

H11217

NOAA FORM 76-35A

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

**DESCRIPTIVE REPORT**

*Type of Survey*      **Basic Hydrographic**

*Registry No.*        **H11217**

**LOCALITY**

*State/Territory*      Florida

*General Locality*    St. Johns River

*Sub-locality*        Doctors Lake

**2004**

CHIEF OF PARTY  
**David B. Elliott -Team Leader**

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DATE

NOAA FORM 77-28  
U.S. DEPARTMENT OF COMMERCE  
(11-72)  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

## HYDROGRAPHIC TITLE SHEET

REGISTRY NUMBER:

**H11217**

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

FIELD NUMBER: N/A

State/Territory: **Florida**

General Locality: **St. Johns River**

Sub-Locality: **Doctors Lake**

Scale: **1:10,000** Date of Survey: Jan.21, 04 to Mar. 01, 2004

Instructions Dated: **05 May 2003** Project Number: **OPR-G443-NRB**T2****

Vessel: **NOAA Launch 1210**

Chief of Party: **David B. Elliott - Team Leader**

Surveyed by: **David Elliott, Robert Ramsey & Laurie Brennan (NRT2)**

Soundings by: **Innerspace 448**

Graphic record scaled by: **DE, RR, LB**

Graphic record checked by: **DE, RR, LB**

*Hewlett Packard Design Jet 2500CP (office)*

Protracted by: **N/A** Automated Plot: **HP-750C (Field)**

Verification by: **Atlantic Hydrographic Branch *Personnel***

Soundings in: **Meters *Feet* at MLLW**

Remarks: ***Bold, Red, Italic notes in Descriptive Report were made during office processing.***

***1) All Times are UTC.***

***2) This is a basic Hydrographic Survey under the Navigable Area Concept.***

***3) Projection is UTM Zone 17.***

## TABLE OF CONTENTS

A. AREA SURVEYED .....	1
B. DATA ACQUISITION AND PROCESSING .....	2
B.1. EQUIPMENT .....	2
B.2. QUALITY CONTROL .....	3
B.3. CORRECTIONS TO ECHO SOUNDING .....	4
C. VERTICAL AND HORIZONTAL CONTROL .....	5
D. RESULTS AND RECOMMENDATIONS .....	6
D.1. CHART COMPARISON .....	6
D.2. ADDITIONAL RESULTS .....	9
E. APPROVAL SHEET .....	10

**DESCRIPTIVE REPORT**

**to accompany**

**HYDROGRAPHIC SURVEY H-11217**

**Scale of Survey: 1:10,000**

**Year of Survey: 2003**

**Navigation Response Team 2 - Launch 1210**

**David B. Elliott- Team Leader**

**A. AREA SURVEYED**

This hydrographic survey was conducted in accordance with Port Letter Instructions for project OPR-G443-NRB, Brunswick Georgia to Jacksonville, Florida. The instructions are dated May 5, 2003.

The purpose of this project is to collect new hydrography in support of the NOAA led Coastal Storms Initiative and to update National Ocean Service (NOS) charts on the St. Johns River in the vicinity of Jacksonville, FL. Results from the investigations will also serve as a chart evaluation for NOS Electronic Nautical Charts (ENC). The hydrographic data from this project will help ensure navigational safety through updated critical nautical charts and provide new information for emergency response organizations to use in the event of a marine casualty or coastal storm.

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Survey Limits for Sheet "D" H-11217 are as follows:

30° 09' 41" N

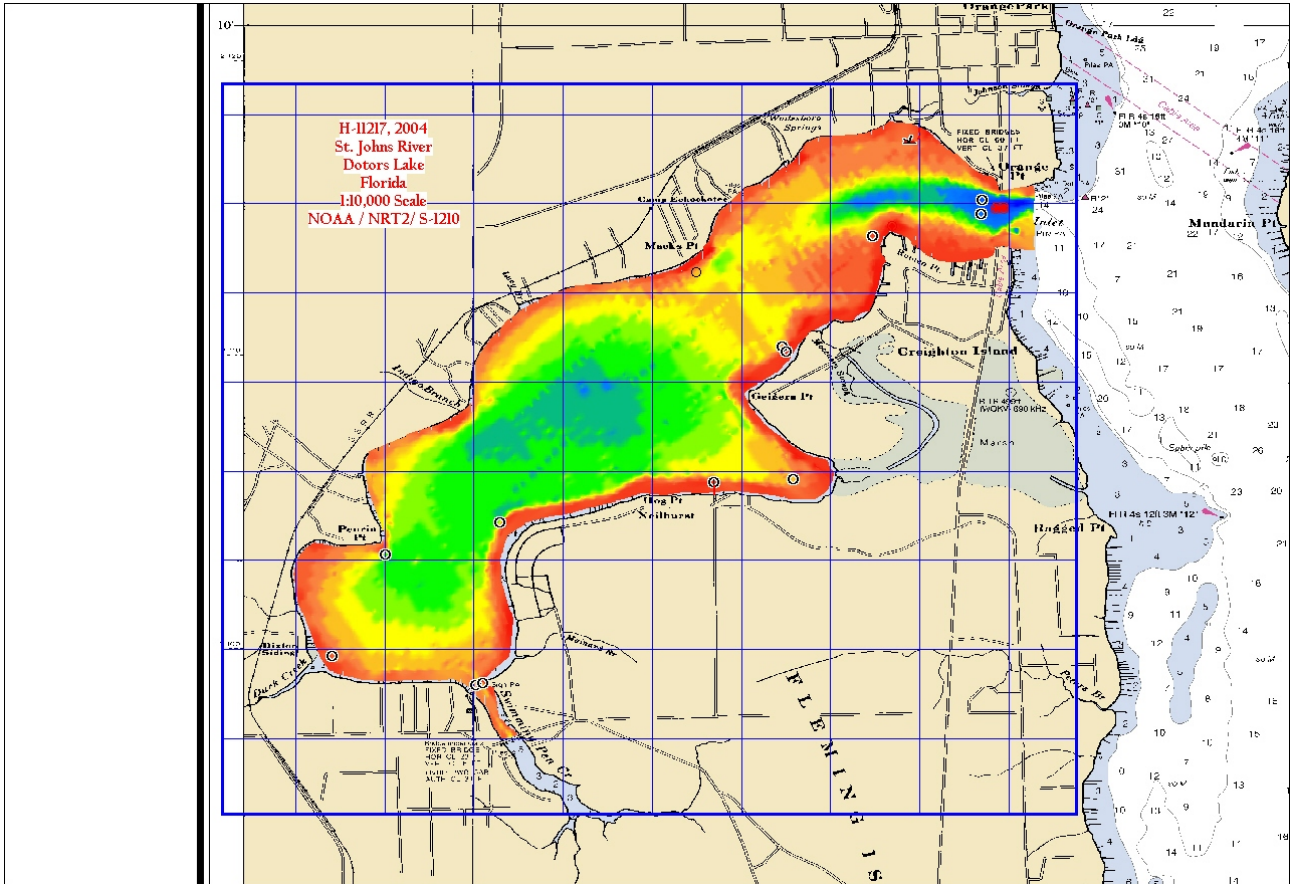
081° 46' 25" W

30° 05' 34" N

081° 41' 36" W

Survey Dates: Jan. 21, 2004 (DN: 021) to Mar. 01, 2004 (DN: 061)

Survey limits are displayed graphically in the chartlet on the following page .



## **B. DATA ACQUISITION AND PROCESSING *See Also the Evaluation Report.***

### **B.1. EQUIPMENT**

Data were acquired by Navigation Response Team 2 and survey Launch 1210. The vessel was configured as described in the Data Acquisition and Processing Report (DAPR) \* for this project. Major data acquisition systems are summarized below. \* *Data filed at the Atlantic Hydrographic Branch (AHB).*

An Innerspace model 455 depth sounder, S/Ns 189 was used to collect all echo soundings on this survey. A standard lead line calibrated in meters, S/N 1210, was used during this survey for comparison with the echo sounder. No problems were encountered with any of the sounding equipment.

A Klein 3110 side scan sonar recorder (S/N 315) with a model 3210 towfish (S/N 414), was used throughout this survey. The side scan sonar equipment was used to investigate AWOIS items.

A Trimble DGPS Beacon Receiver (S/N 0220261525) was used as the primary navigation station on launch 1210.

A Trimble Pathfinder ProXRS (S/N 0224010201) and antenna (S/N 0220170250) were used for all ENC high accuracy positioning and establishment of calibration points.

The instrument used for determining corrections for the speed of sound through the water column was a Seabird-Seacat Velocity Profiler, model 19-03, S/N 198671-1477.

NOAA launch 1210, a 27-foot SeaArk with a draft of 0.5 meters, was used to collect all survey data. There were no unusual vessel configurations or problems encountered with the vessel.

### **B.2. QUALITY CONTROL**

The integrity of the survey data for H-11217 has been insured by following the Field Procedures Manual and the NOS Hydrographic Surveys Specifications and Deliverables Manual, June 2003.

The lead line for launch 1210 was calibrated using a steel tape on March 25, 2003(DN:084). No corrections were necessary. A static draft of 0.5 meters was applied to the sounding plots by the Carris program. The draft was measured by subtracting the difference from a punch mark on the side of launch 1210, 0.6 meter above the transducer, to the water surface.

Settlement and squat measurements for launch 1210 were taken on March 25, 2003(DN:084) These measurements were conducted in Jacksonville, FL on the St. Johns River using the level method.

Settlement and squat correctors were applied to the sounding plots using the Carris program. Differential GPS (DGPS) was used for all hydrographic data acquired on this survey. DGPS performance checks were conducted in accordance with FPM 3.4.4 by comparing the DGPS position of the vessel to a high accuracy (1<sup>st</sup> order) calibration point.

**Side Scan Sonar Quality Control**      **\*(No side scan sonar was conducted during H-11217)**

Daily confidence checks were conducted by observing side scan imagery in the vicinity of known contacts, such as buoys or sand waves. Side scan data were considered satisfactory if these contacts could be distinguished throughout the entire range of the side scan trace. The confidence checks were performed daily at 100kHz.

A coverage of 200% was obtained wherever possible in the required survey areas and AWOIS items where water depth and/or hazards permitted. Side scan sonar coverage was conducted to the 12-foot depth curve and single beam reduced line spacing was performed in other areas where warranted. The towfish was deployed off the starboard quarter of the vessel, which proved very stable. Distorted images caused by strong tidal currents were seen periodically. All contacts and shadows were scaled and entered into Carris HIPS/SIPS to determine the height off the bottom. The significant contacts were then compared by position, as well as common depth and relationship to channels to determine if further investigations were needed. All areas surveyed were track line/swath line plotted to insure complete coverage.

The system frequency used was 100kHz. The recorder was set on one of either 50/75/100-meter range scales. There were no water depths greater than 35 meters.

When operating in shoaler waters (e.g. less than 30 meters deep), a short tow was required for the Klein system. When cable-out was approximately 7 meters or less, minor degradation of the side scan imagery and Innerspace echosounder traces were noted due to cross-talk between the two systems.

Crossline and mainscheme sounding data were compared using MAPINFO 5.1, with no significant discrepancies observed.

**Junctions** *See Also the Evaluation Report.*

Sounding Junctions were compared to H-11216, 2003 east of H-11217. The soundings compared favorably within 1 to 2 feet. *Concur.*

### **B.3. CORRECTIONS TO ECHO SOUNDING**

A table detailing all sound velocity casts is contained in Separates III \*- Sound Velocity Profile Data. Sound velocity data has been submitted with the digital data package. Cast data is organized on the digital media as follows: vessel / day of cast / cast data.

There are no deviations to be discussed in this section.

### **C. VERTICAL AND HORIZONTAL CONTROL *See also the Evaluation Report.***

The instrument used for determining corrections for the speed of sound through the water column was a Seabird-Seacat Velocity Profiler. The manufacturer calibrated this unit on December 19, 2003. Data quality assurance tests were performed after each cast. Program VELOCWIN was used for computing the correctors. Corrections were applied to the sounding plot using the Carris HIPS.

Field tide reduction of soundings is based on unverified actual water levels from the NOAA Co-Ops site. The values are from Main Street Bridge station 872-0226 and are in six minute intervals. Values and correctors were applied at the perspective locations of Hydrography from the Zone files provided by CO-OPS/RDD.

All elevations and soundings on survey H-11217 are based on MLLW unless otherwise specified.

A Request for Approved Tides letter was sent to N/OPS1 on March 4, 2004 (Appendix IV).\*  
*Approved tides and zones were reapplied to survey in Caris during office processing.*

#### **Horizontal Control**

The horizontal datum used for this survey is the North American Datum of 1983 (NAD 83), projected using UTM zone 17. The control reference station used for this survey was the USCG DGPS Station at Savannah, GA (Station ID #818), located at 32°08.3156' N, 081°41.7798' W. *Concur.*

Horizontal dilution of precision (HDOP) was monitored on Hypack daily on all survey platforms. Neither value exceeded 4.00, and adequate satellite coverage was maintained throughout the survey period. All positioning equipment was operated in a manner consistent with the manufacturer's requirements and as described in the DAPR.\*\* There were no equipment malfunctions which affected the positional quality of the data.

*\* Data filed with original field records.*

*\*\* Filed at AHB.*



## **D. RESULTS AND RECOMMENDATIONS**

There is one chart affected by this survey:

11492, 17<sup>th</sup> edition, Nov. 24, 2001 1:40,000

### **General Agreement with Charted soundings**

In general survey soundings compared with the charted soundings within two to three feet. The smooth tides may resolve some of these soundings. All charted soundings should be superseded by this survey. *Concur.*

**Note:** Due to the nature of this survey for the Coastal Storms Initiative (CSI) and primary need for contemporary bathymetry, extensive shoreline investigations were not conducted. However visual identifications conducted by NRT2 found regions alongshore in the form of Dols, piles and piers to be adequately charted. Unless otherwise noted in the sections below all features along shore visible or submerged should remain as charted. *Concur.*

### **The following is a list of notable sounding discrepancies on the chart:**

- 1.) The 6 foot contour in the vicinity of 30° 08' 47" N, 081° 42' 18" W, has migrated due north approximately 220 meters. *Concur.*
- 2.) The offshore isolated 6 foot contour in the vicinity of 30° 08' 44" N, 081° 43' 04" W, has connected to the inshore 6 foot contour due east. *Concur.*
- 3.) The offshore isolated 6 foot contour in the vicinity of 30° 09' 08" N, 081° 42' 59" W, has connected to the inshore 6 foot contour due north west. *Concur.*
- 4.) The offshore isolated 6 foot contour in the vicinity of 30° 08' 36" N, 081° 43' 27" W, no longer exists. Soundings in this region are now 7 to 8 feet. *Concur.*
- 5.) The currently charted region of 11 to 12 foot at the entrance to Mill Cove in the vicinity of 30° 07' 40" N, 081° 43' 44" W, is now 7 to 9 **10** feet. *Concur.*

**The following is a list of Charted items that were investigated or disproved by 200% side scan sonar:**

There was no side scan sonar conducted during the course of H-11217 in Doctors Lake. *Concur.*

**The following is a list of Charted sounding notations that were investigated by echo sounder.**

There were no sounding notations within the confines of H-11217. *Concur.*

**The following is a list of Charted items that were visually investigated.**

- 1.) The two piles PA at 30° 09' 05.68" N, 081° 42' 04.68" W, exist as charted. *Concur, retain.*
- 2.) The piles PA at 30° 09' 22.19" N, 081° 42' 26.11" W, exist as charted. *Concur, retain.*
- 3.) The charted visible wreck and foul limit at 30° 09' 21" N, 081° 42' 32" W, exist as charted.  
A detached position was taken on the visible feature and can be found in the PSS. *Concur, see also section D.3.) of the Evaluation Report.*
- 4.) The submerged pile PA at 30° 09' 14.83" N, 081° 42' 44.54" W, should be retained as charted as adequate disproval could not be conducted in five feet of water. *Concur.*
- 5.) The two dols PA at 30° 09' 20.22" N, 081° 42' 51.69" W, exist as charted. *Concur, retain.*
- 6.) The six piles PA at 30° 09' 03.06" N, 081° 43' 27.98" W, exist as charted. *Concur, retain.*
- 7.) The submerged pile PA at 30° 09' 01.92" N, 081° 43' 25.91" W, should be retained as charted as adequate disproval could not be conducted in five feet of water. *Concur, retain.*
- 8.) The visible wreck PA at 30° 08' 56.68" N, 081° 43' 33.24" W, exists as charted. *Concur, retain.*
- 9.) The dols PA at 30° 08' 30.36" N, 081° 44' 23.07" W, exist as charted. *Concur, retain.*
- 10.) The three dols PA at 30° 08' 19.90" N, 081° 44' 45.27" W, exist as charted. *Concur, retain.*
- 11.) The pile PA at 30° 07' 12.21" N, 081° 45' 29.83" W, exist as charted. *Concur, retain.*
- 12.) The submerged pile at 30° 06' 34.60" N, 081° 45' 49.57" W, should be retained as charted as adequate disproval could not be conducted in six feet of water. *Concur.*

- 13.) The piles PA at 30° 06' 07.46" N, 081° 44' 49.77" W, exist as charted. *Concur, retain.*
- 14.) The sign PA at 30° 06' 16.29" N, 081° 44' 54.85" W, should be removed as Manatee signs were positioned in this vicinity. *Concur. Delete sign PA.*
- 15.) The dols PA at 30° 06' 55.86" N, 081° 44' 52.03" W, exist as charted. *Concur, retain.*
- 16.) The submerged pile PA at 30° 07' 02.24" N, 081° 45' 00.68" W, should be retained as charted as adequate disproval could not be conducted in nine feet of water. *Concur.*
- 17.) The three piles PA at 30° 07' 25.46" N, 081° 43' 56.18" W, exist as charted. *Concur, retain.*
- 18.) The three piles PA at 30° 07' 26.28" N, 081° 43' 43.40" W, exist as charted. *Concur.*
- 19.) The two dols PA at 30° 07' 24.81" N, 081° 43' 32.67" W, exist as charted. *Concur, retain.*
- 20.) The three piles PA at 30° 07' 25.80" N, 081° 43' 27.79" W, exist as charted. *Concur, retain.*
- 21.) The three piles PA at 30° 07' 25.47" N, 081° 43' 21.02" W, exist as charted. *Concur.*
- 22.) The five piles at 30° 07' 27.76" N, 081° 43' 07.85" W, exist as charted. *Concur, retain.*
- 23.) The three stakes PA at 30° 08' 00.78" N, 081° 43' 28.35" W, do not exist and should be removed from the chart. *Concur.*
- 24.) The ruins at 30° 08' 43.61" N, 081° 42' 44.92" W, exist as charted. *Concur, retain.*

## **AWOIS Item Investigations**

There were no AWOIS items within the survey limits. *Concur.*

## **Dangers to Navigation *See also the Evaluation Report.***

There were 15 DTONS within the confines of H-11217, the reference for these features can be found in the Appendices section I. The geographic locations for these DTONS are all new positions to the chart. These items were submitted in advance to MCD. *Concur.*

## **D. 2. ADDITIONAL RESULTS**

### **Aids to Navigation and Other Detached Positions**

All Navigation Aids serve their intended purpose. Charted positions should be superseded by new survey positions. *Concur. Defer to Marine Charting Division (MCD) Update Service Branch for charting recommendations for Aids to Navigation.*

There are no floating aids within the confines of H-11217. *Concur.*

### **Ferry Routes**

There are no Ferry routes within the confines of H-11217. *Concur.*

### **Submarine Cables and Pipelines**

There is one submerged cable crossing and one overhead cable crossing areas within the confines of H-11217. They are charted adequately. *Concur.*

### **Bridges**

There are two bridges within the confines of H-11217. Vertical and horizontal bridge clearances were checked by NRT2 and are adequately charted. *Concur.*

**Note:** The Hwy 13 bridge is portrayed with a single span on the chart but actually has two spans. The western span is not charted. *Concur, MCD action recommended.*

## **E. APPROVAL SHEET**

OPR-G443-NRB  
St. Johns River  
Jacksonville, FL  
Survey Registry No. H-11217

Field operations for this basic hydrographic survey were conducted under my daily supervision with frequent checks of progress and adequacy. All field sheets, this Descriptive Report, and all accompanying records and data are approved.

This survey is adequate to supersede all prior surveys in common areas, and for application to the relevant NOS nautical charts.



**Submitted:**

**David B. Elliott - Team Leader  
Navigation Response Team 2**

# Danger To Navigation Report H-11217

**Registry Number:** H-11217  
**State:** Florida  
**Locality:** Atlantic Ocean, St. Johns River  
**Sub-locality:** Doctors Lake  
**Project Number:** OPR-G443-NRT2  
**Survey Date:** 03/01/2004

List of uncharted structures requiring a DTON letter.

## Charts Affected

Number	Version	Date	Scale
11492	19th Ed.	11/24/01	1:40000
11451	30th Ed.	11/17/01	1:495362
11006	30th Ed.	04/20/02	1:875000
411	48th Ed.	04/28/01	1:2160000

## Features

Feature Type	Survey Depth [m]	Survey Latitude	Survey Longitude
Lighted structure	-2.69 m	030° 08' 52.339" N	81° 42' 38.955" W
Marker (privately maintained)	-3.66 m	030° 06' 18.313" N	81° 44' 59.422" W
Marker (privately maintained)	-2.66 m	030° 06' 18.735" N	81° 44' 56.842" W
Marker (privately maintained)	-2.65 m	030° 06' 28.110" N	81° 45' 47.666" W
Marker (privately maintained)	-2.65 m	030° 07' 02.011" N	81° 45' 29.714" W
Marker (privately maintained)	-3.17 m	030° 07' 12.858" N	81° 44' 51.083" W
Marker (privately maintained)	-3.17 m	030° 07' 26.394" N	81° 43' 39.078" W
Marker (privately maintained)	-3.17 m	030° 07' 27.343" N	81° 43' 12.572" W
Marker (privately maintained)	-1.67 m	030° 08' 10.558" N	81° 43' 15.054" W
Marker (privately maintained)	-3.68 m	030° 08' 12.079" N	81° 43' 16.294" W
Marker (privately maintained)	-2.64 m	030° 08' 36.747" N	81° 43' 45.079" W
Marker (privately maintained)	-3.39 m	030° 08' 49.263" N	81° 42' 45.973" W
Marker (privately maintained)	-3.20 m	030° 08' 56.566" N	81° 42' 09.303" W

Marker (privately maintained)	-3.20 m	030° 09' 01.413" N	81° 42' 09.117" W
Sounding <i>Pier</i>	-1.17 m	030° 07' 25.088" N	81° 43' 39.006" W

## **1 - Detached Positions (DPs)**



**1.1) Profile/Beam - 8/1 from H-11217\_D / 1210dp\_Non\_Echosounder / 2004-061 / DPs\_NavAids\_H-11217\_D**

**DANGER TO NAVIGATION**

**Survey Summary**

**Survey Position:** 030° 08' 52.339" N, 81° 42' 38.955" W  
**Least Depth:** -2.69 m  
**Timestamp:** 2004-061.15:00:57.000 (03/01/2004)  
**DP Dataset:** H-11217\_D / 1210dp\_Non\_Echosounder / 2004-061 / DPs\_NavAids\_H-11217\_D  
**Profile/Beam:** 8/1  
**Charts Affected:** 11492\_1, 11451\_17, 11006\_1, 411\_1

**Remarks:**

Finger pier extending perpendicular from shore. *Concur, extend the currently charted pier to the currently charted light.*

**Feature Correlation**

Line	Feature	Range
key_Digital_Filing_System/Caris/Hips/HDCS_DATA/H-11217_D/1210dp_Non_Echosounder/2004-061/DPs_NavAids_H-11217_D	8/1	0.00

**Hydrographer Recommendations**

[None]

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

-9ft (11492\_1, 11451\_17)  
 -1 ½fm (11006\_1, 411\_1)

**Feature Images**

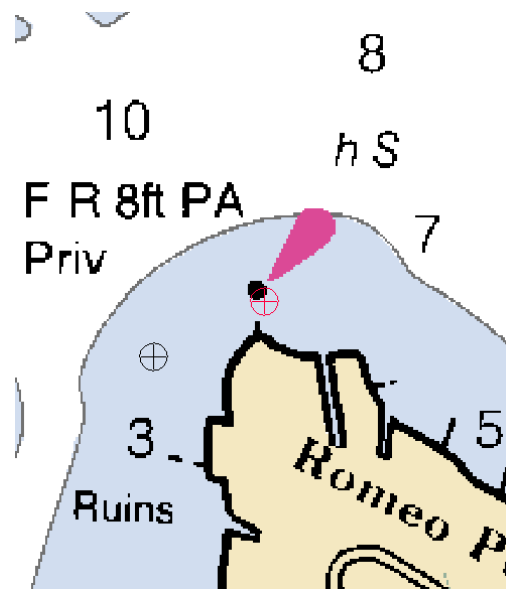


Figure 1.1.1

**1.2) Profile/Beam - 16/1 from H-11217\_D / 1210dp\_Non\_Echosounder / 2004-061 / DPs\_NavAids\_H-11217\_D**

**DANGER TO NAVIGATION**

**Survey Summary**

**Survey Position:** 030° 06' 18.313" N, 81° 44' 59.422" W  
**Least Depth:** -3.66 m  
**Timestamp:** 2004-061.15:41:15.000 (03/01/2004)  
**DP Dataset:** H-11217\_D / 1210dp\_Non\_Echosounder / 2004-061 / DPs\_NavAids\_H-11217\_D  
**Profile/Beam:** 16/1  
**Charts Affected:** 11492\_1, 11451\_17, 11006\_1, 411\_1  
**Remarks:** *See the Evaluation report.*

**Feature Correlation**

Line	Feature	Range
key_Digital_Filing_System/Caris/Hips/HDCS_DATA/H-11217_D/1210dp_Non_Echosounder/2004-061/DPs_NavAids_H-11217_D	16/1	0.00

## Hydrographer Recommendations

[None]

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

-12ft (11492\_1, 11451\_17)

-2fm (11006\_1, 411\_1)

### Feature Images

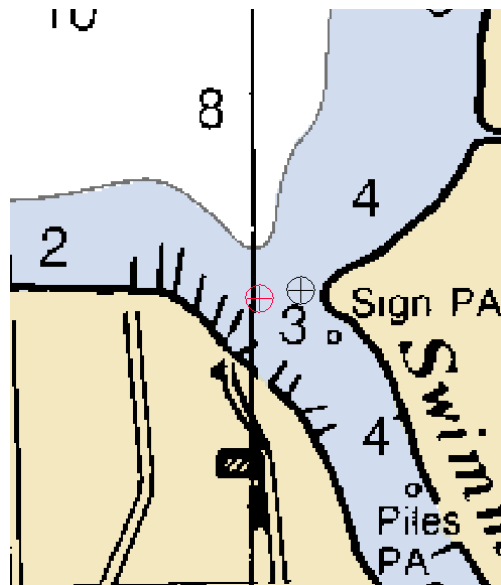


Figure 1.2.1

**1.3) Profile/Beam - 17/1 from H-11217\_D / 1210dp\_Non\_Echosounder / 2004-061 / DPs\_NavAids\_H-11217\_D**

**DANGER TO NAVIGATION**

### Survey Summary

**Survey Position:** 030° 06' 18.735" N, 81° 44' 56.842" W  
**Least Depth:** -2.66 m  
**Timestamp:** 2004-061.15:43:10.000 (03/01/2004)  
**DP Dataset:** H-11217\_D / 1210dp\_Non\_Echosounder / 2004-061 / DPs\_NavAids\_H-11217\_D  
**Profile/Beam:** 17/1  
**Charts Affected:** 11492\_1, 11451\_17, 11006\_1, 411\_1  
**Remarks:** *See the Evaluation Report.*

### Feature Correlation

Line	Feature	Range
ey_Digital_Filing_System/Caris/Hips/HDCS_DATA/H-11217_D/1210dp_Non_Echosounder/2004-061/DPs_NavAids_H-11217_D	17/1	0.00

### Hydrographer Recommendations

[None]

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

- 9ft (11492\_1, 11451\_17)
- 1 ½fm (11006\_1, 411\_1)

### Feature Images

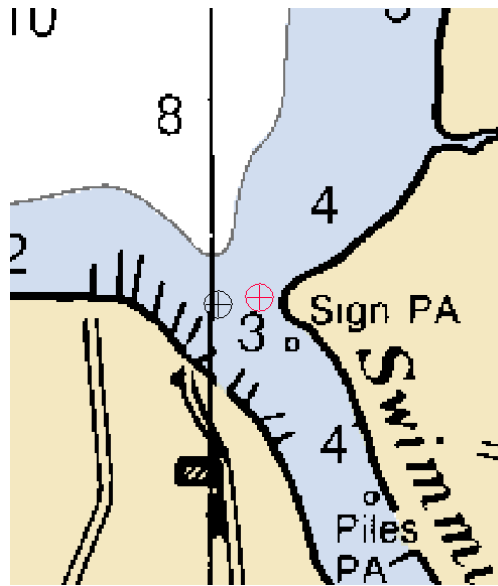


Figure 1.3.1

**1.4) Profile/Beam - 18/1 from H-11217\_D / 1210dp\_Non\_Echosounder / 2004-061 / DPs\_NavAids\_H-11217\_D**

**DANGER TO NAVIGATION**

**Survey Summary**

**Survey Position:** 030° 06' 28.110" N, 81° 45' 47.666" W  
**Least Depth:** -2.65 m  
**Timestamp:** 2004-061.15:47:33.000 (03/01/2004)  
**DP Dataset:** H-11217\_D / 1210dp\_Non\_Echosounder / 2004-061 / DPs\_NavAids\_H-11217\_D  
**Profile/Beam:** 18/1  
**Charts Affected:** 11492\_1, 11451\_17, 11006\_1, 411\_1  
**Remarks:** *See the Evaluation Report.*

**Feature Correlation**

Line	Feature	Range
ey_Digital_Filing_System/Caris/Hips/HDCS_DATA/H-11217_D/1210dp_Non_Echosounder/2004-061/DPs_NavAids_H-11217_D	18/1	0.00

## Hydrographer Recommendations

[None]

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

-9ft (11492\_1, 11451\_17)

-1 ½fm (11006\_1, 411\_1)

### Feature Images

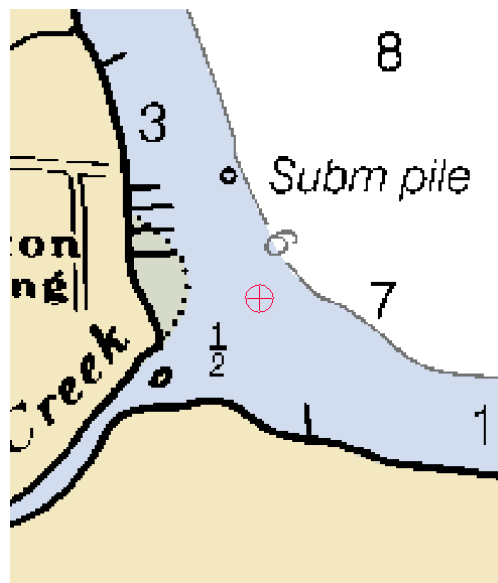


Figure 1.4.1

**1.5) Profile/Beam - 19/1 from H-11217\_D / 1210dp\_Non\_Echosounder / 2004-061 / DPs\_NavAids\_H-11217\_D**

**DANGER TO NAVIGATION**

### Survey Summary

**Survey Position:** 030° 07' 02.011" N, 81° 45' 29.714" W  
**Least Depth:** -2.65 m  
**Timestamp:** 2004-061.15:50:12.000 (03/01/2004)  
**DP Dataset:** H-11217\_D / 1210dp\_Non\_Echosounder / 2004-061 / DPs\_NavAids\_H-11217\_D  
**Profile/Beam:** 19/1  
**Charts Affected:** 11492\_1, 11451\_17, 11006\_1, 411\_1  
**Remarks:** *See the Evaluation Report.*

### Feature Correlation

Line	Feature	Range
ey_Digital_Filing_System/Caris/Hips/HDCS_DATA/H-11217_D/1210dp_Non_Echosounder/2004-061/DPs_NavAids_H-11217_D	19/1	0.00

### Hydrographer Recommendations

[None]

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

- 9ft (11492\_1, 11451\_17)
- 1 ½fm (11006\_1, 411\_1)

### Feature Images

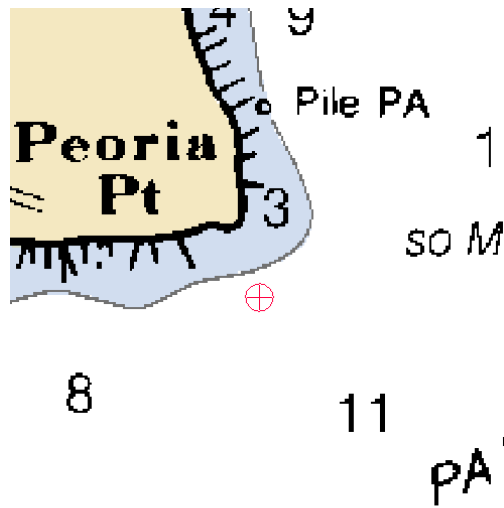


Figure 1.5.1

**1.6) Profile/Beam - 15/1 from H-11217\_D / 1210dp\_Non\_Echosounder / 2004-061 / DPs\_NavAids\_H-11217\_D**

**DANGER TO NAVIGATION**

**Survey Summary**

**Survey Position:** 030° 07' 12.858" N, 81° 44' 51.083" W  
**Least Depth:** -3.17 m  
**Timestamp:** 2004-061.15:31:47.000 (03/01/2004)  
**DP Dataset:** H-11217\_D / 1210dp\_Non\_Echosounder / 2004-061 / DPs\_NavAids\_H-11217\_D  
**Profile/Beam:** 15/1  
**Charts Affected:** 11492\_1, 11451\_17, 11006\_1, 411\_1  
**Remarks:** *See the Evaluation Report.*

**Feature Correlation**

Line	Feature	Range
ey_Digital_Filing_System/Caris/Hips/HDCS_DATA/H-11217_D/1210dp_Non_Echosounder/2004-061/DPs_NavAids_H-11217_D	15/1	0.00



## Hydrographer Recommendations

[None]

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

-11ft (11492\_1, 11451\_17)

-1 ¾fm (11006\_1, 411\_1)

### Feature Images

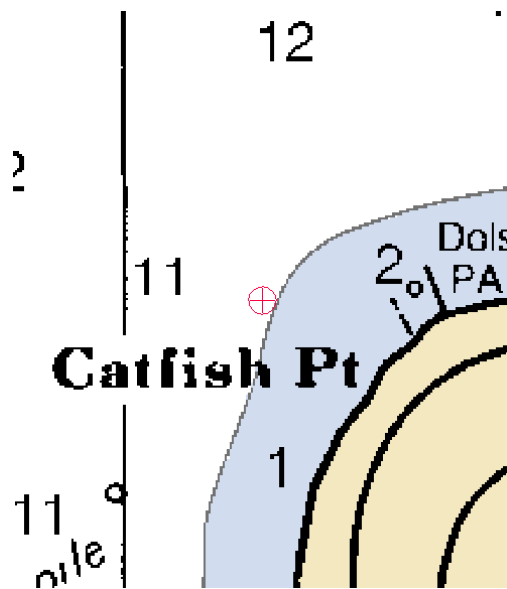


Figure 1.6.1

[1.7\) Profile/Beam - 13/1 from H-11217\\_D / 1210dp\\_Non\\_Echosounder / 2004-061 / DPs\\_NavAids\\_H-11217\\_D](#)

**DANGER TO NAVIGATION**

### Survey Summary

**Survey Position:** 030° 07' 26.394" N, 81° 43' 39.078" W  
**Least Depth:** -3.17 m  
**Timestamp:** 2004-061.15:23:56.000 (03/01/2004)  
**DP Dataset:** H-11217\_D / 1210dp\_Non\_Echosounder / 2004-061 / DPs\_NavAids\_H-11217\_D  
**Profile/Beam:** 13/1  
**Charts Affected:** 11492\_1, 11451\_17, 11006\_1, 411\_1

**Remarks:**  
 at public boat ramp **See the Evaluation Report.**

### Feature Correlation

Line	Feature	Range
ey_Digital_Filing_System/Caris/Hips/HDCS_DATA/H-11217_D/1210dp_Non_Echosounder/2004-061/DPs_NavAids_H-11217_D	13/1	0.00

### Hydrographer Recommendations

[None]

**Cartographically-Rounded Depth (Affected Charts):**  
 -11ft (11492\_1, 11451\_17)  
 -1 ¾fm (11006\_1, 411\_1)

### Feature Images

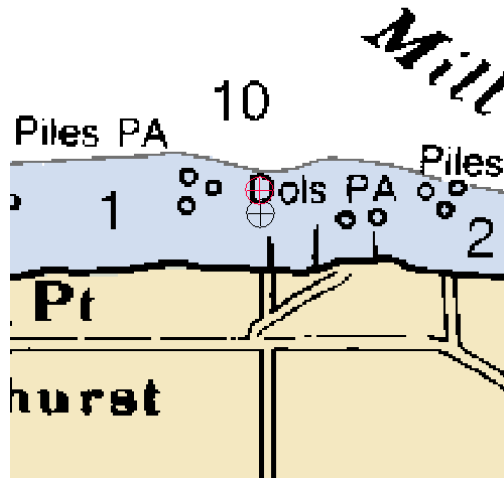


Figure 1.7.1

**1.8) Profile/Beam - 12/1 from H-11217\_D / 1210dp\_Non\_Echosounder / 2004-061 / DPs\_NavAids\_H-11217\_D**

**DANGER TO NAVIGATION**

**Survey Summary**

**Survey Position:** 030° 07' 27.343" N, 81° 43' 12.572" W  
**Least Depth:** -3.17 m  
**Timestamp:** 2004-061.15:19:29.000 (03/01/2004)  
**DP Dataset:** H-11217\_D / 1210dp\_Non\_Echosounder / 2004-061 / DPs\_NavAids\_H-11217\_D  
**Profile/Beam:** 12/1  
**Charts Affected:** 11492\_1, 11451\_17, 11006\_1, 411\_1  
**Remarks:** *See the Evaluation Report.*

**Feature Correlation**

Line	Feature	Range
ey_Digital_Filing_System/Caris/Hips/HDCS_DATA/H-11217_D/1210dp_Non_Echosounder/2004-061/DPs_NavAids_H-11217_D	12/1	0.00

## Hydrographer Recommendations

[None]

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

-11ft (11492\_1, 11451\_17)

-1 ¾fm (11006\_1, 411\_1)

### Feature Images

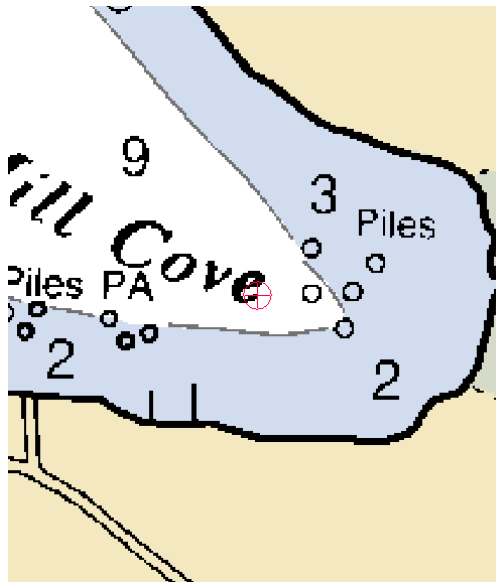


Figure 1.8.1

**1.9) Profile/Beam - 11/1 from H-11217\_D / 1210dp\_Non\_Echosounder / 2004-061 / DPs\_NavAids\_H-11217\_D**

**DANGER TO NAVIGATION**

### Survey Summary

**Survey Position:** 030° 08' 10.558" N, 81° 43' 15.054" W  
**Least Depth:** -1.67 m  
**Timestamp:** 2004-061.15:14:48.000 (03/01/2004)  
**DP Dataset:** H-11217\_D / 1210dp\_Non\_Echosounder / 2004-061 / DPs\_NavAids\_H-11217\_D  
**Profile/Beam:** 11/1  
**Charts Affected:** 11492\_1, 11451\_17, 11006\_1, 411\_1

**Remarks:**  
 information sign *See the Evaluation Report.*

### Feature Correlation

Line	Feature	Range
ey_Digital_Filing_System/Caris/Hips/HDCS_DATA/H-11217_D/1210dp_Non_Echosounder/2004-061/DPs_NavAids_H-11217_D	11/1	0.00

### Hydrographer Recommendations

[None]

**Cartographically-Rounded Depth (Affected Charts):**  
 -6ft (11492\_1, 11451\_17)  
 0 ¾fm (11006\_1, 411\_1)

### Feature Images

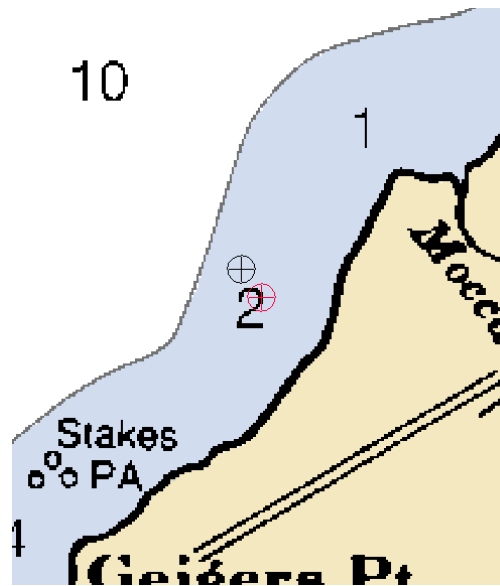


Figure 1.9.1

**1.10) Profile/Beam - 10/1 from H-11217\_D / 1210dp\_Non\_Echosounder / 2004-061 / DPs\_NavAids\_H-11217\_D**

**DANGER TO NAVIGATION**

**Survey Summary**

**Survey Position:** 030° 08' 12.079" N, 81° 43' 16.294" W  
**Least Depth:** -3.68 m  
**Timestamp:** 2004-061.15:10:07.000 (03/01/2004)  
**DP Dataset:** H-11217\_D / 1210dp\_Non\_Echosounder / 2004-061 / DPs\_NavAids\_H-11217\_D  
**Profile/Beam:** 10/1  
**Charts Affected:** 11492\_1, 11451\_17, 11006\_1, 411\_1  
**Remarks:** *See the Evaluation Report.*

**Feature Correlation**

Line	Feature	Range
ey_Digital_Filing_System/Caris/Hips/HDCS_DATA/H-11217_D/1210dp_Non_Echosounder/2004-061/DPs_NavAids_H-11217_D	10/1	0.00

## Hydrographer Recommendations

[None]

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

-12ft (11492\_1, 11451\_17)

-2fm (11006\_1, 411\_1)

### Feature Images

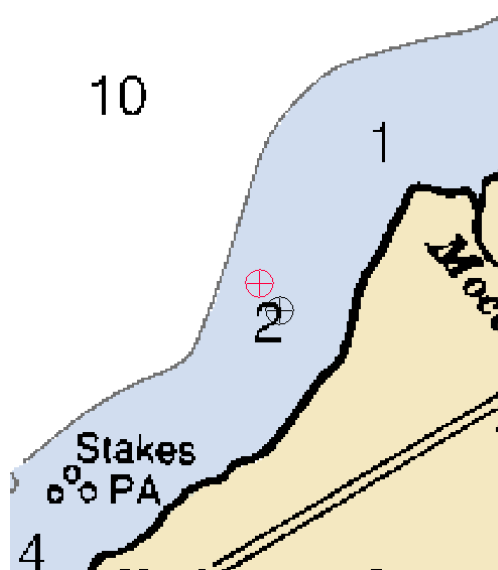


Figure 1.10.1

**1.11) Profile/Beam - 20/1 from H-11217\_D / 1210dp\_Non\_Echosounder / 2004-061 / DPs\_NavAids\_H-11217\_D**

**DANGER TO NAVIGATION**

### Survey Summary

**Survey Position:** 030° 08' 36.747" N, 81° 43' 45.079" W  
**Least Depth:** -2.64 m  
**Timestamp:** 2004-061.15:56:19.000 (03/01/2004)  
**DP Dataset:** H-11217\_D / 1210dp\_Non\_Echosounder / 2004-061 / DPs\_NavAids\_H-11217\_D  
**Profile/Beam:** 20/1  
**Charts Affected:** 11492\_1, 11451\_17, 11006\_1, 411\_1  
**Remarks:** *See the Evaluation Report.*

### Feature Correlation

Line	Feature	Range
ey_Digital_Filing_System/Caris/Hips/HDCS_DATA/H-11217_D/1210dp_Non_Echosounder/2004-061/DPs_NavAids_H-11217_D	20/1	0.00

### Hydrographer Recommendations

[None]

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

- 9ft (11492\_1, 11451\_17)
- 1 ½fm (11006\_1, 411\_1)

### Feature Images



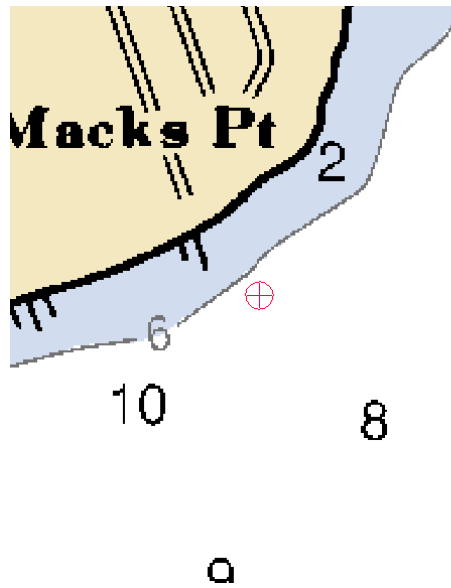


Figure 1.11.1

**1.12) Profile/Beam - 9/1 from H-11217\_D / 1210dp\_Non\_Echosounder / 2004-061 / DPs\_NavAids\_H-11217\_D**

**DANGER TO NAVIGATION**

**Survey Summary**

**Survey Position:** 030° 08' 49.263" N, 81° 42' 45.973" W  
**Least Depth:** -3.39 m  
**Timestamp:** 2004-061.15:04:21.000 (03/01/2004)  
**DP Dataset:** H-11217\_D / 1210dp\_Non\_Echosounder / 2004-061 / DPs\_NavAids\_H-11217\_D  
**Profile/Beam:** 9/1  
**Charts Affected:** 11492\_1, 11451\_17, 11006\_1, 411\_1  
**Remarks:** *See the Evaluation Report.*

**Feature Correlation**

Line	Feature	Range
ey_Digital_Filing_System/Caris/Hips/HDCS_DATA/H-11217_D/1210dp_Non_Echosounder/2004-061/DPs_NavAids_H-11217_D	9/1	0.00

## Hydrographer Recommendations

[None]

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

-11ft (11492\_1, 11451\_17)

-1 ¾fm (11006\_1, 411\_1)

### Feature Images

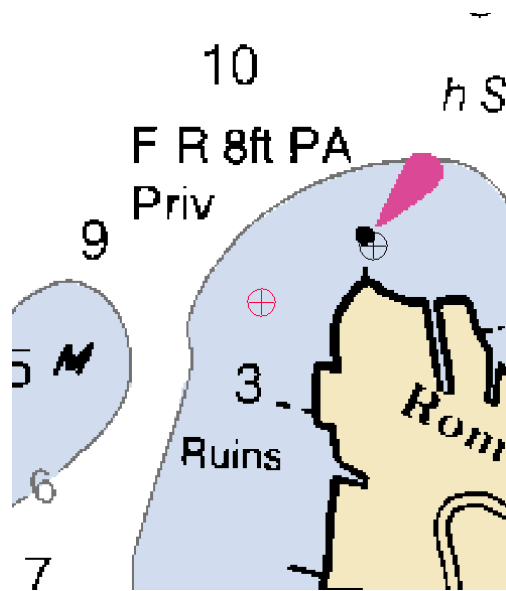


Figure 1.12.1

**1.13) Profile/Beam - 5/1 from H-11217\_D / 1210dp\_Non\_Echosounder / 2004-061 / DPs\_NavAids\_H-11217\_D**

**DANGER TO NAVIGATION**

### Survey Summary

**Survey Position:** 030° 08' 56.566" N, 81° 42' 09.303" W  
**Least Depth:** -3.20 m  
**Timestamp:** 2004-061.14:46:17.000 (03/01/2004)  
**DP Dataset:** H-11217\_D / 1210dp\_Non\_Echosounder / 2004-061 / DPs\_NavAids\_H-11217\_D  
**Profile/Beam:** 5/1  
**Charts Affected:** 11492\_1, 11451\_17, 11006\_1, 411\_1  
**Remarks:** *See the Evaluation Report.*

### Feature Correlation

Line	Feature	Range
ey_Digital_Filing_System/Caris/Hips/HDCS_DATA/H-11217_D/1210dp_Non_Echosounder/2004-061/DPs_NavAids_H-11217_D	5/1	0.00

### Hydrographer Recommendations

[None]

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

- 11ft (11492\_1, 11451\_17)
- 1 ¾fm (11006\_1, 411\_1)

### Feature Images

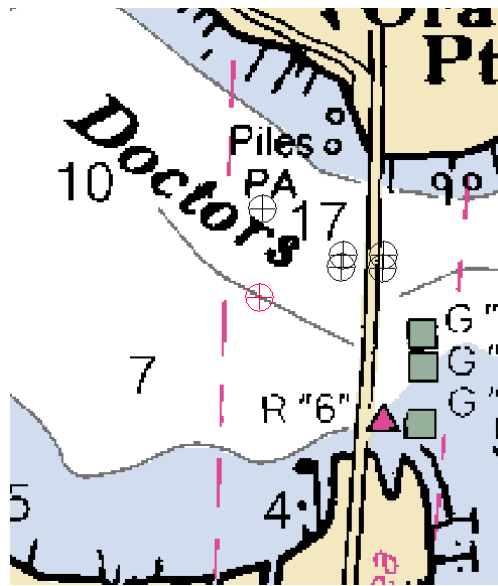


Figure 1.13.1

**1.14) Profile/Beam - 6/1 from H-11217\_D / 1210dp\_Non\_Echosounder / 2004-061 / DPs\_NavAids\_H-11217\_D**

**DANGER TO NAVIGATION**

**Survey Summary**

**Survey Position:** 030° 09' 01.413" N, 81° 42' 09.117" W  
**Least Depth:** -3.20 m  
**Timestamp:** 2004-061.14:48:27.000 (03/01/2004)  
**DP Dataset:** H-11217\_D / 1210dp\_Non\_Echosounder / 2004-061 / DPs\_NavAids\_H-11217\_D  
**Profile/Beam:** 6/1  
**Charts Affected:** 11492\_1, 11451\_17, 11006\_1, 411\_1  
**Remarks:** *See the Evaluation Report.*

**Feature Correlation**

Line	Feature	Range
ey_Digital_Filing_System/Caris/Hips/HDCS_DATA/H-11217_D/1210dp_Non_Echosounder/2004-061/DPs_NavAids_H-11217_D	6/1	0.00

## Hydrographer Recommendations

[None]

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

-11ft (11492\_1, 11451\_17)

-1 ¾fm (11006\_1, 411\_1)

### Feature Images

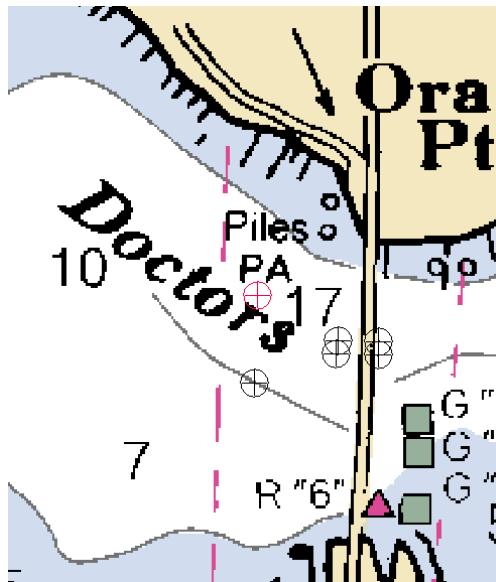


Figure 1.14.1

[1.15\) Profile/Beam - 14/1 from H-11217\\_D / 1210dp\\_Non\\_Echosounder / 2004-061 / DPs\\_NavAids\\_H-11217\\_D](#)

**DANGER TO NAVIGATION**

### Survey Summary

**Survey Position:** 030° 07' 25.088" N, 81° 43' 39.006" W  
**Least Depth:** -1.17 m  
**Timestamp:** 2004-061.15:25:18.000 (03/01/2004)  
**DP Dataset:** H-11217\_D / 1210dp\_Non\_Echosounder / 2004-061 / DPs\_NavAids\_H-11217\_D  
**Profile/Beam:** 14/1  
**Charts Affected:** 11492\_1, 11451\_17, 11006\_1, 411\_1

**Remarks:**

public boat ramp *See the Evaluation Report.*

### Feature Correlation

Line	Feature	Range
ey_Digital_Filing_System/Caris/Hips/HDCS_DATA/H-11217_D/1210dp_Non_Echosounder/2004-061/DPs_NavAids_H-11217_D	14/1	0.00

### Hydrographer Recommendations

[None]

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

-4ft (11492\_1, 11451\_17)

0 ½fm (11006\_1, 411\_1)

### Feature Images

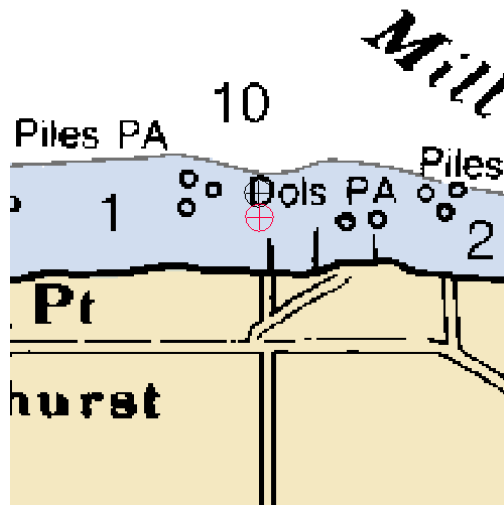


Figure 1.15.1



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL OCEAN SERVICE  
Silver Spring, Maryland 20910

**TIDE NOTE FOR HYDROGRAPHIC SURVEY**

**DATE:** June 24, 2004

**HYDROGRAPHIC BRANCH:** Atlantic

**HYDROGRAPHIC PROJECT:** OPR-G443-NRT2-2004

**HYDROGRAPHIC SHEET:** H11217

**LOCALITY:** Doctors Lake, St. Johns River, FL

**TIME PERIOD:** January 21 - March 1, 2004

**TIDE STATION USED:** 872-0357 I-295 Bridge, FL

Lat. 30° 11.5'N Lon. 81° 41.5'W

**PLANE OF REFERENCE (MEAN LOWER LOW WATER):** 0.000 meters

**HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE:** 0.309 meters

**REMARKS: RECOMMENDED ZONING**

**Use zone(s) identified as:** SJR39, SJR40, SJR40A, SJR41, SJR41A & SJR41B.

**Refer to attachments for zoning information.**

**Note 1: Provided time series data are tabulated in metric units (meters), relative to MLLW and on Greenwich Mean Time.**

*For*   
-----  
**CHIEF, REQUIREMENTS AND DEVELOPMENT DIVISION**





**ATLANTIC HYDROGRAPHIC BRANCH  
EVALUATION REPORT FOR H11217 (2004)**

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**

The following software was used to process data at the Atlantic Hydrographic Branch:

Hydrographic Processing System  
MicroStation J, version 7.1  
I/RAS B, version 7.01  
MapInfo, version 6.5  
CARIS HIPS/SIPS 2000  
PYDRO, version 2.5.4

The smooth sheet was plotted using a Hewlett Packard DesignJet 2500CP plotter.

**Junctions**

H11216 (2003) to the east

A standard junction was effected between the present survey and H11216 (2003).

**C. VERTICAL AND HORIZONTAL CONTROL**

**Horizontal Control**

Horizontal control used for this survey during data acquisition is based upon the North American Datum of 1983 (NAD 83). Office processing of this survey is based on these values.

**D. RESULTS AND RECOMMENDATIONS**

**COMPARISON WITH CHART 11492 (19<sup>th</sup> Edition, Nov. 24/01)**

The charted hydrography originates with prior surveys and requires no further consideration. The hydrographer makes an adequate chart comparison in section D. of the Descriptive Report.

### Charted Items

3.) The hydrographer verified a charted visible wreck in Latitude 30°09'21"N, Longitude 81°42'32"W. The hydrographer identified an uncharted foul area on the eastern side of the wreck extending from the shore to Latitude 30°09'20.77"N, Longitude 81°42'33.40"W. It is recommended that the foul area limits be extended as shown on the present survey.

The following charted depths and features originating with miscellaneous sources are not considered verified or disproved by the present survey:

<u>Feature</u>	<u>Latitude (N)</u>	<u>Longitude (W)</u>
3-ft	30°07'06.79"	81°45'28.67"
2-ft	30°09'20.62"	81°42'54.74"
Pile	30°09'18.15"	81°43'01.01"

It is recommended that these features be retained as charted.

### Dangers to Navigation

The hydrographer submitted fifteen Danger to Navigation (DTON) Reports to the Marine Chart Division, N/CS3x1, Silver Spring, Maryland. Copies of these reports are appended to the Descriptive Report.

The hydrographer submitted the following features as DTONs. During office processing it was determined that the markers are privately maintained signs. It is recommended that these features be charted in the present survey location.

<u>Feature</u>	<u>Latitude (N)</u>	<u>Longitude (W)</u>
1.1 Pier	30°08'52.34"	81°42'38.95"
1.2 Sign	30°06'18.31"	81°44'59.42"
1.3 Sign	30°06'18.73"	81°44'56.84"
1.4 Sign	30°06'28.11"	81°45'47.67"
1.5 Sign	30°07'02.01"	81°45'29.71"
1.6 Sign	30°07'12.86"	81°44'51.08"
1.7 Sign	30°07'26.39"	81°43'39.08"
1.8 Sign	30°07'27.34"	81°43'12.57"
1.9 Sign	30°08'10.56"	81°43'15.05"
1.10 Sign	30°08'12.08"	81°43'16.29"
1.11 Sign	30°08'36.75"	81°43'45.08"
1.12 Sign	30°08'49.26"	81°42'45.97"

1.13 Sign	30°08'56.57"	81°42'09.30"
1.14 Sign	30°09'01.41"	81°42'09.12"
1.15 Pier	30°07'25.09"	81°43'39.01"

### **Comparison with Prior Surveys**

A comparison with prior surveys was not done during office processing in accordance with section 4. of the memorandum titled Changes to Hydrographic Survey Processing, dated May 24, 1995.

### **Adequacy of Survey**

This is an adequate hydrographic survey. No additional field work is recommended.

### **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. The following NOS Chart was used for compilation of the present survey: 11492 (19<sup>th</sup> Edition, Nov. 24/01)

A handwritten signature in black ink, appearing to read "Joe Burke", written over a horizontal line.

**Joseph W. Burke**  
Hydrographic Survey Associate  
Verification of Field Data  
Evaluation and Analysis

APPROVAL SHEET  
H11217 (2004)

The completed survey has been inspected with regard to survey coverage, delineation of depth curves, development of critical depths, cartographic symbolization, and verification or disproof of charted data. All revisions and additions made to the smooth sheet during survey processing have been entered in the digital data for this survey. The survey records and digital data comply with NOS requirements except where noted in the Evaluation Report.



Richard H. Whitfield  
Cartographer,  
Atlantic Hydrographic Branch

Date: 6 Oct 2004

I have reviewed the smooth sheet, accompanying data, and reports. This survey and accompanying digital data meet or exceed NOS requirements and standards for products in support of nautical charting except where noted in the Evaluation Report.



Approved:

P. Tod Schattgen  
Lieutenant Commander, NOAA  
Chief, Atlantic Hydrographic Branch

Date: 6 OCT 2004

