.5"	51	Add OBSTN*
ax	11377	30° 06' 59.1"	87° 58' 52.0"	50	Add OBSTN*
ay	11377	30° 06' 54.5"	87° 54' 44.3"	44	Add OBSTN*
az	11377	30° 06' 52.8"	88° 00' 41.5"	61	Add OBSTN*
ba	11377	30° 06' 47.9"	87° 58' 06.3"	48	Add OBSTN*
bb	11377	30° 06' 47.5"	88° 02' 24.2"	60	Add OBSTN*
bc	11377	30° 06' 42.3"	88° 00' 53.7"	61	Add OBSTN*
bd	11377	30° 06' 42.1"	88° 00' 00.4"	59	Add OBSTN*
be	11377	30° 06' 36.3"	87° 57' 37.2"	48	Add OBSTN*
bf	11377	30° 06' 35.8"	87° 58' 03.3"	49	Add OBSTN*
bg	11377	30° 06' 15.9"	87° 59' 57.2"	59	Add OBSTN*
bh	11376	30° 06' 09.9"	88° 00' 12.5"	61	Add OBSTN*
bi	11376	30° 05' 37.5"	88° 00' 54.6"	66	Add OBSTN*

Feature Letter	Chart	Latitude N	Longitude W	Sounding Value (feet)	Comment
bj	11376	30° 05' 32.1"	88° 02' 15.9"	69	Add OBSTN*
bk	11376	30° 05' 20.0"	88° 01' 11.4"	62	Add OBSTN*
bl	11376	30° 05' 07.0"	87° 59' 53.0"	63	Add OBSTN*
bm	1115A	30° 05' 04.2"	87° 58' 20.6"	60	Add OBSTN*
bn	1115A	30° 04' 55.7"	87° 59' 59.7"	61	Add OBSTN*
bo	1115A	30° 04' 54.5"	87° 59' 51.4"	62	Add OBSTN*
bp	1115A	30° 04' 47.6"	88° 02' 37.9"	67	Add OBSTN*
bq	1115A	30° 04' 46.4"	88° 01' 31.4"	62	Add OBSTN*
br	1115A	30° 04' 45.5"	88° 02' 30.1"	64	Add OBSTN*
bs	1115A	30° 04' 32.5"	87° 57' 59.3"	42	Add OBSTN*
bt	1115A	30° 04' 32.4"	88° 00' 16.6"	63	Add OBSTN*
bu	1115A	30° 04' 26.3"	87° 58' 21.9"	47	Add OBSTN*
bv	1115A	30° 04' 26.0"	88° 00' 10.1"	61	Add OBSTN*
bw	1115A	30° 04' 25.7"	88° 02' 03.4"	67	Add OBSTN*
bx	1115A	30° 04' 19.7	87° 57' 42.4	43	Add OBSTN*
by	1115A	30° 04' 15.8"	88° 02' 11.6"	66	Add OBSTN*
bz	1115A	30° 04' 09.1"	88° 03' 23.2"	66	Add OBSTN*
ca	1115A	30° 04' 01.6"	88° 00' 41.6"	61	Add OBSTN*
cb	1115A	30° 03' 59.7"	88° 02' 32.3"	69	Add OBSTN*
cc	1115A	30° 03' 59.4"	88° 03' 35.3"	66	Add OBSTN*
cd	1115A	30° 03' 58.7"	88° 00' 32.5"	61	Add OBSTN*
ce	1115A	30° 03' 45.8"	87° 59' 46.5"	54	Add OBSTN*
cf	1115A	30° 03' 45.8"	87° 59' 05.3"	51	Add OBSTN*
cg	1115A	30° 03' 22.1"	87° 58' 33.4"	53	Add OBSTN*
ch	1115A	30° 03' 09.3"	87° 59' 13.8"	56	Add OBSTN*
ci	1115A	30° 03' 08.2"	87° 59' 25.3"	51	Add OBSTN*
cj	1115A	30° 02' 57.9"	87° 56' 52.8"	47	Add OBSTN*

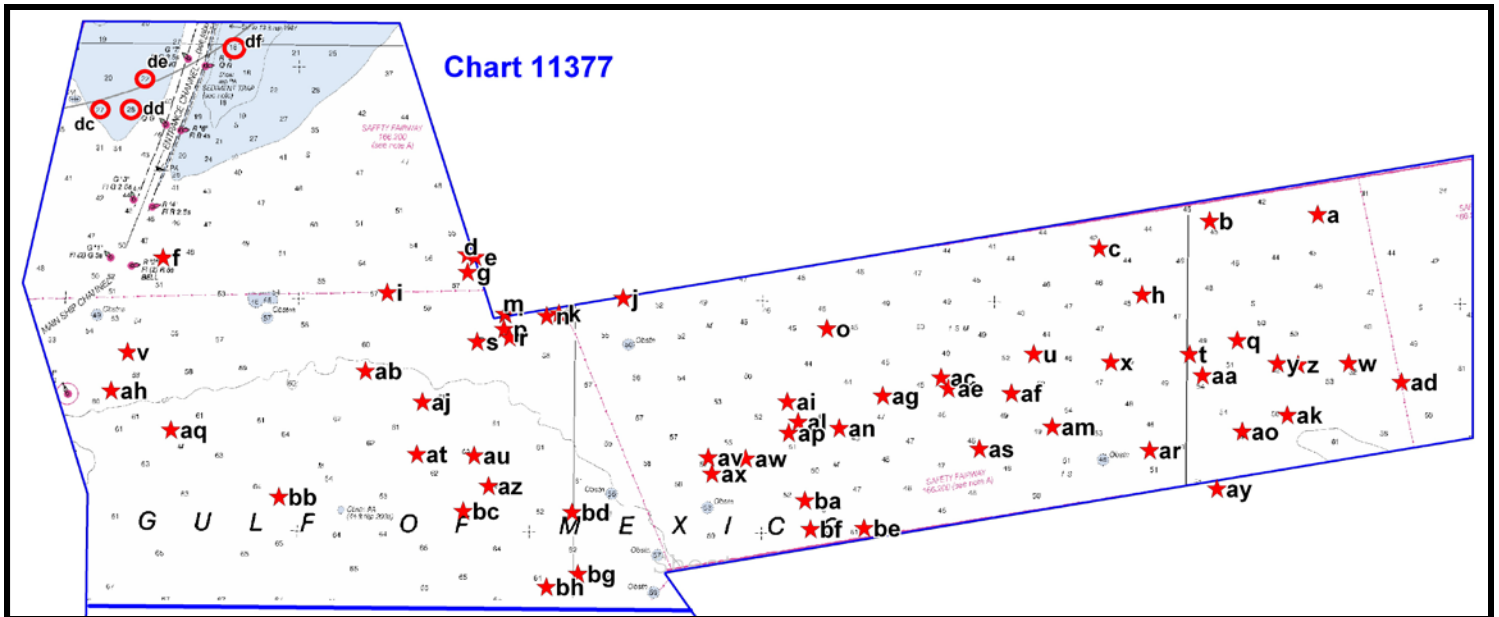
Feature Letter	Chart	Latitude N	Longitude W	Sounding Value (feet)	Comment
ck	1115A	30° 02' 37.3"	87° 58' 06.7"	55	Add OBSTN*
cl	1115A	30° 02' 29.3"	87° 56' 49.8"	53	Add OBSTN*
cm	1115A	30° 02' 29.2"	87° 58' 46.2"	48	Add OBSTN*
cn	1115A	30° 02' 20.6"	87° 57' 53.8"	57	Add OBSTN*

*\*See section D. and the Evaluation report for final charting recommendations.*

**Comments:** During office review of H-11583, the following 2006 soundings proved significantly shoaler than charted soundings, and are recommended for update.

**Table 2 - Areas within the survey limits of H-11583 where the 2006 survey soundings were significantly shoaler than the charted soundings.**

Feature Letter	Latitude N	Longitude W	Chart	Charted Sounding (feet)	Survey Sounding (feet)	Difference (feet)
dc	30° 9' 31.0"	88° 3' 53.6"	11377	27	24	3
dd	30° 9' 32.2"	88° 3' 38.4"	11377	28	20	8
de	30° 9' 45.0"	88° 3' 31.5"	11377	22	20	2
df	30° 9' 58.7"	88° 2' 48.6"	11377	18	14	4



**Figure 1- Overview of H-11583 showing DTON locations, Chart 11377, 6<sup>th</sup> Edition (1:80,000 Scale). The stars represent new features (Table 1) and the circles represent locations of shoaler soundings (Table 2).**

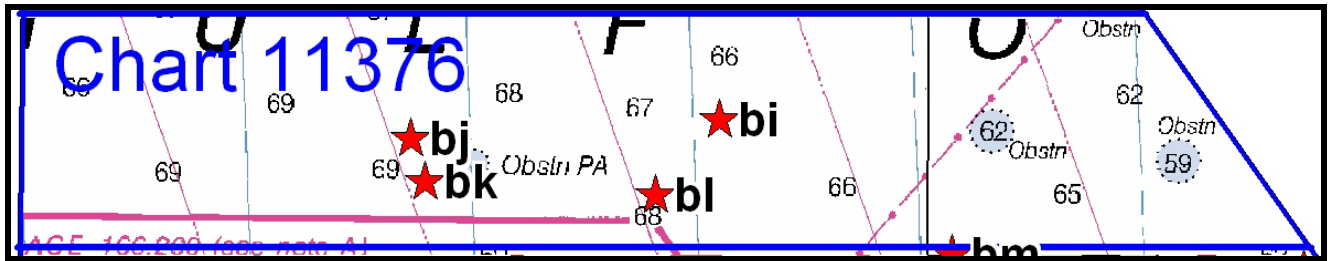


Figure 2 - Overview of H-11583 showing DTON locations, Chart 11376, 51<sup>st</sup> Edition (1:80,000 Scale).

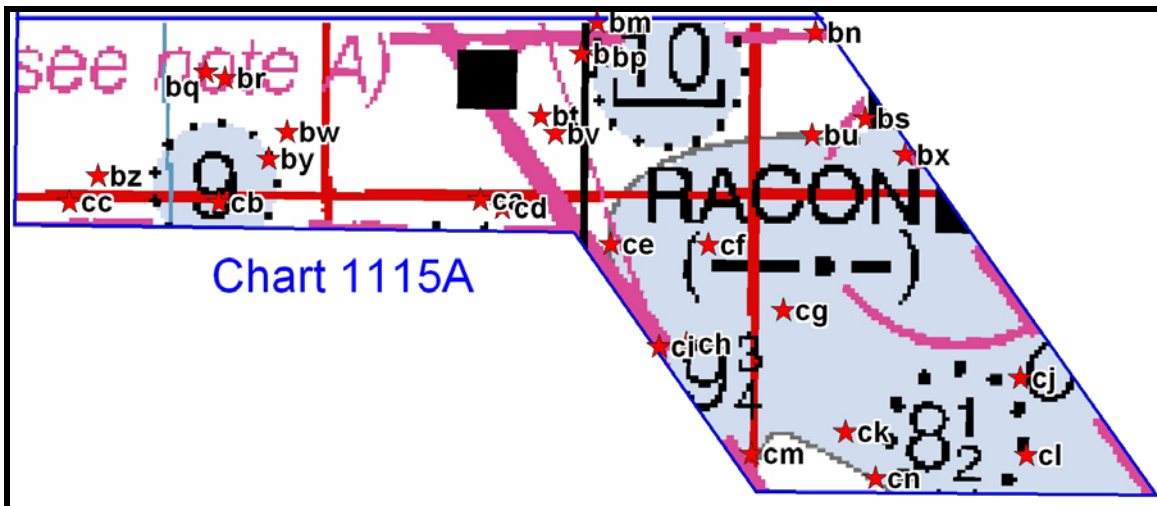


Figure 3 - Overview of H-11583 showing DTON locations, Chart 1115A, 41<sup>st</sup> Edition (1:456,394 Scale).





**APPENDIX II**

**Survey Feature Report**

## Item Investigation Field Report

Description (as charted): SNDG

Source: AWOIS record number 3624

Charted Position: Lat. 30°06'33.74"N Long. 088°00'46.98"W

Charts Affected: 11376 1:80,000, 51<sup>st</sup> ed. February 2006

**Investigation**

Date(s)/Day Number(s): June 26-27, 2006

Survey Vessel Name: *R/V Davidson*

Position Numbers/Time: Survey lines:  
0606D (JD177 20:01-20:04 UTC)  
0608D (JD177 22:15-22:18 UTC)  
0609D (JD177 22:37-22:39 UTC)  
0610D (JD177 00:27-00:30 UTC)  
0612D (JD178 02:33-02:36 UTC)  
0614D (JD178 04:38-04:40 UTC)

Investigation Method: 200% side scan sonar; supported by MBES

If Found: Surveyed Position: Shoaling not found  
(NAD83)

Position Determined By: DGPS

Investigation Summary: Shoaling not found.

## Item Investigation Field Report

Description (as charted): SNDG

Source: AWOIS record number 3625

Charted Position: Lat. 30°06'27.74"N Long. 088°02'23.98"W

Charts Affected: 11377 1:40,000, 6<sup>th</sup> ed. January 2007

**Investigation**

Date(s)/Day Number(s): June 25, 2006

Survey Vessel Name: *R/V Davidson*

Position Numbers/Time: Survey lines:  
0576D (JD176 15:26-15:28 UTC)  
0579D (JD176 17:55-17:57 UTC)  
0578D (JD176 16:49-16:51 UTC)  
0582D (JD176 20:17-20:19 UTC)  
0583D (JD176 21:26-21:28 UTC)

Investigation Method: 200% side scan sonar; supported by MBES

If Found: Surveyed Position: Shoaling not found

(NAD83)

Position Determined By: DGPS

Investigation Summary: Shoaling not found

## Item Investigation Field Report

Description (as charted): Not Assigned

Source: AWOIS record number 3646

Charted Position: Lat. 30°07'19.54"N Long. 088°01'02.88"W

Charts Affected: 11378 1:40,000, 34<sup>th</sup> ed. February 2006

**Investigation**

Date(s)/Day Number(s): June 24-25, 2006

Survey Vessel Name: *R/V Davidson*

Position Numbers/Time: Survey lines:  
0541D (JD175 09:03-09:06 UTC)  
0543D (JD175 12:22-12:25 UTC)  
0545D (JD175 15:39-15:41 UTC)  
0550D (JD175 18:15-18:18 UTC)  
0551D (JD175 20:42-20:45 UTC)  
0552D (JD175 21:36-21:39 UTC)



0553D (JD176 00:03-00:06 UTC)

Investigation Method: 200% side scan sonar; supported by MBES

If Found: Surveyed Position: Wreck not found  
(NAD83)

Position Determined By: DGPS

Investigation Summary: Wreck not found. Recommend leaving chart as is.

## Item Investigation Field Report

Description (as charted): Not assigned

Source: AWOIS record number 3647

Charted Position: Lat. 30°07'36.73"N Long. 088°04'06.99"W

Charts Affected: 11378 1:40,000, 34<sup>th</sup> ed. February 2006

**Investigation**

Date(s)/Day Number(s): June 23, 2006

July 9, 2006

Survey Vessel Name: *R/V Davidson*

Position Numbers/Time: Survey lines:

0524D (JD174 07:35-07:38 UTC)

0526D (JD174 08:47-08:50 UTC)

0528D (JD174 10:06-10:09 UTC)

0529D (JD174 10:13-10:13 UTC)

0530D (JD174 11:43-11:46 UTC)

0532D (JD174 15:35-15:38 UTC)

0534D (JD174 19:31-19:34 UTC)

0860D (JD190 15:18-15:20 UTC)

0861D (JD190 15:26-15:30 UTC)

Investigation Method: 200% side scan sonar; supported by MBES

If Found: Surveyed Position: Item not found

(NAD83)

Position Determined By: DGPS

Investigation Summary: Item not found

## Item Investigation Field Report

Description (as charted): SNDG

Source: AWOIS record number 3648

Charted Position: Lat. 30°07'25.74"N Long. 088°03'10.99"W

Charts Affected: 11378 1:40,000, 34<sup>th</sup> ed. February 2006

**Investigation**

Date(s)/Day Number(s): June 23, 2006

Survey Vessel Name: *R/V Davidson*

Position Numbers/Time: Survey lines:  
0533D (JD174 18:48-18:50 UTC)  
0531D (JD174 15:12-15:14 UTC)  
0538D (JD174 02:42-02:44 UTC)  
0535D (JD174 22:45-22:48 UTC)  
0540D (JD174 06:05-06:08 UTC)

Investigation Method: 200% side scan sonar; supported by MBES

If Found: Surveyed Position: Item not found.

(NAD83)

Position Determined By: DGPS

Investigation Summary: Item not found.

## Item Investigation Field Report

Description (as charted): Not assigned

Source: AWOIS record number 7132

Charted Position: Lat. 30°07'20.02"N Long. 088°00'35.68"W

Charts Affected: 11376 1:80,000, 51<sup>st</sup> ed. February 2006

**Investigation**

Date(s)/Day Number(s): June 24, 27, 2006

Survey Vessel Name: *R/V Davidson*

Position Numbers/Time: Survey lines:  
0541D (JD175 08:59-09:02 UTC)  
0543D (JD175 12:18-12:21 UTC)  
0545D (JD175 15:34-15:37 UTC)  
0551D (JD175 20:41-20:38 UTC)  
0553D (JD175/176 23:59-00:02 UTC)

0622D (JD178 11:42-11:44 UTC)

0624D (JD178 13:50-13:53 UTC)

0626D (JD178 16:09-16:10 UTC)

0627D (JD178 16:15-16:16 UTC)

0628D (JD178 18:15-18:16 UTC)

0630D (JD178 20:24-20:25 UTC)

Investigation Method: 200% side scan sonar; supported by MBES

If Found: Surveyed Position: Item not found  
(NAD83)

Position Determined By: DGPS

Investigation Summary: Item not found



## Item Investigation Field Report

Description (as charted): Not assigned

Source: AWOIS record number 7350

Charted Position: Lat. 30°04'48.74"N Long. 087°59'29.98"W

Charts Affected: 11360 1:456,394, 41<sup>st</sup> ed. March 2005

**Investigation**

Date(s)/Day Number(s): June 26-27, 2006

Survey Vessel Name: *R/V Davidson*

Position Numbers/Time: Survey lines:  
0602D (JD177 16:19-16:22 UTC)  
0604D (JD177 18:19-18:22 UTC)  
0605D (JD177 19:21-19:23 UTC)  
0606D (JD177 20:20-20:23 UTC)  
0608D (JD177 21:54-21:57 UTC)

0610D (JD178 00:04-00:07 UTC)

0612D (JD178 02:10-02:13 UTC)

Investigation Method: 200% side scan sonar; supported by MBES

If Found: Surveyed Position: Item not found

(NAD83)

Position Determined By: DGPS

Investigation Summary: Item not found

## Item Investigation Field Report

Description (as charted): Not assigned

Source: AWOIS record number 7378

Charted Position: Lat. 30°05'29.11"N Long. 088°02'14.12"W

Charts Affected: 11376 1:80,000, 51<sup>st</sup> ed. February 2006

**Investigation**

Date(s)/Day Number(s): June 25, 2006  
July 9, 2006

Survey Vessel Name: *R/V Davidson*

Position Numbers/Time: Survey lines:  
0562D (JD176 06:29-06:31 UTC)  
0564D (JD176 07:49-07:51 UTC)  
0565D (JD176 08:31-08:33 UTC)  
0566D (JD176 09:09-09:11 UTC)

0567D (JD176 09:57-09:58 UTC)

0569D (JD176 11:22-11:24 UTC)

0847D (JD190 10:24-10:26 UTC)

Investigation Method: 200% side scan sonar; supported by MBES

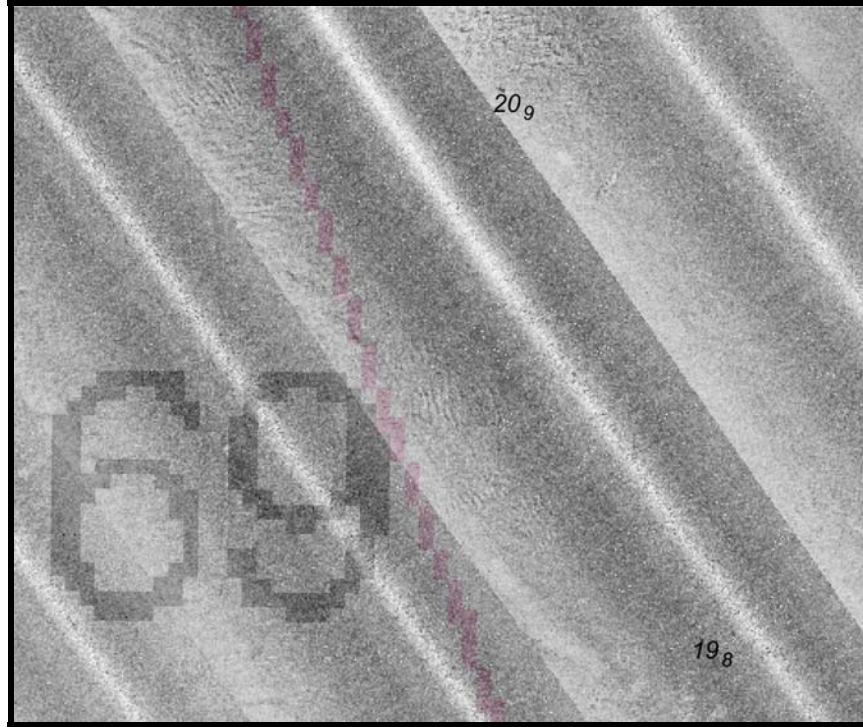
If Found: Surveyed Position: Lat. 30°05'32.12"N Long. 088°02'15.88"W

(NAD83)

Lat. 30°05'22.46"N Long. 088°02'11.72"W

Position Determined By: DGPS

Investigation Summary: Two items found. One to North measures 1.9m by 3.5m with a height of 0.6m and a least depth of 20.8m. Other item measures 2.1m by 2.6m with a height of 0.5m and a least depth of 19.8m.



**Figure 1 – A side scan mosaic overlain on Chart 11376, 51<sup>st</sup> Edition, showing two contacts found near Awois 7378.**

## Item Investigation Field Report

Description (as charted):      Obstns PA

Source:                              AWOIS record number 7379

Charted Position:              Lat. 30°04'03.22"N    Long. 088°02'36.68"W

Charts Affected:              11360 1:456,394, 41<sup>st</sup> ed. March 2005

**Investigation**

Date(s)/Day Number(s):      June 28, 2006

Survey Vessel Name:            *R/V Davidson*

Position Numbers/Time:      Survey lines:  
0646D (JD179 08:57-08:59 UTC)  
0648D (JD179 10:07-10:09 UTC)  
0650D (JD179 11:16-11:18 UTC)  
0651D (JD179 12:06-12:09 UTC)  
0653D (JD179 13:08-13:11 UTC)

0655D (JD179 14:05-14:07 UTC)

Investigation Method: 200% side scan sonar; supported by MBES

If Found: Surveyed Position: Lat. 30°03'59.68"N Long. 088°02'32.26"W  
(NAD83)

Position Determined By: DGPS

Investigation Summary: Item measures 2.3m by 3.7m with a height of 1.5m at a least depth of 21.0m. Recommend a least depth of 11.4 fathoms.



**Figure 2 – Side scan mosaic of a contact found near AWOIS 7379.**



## Item Investigation Field Report

Description (as charted): Not assigned

Source: AWOIS record number 7398

Charted Position: Lat. 30°07'39.74"N Long. 088°01'41.98"W

Charts Affected: 11376 1:80,000, 51<sup>st</sup> ed. February 2006

**Investigation**

Date(s)/Day Number(s): June 23-24, 2006

Survey Vessel Name: *R/V Davidson*

Position Numbers/Time: Survey lines:  
0531D (JD174 14:58-15:01 UTC)  
0533D (JD174 18:34-18:37 UTC)  
0535D (JD174 22:33-22:35 UTC)  
0538D (JD175 02:55-02:57 UTC)  
0540D (JD175 06:18-06:20 UTC)

Investigation Method: 200% side scan sonar; supported by MBES

If Found: Surveyed Position: Lat. 30°07'41.65"N Long. 088°01'42.12"W  
(NAD83)

Position Determined By: DGPS

Investigation Summary: Item measures 1.2m by 3.0m with a height of 0.9m at a least depth of 17.4m.

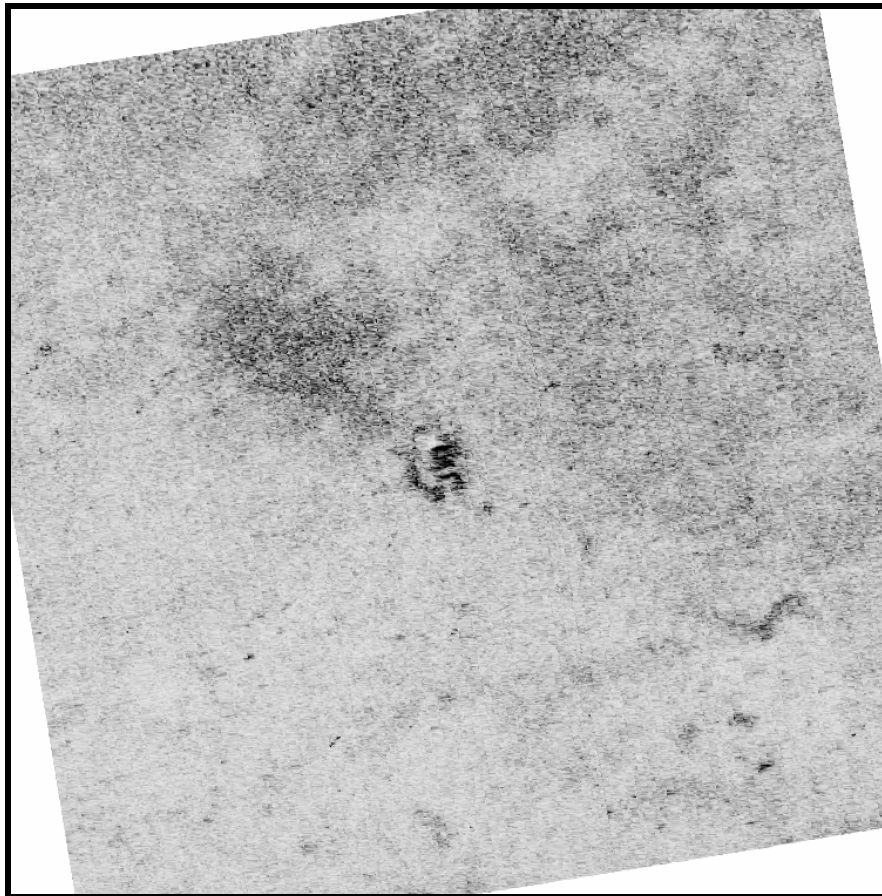


Figure 3 – Side scan image showing area near AWOIS 7398.

## Item Investigation Field Report

Description (as charted): Not assigned

Source: AWOIS record number 7399

Charted Position: Lat. 30°07'15.74"N Long. 088°02'19.98"W

Charts Affected: 11376 1:80,000, 51<sup>st</sup> ed. February 2006

**Investigation**

Date(s)/Day Number(s): June 24, 2006  
July 9, 2006  
August 9, 2006

Survey Vessel Name: *R/V Davidson*

Position Numbers/Time: Survey lines:  
0541D (JD175 09:14-09:16 UTC)  
0542D (JD175 09:48-09:50 UTC)  
0544D (JD175 13:07-13:09 UTC)

0550D (JD175 18:05-18:07 UTC)

0552D (JD175 21:27-21:28 UTC)

0711D (JD181 10:03-10:04 UTC)

0858D (JD190 14:30-14:32 UTC)

1334D (JD221 18:56-18:58 UTC)

Investigation Method: 200% side scan sonar; supported by MBES

If Found: Surveyed Position: Item not found  
(NAD83)

Position Determined By: DGPS

Investigation Summary: Item not found

## Item Investigation Field Report

Description (as charted): Not assigned

Source: AWOIS record number 7400

Charted Position: Lat. 30°07'33.74"N Long. 088°01'41.98"W

Charts Affected: 11376 1:80,000, 51<sup>st</sup> ed. February 2006

**Investigation**

Date(s)/Day Number(s): June 23-24, 2006  
July 9, 2006

Survey Vessel Name: *R/V Davidson*

Position Numbers/Time: Survey lines:  
0535D (JD174 22:33-22:35 UTC)  
0537D (JD175 02:07-02:09 UTC)  
0538D (JD175 02:55-02:57 UTC)  
0539D (JD175 05:32-05:34 UTC)  
0540D (JD175 06:18-06:20 UTC)

0834D (JD190 06:24-06:24 UTC)

Investigation Method: 200% side scan sonar; supported by MBES

If Found: Surveyed Position: Item not found

(NAD83)

Position Determined By: DGPS

Investigation Summary: Item not found

## Item Investigation Field Report

Description (as charted): Not assigned

Source: AWOIS record numbers 7401

Charted Position: Lat. 30°06'46.74"N Long. 088°02'36.98"W

Charts Affected: 11376 1:80,000, 51<sup>st</sup> ed. February 2006

**Investigation**

Date(s)/Day Number(s): June 25, 2006

Survey Vessel Name: *R/V Davidson*

Position Numbers/Time: Survey lines:  
0576D (JD176 15:22-15:24 UTC)  
0578D (JD176 16:46-16:48 UTC)  
0580D (JD176 18:08-18:10 UTC)  
0582D (JD176 20:13-20:15 UTC)  
0583D (JD176 21:29-21:32 UTC)

Investigation Method: 200% side scan sonar; supported by MBES



If Found: Surveyed Position: Item not found

(NAD83)

Position Determined By: DGPS

Investigation Summary: Item not found.

## Item Investigation Field Report

Description (as charted): Not assigned

Source: AWOIS record number 7403

Charted Position: Lat. 30°05'35.01"N Long. 088°02'14.87"W

Charts Affected: 11360 1:456,394, 41<sup>st</sup> ed. March 2005

**Investigation**

Date(s)/Day Number(s): June 25, 2006

Survey Vessel Name: *R/V Davidson*

Position Numbers/Time: Survey lines:  
0564D (JD176 07:47-07:50 UTC)  
0566D (JD176 09:07-09:10 UTC)  
0567D (JD176 09:59-09:57 UTC)  
0569D (JD176 11:23-11:26 UTC)  
0573D (JD176 13:36-13:39 UTC)

Investigation Method: 200% side scan sonar; supported by MBES

If Found: Surveyed Position: Lat. 30°05'32.12"N Long. 088°02'15.88"W  
(NAD83)

Position Determined By: DGPS

Investigation Summary: Item measures 1.9m by 3.5m with a height of 0.7m at a  
least depth of 20.8m.

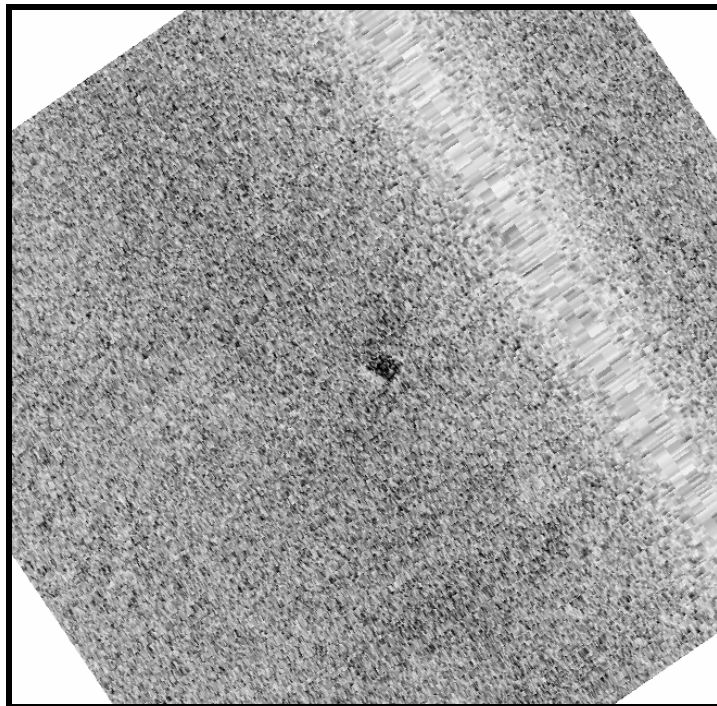


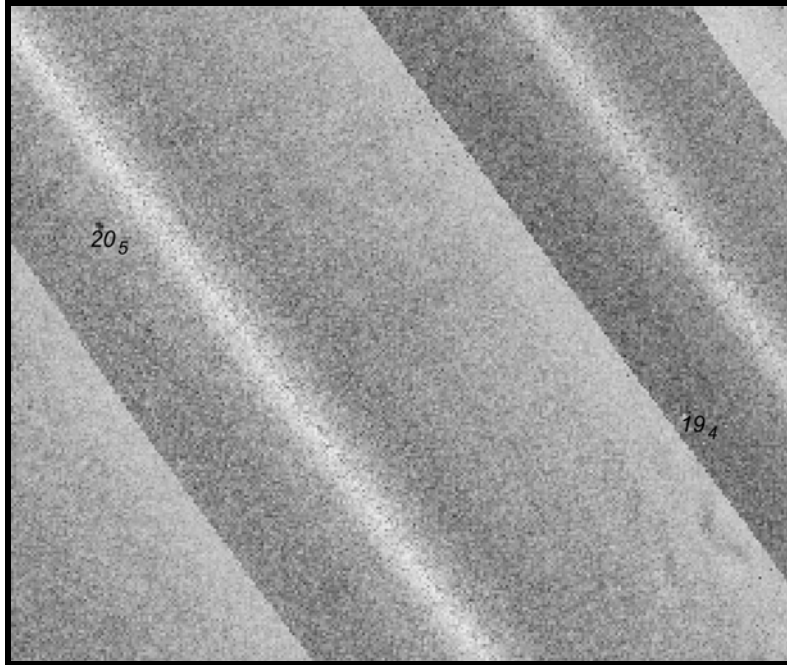
Figure 4 – Side scan image of contact near AWOIS 7403.

## Item Investigation Field Report

Description (as charted): Not assigned (SNDG)  
Source: AWOIS record number 7504  
Charted Position: Lat. 30°04'47.74"N Long. 088°02'37.98"W  
Charts Affected: 11360 1:456,394, 41<sup>st</sup> ed. March 2005

**Investigation**

Date(s)/Day Number(s): June 28, 2006  
Survey Vessel Name: *R/V Davidson*  
Position Numbers/Time: Survey lines:  
0636D (JD179 05:30-05:33 UTC)  
0638D (JD179 04:14-04:17 UTC)  
0640D (JD179 02:59-03:02 UTC)  
0641D (JD179 16:15-06:18 UTC)  
0643D (JD179 07:25-07:28 UTC)  
Investigation Method: 200% side scan sonar; supported by MBES  
If Found: Surveyed Position: Lat. 30°04'47.56"N Long. 088°02'37.93"W  
(NAD83)  
Position Determined By: DGPS  
Investigation Summary: Item closest in proximity to AWOIS coordinates measured 2.5m by 4.3m with a height of 1.7m at a least depth of 20.5m located at Lat. 30°04'47.56"N Long. 088°02'37.93"W. Second item at Lat 30°04'45.49"N Long 088°02'30.06"W measured 1.6m by 5.5m with a height of 1.4m at a least depth of 19.4m



**Figure 5 – Side scan image of contacts near AWOIS 7504 with soundings (in meters).**



0518D (JD174 02:09-02:14 UTC)

0520D (JD174 03:32-03:36 UTC)

0522D (JD174 04:42-04:45 UTC)

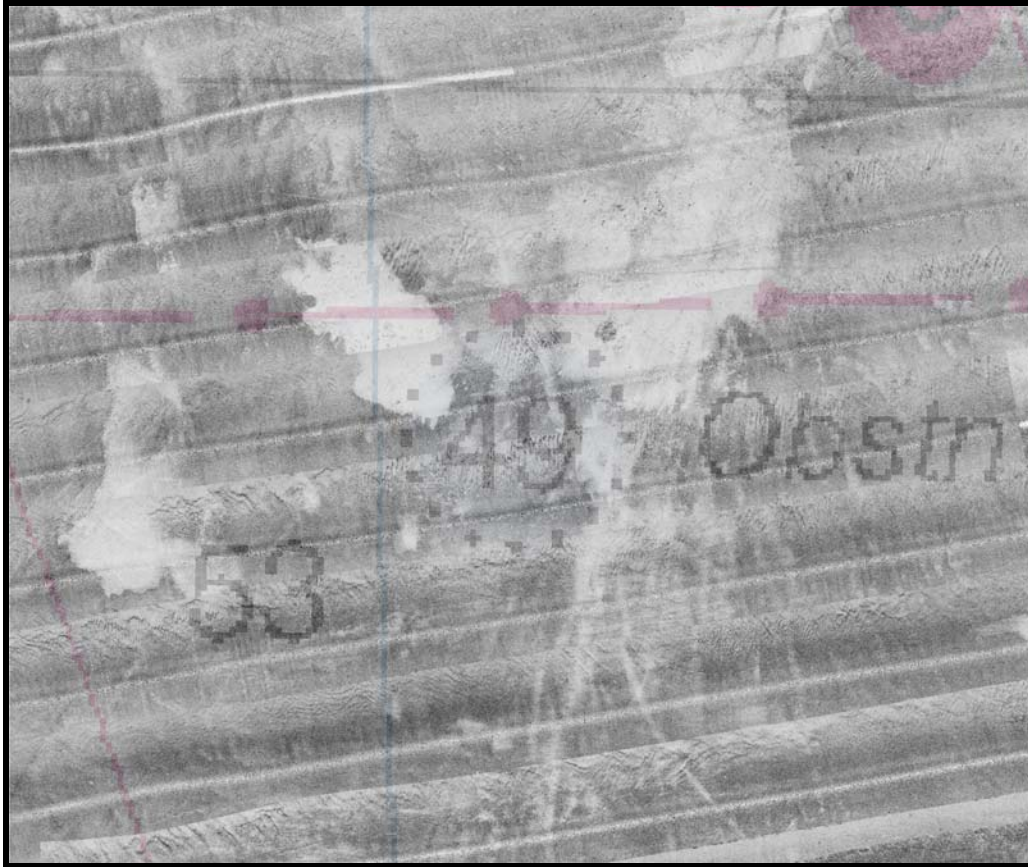
Investigation Method: 200% side scan sonar; supported by MBES

If Found: Surveyed Position: Item not found

(NAD83)

Position Determined By: DGPS

Investigation Summary: Item not found. Recommend removing Obstrn 49 from chart.



**Figure 6 – Side Scan Mosaic of a charted obstruction near AWOIS 8222 overlain on Chart 11376, 51<sup>st</sup> Edition. The hydrographer recommends removing the obstruction from the chart.**





0520D (JD174 03:33-03:36 UTC)

0522D (JD174 04:43-04:45 UTC)

Investigation Method: 200% side scan sonar; supported by MBES

If Found: Surveyed Position: Item not found

(NAD83)

Position Determined By: DGPS

Investigation Summary: Item not found. Recommend removing Obstrn 49 from chart.



**Figure 7 – Side Scan Mosaic of a charted obstruction near AWOIS 8223 overlain on Chart 11376, 51<sup>st</sup> Edition. The hydrographer recommends removing the obstruction from the chart.**



0696D (JD180 16:35-16:37 UTC)

0698D (JD180 18:41-18:42 UTC)

Investigation Method: 200% side scan sonar; supported by MBES

If Found: Surveyed Position: Item not found

(NAD83)

Position Determined By: DGPS

Investigation Summary: Item not found. Recommend removing Obstrn 55 from chart.



**Figure 8 – Side scan Mosaic of a charted obstruction near AWOIS 8706 overlain on Chart 11376, 51<sup>st</sup> Edition. The hydrographer recommends removing the obstruction from the chart.**



0706D (JD181 03:06-03:07 UTC)

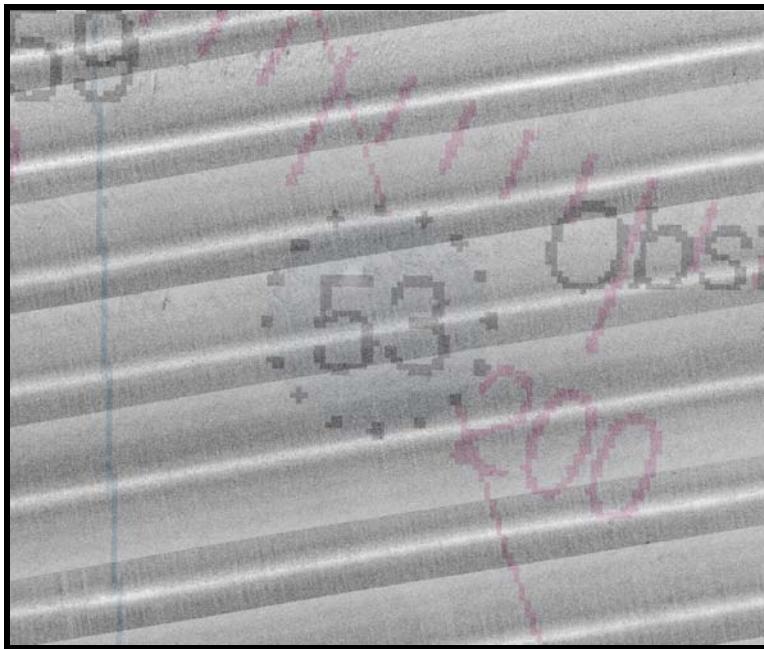
Investigation Method: 200% side scan sonar; supported by MBES

If Found: Surveyed Position: Item not found

(NAD83)

Position Determined By: DGPS

Investigation Summary: Item not found. Recommend removing Obstn 53 from chart.



**Figure 9 – Side Scan Mosaic of a charted obstruction near AWOIS 8707 overlain on Chart 11376, 51<sup>st</sup> Edition. The hydrographer recommends removing the obstruction from the chart.**





0708D (JD181 05:35-05:36 UTC)

Investigation Method: 200% side scan sonar; supported by MBES

If Found: Surveyed Position: Item not found  
(NAD83)

Position Determined By: DGPS

Investigation Summary: Item not found. Recommend removing Obstrn 48 from chart.



**Figure 10 -Side Scan Mosaic of a charted obstruction near AWOIS 8708 overlain on Chart 11376, 51<sup>st</sup> Edition. The hydrographer recommends removing the obstruction from the chart.**



0705D (JD181 02:56-02:57 UTC)

0706D (JD181 03:02-03:04 UTC)

0708D (JD181 05:05-05:07 UTC)

0710D (JD181 07:23-07:25 UTC)

Investigation Method: 200% side scan sonar; supported by MBES

If Found: Surveyed Position: Lat. 30°06'16.01"N Long. 087°59'20.42"W  
(NAD83)

Position Determined By: DGPS

Investigation Summary: Item found just outside 200m radius of charted coordinates. Measures 1.5m by 7.5m with a height of 3.0m at a least depth of 16.2m. Recommend moving Obsth to Lat. 30°06'16.01"N Long. 087°59'20.42"W and charting at a depth of 52 ft.



**Figure 11 –Side Scan Mosaic of a charted obstruction near AWOIS 8709 overlain on Chart 11376, 51<sup>st</sup> Edition. The hydrographer recommends moving the charted obstruction south to the location of the contact (blue circle).**

## Item Investigation Field Report

Description (as charted): Well 57

Source: AWOIS record number 8710

Charted Position: Lat. 30°08'06.40"N Long. 088°00'33.85"W

Charts Affected: 11376 1:80,000, 51<sup>st</sup> ed. February 2006  
11377 1:40,000, 6<sup>th</sup> ed. January 2007  
11378 1:40,000, 34<sup>th</sup> ed. February 2006

**Investigation**

Date(s)/Day Number(s): June 23, 2006

Survey Vessel Name: *R/V Davidson*

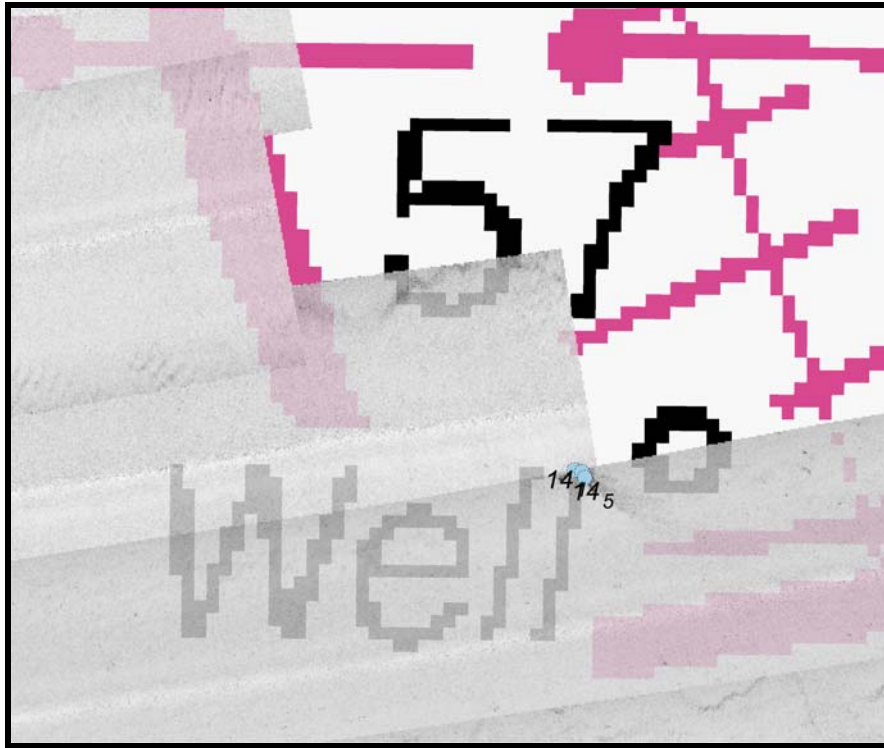
Position Numbers/Time: Survey lines:  
0528D (JD174 09:35-09:37 UTC)  
0530D (JD174 12:12-12:15 UTC)  
0532D (JD174 16:02-16:04 UTC)  
0534D (JD174 19:59-20:02 UTC)

Investigation Method: 200% side scan sonar; supported by MBES

If Found: Surveyed Position: Lat. 30°08'06.53"N Long. 088°00'34.37"W  
(NAD83)

Position Determined By: DGPS

Investigation Summary: Submerged well found. Recommend charting at Lat.  
30°08'06.53"N Long. 088°00'34.37"W.



**Figure 12 - Side Scan Mosaic of a charted obstruction near AWOIS 8710 overlain on Chart 11376, 51<sup>st</sup> Edition. The hydrographer recommends moving the charted obstruction south to the location of the contact (blue circle).**





0520D (JD174 03:44-03:46 UTC)

0522D (JD174 04:53-04:56 UTC)

0525D (JD174 07:57-08:00 UTC)

0862D (JD190 15:49-15:51 UTC)

1342D (JD221 20:52-20:53 UTC)

Investigation Method: 200% side scan sonar; supported by MBES

If Found: Surveyed Position: Lat. 30°08'15.69"N Long. 088°02'24.27"W  
(NAD83)

Position Determined By: DGPS

Investigation Summary: Item measures 1.6m by 4.6m with a height of 2.1m at a depth of 15.6m. Recommend moving Obstrn 46 to Lat. 30°08'15.69"N Long. 088°02'24.27"W and charting a least depth of 51 ft.



**Figure 13 – Side Scan Mosaic of a charted obstruction near AWOIS 8754 overlain on Chart 11376, 51<sup>st</sup> Edition. The hydrographer recommends moving the charted obstruction south to the location of the contacts (blue circle) and sounding (in meters).**



0520D (JD174 03:43-03:45 UTC)

0522D (JD174 04:52-04:54 UTC)

0525D (JD174 07:56-07:59 UTC)

0862D (JD190 15:49-15:52 UTC)

Investigation Method: 200% side scan sonar; supported by MBES

If Found: Surveyed Position: Item not found

(NAD83)

Position Determined By: DGPS

Investigation Summary: Item not found. Recommend removing Obstrn 46 from chart.



**Figure 14 – Side Scan Mosaic of a charted obstruction near AWOIS 8755 overlain on Chart 11376, 51<sup>st</sup> Edition. The hydrographer recommends removing the obstruction from the chart.**



0520D (JD174 03:43-03:45 UTC)

0522D (JD174 04:52-04:54 UTC)

0525D (JD174 07:56-07:59 UTC)

0862D (JD190 15:49-15:52 UTC)

Investigation Method: 200% side scan sonar; supported by MBES

If Found: Surveyed Position: Item not found

(NAD83)

Position Determined By: DGPS

Investigation Summary: Item not found. Recommend removing Obstrn 46 from chart.



**Figure 15 –Side Scan Mosaic of a charted obstruction near AWOIS 8756 overlain on Chart 11376, 51<sup>st</sup> Edition. The hydrographer recommends removing the obstruction from the chart.**





0525D (JD174 07:57-07:59 UTC)

0527D (JD174 09:09-09:11 UTC)

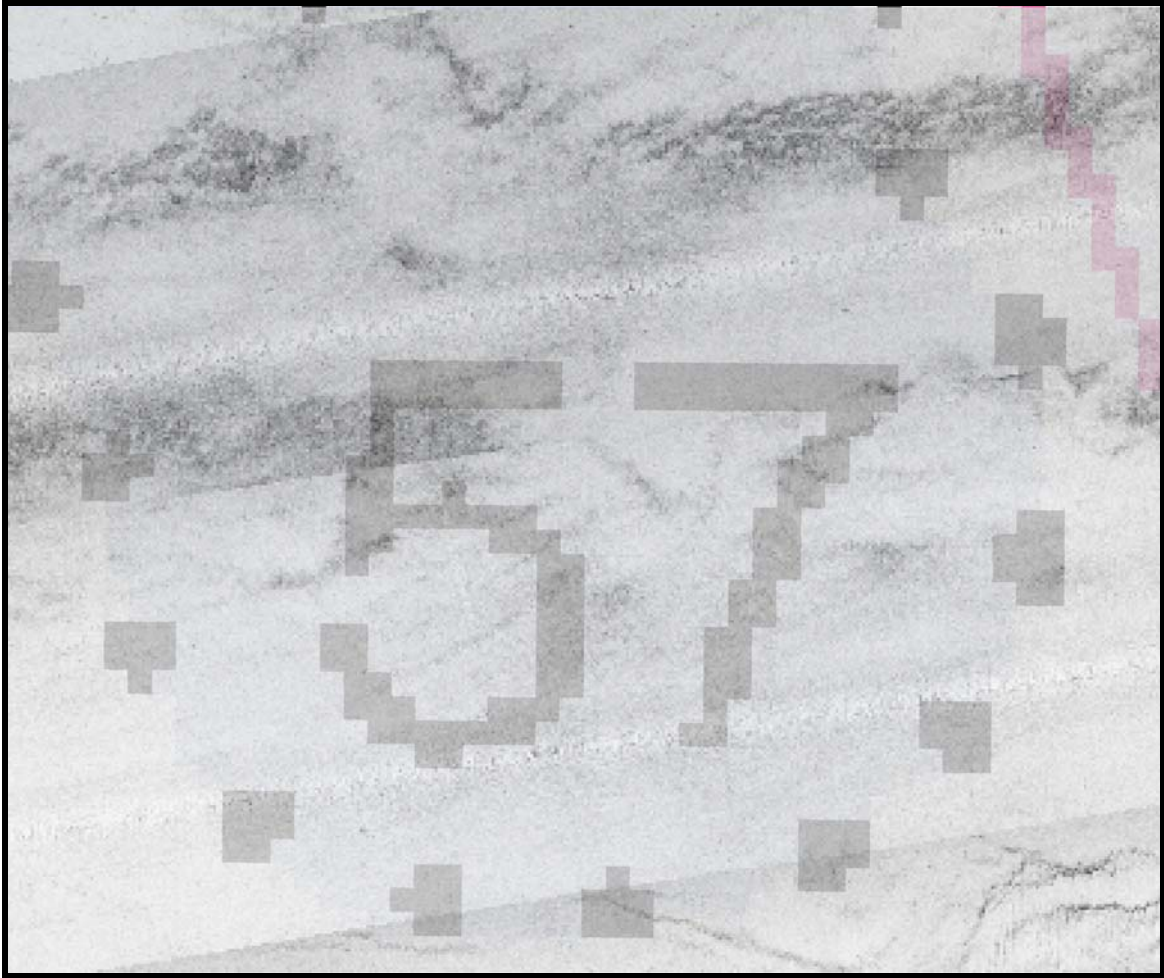
Investigation Method: 200% side scan sonar; supported by MBES

If Found: Surveyed Position: Item not found

(NAD83)

Position Determined By: DGPS

Investigation Summary: Item not found. Recommend removing Obstrn 57 from chart.



**Figure 16 – Side Scan Mosaic of a charted obstruction near AWOIS 8757 overlain on Chart 11376, 51<sup>st</sup> Edition. The hydrographer recommends removing the obstruction from the chart.**

## Item Investigation Field Report

Description (as charted): Stranded Wreck (PA)

Source: AWOIS record number 11333

Charted Position: Lat. 30°09'06"N Long. 088°03'24"W

Charts Affected: 11376 1:80,000, 51<sup>th</sup> ed. February 2006  
11377 1:40,000, 6<sup>th</sup> ed. January 2007  
11378 1:40,000, 34<sup>rd</sup> ed. February 2006

**Investigation**

Date(s)/Day Number(s): December 10, 2006  
January 10, 15, 18, 30, 31, 2007  
March 9, 2007

Survey Vessel Name: *R/V Davidson/Bella Marie*

Position Numbers/Time: 8210D (JD018 17:31-17:33 UTC)  
8327D (JD068 21:19-21:21 UTC)  
8131D (JD344 16:20-16:22 UTC)

8316D (JD068 14:38-14:40 UTC)  
8186D (JD010 22:05-22:07 UTC)  
8325D (JD068 20:59-21:01 UTC)  
8328D (JD068 21:29-21:31 UTC)  
8324D (JD031 17:32-17:33 UTC)  
8209D (JD018 17:24-17:25 UTC)  
8323D (JD068 15:43-15:45 UTC)  
8326D (JD068 21:13-21:15 UTC)  
8164D (JD015 17:31-17:32 UTC)  
8213D (JD030 17:09-17:10 UTC)  
8322D (JD068 15:36-15:38 UTC)  
8195D (JD015 17:16-17:16 UTC)  
8127D (JD344 15:20-15:21 UTC)  
8216D (JD030 17:43-17:44 UTC)  
8182D (JD010 20:45-20:46 UTC)  
8190D (JD015 16:56-16:57 UTC)

Investigation Method: 200% side scan sonar; supported by MBES

If Found: Surveyed Position: Item not found

(NAD83)

Position Determined By: DGPS

Investigation Summary: Item not found. Recommend removing Stranded Wreck (PA) from chart.



**Figure 17 - Side Scan Mosaic of a charted obstruction near AWOIS 11333 overlain on Chart 11376, 51<sup>st</sup> Edition. The hydrographer recommends removing the obstruction from the chart.**



8327D (JD068 21:21-21:23 UTC)  
8316D (JD068 14:40-14:42 UTC)  
8186D (JD010 22:06-22:08 UTC)  
8239D (JD034 16:55-16:57 UTC)  
8325D (JD068 21:02-21:04 UTC)  
8328D (JD068 21:27-21:29 UTC)  
8234D (JD031 17:34-17:36 UTC)  
8296D (JD058 20:02-20:04 UTC)  
8323D (JD068 15:45-15:47 UTC)  
8326D (JD068 21:10-21:12 UTC)  
8297D (JD058 20:17-20:19 UTC)  
8175D (JD010 19:02-19:04 UTC)  
8177D (JD010 19:30-19:32 UTC)  
8180D (JD010 20:20-20:22 UTC)  
8208D (JD018 17:16-17:17 UTC)  
8207D (JD015 19:11-19:12 UTC)  
8189D (JD015 16:19:16:50 UTC)  
8173D (JD009 19:44-19:45 UTC)

Investigation Method: 200% side scan sonar; supported by MBES

If Found: Surveyed Position: Item not found  
(NAD83)

Position Determined By: DGPS



Investigation Summary: Item not found



0588D (JD177 01:48-01:51 UTC)

0590D (JD177 03:47-03:49 UTC)

0591D (JD177 05:31-05:33 UTC)

0593D (JD177 07:30-07:33 UTC)

0595D (JD177 09:31-09:34 UTC)

0597D (JD177 11:39-11:37 UTC)

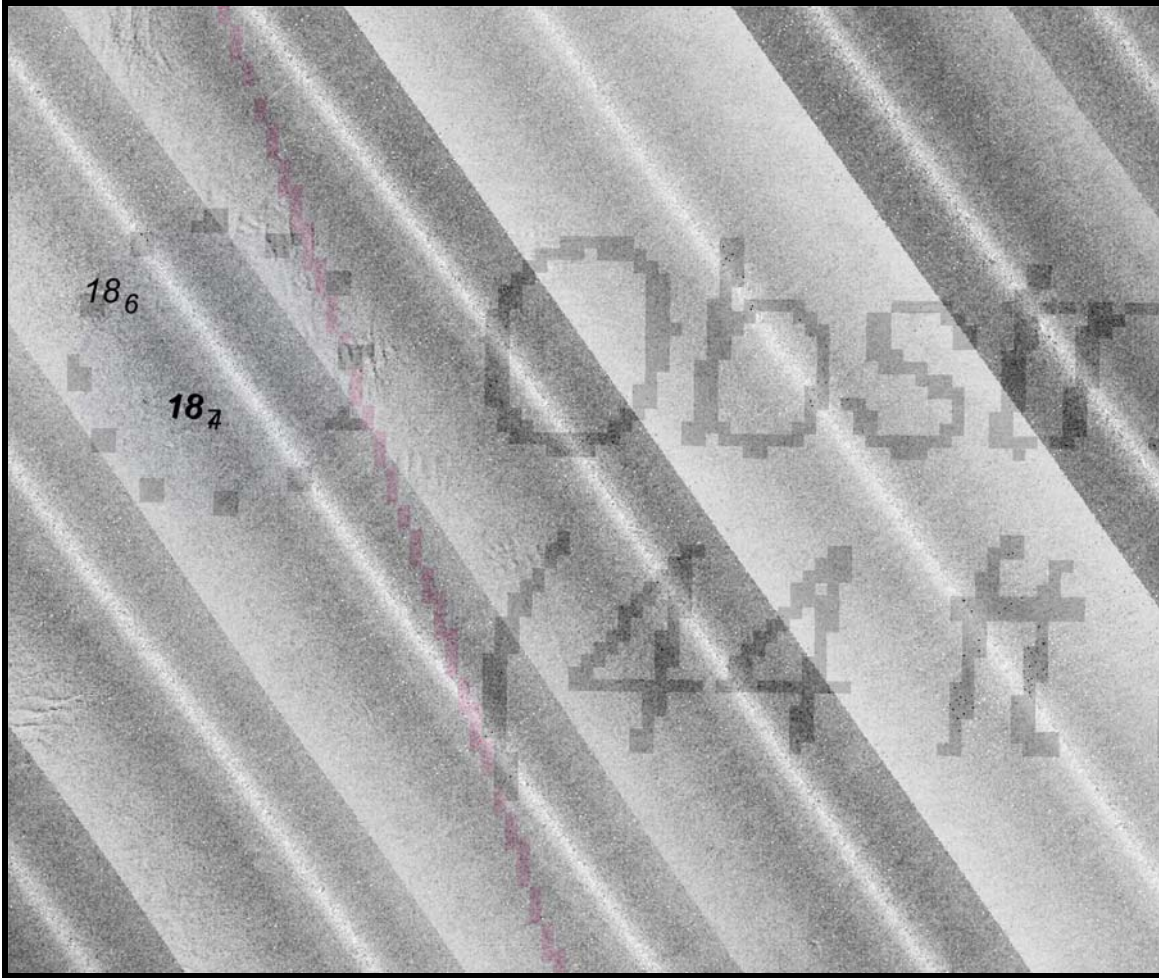
Investigation Method: 200% side scan sonar; supported by MBES

If Found: Surveyed Position: Lat. 30°06'42.92"N Long. 088°01'55.95"W

(NAD83) Lat. 30°06'40.47"N Long. 088°01'53.90"W

Position Determined By: DGPS

Investigation Summary:



**Figure 18 - Side scan Mosaic of a charted obstruction near AWOIS 13391 overlain on Chart 11376, 51<sup>st</sup> Edition. The hydrographer recommends charting OBSTN 44 with 60 foot depth.**



## **APPENDIX III**

### **Progress Sketch**

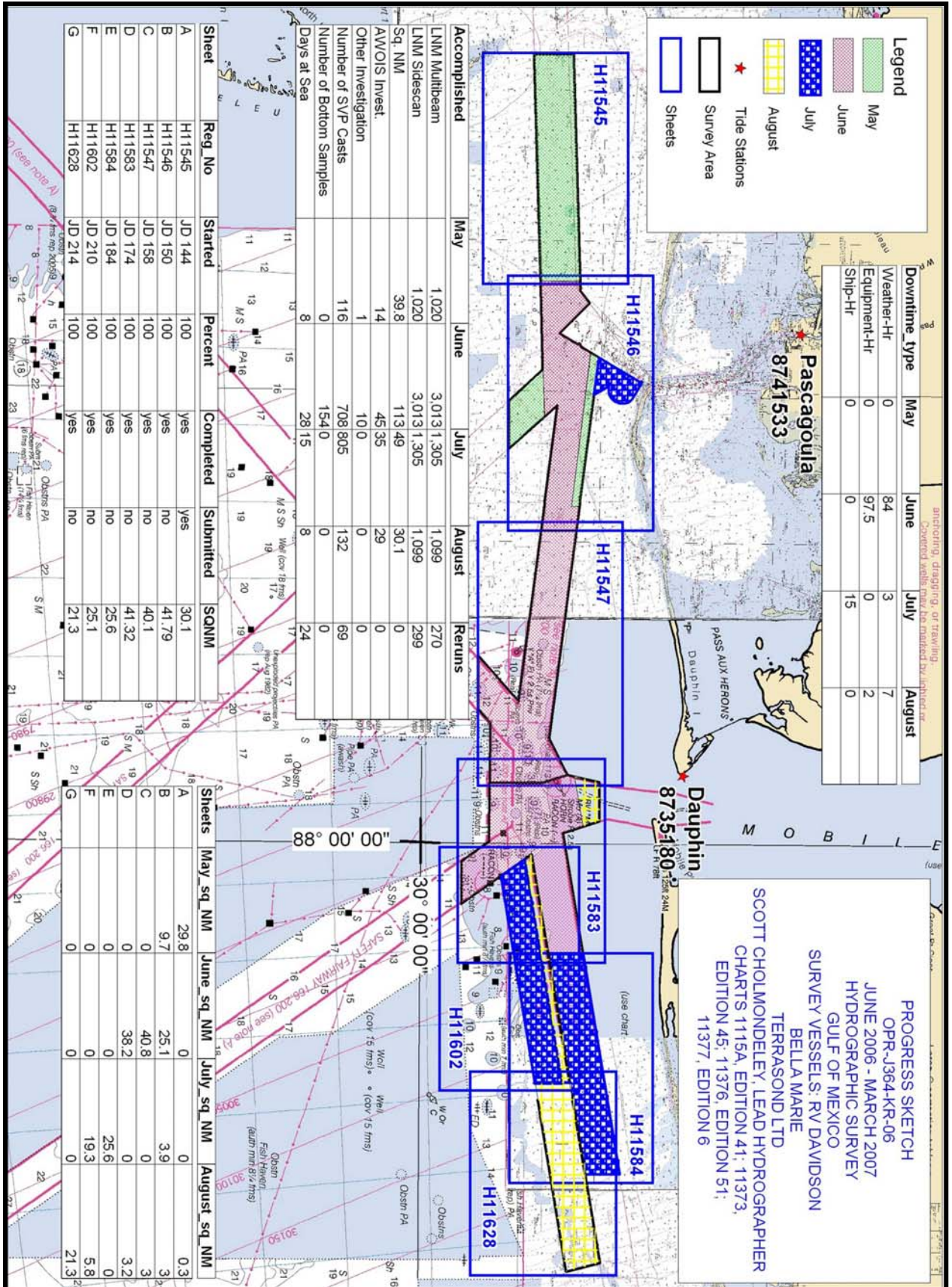


Figure 1: Final Progress Sketch for OPR-J364-KR-06



**APPENDIX V**

**Supplemental Survey Records and Correspondence**



### Bottom Samples

Thirty-eight (38) bottom samples were collected in support of the 2006 survey. The samples were distributed geographically to obtain a full representation of the bottom characteristics as specified in NOAA Hydrographic Surveys Specifications and Deliverables, Section 7.1.

*Table 1 – Bottom samples obtained in conjunction with survey H-11583 (2006).*

Point Number	Date	Time (UTC)	Depth (m)	Latitude	Longitude	Color	Surface Description	Nature of Surface
D01	6/27/2006	16:15	22.2	30° 04' 17.2" N	88° 03' 59.5" W	grey	medium	sand
D02	6/27/2006	16:30	22.2	30° 04' 00.0" N	88° 02' 20.4" W	grey	soft	sand
D03	6/27/2006	16:10	21.3	30° 04' 57.6" N	88° 03' 10.8" W	grey	medium	sand
D04	6/27/2006	16:00	20.4	30° 06' 07.3" N	88° 02' 41.3" W	grey	medium	silt
D05	6/27/2006	14:05	18.6	30° 07' 21.3" N	88° 04' 05.7" W	grey	medium	silt
D06	6/27/2006	13:55	15.2	30° 08' 11.1" N	88° 03' 50.1" W	grey	medium	mud
D07	6/27/2006	13:45	10.1	30° 09' 15.8" N	88° 04' 04.9" W	grey	medium	silt
D08	6/28/2006	13:31	22.0	30° 09' 27.4" N	88° 02' 50.5" W	brown	medium	sand
D09	6/28/2006	13:48	15.8	30° 08' 22.3" N	88° 02' 35.9" W	green	medium	clay
D10	6/27/2006	15:50	18.6	30° 07' 13.7" N	88° 02' 41.2" W	grey	medium	silt
D11	6/27/2006	16:50	21.3	30° 05' 09.5" N	88° 01' 56.1" W	grey	medium	sand
D12	6/27/2006	16:35	21.6	30° 04' 11.7" N	88° 01' 05.3" W	grey	medium	sand
D13	6/27/2006	17:30	20.1	30° 02' 27.2" N	87° 58' 13.8" W	grey	medium	sand



<b>Point Number</b>	<b>Date</b>	<b>Time (UTC)</b>	<b>Depth (m)</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Color</b>	<b>Surface Description</b>	<b>Nature of Surface</b>
D14	6/27/2006	17:20	19.2	30° 03' 26.7" N	87° 58' 56.7" W	grey	medium	sand
D15	6/27/2006	17:10	21.0	30° 04' 25.2" N	87° 59' 50.6" W	grey	medium	sand
D16	6/27/2006	17:00	20.1	30° 05' 22.6" N	88° 00' 41.3" W	grey	medium	sand
D17	6/28/2006	14:08	19.8	30° 06' 18.5" N	88° 01' 26.5" W	grey	fine	sand
D18	6/28/2006	14:00	18.9	30° 07' 24.3" N	88° 01' 26.6" W	grey	medium	silt
D19	6/27/2006	20:20	16.1	30° 08' 34.5" N	88° 01' 20.5" W	grey	medium	silt
D20	6/27/2006	20:25	12.2	30° 09' 38.9" N	88° 01' 35.5" W	grey	soft	mud
D21	6/27/2006	20:00	18.0	30° 07' 38.5" N	88° 00' 11.7" W	grey	medium	silt
D22	6/28/2006	14:27	19.2	30° 06' 31.8" N	88° 00' 12.6" W	grey	fine	sand
D23	6/27/2006	18:15	19.8	30° 05' 33.9" N	87° 59' 27.2" W	grey	medium	sand
D24	6/27/2006	18:05	19.5	30° 04' 36.0" N	87° 58' 36.8" W	grey	medium	sand
D25	6/27/2006	17:55	20.1	30° 03' 38.8" N	87° 57' 43.3" W	grey	medium	sand
D26	6/27/2006	17:40	20.1	30° 02' 38.7" N	87° 56' 59.1" W	grey	medium	sand
D27	6/27/2006	18:25	18.0	30° 06' 44.1" N	87° 58' 57.0" W	grey	medium	sand
D28	6/27/2006	19:55	15.5	30° 07' 49.6" N	87° 58' 57.5" W	grey	medium	sand
D29	6/27/2006	19:45	14.6	30° 08' 01.2" N	87° 57' 42.9" W	grey	medium	sand
D30	6/27/2006	18:30	15.5	30° 06' 55.3" N	87° 57' 42.3" W	grey	medium	sand

<b>Point Number</b>	<b>Date</b>	<b>Time (UTC)</b>	<b>Depth (m)</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Color</b>	<b>Surface Description</b>	<b>Nature of Surface</b>
D31	6/27/2006	18:40	14.6	30° 07' 08.1" N	87° 56' 24.4" W	grey	medium	sand
D32	6/27/2006	19:40	14.6	30° 08' 13.7" N	87° 56' 24.9" W	grey	medium	sand
D33	6/27/2006	19:30	13.7	30° 08' 25.4" N	87° 55' 10.1" W	grey	medium	sand
D34	6/27/2006	18:50	15.2	30° 07' 19.5" N	87° 55' 09.8" W	grey	medium	sand
D35	6/27/2006	18:55	16.2	30° 07' 31.0" N	87° 53' 54.6" W	black	medium	silt
D36	6/27/2006	19:25	13.4	30° 08' 36.6" N	87° 53' 55.6" W	grey	medium	sand
D37	6/27/2006	19:15	12.5	30° 08' 47.9" N	87° 52' 41.2" W	grey	medium	sand
D38	6/27/2006	19:05	14.6	30° 07' 42.4" N	87° 52' 40.3" W	grey	medium	sand

**ATLANTIC HYDROGRAPHIC BRANCH  
EVALUATION REPORT to Accompany  
Surveys H11583 (2006-2007)**

This Evaluation Report has been written to supplement and/or clarify the original Descriptive Report. Sections in this report refer to the corresponding sections of the Descriptive Report.

**B. DATA ACQUISITION AND PROCESSING**

**B.1 DATA PROCESSING**

The following software was used to process and review data at the Atlantic Hydrographic Branch (AHB):

CARIS HIPS/SIPS version 6.1  
CARIS BASE Manager 2.1  
CARIS HOM ENC 3.3  
PYDRO, version 8.7  
CARIS S-57 Composer 2.0

**B.2 QUALITY CONTROL**

**H-Cells**

The AHB source depth grid was generated as a 2m resolution BASE surface. Survey scale soundings were extracted from AHB generated 2m Base surface at a 1:20000 scale using a radius of 1.75m. Soundings were selected for charting by hand using the latest raster charts 11376 and 11377. Soundings were then checked for conflicts, corrected to remove conflicts, and edited to allow for proper sounding compilation placement with respect to existing charted depths outside the survey area. The BASE surface was referenced when selecting the chart scale soundings, to ensure that the selected soundings portrayed the bathymetry within the common area.

Depth curves were drawn by hand from the Base surface. The contours are included in the final H-Cell product. The curves were utilized during chart scale sounding selection at AHB.

## H11583

The compilation products and Stand Alone HOB Files (SAHOB) are detailed in the Compilation Process Log of this document. All individual SAHOB files were assembled in BASE Editor during H-Cell compilation.

The completed H-Cell was exported as a Base Cell File (ENC.000) in S-57 format with all values in metric units. The metric equivalent ENC.000 file was then converted to NOAA chart units (ENC\_CS.000) with all values measured in feet following NOAA sounding rounding rules.

The H11584 CARIS H-Cell final deliverables include the following products:

H11583_CS.000	1:40,000 Scale	H11584 Selected Soundings (Chart Scale)
H11583_SS.000	1:20,000 Scale	H11584 Selected Soundings (Survey Scale)

### JUNCTIONS

<u>H11547 (2007)</u>	<u>to the west</u>
<u>H11584 (2006)</u>	<u>to the east</u>
<u>H11602 (2007)</u>	<u>to the southeast</u>
<u>H11626 (2007)</u>	<u>to the northeast</u>

Survey H11547 (2007) junctions with the present survey to the west. Present survey soundings are 1 foot deeper than survey H11547 (2007).

Survey H11584 (2006) junctions with the present survey to the east. Present survey soundings are 1 foot deeper than survey H11584 (2006).

Survey H11602 (2007) junctions with the present survey to the southeast. Present survey soundings are 1 foot deeper than survey H11602 (2007).

Survey H11626 (2007) junctions with the present survey to the northeast. Present survey soundings are +/- 1 foot different than survey H11626 (2007).

### C. VERTICAL AND HORIZONTAL CONTROL

Final vertical correction processing was completed by the field unit with no additional corrections required by Atlantic Hydrographic Branch personnel. The field unit

applied verified water levels in conjunction with the preliminary tidal zoning which was accepted and approved by N/OPSI CO-OPS as the final zoning for H11584. Sounding datum is Mean Lower Low Water (MLLW). Vertical datum is Mean High Water (MHW).

Horizontal control used for this survey during data acquisition is based upon the North American Datum of 1983 (NAD83), UTM projection zone 16. Office ENC processing of this survey required translating the datum to meet S-57 ENC requirements. The horizontal geodetic datum was translated to Latitude and Longitude (LLDG) World Geodetic System-84 (WGS-84) during CARIS Base Manager processing.

**D. RESULTS AND RECOMMENDATIONS**

Chart Comparison      11376 (53<sup>rd</sup>. Edition, Aug. /08  
Corrected through NM, Aug. 30/08  
Corrected through LNM, Aug. 19/08  
Scale      1:80,000

Chart Comparison      11377 (7<sup>th</sup>. Edition, Oct. /08  
Corrected through NM, Oct. 13/07  
Corrected through LNM, Oct. 2/07  
Scale      1:40,000

Chart Comparison      11360/1115A (43<sup>rd</sup>. Ed., Nov. /08  
Corrected through NM, Nov. 22/08  
Corrected through LNM, Nov. 11/08  
Scale      1:456,394

ENC Comparison      US4AL11M  
Mobile Bay Alabama  
Edition 21  
Update Application Date 2009-02-02  
Issue Date 2009-02-02  
References:    Charts 11376

ENC Comparison      US5AL13M  
Mobile Bay Approaches and Lower  
Half  
Edition 22  
Update Application Date 2008-09-22  
Issue Date 2009-01-08  
References:    Charts 11377

ENC ComparisonUS3GC05M

Cape St. George to Mississippi  
 Passes  
 Edition 10  
 Update Application Date 2008-05-01  
 Issue Date 2008-11-03  
 References: Charts 11360/1115A

Hydrography

The charted Hydrography originates with prior surveys and requires no further consideration. The hydrographer makes adequate chart comparisons in Section D. of the Descriptive Report. The following should be noted:

1) A charted dangerous submerged obstruction with a depth of 63 feet in the vicinity of Latitude 30°05'07"N, Longitude 87°59'53"W was determined to be insignificant during office processing. It is recommended that the dangerous submerged obstruction with a depth of 63 feet, (63 Obstn) be deleted. Delete 63 Obstn and danger curve.

2) A charted dangerous submerged obstruction with a depth of 59 feet in the vicinity of Latitude 30°06'08"N, Longitude 87°59'20"W was verified by the present survey. It is recommended that the dangerous submerged obstruction with a depth of 59 feet, (59 Obstn) location be revised to Latitude 30°06'08.17"N, Longitude 87°59'20.05"W.

3) An uncharted dangerous submerged obstruction with a depth of 53 feet in Latitude 30°06'16.01"N, Longitude 87°59'20.42"W was located by the present survey. It is recommended that a dangerous submerged obstruction with a depth of 53 feet, (53 Obstn) be charted. Chart a 53 Obstn and danger curve.

4) A charted dangerous submerged obstruction with a wire drag clearance depth of 60 feet in the vicinity of Latitude 30°04'50"N, Longitude 87°59'29"W was disproved by 200% side scan and multibeam. It is recommended that the dangerous submerged obstruction with a wire drag clearance depth of 60 feet, (60 Obstn) be deleted.

5) Charted notation Shl to 13 ft rep 1987 in the vicinity of Latitude 30°10'08"N, Longitude 88°02'51"W was disproved by 200% side scan sonar and multibeam investigation. It is recommended that the notation Shl to 13 ft rep 1987 be deleted from the chart. Chart present survey depths.

6) Charted notation Shoal rep PA in the vicinity of Latitude 30°09'46"N, Longitude 88°02'52"W was disproved by 200% side scan sonar and multibeam investigation. It is recommended that the notation Shoal rep PA be deleted from the chart. Chart present survey depths.

### Adequacy of Survey

The present survey is adequate to supersede the charted bathymetry within the common area. Any features not specifically addressed either in the H-Cell File or the Blue Notes should be retained as charted. Refer to the Descriptive Report for further survey requirements recommended by the hydrographer.

### Miscellaneous

Chart compilation was done by Atlantic Hydrographic Branch personnel, in Norfolk, Virginia. Compilation data will be forwarded to Marine Chart Division, Silver Spring, Maryland. See Section D.1. of this report for a list of the Raster Charts and Electronic Navigation Charts (ENC) used for compiling the present survey.

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**Norris A. Wike**  
Cartographer  
Verification of Data  
Evaluation and Analysis Report



**Registry Number:** H11583  
**State:** Alabama  
**Locality:** Gulf of Mexico  
**Sub-locality:** 7 NM South of Mobile Point  
**Project Number:** OPR-S-J364-KR-06  
**Survey Date:** 03/24/2007

### Charts Affected

Number	Version	Date	Scale
11377	5th Ed.	06/01/2003	1:40000
11378	34th Ed.	02/01/2006	1:40000
11376	51st Ed.	02/01/2006	1:80000
1115A	41st Ed.	03/01/2005	1:456394
11360	41st Ed.	03/01/2005	1:456394
11006	32nd Ed.	08/01/2005	1:875000
411	51st Ed.	12/01/2006	1:2160000

### Features

No.	Name	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	Obstruction - a	GP	11.89 m	030° 08' 51.600" N	87° 53' 55.900" W	---
1.2	Obstruction - b	GP	11.28 m	030° 08' 48.600" N	87° 54' 49.100" W	---
1.3	Obstruction - c	GP	12.20 m	030° 08' 36.600" N	87° 55' 43.000" W	---
1.4	Obstruction - g	GP	15.85 m	030° 08' 24.000" N	88° 00' 52.700" W	---
1.5	Obstruction - h	GP	12.80 m	030° 08' 16.800" N	87° 55' 21.700" W	---
1.6	Obstruction - k	GP	15.55 m	030° 08' 06.800" N	88° 00' 07.600" W	---
1.7	Obstruction - l	GP	14.02 m	030° 08' 06.500" N	88° 00' 34.400" W	---
1.8	Obstruction - o	GP	13.11 m	030° 08' 01.300" N	87° 57' 56.000" W	---
1.9	Obstruction - q	GP	14.02 m	030° 07' 57.900" N	87° 54' 35.000" W	---
1.10	Obstruction - r	GP	16.77 m	030° 07' 56.300" N	88° 00' 47.500" W	---
1.11	Obstruction - t	GP	13.41 m	030° 07' 51.400" N	87° 54' 58.300" W	---
1.12	Obstruction - u	GP	13.41 m	030° 07' 51.200" N	87° 56' 14.700" W	---
1.13	Obstruction - v	GP	15.85 m	030° 07' 48.600" N	88° 03' 38.800" W	---

1.14	Obstruction - x	GP	13.72 m	030° 07' 48.000" N	87° 55' 36.900" W	---
1.15	Obstruction - ac	GP	12.80 m	030° 07' 40.700" N	87° 56' 59.900" W	---
1.16	Obstruction - ad	GP	13.72 m	030° 07' 40.300" N	87° 53' 14.200" W	---
1.17	Obstruction - af	GP	13.41 m	030° 07' 34.300" N	87° 56' 25.400" W	---
1.18	Obstruction - ag	GP	12.50 m	030° 07' 33.000" N	87° 57' 28.500" W	---
1.19	Obstruction - ar	GP	13.11 m	030° 07' 10.600" N	87° 55' 17.400" W	---
1.20	Obstruction - as	GP	13.11 m	030° 07' 10.500" N	87° 56' 40.900" W	---
1.21	Obstruction - aw	GP	15.55 m	030° 07' 05.600" N	87° 58' 35.500" W	---
1.22	Obstruction - ax	GP	15.24 m	030° 06' 59.100" N	87° 58' 52.000" W	---
1.23	Obstruction - ay	GP	13.41 m	030° 06' 54.500" N	87° 54' 44.300" W	---
1.24	Obstruction - bf	GP	14.63 m	030° 06' 35.800" N	87° 58' 03.300" W	---
1.25	Obstruction - bg	GP	17.99 m	030° 06' 15.900" N	87° 59' 57.200" W	---
1.26	Obstruction - bh	GP	18.60 m	030° 06' 09.900" N	88° 00' 12.500" W	---
1.27	Obstruction - bk	GP	18.90 m	030° 05' 20.000" N	88° 01' 11.400" W	---
1.28	Obstruction - bl	GP	19.21 m	030° 05' 07.000" N	87° 59' 53.000" W	---
1.29	Obstruction - bm	GP	17.98 m	030° 05' 04.200" N	87° 58' 20.600" W	---
1.30	Obstruction - br	GP	19.20 m	030° 04' 45.500" N	88° 02' 30.100" W	---
1.31	Obstruction - bu	GP	14.02 m	030° 04' 26.300" N	87° 58' 21.900" W	---
1.32	Obstruction - ce	GP	16.46 m	030° 03' 45.800" N	87° 59' 46.500" W	---
1.33	Obstruction - cf	GP	15.55 m	030° 03' 45.800" N	87° 59' 05.300" W	---
1.34	Obstruction - ci	GP	15.55 m	030° 03' 08.200" N	87° 59' 25.300" W	---
1.35	Obstruction - cj	GP	14.33 m	030° 02' 57.900" N	87° 56' 52.800" W	---
1.36	Obstruction - cm	GP	14.63 m	030° 02' 29.200" N	87° 58' 46.200" W	---
1.37	Sounding - dd	GP	6.10 m	030° 09' 32.200" N	88° 03' 38.400" W	---

**1 - DR\_DToN**

**1.1) Obstruction - a**

**DANGER TO NAVIGATION**

**Survey Summary**

**Survey Position:** 030° 08' 51.600" N, 87° 53' 55.900" W  
**Least Depth:** 11.89 m  
**Timestamp:** [None]  
**GP Dataset:** H11583\_DtoN\_importlist.xls  
**GP No.:** 1  
**Charts Affected:** 11377\_1, 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

**Remarks:**

The DTONS in this report result from comparison of 2006 survey data to the largest scale charts covering the survey area.

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
H11583_DtoN_importlist.xls	1	0.00	000.0	Primary

**Hydrographer Recommendations**

Chart a 39 ft obstruction at the given location.

**Cartographically-Rounded Depth (Affected Charts):**

39ft (11377\_1, 11376\_1)

6 ½fm (1115A\_1, 11360\_1, 11006\_1, 411\_1)

**S-57 Data**

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 SORDAT - 20060629  
 SORIND - US,US,surve,H11583  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 11.8902439024 m

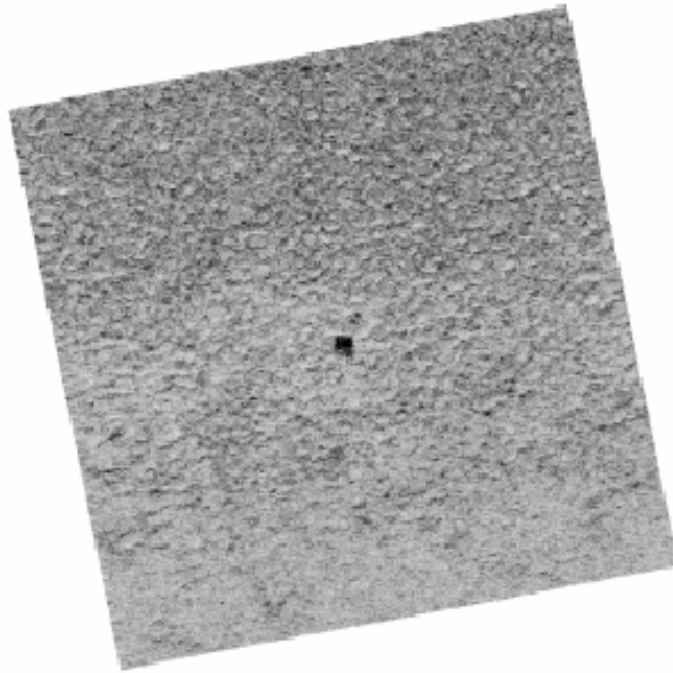
VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## Office Notes

Survey data has been submitted to AHB. The submitted Danger to Nav feature has been verified by hydrographic processing branch. Concur See Bluenotes for final charting recommendation.

## Feature Images



*Figure 1.1.1*

## 1.2) Obstruction - b

### DANGER TO NAVIGATION

#### Survey Summary

**Survey Position:** 030° 08' 48.600" N, 87° 54' 49.100" W  
**Least Depth:** 11.28 m  
**Timestamp:** [None]  
**GP Dataset:** H11583\_DtoN\_importlist.xls  
**GP No.:** 2  
**Charts Affected:** 11377\_1, 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

**Remarks:**

The DTONS in this report result from comparison of 2006 survey data to the largest scale charts covering the survey area.

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
H11583_DtoN_importlist.xls	2	0.00	000.0	Primary

#### Hydrographer Recommendations

Chart a 37 ft obstruction at the given location.

**Cartographically-Rounded Depth (Affected Charts):**

37ft (11377\_1, 11376\_1)

6fm (1115A\_1, 11360\_1, 11006\_1, 411\_1)

#### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 SORDAT - 20060629  
 SORIND - US,US,surve,H11583  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 11.2804878049 m

---

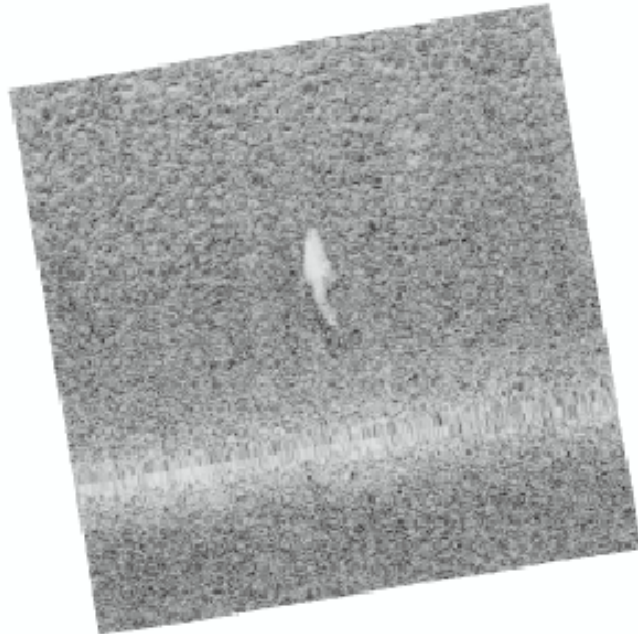
VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## Office Notes

Survey data has been submitted to AHB. The submitted Danger to Nav feature has been verified by hydrographic processing branch. Concur See Bluenotes for final charting recommendation.

### Feature Images



*Figure 1.2.1*

### 1.3) Obstruction - c

## DANGER TO NAVIGATION

### Survey Summary

**Survey Position:** 030° 08' 36.600" N, 87° 55' 43.000" W  
**Least Depth:** 12.20 m  
**Timestamp:** [None]  
**GP Dataset:** H11583\_DtoN\_importlist.xls  
**GP No.:** 3  
**Charts Affected:** 11377\_1, 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

**Remarks:**

The DTONS in this report result from comparison of 2006 survey data to the largest scale charts covering the survey area.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
H11583_DtoN_importlist.xls	3	0.00	000.0	Primary

### Hydrographer Recommendations

Chart a 40 ft obstruction at the given location.

**Cartographically-Rounded Depth (Affected Charts):**

40ft (11377\_1, 11376\_1)

6 ½fm (1115A\_1, 11360\_1, 11006\_1, 411\_1)

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 SORDAT - 20060629  
 SORIND - US,US,surve,H11583  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 12.1951219512 m



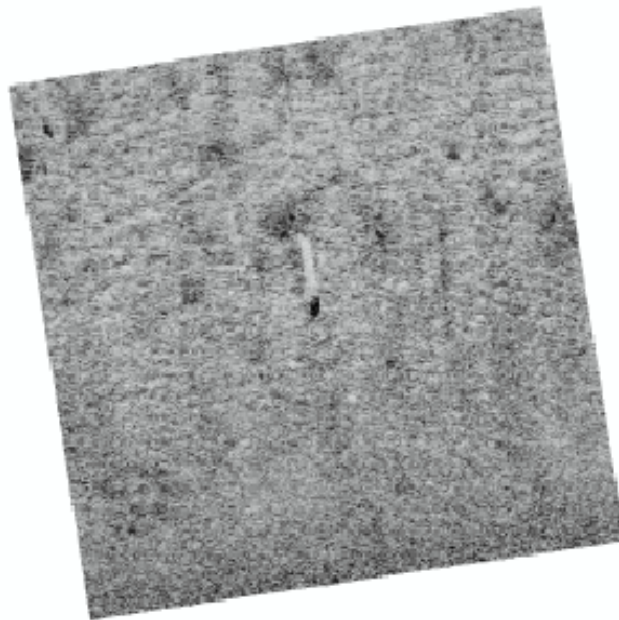
VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## Office Notes

Survey data has been submitted to AHB. The submitted Danger to Nav feature has been verified by hydrographic processing branch. Concur See Bluenotes for final charting recommendation.

## Feature Images



*Figure 1.3.1*

## 1.4) Obstruction - g

### DANGER TO NAVIGATION

#### Survey Summary

**Survey Position:** 030° 08' 24.000" N, 88° 00' 52.700" W  
**Least Depth:** 15.85 m  
**Timestamp:** [None]  
**GP Dataset:** H11583\_DtoN\_importlist.xls  
**GP No.:** 7  
**Charts Affected:** 11377\_1, 11378\_7, 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

**Remarks:**

The DTONS in this report result from comparison of 2006 survey data to the largest scale charts covering the survey area.

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
H11583_DtoN_importlist.xls	7	0.00	000.0	Primary

#### Hydrographer Recommendations

Chart a 52 ft obstruction at the given location.

**Cartographically-Rounded Depth (Affected Charts):**

52ft (11377\_1, 11378\_7, 11376\_1)  
 8 ½fm (1115A\_1, 11360\_1, 11006\_1, 411\_1)

#### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 SORDAT - 20060629  
 SORIND - US,US,surve,H11583  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 15.8536585366 m

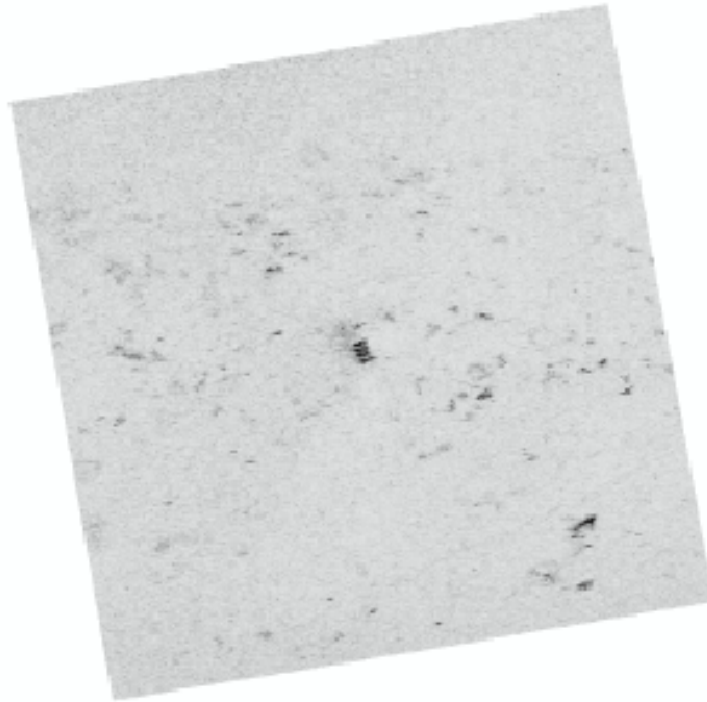
VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## Office Notes

Survey data has been submitted to AHB. The submitted Danger to Nav feature has been verified by hydrographic processing branch. Concur See Bluenotes for final charting recommendation.

## Feature Images



*Figure 1.4.1*

## 1.5) Obstruction - h

### DANGER TO NAVIGATION

#### Survey Summary

**Survey Position:** 030° 08' 16.800" N, 87° 55' 21.700" W  
**Least Depth:** 12.80 m  
**Timestamp:** [None]  
**GP Dataset:** H11583\_DtoN\_importlist.xls  
**GP No.:** 8  
**Charts Affected:** 11377\_1, 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

**Remarks:**

The DTONS in this report result from comparison of 2006 survey data to the largest scale charts covering the survey area.

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
H11583_DtoN_importlist.xls	8	0.00	000.0	Primary

#### Hydrographer Recommendations

Chart a 42 ft obstruction at the given location.

**Cartographically-Rounded Depth (Affected Charts):**

42ft (11377\_1, 11376\_1)

7fm (1115A\_1, 11360\_1, 11006\_1, 411\_1)

#### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 SORDAT - 20060629  
 SORIND - US,US,surve,H11583  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 12.8048780488 m

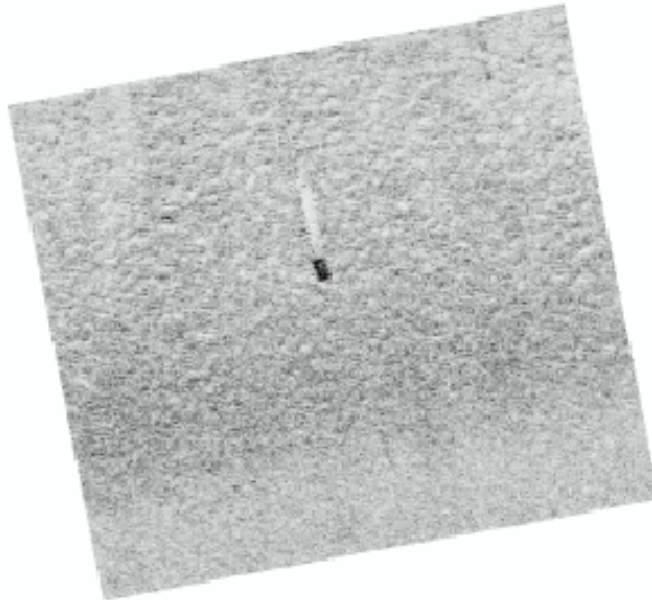
VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## Office Notes

Survey data has been submitted to AHB. The submitted Danger to Nav feature has been verified by hydrographic processing branch. Concur See Bluenotes for final charting recommendation.

### Feature Images



*Figure 1.5.1*

**1.6) Obstruction - k**

**DANGER TO NAVIGATION**

**Survey Summary**

**Survey Position:** 030° 08' 06.800" N, 88° 00' 07.600" W  
**Least Depth:** 15.55 m  
**Timestamp:** [None]  
**GP Dataset:** H11583\_DtoN\_importlist.xls  
**GP No.:** 11  
**Charts Affected:** 11377\_1, 11378\_7, 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

**Remarks:**

The DTONS in this report result from comparison of 2006 survey data to the largest scale charts covering the survey area.

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
H11583_DtoN_importlist.xls	11	0.00	000.0	Primary

**Hydrographer Recommendations**

Chart a 51 ft obstruction at the given location.

**Cartographically-Rounded Depth (Affected Charts):**

51ft (11377\_1, 11378\_7, 11376\_1)  
 8 ½fm (1115A\_1, 11360\_1, 11006\_1, 411\_1)

**S-57 Data**

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 SORDAT - 20060629  
 SORIND - US,US,surve,H11583  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 15.5487804878 m

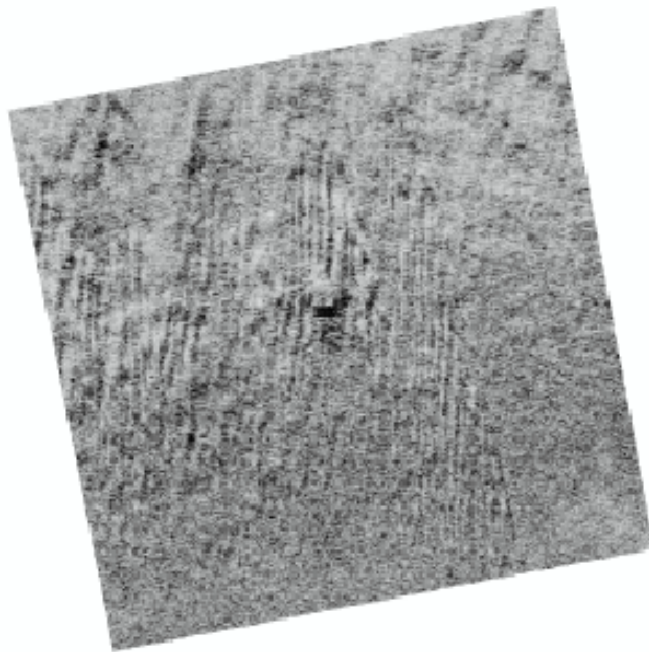
VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## Office Notes

Survey data has been submitted to AHB. The submitted Danger to Nav feature has been verified by hydrographic processing branch. Concur See Bluenotes for final charting recommendation.

## Feature Images



*Figure 1.6.1*

## 1.7) Obstruction - 1

### DANGER TO NAVIGATION

#### Survey Summary

**Survey Position:** 030° 08' 06.500" N, 88° 00' 34.400" W  
**Least Depth:** 14.02 m  
**Timestamp:** [None]  
**GP Dataset:** H11583\_DtoN\_importlist.xls  
**GP No.:** 12  
**Charts Affected:** 11377\_1, 11378\_7, 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

**Remarks:**

The DTONS in this report result from comparison of 2006 survey data to the largest scale charts covering the survey area.

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
H11583_DtoN_importlist.xls	12	0.00	000.0	Primary

#### Hydrographer Recommendations

Chart a 46 ft obstruction at the given location.

**Cartographically-Rounded Depth (Affected Charts):**

46ft (11377\_1, 11378\_7, 11376\_1)

7 ½fm (1115A\_1, 11360\_1, 11006\_1, 411\_1)

#### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 SORDAT - 20060629  
 SORIND - US,US,surve,H11583  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 14.0243902439 m



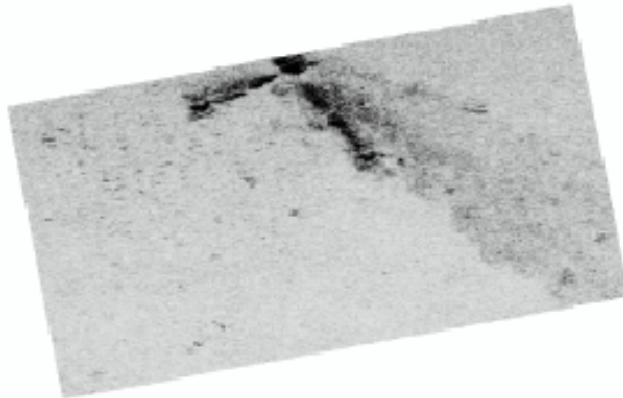
VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## Office Notes

Survey data has been submitted to AHB. The submitted Danger to Nav feature has been verified by hydrographic processing branch. Concur See Bluenotes for final charting recommendation.

## Feature Images



*Figure 1.7.1*

## 1.8) Obstruction - o

### DANGER TO NAVIGATION

#### Survey Summary

**Survey Position:** 030° 08' 01.300" N, 87° 57' 56.000" W  
**Least Depth:** 13.11 m  
**Timestamp:** [None]  
**GP Dataset:** H11583\_DtoN\_importlist.xls  
**GP No.:** 15  
**Charts Affected:** 11377\_1, 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

**Remarks:**

The DTONS in this report result from comparison of 2006 survey data to the largest scale charts covering the survey area.

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
H11583_DtoN_importlist.xls	15	0.00	000.0	Primary

#### Hydrographer Recommendations

Chart a 43 ft obstruction at the given location.

**Cartographically-Rounded Depth (Affected Charts):**

43ft (11377\_1, 11376\_1)

7fm (1115A\_1, 11360\_1, 11006\_1, 411\_1)

#### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 SORDAT - 20060629  
 SORIND - US,US,surve,H11583  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 13.1097560976 m

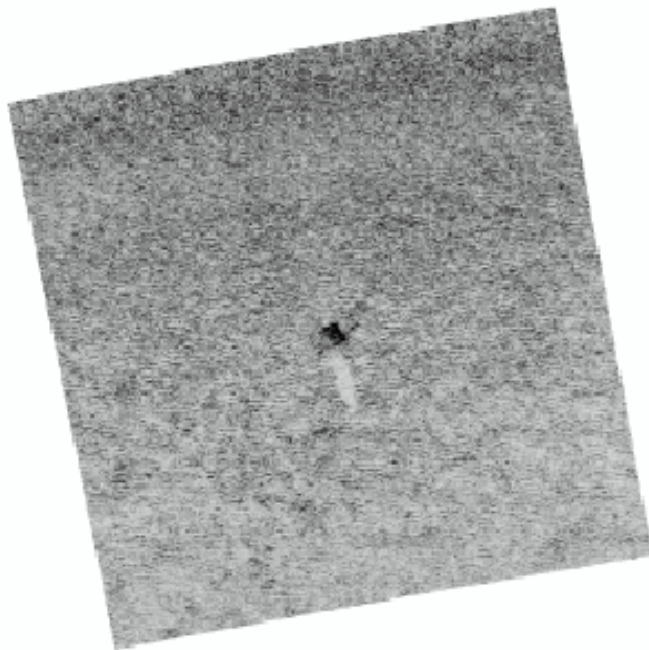
VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## Office Notes

Survey data has been submitted to AHB. The submitted Danger to Nav feature has been verified by hydrographic processing branch. Concur See Bluenotes for final charting recommendation.

## Feature Images



*Figure 1.8.1*

## 1.9) Obstruction - q

### DANGER TO NAVIGATION

#### Survey Summary

**Survey Position:** 030° 07' 57.900" N, 87° 54' 35.000" W  
**Least Depth:** 14.02 m  
**Timestamp:** [None]  
**GP Dataset:** H11583\_DtoN\_importlist.xls  
**GP No.:** 17  
**Charts Affected:** 11377\_1, 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

**Remarks:**

The DTONS in this report result from comparison of 2006 survey data to the largest scale charts covering the survey area.

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
H11583_DtoN_importlist.xls	17	0.00	000.0	Primary

#### Hydrographer Recommendations

Chart a 46 ft obstruction at the given location.

**Cartographically-Rounded Depth (Affected Charts):**

46ft (11377\_1, 11376\_1)

7 ½fm (1115A\_1, 11360\_1, 11006\_1, 411\_1)

#### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 SORDAT - 20060629  
 SORIND - US,US,surve,H11583  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 14.0243902439 m

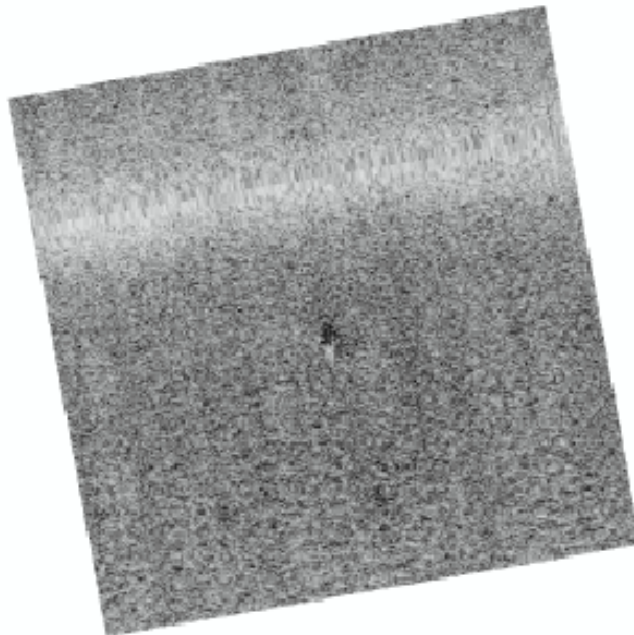
VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## Office Notes

Survey data has been submitted to AHB. The submitted Danger to Nav feature has been verified by hydrographic processing branch. Concur See Bluenotes for final charting recommendation.

## Feature Images



*Figure 1.9.1*

**1.10) Obstruction - r**

**DANGER TO NAVIGATION**

**Survey Summary**

**Survey Position:** 030° 07' 56.300" N, 88° 00' 47.500" W  
**Least Depth:** 16.77 m  
**Timestamp:** [None]  
**GP Dataset:** H11583\_DtoN\_importlist.xls  
**GP No.:** 18  
**Charts Affected:** 11377\_1, 11378\_7, 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

**Remarks:**

The DTONS in this report result from comparison of 2006 survey data to the largest scale charts covering the survey area.

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
H11583_DtoN_importlist.xls	18	0.00	000.0	Primary

**Hydrographer Recommendations**

Chart a 55 ft obstruction at the given location.

**Cartographically-Rounded Depth (Affected Charts):**

55ft (11377\_1, 11378\_7, 11376\_1)  
 9fm (1115A\_1, 11360\_1, 11006\_1, 411\_1)

**S-57 Data**

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 SORDAT - 20060629  
 SORIND - US,US,surve,H11583  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 16.7682926829 m

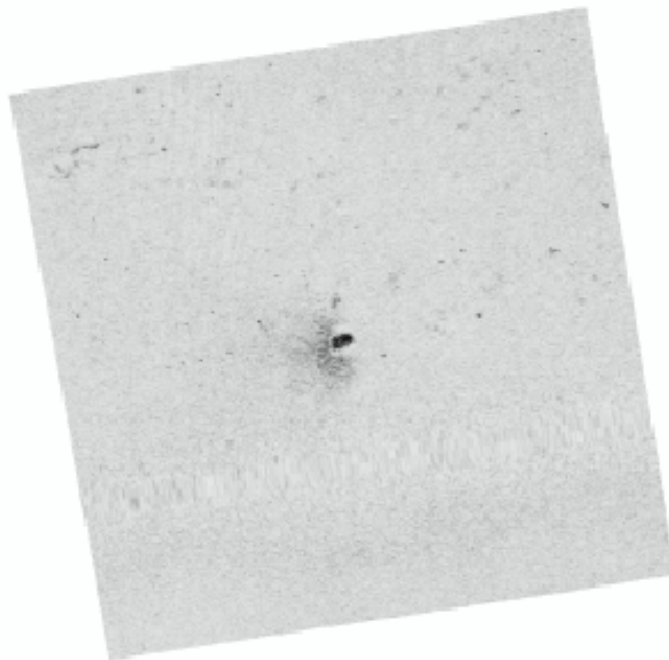
VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## Office Notes

Survey data has been submitted to AHB. The submitted Danger to Nav feature has been verified by hydrographic processing branch. Concur See Bluenotes for final charting recommendation.

## Feature Images



*Figure 1.10.1*

**1.11) Obstruction - t**

**DANGER TO NAVIGATION**

**Survey Summary**

**Survey Position:** 030° 07' 51.400" N, 87° 54' 58.300" W  
**Least Depth:** 13.41 m  
**Timestamp:** [None]  
**GP Dataset:** H11583\_DtoN\_importlist.xls  
**GP No.:** 20  
**Charts Affected:** 11377\_1, 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

**Remarks:**

The DTONS in this report result from comparison of 2006 survey data to the largest scale charts covering the survey area.

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
H11583_DtoN_importlist.xls	20	0.00	000.0	Primary

**Hydrographer Recommendations**

Chart a 44 ft obstruction at the given location.

**Cartographically-Rounded Depth (Affected Charts):**

44ft (11377\_1, 11376\_1)

7 ¼fm (1115A\_1, 11360\_1, 11006\_1, 411\_1)

**S-57 Data**

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 SORDAT - 20060629  
 SORIND - US,US,surve,H11583  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 13.411 m



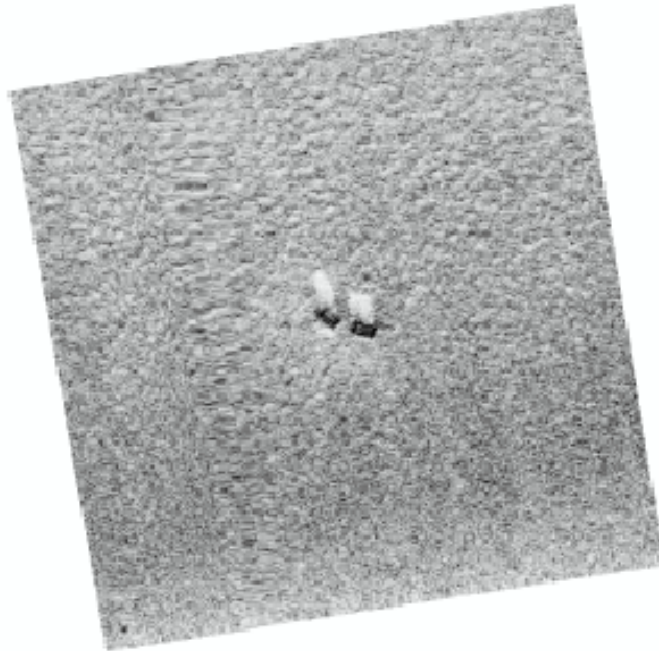
VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## Office Notes

Survey data has been submitted to AHB. The submitted Danger to Nav feature has been verified by hydrographic processing branch. Concur See Bluenotes for final charting recommendation.

## Feature Images



*Figure 1.11.1*

**1.12) Obstruction - u**

**DANGER TO NAVIGATION**

**Survey Summary**

**Survey Position:** 030° 07' 51.200" N, 87° 56' 14.700" W  
**Least Depth:** 13.41 m  
**Timestamp:** [None]  
**GP Dataset:** H11583\_DtoN\_importlist.xls  
**GP No.:** 21  
**Charts Affected:** 11377\_1, 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

**Remarks:**

The DTONS in this report result from comparison of 2006 survey data to the largest scale charts covering the survey area.

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
H11583_DtoN_importlist.xls	21	0.00	000.0	Primary

**Hydrographer Recommendations**

Chart a 44 ft obstruction at the given location.

**Cartographically-Rounded Depth (Affected Charts):**

44ft (11377\_1, 11376\_1)

7 ¼fm (1115A\_1, 11360\_1, 11006\_1, 411\_1)

**S-57 Data**

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 SORDAT - 20060629  
 SORIND - US,US,surve,H11583  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 13.4146341463 m

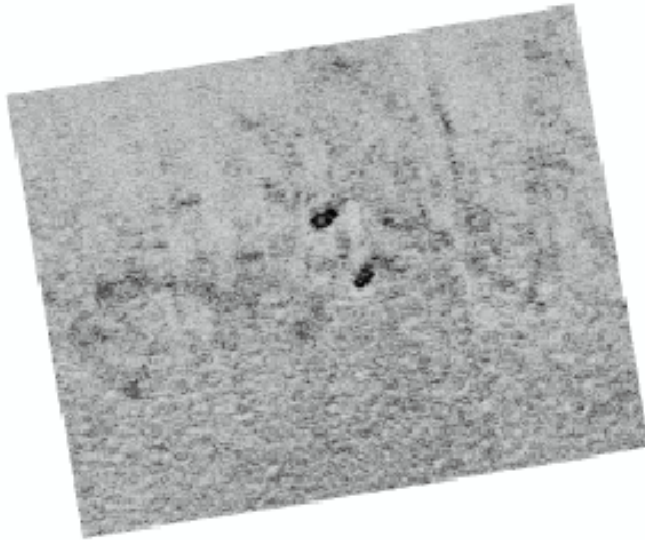
VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## Office Notes

Survey data has been submitted to AHB. The submitted Danger to Nav feature has been verified by hydrographic processing branch. Concur See Bluenotes for final charting recommendation.

## Feature Images



*Figure 1.12.1*

**1.13) Obstruction - v**

**DANGER TO NAVIGATION**

**Survey Summary**

**Survey Position:** 030° 07' 48.600" N, 88° 03' 38.800" W  
**Least Depth:** 15.85 m  
**Timestamp:** [None]  
**GP Dataset:** H11583\_DtoN\_importlist.xls  
**GP No.:** 22  
**Charts Affected:** 11377\_1, 11378\_7, 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

**Remarks:**

The DTONS in this report result from comparison of 2006 survey data to the largest scale charts covering the survey area.

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
H11583_DtoN_importlist.xls	22	0.00	000.0	Primary

**Hydrographer Recommendations**

Chart a 52 ft obstruction at the given location.

**Cartographically-Rounded Depth (Affected Charts):**

52ft (11377\_1, 11378\_7, 11376\_1)  
 8 ½fm (1115A\_1, 11360\_1, 11006\_1, 411\_1)

**S-57 Data**

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 SORDAT - 20060629  
 SORIND - US,US,surve,H11583  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 15.8536585366 m

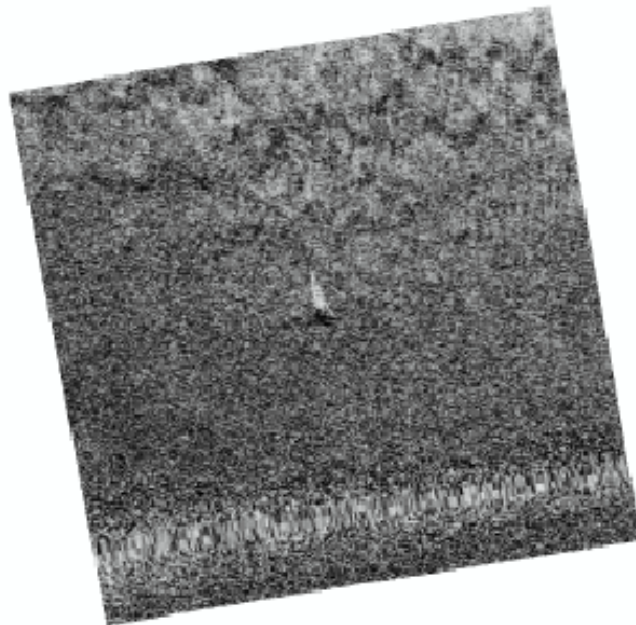
VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## Office Notes

Survey data has been submitted to AHB. The submitted Danger to Nav feature has been verified by hydrographic processing branch. Concur See Bluenotes for final charting recommendation.

## Feature Images



*Figure 1.13.1*

**1.14) Obstruction - x**

**DANGER TO NAVIGATION**

**Survey Summary**

**Survey Position:** 030° 07' 48.000" N, 87° 55' 36.900" W  
**Least Depth:** 13.72 m  
**Timestamp:** [None]  
**GP Dataset:** H11583\_DtoN\_importlist.xls  
**GP No.:** 24  
**Charts Affected:** 11377\_1, 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

**Remarks:**

The DTONS in this report result from comparison of 2006 survey data to the largest scale charts covering the survey area.

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
H11583_DtoN_importlist.xls	24	0.00	000.0	Primary

**Hydrographer Recommendations**

Chart a 45 ft obstruction at the given location.

**Cartographically-Rounded Depth (Affected Charts):**

45ft (11377\_1, 11376\_1)

7 ½fm (1115A\_1, 11360\_1, 11006\_1, 411\_1)

**S-57 Data**

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 SORDAT - 20060629  
 SORIND - US,US,surve,H11583  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 13.7195121951 m

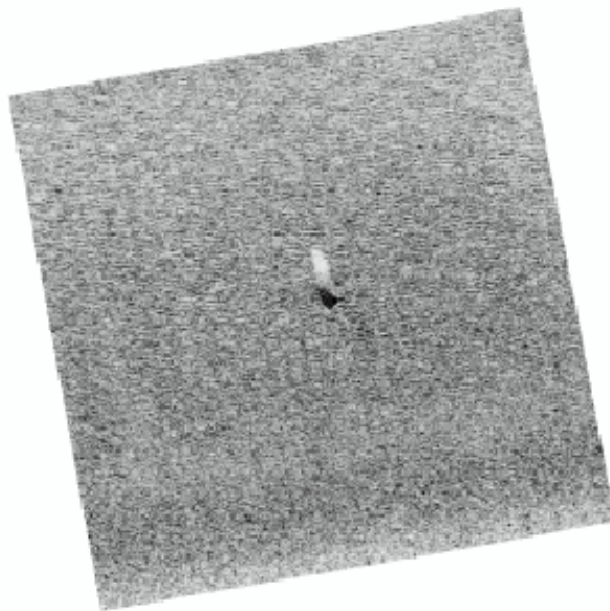
VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## Office Notes

Survey data has been submitted to AHB. The submitted Danger to Nav feature has been verified by hydrographic processing branch. Concur See Bluenotes for final charting recommendation.

## Feature Images



*Figure 1.14.1*

**1.15) Obstruction - ac**

**DANGER TO NAVIGATION**

**Survey Summary**

**Survey Position:** 030° 07' 40.700" N, 87° 56' 59.900" W  
**Least Depth:** 12.80 m  
**Timestamp:** [None]  
**GP Dataset:** H11583\_DtoN\_importlist.xls  
**GP No.:** 29  
**Charts Affected:** 11377\_1, 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

**Remarks:**

The DTONS in this report result from comparison of 2006 survey data to the largest scale charts covering the survey area.

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
H11583_DtoN_importlist.xls	29	0.00	000.0	Primary

**Hydrographer Recommendations**

Chart a 42 ft obstruction at the given location.

**Cartographically-Rounded Depth (Affected Charts):**

42ft (11377\_1, 11376\_1)

7fm (1115A\_1, 11360\_1, 11006\_1, 411\_1)

**S-57 Data**

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 SORDAT - 20060629  
 SORIND - US,US,surve,H11583  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 12.8048780488 m



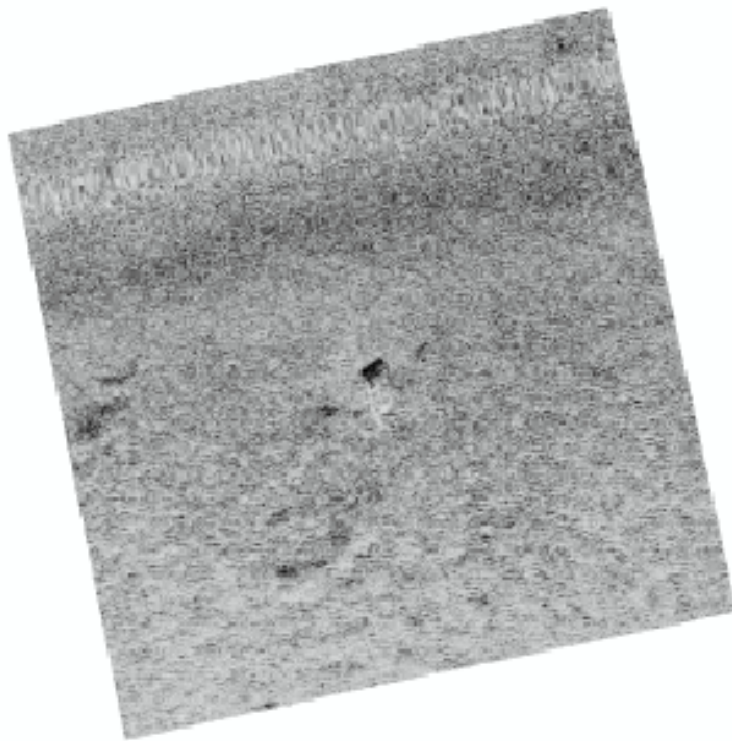
VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## Office Notes

Survey data has been submitted to AHB. The submitted Danger to Nav feature has been verified by hydrographic processing branch. Concur  
See Bluenotes for final charting recommendation.

## Feature Images



*Figure 1.15.1*

**1.16) Obstruction - ad**

**DANGER TO NAVIGATION**

**Survey Summary**

**Survey Position:** 030° 07' 40.300" N, 87° 53' 14.200" W  
**Least Depth:** 13.72 m  
**Timestamp:** [None]  
**GP Dataset:** H11583\_DtoN\_importlist.xls  
**GP No.:** 30  
**Charts Affected:** 11377\_1, 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

**Remarks:**

The DTONS in this report result from comparison of 2006 survey data to the largest scale charts covering the survey area.

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
H11583_DtoN_importlist.xls	30	0.00	000.0	Primary

**Hydrographer Recommendations**

Chart a 45 ft obstruction at the given location.

**Cartographically-Rounded Depth (Affected Charts):**

45ft (11377\_1, 11376\_1)

7 ½fm (1115A\_1, 11360\_1, 11006\_1, 411\_1)

**S-57 Data**

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 SORDAT - 20060629  
 SORIND - US,US,surve,H11583  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 13.7195121951 m

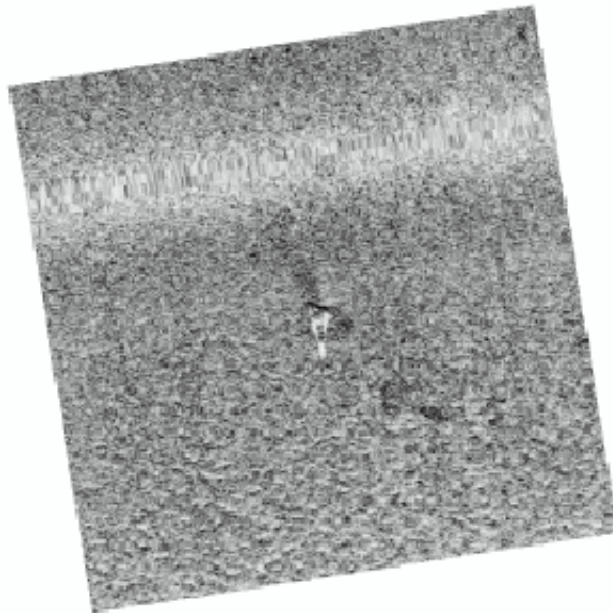
VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## Office Notes

Survey data has been submitted to AHB. The submitted Danger to Nav feature has been verified by hydrographic processing branch. Concur  
See Bluenotes for final charting recommendation.

## Feature Images



*Figure 1.16.1*

**1.17) Obstruction - af**

**DANGER TO NAVIGATION**

**Survey Summary**

**Survey Position:** 030° 07' 34.300" N, 87° 56' 25.400" W  
**Least Depth:** 13.41 m  
**Timestamp:** [None]  
**GP Dataset:** H11583\_DtoN\_importlist.xls  
**GP No.:** 32  
**Charts Affected:** 11377\_1, 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

**Remarks:**

The DTONS in this report result from comparison of 2006 survey data to the largest scale charts covering the survey area.

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
H11583_DtoN_importlist.xls	32	0.00	000.0	Primary

**Hydrographer Recommendations**

Chart a 44 ft obstruction at the given location.

**Cartographically-Rounded Depth (Affected Charts):**

44ft (11377\_1, 11376\_1)

7 ¼fm (1115A\_1, 11360\_1, 11006\_1, 411\_1)

**S-57 Data**

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 SORDAT - 20060629  
 SORIND - US,US,surve,H11583  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 13.4146341463 m

VERDAT - 12:Mean lower low water

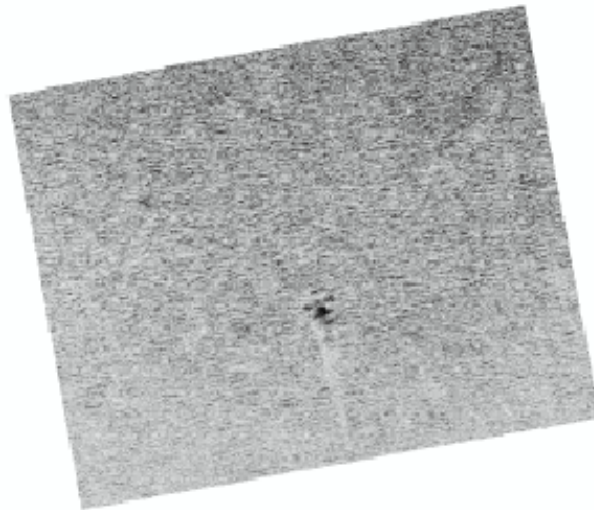
WATLEV - 3:always under water/submerged

## Office Notes

Survey data has been submitted to AHB. The submitted Danger to Nav feature has been verified by hydrographic processing branch. Concur

See Bluenotes for final charting recommendation.

## Feature Images



*Figure 1.17.1*

**1.18) Obstruction - ag**

**DANGER TO NAVIGATION**

**Survey Summary**

**Survey Position:** 030° 07' 33.000" N, 87° 57' 28.500" W  
**Least Depth:** 12.50 m  
**Timestamp:** [None]  
**GP Dataset:** H11583\_DtoN\_importlist.xls  
**GP No.:** 33  
**Charts Affected:** 11377\_1, 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

**Remarks:**

The DTONS in this report result from comparison of 2006 survey data to the largest scale charts covering the survey area.

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
H11583_DtoN_importlist.xls	33	0.00	000.0	Primary

**Hydrographer Recommendations**

Chart a 41 ft obstruction at the given location.

**Cartographically-Rounded Depth (Affected Charts):**

41ft (11377\_1, 11376\_1)

6 ¾fm (1115A\_1, 11360\_1, 11006\_1, 411\_1)

**S-57 Data**

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 SORDAT - 20060629  
 SORIND - US,US,surve,H11583  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 12.5 m

VERDAT - 12:Mean lower low water

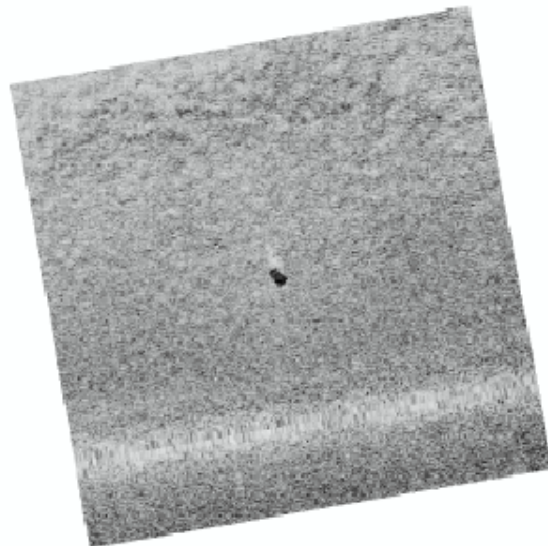
WATLEV - 3:always under water/submerged

## Office Notes

Survey data has been submitted to AHB. The submitted Danger to Nav feature has been verified by hydrographic processing branch. Concur

See Bluenotes for final charting recommendation.

## Feature Images



*Figure 1.18.1*

**1.19) Obstruction - ar**

**DANGER TO NAVIGATION**

**Survey Summary**

**Survey Position:** 030° 07' 10.600" N, 87° 55' 17.400" W  
**Least Depth:** 13.11 m  
**Timestamp:** [None]  
**GP Dataset:** H11583\_DtoN\_importlist.xls  
**GP No.:** 44  
**Charts Affected:** 11377\_1, 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

**Remarks:**

The DTONS in this report result from comparison of 2006 survey data to the largest scale charts covering the survey area.

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
H11583_DtoN_importlist.xls	44	0.00	000.0	Primary

**Hydrographer Recommendations**

Chart a 43 ft obstruction at the given location.

**Cartographically-Rounded Depth (Affected Charts):**

43ft (11377\_1, 11376\_1)

7fm (1115A\_1, 11360\_1, 11006\_1, 411\_1)

**S-57 Data**

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 SORDAT - 20060629  
 SORIND - US,US,surve,H11583  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 13.1097560976 m



VERDAT - 12:Mean lower low water

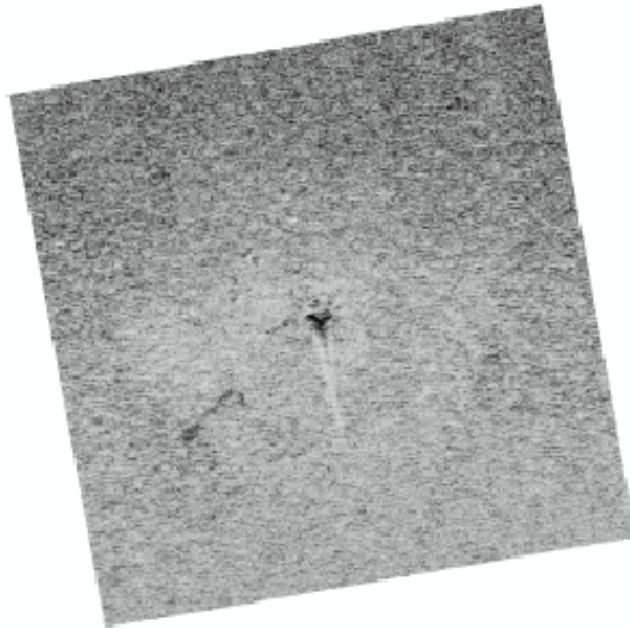
WATLEV - 3:always under water/submerged

## Office Notes

Survey data has been submitted to AHB. The submitted Danger to Nav feature has been verified by hydrographic processing branch. Concur

See Bluenotes for final charting recommendation.

## Feature Images



*Figure 1.19.1*

**1.20) Obstruction - as**

**DANGER TO NAVIGATION**

**Survey Summary**

**Survey Position:** 030° 07' 10.500" N, 87° 56' 40.900" W  
**Least Depth:** 13.11 m  
**Timestamp:** [None]  
**GP Dataset:** H11583\_DtoN\_importlist.xls  
**GP No.:** 45  
**Charts Affected:** 11377\_1, 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

**Remarks:**

The DTONS in this report result from comparison of 2006 survey data to the largest scale charts covering the survey area.

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
H11583_DtoN_importlist.xls	45	0.00	000.0	Primary

**Hydrographer Recommendations**

Chart a 43 ft obstruction at the given location.

**Cartographically-Rounded Depth (Affected Charts):**

43ft (11377\_1, 11376\_1)

7fm (1115A\_1, 11360\_1, 11006\_1, 411\_1)

**S-57 Data**

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 SORDAT - 20060629  
 SORIND - US,US,surve,H11583  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 13.1064 m

VERDAT - 12:Mean lower low water

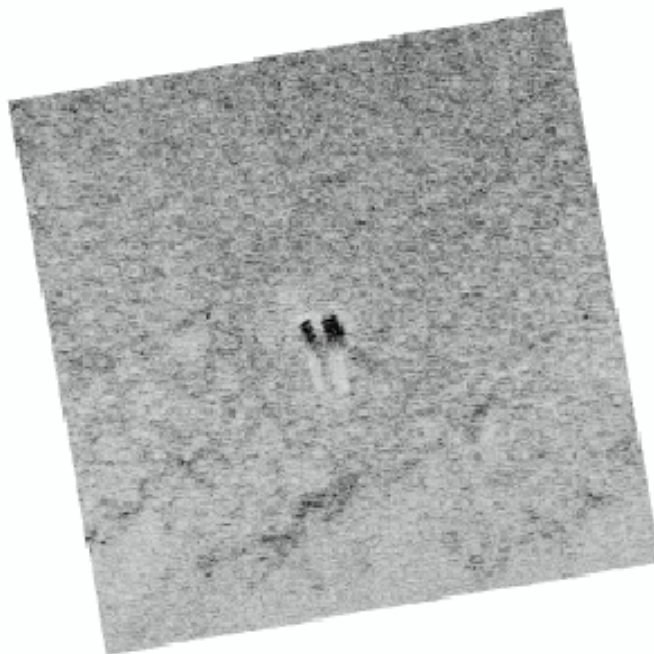
WATLEV - 3:always under water/submerged

## Office Notes

Survey data has been submitted to AHB. The submitted Danger to Nav feature has been verified by hydrographic processing branch. Concur

See Bluenotes for final charting recommendation.

## Feature Images



*Figure 1.20.1*

**1.21) Obstruction - aw**

**DANGER TO NAVIGATION**

**Survey Summary**

**Survey Position:** 030° 07' 05.600" N, 87° 58' 35.500" W  
**Least Depth:** 15.55 m  
**Timestamp:** [None]  
**GP Dataset:** H11583\_DtoN\_importlist.xls  
**GP No.:** 49  
**Charts Affected:** 11377\_1, 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

**Remarks:**

The DTONS in this report result from comparison of 2006 survey data to the largest scale charts covering the survey area.

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
H11583_DtoN_importlist.xls	49	0.00	000.0	Primary

**Hydrographer Recommendations**

Chart a 51 ft obstruction at the given location.

**Cartographically-Rounded Depth (Affected Charts):**

51ft (11377\_1, 11376\_1)

8 ½fm (1115A\_1, 11360\_1, 11006\_1, 411\_1)

**S-57 Data**

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 SORDAT - 20060629  
 SORIND - US,US,surve,H11583  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 15.5487804878 m

VERDAT - 12:Mean lower low water

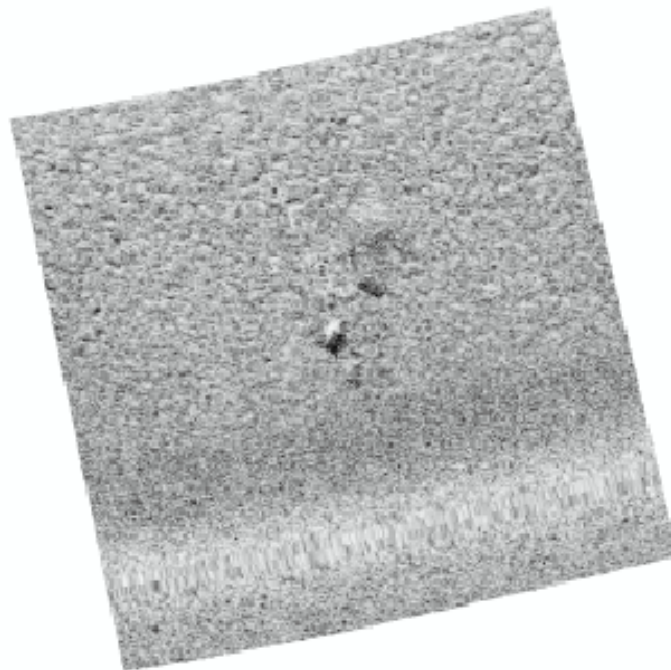
WATLEV - 3:always under water/submerged

## Office Notes

Survey data has been submitted to AHB. The submitted Danger to Nav feature has been verified by hydrographic processing branch. Concur

See Bluenotes for final charting recommendation.

## Feature Images



*Figure 1.21.1*

**1.22) Obstruction - ax**

**DANGER TO NAVIGATION**

**Survey Summary**

**Survey Position:** 030° 06' 59.100" N, 87° 58' 52.000" W  
**Least Depth:** 15.24 m  
**Timestamp:** [None]  
**GP Dataset:** H11583\_DtoN\_importlist.xls  
**GP No.:** 50  
**Charts Affected:** 11377\_1, 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

**Remarks:**

The DTONS in this report result from comparison of 2006 survey data to the largest scale charts covering the survey area.

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
H11583_DtoN_importlist.xls	50	0.00	000.0	Primary

**Hydrographer Recommendations**

Chart a 50 ft obstruction at the given location.

**Cartographically-Rounded Depth (Affected Charts):**

50ft (11377\_1, 11376\_1)

8 ¼fm (1115A\_1, 11360\_1, 11006\_1, 411\_1)

**S-57 Data**

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 SORDAT - 20060629  
 SORIND - US,US,surve,H11583  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 15.243902439 m

VERDAT - 12:Mean lower low water

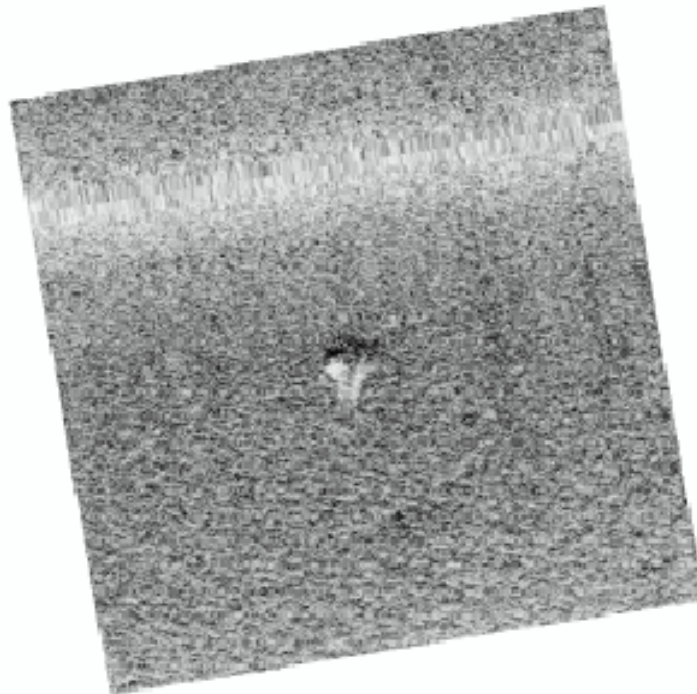
WATLEV - 3:always under water/submerged

## Office Notes

Survey data has been submitted to AHB. The submitted Danger to Nav feature has been verified by hydrographic processing branch. Concur

See Bluenotes for final charting recommendation.

## Feature Images



*Figure J.22.1*

### 1.23) Obstruction - ay

## DANGER TO NAVIGATION

### Survey Summary

**Survey Position:** 030° 06' 54.500" N, 87° 54' 44.300" W  
**Least Depth:** 13.41 m  
**Timestamp:** [None]  
**GP Dataset:** H11583\_DtoN\_importlist.xls  
**GP No.:** 51  
**Charts Affected:** 11377\_1, 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

**Remarks:**

The DTONS in this report result from comparison of 2006 survey data to the largest scale charts covering the survey area.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
H11583_DtoN_importlist.xls	51	0.00	000.0	Primary

### Hydrographer Recommendations

Chart a 44 ft obstruction at the given location.

**Cartographically-Rounded Depth (Affected Charts):**

44ft (11377\_1, 11376\_1)

7 ¼fm (1115A\_1, 11360\_1, 11006\_1, 411\_1)

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 SORDAT - 20060926  
 SORIND - US,US,surve,H11583  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 13.4146341463 m



VERDAT - 12:Mean lower low water

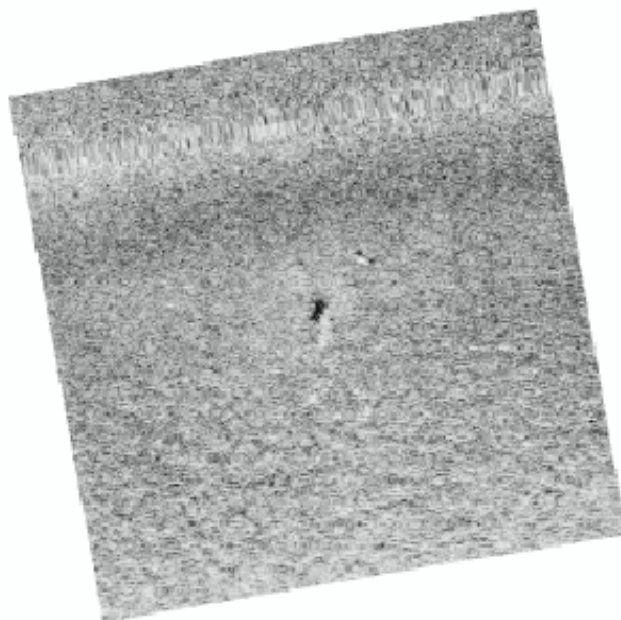
WATLEV - 3:always under water/submerged

## Office Notes

Survey data has been submitted to AHB. The submitted Danger to Nav feature has been verified by hydrographic processing branch. Concur

See Bluenotes for final charting recommendation.

### Feature Images



*Figure 1.23.1*

## 1.24) Obstruction - bf

### DANGER TO NAVIGATION

#### Survey Summary

**Survey Position:** 030° 06' 35.800" N, 87° 58' 03.300" W  
**Least Depth:** 14.63 m  
**Timestamp:** [None]  
**GP Dataset:** H11583\_DtoN\_importlist.xls  
**GP No.:** 58  
**Charts Affected:** 11377\_1, 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

**Remarks:**

The DTONS in this report result from comparison of 2006 survey data to the largest scale charts covering the survey area.

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
H11583_DtoN_importlist.xls	58	0.00	000.0	Primary

#### Hydrographer Recommendations

Chart a 48 ft obstruction at the given location.

**Cartographically-Rounded Depth (Affected Charts):**

48ft (11377\_1, 11376\_1)

8fm (1115A\_1, 11360\_1, 11006\_1, 411\_1)

#### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 SORDAT - 20060702  
 SORIND - US,US,surve,H11583  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 14.6304 m

VERDAT - 12:Mean lower low water

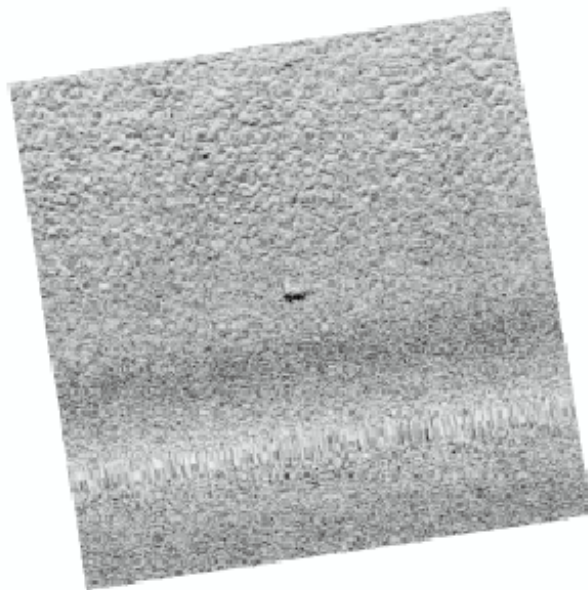
WATLEV - 3:always under water/submerged

## Office Notes

Survey data has been submitted to AHB. The submitted Danger to Nav feature has been verified by hydrographic processing branch. Concur

See Bluenotes for final charting recommendation.

## Feature Images



*Figure 1.24.1*

**1.25) Obstruction - bg**

**DANGER TO NAVIGATION**

**Survey Summary**

**Survey Position:** 030° 06' 15.900" N, 87° 59' 57.200" W  
**Least Depth:** 17.99 m  
**Timestamp:** [None]  
**GP Dataset:** H11583\_DtoN\_importlist.xls  
**GP No.:** 59  
**Charts Affected:** 11377\_1, 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

**Remarks:**

The DTONS in this report result from comparison of 2006 survey data to the largest scale charts covering the survey area.

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
H11583_DtoN_importlist.xls	59	0.00	000.0	Primary

**Hydrographer Recommendations**

Chart a 59 ft obstruction at the given location.

**Cartographically-Rounded Depth (Affected Charts):**

59ft (11377\_1, 11376\_1)

9 ¾fm (1115A\_1, 11360\_1, 11006\_1, 411\_1)

**S-57 Data**

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 SORDAT - 20060627  
 SORIND - US,US,surve,H11583  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 17.987804878 m

VERDAT - 12:Mean lower low water

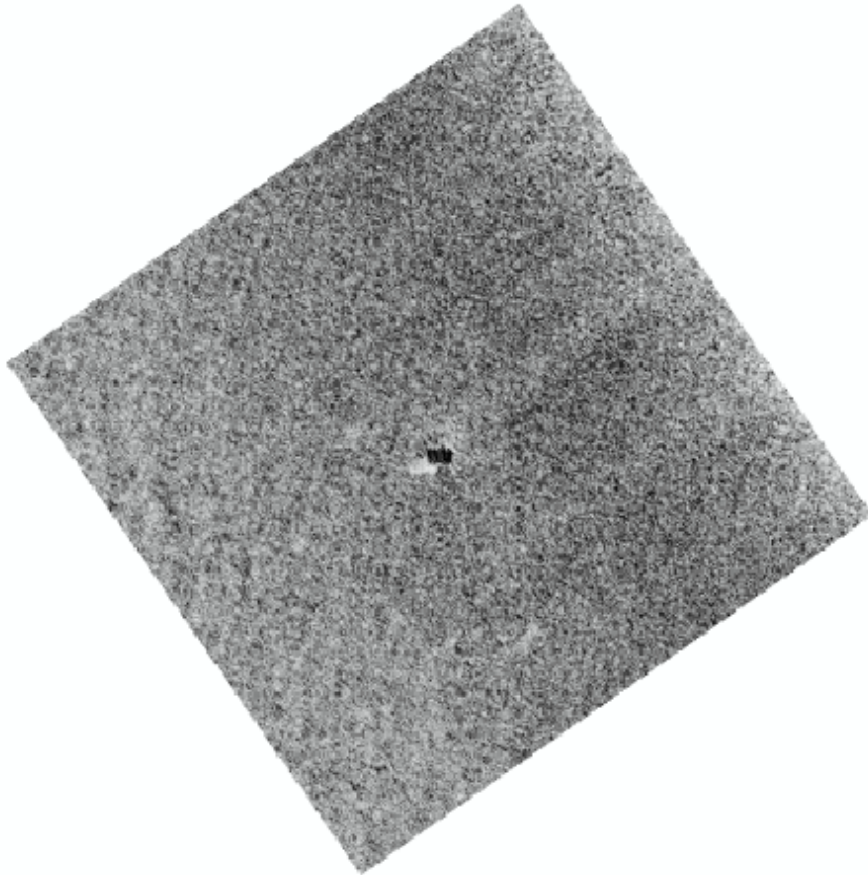
WATLEV - 3:always under water/submerged

## Office Notes

Survey data has been submitted to AHB. The submitted Danger to Nav feature has been verified by hydrographic processing branch. Concur

See Bluenotes for final charting recommendation.

### Feature Images



*Figure 1.25.1*

## 1.26) Obstruction - bh

### DANGER TO NAVIGATION

#### Survey Summary

**Survey Position:** 030° 06' 09.900" N, 88° 00' 12.500" W  
**Least Depth:** 18.60 m  
**Timestamp:** [None]  
**GP Dataset:** H11583\_DtoN\_importlist.xls  
**GP No.:** 60  
**Charts Affected:** 11377\_1, 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

**Remarks:**

The DTONS in this report result from comparison of 2006 survey data to the largest scale charts covering the survey area.

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
H11583_DtoN_importlist.xls	60	0.00	000.0	Primary

#### Hydrographer Recommendations

Chart a 61 ft obstruction at the given location.

**Cartographically-Rounded Depth (Affected Charts):**

61ft (11377\_1, 11376\_1)

10fm (1115A\_1, 11360\_1, 11006\_1, 411\_1)

#### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 SORDAT - 20060627  
 SORIND - US,US,surve,H11583  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 18.5975609756 m

VERDAT - 12:Mean lower low water

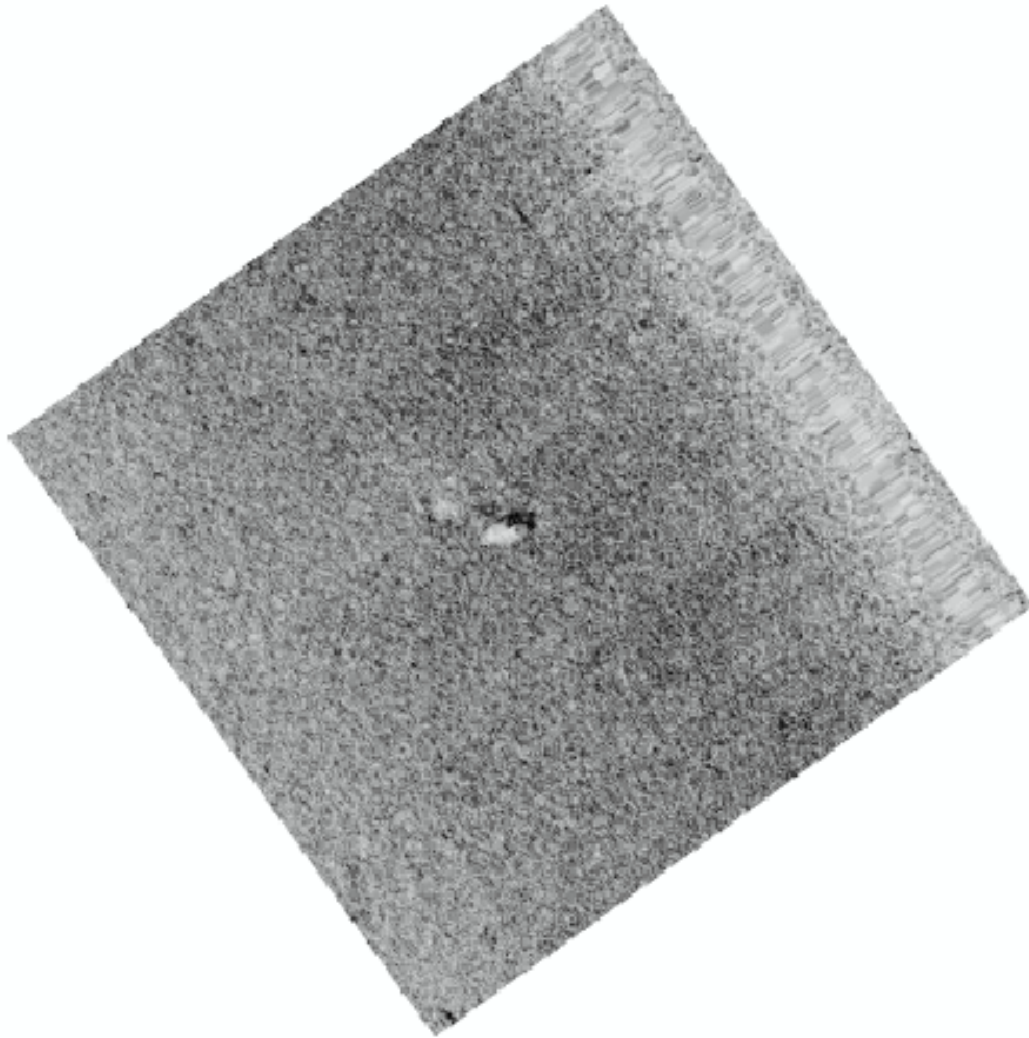
WATLEV - 3:always under water/submerged

## Office Notes

Survey data has been submitted to AHB. The submitted Danger to Nav feature has been verified by hydrographic processing branch. Concur

See Bluenotes for final charting recommendation.

### Feature Images



*Figure 1.26.1*

**1.27) Obstruction - bk**

**DANGER TO NAVIGATION**

**Survey Summary**

**Survey Position:** 030° 05' 20.000" N, 88° 01' 11.400" W  
**Least Depth:** 18.90 m  
**Timestamp:** [None]  
**GP Dataset:** H11583\_DtoN\_importlist.xls  
**GP No.:** 63  
**Charts Affected:** 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

**Remarks:**

The DTONS in this report result from comparison of 2006 survey data to the largest scale charts covering the survey area.

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
H11583_DtoN_importlist.xls	63	0.00	000.0	Primary

**Hydrographer Recommendations**

Chart a 62 ft obstruction at the given location.

**Cartographically-Rounded Depth (Affected Charts):**

62ft (11376\_1)  
 10 ¼fm (1115A\_1, 11360\_1, 11006\_1, 411\_1)

**S-57 Data**

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 RECDAT - 20070709  
 SORDAT - 20070324  
 SORIND - US,US,surve,H11583  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam



VALSOU - 18.9024390244 m

VERDAT - 12:Mean lower low water

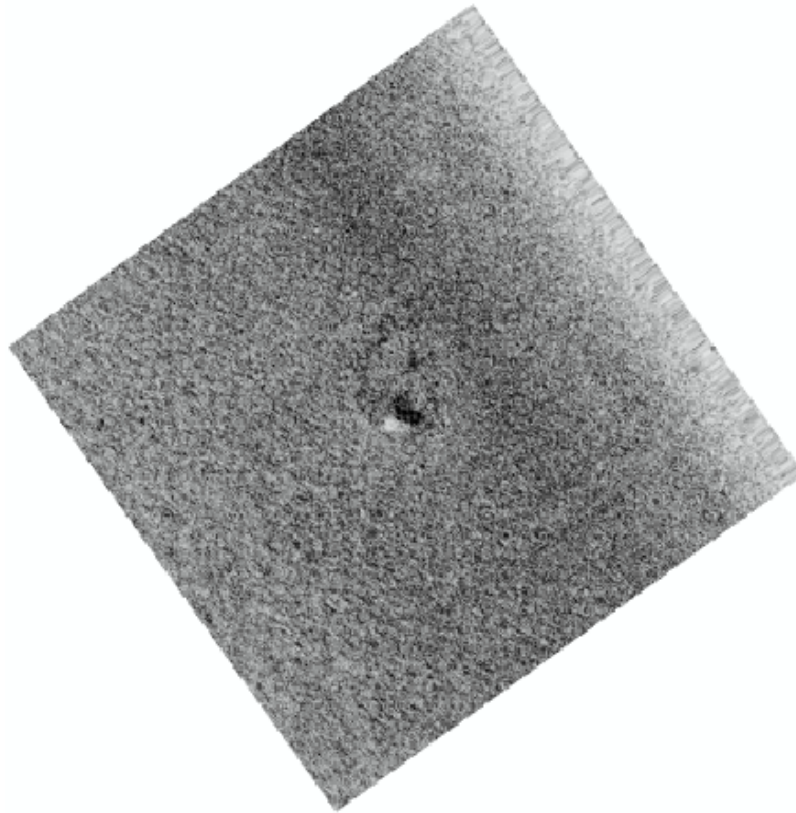
WATLEV - 3:always under water/submerged

## Office Notes

Survey data has been submitted to AHB. The submitted Danger to Nav feature has been verified by hydrographic processing branch. Concur

See Bluenotes for final charting recommendation.

### Feature Images



*Figure 1.27.1*

**1.28) Obstruction - bl**

**DANGER TO NAVIGATION**

**Survey Summary**

**Survey Position:** 030° 05' 07.000" N, 87° 59' 53.000" W  
**Least Depth:** 19.21 m  
**Timestamp:** [None]  
**GP Dataset:** H11583\_DtoN\_importlist.xls  
**GP No.:** 64  
**Charts Affected:** 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

**Remarks:**

The DTONS in this report result from comparison of 2006 survey data to the largest scale charts covering the survey area.

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
H11583_DtoN_importlist.xls	64	0.00	000.0	Primary

**Hydrographer Recommendations**

Chart a 63 ft obstruction at the given location.

**Cartographically-Rounded Depth (Affected Charts):**

63ft (11376\_1)  
 10 ½fm (1115A\_1, 11360\_1, 11006\_1, 411\_1)

**S-57 Data**

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 RECDAT - 20070709  
 SORDAT - 20070324  
 SORIND - us,us,surve,H11583  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 19.2073170732 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## Office Notes

Survey data has been submitted to AHB. The submitted Danger to Nav feature has been verified by hydrographic processing branch. Concur

See Bluenotes for final charting recommendation.

### Feature Images



*Figure 1.28.1*

**1.29) Obstruction - bm**

**DANGER TO NAVIGATION**

**Survey Summary**

**Survey Position:** 030° 05' 04.200" N, 87° 58' 20.600" W  
**Least Depth:** 17.98 m  
**Timestamp:** [None]  
**GP Dataset:** H11583\_DtoN\_importlist.xls  
**GP No.:** 65  
**Charts Affected:** 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

**Remarks:**

The DTONS in this report result from comparison of 2006 survey data to the largest scale charts covering the survey area.

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
H11583_DtoN_importlist.xls	65	0.00	000.0	Primary

**Hydrographer Recommendations**

Chart a 59 ft obstruction at the given location.

**Cartographically-Rounded Depth (Affected Charts):**

59ft (11376\_1)  
 9 ¾fm (1115A\_1, 11360\_1, 11006\_1, 411\_1)

**S-57 Data**

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 RECDAT - 20070709  
 SORDAT - 20070324  
 SORIND - US,US,surve,H11583  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 17.9832 m

VERDAT - 12:Mean lower low water

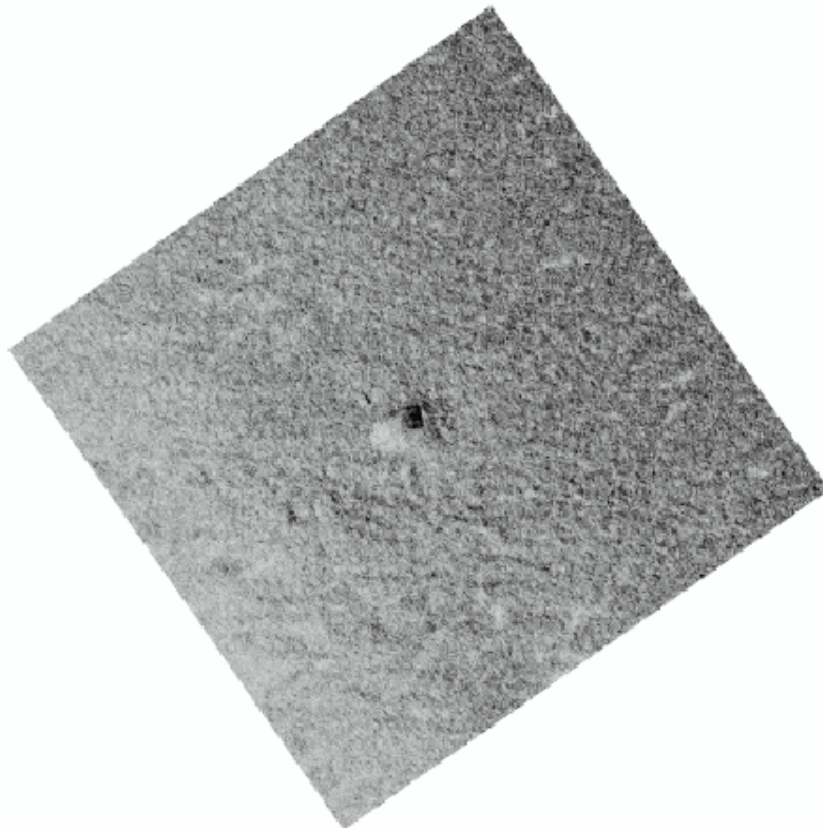
WATLEV - 3:always under water/submerged

## Office Notes

Survey data has been submitted to AHB. The submitted Danger to Nav feature has been verified by hydrographic processing branch. Concur

See Bluenotes for final charting recommendation.

## Feature Images



*Figure 1.29.1*

### 1.30) Obstruction - br

## DANGER TO NAVIGATION

### Survey Summary

**Survey Position:** 030° 04' 45.500" N, 88° 02' 30.100" W  
**Least Depth:** 19.20 m  
**Timestamp:** [None]  
**GP Dataset:** H11583\_DtoN\_importlist.xls  
**GP No.:** 70  
**Charts Affected:** 1115A\_1, 11360\_1, 11006\_1, 411\_1

**Remarks:**

The DTONS in this report result from comparison of 2006 survey data to the largest scale charts covering the survey area.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
H11583_DtoN_importlist.xls	70	0.00	000.0	Primary

### Hydrographer Recommendations

Chart a 63 ft obstruction at the given location.

**Cartographically-Rounded Depth (Affected Charts):**

10 ½fm (1115A\_1, 11360\_1, 11006\_1, 411\_1)

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 RECDAT - 20070709  
 SORDAT - 20070324  
 SORIND - US,US,surve,H11583  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 19.2024 m

VERDAT - 12:Mean lower low water

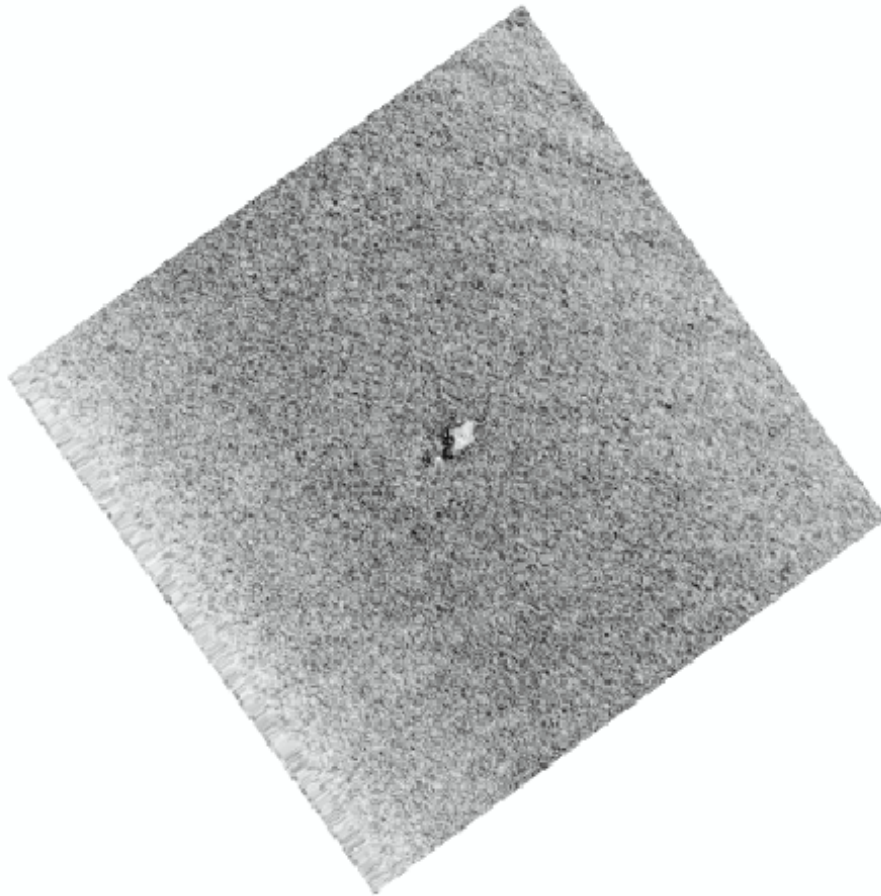
WATLEV - 3:always under water/submerged

## Office Notes

Survey data has been submitted to AHB. The submitted Danger to Nav feature has been verified by hydrographic processing branch. Concur

See Bluenotes for final charting recommendation.

## Feature Images



*Figure 1.30.1*

**1.31) Obstruction - bu**

**DANGER TO NAVIGATION**

**Survey Summary**

**Survey Position:** 030° 04' 26.300" N, 87° 58' 21.900" W  
**Least Depth:** 14.02 m  
**Timestamp:** [None]  
**GP Dataset:** H11583\_DtoN\_importlist.xls  
**GP No.:** 73  
**Charts Affected:** 1115A\_1, 11360\_1, 11006\_1, 411\_1

**Remarks:**

The DTONS in this report result from comparison of 2006 survey data to the largest scale charts covering the survey area.

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
H11583_DtoN_importlist.xls	73	0.00	000.0	Primary

**Hydrographer Recommendations**

Chart a 46 ft obstruction at the given location.

**Cartographically-Rounded Depth (Affected Charts):**

7 ½fm (1115A\_1, 11360\_1, 11006\_1, 411\_1)

**S-57 Data**

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 RECDAT - 20070709  
 SORDAT - 20070324  
 SORIND - US,US,surve,H11583  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 14.021 m



VERDAT - 12:Mean lower low water

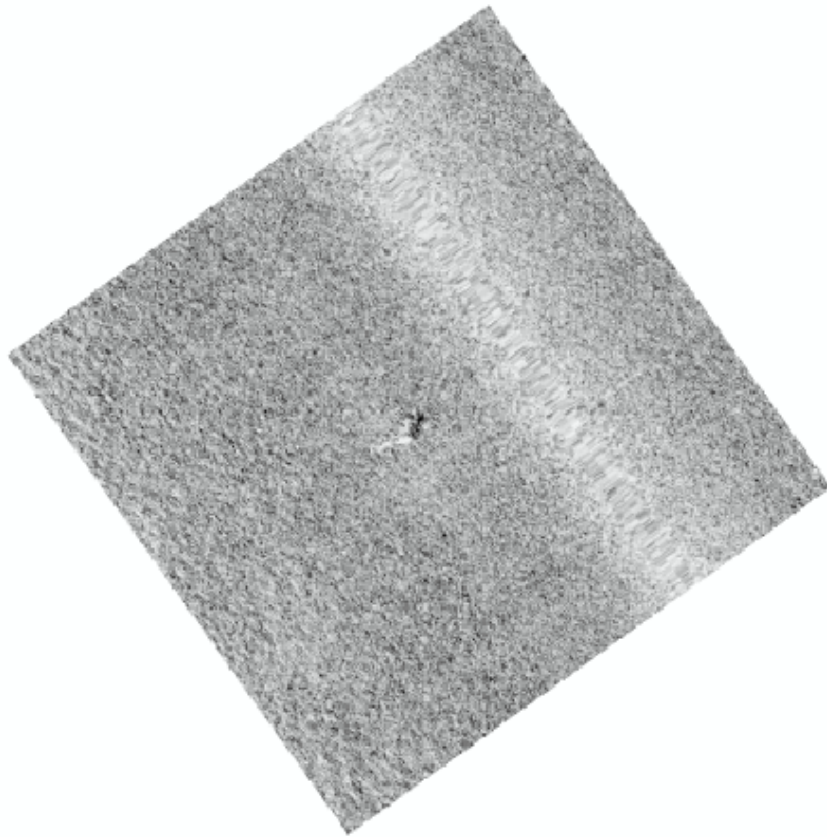
WATLEV - 3:always under water/submerged

## Office Notes

Survey data has been submitted to AHB. The submitted Danger to Nav feature has been verified by hydrographic processing branch. Concur

See Bluenotes for final charting recommendation.

### Feature Images



*Figure 1.31.1*

**1.32) Obstruction - ce**

**DANGER TO NAVIGATION**

**Survey Summary**

**Survey Position:** 030° 03' 45.800" N, 87° 59' 46.500" W  
**Least Depth:** 16.46 m  
**Timestamp:** [None]  
**GP Dataset:** H11583\_DtoN\_importlist.xls  
**GP No.:** 83  
**Charts Affected:** 1115A\_1, 11360\_1, 11006\_1, 411\_1

**Remarks:**

The DTONS in this report result from comparison of 2006 survey data to the largest scale charts covering the survey area.

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
H11583_DtoN_importlist.xls	83	0.00	000.0	Primary

**Hydrographer Recommendations**

Chart a 54 ft obstruction at the given location.

**Cartographically-Rounded Depth (Affected Charts):**

9fm (1115A\_1, 11360\_1, 11006\_1, 411\_1)

**S-57 Data**

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 RECDAT - 20070709  
 SORDAT - 20070324  
 SORIND - US,US,surve,H11583  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 16.4634146341 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## Office Notes

Survey data has been submitted to AHB. The submitted Danger to Nav feature has been verified by hydrographic processing branch. Concur

See Bluenotes for final charting recommendation.

## Feature Images



*Figure 1.32.1*

### 1.33) Obstruction - cf

## DANGER TO NAVIGATION

### Survey Summary

**Survey Position:** 030° 03' 45.800" N, 87° 59' 05.300" W  
**Least Depth:** 15.55 m  
**Timestamp:** [None]  
**GP Dataset:** H11583\_DtoN\_importlist.xls  
**GP No.:** 84  
**Charts Affected:** 1115A\_1, 11360\_1, 11006\_1, 411\_1

**Remarks:**

The DTONS in this report result from comparison of 2006 survey data to the largest scale charts covering the survey area.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
H11583_DtoN_importlist.xls	84	0.00	000.0	Primary

### Hydrographer Recommendations

Chart a 51 ft obstruction at the given location.

**Cartographically-Rounded Depth (Affected Charts):**

8 ½fm (1115A\_1, 11360\_1, 11006\_1, 411\_1)

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 RECDAT - 20070709  
 SORDAT - 20070324  
 SORIND - US,US,surve,H11583  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 15.5487804878 m

VERDAT - 12:Mean lower low water

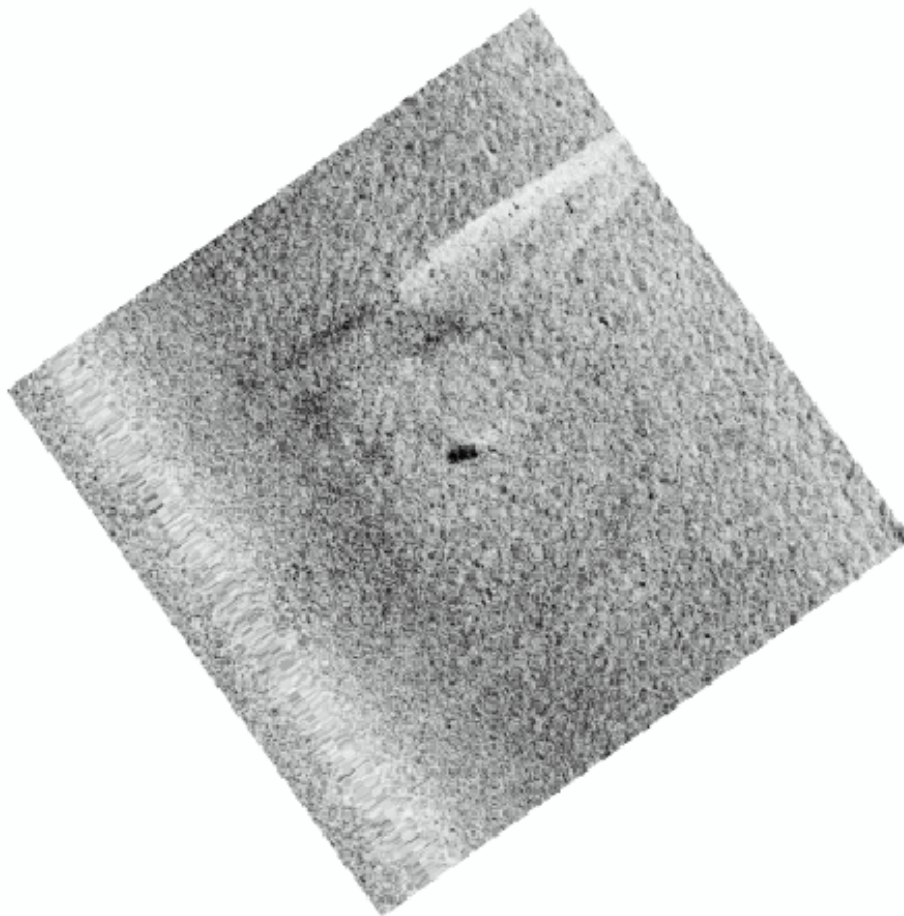
WATLEV - 3:always under water/submerged

## Office Notes

Survey data has been submitted to AHB. The submitted Danger to Nav feature has been verified by hydrographic processing branch. Concur

See Bluenotes for final charting recommendation.

## Feature Images



*Figure 1.33.1*

**1.34) Obstruction - ci**

**DANGER TO NAVIGATION**

**Survey Summary**

**Survey Position:** 030° 03' 08.200" N, 87° 59' 25.300" W  
**Least Depth:** 15.55 m  
**Timestamp:** [None]  
**GP Dataset:** H11583\_DtoN\_importlist.xls  
**GP No.:** 87  
**Charts Affected:** 1115A\_1, 11360\_1, 11006\_1, 411\_1

**Remarks:**

The DTONS in this report result from comparison of 2006 survey data to the largest scale charts covering the survey area.

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
H11583_DtoN_importlist.xls	87	0.00	000.0	Primary

**Hydrographer Recommendations**

Chart a 51 ft obstruction at the given location.

**Cartographically-Rounded Depth (Affected Charts):**

8 ½fm (1115A\_1, 11360\_1, 11006\_1, 411\_1)

**S-57 Data**

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 RECDAT - 20070709  
 SORDAT - 20070324  
 SORIND - US,US,surve,H11583  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 15.5487804878 m

VERDAT - 12:Mean lower low water

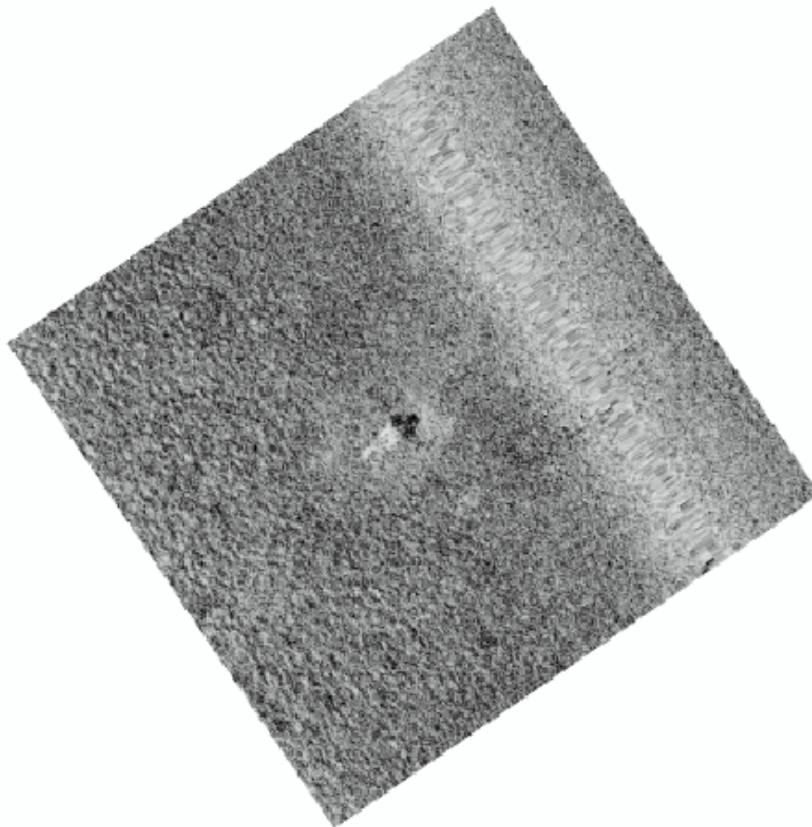
WATLEV - 3:always under water/submerged

## Office Notes

Survey data has been submitted to AHB. The submitted Danger to Nav feature has been verified by hydrographic processing branch. Concur

See Bluenotes for final charting recommendation.

### Feature Images



*Figure 1.34.1*

### 1.35) Obstruction - cj

## DANGER TO NAVIGATION

### Survey Summary

**Survey Position:** 030° 02' 57.900" N, 87° 56' 52.800" W  
**Least Depth:** 14.33 m  
**Timestamp:** [None]  
**GP Dataset:** H11583\_DtoN\_importlist.xls  
**GP No.:** 88  
**Charts Affected:** 1115A\_1, 11360\_1, 11006\_1, 411\_1

**Remarks:**

The DTONS in this report result from comparison of 2006 survey data to the largest scale charts covering the survey area.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
H11583_DtoN_importlist.xls	88	0.00	000.0	Primary

### Hydrographer Recommendations

Chart a 47 ft obstruction at the given location.

**Cartographically-Rounded Depth (Affected Charts):**

7 ¾fm (1115A\_1, 11360\_1, 11006\_1, 411\_1)

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 RECDAT - 20070709  
 SORDAT - 20070324  
 SORIND - US,US,surve,H11583  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 14.3292682927 m



VERDAT - 12:Mean lower low water

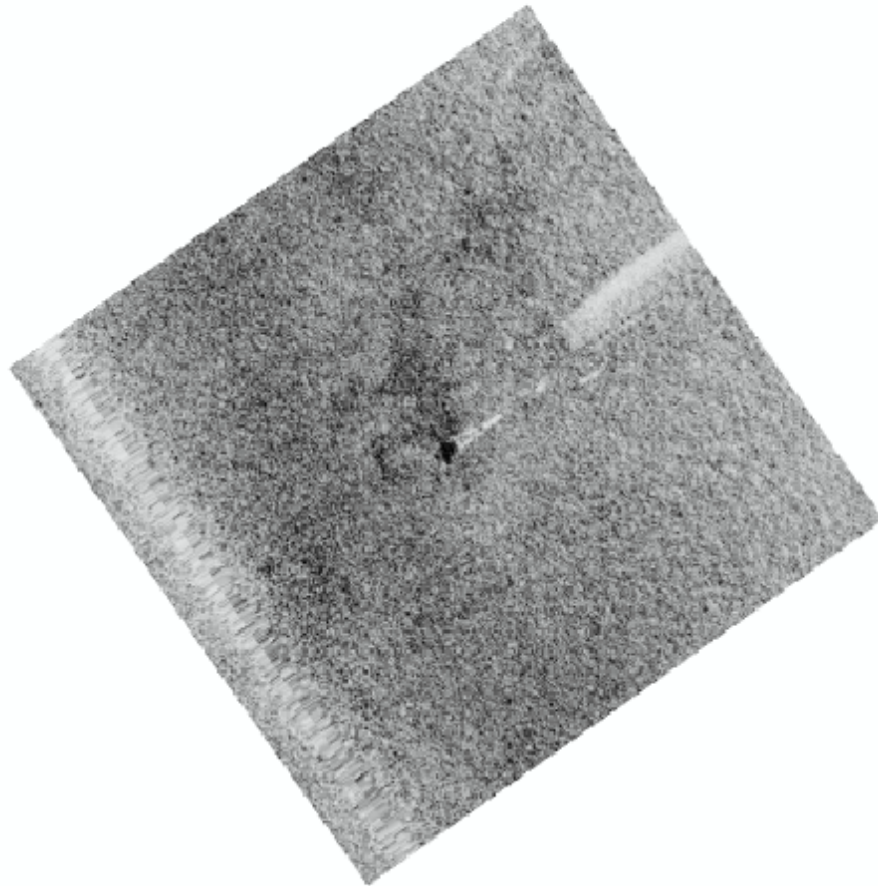
WATLEV - 3:always under water/submerged

## Office Notes

Survey data has been submitted to AHB. The submitted Danger to Nav feature has been verified by hydrographic processing branch. Concur

See Bluenotes for final charting recommendation.

### Feature Images



*Figure 1.35.1*

**1.36) Obstruction - cm**

**DANGER TO NAVIGATION**

**Survey Summary**

**Survey Position:** 030° 02' 29.200" N, 87° 58' 46.200" W  
**Least Depth:** 14.63 m  
**Timestamp:** [None]  
**GP Dataset:** H11583\_DtoN\_importlist.xls  
**GP No.:** 91  
**Charts Affected:** 1115A\_1, 11360\_1, 11006\_1, 411\_1

**Remarks:**

The DTONS in this report result from comparison of 2006 survey data to the largest scale charts covering the survey area.

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
H11583_DtoN_importlist.xls	91	0.00	000.0	Primary

**Hydrographer Recommendations**

Chart a 48 ft obstruction at the given location.

**Cartographically-Rounded Depth (Affected Charts):**

8fm (1115A\_1, 11360\_1, 11006\_1, 411\_1)

**S-57 Data**

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 RECDAT - 20070709  
 SORDAT - 20070324  
 SORIND - US,US,surve,H11583  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 14.6341463415 m

VERDAT - 12:Mean lower low water

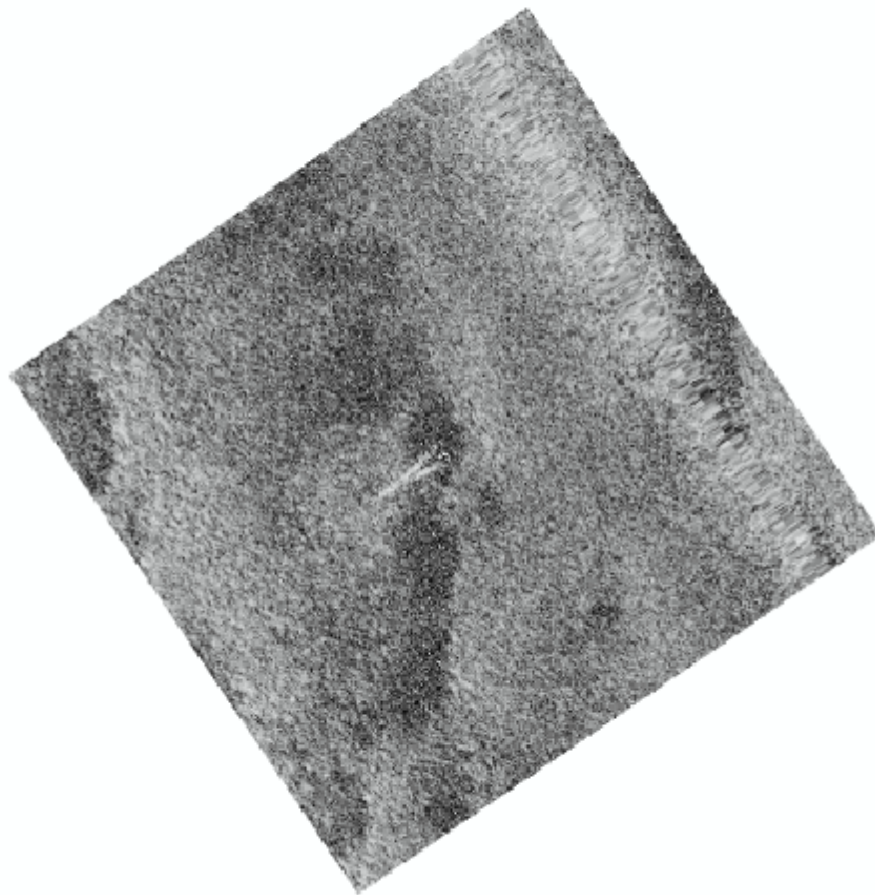
WATLEV - 3:always under water/submerged

## Office Notes

Survey data has been submitted to AHB. The submitted Danger to Nav feature has been verified by hydrographic processing branch. Concur

See Bluenotes for final charting recommendation.

### Feature Images



*Figure 1.36.1*

### 1.37) Sounding - dd

## DANGER TO NAVIGATION

### Survey Summary

**Survey Position:** 030° 09' 32.200" N, 88° 03' 38.400" W  
**Least Depth:** 6.10 m  
**Timestamp:** 2007-083.00:00:00.000 (03/24/2007)  
**GP Dataset:** H11583\_pydro\_sounding.txt  
**GP No.:** 1  
**Charts Affected:** 11377\_1, 11378\_7, 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

**Remarks:**

The DTONS in this report result from comparison of 2006 survey data to the largest scale charts covering the survey area.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
H11583_pydro_sounding.txt	1	0.00	000.0	Primary

### Hydrographer Recommendations

Replace the charted 28 ft sounding with a 20 ft sounding at the given location.

**Cartographically-Rounded Depth (Affected Charts):**

20ft (11377\_1, 11378\_7, 11376\_1)  
 3 ¼fm (1115A\_1, 11360\_1, 11006\_1, 411\_1)

### S-57 Data

**Geo object 1:** Sounding (SOUNDG)  
**Attributes:** EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 QUASOU - 1:depth known  
 RECDAT - 20070710  
 SORDAT - 20070324  
 SORIND - US,US,surve,H11583

TECSOU - 3:found by multi-beam

VERDAT - 12:Mean lower low water

## Office Notes

Survey data has been submitted to AHB. The submitted Danger to Nav feature has been verified by hydrographic processing branch. Concur with clarification. Shoaler depths in vicinity of 20 depth. Delete 20 ft depth. Chart present survey depths.

## AHB PRE-COMPILATION PROCESS H11584

REGISTRY No.	H11583
PROJECT No.	OPR-J364-KR-06
FIELD UNIT	TERRASOND
LARGEST SCALE CHART	#11377, edition #7, 20071001
CHART SCALE	1:40000
SURVEY SCALE	1:20000
DATE OF SURVEY	6/8/2006 – 3/9/2007

I. META-OBJECTS:

a. M\_COVR attributes

Acronym	Value
SORDAT	200760309
CATCOV	1
SORIND	US,US,survey,H11583

b. M\_QUAL attributes

Acronym	Value
CATZOC	U
INFORM	H11584, OPR-J364-KR-06, RV Davidson
POSACC	1
SORDAT	20060809
SORIND	US,US,survey,H11583
SUREND	20070309
SURSTA	20060608
TECSOU	3

c. DEPART attributes

Acronym	Value
DRVALV 1	10.00
DRVALV 2	75.00
SORDAT	20060809
SORIND	US,US,survey,H11583

d. M\_CSCL attributes

Chart #11377

Acronym	Value
CSCALE	40000
SORDAT	20070309
SORIND	US,US,survey,H11583

a. M\_CSCL attributes



Chart #11376

Acronym	Value
CSCALE	80000
SORDAT	20070309
SORIND	US,US,survey,H11583

a. M\_CSCL attributes

Chart #11360/1115A

Acronym	Value
CSCALE	456394
SORDAT	20070309
SORIND	US,US,survy,H11583

 H11583_COMBINED_2M	18 KB	XML Document	2/9/2009 2:47 PM
 H11583_COMBINED_2M.hns	1,117,582 KB	HNS File	2/9/2009 2:47 PM

**APPROVAL SHEET**  
**H11583**

The completed survey has been inspected with regard to survey coverage, delineation of depth curves, representation of critical depths, cartographic symbolization, and verification or disproof of charted data. All revisions and additions made to the H-Cell files during survey processing have been entered in the digital data for this survey. The survey records and digital data comply with National Ocean Service and Office of Coast Survey requirements except where noted in the Descriptive Report and the Evaluation Report.

All final products have undergone a comprehensive review as per the Atlantic Hydrographic Branch Processing Manual and are verified to be accurate and complete except where noted.

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**Norris A. Wike**  
Cartographer  
Atlantic Hydrographic Branch

I have reviewed the H-Cell files, accompanying data, and reports. This survey and accompanying Marine Chart Division deliverables meet National Ocean Service requirements and standards for products in support of nautical charting except where noted.

Approved: \_\_\_\_\_  
**Shep Smith**  
Commander, NOAA  
Chief, Atlantic Hydrographic Branch