NOAA FORM 76-35A

#### U.S. DEPARTMENT OF COMMERCE

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY

#### DESCRIPTIVE REPORT

Type of Survey Field Examination

Chart Validation

Registry No. F00520

#### LOCALITY

State/Territory Florida

General Locality Port Canaveral

 $\begin{tabular}{ll} {\it Sub-locality} & {\it Entrance to Canaveral Harbor Channel} \\ & {\it To Barge Channel} \end{tabular}$ 

2006-07

CHIEF OF PARTY

David B. Elliott -Team Leader

LIBRARY & ARCHIVES

DATE

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

#### **REGISTRY NUMBER:**

## **HYDROGRAPHIC TITLE SHEET**

F00520

 $INSTRUCTIONS: \quad \hbox{The Hydrographic Sheet should be accompanied by this form, filled in as}$ 

completely as possible, when the sheet is forwarded to the Office.

FIELD NUMBER: N/A

State/Territory: Florida

General Locality: Port Canaveral

Sub-Locality: Entrance to Canaveral Harbor Channel to Barge Channel

Scale: 1:5,000 Date of Survey: 06 Dec, 2006 to 27 Aug, 2007

Instructions Dated: 14 Sept, 2006 Project Number: OPR-H320-NRT2-06

Vessel: NOAA Launch 1210

Chief of Party: David B. Elliott - Team Leader

Surveyed by: David Elliott, Robert Ramsey, Frank Younger

& Aurel Piantanida (NRT2)

Soundings by: **ODOM Echtotrac CV** 

Graphic record scaled by: **DE, RR, FY, AP** 

Graphic record checked by: DE. RR, FY, AP

Protracted by: N/A Automated Plot: N/A

Verification by: Atlantic Hydrographic Branch Personnel

Soundings in: Meters at MLLW

#### Remarks:

- 1) All Times are UTC.
- 2) This is a basic Hydrographic Survey under the Navigable Area Concept.
- 3) Projection is UTM Zone 17.

Red bold italic comments were made during office review.

# TABLE OF CONTENTS

A.	AREA SURVEYED	2
B.	DATA ACQUISITION AND PROCESSING	4
	B.1. EQUIPMENT	4
	B.2. QUALITY CONTROL	4
	B.3. CORRECTIONS TO ECHO SOUNDING	6
C.	VERTICAL AND HORIZONTAL CONTROL	6
D.	RESULTS AND RECOMMENDATIONS	7
	D.1. CHART COMPARISON	8
	D.2. ADDITIONAL RESULTS	8
E.	APPROVAL SHEET	9

## **DESCRIPTIVE REPORT**

## to accompany

OPR-H320-NRT2-06

FIELD EXAMINATION SURVEY F00520

Scale of Survey: 1:5,000 Year of Survey: 2006-07 Navigation Response Team 2 - Launch 1210 David B. Elliott- Team Leader

## A. AREA SURVEYED

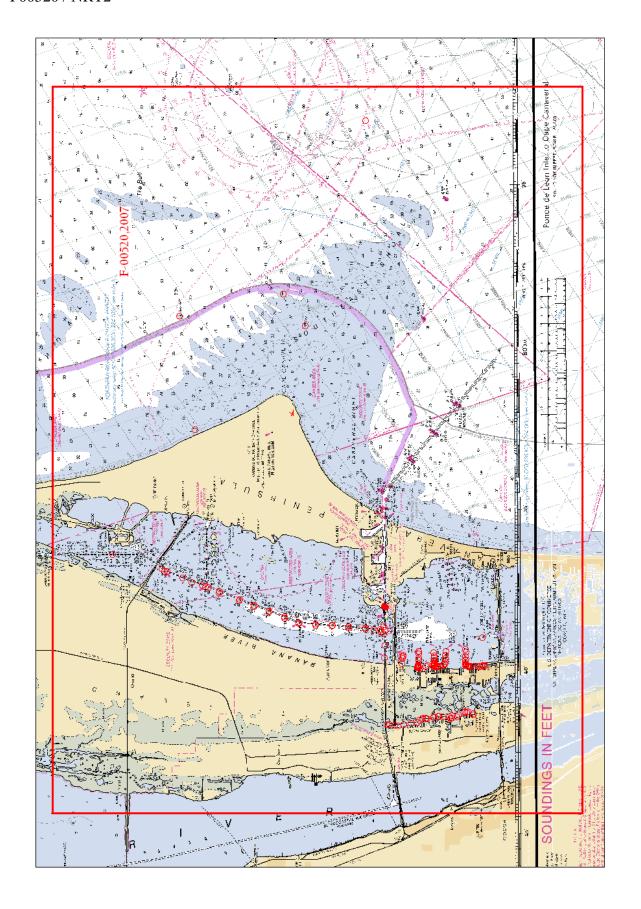
This hydrographic survey was conducted in accordance with Port Letter Instructions for project OPR-H320-NRT-06, Canaveral and Ponce De Leon Inlet, FL. The instructions are dated Sep. 14, 2006.

The Regional Navigation Manager has identified the Port of Canaveral and Ponce De Leon Inlet as areas that require either bathymetry or ENC updates from maritime constituent requests. 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.

Survey Dates: Dec 06, 2006 (DN: 340) to 27, 2007 (DN: 239)

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

Total LNM of SB & SSS = 1.8 Total Crosslines = 0 Bottom Samples = 0 Total Sq NM = 5



## **B. DATA ACQUISITION AND PROCESSING**

## **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.

NOAA launch 1210, a 30-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.

An ODOM EchotracCV Fathometer was used to collect all echo soundings on this survey.

A Klein 3000 side scan sonar, was used throughout this survey. The side scan sonar equipment was used to investigate AWOIS items.

A Trimble DGPS Beacon Receiver was used as the primary navigation station on launch 1210.

A Trimble Pathfinder ProXRS was used for all ENC validation positioning and establishment of calibration points.

The Instruments used for determining corrections for the speed of sound through the water column were an ODOM Digibar Ser # 98295-020606 and a Seabird-Seacat Velocity Profiler, model 19-03, Ser# 198671-1477. CTD casts are downloaded and processed in the Velociwin program supplied by the Hydrographic Systems and Technology Program (HSTP).

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

Following the Field Procedures Manual and the NOS Hydrographic Surveys Specifications and Deliverables Manual, June 14, 2006 has insured the integrity of the survey data for F00520.

Differential GPS (DGPS) was used for all hydrographic data acquired on this survey.

#### **Echo Sounder Control**

Lead line comparisons were conducted daily and compared to the digital depth and draft.

#### **Side Scan Sonar Quality Control**

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 100/500kHz.

A coverage of 200% was obtained wherever possible in the required survey areas and where water depth and/or hazards permitted. Side scan sonar coverage was conducted to the 12-foot depth curve

#### F00520 / NRT2

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, or sea state, were seen periodically. Significant contacts and shadows were processed with Caris 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 frequencies used were 100kHz and 500kHz. 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 4 meters or less, minor degradation of the side scan imagery resulted from the Odom EchoTrack CV2 echosounder. Traces were noted due to cross-talk between the two systems.

#### **Junctions**

There are no Junctions for this survey.

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

Velocwin SV and cast GP's have been inserted into the final Pydro PSS as suggested in the Field Procedures Manual.

There are no deviations to be discussed in this section.

## C. VERTICAL AND HORIZONTAL CONTROL

The Instruments used for determining corrections for the speed of sound through the water column were an ODOM Digibar and a Seabird-Seacat Velocity Profiler. CTD casts are downloaded and processed in the Velociwin program supplied by the Hydrographic Systems and Technology Program (HSTP). Corrections were applied to the sounding plot using the Carris HIPS.

Field soundings are corrected by preliminary acoustic water level data from NOAA/CO-OPS. The Real Time Actual 6 min Tides are downloaded from: "http://co-ops.nos.noaa.gov/data\_res.html", for all gauges required in the given projects defined by the ZDF file provided in the project instructions. Tide values are downloaded in blocks of data that covers the Times of Hydrography, and saved in a text file format. The MapInfo program is then used with the "HYDRO\_MI" pre-Survey function "Create Cowlis", which converts the text file into a Caris tide file (.tid).

All elevations and soundings on survey F00520 are based on MLLW unless otherwise specified.

A Request for Approved Tides letter was sent to <smooth.tides@noaa.gov> on Aug. 28, 2007 (Appendix IV).

#### **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 Beacon.

Horizontal dilution of precision (HDOP) was monitored on Hypack daily on the survey platform. The value never exceeded 2.5 HDOP, 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.

## D. RESULTS AND RECOMMENDATIONS

## **D.1** Chart Comparison

There are five charts affected by this survey:

<b>Chart Number</b>	<b>Edition</b>	<b>Edition Date</b>	<b>Scale</b>
11476	21st	July 01, 2006	1:80,000
11478	21st	May 01, 2005	1:10,000
11481	$6^{ ext{th}}$	Nov. 01, 2006	1:25,000
11484	23rd	Sept. 1, 2006	1:80,000
11485	34 <sup>th</sup>	April 1, 2005	1:40,000

ENC Cell	<b>Last Updated</b>	Corresponding Chart	<b>Edition</b>
US5FL81M	Mar 01, 2006	11481	3
US5FL82M	Feb 22, 2006	11478	3

## **General Agreement with Charted soundings**

In general survey soundings compared with the charted soundings within two to three feet. All charted soundings should be superseded by this survey. *Refer to Evaluation Report.* 

## **AWOIS Item Investigations**

There were four AWOIS items within the survey limits of F00520. One was "assigned" and three were for informational purposes. The detailed documentation for these features can be found in the PSS in Pydro and the AWOIS database record.

The AWOIS item search results are as follows:

Record #	<u>Method</u>	Recommendation
53437	SSS/VBES	No obstruction exists, Remove from chart. <i>Concur</i> .
Informational only		
301	Not investigated	none
10325	Not investigated	none
13308	Not Investigated	none

## **Dangers to Navigation**

There were 2 DTONS within the confines of F00520. These items were submitted in advance to MCD.

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

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

Navigation Aids serve their intended purpose. Charted positions should be superseded by new survey positions. *Concur with clarification. Refer to Evaluation Report.* 

## **Ferry Routes**

There are no Ferry routes within the confines of F00520.

## **Submarine Cables and Pipelines**

There are five submerged cable crossings and they are adequately charted.

## **Bridges**

There are six bridges within the confines of F00520. The horizontal and vertical clearances were checked by NRT2 and they are adequately charted.

## **E. APPROVAL SHEET**

## OPR-H320-NRT2-O6/07 Port Canaveral, FL

Survey Registry No. F00520

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.

David B. Elliott

Submitted by: Dail B Clust 2007.08.28

17:55:40 Z

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

# F00520 DTON Report

**Registry Number:** F00520 **State:** Florida

**Locality:** Port Canaveral

**Sub-locality:** : Entrance to Canaveral Harbor Channel to Barge Channel

**Project Number:** OPR-H320-NRT2-06

**Survey Dates:** 12/07/2006 - 08/21/2007

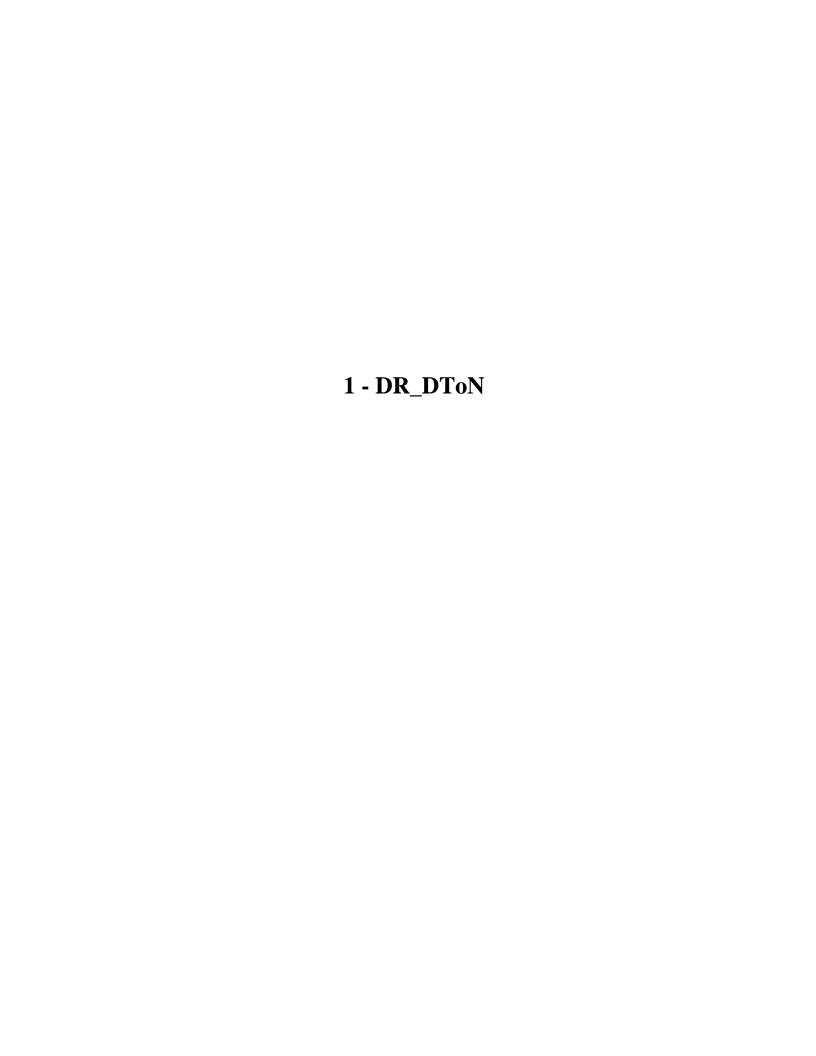
## **Charts Affected**

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
11478	21st	05/01/2005	1:10,000 (11478_1)	USCG LNM: 04/01/2008 (12/30/2008) NGA NTM: 04/24/1999 (01/03/2009)
11481	6th	11/01/2006	1:25,000 (11481_1)	USCG LNM: 11/25/2008 (12/30/2008) NGA NTM: 07/31/1999 (01/03/2009)
11478	21st	05/01/2005	1:40,000 (11478_2)	[L]NTM: ?
11476	20th	04/01/2004	1:80,000 (11476_1)	[L]NTM: ?
11484	23rd	09/01/2006	1:80,000 (11484_1)	USCG LNM: 09/25/2007 (12/30/2008) NGA NTM: 04/24/1999 (01/03/2009)
11460	40th	09/01/2005	1:466,940 (11460_1)	[L]NTM: ?
11451	32nd	03/01/2005	1:495,362 (11451_17)	[L]NTM: ?
11009	37th	07/01/2004	1:1,200,000 (11009_1)	[L]NTM: ?
411	50th	09/01/2005	1:2,160,000 (411_1)	[L]NTM: ?

<sup>\*</sup> Correction(s) - source: last correction applied (last correction reviewed--"cleared date")

## **Features**

		Feature	Survey	Survey	Survey	AWOIS
No.	Name	Type	Depth	Latitude	Longitude	Item
1.1	Visible wreck {FL WRK #05-NE-05-9292}	Wreck	-7.27 m	28° 23' 37.8" N	080° 39' 21.9" W	
1.2	Danger Beacon LT USCG LL#9650.1	Lighted structure	[None]	28° 24' 28.2" N	080° 35' 11.9" W	



## 1.1) Visible wreck {FL WRK #05-NE-05-9292}

#### DANGER TO NAVIGATION

## **Survey Summary**

**Survey Position:** 28° 23′ 37.8″ N, 080° 39′ 21.9″ W

**Least Depth:** -7.27 m = -3.86 ft = -3.977 fm = -3 fm 5.86 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.15:32:14.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 41/1

**Charts Affected:** 11481\_1, 11478\_2, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

Sailboat Ange. Abandoned vessel FWC 05-NOVA-059292

## **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	41/1	0.00	000.0	Primary

# **Hydrographer Recommendations**

Chart a VIS WRK at surveyed position 28°23'37.812", -080°39'21.939".

QUA: GPSmode=2, SVs=8, HDOP=1.00

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

-24ft (11481\_1, 11478\_2, 11476\_1, 11484\_1, 11451\_17)

-2fm (11460\_1, 11009\_1, 411\_1)

#### S-57 Data

**Geo object 1:** Wreck (WRECKS)

Attributes: CATWRK - 2:dangerous wreck

CONVIS - 1:visual conspicuous

HEIGHT - 7.27 m

INFORM - {FL WRK #05-NE-05-9292}

OBJNAM - VIS WrK

TECSOU - 1:found by echo-sounder

VALSOU - -7.274 m

VERDAT - 12:Mean lower low water

WATLEV - 1:partly submerged at high water

## **Office Notes**

Retain as charted. The stranded wreck was charted as a result of a field-submitted DtoN.

# **Feature Images**



Figure 1.1.1



Figure 1.1.2

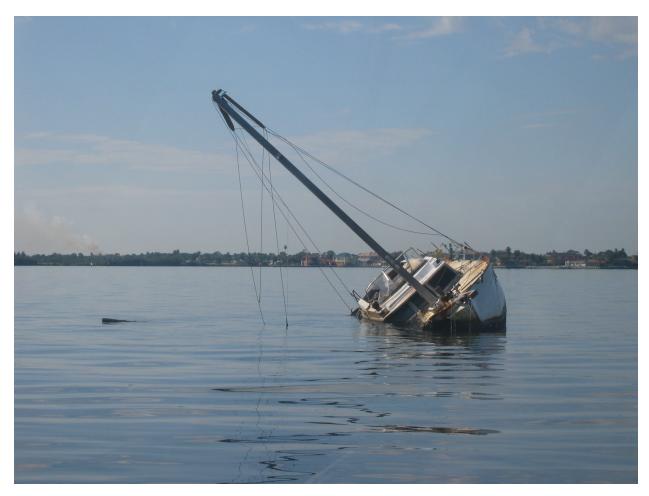


Figure 1.1.3



Figure 1.1.4



Figure 1.1.5



Figure 1.1.6

## 1.2) Danger Beacon LT USCG LL#9650.1

#### DANGER TO NAVIGATION

## **Survey Summary**

**Survey Position:** 28° 24′ 28.2″ N, 080° 35′ 11.9″ W

**Least Depth:** [None]

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2007-233.18:03:01.000 (08/21/2007) **GP Dataset:** F00520 Trimble 300 ATONS.mdb

**GP No.:** 1

**Charts Affected:** 11478\_1, 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

SOUTH JETTY LIGHT. Sklt tower. DANGER BEACON

USCG LL# 9650.1, South Jetty Danger Beacon Light is miss charted. Currently charted on the offshore end of a public fishing pier, it is actually positioned on the offshore end of the South jetty.

## **Feature Correlation**

Address		Feature	Range	Azimuth	Status	
	F00520 Trimble 300 ATONS.mdb	1	0.00	0.000	Primary	

# **Hydrographer Recommendations**

[None]

#### S-57 Data

Geo object 1: Light (LIGHTS)

Attributes: COLOUR - 1:white

INFORM - USCG maintained White LT USCG LL#9650.1

OBJNAM - SOUTH JETTY LIGHT. Sklt tower. DANGER BEACON

# **Office Notes**

Defer to MCD for charting disposition. The feature was submitted as a DtoN by the field, but the chart does not reflect the hydrographer's DtoN report.

# **Feature Images**



Figure 1.2.1

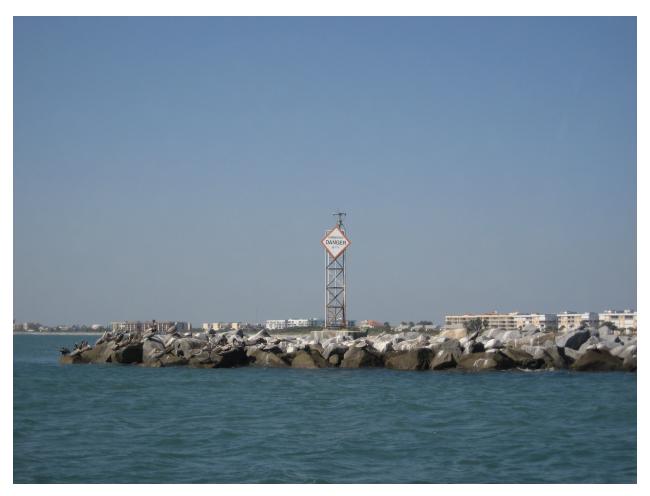


Figure 1.2.2

# F00520 AWOIS Report

**Registry Number:** F00520 **State:** Florida

**Locality:** Port Canaveral

**Sub-locality:** : Entrance to Canaveral Harbor Channel to Barge Channel

**Project Number:** OPR-H320-NRT2-06

**Survey Date:** 01/22/2009

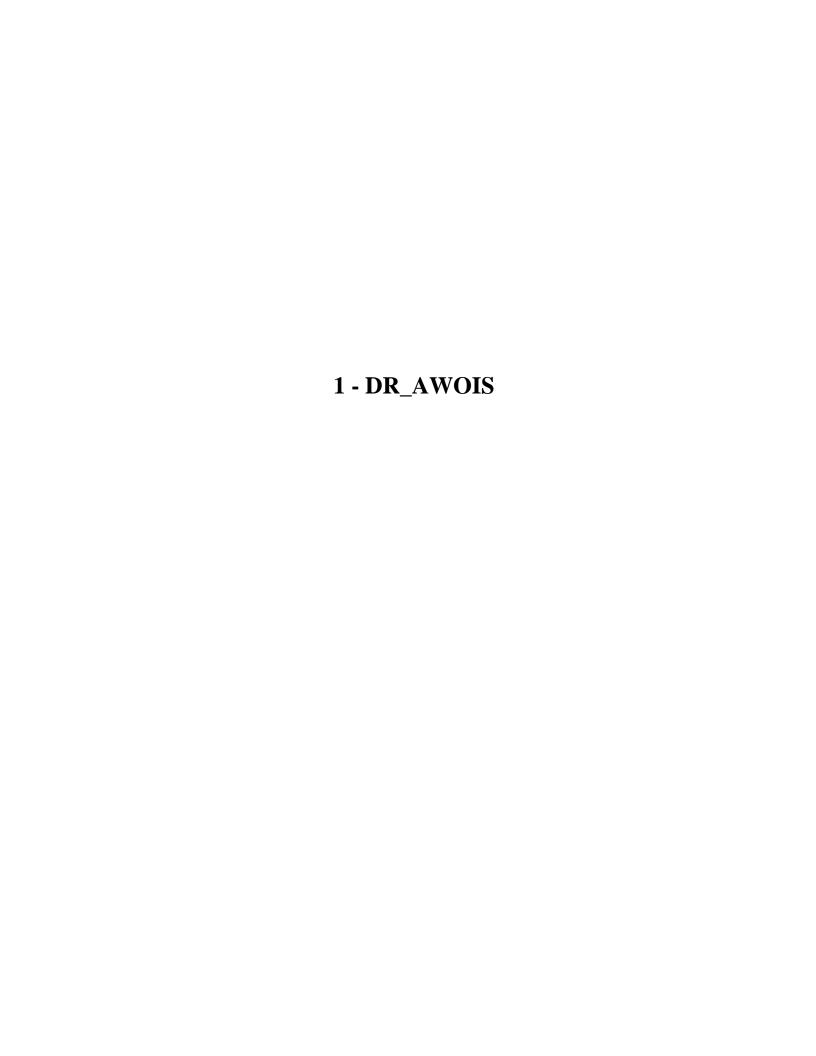
## **Charts Affected**

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
11478	21st	05/01/2005	1:10,000 (11478_1)	USCG LNM: 04/01/2008 (12/30/2008) NGA NTM: 04/24/1999 (01/03/2009)
11481	6th	11/01/2006	1:25,000 (11481_1)	USCG LNM: 11/25/2008 (12/30/2008) NGA NTM: 07/31/1999 (01/03/2009)
11476	20th	04/01/2004	1:80,000 (11476_1)	[L]NTM: ?
11484	23rd	09/01/2006	1:80,000 (11484_1)	USCG LNM: 09/25/2007 (12/30/2008) NGA NTM: 04/24/1999 (01/03/2009)
11460	40th	09/01/2005	1:466,940 (11460_1)	[L]NTM: ?
11451	32nd	03/01/2005	1:495,362 (11451_17)	[L]NTM: ?
11009	37th	07/01/2004	1:1,200,000 (11009_1)	[L]NTM: ?
411	50th	09/01/2005	1:2,160,000 (411_1)	[L]NTM: ?

<sup>\*</sup> Correction(s) - source: last correction applied (last correction reviewed--"cleared date")

## **Features**

No.	Name	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	AWOIS 53437	GP	[None]	28° 24' 33.2" N	080° 37' 59.1" W	53437



F00520 AWOIS Report 1 - DR\_AWOIS

## 1.1) AWOIS 53437

## **Primary Feature for AWOIS Item #53437**

**Search Position:** 28° 24′ 32.0″ N, 080° 37′ 60.0″ W

Historical Depth: [None]
Search Radius: 100

**Search Technique:** S2,ES,DI,SD

Technique Notes: SURVEY SOUTH OF GP FROM SHORE (SAFE NAVIGATION) TO 75 METERS

NORTH FROM GP. SURVEY 100 METERS EAST AND WEST OF GP.

#### **History Notes:**

LNM 28/86-- USCG DISTRICT 7; A 19 FOOT PLEASURE CRAFT HAS BEEN REPORTED SUNK IN ABOUT 3 FEET OF WATER IN APPROXIMATE POSITION 28°24'32"N - 080°38'00"W. (ENTERED CEH 5/06) OPR-H320-NRT2-06, F00520, 2007. 200% sss ops were conducted over the search area for the charted subm wrk. NO contact was made of the charted feature. Recommend Removal from the Charts. RWR

## **Survey Summary**

**Survey Position:** 28° 24′ 33.2″ N, 080° 37′ 59.1″ W

**Least Depth:** [None]

**TPU** ( $\pm 1.96\sigma$ ): **THU** (**TPEh**) [None]; **TVU** (**TPEv**) [None]

**Timestamp:** 2009-022.09:36:43 (01/22/2009)

**GP Dataset:** ChartGPs - Digitized

**GP No.:** 1

**Charts Affected:** 11478\_1, 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

No signs of Awois# 53437 subm wrk PA were found. an unrelated subm obstr was located, however on further developement no hard contact on this feature could be located. This LD represents the best shoal sounding obtained.

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	1	0.00	0.000	Primary
AWOIS	AWOIS # 53437	42.92	032.9	Secondary (grouped)

F00520 AWOIS Report 1 - DR\_AWOIS

# **Hydrographer Recommendations**

OPR-H320-NRT2-06, F00520, 2007. 200% sss ops were conducted over the search area for the charted subm wrk. NO contact was made of the charted feature. Recommend Removal from the Charts. RWR

#### S-57 Data

**Geo object 1:** Cartographic symbol (\$CSYMB)

## **Office Notes**

Concur with clarification. No contact deemed to be AWOIS 53437 was found; however, an insignificant contact was found within the search radius. Delete the charted dangerous wreck PA.

# **F00520 Charted Features Report**

**Registry Number:** F00520 **State:** Florida

**Locality:** Port Canaveral

**Sub-locality:** : Entrance to Canaveral Harbor Channel to Barge Channel

**Project Number:** OPR-H320-NRT2-06

**Survey Dates:** 12/06/2006 - 01/26/2009

## **Charts Affected**

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
11478	21st	05/01/2005	1:10,000 (11478_1)	USCG LNM: 04/01/2008 (12/30/2008) NGA NTM: 04/24/1999 (01/03/2009)
11481	6th	11/01/2006	1:25,000 (11481_1)	USCG LNM: 11/25/2008 (12/30/2008) NGA NTM: 07/31/1999 (01/03/2009)
11485	35th	08/01/2007	1:40,000 (11485_6)	USCG LNM: 08/05/2008 (12/30/2008) NGA NTM: None (01/03/2009)
11478	21st	05/01/2005	1:40,000 (11478_2)	[L]NTM: ?
11476	20th	04/01/2004	1:80,000 (11476_1)	[L]NTM: ?
11484	23rd	09/01/2006	1:80,000 (11484_1)	USCG LNM: 09/25/2007 (12/30/2008) NGA NTM: 04/24/1999 (01/03/2009)
11480	39th	09/01/2005	1:449,659 (11480_1)	[L]NTM: ?
11460	40th	09/01/2005	1:466,940 (11460_1)	[L]NTM: ?
11451	32nd	03/01/2005	1:495,362 (11451_17)	[L]NTM: ?
11009	37th	07/01/2004	1:1,200,000 (11009_1)	[L]NTM: ?
411	50th	09/01/2005	1:2,160,000 (411_1)	[L]NTM: ?

<sup>\*</sup> Correction(s) - source: last correction applied (last correction reviewed--"cleared date")

## **Features**

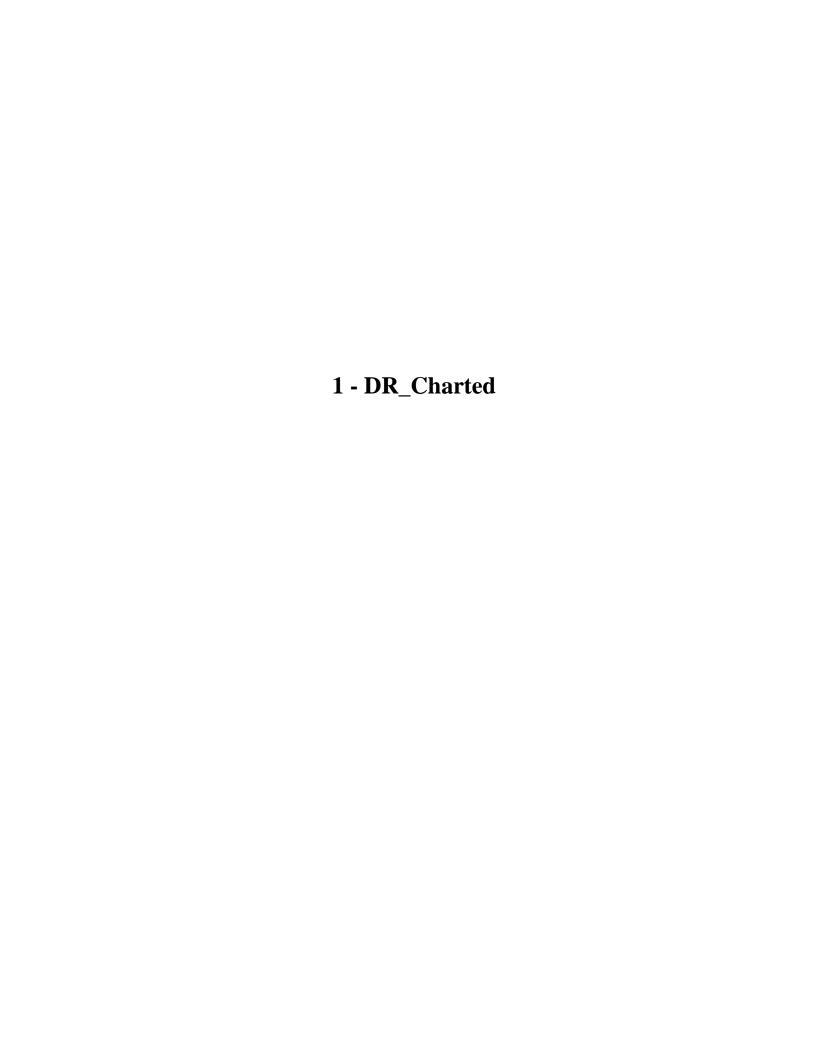
	Feature	Survey	Survey	Survey	4
Name	Туре	Depth	Latitude	Longitude	_
DBN G"1" USCG LL#41565	Daybeacon (green)	-3.37 m	28° 24' 25.8" N	080° 41' 37.7" W	
DBN G"3" USCG LL#41570	Daybeacon (green)	-2.85 m	28° 24' 12.2" N	080° 41' 39.5" W	
DBN G"5" USCG LL#41575	Daybeacon (green)	-2.84 m	28° 24' 02.2" N	080° 41′ 36.9″ W	
DBN G"9" USCG LL#41585	Daybeacon (green)	-3.31 m	28° 23' 39.8" N	080° 41′ 34.3″ W	

					'
DBN G"13" USCG LL#41595	Daybeacon (green)	-3.28 m	28° 23' 31.0" N	080° 41' 25.2" W	
DBN R"14" USCG LL#41600	Daybeacon (red)	-2.77 m	28° 23' 23.7" N	080° 41' 26.6" W	
DBN R"16" USCG LL#41610	Daybeacon (red)	-3.25 m	28° 23' 13.8" N	080° 41' 24.6" W	
DBN G"15" USCG LL#41605	Daybeacon (green)	-3.25 m	28° 23' 13.5" N	080° 41' 23.2" W	
DBN G"17" USCG LL#41615	Daybeacon (green)	-2.75 m	28° 23' 04.8" N	080° 41' 22.2" W	
DBN G"19" USCG LL#41620	Daybeacon (green)	0.25 m	28° 22' 58.4" N	080° 41' 22.6" W	
DBN G"21" USCG LL#41625	Daybeacon (green)	-3.24 m	28° 22' 47.6" N	080° 41' 23.7" W	
DBN R"22" USCG LL#41630	Daybeacon (red)	-3.24 m	28° 22' 43.3" N	080° 41' 25.5" W	
DBN R"24" USCG LL#41640	Daybeacon (red)	-3.23 m	28° 22' 35.0" N	080° 41' 22.9" W	
DBN G"23" USCG LL#41635	Daybeacon (green)	-3.23 m	28° 22' 33.4" N	080° 41' 19.2" W	
DBN R"26" USCG LL#41650	Daybeacon (red)	-3.22 m	28° 22' 22.5" N	080° 41' 15.2" W	
DBN R"28" USCG LL#41655	Daybeacon (red)	-3.21 m	28° 22' 19.6" N	080° 41' 14.6" W	
DBN R"30" USCG LL#41665	Daybeacon (red)	-2.71 m	28° 22' 17.4" N	080° 41′ 13.9″ W	
DBN G"29" USCG LL#41660	Daybeacon (green)	-3.21 m	28° 22' 17.4" N	080° 41′ 13.1″ W	
Pile (Shoal Beacon USCG LL#41670 missing DBN board)	Pile	-3.20 m	28° 22' 08.6" N	080° 41' 17.0" W	
Manatee Zone	Stationary structure, floating or fixed	-4.29 m	28° 23' 36.8" N	080° 41' 29.2" W	
Manatee Zone	Stationary structure, floating or fixed	-5.19 m	28° 22' 08.7" N	080° 41' 19.3" W	
Manatee Zone	Stationary structure, floating or fixed	-5.16 m	28° 22' 22.7" N	080° 41′ 13.5″ W	
Manatee Zone	Stationary structure, floating or fixed	-5.13 m	28° 22' 43.6" N	080° 41' 21.0" W	
Manatee Zone	Stationary structure, floating or fixed	-4.12 m	28° 22' 46.4" N	080° 41' 26.4" W	
Manatee Zone	Stationary structure, floating or fixed	-6.10 m	28° 23' 05.6" N	080° 41' 21.5" W	
Manatee Zone	Stationary structure, floating or fixed	-5.08 m	28° 23' 26.2" N	080° 41' 25.1" W	
Manatee Zone	Stationary structure, floating or fixed	-4.08 m	28° 23' 26.2" N	080° 41' 27.0" W	
Manatee Zone	Stationary structure, floating or fixed	-5.07 m	28° 23' 50.6" N	080° 41' 35.2" W	
Manatee Zone	Stationary structure, floating or fixed	-4.05 m	28° 24' 17.6" N	080° 41' 39.0" W	
Manatee Zone	Stationary structure, floating or fixed	-4.04 m	28° 24' 29.7" N	080° 41' 37.9" W	
DBN G"25" USCG LL#41805	Daybeacon (green)	-4.36 m	28° 28' 07.4" N	080° 37' 57.5" W	
DBN R"16A" USCG LL#41750	Daybeacon (red)	-3.36 m	28° 25' 58.9" N	080° 38' 33.2" W	
DBN G"17" USCG LL#41755	Daybeacon (green)	-4.36 m	28° 25' 59.2" N	080° 38' 34.9" W	
DBN G"13" USCG LL#41715	Daybeacon (green)	-4.30 m	28° 24' 38.6" N	080° 38' 45.4" W	
DBN R"6" USCG LL#41695	Daybeacon (red)	-4.29 m	28° 24' 34.8" N	080° 38' 48.6" W	
DBN R"4" USCG LL#41705	Daybeacon (red)	-4.27 m	28° 24' 34.4" N	080° 38' 36.1" W	
FL G"1" USCG LL#43030	Lighted structure	-3.26 m	28° 24' 03.1" N	080° 39' 29.0" W	
DBN G"3" USCG LL#43040	Daybeacon (green)	-3.26 m	28° 24' 03.5" N	080° 39' 31.2" W	
DBN G"5" USCG LL#43050	Daybeacon (green)	-3.26 m	28° 24' 04.0" N	080° 39' 35.4" W	
DBN G"7" USCG LL#43055	Daybeacon (green)	-4.27 m	28° 24' 05.3" N	080° 39' 44.0" W	_
					_

DBN R"2" USCG LL#43035	Daybeacon (red)	-3.29 m	28° 24' 04.8" N	080° 39' 31.2" W	
FL R"2" USCG LL#42495	Lighted structure	-4.25 m	28° 23' 37.7" N	080° 39' 26.5" W	
DBN G"3" USCG LL#42950	Daybeacon (green)	-3.74 m	28° 23' 37.6" N	080° 39' 33.5" W	
DBN R"4" USCG LL#42955	Daybeacon (red)	-3.75 m	28° 23' 38.1" N	080° 39' 39.1" W	
DBN G"5" USCG LL#42960	Daybeacon (green)	-2.75 m	28° 23' 38.2" N	080° 39' 46.6" W	
DBN R"6" USCG LL#42965	Daybeacon (red)	-2.75 m	28° 23' 38.5" N	080° 39' 46.7" W	
DBN G"7" USCG LL#42970	Daybeacon (green)	-2.74 m	28° 23' 38.3" N	080° 39' 47.8" W	
DBN G"9" USCG LL#42980	Daybeacon (green)	-2.74 m	28° 23' 38.4" N	080° 39' 49.1" W	
DBN G"11" USCG LL#43005	Daybeacon (green)	-2.73 m	28° 23' 38.4" N	080° 39' 50.1" W	
DBN G"13" USCG LL#43015	Daybeacon (green)	-2.73 m	28° 23' 38.2" N	080° 39' 51.6" W	
DBN G"15" USCG LL#43020	Daybeacon (green)	-2.73 m	28° 23' 37.6" N	080° 39' 53.1" W	
DBN G"17" USCG LL#43025	Daybeacon (green)	-2.72 m	28° 23' 36.1" N	080° 39' 54.2" W	
DBN R"4" USCG LL#43000	Daybeacon (red)	-2.71 m	28° 23' 39.4" N	080° 39' 51.8" W	
DBN R"2" USCG LL#42995	Daybeacon (red)	-2.71 m	28° 23' 39.3" N	080° 39' 50.8" W	
JUNCTION DBN "A" USCG LL#42990	Daybeacon (open)	-2.71 m	28° 23' 38.9" N	080° 39' 49.9" W	
DBN R"10" USCG LL#42985	Daybeacon (red)	-2.71 m	28° 23' 38.8" N	080° 39' 49.4" W	
DBN R"8" USCG LL#42975	Daybeacon (red)	-2.71 m	28° 23' 38.6" N	080° 39' 47.8" W	
FL LT R"2" USCG LL#42830	Lighted structure	-5.17 m	28° 23' 12.9" N	080° 39' 23.9" W	
DBN R"4" USGC LL#42840	Daybeacon (red)	-4.16 m	28° 23' 12.4" N	080° 39' 33.9" W	
DBM R"6" USCG LL#42850	Daybeacon (red)	-2.65 m	28° 23' 12.2" N	080° 39' 39.2" W	
DBN R"10" USCG LL#42870	Daybeacon (red)	-2.65 m	28° 23' 12.0" N	080° 39' 44.0" W	
DBN R"12" USCG LL#42880	Daybeacon (red)	-2.64 m	28° 23' 11.9" N	080° 39' 46.4" W	
DBN R"14" USCG LL#42890	Daybeacon (red)	-2.64 m	28° 23' 12.7" N	080° 39' 48.9" W	
DBN R"2" USCG LL#42895	Daybeacon (red)	-2.64 m	28° 23' 15.7" N	080° 39' 48.7" W	
DBN R"4" USCG LL#42900	Daybeacon (red)	-2.63 m	28° 23' 23.1" N	080° 39' 48.2" W	
DBN R"6" USCG LL#42905	Daybeacon (red)	-2.62 m	28° 23' 26.2" N	080° 39' 50.0" W	
DBN G"1" USCG LL#42920	Daybeacon (green)	-2.59 m	28° 23' 09.1" N	080° 39' 50.6" W	
Junction DBN"A" USCG LL#42915	Daybeacon (open)	-3.08 m	28° 23' 09.0" N	080° 39' 50.0" W	
DBN R"2" USCG LL#42925	Daybeacon (red)	-3.08 m	28° 23' 06.5" N	080° 39' 50.1" W	
DBN R"4" USCG LL#42935	Daybeacon (red)	-3.07 m	28° 23' 03.6" N	080° 39' 49.4" W	
DBN G"5" USCG LL#42940	Daybeacon (green)	-3.06 m	28° 23' 03.5" N	080° 39' 49.2" W	
DBN G"3" USCG LL#42930	Daybeacon (green)	-3.06 m	28° 23' 06.5" N	080° 39' 49.7" W	
DBN G"1" USCG LL#42910	Daybeacon (green)	-3.06 m	28° 23' 09.0" N	080° 39' 49.6" W	
DBN G"13" USCG LL#42885	Daybeacon (green)	-3.05 m	28° 23' 11.6" N	080° 39' 48.0" W	
DBN G"11" USCG LL#42875	Daybeacon (green)	-3.05 m	28° 23' 11.5" N	080° 39' 46.5" W	
DBN G"9" USCG LL#42865	Daybeacon (green)	-3.05 m	28° 23' 11.8" N	080° 39' 44.2" W	
					_

DBN G"5" USCG LL#42845	Daybeacon (green)	-3.04 m	28° 23' 11.8" N	080° 39' 39.4" W
DBN G"3" USCG LL#42835	Daybeacon (green)	-3.04 m	28° 23' 11.8" N	080° 39' 30.4" W
FL G"1" USCG LL#42770	Lighted structure	-3.95 m	28° 22' 52.9" N	080° 39' 22.3" W
DBN R"2" USCG LL#42775	Daybeacon (red)	-3.93 m	28° 22' 53.9" N	080° 39' 29.0" W
DBN R"4" USCG LL#42785	Daybeacon (red)	-2.92 m	28° 22' 54.2" N	080° 39' 35.1" W
DBN R"6" USCG LL#42795	Daybeacon (red)	-2.91 m	28° 22' 54.6" N	080° 39' 41.2" W
DBN R"8" USCG LL#42805	Daybeacon (red)	-2.90 m	28° 22' 55.0" N	080° 39' 44.2" W
DBN R"10" Shore Drive Channel	Daybeacon (red)	-2.90 m	28° 22' 57.0" N	080° 39' 47.6" W
DBN G"9" USCG LL#42810	Daybeacon (green)	-2.88 m	28° 22' 55.0" N	080° 39' 45.7" W
DBN G"7" USCG LL#42800	Daybeacon (green)	-2.88 m	28° 22' 54.6" N	080° 39' 44.2" W
DBN G"5" USCG LL#42790	Daybeacon (green)	-2.88 m	28° 22' 54.2" N	080° 39' 41.4" W
DBN G"3" USCG LL#42780	Daybeacon (green)	-2.87 m	28° 22' 53.9" N	080° 39' 35.2" W
FL R"2" USCG LL#42615	Lighted structure	-3.82 m	28° 22' 20.9" N	080° 39' 19.0" W
DBN R"6" USCG LL#42635	Daybeacon (red)	-2.81 m	28° 22' 21.4" N	080° 39' 38.1" W
DBN R"6A" Pelican Crk	Daybeacon (red)	-2.81 m	28° 22' 21.6" N	080° 39' 43.4" W
DBN R"8" USCG LL#42645	Daybeacon (red)	-2.81 m	28° 22' 21.7" N	080° 39' 46.0" W
DBN R"10" USCG LL#42655	Daybeacon (red)	-2.81 m	28° 22' 21.4" N	080° 39' 47.3" W
DBN R"12" USCG LL#42665	Daybeacon (red)	-2.82 m	28° 22' 21.3" N	080° 39' 48.9" W
DBN R"16" USCG LL#42685	Daybeacon (red)	-2.81 m	28° 22' 15.9" N	080° 39' 50.8" W
DBN R"24" Pelican Crk	Daybeacon (red)	-2.80 m	28° 21' 54.4" N	080° 39' 49.8" W
DBN R"26" USCG LL#42720	Daybeacon (red)	-2.80 m	28° 21' 53.7" N	080° 39' 49.0" W
DBN R"28" USCG LL#42745	Daybeacon (red)	-2.79 m	28° 21' 51.6" N	080° 39' 49.0" W
DBN R"30" USCG LL#42730	Daybeacon (red)	-2.79 m	28° 21' 49.8" N	080° 39' 48.9" W
DBN G"23" USCG LL#42710	Daybeacon (green)	-2.79 m	28° 21' 57.8" N	080° 39' 50.0" W
DBN G"21" USCG LL#42705	Daybeacon (green)	-2.78 m	28° 22' 00.6" N	080° 39' 50.1" W
DBN G"19" USCG LL#42700	Daybeacon (green)	-2.78 m	28° 22' 07.5" N	080° 39' 49.1" W
DBN G"17" USCG LL#42690	Daybeacon (green)	-2.76 m	28° 22' 12.3" N	080° 39' 49.8" W
DBN G"15" USCG LL#42680	Daybeacon (green)	-2.74 m	28° 22' 15.9" N	080° 39' 49.7" W
DBN G"13" USCG LL#42670	Daybeacon (green)	-2.73 m	28° 22' 18.0" N	080° 39' 49.5" W
DBN G"11" USCG LL#42660	Daybeacon (green)	-2.72 m	28° 22' 20.4" N	080° 39' 48.5" W
DBN G"9" USCG LL#42650	Daybeacon (green)	-2.71 m	28° 22' 21.1" N	080° 39' 47.0" W
DBN G"7" USCG LL#42640	Daybeacon (green)	-2.70 m	28° 22' 21.4" N	080° 39' 46.2" W
DBN G"5A" Pelican Crk	Daybeacon (green)	-2.69 m	28° 22' 21.3" N	080° 39' 43.6" W
DBN G"5" USCG LL#42630	Daybeacon (green)	-2.68 m	28° 22' 21.1" N	080° 39' 38.4" W
DBN G"3A" Pelican Crk	Daybeacon (green)	-2.67 m	28° 22' 20.7" N	080° 39' 31.4" W
DBN G"3" USCG LL#42620	Daybeacon (green)	-2.66 m	28° 22' 20.3" N	080° 39' 23.6" W

charted R"14" day marker	GP	[None]	28° 22' 24.2" N	080° 39' 48.3" W	
charted private marker	GP	[None]	28° 22' 21.8" N	080° 39' 37.1" W	
charted private marker	GP	[None]	28° 22' 20.5" N	080° 39' 36.9" W	
charted private marker	GP	[None]	28° 23' 12.1" N	080° 39' 47.6" W	
charted private marker	GP	[None]	28° 23' 11.9" N	080° 39' 46.5" W	
charted private marker	GP	[None]	28° 23' 12.5" N	080° 39' 46.5" W	
charted private marker	GP	[None]	28° 23' 12.6" N	080° 39' 45.5" W	
charted private marker	GP	[None]	28° 23' 12.0" N	080° 39' 45.3" W	
charted private marker	GP	[None]	28° 23' 12.6" N	080° 39' 44.6" W	
charted private marker	GP	[None]	28° 23' 11.9" N	080° 39' 44.5" W	
charted private marker	GP	[None]	28° 23' 12.0" N	080° 39' 42.9" W	
charted private marker	GP	[None]	28° 23' 12.2" N	080° 39' 41.3" W	
charted private marker	GP	[None]	28° 23' 12.0" N	080° 39' 40.5" W	
charted private marker	GP	[None]	28° 23' 12.1" N	080° 39' 39.3" W	
charted private marker	GP	[None]	28° 23' 12.7" N	080° 39' 36.1" W	
charted private marker	GP	[None]	28° 23' 12.8" N	080° 39' 33.6" W	
charted private R"4" day beacon	GP	[None]	28° 24' 07.2" N	080° 39' 36.1" W	
					_



## 1.1) DBN G"1" USCG LL#41565

## **Survey Summary**

**Survey Position:** 28° 24′ 25.8″ N, 080° 41′ 37.7″ W

**Least Depth:** -3.37 m = -1.841 fm = -1 fm = 5.05 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-340.14:33:52.000 (12/06/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-340 / 12062006 cape aton

**Profile/Beam:** 3/1

**Charts Affected:** 11478\_2, 11485\_6, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

Serves intended purposes

## **Feature Correlation**

Address		Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-340/12062006 cape aton	3/1	0.00	000.0	Primary

## **Hydrographer Recommendations**

Add to Chart.

QUA: GPSmode=2, SVs=7, HDOP=1.10

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

-11ft (11478\_2, 11485\_6, 11476\_1, 11484\_1, 11451\_17)

-1 3/4fm (11460\_1, 11009\_1, 411\_1)

## S-57 Data

**Geo object 1:** Beacon, lateral (BCNLAT)

**Attributes:** BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green

**Geo object 2:** Daymark (DAYMAR)

**Attributes:** COLOUR - 4:green

TOPSHP - 19:square

Defer to MCD for charting disposition. The feature is an uncharted G"1" day beacon.

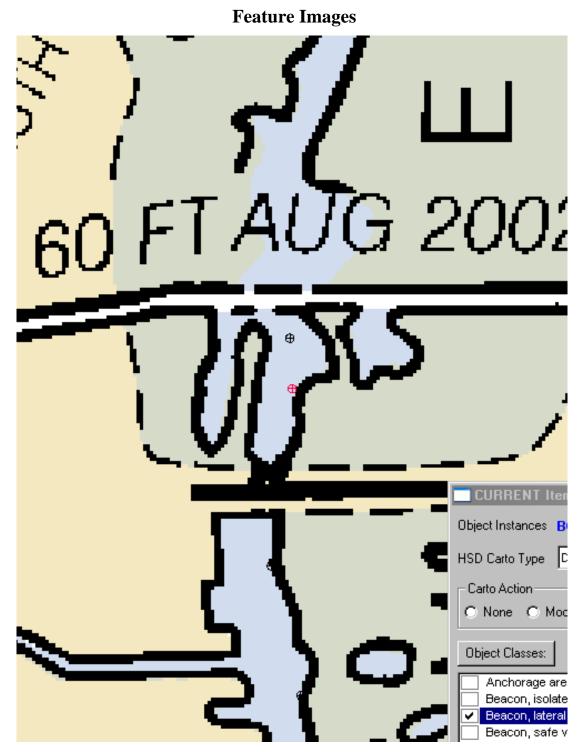


Figure 1.1.1

## 1.2) DBN G"3" USCG LL#41570

## **Survey Summary**

**Survey Position:** 28° 24′ 12.2″ N, 080° 41′ 39.5″ W

**Least Depth:** -2.85 m = -9.36 ft = -1.560 fm = -1 fm 3.36 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-340.14:37:54.000 (12/06/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-340 / 12062006 cape aton

**Profile/Beam:** 4/1

**Charts Affected:** 11478\_2, 11485\_6, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

Serves intended purposes

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status	
f00520/nrt2_1210_dpnonechosounder/2006-340/12062006 cape aton	4/1	0.00	0.000	Primary	

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=8, HDOP=1.00

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

 $\text{-}10 \text{ft} \; (11478\_2, \, 11485\_6, \, 11476\_1, \, 11484\_1, \, 11451\_17)$ 

-1 ½fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

**Geo object 1:** Beacon, lateral (BCNLAT)

**Attributes:** BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green

**Geo object 2:** Daymark (DAYMAR)

**Attributes:** COLOUR - 4:green

TOPSHP - 19:square

Defer to MCD for charting disposition. The feature is an uncharted G"3" day beacon.

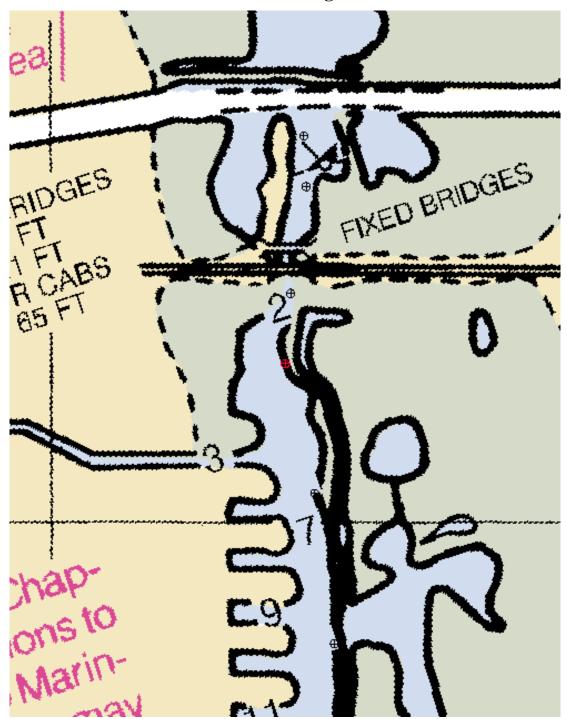


Figure 1.2.1

## 1.3) DBN G"5" USCG LL#41575

## **Survey Summary**

**Survey Position:** 28° 24′ 02.2″ N, 080° 41′ 36.9″ W

**Least Depth:** -2.84 m = -1.555 fm = -1 fm 3.33 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-340.14:40:16.000 (12/06/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-340 / 12062006 cape aton

**Profile/Beam:** 5/1

**Charts Affected:** 11478\_2, 11485\_6, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

Damaged

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-340/12062006 cape aton	5/1	0.00	000.0	Primary

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=8, HDOP=1.00

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

```
\text{-}10 \text{ft} \; (11478\_2, \, 11485\_6, \, 11476\_1, \, 11484\_1, \, 11451\_17)
```

-1 ½fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

**Geo object 1:** Beacon, lateral (BCNLAT)

**Attributes:** BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

Defer to MCD for charting disposition. The feature is an uncharted G"5" day beacon.

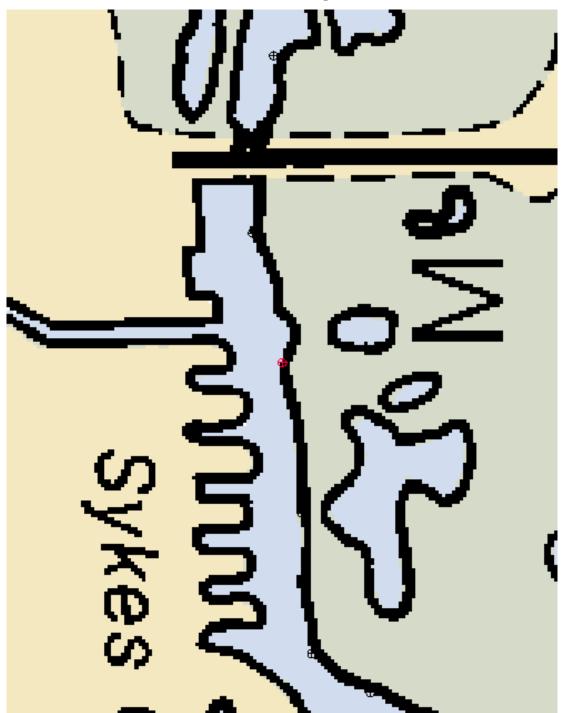


Figure 1.3.1

## 1.4) DBN G"9" USCG LL#41585

## **Survey Summary**

**Survey Position:** 28° 23′ 39.8″ N, 080° 41′ 34.3″ W

**Least Depth:** -3.31 m = -1.811 fm = -1 fm 4.87 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-340.14:45:41.000 (12/06/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-340 / 12062006 cape aton

**Profile/Beam:** 6/1

**Charts Affected:** 11478\_2, 11485\_6, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

Serves intended purposes.

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-340/12062006 cape aton	6/1	0.00	000.0	Primary

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=8, HDOP=1.00

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

- $\text{-}11 \text{ft} \ (11478\_2, \ 11485\_6, \ 11476\_1, \ 11484\_1, \ 11451\_17)$
- -1 <sup>3</sup>/<sub>4</sub>fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

**Geo object 1:** Beacon, lateral (BCNLAT)

**Attributes:** BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

Defer to MCD for charting disposition. The feature is an uncharted G"9" day beacon.

## 1.5) DBN G"13" USCG LL#41595

## **Survey Summary**

**Survey Position:** 28° 23′ 31.0″ N, 080° 41′ 25.2″ W

**Least Depth:** -3.28 m = -1.794 fm = -1 fm 4.76 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-340.14:52:42.000 (12/06/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-340 / 12062006 cape aton

**Profile/Beam:** 7/1

**Charts Affected:** 11485\_6, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

Serves intended purpose.

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-340/12062006 cape aton	7/1	0.00	000.0	Primary

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=8, HDOP=1.00

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

- -11ft (11485\_6, 11476\_1, 11484\_1, 11451\_17)
- -1 3/4fm (11460\_1, 11009\_1, 411\_1)

#### S-57 Data

**Geo object 1:** Beacon, lateral (BCNLAT)

**Attributes:** BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

Defer to MCD for charting disposition. The feature is the surveyed day marker G''13'', which is ~68 meters from a charted marker.

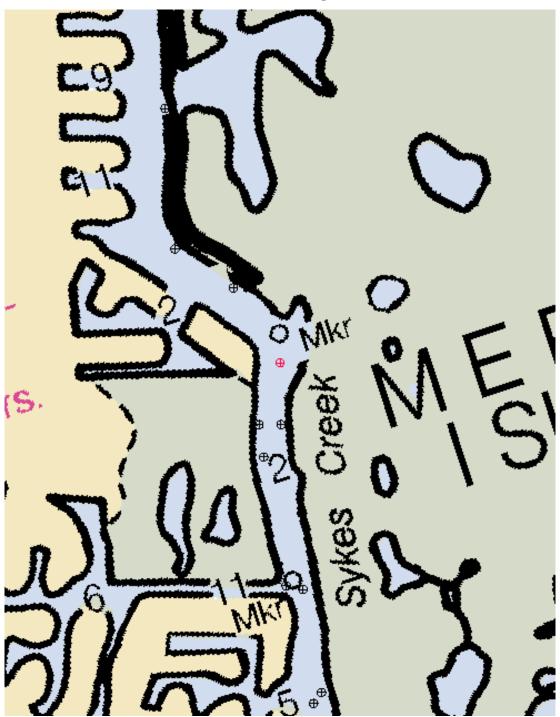


Figure 1.5.1

## 1.6) DBN R"14" USCG LL#41600

## **Survey Summary**

**Survey Position:** 28° 23′ 23.7″ N, 080° 41′ 26.6″ W

**Least Depth:** -2.77 m = -1.516 fm = -1 fm 3.09 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-340.14:55:47.000 (12/06/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-340 / 12062006 cape aton

**Profile/Beam:** 8/1

**Charts Affected:** 11485\_6, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

Serves intended purposes.

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status	
f00520/nrt2_1210_dpnonechosounder/2006-340/12062006 cape aton	8/1	0.00	0.000	Primary	

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=8, HDOP=1.00

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

-9ft (11485\_6, 11476\_1, 11484\_1, 11451\_17)

-1 ½fm (11460\_1, 11009\_1, 411\_1)

#### S-57 Data

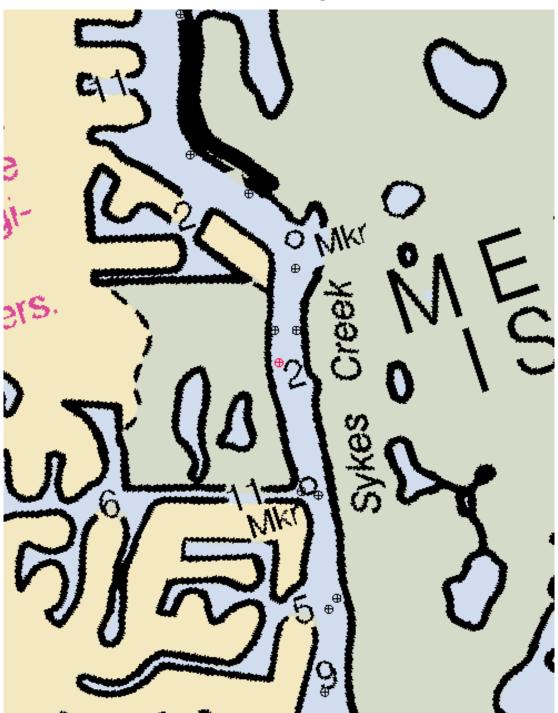
Geo object 1: Beacon, lateral (BCNLAT)

**Attributes:** BCNSHP - 5:pile beacon

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red

Defer to MCD for charting disposition. The feature is an uncharted day marker.



*Figure 1.6.1* 

## 1.7) DBN R"16" USCG LL#41610

## **Survey Summary**

**Survey Position:** 28° 23′ 13.8″ N, 080° 41′ 24.6″ W

**Least Depth:** -3.25 m = -1.779 fm = -1 fm 4.68 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-340.14:59:50.000 (12/06/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-340 / 12062006 cape aton

**Profile/Beam:** 9/1

**Charts Affected:** 11485\_6, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

Serves intended purposes.

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status	
f00520/nrt2_1210_dpnonechosounder/2006-340/12062006 cape aton	9/1	0.00	0.000	Primary	

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=8, HDOP=1.00

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

- -11ft (11485\_6, 11476\_1, 11484\_1, 11451\_17)
- -1 3/4fm (11460\_1, 11009\_1, 411\_1)

#### S-57 Data

**Geo object 1:** Beacon, lateral (BCNLAT)

**Attributes:** BCNSHP - 5:pile beacon

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red

Defer to MCD for charting disposition. The feature is a day beacon ~20 meters from a charted marker; another surveyed beacon is also in the vicinity of the same charted marker.



Figure 1.7.1

## 1.8) DBN G"15" USCG LL#41605

## **Survey Summary**

**Survey Position:** 28° 23′ 13.5″ N, 080° 41′ 23.2″ W

**Least Depth:** -3.25 m = -1.777 fm = -1 fm 4.66 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-340.15:01:17.000 (12/06/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-340 / 12062006 cape aton

**Profile/Beam:** 10/1

**Charts Affected:** 11485\_6, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

Serves intended purposes.

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status	
f00520/nrt2_1210_dpnonechosounder/2006-340/12062006 cape aton	10/1	0.00	0.000	Primary	

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=8, HDOP=1.00

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

- -11ft (11485\_6, 11476\_1, 11484\_1, 11451\_17)
- -1 3/4fm (11460\_1, 11009\_1, 411\_1)

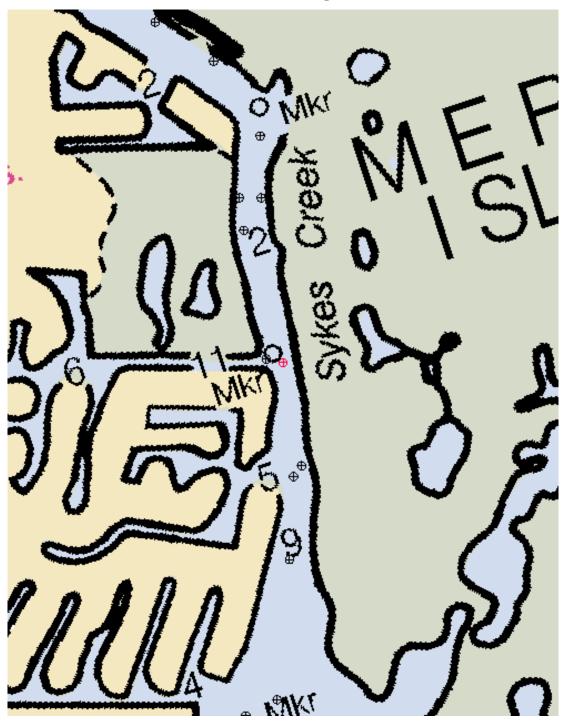
#### S-57 Data

**Geo object 1:** Beacon, lateral (BCNLAT)

**Attributes:** BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

Defer to MCD for charting disposition. The feature is a day beacon ~33 meters from a charted marker; another surveyed beacon is also in the vicinity of the same charted marker.



*Figure 1.8.1* 

## 1.9) DBN G"17" USCG LL#41615

## **Survey Summary**

**Survey Position:** 28° 23' 04.8" N, 080° 41' 22.2" W

**Least Depth:** -2.75 m = -9.02 ft = -1.503 fm = -1 fm 3.02 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-340.15:04:04.000 (12/06/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-340 / 12062006 cape aton

**Profile/Beam:** 11/1

**Charts Affected:** 11485\_6, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

Serves intended purposes.

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status	
f00520/nrt2_1210_dpnonechosounder/2006-340/12062006 cape aton	11/1	0.00	0.000	Primary	

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=8, HDOP=1.00

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

-9ft (11485\_6, 11476\_1, 11484\_1, 11451\_17)

-1 ½fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

**Geo object 1:** Beacon, lateral (BCNLAT)

**Attributes:** BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

Defer to MCD for charting disposition. The feature is an uncharted day marker.

## 1.10) DBN G"19" USCG LL#41620

## **Survey Summary**

**Survey Position:** 28° 22′ 58.4″ N, 080° 41′ 22.6″ W

**Least Depth:** 0.25 m = 0.82 ft = 0.137 fm = 0 fm 0.82 ft**TPU** ( $\pm 1.96 \sigma$ ): **THU** (**TPEh**) [None]; **TVU** (**TPEv**) [None]

**Timestamp:** 2006-340.15:05:54.000 (12/06/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-340 / 12062006 cape aton

**Profile/Beam:** 12/1

**Charts Affected:** 11485\_6, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

Serves intended purposes.

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-340/12062006 cape aton	12/1	0.00	000.0	Primary

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=8, HDOP=1.00

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

1ft (11485\_6, 11476\_1, 11484\_1, 11451\_17) 0fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

**Geo object 1:** Beacon, lateral (BCNLAT) **Attributes:** BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

Defer to MCD for charting disposition. The feature is an uncharted day marker.

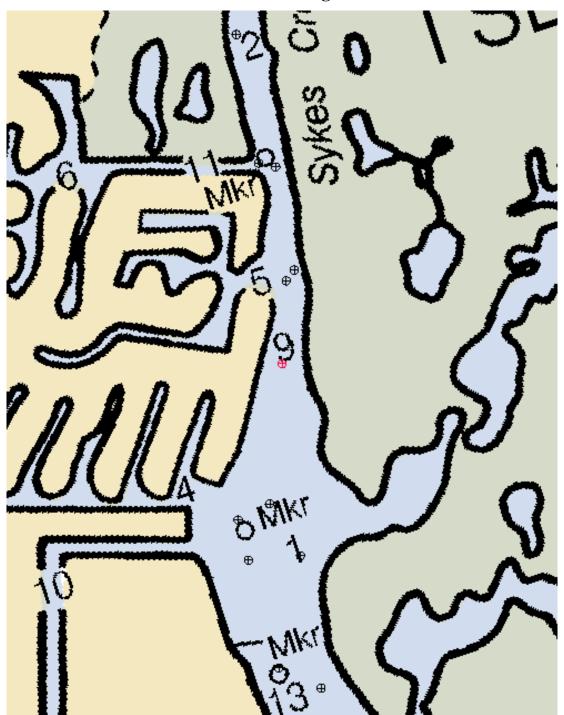


Figure 1.10.1

## 1.11) DBN G"21" USCG LL#41625

## **Survey Summary**

**Survey Position:** 28° 22' 47.6" N, 080° 41' 23.7" W

**Least Depth:** -3.24 m = -1.774 fm = -1 fm 4.64 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-340.15:09:39.000 (12/06/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-340 / 12062006 cape aton

**Profile/Beam:** 13/1

**Charts Affected:** 11485\_6, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

Serves intended purposes.

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status	
f00520/nrt2_1210_dpnonechosounder/2006-340/12062006 cape aton	13/1	0.00	0.000	Primary	

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=8, HDOP=0.90

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

- -11ft (11485\_6, 11476\_1, 11484\_1, 11451\_17)
- -1 3/4fm (11460\_1, 11009\_1, 411\_1)

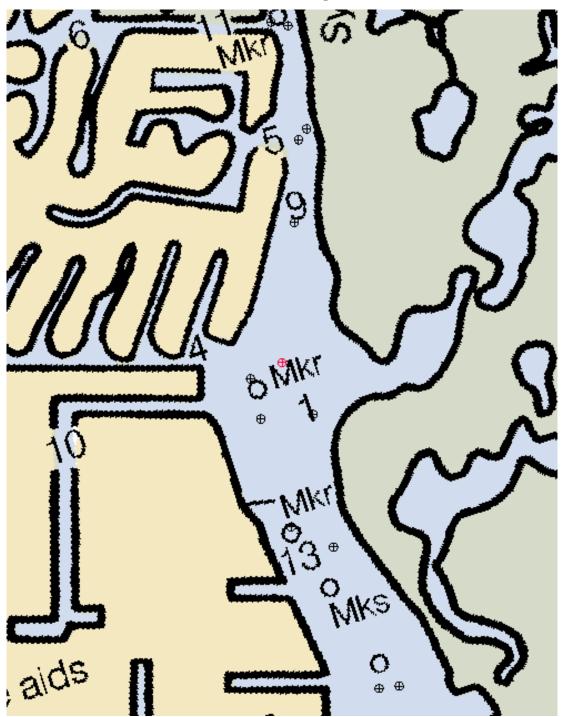
### S-57 Data

**Geo object 1:** Beacon, lateral (BCNLAT)

**Attributes:** BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

Defer to MCD for charting disposition. The feature is a day beacon ~87 meters from a charted marker; three other another surveyed beacons are also in the vicinity of the same charted marker.



*Figure 1.11.1* 

## 1.12) DBN R"22" USCG LL#41630

## **Survey Summary**

**Survey Position:** 28° 22′ 43.3″ N, 080° 41′ 25.5″ W

**Least Depth:** -3.24 m = -1.772 fm = -1 fm + 4.63 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-340.15:10:59.000 (12/06/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-340 / 12062006 cape aton

**Profile/Beam:** 14/1

**Charts Affected:** 11485\_6, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

Serves intended purposes.

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status	
f00520/nrt2_1210_dpnonechosounder/2006-340/12062006 cape aton	14/1	0.00	0.000	Primary	

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=8, HDOP=0.90

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

- -11ft (11485\_6, 11476\_1, 11484\_1, 11451\_17)
- -1 3/4fm (11460\_1, 11009\_1, 411\_1)

#### S-57 Data

**Geo object 1:** Beacon, lateral (BCNLAT) **Attributes:** BCNSHP - 5:pile beacon

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red

Defer to MCD for charting disposition. The feature is a day beacon ~71 meters from a charted marker; three other another surveyed beacons are also in the vicinity of the same charted marker.

## 1.13) DBN R"24" USCG LL#41640

## **Survey Summary**

**Survey Position:** 28° 22′ 35.0″ N, 080° 41′ 22.9″ W

**Least Depth:** -3.23 m = -1.769 fm = -1 fm 4.61 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-340.15:13:31.000 (12/06/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-340 / 12062006 cape aton

**Profile/Beam:** 15/1

**Charts Affected:** 11485\_6, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

Serves intended purposes.

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-340/12062006 cape aton	15/1	0.00	000.0	Primary

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=8, HDOP=0.90

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

- -11ft (11485\_6, 11476\_1, 11484\_1, 11451\_17)
- -1 3/4fm (11460\_1, 11009\_1, 411\_1)

#### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

**Attributes:** BCNSHP - 5:pile beacon

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red

Defer to MCD for charting disposition. The feature is a day beacon ~13 meters north of a charted marker.

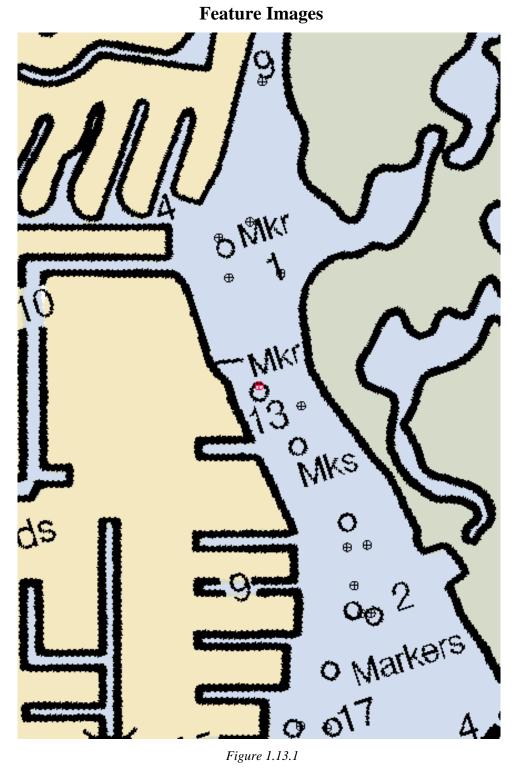


Figure 1.13.1

## 1.14) DBN G"23" USCG LL#41635

## **Survey Summary**

**Survey Position:** 28° 22' 33.4" N, 080° 41' 19.2" W

**Least Depth:** -3.23 m = -1.766 fm = -1 fm 4.60 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-340.15:15:06.000 (12/06/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-340 / 12062006 cape aton

**Profile/Beam:** 16/1

**Charts Affected:** 11485\_6, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-340/12062006 cape aton	16/1	0.00	000.0	Primary

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=8, HDOP=0.90

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

- -11ft (11485\_6, 11476\_1, 11484\_1, 11451\_17)
- -1 3/4fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

Attributes: BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green

#### **Office Notes**

Defer to MCD for charting disposition. The feature is a day beacon ~96 meters north of a charted marker.

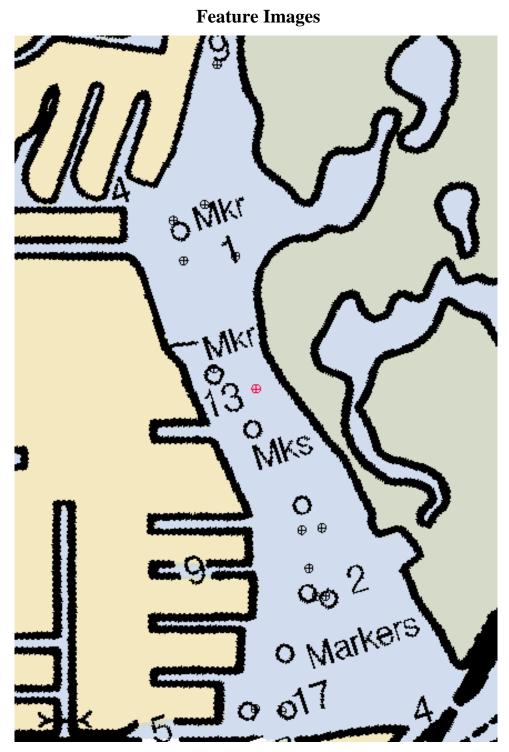


Figure 1.14.1

## 1.15) DBN R"26" USCG LL#41650

## **Survey Summary**

**Survey Position:** 28° 22' 22.5" N, 080° 41' 15.2" W

**Least Depth:** -3.22 m = -1.760 fm = -1 fm 4.56 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-340.15:18:46.000 (12/06/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-340 / 12062006 cape aton

**Profile/Beam:** 17/1

**Charts Affected:** 11485\_6, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

Serves intended purposes.

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-340/12062006 cape aton	17/1	0.00	000.0	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=8, HDOP=0.90

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

- -11ft (11485\_6, 11476\_1, 11484\_1, 11451\_17)
- -1 3/4fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

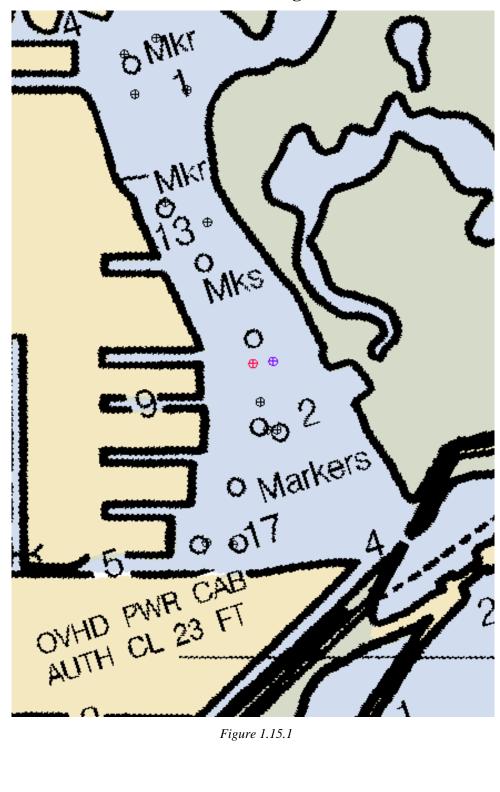
**Attributes:** BCNSHP - 5:pile beacon

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red

Defer to MCD for charting disposition. The feature is a day beacon ~58 meters from a charted marker; another surveyed beacon is also in the vicinity of the same charted marker.

# **Feature Images**



## 1.16) DBN R"28" USCG LL#41655

## **Survey Summary**

**Survey Position:** 28° 22' 19.6" N, 080° 41' 14.6" W

**Least Depth:** -3.21 m = -1.758 fm = -1 fm 4.55 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-340.15:20:23.000 (12/06/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-340 / 12062006 cape aton

**Profile/Beam:** 18/1

**Charts Affected:** 11485\_6, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-340/12062006 cape aton	18/1	0.00	000.0	Primary

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=8, HDOP=0.90

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

- -11ft (11485\_6, 11476\_1, 11484\_1, 11451\_17)
- -1 3/4fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

Attributes: BCNSHP - 5:pile beacon

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red

### **Office Notes**

Defer to MCD for charting disposition. The feature is the uncharted day beacon R"28".

## **Feature Images**

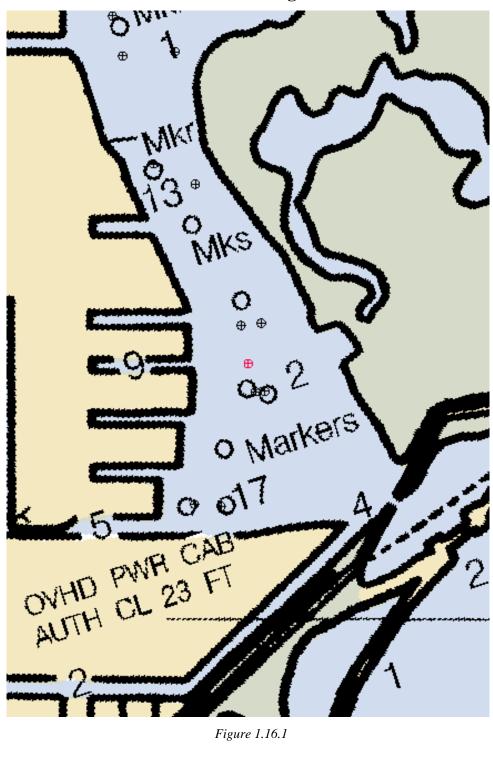


Figure 1.16.1

## 1.17) DBN R"30" USCG LL#41665

## **Survey Summary**

**Survey Position:** 28° 22' 17.4" N, 080° 41' 13.9" W

**Least Depth:** -2.71 m (= -8.90 ft = -1.483 fm = -1 fm 2.90 ft)

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-340.15:21:16.000 (12/06/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-340 / 12062006 cape aton

**Profile/Beam:** 19/1

**Charts Affected:** 11485\_6, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-340/12062006 cape aton	19/1	0.00	000.0	Primary

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=8, HDOP=0.90

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

```
-9ft (11485_6, 11476_1, 11484_1, 11451_17)
```

-1 ½fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

Attributes: BCNSHP - 5:pile beacon

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red

### **Office Notes**

Defer to MCD for charting disposition. The feature is a charted marker, the survey position of which is ~21 meters from the charted position.

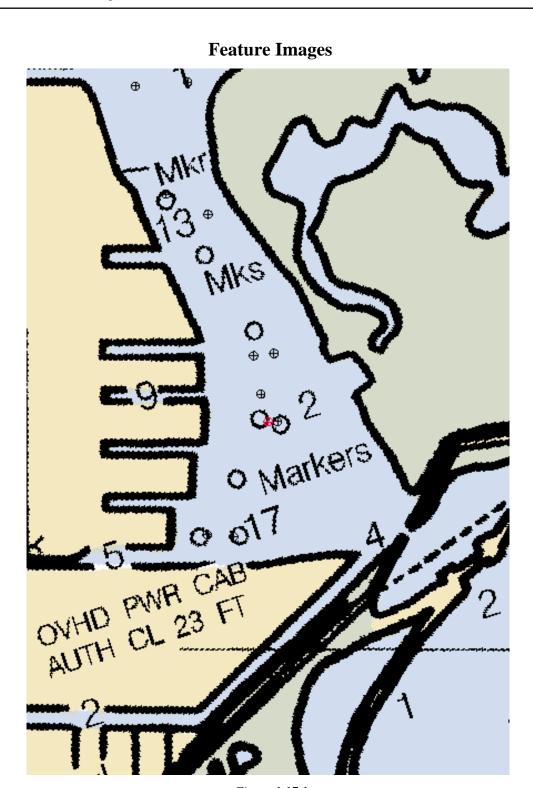


Figure 1.17.1

## 1.18) DBN G"29" USCG LL#41660

## **Survey Summary**

**Survey Position:** 28° 22' 17.4" N, 080° 41' 13.1" W

**Least Depth:** -3.21 m = -1.756 fm = -1 fm 4.53 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-340.15:22:06.000 (12/06/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-340 / 12062006 cape aton

**Profile/Beam:** 20/1

**Charts Affected:** 11485\_6, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-340/12062006 cape aton	20/1	0.00	000.0	Primary

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=8, HDOP=0.90

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

- -11ft (11485\_6, 11476\_1, 11484\_1, 11451\_17)
- -1 3/4fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

Attributes: BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green

### **Office Notes**

Defer to MCD for charting disposition. The feature is a charted marker, the survey position of which is ~9 meters from the charted position.

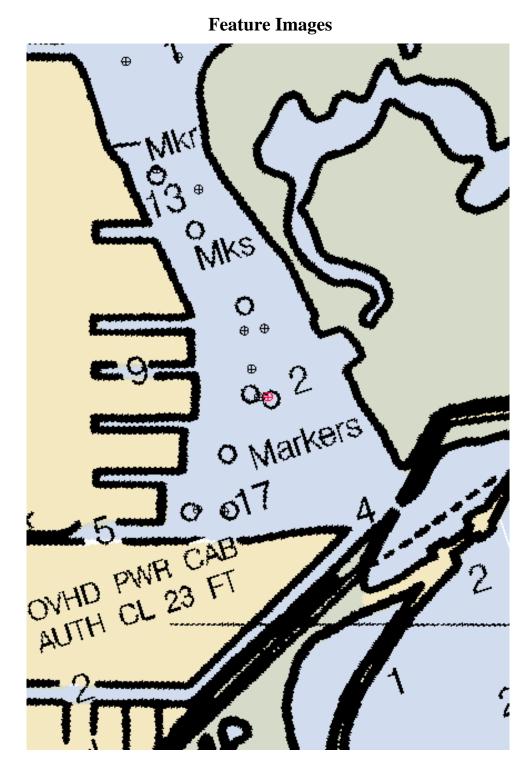


Figure 1.18.1

## 1.19) Pile (Shoal Beacon USCG LL#41670 missing DBN board)

## **Survey Summary**

**Survey Position:** 28° 22' 08.6" N, 080° 41' 17.0" W

**Least Depth:** -3.20 m = -1.752 fm =

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-340.15:24:52.000 (12/06/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-340 / 12062006 cape aton

**Profile/Beam:** 21/1

**Charts Affected:** 11485\_6, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

Missing dayboard

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-340/12062006 cape aton	21/1	0.00	000.0	Primary

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=8, HDOP=0.90

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

- -11ft (11485\_6, 11476\_1, 11484\_1, 11451\_17)
- -1 3/4fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

**Geo object 1:** Beacon, special purpose/general (BCNSPP)

**Attributes:** BCNSHP - 5:pile beacon

CATSPM - 13:private mark

CONDTN - 2:ruined

CONRAD - 2:not radar conspicuous

HEIGHT - 3.2 m

INFORM - missing dayboard OBJNAM - Shoal Beacon

VERDAT - 12:Mean lower low water

## **Office Notes**

Defer to MCD for charting disposition. The feature is a charted marker, the survey position of which is  $\sim$ 12 meters from the charted position. The field noted the marker is missing the dayboard.

# **Feature Images**

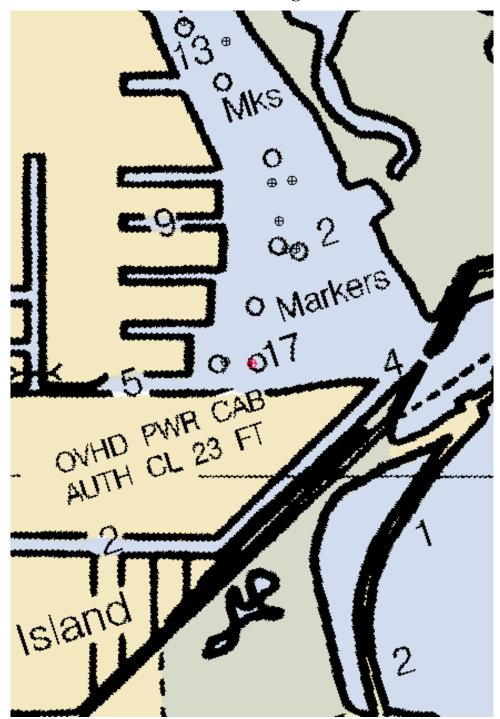


Figure 1.19.1

## 1.20) Manatee Zone

## **Survey Summary**

**Survey Position:** 28° 23′ 36.8″ N, 080° 41′ 29.2″ W

**Least Depth:** -4.29 m = -14.07 ft = -2.346 fm = -2 fm 2.07 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-340.14:48:10.000 (12/06/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-340 / 12062006 manatee signs

**Profile/Beam:** 1/1

**Charts Affected:** 11485\_6, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

Slow Speed Manatee Zone Sykes Creek

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status	
f00520/nrt2_1210_dpnonechosounder/2006-340/12062006 manatee signs	1/1	0.00	0.000	Primary	

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=8, HDOP=1.00

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

 $\text{-}14 \text{ft} \; (11485\_6, \, 11476\_1, \, 11484\_1, \, 11451\_17)$ 

-2 <sup>1</sup>/<sub>4</sub>fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

**Geo object 1:** Beacon, special purpose/general (BCNSPP)

**Attributes:** BCNSHP - 5:pile beacon

CATSPM - 25:speed limit mark
COLOUR - 1,11:white,orange
COLPAT - 6:border stripes

HEIGHT - 4.3 m

INFORM - Manatee Zone OBJNAM - Slow Speed VERDAT - 12:Mean lower low water

## **Office Notes**

Defer to MCD for charting disposition. The feature is an uncharted slow speed zone marker.

# **Feature Images**



Figure 1.20.1

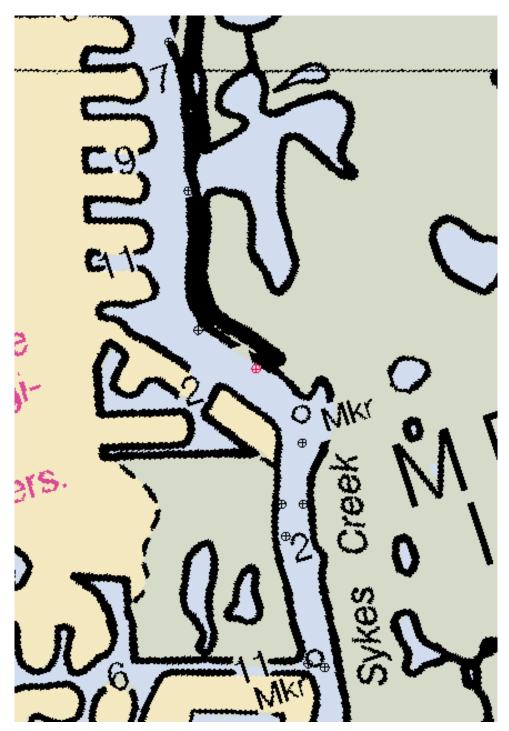


Figure 1.20.2

### 1.21) Manatee Zone

## **Survey Summary**

**Survey Position:** 28° 22' 08.7" N, 080° 41' 19.3" W

**Least Depth:** -5.19 m = -2.840 fm =

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-340.15:26:27.000 (12/06/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-340 / 12062006 manatee signs

**Profile/Beam:** 2/1

**Charts Affected:** 11485\_6, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status	
f00520/nrt2_1210_dpnonechosounder/2006-340/12062006 manatee signs	2/1	0.00	0.000	Primary	

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=8, HDOP=0.90

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

```
-17ft (11485_6, 11476_1, 11484_1, 11451_17)
```

-2 3/4fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

Geo object 1: Beacon, special purpose/general (BCNSPP)

**Attributes:** BCNSHP - 5:pile beacon

CATSPM - 25:speed limit mark
COLOUR - 1,11:white,orange
COLPAT - 6:border stripes

HEIGHT - 5 m

INFORM - Manatee Zone
OBJNAM - Speed Zone

Defer to MCD for charting disposition. The feature is a charted marker, the survey position of which is  $\sim$ 17 meters from the charted position.

### 1.22) Manatee Zone

## **Survey Summary**

**Survey Position:** 28° 22' 22.7" N, 080° 41' 13.5" W

**Least Depth:** -5.16 m = -2.822 fm = -2.822 fm = -2.822 fm

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-340.15:31:33.000 (12/06/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-340 / 12062006 manatee signs

**Profile/Beam:** 3/1

**Charts Affected:** 11485\_6, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

### **Feature Correlation**

	Address	Feature	Range	Azimuth	Status
f	600520/nrt2_1210_dpnonechosounder/2006-340/12062006 manatee signs	3/1	0.00	0.000	Primary

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=8, HDOP=0.90

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

```
-17ft (11485_6, 11476_1, 11484_1, 11451_17)
```

-2 3/4fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

Geo object 1: Beacon, special purpose/general (BCNSPP)

**Attributes:** BCNSHP - 5:pile beacon

CATSPM - 25:speed limit mark
COLOUR - 1,11:white,orange
COLPAT - 6:border stripes

HEIGHT - 5.16 m

INFORM - Manatee Zone
OBJNAM - Speed Zone

Defer to MCD for charting disposition. The feature is a speed zone marker ~70 meters from a charted marker; another surveyed beacon is also in the vicinity of the same charted marker.

## 1.23) Manatee Zone

## **Survey Summary**

**Survey Position:** 28° 22' 43.6" N, 080° 41' 21.0" W

**Least Depth:** -5.13 m = -16.82 ft = -2.804 fm = -2 fm 4.82 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-340.15:37:17.000 (12/06/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-340 / 12062006 manatee signs

**Profile/Beam:** 4/1

**Charts Affected:** 11485\_6, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

3 pile

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status	
f00520/nrt2_1210_dpnonechosounder/2006-340/12062006 manatee signs	4/1	0.00	0.000	Primary	

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=8, HDOP=1.00

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

-17ft (11485\_6, 11476\_1, 11484\_1, 11451\_17)

-2 <sup>3</sup>/<sub>4</sub>fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

**Geo object 1:** Beacon, special purpose/general (BCNSPP)

**Attributes:** BCNSHP - 5:pile beacon

CATSPM - 25:speed limit mark
COLOUR - 1,11:white,orange
COLPAT - 6:border stripes

HEIGHT - 5.13 m

INFORM - Manatee Zone
OBJNAM - Speed Zone

VERDAT - 12:Mean lower low water

## **Office Notes**

Defer to MCD for charting disposition. The feature is a day beacon ~145 meters from a charted marker; three other another surveyed beacons are also in the vicinity of the same charted marker.

## 1.24) Manatee Zone

## **Survey Summary**

**Survey Position:** 28° 22' 46.4" N, 080° 41' 26.4" W

**Least Depth:** -4.12 m = -2.255 fm = -2 fm 1.53 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-340.15:39:16.000 (12/06/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-340 / 12062006 manatee signs

**Profile/Beam:** 5/1

**Charts Affected:** 11485\_6, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-340/12062006 manatee signs	5/1	0.00	0.000	Primary

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=9, HDOP=0.90

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

```
-14ft (11485_6, 11476_1, 11484_1, 11451_17)
```

-2 <sup>1</sup>/<sub>4</sub>fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

Geo object 1: Beacon, special purpose/general (BCNSPP)

**Attributes:** BCNSHP - 5:pile beacon

CATSPM - 25:speed limit mark
COLOUR - 1,11:white,orange
COLPAT - 6:border stripes

HEIGHT - 4.12 m

INFORM - Manatee Zone OBJNAM - Speed Zone

Defer to MCD for charting disposition. The feature is a day beacon ~30 meters from a charted marker; three other another surveyed beacons are also in the vicinity of the same charted marker.

### 1.25) Manatee Zone

## **Survey Summary**

**Survey Position:** 28° 23' 05.6" N, 080° 41' 21.5" W

**Least Depth:** -6.10 m = -20.03 ft = -3.338 fm = -3 fm 2.03 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-340.15:44:24.000 (12/06/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-340 / 12062006 manatee signs

**Profile/Beam:** 6/1

**Charts Affected:** 11485\_6, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-340/12062006 manatee signs	6/1	0.00	0.000	Primary

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=8, HDOP=1.00

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

 $-20 {\rm ft} \; (11485\_6, \, 11476\_1, \, 11484\_1, \, 11451\_17)$ 

-3 <sup>1</sup>/<sub>4</sub>fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

Geo object 1: Beacon, special purpose/general (BCNSPP)

**Attributes:** BCNSHP - 5:pile beacon

CATSPM - 25:speed limit mark
COLOUR - 1,11:white,orange
COLPAT - 6:border stripes

HEIGHT - 6.1 m

INFORM - Manatee Zone
OBJNAM - Speed Zone

Defer to MCD for charting disposition. The feature is an uncharted speed zone marker.

### 1.26) Manatee Zone

## **Survey Summary**

**Survey Position:** 28° 23' 26.2" N, 080° 41' 25.1" W

**Least Depth:** -5.08 m = -2.778 fm = -2.778 fm = -2 fm = -2.778 fm = -2.788 fm = -2.

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-340.15:50:06.000 (12/06/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-340 / 12062006 manatee signs

**Profile/Beam:** 7/1

**Charts Affected:** 11485\_6, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-340/12062006 manatee signs	7/1	0.00	0.000	Primary

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=7, HDOP=1.20

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

- -17ft (11485\_6, 11476\_1, 11484\_1, 11451\_17)
- -2 3/4fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

Geo object 1: Beacon, special purpose/general (BCNSPP)

**Attributes:** BCNSHP - 5:pile beacon

CATSPM - 25:speed limit mark
COLOUR - 1,11:white,orange
COLPAT - 6:border stripes

HEIGHT - 5 m

INFORM - Manatee Zone
OBJNAM - Speed Zone

Defer to MCD for charting disposition. The feature is an uncharted manatee zone marker.

## 1.27) Manatee Zone

## **Survey Summary**

**Survey Position:** 28° 23' 26.2" N, 080° 41' 27.0" W

**Least Depth:** -4.08 m = -2.231 fm =

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-340.15:51:05.000 (12/06/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-340 / 12062006 manatee signs

**Profile/Beam:** 8/1

**Charts Affected:** 11485\_6, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-340/12062006 manatee signs	8/1	0.00	0.000	Primary

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=8, HDOP=1.00

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

```
-14ft (11485_6, 11476_1, 11484_1, 11451_17)
```

-2 <sup>1</sup>/<sub>4</sub>fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

Geo object 1: Beacon, special purpose/general (BCNSPP)

**Attributes:** BCNSHP - 5:pile beacon

CATSPM - 25:speed limit mark
COLOUR - 1,11:white,orange
COLPAT - 6:border stripes

HEIGHT - 4 m

INFORM - Manatee Zone
OBJNAM - Speed Zone

Defer to MCD for charting disposition. The feature is an uncharted manatee zone marker.

### 1.28) Manatee Zone

## **Survey Summary**

**Survey Position:** 28° 23′ 50.6″ N, 080° 41′ 35.2″ W

**Least Depth:** -5.07 m = -2.773 fm = -2 fm + 4.64 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-340.15:56:52.000 (12/06/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-340 / 12062006 manatee signs

**Profile/Beam:** 9/1

**Charts Affected:** 11478\_2, 11485\_6, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-340/12062006 manatee signs	9/1	0.00	0.000	Primary

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=7, HDOP=1.20

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

 $-17 {\rm ft} \; (11478\_2,\, 11485\_6,\, 11476\_1,\, 11484\_1,\, 11451\_17)$ 

-2 3/4fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

Geo object 1: Beacon, special purpose/general (BCNSPP)

**Attributes:** BCNSHP - 5:pile beacon

CATSPM - 25:speed limit mark
COLOUR - 1,11:white,orange
COLPAT - 6:border stripes

HEIGHT - 5 m

INFORM - Manatee Zone
OBJNAM - Speed Zone

Defer to MCD for charting disposition. The feature is an uncharted manatee zone marker.

## 1.29) Manatee Zone

## **Survey Summary**

**Survey Position:** 28° 24' 17.6" N, 080° 41' 39.0" W

**Least Depth:** -4.05 m = -2.217 fm = -2 fm 1.30 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-340.16:02:01.000 (12/06/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-340 / 12062006 manatee signs

**Profile/Beam:** 10/1

**Charts Affected:** 11478\_2, 11485\_6, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-340/12062006 manatee signs	10/1	0.00	0.000	Primary

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=7, HDOP=1.20

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

 $\text{-}14 \text{ft} \; (11478\_2, \, 11485\_6, \, 11476\_1, \, 11484\_1, \, 11451\_17)$ 

-2 <sup>1</sup>/<sub>4</sub>fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

Geo object 1: Beacon, special purpose/general (BCNSPP)

**Attributes:** BCNSHP - 5:pile beacon

CATSPM - 25:speed limit mark
COLOUR - 1,11:white,orange
COLPAT - 6:border stripes

HEIGHT - 4 m

INFORM - Manatee Zone
OBJNAM - Speed Zone

Defer to MCD for charting disposition. The feature is an uncharted manatee zone marker.

## 1.30) Manatee Zone

## **Survey Summary**

**Survey Position:** 28° 24′ 29.7″ N, 080° 41′ 37.9″ W

**Least Depth:** -4.04 m = -2.211 fm = -2 fm = 1.26 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-340.16:05:35.000 (12/06/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-340 / 12062006 manatee signs

**Profile/Beam:** 11/1

**Charts Affected:** 11478\_2, 11485\_6, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-340/12062006 manatee signs	11/1	0.00	0.000	Primary

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=7, HDOP=1.20

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

 $\text{-}14 \text{ft} \; (11478\_2, \, 11485\_6, \, 11476\_1, \, 11484\_1, \, 11451\_17)$ 

-2 <sup>1</sup>/<sub>4</sub>fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

Geo object 1: Beacon, special purpose/general (BCNSPP)

**Attributes:** BCNSHP - 5:pile beacon

CATSPM - 25:speed limit mark
COLOUR - 1,11:white,orange
COLPAT - 6:border stripes

HEIGHT - 4 m

INFORM - Manatee Zone
OBJNAM - Speed Zone

Defer to MCD for charting disposition. The feature is an uncharted manatee zone marker.

## 1.31) DBN G"25" USCG LL#41805

## **Survey Summary**

**Survey Position:** 28° 28' 07.4" N, 080° 37' 57.5" W

**Least Depth:** -4.36 m = -2.385 fm = -2.385 fm = -2.31 ft

**TPU** ( $\pm 1.96\sigma$ ): **THU** (**TPEh**) [None]; **TVU** (**TPEv**) [None]

**Timestamp:** 2006-341.14:16:11.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 15/1

**Charts Affected:** 11484\_1, 11480\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

Steel I Beam. Previously charted 23A is now 25.

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status	
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	15/1	0.00	0.000	Primary	

# **Hydrographer Recommendations**

Previously charted 23A is now 25. Remove charted G23A, and chart G"25" at surveyd position.

QUA: GPSmode=2, SVs=8, HDOP=0.90

#### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

**Attributes:** BCNSHP - 4:lattice beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green

CONRAD - 1:radar conspicuous

HEIGHT - 4.36 m

INFORM - Previously charted 23A is now 25.
OBJNAM - DBN G"25" USCG LL#41805

VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition.

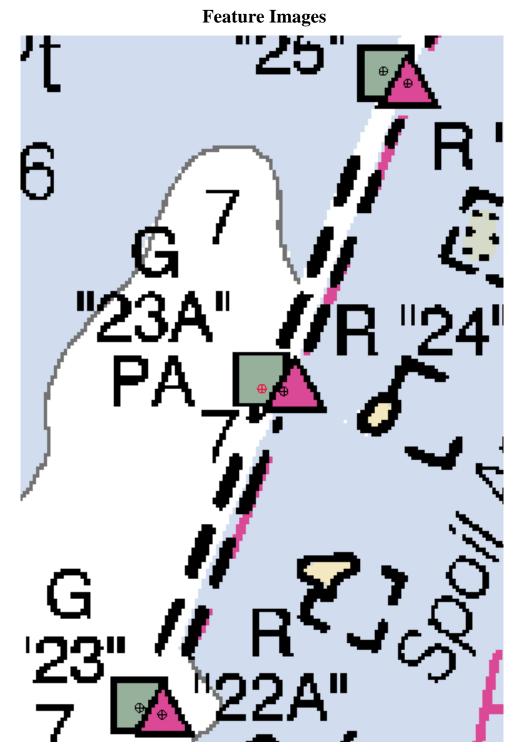


Figure 1.31.1

## 1.32) DBN R"16A" USCG LL#41750

# **Survey Summary**

**Survey Position:** 28° 25′ 58.9″ N, 080° 38′ 33.2″ W

**Least Depth:** -3.36 m = -1.839 fm = -1 fm 5.03 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-341.14:42:52.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 24/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

Steel I Beam. No motorized bots North of signs.

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	24/1	0.00	000.0	Primary

# **Hydrographer Recommendations**

Special Marine Note needs be applied to the charts stating, "NO MOTORS ALLOWED NORTH OF THIS POINT IN THE BANNA RIVER"

QUA: GPSmode=2, SVs=8, HDOP=1.00

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

- -11ft (11481\_1, 11476\_1, 11484\_1, 11451\_17)
- -1 3/4fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

**Geo object 1:** Beacon, lateral (BCNLAT) **Attributes:** BCNSHP - 5:pile beacon

\_\_\_\_\_

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red

CONRAD - 1:radar conspicuous

HEIGHT - 3.36 m

INFORM - No motorized bots North of signs.

OBJNAM - DBN R"16A" USCG LL#41750

VERDAT - 12:Mean lower low water

# **Office Notes**

Defer to MCD for charting disposition.

## 1.33) DBN G"17" USCG LL#41755

## **Survey Summary**

**Survey Position:** 28° 25' 59.2" N, 080° 38' 34.9" W

**Least Depth:** -4.36 m = -2.383 fm = -2.383 fm = -2.383 fm

**TPU** ( $\pm 1.96\sigma$ ): **THU** (**TPEh**) [None]; **TVU** (**TPEv**) [None]

**Timestamp:** 2006-341.14:43:50.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 25/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

No motorized boats North of signs.

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status	
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	25/1	0.00	0.000	Primary	

# **Hydrographer Recommendations**

Special Marine Note needs be applied to the charts stating, "NO MOTORS ALLOWED NORTH OF THIS POINT IN THE BANNA RIVER"

QUA: GPSmode=2, SVs=8, HDOP=1.00

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

```
-15ft (11481_1, 11476_1, 11484_1, 11451_17)
```

-2 <sup>1</sup>/<sub>4</sub>fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

Attributes: BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green HEIGHT - 4.36 m

INFORM - No motorized boats North of signs.

OBJNAM - DBN G"17" USCG LL#41755

VERDAT - 12:Mean lower low water

# **Office Notes**

Defer to MCD for charting disposition.

## 1.34) DBN G"13" USCG LL#41715

## **Survey Summary**

**Survey Position:** 28° 24′ 38.6″ N, 080° 38′ 45.4″ W

**Least Depth:** -4.30 m = -14.10 ft = -2.350 fm = -2 fm 2.10 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-341.15:01:40.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 32/1

**Charts Affected:** 11478\_1, 11481\_1, 11478\_2, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

RA REF. Manatee zone.

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status	
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	32/1	0.00	0.000	Primary	

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=8, HDOP=1.00

#### S-57 Data

Page 88

**Geo object 1:** Beacon, lateral (BCNLAT) **Attributes:** BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green

CONRAD - 1:radar conspicuous

HEIGHT - 4.3 m

INFORM - Manatee zone sign "Speed Zone"
OBJNAM - DBN G"13" USCG LL#41715
VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. Day beacon is ~24 meters off station.

## 1.35) DBN R"6" USCG LL#41695

## **Survey Summary**

**Survey Position:** 28° 24′ 34.8″ N, 080° 38′ 48.6″ W

**Least Depth:** -4.29 m = -14.07 ft = -2.346 fm = -2 fm 2.07 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.15:02:45.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 33/1

**Charts Affected:** 11478\_1, 11481\_1, 11478\_2, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

Off station North of currently charted position. Serves intended purpose.

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	33/1	0.00	000.0	Primary

# **Hydrographer Recommendations**

Adjust position to reflect survey position.

QUA: GPSmode=2, SVs=8, HDOP=1.00

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

-14ft (11478\_1, 11481\_1, 11478\_2, 11476\_1, 11484\_1, 11451\_17)

-2 <sup>1</sup>/<sub>4</sub>fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

Attributes: BCNSHP - 5:pile beacon

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red HEIGHT - 4.29 m

INFORM - slightly off station. serves intended purpose.

OBJNAM - DBN R"6" USCG LL#41695

VERDAT - 12:Mean lower low water

# **Office Notes**

Defer to MCD for charting disposition. Day beacon is ~35 meters off station.

## 1.36) DBN R"4" USCG LL#41705

## **Survey Summary**

**Survey Position:** 28° 24′ 34.4″ N, 080° 38′ 36.1″ W

**Least Depth:** -4.27 m = -14.02 ft = -2.337 fm = -2 fm 2.02 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.15:05:09.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 34/1

**Charts Affected:** 11478\_1, 11481\_1, 11478\_2, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

Off station, serves its' intended purpose.

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	34/1	0.00	000.0	Primary

# **Hydrographer Recommendations**

Adjust position to reflect survey position.

QUA: GPSmode=2, SVs=8, HDOP=0.90

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

-14ft (11478\_1, 11481\_1, 11478\_2, 11476\_1, 11484\_1, 11451\_17)

-2 <sup>1</sup>/<sub>4</sub>fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

**Geo object 1:** Beacon, lateral (BCNLAT)

**Attributes:** HEIGHT - 4.27 m

INFORM - offstation; serves intended purpose.

OBJNAM - DBN R"4" USCG LL#41705

VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. Day beacon is ~23 meters off station.

## 1.37) FL G"1" USCG LL#43030

## **Survey Summary**

**Survey Position:** 28° 24′ 03.1″ N, 080° 39′ 29.0″ W

**Least Depth:** -3.26 m = -1.781 fm = -1 fm 4.69 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-341.15:17:36.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 36/1

**Charts Affected:** 11481\_1, 11478\_2, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

All Aids to the west of the Banana River channel, south of SR 528, and North of the SR 520, are in error, and should be removed from the charts, and replaced by the surveyed aids in F-00520, 2006.

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status	
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	36/1	0.00	0.000	Primary	

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=8, HDOP=0.90

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

- -11ft (11481\_1, 11478\_2, 11476\_1, 11484\_1, 11451\_17)
- -1 3/4fm (11460\_1, 11009\_1, 411\_1)

#### S-57 Data

**Geo object 1:** Light (LIGHTS)

**Attributes:** CATLIT - 19:horizontally disposed

COLOUR - 4:green HEIGHT - 3.26 m LITCHR - 2:flashing

OBJNAM - FL G"1" USCG LL#43030 VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the charted private light Fl G 5s 8ft "1" (USCG LL#43030), the survey position of which is  $\sim$ 249 meters from the charted position.

## 1.38) DBN G"3" USCG LL#43040

## **Survey Summary**

**Survey Position:** 28° 24′ 03.5″ N, 080° 39′ 31.2″ W

**Least Depth:** -3.26 m = -1.781 fm = -1 fm = 4.69 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-341.15:18:22.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 37/1

**Charts Affected:** 11481\_1, 11478\_2, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	37/1	0.00	000.0	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=8, HDOP=0.90

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

- $-11 {\rm ft} \; (11481\_1,\, 11478\_2,\, 11476\_1,\, 11484\_1,\, 11451\_17)$
- -1 3/4fm (11460\_1, 11009\_1, 411\_1)

#### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

Attributes: BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green HEIGHT - 3.26 m

OBJNAM - DBN G"3" USCG LL#43040 VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the charted private beacon G"3" (USCG LL#43040), the survey position of which is ~22 meters from the charted position.

## 1.39) DBN G"5" USCG LL#43050

# **Survey Summary**

**Survey Position:** 28° 24′ 04.0″ N, 080° 39′ 35.4″ W

**Least Depth:** -3.26 m = -1.783 fm = -1 fm 4.70 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.15:19:32.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 38/1

**Charts Affected:** 11481\_1, 11478\_2, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

Leaning 45deg

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	38/1	0.00	0.000	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=8, HDOP=0.90

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

- -11ft (11481\_1, 11478\_2, 11476\_1, 11484\_1, 11451\_17)
- -1 <sup>3</sup>/<sub>4</sub>fm (11460\_1, 11009\_1, 411\_1)

#### S-57 Data

**Geo object 1:** Beacon, lateral (BCNLAT)

**Attributes:** BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green HEIGHT - 3.26 m

INFORM - Leaning 45deg

OBJNAM - DBN G"5" USCG LL#43050 VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the charted private beacon G"5" (USCG LL#43050), the survey position of which is ~31 meters from the charted position.

## 1.40) DBN G"7" USCG LL#43055

## **Survey Summary**

**Survey Position:** 28° 24′ 05.3″ N, 080° 39′ 44.0″ W

**Least Depth:** -4.27 m = -14.02 ft = -2.336 fm = -2 fm 2.02 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-341.15:21:47.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 39/1

**Charts Affected:** 11481\_1, 11478\_2, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

Manatee zone

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status	
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	39/1	0.00	0.000	Primary	

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=8, HDOP=0.90

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

 $\text{-}14 \text{ft} \left(11481 \_1, 11478 \_2, 11476 \_1, 11484 \_1, 11451 \_17\right)$ 

-2 <sup>1</sup>/<sub>4</sub>fm (11460\_1, 11009\_1, 411\_1)

#### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

**Attributes:** BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green HEIGHT - 4.27 m

INFORM - Manatee zone

OBJNAM - DBN G"7" USCG LL#43055 VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the charted private beacon G"7" (USCG LL#43055), the survey position of which is ~84 meters from the charted position.

## 1.41) DBN R"2" USCG LL#43035

# **Survey Summary**

**Survey Position:** 28° 24′ 04.8″ N, 080° 39′ 31.2″ W

**Least Depth:** -3.29 m = -1.799 fm = -1 fm 4.79 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-341.15:25:12.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 40/1

**Charts Affected:** 11481\_1, 11478\_2, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	40/1	0.00	000.0	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=8, HDOP=0.90

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

- $-11 {\rm ft} \; (11481\_1,\, 11478\_2,\, 11476\_1,\, 11484\_1,\, 11451\_17)$
- -1 3/4fm (11460\_1, 11009\_1, 411\_1)

#### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

Attributes: BCNSHP - 5:pile beacon

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red HEIGHT - 3.29 m

OBJNAM - DBN R"2" USCG LL#43035 VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the charted private day beacon R"2" (USCG LL#43035), the survey position of which is  $\sim$ 73 meters from the charted position.

## 1.42) FL R"2" USCG LL#42495

# **Survey Summary**

**Survey Position:** 28° 23′ 37.7″ N, 080° 39′ 26.5″ W

**Least Depth:** -4.25 m = -2.323 fm = -2 fm 1.94 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.15:36:03.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 42/1

**Charts Affected:** 11481\_1, 11478\_2, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	42/1	0.00	000.0	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=8, HDOP=1.20

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

```
\text{-}14 \text{ft} \left(11481 \_1, 11478 \_2, 11476 \_1, 11484 \_1, 11451 \_17\right)
```

-2 <sup>1</sup>/<sub>4</sub>fm (11460\_1, 11009\_1, 411\_1)

#### S-57 Data

**Geo object 1:** Light (LIGHTS)

**Attributes:** CATLIT - 19:horizontally disposed

COLOUR - 3:red HEIGHT - 4.25 m LITCHR - 2:flashing

OBJNAM - FL R"2" USCG LL#42495 VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the charted private light Fl R 5s "2" (USCG LL#42495), the survey position of which is  $\sim$ 235 meters from the charted position.

## 1.43) DBN G"3" USCG LL#42950

# **Survey Summary**

**Survey Position:** 28° 23′ 37.6″ N, 080° 39′ 33.5″ W

**Least Depth:** -3.74 m = -2.047 fm = -2 fm 0.28 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.15:38:06.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 43/1

**Charts Affected:** 11481\_1, 11478\_2, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	43/1	0.00	000.0	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=8, HDOP=1.00

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

```
\text{-}13 \text{ft} \; (11481\_1, \, 11478\_2, \, 11476\_1, \, 11484\_1, \, 11451\_17)
```

-2fm (11460\_1, 11009\_1, 411\_1)

#### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

Attributes: BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green HEIGHT - 3.74 m

OBJNAM - DBN G"3" USCG LL#42950

VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the charted private beacon G"3" (USCG LL#42950), the survey position of which is ~270 meters from the charted position.

## 1.44) DBN R"4" USCG LL#42955

# **Survey Summary**

**Survey Position:** 28° 23′ 38.1″ N, 080° 39′ 39.1″ W

**Least Depth:** -3.75 m = -2.048 fm = -2 fm 0.29 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.15:40:52.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 44/1

**Charts Affected:** 11481\_1, 11478\_2, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	44/1	0.00	000.0	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=7, HDOP=1.30

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

```
\text{-}13 \text{ft} \left(11481\_1,\,11478\_2,\,11476\_1,\,11484\_1,\,11451\_17\right)
```

-2fm (11460\_1, 11009\_1, 411\_1)

#### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

Attributes: BCNSHP - 5:pile beacon

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red HEIGHT - 3.75 m

OBJNAM - DBN R"4" USCG LL#42955 VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the charted private beacon R"4" (USCG LL#42955), the survey position of which is ~253 meters from the charted position.

## 1.45) DBN G"5" USCG LL#42960

## **Survey Summary**

**Survey Position:** 28° 23′ 38.2″ N, 080° 39′ 46.6″ W

**Least Depth:** -2.75 m (= -9.02 ft = -1.503 fm = -1 fm 3.02 ft)

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.15:42:50.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 45/1

**Charts Affected:** 11481\_1, 11478\_2, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	45/1	0.00	000.0	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=7, HDOP=1.10

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

```
-9ft (11481_1, 11478_2, 11476_1, 11484_1, 11451_17)
-1 ½fm (11460_1, 11009_1, 411_1)
```

#### S-57 Data

**Geo object 1:** Beacon, lateral (BCNLAT) **Attributes:** BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green HEIGHT - 2.75 m

OBJNAM - DBN G"5" USCG LL#42960 VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the uncharted private beacon G"5" (USCG LL#42960).

## 1.46) DBN R"6" USCG LL#42965

## **Survey Summary**

**Survey Position:** 28° 23′ 38.5″ N, 080° 39′ 46.7″ W

**Least Depth:** -2.75 m = -9.01 ft = -1.502 fm = -1 fm 3.01 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.15:43:29.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 46/1

**Charts Affected:** 11481\_1, 11478\_2, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status	
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	46/1	0.00	0.000	Primary	

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=8, HDOP=1.00

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

```
-9ft (11481_1, 11478_2, 11476_1, 11484_1, 11451_17)
-1 ½fm (11460_1, 11009_1, 411_1)
```

#### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

Attributes: BCNSHP - 5:pile beacon

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red HEIGHT - 2.75 m

OBJNAM - DBN R"6" USCG LL#42965 VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the charted private beacon R"6" (USCG LL#42965), the survey position of which is ~274 meters from the charted position.

## 1.47) DBN G"7" USCG LL#42970

# **Survey Summary**

**Survey Position:** 28° 23′ 38.3″ N, 080° 39′ 47.8″ W

**Least Depth:** -2.74 m = -1.498 fm = -1 fm 2.99 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.15:47:08.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 47/1

**Charts Affected:** 11481\_1, 11478\_2, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	47/1	0.00	0.000	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=8, HDOP=1.00

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

```
-9ft (11481_1, 11478_2, 11476_1, 11484_1, 11451_17)
-1 ½fm (11460_1, 11009_1, 411_1)
```

#### S-57 Data

**Geo object 1:** Beacon, lateral (BCNLAT) **Attributes:** BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green HEIGHT - 2.74 m

OBJNAM - DBN G"7" USCG LL#42970 VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the uncharted private beacon G"7" (USCG LL#42970).

## 1.48) DBN G"9" USCG LL#42980

# **Survey Summary**

**Survey Position:** 28° 23′ 38.4″ N, 080° 39′ 49.1″ W

**Least Depth:** -2.74 m = -1.497 fm = -1 fm 2.98 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.15:47:59.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 48/1

**Charts Affected:** 11481\_1, 11478\_2, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	48/1	0.00	000.0	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=7, HDOP=1.10

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

```
-9ft (11481_1, 11478_2, 11476_1, 11484_1, 11451_17)
-1 ½fm (11460_1, 11009_1, 411_1)
```

### S-57 Data

**Geo object 1:** Beacon, lateral (BCNLAT) **Attributes:** BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green HEIGHT - 2.74 m

OBJNAM - DBN G"9" USCG LL#42980 VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the uncharted private beacon G"9" (USCG LL#42980).

## 1.49) DBN G"11" USCG LL#43005

## **Survey Summary**

**Survey Position:** 28° 23′ 38.4″ N, 080° 39′ 50.1″ W

**Least Depth:** -2.73 m = -1.496 fm = -1 fm 2.97 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-341.15:48:39.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 49/1

**Charts Affected:** 11481\_1, 11478\_2, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	49/1	0.00	0.000	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=8, HDOP=1.00

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

```
-9ft (11481_1, 11478_2, 11476_1, 11484_1, 11451_17)
-1 ½fm (11460_1, 11009_1, 411_1)
```

### S-57 Data

**Geo object 1:** Beacon, lateral (BCNLAT) **Attributes:** BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green HEIGHT - 2.74 m

OBJNAM - DBN G"11" USCG LL#43005

Defer to MCD for charting disposition. The feature is the uncharted private beacon G"11" (USCG LL#43005).

## 1.50) DBN G"13" USCG LL#43015

## **Survey Summary**

**Survey Position:** 28° 23′ 38.2″ N, 080° 39′ 51.6″ W

**Least Depth:** -2.73 m = -1.494 fm = -1 fm 2.96 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.15:49:45.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 50/1

**Charts Affected:** 11481\_1, 11478\_2, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status	
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	50/1	0.00	000.0	Primary	

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=7, HDOP=1.20

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

```
-9ft (11481_1, 11478_2, 11476_1, 11484_1, 11451_17)
-1 ½fm (11460_1, 11009_1, 411_1)
```

### S-57 Data

**Geo object 1:** Beacon, lateral (BCNLAT) **Attributes:** BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green HEIGHT - 2.73 m

OBJNAM - DBN G"13" USCG LL#43015

Defer to MCD for charting disposition. The feature is the charted private beacon G"13" (USCG LL#43015), the survey position of which is ~223 meters from the charted position.

## 1.51) DBN G"15" USCG LL#43020

## **Survey Summary**

**Survey Position:** 28° 23′ 37.6″ N, 080° 39′ 53.1″ W

**Least Depth:** -2.73 m = -1.490 fm = -1 fm 2.94 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.15:51:34.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 51/1

**Charts Affected:** 11481\_1, 11478\_2, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	51/1	0.00	000.0	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=7, HDOP=1.20

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

```
-9ft (11481_1, 11478_2, 11476_1, 11484_1, 11451_17)
-1 ½fm (11460_1, 11009_1, 411_1)
```

### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

Attributes: BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green HEIGHT - 2.73 m

OBJNAM - DBN G"15" USCG LL#43020

Defer to MCD for charting disposition. The feature is the uncharted private beacon G"15" (USCG LL#43020).

## 1.52) DBN G"17" USCG LL#43025

## **Survey Summary**

**Survey Position:** 28° 23′ 36.1″ N, 080° 39′ 54.2″ W

**Least Depth:** -2.72 m = -1.488 fm = -1 fm 2.93 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.15:52:33.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 52/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	52/1	0.00	000.0	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=7, HDOP=1.20

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

```
-9 ft \ (11481\_1, \ 11476\_1, \ 11484\_1, \ 11451\_17)
```

-1 ½fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

Attributes: BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green HEIGHT - 2.72 m

OBJNAM - DBN G"17" USCG LL#43025

Defer to MCD for charting disposition. The feature is the charted private beacon G"17" (USCG LL#43025), the survey position of which is ~213 meters from the charted position.

## 1.53) DBN R"4" USCG LL#43000

# **Survey Summary**

**Survey Position:** 28° 23′ 39.4″ N, 080° 39′ 51.8″ W

**Least Depth:** -2.71 m (= -8.90 ft = -1.483 fm = -1 fm 2.90 ft)

TPU (±1.96σ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-341.15:56:05.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 53/1

**Charts Affected:** 11481\_1, 11478\_2, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status	
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	53/1	0.00	000.0	Primary	

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=7, HDOP=1.20

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

```
-9ft (11481_1, 11478_2, 11476_1, 11484_1, 11451_17)
-1 ½fm (11460_1, 11009_1, 411_1)
```

### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

Attributes: BCNSHP - 5:pile beacon

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red HEIGHT - 2.71 m

OBJNAM - DBN R"4" USCG LL#43000 VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the charted private beacon R"4" (USCG LL#43000), the survey position agress well with the charted position.

## 1.54) DBN R"2" USCG LL#42995

# **Survey Summary**

**Survey Position:** 28° 23′ 39.3″ N, 080° 39′ 50.8″ W

**Least Depth:** -2.71 m = -1.483 fm = -1 fm 2.90 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.15:58:27.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 54/1

**Charts Affected:** 11481\_1, 11478\_2, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	54/1	0.00	000.0	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=7, HDOP=1.20

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

```
-9ft (11481_1, 11478_2, 11476_1, 11484_1, 11451_17)
-1 ½fm (11460_1, 11009_1, 411_1)
```

### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

Attributes: BCNSHP - 5:pile beacon

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red HEIGHT - 2.71 m

OBJNAM - DBN R"2" USCG LL#42995 VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the charted private beacon R"2" (USCG LL#42995), the survey position of which is ~25 meters from the charted position.

# 1.55) JUNCTION DBN "A" USCG LL#42990

## **Survey Summary**

**Survey Position:** 28° 23′ 38.9″ N, 080° 39′ 49.9″ W

**Least Depth:** -2.71 m (= -8.90 ft = -1.483 fm = -1 fm 2.90 ft)

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-341.15:59:03.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 55/1

**Charts Affected:** 11481\_1, 11478\_2, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status	
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	55/1	0.00	000.0	Primary	ĺ

# **Hydrographer Recommendations**

### [None]

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

```
-9ft (11481_1, 11478_2, 11476_1, 11484_1, 11451_17)
-1 ½fm (11460_1, 11009_1, 411_1)
```

### S-57 Data

Geo object 1: Beacon, special purpose/general (BCNSPP)

**Attributes:** BCNSHP - 5:pile beacon

CATSPM - 54:channel separation mark

COLOUR - 3:red HEIGHT - 2.71 m

OBJNAM - JUNCTION DBN "A" USCG LL#42990

Defer to MCD for charting disposition. The feature is the charted private junction beacon "A" (USCG LL#42990), the survey position of which is ~108 meters from the charted position.

## 1.56) DBN R"10" USCG LL#42985

## **Survey Summary**

**Survey Position:** 28° 23′ 38.8″ N, 080° 39′ 49.4″ W

**Least Depth:** -2.71 m (= -8.90 ft = -1.484 fm = -1 fm 2.90 ft)

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.16:00:02.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 56/1

**Charts Affected:** 11481\_1, 11478\_2, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	56/1	0.00	000.0	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=7, HDOP=1.20

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

```
-9ft (11481_1, 11478_2, 11476_1, 11484_1, 11451_17)
-1 ½fm (11460_1, 11009_1, 411_1)
```

### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

Attributes: BCNSHP - 5:pile beacon

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red HEIGHT - 2.71 m

OBJNAM - DBN R"10" USCG LL#42985 VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the charted private beacon R"10" (USCG LL#42985), the survey position of which is ~94 meters from the charted position.

## 1.57) DBN R"8" USCG LL#42975

# **Survey Summary**

**Survey Position:** 28° 23′ 38.6″ N, 080° 39′ 47.8″ W

**Least Depth:** -2.71 m = -1.484 fm = -1 fm 2.90 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.16:00:59.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 57/1

**Charts Affected:** 11481\_1, 11478\_2, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	57/1	0.00	000.0	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=7, HDOP=1.20

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

```
-9ft (11481_1, 11478_2, 11476_1, 11484_1, 11451_17)
```

-1 ½fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

Attributes: BCNSHP - 5:pile beacon

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red HEIGHT - 2.71 m

OBJNAM - DBN R"8" USCG LL#42975 VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the charted private beacon R"8" (USCG LL#42975), the survey position of which is ~176 meters from the charted position.

## 1.58) FL LT R"2" USCG LL#42830

## **Survey Summary**

**Survey Position:** 28° 23′ 12.9″ N, 080° 39′ 23.9″ W

**Least Depth:** -5.17 m = -2.826 fm = -2.826 fm = -2 fm = -2.826 fm = -2.

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-341.16:10:32.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 58/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	58/1	0.00	000.0	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=7, HDOP=1.10

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

- -17ft (11481\_1, 11476\_1, 11484\_1, 11451\_17)
- -2 3/4fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

**Geo object 1:** Light (LIGHTS)

**Attributes:** CATLIT - 19:horizontally disposed

COLOUR - 3:red HEIGHT - 5.17 m LITCHR - 2:flashing

OBJNAM - FL LT R"2" USCG LL#42830

Defer to MCD for charting disposition. The feature is the charted private light Fl R 2.5s "2" (USCG LL#42830), the survey position of which is ~200 meters from the charted position.

## 1.59) DBN R"4" USGC LL#42840

# **Survey Summary**

**Survey Position:** 28° 23′ 12.4″ N, 080° 39′ 33.9″ W

**Least Depth:** -4.16 m = -2.275 fm = -2 fm = 1.65 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-341.16:12:23.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 59/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	59/1	0.00	000.0	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=7, HDOP=1.10

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

```
\text{-}14 \text{ft} \ (11481\_1, \ 11476\_1, \ 11484\_1, \ 11451\_17)
```

-2 <sup>1</sup>/<sub>4</sub>fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

Attributes: BCNSHP - 5:pile beacon

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red HEIGHT - 4.16 m

OBJNAM - DBN R"4" USGC LL#42840 VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the charted private beacon R'4' (USCG LL#42840), the survey position of which is ~218 meters from the charted position.

## 1.60) DBM R"6" USCG LL#42850

# **Survey Summary**

**Survey Position:** 28° 23′ 12.2″ N, 080° 39′ 39.2″ W

**Least Depth:** -2.65 m = -8.70 ft = -1.451 fm = -1 fm 2.70 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.16:14:00.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 60/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	60/1	0.00	0.000	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=7, HDOP=1.10

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

```
-9 ft \ (11481\_1, \ 11476\_1, \ 11484\_1, \ 11451\_17)
```

-1 ½fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

Attributes: BCNSHP - 5:pile beacon

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red HEIGHT - 2.65 m

OBJNAM - DBM R"6" USCG LL#42850 VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the charted private beacon R'6' (USCG LL#42850), the survey position of which is  $\sim$ 250 meters from the charted position.

## 1.61) DBN R"10" USCG LL#42870

## **Survey Summary**

**Survey Position:** 28° 23′ 12.0″ N, 080° 39′ 44.0″ W

**Least Depth:** -2.65 m = -1.448 fm = -1 fm 2.69 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.16:15:19.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 61/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	61/1	0.00	000.0	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=7, HDOP=1.10

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

```
-9 ft \ (11481\_1, \ 11476\_1, \ 11484\_1, \ 11451\_17)
```

-1 ½fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

Attributes: BCNSHP - 5:pile beacon

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red HEIGHT - 2.65 m

OBJNAM - DBN R"10" USCG LL#42870

Defer to MCD for charting disposition. The feature is the charted private beacon R'10' (USCG LL#42870), the survey position of which is ~137 meters from the charted position.

## 1.62) DBN R"12" USCG LL#42880

# **Survey Summary**

**Survey Position:** 28° 23′ 11.9″ N, 080° 39′ 46.4″ W

**Least Depth:** -2.64 m = -8.67 ft = -1.446 fm = -1 fm 2.67 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.16:16:12.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 62/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	62/1	0.00	000.0	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=7, HDOP=1.10

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

```
-9 ft \ (11481\_1, \ 11476\_1, \ 11484\_1, \ 11451\_17)
```

-1 ½fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

Attributes: BCNSHP - 5:pile beacon

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red HEIGHT - 2.64 m

OBJNAM - DBN R"12" USCG LL#42880

Defer to MCD for chart disposition. The feature is an uncharted private R"12" beacon.

## 1.63) DBN R"14" USCG LL#42890

## **Survey Summary**

**Survey Position:** 28° 23′ 12.7″ N, 080° 39′ 48.9″ W

**Least Depth:** -2.64 m = -8.66 ft = -1.444 fm = -1 fm 2.66 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.16:17:17.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 63/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	63/1	0.00	0.000	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=7, HDOP=1.10

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

```
-9ft (11481_1, 11476_1, 11484_1, 11451_17)
```

-1 ½fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

Attributes: BCNSHP - 5:pile beacon

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red HEIGHT - 2.64 m

OBJNAM - DBN R"14" USCG LL#42890

Defer to MCD for chart disposition. The feature is an uncharted private R"14" beacon.

## 1.64) DBN R"2" USCG LL#42895

# **Survey Summary**

**Survey Position:** 28° 23′ 15.7″ N, 080° 39′ 48.7″ W

**Least Depth:** -2.64 m = -8.65 ft = -1.441 fm = -1 fm 2.65 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-341.16:18:10.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 64/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status	
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	64/1	0.00	000.0	Primary	l

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=6, HDOP=1.40

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

```
-9ft (11481_1, 11476_1, 11484_1, 11451_17)
```

-1 ½fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

Attributes: BCNSHP - 5:pile beacon

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red HEIGHT - 2.64 m

OBJNAM - DBN R"2" USCG LL#42895 VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the charted private beacon R"2" (USCG LL#42895), the survey position of which is ~22 meters from the charted position.

## 1.65) DBN R"4" USCG LL#42900

# **Survey Summary**

**Survey Position:** 28° 23' 23.1" N, 080° 39' 48.2" W

**Least Depth:** -2.63 m = -8.62 ft = -1.436 fm = -1 fm 2.62 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-341.16:19:55.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 65/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status	
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	65/1	0.00	000.0	Primary	

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=7, HDOP=1.10

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

```
-9ft (11481_1, 11476_1, 11484_1, 11451_17)
```

-1 ¼fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

Attributes: BCNSHP - 5:pile beacon

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red HEIGHT - 2.63 m

OBJNAM - DBN R"4" USCG LL#42900 VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the charted private beacon R"4" (USCG LL#42900), the survey position of which is ~61 meters from the charted position.

## 1.66) DBN R"6" USCG LL#42905

## **Survey Summary**

**Survey Position:** 28° 23′ 26.2″ N, 080° 39′ 50.0″ W

**Least Depth:** -2.62 m = -8.60 ft = -1.433 fm = -1 fm 2.60 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.16:20:59.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 66/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	66/1	0.00	000.0	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=7, HDOP=1.10

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

```
-9ft (11481_1, 11476_1, 11484_1, 11451_17)
```

-1 ¼fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

Attributes: BCNSHP - 5:pile beacon

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red HEIGHT - 2.62 m

OBJNAM - DBN R"6" USCG LL#42905 VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the charted private beacon R"6" (USCG LL#42905), the survey position of which is ~66 meters from the charted position.

## 1.67) DBN G"1" USCG LL#42920

## **Survey Summary**

**Survey Position:** 28° 23' 09.1" N, 080° 39' 50.6" W

**Least Depth:** -2.59 m = -1.417 fm = -1 fm 2.50 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.16:25:23.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 67/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

Central Ave Boat Canal. Manatee Zone

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	67/1	0.00	000.0	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=7, HDOP=1.10

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

-9ft (11481\_1, 11476\_1, 11484\_1, 11451\_17)

-1 <sup>1</sup>/<sub>4</sub>fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

**Attributes:** BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green HEIGHT - 2.59 m

OBJNAM - DBN G"1" USCG LL#42920

VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is a surveyed G"1" beacon. There is another surveyed G"1" beacon (DBN G'1' USCG LL#42910) ~27 meters away, but only one green "1" beacon is charted in the vicinity.

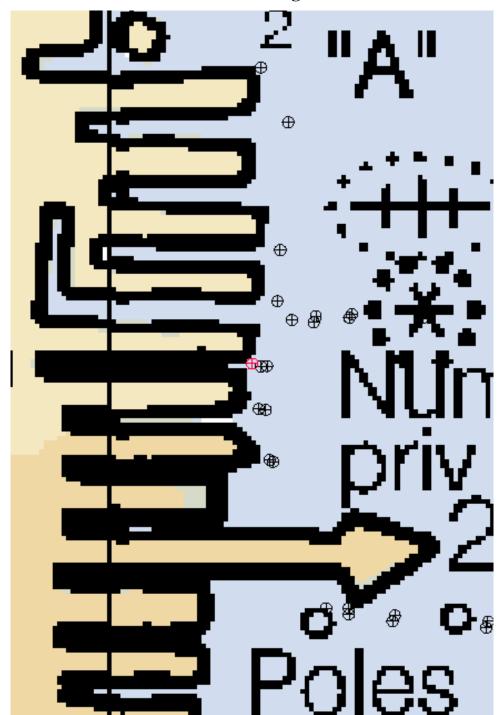


Figure 1.67.1

## 1.68) Junction DBN"A" USCG LL#42915

## **Survey Summary**

**Survey Position:** 28° 23′ 09.0″ N, 080° 39′ 50.0″ W

**Least Depth:** -3.08 m = -1.686 fm =

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-341.16:26:42.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 68/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	68/1	0.00	000.0	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=6, HDOP=1.50

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

- -10ft (11481\_1, 11476\_1, 11484\_1, 11451\_17)
- -1 ½fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

**Geo object 1:** Beacon, special purpose/general (BCNSPP)

**Attributes:** BCNSHP - 5:pile beacon

CATSPM - 54:channel separation mark

COLOUR - 3:red HEIGHT - 3.08 m

OBJNAM - Junction DBN"A" USCG LL#42915

VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the mischarted private junction beacon "A" (USCG LL#42915). The beacon is charted as RG"A", but the beacon is red. The survey position is  $\sim$ 66 meters from the charted position.

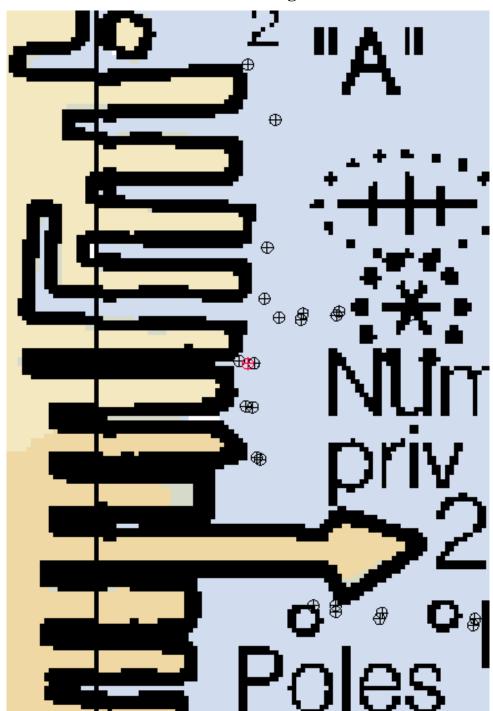


Figure 1.68.1

## 1.69) DBN R"2" USCG LL#42925

## **Survey Summary**

**Survey Position:** 28° 23′ 06.5″ N, 080° 39′ 50.1″ W

**Least Depth:** -3.08 m = -1.683 fm = -1.683 fm = -1 fm 4.10 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-341.16:27:52.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 69/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status	
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	69/1	0.00	000.0	Primary	

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=6, HDOP=1.50

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

- -10ft (11481\_1, 11476\_1, 11484\_1, 11451\_17)
- -1 ½fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

Attributes: BCNSHP - 5:pile beacon

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red HEIGHT - 3.08 m

OBJNAM - DBN R"2" USCG LL#42925 VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the charted private beacon R"2" (USCG LL#42925), the survey position of which is ~74 meters from the charted position.

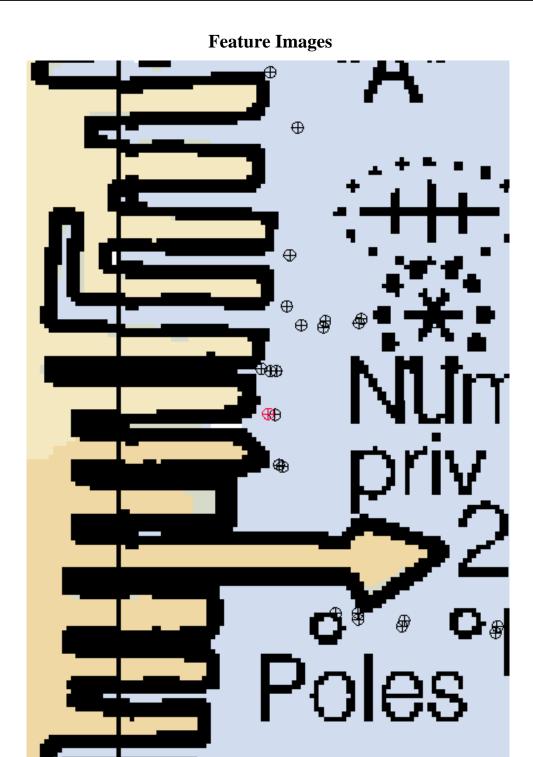


Figure 1.69.1

## 1.70) DBN R"4" USCG LL#42935

## **Survey Summary**

**Survey Position:** 28° 23′ 03.6″ N, 080° 39′ 49.4″ W

**Least Depth:** -3.07 m = -1.679 fm = -1 fm 4.08 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-341.16:28:55.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 70/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	70/1	0.00	000.0	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=7, HDOP=1.10

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

- -10ft (11481\_1, 11476\_1, 11484\_1, 11451\_17)
- -1 ½fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

Attributes: BCNSHP - 5:pile beacon

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red HEIGHT - 3.07 m

OBJNAM - DBN R"4" USCG LL#42935 VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the charted private beacon R'4' (USCG LL#42935), the survey position of which is 60 meters from the charted position.

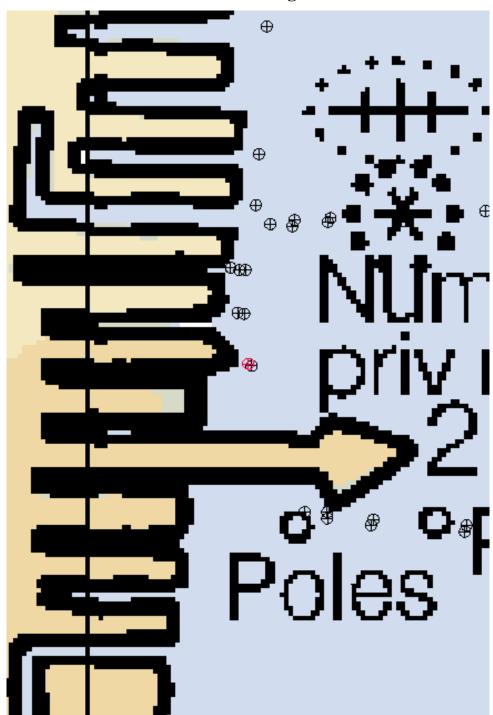


Figure 1.70.1

## 1.71) DBN G"5" USCG LL#42940

## **Survey Summary**

**Survey Position:** 28° 23′ 03.5″ N, 080° 39′ 49.2″ W

**Least Depth:** -3.06 m = -1.676 fm = -1 fm 4.06 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-341.16:30:02.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 71/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	71/1	0.00	000.0	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=7, HDOP=1.10

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

- -10ft (11481\_1, 11476\_1, 11484\_1, 11451\_17)
- -1 ½fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

**Geo object 1:** Beacon, lateral (BCNLAT) **Attributes:** BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green HEIGHT - 3.06 m

OBJNAM - DBN G"5" USCG LL#42940 VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the charted private beacon G'5' (USCG LL#42940), the survey position of which is  $\sim$ 100 meters from the charted position.

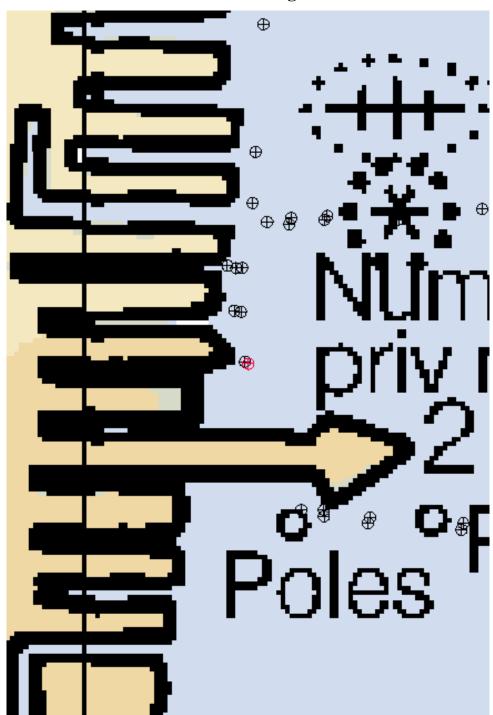


Figure 1.71.1

## 1.72) DBN G"3" USCG LL#42930

## **Survey Summary**

**Survey Position:** 28° 23′ 06.5″ N, 080° 39′ 49.7″ W

**Least Depth:** -3.06 m = -1.672 fm = -1 fm 4.03 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-341.16:31:09.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 72/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	72/1	0.00	000.0	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=7, HDOP=1.10

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

- -10ft (11481\_1, 11476\_1, 11484\_1, 11451\_17)
- -1 ½fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

Attributes: BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green HEIGHT - 3.06 m

OBJNAM - DBN G"3" USCG LL#42930 VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the charted private beacon G"3" (USCG LL#42930), the survey position of which is ~109 meters from the charted position.

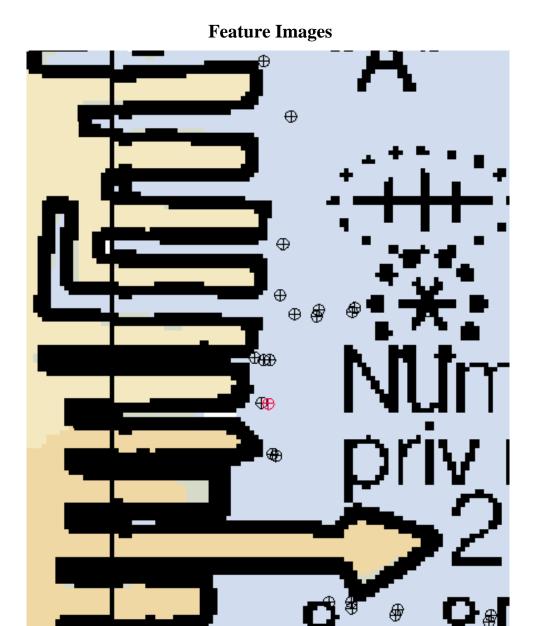


Figure 1.72.1

## 1.73) DBN G"1" USCG LL#42910

## **Survey Summary**

**Survey Position:** 28° 23' 09.0" N, 080° 39' 49.6" W

**Least Depth:** -3.06 m = -1.671 fm = -1 fm 4.03 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-341.16:32:04.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 73/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	73/1	0.00	0.000	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=6, HDOP=1.50

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

- -10ft (11481\_1, 11476\_1, 11484\_1, 11451\_17)
- -1 ½fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

Attributes: BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green HEIGHT - 3.06 m

OBJNAM - DBN G"1" USCG LL#42910 VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is a surveyed G"1" beacon. There is another surveyed G"1" beacon (DBN G'1' USCG LL#42920) ~27 meters away, but only one green "1" beacon is charted in the vicinity.

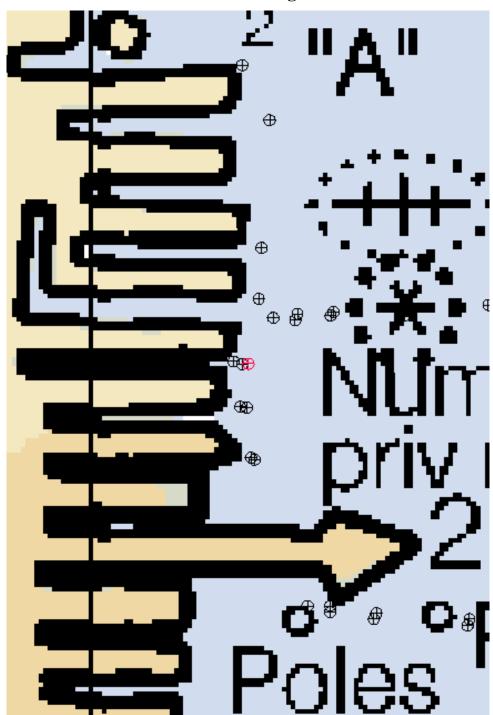


Figure 1.73.1

## 1.74) DBN G"13" USCG LL#42885

## **Survey Summary**

**Survey Position:** 28° 23′ 11.6″ N, 080° 39′ 48.0″ W

**Least Depth:** -3.05 m = -1.669 fm = -1 fm 4.02 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-341.16:33:10.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 74/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

Manatee Zone

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status	
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	74/1	0.00	0.000	Primary	

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=6, HDOP=1.50

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

- -10ft (11481\_1, 11476\_1, 11484\_1, 11451\_17)
- -1 ½fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

**Geo object 1:** Beacon, lateral (BCNLAT)

**Attributes:** BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green HEIGHT - 3.05 m

INFORM - Manatee Zone

OBJNAM - DBN G"13" USCG LL#42885

VERDAT - 12:Mean lower low water

Defer to MCD for chart disposition. The feature is an uncharted private G"13" beacon.

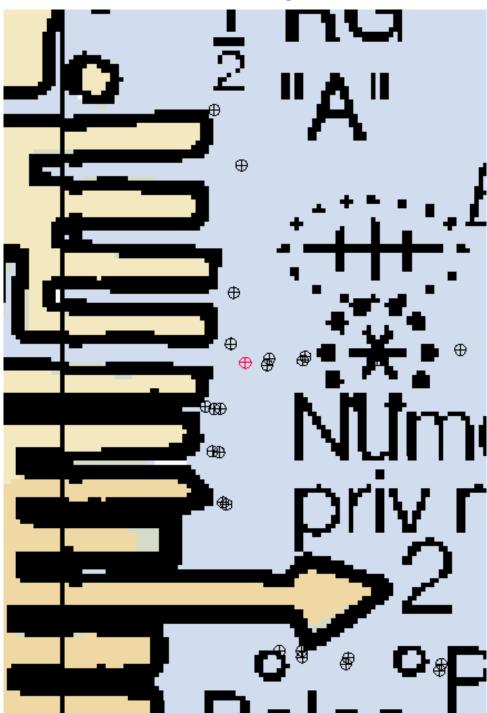


Figure 1.74.1

## 1.75) DBN G"11" USCG LL#42875

## **Survey Summary**

**Survey Position:** 28° 23′ 11.5″ N, 080° 39′ 46.5″ W

**Least Depth:** -3.05 m = -1.668 fm = -1 fm 4.01 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-341.16:33:53.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 75/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	75/1	0.00	000.0	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=6, HDOP=1.50

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

- -10ft (11481\_1, 11476\_1, 11484\_1, 11451\_17)
- -1 ½fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

**Geo object 1:** Beacon, lateral (BCNLAT) **Attributes:** BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green HEIGHT - 3.05 m

OBJNAM - DBN G"11" USCG LL#42875

VERDAT - 12:Mean lower low water

Defer to MCD for chart disposition. The feature is an uncharted private G"11" beacon.

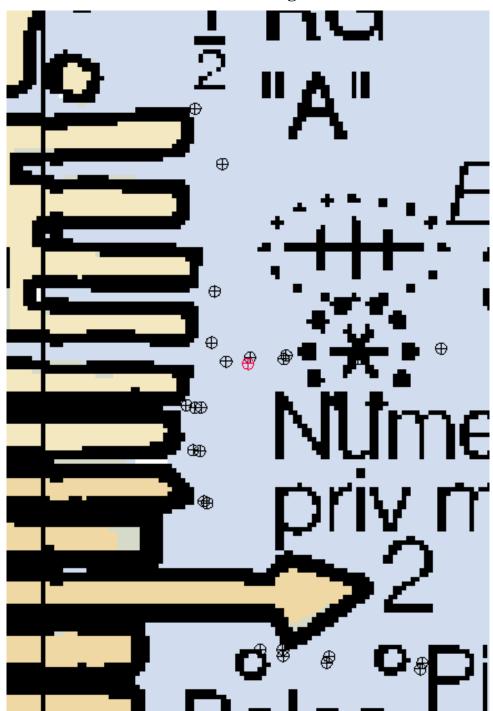


Figure 1.75.1

## 1.76) DBN G"9" USCG LL#42865

## **Survey Summary**

**Survey Position:** 28° 23′ 11.8″ N, 080° 39′ 44.2″ W

**Least Depth:** -3.05 m = -1.667 fm =

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-341.16:34:46.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 76/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	76/1	0.00	000.0	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=6, HDOP=1.50

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

- -10ft (11481\_1, 11476\_1, 11484\_1, 11451\_17)
- -1 ½fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

Attributes: BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green HEIGHT - 3.05 m

OBJNAM - DBN G"9" USCG LL#92865 VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the charted private beacon G'9' (USCG LL#42865), the survey position of which is  $\sim$ 150 meters from the charted position.

## 1.77) DBN G"5" USCG LL#42845

## **Survey Summary**

**Survey Position:** 28° 23′ 11.8″ N, 080° 39′ 39.4″ W

**Least Depth:** -3.04 m = -1.665 fm = -1 fm 3.99 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.16:36:05.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 77/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	77/1	0.00	000.0	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=6, HDOP=1.50

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

- -10ft (11481\_1, 11476\_1, 11484\_1, 11451\_17)
- -1 ½fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

**Attributes:** HEIGHT - 3.04 m

OBJNAM - DBN G"5" USCG LL#42845 VERDAT - 12:Mean lower low water

### **Office Notes**

Defer to MCD for charting disposition. The feature is the charted private beacon G'5' (USCG LL#42845), the survey position of which is ~260 meters from the charted position.

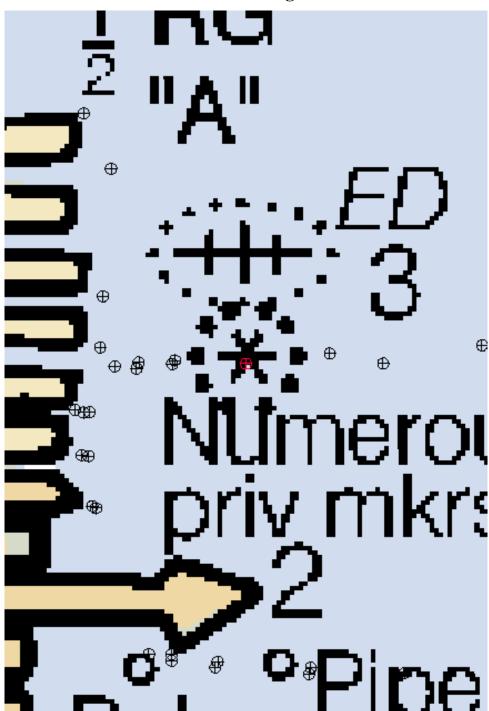


Figure 1.77.1

## 1.78) DBN G"3" USCG LL#42835

## **Survey Summary**

**Survey Position:** 28° 23′ 11.8″ N, 080° 39′ 30.4″ W

**Least Depth:** -3.04 m = -9.97 ft = -1.662 fm = -1 fm 3.97 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-341.16:37:37.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 78/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	78/1	0.00	000.0	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=6, HDOP=1.50

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

- -10ft (11481\_1, 11476\_1, 11484\_1, 11451\_17)
- -1 ½fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

Attributes: BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green HEIGHT - 3.04 m

OBJNAM - DBN G"3" USCG LL#42835

VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the charted private beacon G'3' (USCG LL#42835), the survey position of which is ~206 meters from the charted position.

## 1.79) FL G"1" USCG LL#42770

## **Survey Summary**

**Survey Position:** 28° 22′ 52.9″ N, 080° 39′ 22.3″ W

**Least Depth:** -3.95 m = -2.160 fm = -2.160 fm = -2.160 fm

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-341.16:53:02.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 79/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	79/1	0.00	000.0	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=6, HDOP=1.50

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

-13ft (11481\_1, 11476\_1, 11484\_1, 11451\_17)

-2fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

**Attributes:** HEIGHT - 3.95 m

OBJNAM - DBN G"1" USCG LL#42770

VERDAT - 12:Mean lower low water

**Geo object 2:** Light (LIGHTS)

**Attributes:** CATLIT - 19:horizontally disposed

COLOUR - 4:green HEIGHT - 3.95 m LITCHR - 2:flashing OBJNAM - FL G"1" USCG LL#42770

VERDAT - 12:Mean lower low water

## **Office Notes**

Defer to MCD for charting disposition. The feature is the charted private light Fl G 5s "1" (USCG LL#42770), the survey position of which is ~87 meters from the charted position.

## 1.80) DBN R"2" USCG LL#42775

## **Survey Summary**

**Survey Position:** 28° 22′ 53.9″ N, 080° 39′ 29.0″ W

**Least Depth:** -3.93 m = -2.151 fm = -2 fm 0.91 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-341.16:55:01.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 80/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	80/1	0.00	0.000	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=6, HDOP=1.50

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

```
-13ft (11481_1, 11476_1, 11484_1, 11451_17)
```

-2fm (11460\_1, 11009\_1, 411\_1)

#### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

Attributes: BCNSHP - 5:pile beacon

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red HEIGHT - 3.93 m

OBJNAM - DBN R"2" USCG LL#42775 VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the charted private beacon R"2" (USCG LL#42775), the survey position of which is ~110 meters from the charted position.

## 1.81) DBN R"4" USCG LL#42785

## **Survey Summary**

**Survey Position:** 28° 22′ 54.2″ N, 080° 39′ 35.1″ W

**Least Depth:** -2.92 m = -1.598 fm = -1 fm 3.59 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.16:56:47.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 81/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status	
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	81/1	0.00	000.0	Primary	

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=6, HDOP=1.50

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

- -10ft (11481\_1, 11476\_1, 11484\_1, 11451\_17)
- -1 ½fm (11460\_1, 11009\_1, 411\_1)

#### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

Attributes: BCNSHP - 5:pile beacon

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red HEIGHT - 2.92 m

OBJNAM - DBN R"4" USCG LL#42785 VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the charted private beacon R"4" (USCG LL#42785), the survey position of which is ~130 meters from the charted position.

## 1.82) DBN R"6" USCG LL#42795

## **Survey Summary**

**Survey Position:** 28° 22′ 54.6″ N, 080° 39′ 41.2″ W

**Least Depth:** -2.91 m (= -9.55 ft = -1.592 fm = -1 fm 3.55 ft)

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-341.16:58:36.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 82/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	82/1	0.00	000.0	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=6, HDOP=1.50

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

- -10ft (11481\_1, 11476\_1, 11484\_1, 11451\_17)
- -1 ½fm (11460\_1, 11009\_1, 411\_1)

#### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

Attributes: BCNSHP - 5:pile beacon

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red HEIGHT - 2.91 m

OBJNAM - DBN R"6" USCG LL#42795 VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the uncharted private beacon R"6".

## 1.83) DBN R"8" USCG LL#42805

## **Survey Summary**

**Survey Position:** 28° 22′ 55.0″ N, 080° 39′ 44.2″ W

**Least Depth:** -2.90 m = -1.588 fm =

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-341.16:59:32.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 83/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	83/1	0.00	000.0	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=6, HDOP=1.50

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

- -10ft (11481\_1, 11476\_1, 11484\_1, 11451\_17)
- -1 ½fm (11460\_1, 11009\_1, 411\_1)

#### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

Attributes: BCNSHP - 5:pile beacon

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red HEIGHT - 2.90 m

OBJNAM - DBN R"8" USCG LL#42805 VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the uncharted private beacon R"8".

# 1.84) DBN R"10" Shore Drive Channel

## **Survey Summary**

**Survey Position:** 28° 22′ 57.0″ N, 080° 39′ 47.6″ W

**Least Depth:** -2.90 m (= -9.51 ft = -1.585 fm = -1 fm 3.51 ft)

TPU (±1.96σ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-341.17:00:37.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 84/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	84/1	0.00	0.000	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=6, HDOP=1.50

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

- -10ft (11481\_1, 11476\_1, 11484\_1, 11451\_17)
- -1 ½fm (11460\_1, 11009\_1, 411\_1)

#### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

Attributes: BCNSHP - 5:pile beacon

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red HEIGHT - 2.90 m

OBJNAM - DBN R"10" Shore Drive Channel

VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the uncharted private beacon R"10".

## 1.85) DBN G"9" USCG LL#42810

## **Survey Summary**

**Survey Position:** 28° 22′ 55.0″ N, 080° 39′ 45.7″ W

**Least Depth:** -2.88 m = -9.47 ft = -1.578 fm = -1 fm 3.47 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.17:02:40.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 85/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	85/1	0.00	000.0	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=6, HDOP=1.40

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

- -10ft (11481\_1, 11476\_1, 11484\_1, 11451\_17)
- -1 ½fm (11460\_1, 11009\_1, 411\_1)

#### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

Attributes: BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 5:blue HEIGHT - 2.88 m

OBJNAM - DBN G"9" USCG LL#42810 VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the uncharted private beacon G"9".

## 1.86) DBN G"7" USCG LL#42800

## **Survey Summary**

**Survey Position:** 28° 22′ 54.6″ N, 080° 39′ 44.2″ W

**Least Depth:** -2.88 m = -9.46 ft = -1.576 fm = -1 fm 3.46 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.17:03:19.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 86/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	86/1	0.00	0.000	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=6, HDOP=1.40

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

- -10ft (11481\_1, 11476\_1, 11484\_1, 11451\_17)
- -1 ½fm (11460\_1, 11009\_1, 411\_1)

#### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

Attributes: BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green HEIGHT - 2.88 m

OBJNAM - DBN G"7" USCG LL#42800

VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the charted private beacon G''7'' (USCG LL#42800), the survey position of which is ~75 meters from the charted position.

# 1.87) DBN G"5" USCG LL#42790

## **Survey Summary**

**Survey Position:** 28° 22′ 54.2″ N, 080° 39′ 41.4″ W

**Least Depth:** -2.88 m = -9.44 ft = -1.574 fm = -1 fm 3.44 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-341.17:03:57.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 87/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	87/1	0.00	000.0	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=6, HDOP=1.40

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

- -10ft (11481\_1, 11476\_1, 11484\_1, 11451\_17)
- -1 ½fm (11460\_1, 11009\_1, 411\_1)

#### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

Attributes: BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green HEIGHT - 2.88 m

OBJNAM - DBN G"5" USCG LL#42790

VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the charted private beacon G"5" (USCG LL#42790), the survey position of which is ~140 meters from the charted position.

## 1.88) DBN G"3" USCG LL#42780

## **Survey Summary**

**Survey Position:** 28° 22′ 53.9″ N, 080° 39′ 35.2″ W

**Least Depth:** -2.87 m = -9.42 ft = -1.569 fm = -1 fm 3.42 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-341.17:05:13.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 88/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status	
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	88/1	0.00	000.0	Primary	

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=5, HDOP=1.70

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

- -10ft (11481\_1, 11476\_1, 11484\_1, 11451\_17)
- -1 ½fm (11460\_1, 11009\_1, 411\_1)

#### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

Attributes: BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green HEIGHT - 2.87 m

OBJNAM - DBN G"3" USCG LL#42780 VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the charted private beacon G"3" (USCG LL#42780), the survey position of which is ~134 meters from the charted position.

## 1.89) FL R"2" USCG LL#42615

## **Survey Summary**

**Survey Position:** 28° 22′ 20.9″ N, 080° 39′ 19.0″ W

**Least Depth:** -3.82 m = -2.090 fm = -2 fm 0.54 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-341.17:11:48.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 89/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

USCG Light List #3 Identifies this water body as "Pelican Creek"; The NOAA NOS Charts have this water body identified as "Crane Creek".

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status	
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	89/1	0.00	0.000	Primary	

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=5, HDOP=1.60

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

-13ft (11481\_1, 11476\_1, 11484\_1, 11451\_17)

-2fm (11460\_1, 11009\_1, 411\_1)

#### S-57 Data

**Geo object 1:** Beacon, lateral (BCNLAT)

**Attributes:** BCNSHP - 5:pile beacon

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red HEIGHT - 3.82 m

OBJNAM - DBN R"2" USCG LL#42615 VERDAT - 12:Mean lower low water **Geo object 2:** Light (LIGHTS)

**Attributes:** CATLIT - 19:horizontally disposed

COLOUR - 3:red HEIGHT - 3.82 m LITCHR - 2:flashing

OBJNAM - FL R"2" USCG LL#42615 VERDAT - 12:Mean lower low water

## **Office Notes**

Defer to MCD for charting disposition. The feature is the charted private light Fl R 2.5s "2" (USCG LL#42615), the survey position of which is ~103 meters from the charted position.

## 1.90) DBN R"6" USCG LL#42635

## **Survey Summary**

**Survey Position:** 28° 22' 21.4" N, 080° 39' 38.1" W

**Least Depth:** -2.81 m (= -9.23 ft = -1.538 fm = -1 fm 3.23 ft)

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.17:15:22.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 90/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

USCG Light List #3 Identifies this water body as "Pelican Creek"; The NOAA NOS Charts have this water body identified as "Crane Creek".

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	90/1	0.00	000.0	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=5, HDOP=1.60

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

-9ft (11481\_1, 11476\_1, 11484\_1, 11451\_17)

-1 ½fm (11460\_1, 11009\_1, 411\_1)

#### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

**Attributes:** BCNSHP - 5:pile beacon

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red HEIGHT - 2.81 m

OBJNAM - DBN R"6" USCG LL#42635 VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the charted private beacon R"6" (USCG LL#42635), the survey position of which is ~160 meters from the charted position.

# **Feature Images**

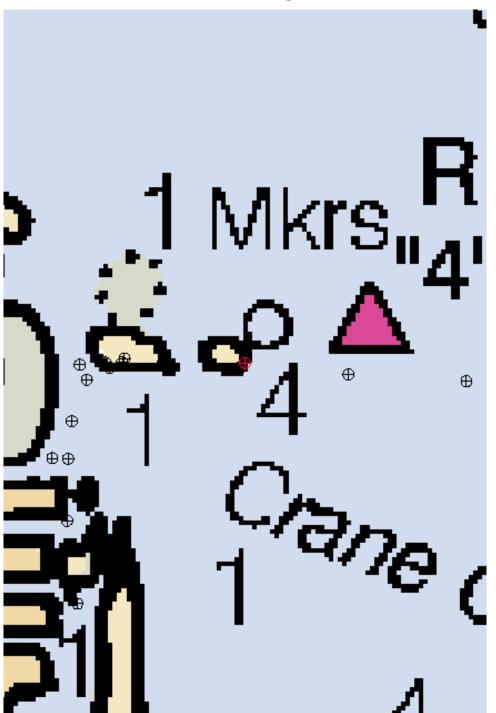


Figure 1.90.1

## 1.91) DBN R"6A" Pelican Crk

## **Survey Summary**

**Survey Position:** 28° 22' 21.6" N, 080° 39' 43.4" W

**Least Depth:** -2.81 m = -9.23 ft = -1.539 fm = -1 fm 3.23 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.17:16:45.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 91/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

USCG Light List #3 Identifies this water body as "Pelican Creek"; The NOAA NOS Charts have this water body identified as "Crane Creek".

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	91/1	0.00	000.0	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=5, HDOP=1.60

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

-9ft (11481\_1, 11476\_1, 11484\_1, 11451\_17)

-1 ½fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

**Geo object 1:** Beacon, lateral (BCNLAT)

**Attributes:** BCNSHP - 5:pile beacon

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red HEIGHT - 2.81 m

INFORM - Water body name in question.

OBJNAM - DBN R"6A" Pelican Crk

VERDAT - 12:Mean lower low water

# **Office Notes**

Defer to MCD for charting disposition. The feature is the uncharted private beacon R"6A".

## 1.92) DBN R"8" USCG LL#42645

## **Survey Summary**

**Survey Position:** 28° 22' 21.7" N, 080° 39' 46.0" W

**Least Depth:** -2.81 m (= -9.24 ft = -1.539 fm = -1 fm 3.24 ft)

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.17:17:33.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 92/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

USCG Light List #3 Identifies this water body as "Pelican Creek"; The NOAA NOS Charts have this water body identified as "Crane Creek".

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status	
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	92/1	0.00	0.000	Primary	

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=5, HDOP=1.60

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

-9ft (11481\_1, 11476\_1, 11484\_1, 11451\_17)

-1 ½fm (11460\_1, 11009\_1, 411\_1)

#### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

**Attributes:** BCNSHP - 5:pile beacon

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red HEIGHT - 2.81 m

OBJNAM - DBN R"8" USCG LL#42645

VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the charted private beacon R"8" (USCG LL#42645), the survey position of which is ~230 meters from the charted position.

## 1.93) DBN R"10" USCG LL#42655

## **Survey Summary**

**Survey Position:** 28° 22' 21.4" N, 080° 39' 47.3" W

**Least Depth:** -2.81 m (= -9.24 ft = -1.539 fm = -1 fm 3.24 ft)

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.17:18:02.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 93/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

USCG Light List #3 Identifies this water body as "Pelican Creek"; The NOAA NOS Charts have this water body identified as "Crane Creek".

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status	
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	93/1	0.00	000.0	Primary	

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=6, HDOP=1.40

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

-9ft (11481\_1, 11476\_1, 11484\_1, 11451\_17)

-1 ½fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

**Attributes:** BCNSHP - 5:pile beacon

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red HEIGHT - 2.81 m

OBJNAM - DBN R"10" USCG LL#42655 VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the charted private beacon R"10" (USCG LL#42655), the survey position of which is ~190 meters from the charted position.

## 1.94) DBN R"12" USCG LL#42665

## **Survey Summary**

**Survey Position:** 28° 22' 21.3" N, 080° 39' 48.9" W

**Least Depth:** -2.82 m = -1.540 fm = -1 fm 3.24 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.17:18:36.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 94/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

USCG Light List #3 Identifies this water body as "Pelican Creek"; The NOAA NOS Charts have this water body identified as "Crane Creek".

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status	
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	94/1	0.00	000.0	Primary	

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=6, HDOP=1.40

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

-9ft (11481\_1, 11476\_1, 11484\_1, 11451\_17)

-1 ½fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

**Geo object 1:** Beacon, lateral (BCNLAT)

**Attributes:** BCNSHP - 5:pile beacon

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red HEIGHT - 2.82 m

OBJNAM - DBN R"12" USCG LL#42665

VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the charted private beacon R"12" (USCG LL#42665), the survey position of which is  $\sim 165$  meters from the charted position.

# **Feature Images**

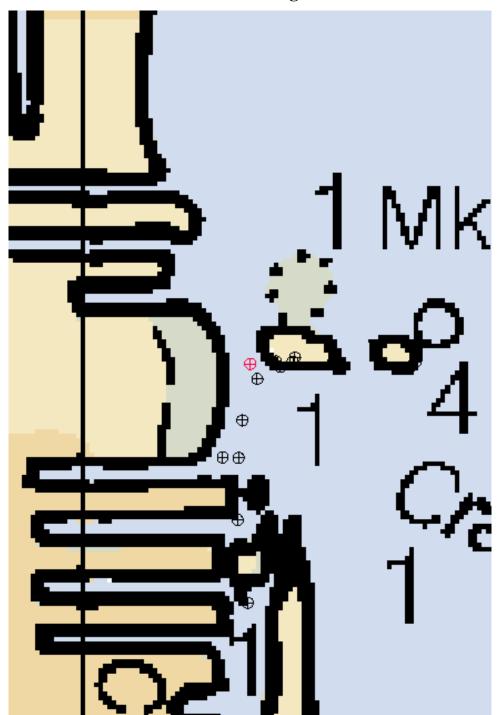


Figure 1.94.1

## 1.95) DBN R"16" USCG LL#42685

## **Survey Summary**

**Survey Position:** 28° 22′ 15.9″ N, 080° 39′ 50.8″ W

**Least Depth:** -2.81 m = -9.23 ft = -1.538 fm = -1 fm 3.23 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.17:20:05.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 95/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

USCG Light List #3 Identifies this water body as "Pelican Creek"; The NOAA NOS Charts have this water body identified as "Crane Creek".

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	95/1	0.00	000.0	Primary

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=7, HDOP=1.20

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

-9ft (11481\_1, 11476\_1, 11484\_1, 11451\_17)

-1 ½fm (11460\_1, 11009\_1, 411\_1)

#### S-57 Data

**Geo object 1:** Beacon, lateral (BCNLAT)

**Attributes:** BCNSHP - 5:pile beacon

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red HEIGHT - 2.81 m

OBJNAM - DBN R"16" USCG LL#42685

VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the uncharted private beacon R"16".

# 1.96) DBN R"24" Pelican Crk

## **Survey Summary**

**Survey Position:** 28° 21' 54.4" N, 080° 39' 49.8" W

**Least Depth:** -2.80 m (= -9.18 ft = -1.531 fm = -1 fm 3.18 ft)

TPU (±1.96σ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-341.17:24:49.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 96/1

**Charts Affected:** 11481\_1, 11485\_6, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

USCG Light List #3 Identifies this water body as "Pelican Creek"; The NOAA NOS Charts have this water body identified as "Crane Creek".

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status	
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	96/1	0.00	0.000	Primary	

# **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=7, HDOP=1.20

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

-9ft (11481\_1, 11485\_6, 11476\_1, 11484\_1, 11451\_17)

-1 ½fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

**Geo object 1:** Beacon, lateral (BCNLAT)

**Attributes:** BCNSHP - 5:pile beacon

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red HEIGHT - 2.8 m

OBJNAM - DBN R"24" Pelican Crk VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the uncharted private beacon R"24".

## 1.97) DBN R"26" USCG LL#42720

## **Survey Summary**

**Survey Position:** 28° 21' 53.7" N, 080° 39' 49.0" W

**Least Depth:** -2.80 m (= -9.18 ft = -1.530 fm = -1 fm 3.18 ft)

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.17:25:34.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 97/1

**Charts Affected:** 11481\_1, 11485\_6, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

USCG Light List #3 Identifies this water body as "Pelican Creek"; The NOAA NOS Charts have this water body identified as "Crane Creek".

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	97/1	0.00	000.0	Primary

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=7, HDOP=1.20

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

-9ft (11481\_1, 11485\_6, 11476\_1, 11484\_1, 11451\_17)

-1 ½fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

**Geo object 1:** Beacon, lateral (BCNLAT)

**Attributes:** BCNSHP - 5:pile beacon

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red HEIGHT - 2.8 m

OBJNAM - DBN R"26" USCG LL#42720

Defer to MCD for charting disposition. The feature is the uncharted private beacon R"26".

## 1.98) DBN R"28" USCG LL#42745

## **Survey Summary**

**Survey Position:** 28° 21' 51.6" N, 080° 39' 49.0" W

**Least Depth:** -2.79 m = -9.16 ft = -1.527 fm = -1 fm 3.16 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.17:28:51.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 98/1

**Charts Affected:** 11481\_1, 11485\_6, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

USCG Light List #3 Identifies this water body as "Pelican Creek"; The NOAA NOS Charts have this water body identified as "Crane Creek".

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status	
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	98/1	0.00	0.000	Primary	

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=6, HDOP=1.50

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

-9ft (11481\_1, 11485\_6, 11476\_1, 11484\_1, 11451\_17)

-1 ½fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

**Geo object 1:** Beacon, lateral (BCNLAT)

**Attributes:** BCNSHP - 5:pile beacon

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red HEIGHT - 2.79 m

OBJNAM - DBN R"28" USCG LL#42745

Defer to MCD for charting disposition. The feature is the uncharted private beacon R"28".

## 1.99) DBN R"30" USCG LL#42730

## **Survey Summary**

**Survey Position:** 28° 21′ 49.8″ N, 080° 39′ 48.9″ W

**Least Depth:** -2.79 m = -9.16 ft = -1.527 fm = -1 fm 3.16 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-341.17:29:35.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 99/1

**Charts Affected:** 11481\_1, 11485\_6, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

USCG Light List #3 Identifies this water body as "Pelican Creek"; The NOAA NOS Charts have this water body identified as "Crane Creek".

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status	
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	99/1	0.00	0.000	Primary	

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=6, HDOP=1.50

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

-9ft (11481\_1, 11485\_6, 11476\_1, 11484\_1, 11451\_17)

-1 ½fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

**Geo object 1:** Beacon, lateral (BCNLAT)

**Attributes:** BCNSHP - 5:pile beacon

CATLAM - 2:starboard-hand lateral mark

COLOUR - 3:red HEIGHT - 2.79 m

OBJNAM - DBN R"30" USCG LL#42730

Defer to MCD for charting disposition. The feature is the charted private beacon R"30" (USCG LL#42730), the survey position of which is  $\sim$ 128 meters from the charted position.

## 1.100) DBN G"23" USCG LL#42710

## **Survey Summary**

**Survey Position:** 28° 21' 57.8" N, 080° 39' 50.0" W

**Least Depth:** -2.79 m (= -9.14 ft = -1.523 fm = -1 fm 3.14 ft)

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.17:32:38.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 100/1

**Charts Affected:** 11481\_1, 11485\_6, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

USCG Light List #3 Identifies this water body as "Pelican Creek"; The NOAA NOS Charts have this water body identified as "Crane Creek".

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status	
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	100/1	0.00	000.0	Primary	

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=6, HDOP=1.50

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

-9ft (11481\_1, 11485\_6, 11476\_1, 11484\_1, 11451\_17)

-1 ½fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

**Geo object 1:** Beacon, lateral (BCNLAT)

**Attributes:** BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green HEIGHT - 2.78 m

OBJNAM - DBN G"23" USCG LL#42710

Defer to MCD for charting disposition. The feature is the charted private beacon G"23" (USCG LL#42710), the survey position of which is ~225 meters from the charted position.

## 1.101) DBN G"21" USCG LL#42705

## **Survey Summary**

**Survey Position:** 28° 22' 00.6" N, 080° 39' 50.1" W

**Least Depth:** -2.78 m = -9.13 ft = -1.522 fm = -1 fm 3.13 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.17:33:38.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 101/1

**Charts Affected:** 11481\_1, 11485\_6, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

USCG Light List #3 Identifies this water body as "Pelican Creek"; The NOAA NOS Charts have this water body identified as "Crane Creek".

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status	
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	101/1	0.00	0.000	Primary	

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=6, HDOP=1.50

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

-9ft (11481\_1, 11485\_6, 11476\_1, 11484\_1, 11451\_17)

-1 ½fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

**Geo object 1:** Beacon, lateral (BCNLAT)

**Attributes:** BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green HEIGHT - 2.78 m

OBJNAM - DBN G"21" USCG LL#42705

Defer to MCD for charting disposition. The feature is the uncharted private beacon G"21".

## 1.102) DBN G"19" USCG LL#42700

## **Survey Summary**

**Survey Position:** 28° 22' 07.5" N, 080° 39' 49.1" W

**Least Depth:** -2.78 m = -1.518 fm = -1 fm 3.11 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.17:36:26.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 102/1

**Charts Affected:** 11481\_1, 11485\_6, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

USCG Light List #3 Identifies this water body as "Pelican Creek"; The NOAA NOS Charts have this water body identified as "Crane Creek".

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status	
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	102/1	0.00	0.000	Primary	

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=6, HDOP=1.50

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

-9ft (11481\_1, 11485\_6, 11476\_1, 11484\_1, 11451\_17)

-1 ½fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

**Geo object 1:** Beacon, lateral (BCNLAT)

**Attributes:** BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green

HEIGHT - 2.78 m

OBJNAM - DBN G"19" USCG LL#42700

Defer to MCD for charting disposition. The feature is the uncharted private beacon G"19".

## 1.103) DBN G"17" USCG LL#42690

## **Survey Summary**

**Survey Position:** 28° 22′ 12.3″ N, 080° 39′ 49.8″ W

**Least Depth:** -2.76 m = -9.06 ft = -1.510 fm = -1 fm 3.06 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.17:38:20.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 103/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

USCG Light List #3 Identifies this water body as "Pelican Creek"; The NOAA NOS Charts have this water body identified as "Crane Creek".

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status	
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	103/1	0.00	0.000	Primary	

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=7, HDOP=1.30

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

-9ft (11481\_1, 11476\_1, 11484\_1, 11451\_17)

-1 ½fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

**Geo object 1:** Beacon, lateral (BCNLAT)

**Attributes:** BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green HEIGHT - 2.78 m

OBJNAM - DBN G"17" USCG LL#42690

Defer to MCD for charting disposition. The feature is the charted private beacon G"17" (USCG LL#42690), the survey position of which is ~185 meters from the charted position.

# **Feature Images**

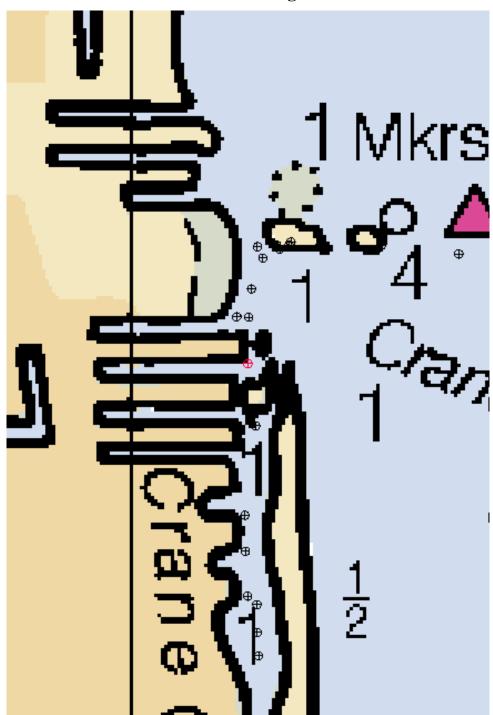


Figure 1.103.1

## 1.104) DBN G"15" USCG LL#42680

## **Survey Summary**

**Survey Position:** 28° 22′ 15.9″ N, 080° 39′ 49.7″ W

**Least Depth:** -2.74 m = -9.00 ft = -1.500 fm = -1 fm 3.00 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-341.17:39:45.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 104/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

USCG Light List #3 Identifies this water body as "Pelican Creek"; The NOAA NOS Charts have this water body identified as "Crane Creek".

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	104/1	0.00	0.000	Primary

## **Hydrographer Recommendations**

[None]

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

```
-9ft (11481_1, 11476_1, 11484_1, 11451_17)
```

-1 ½fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

**Geo object 1:** Beacon, lateral (BCNLAT)

**Attributes:** BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green

HEIGHT - 2.74 m

OBJNAM - DBN G"15" USCG LL#42680

Defer to MCD for charting disposition. The feature is the uncharted private beacon G"15".

# **Feature Images**

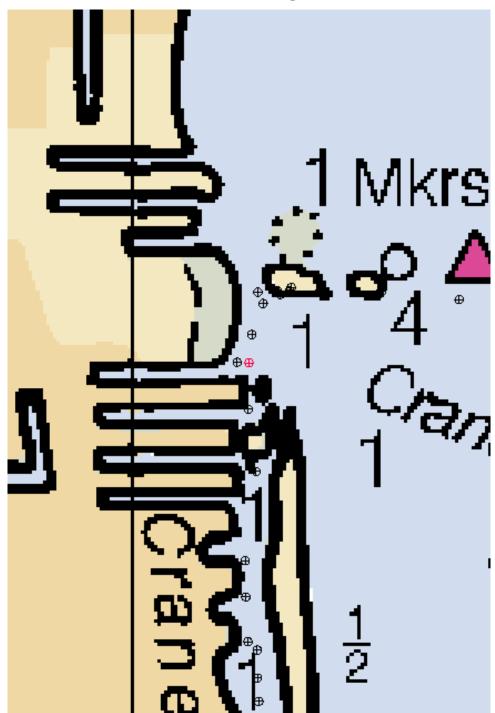


Figure 1.104.1

## 1.105) DBN G"13" USCG LL#42670

## **Survey Summary**

**Survey Position:** 28° 22′ 18.0″ N, 080° 39′ 49.5″ W

**Least Depth:** -2.73 m (= -8.96 ft = -1.494 fm = -1 fm 2.96 ft)

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.17:40:42.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 105/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

USCG Light List #3 Identifies this water body as "Pelican Creek"; The NOAA NOS Charts have this water body identified as "Crane Creek".

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	105/1	0.00	0.000	Primary

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=7, HDOP=1.30

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

-9ft (11481\_1, 11476\_1, 11484\_1, 11451\_17)

-1 ½fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

**Attributes:** BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green HEIGHT - 2.73 m

OBJNAM - DBN G"13" USCG LL#42670

Defer to MCD for charting disposition. The feature is the charted private beacon G"13" (USCG LL#42670), the survey position of which is  $\sim$ 162 meters from the charted position.

# **Feature Images**

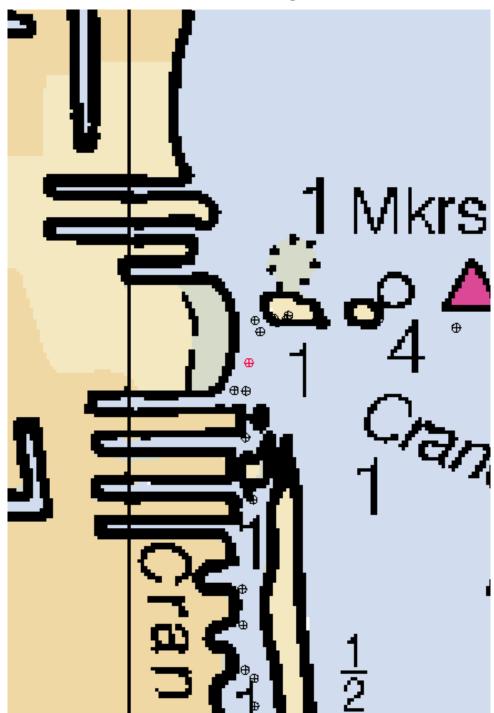


Figure 1.105.1

## 1.106) DBN G"11" USCG LL#42660

## **Survey Summary**

**Survey Position:** 28° 22' 20.4" N, 080° 39' 48.5" W

**Least Depth:** -2.72 m = -1.487 fm = -1 fm 2.92 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.17:41:46.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 106/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

USCG Light List #3 Identifies this water body as "Pelican Creek"; The NOAA NOS Charts have this water body identified as "Crane Creek".

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	106/1	0.00	000.0	Primary

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=7, HDOP=1.30

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

-9ft (11481\_1, 11476\_1, 11484\_1, 11451\_17)

-1 ½fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

**Geo object 1:** Beacon, lateral (BCNLAT)

**Attributes:** BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green

HEIGHT - 2.72 m

OBJNAM - DBN G"11" USCG LL#42660

Defer to MCD for charting disposition. The feature is the uncharted private beacon G"11".

## **Feature Images**

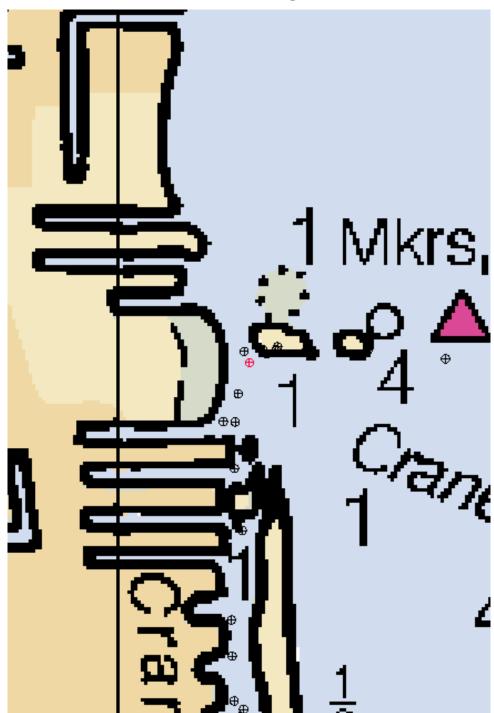


Figure 1.106.1

## 1.107) DBN G"9" USCG LL#42650

## **Survey Summary**

**Survey Position:** 28° 22' 21.1" N, 080° 39' 47.0" W

**Least Depth:** -2.71 m (= -8.90 ft = -1.483 fm = -1 fm 2.90 ft)

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.17:42:26.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 107/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

USCG Light List #3 Identifies this water body as "Pelican Creek"; The NOAA NOS Charts have this water body identified as "Crane Creek".

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status	
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	107/1	0.00	0.000	Primary	

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=7, HDOP=1.30

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

-9ft (11481\_1, 11476\_1, 11484\_1, 11451\_17)

-1 ½fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

**Geo object 1:** Beacon, lateral (BCNLAT)

**Attributes:** BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green

HEIGHT - 2.71 m

OBJNAM - DBN G"9" USCG LL#42650

Defer to MCD for charting disposition. The feature is the uncharted private beacon G"9".

## **Feature Images**

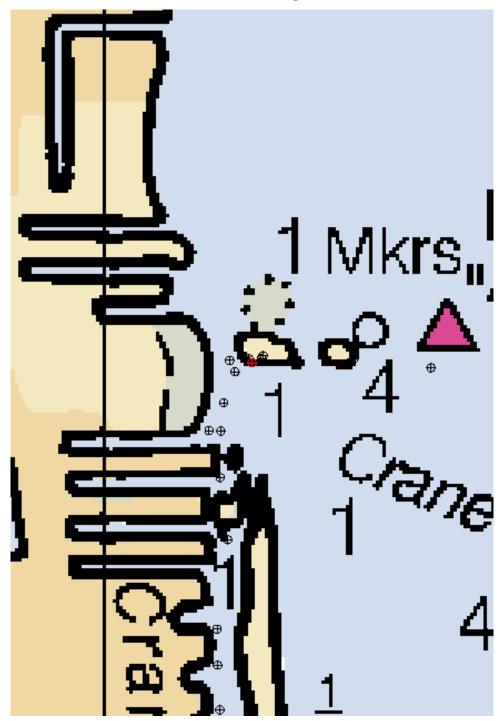


Figure 1.107.1

## 1.108) DBN G"7" USCG LL#42640

## **Survey Summary**

**Survey Position:** 28° 22' 21.4" N, 080° 39' 46.2" W

**Least Depth:** -2.70 m = -1.478 fm = -1 fm 2.87 ft

**TPU** ( $\pm 1.96\sigma$ ): **THU** (**TPEh**) [None]; **TVU** (**TPEv**) [None]

**Timestamp:** 2006-341.17:43:10.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 108/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

USCG Light List #3 Identifies this water body as "Pelican Creek"; The NOAA NOS Charts have this water body identified as "Crane Creek".

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status	
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	108/1	0.00	0.000	Primary	

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=7, HDOP=1.30

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

-9ft (11481\_1, 11476\_1, 11484\_1, 11451\_17)

-1 ½fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

**Geo object 1:** Beacon, lateral (BCNLAT)

**Attributes:** BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green

HEIGHT - 2.7 m

OBJNAM - DBN G"7" USCG LL#42640

Defer to MCD for charting disposition. The feature is the uncharted private beacon G"7".

## **Feature Images**

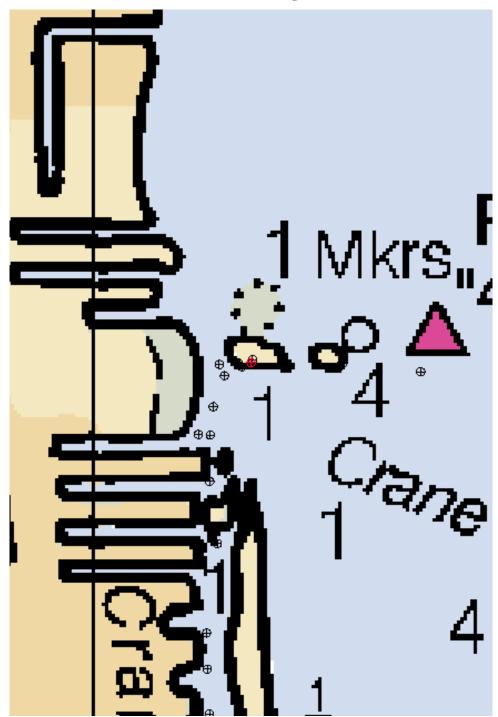


Figure 1.108.1

## 1.109) DBN G"5A" Pelican Crk

## **Survey Summary**

**Survey Position:** 28° 22' 21.3" N, 080° 39' 43.6" W

**Least Depth:** -2.69 m = -8.84 ft = -1.473 fm = -1 fm 2.84 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-341.17:44:28.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 109/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

USCG Light List #3 Identifies this water body as "Pelican Creek"; The NOAA NOS Charts have this water body identified as "Crane Creek".

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	109/1	0.00	0.000	Primary

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=7, HDOP=1.30

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

-9ft (11481\_1, 11476\_1, 11484\_1, 11451\_17)

-1 ½fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

**Geo object 1:** Beacon, lateral (BCNLAT)

**Attributes:** BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green HEIGHT - 2.69 m

OBJNAM - DBN G"5A" Pelican Crk VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the uncharted private beacon G"5A".

## **Feature Images**

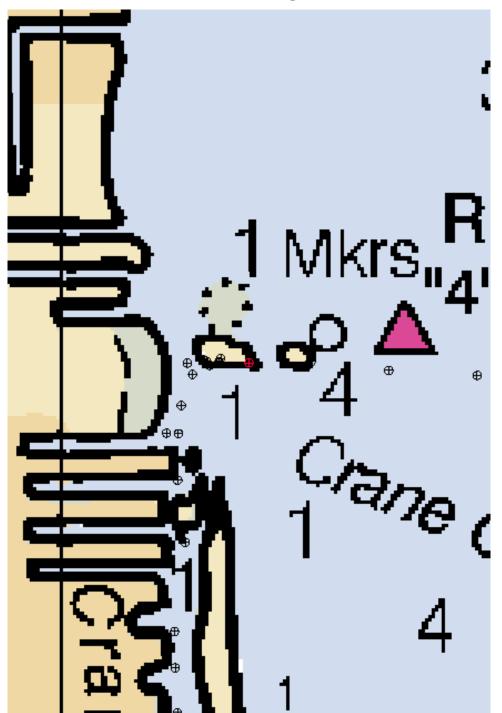


Figure 1.109.1

## 1.110) DBN G"5" USCG LL#42630

## **Survey Summary**

**Survey Position:** 28° 22' 21.1" N, 080° 39' 38.4" W

**Least Depth:** -2.68 m = -1.467 fm = -1 fm 2.80 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.17:45:48.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 110/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

USCG Light List #3 Identifies this water body as "Pelican Creek"; The NOAA NOS Charts have this water body identified as "Crane Creek".

### **Feature Correlation**

Address	Feature	Range	Azimuth	Status	
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	110/1	0.00	0.000	Primary	

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=7, HDOP=1.30

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

-9ft (11481\_1, 11476\_1, 11484\_1, 11451\_17)

-1 ½fm (11460\_1, 11009\_1, 411\_1)

### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

**Attributes:** BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green HEIGHT - 2.88 m

OBJNAM - DBN G"5" USCG LL#42630 VERDAT - 12:Mean lower low water

Defer to MCD for charting disposition. The feature is the charted private beacon G"5" (USCG LL#42630), the survey position of which is ~155 meters from the charted position.

## **Feature Images**

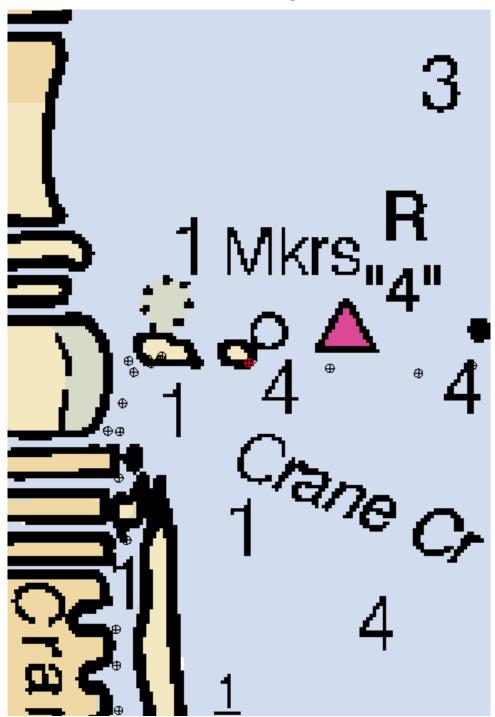


Figure 1.110.1

## 1.111) DBN G"3A" Pelican Crk

## **Survey Summary**

**Survey Position:** 28° 22' 20.7" N, 080° 39' 31.4" W

**Least Depth:** -2.67 m = -8.77 ft = -1.461 fm = -1 fm 2.77 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None] ; TVU (TPEv) [None]

**Timestamp:** 2006-341.17:47:09.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 111/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

USCG Light List #3 Identifies this water body as "Pelican Creek"; The NOAA NOS Charts have this water body identified as "Crane Creek".

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	111/1	0.00	000.0	Primary

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=7, HDOP=1.30

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

-9ft (11481\_1, 11476\_1, 11484\_1, 11451\_17)

-1 ½fm (11460\_1, 11009\_1, 411\_1)

#### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

**Attributes:** BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green HEIGHT - 2.67 m

OBJNAM - DBN G"3A" Pelican Crk VERDAT - 12:Mean lower low water

## **Office Notes**

Defer to MCD for charting disposition. The feature is the uncharted private beacon G"3A".

## 1.112) DBN G"3" USCG LL#42620

## **Survey Summary**

**Survey Position:** 28° 22' 20.3" N, 080° 39' 23.6" W

**Least Depth:** -2.66 m = -1.455 fm = -1 fm 2.73 ft

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2006-341.17:48:36.000 (12/07/2006)

**DP Dataset:** f00520 / nrt2\_1210\_dpnonechosounder / 2006-341 / 12072006 cape aton

**Profile/Beam:** 112/1

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

#### Remarks:

USCG Light List #3 Identifies this water body as "Pelican Creek"; The NOAA NOS Charts have this water body identified as "Crane Creek".

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
f00520/nrt2_1210_dpnonechosounder/2006-341/12072006 cape aton	112/1	0.00	000.0	Primary

## **Hydrographer Recommendations**

QUA: GPSmode=2, SVs=7, HDOP=1.30

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

-9ft (11481\_1, 11476\_1, 11484\_1, 11451\_17)

-1 ½fm (11460\_1, 11009\_1, 411\_1)

#### S-57 Data

Geo object 1: Beacon, lateral (BCNLAT)

**Attributes:** BCNSHP - 5:pile beacon

CATLAM - 1:port-hand lateral mark

COLOUR - 4:green HEIGHT - 2.66 m

OBJNAM - DBN G"3" USCG LL#42620 VERDAT - 12:Mean lower low water

## **Office Notes**

Defer to MCD for charting disposition. The feature is the charted private beacon G"3" (USCG LL#42620), the survey position of which is ~90 meters from the charted position.

## 1.113) charted R"14" day marker

## **Survey Summary**

**Survey Position:** 28° 22′ 24.2″ N, 080° 39′ 48.3″ W

**Least Depth:** [None]

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2009-023.16:08:11 (01/23/2009)

**GP Dataset:** ChartGPs - Digitized

**GP No.:** 2

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

[None]

## **Feature Correlation**

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	2	0.00	0.000	Primary

## **Hydrographer Recommendations**

[None]

S-57 Data

[None]

#### **Office Notes**

Defer to MCD for charting disposition. R"14" was not observed by the field unit.

## 1.114) charted private marker

## **Survey Summary**

**Survey Position:** 28° 22' 21.8" N, 080° 39' 37.1" W

**Least Depth:** [None]

**TPU** ( $\pm 1.96\sigma$ ): **THU** (**TPEh**) [None]; **TVU** (**TPEv**) [None]

**Timestamp:** 2009-023.16:09:32 (01/23/2009)

**GP Dataset:** ChartGPs - Digitized

**GP No.:** 3

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

[None]

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	3	0.00	0.000	Primary

## **Hydrographer Recommendations**

[None]

S-57 Data

[None]

#### **Office Notes**

## 1.115) charted private marker

## **Survey Summary**

**Survey Position:** 28° 22' 20.5" N, 080° 39' 36.9" W

**Least Depth:** [None]

**TPU** ( $\pm 1.96\sigma$ ): **THU** (**TPEh**) [None]; **TVU** (**TPEv**) [None]

**Timestamp:** 2009-023.16:09:35 (01/23/2009)

**GP Dataset:** ChartGPs - Digitized

**GP No.:** 4

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

[None]

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	4	0.00	0.000	Primary

## **Hydrographer Recommendations**

[None]

S-57 Data

[None]

#### **Office Notes**

## 1.116) charted private marker

## **Survey Summary**

**Survey Position:** 28° 23' 12.1" N, 080° 39' 47.6" W

Least Depth: [None]

**TPU** ( $\pm 1.96\sigma$ ): **THU** (**TPEh**) [None]; **TVU** (**TPEv**) [None]

**Timestamp:** 2009-026.14:04:57 (01/26/2009)

**GP Dataset:** ChartGPs - Digitized

**GP No.:** 5

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

[None]

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	5	0.00	0.000	Primary

## **Hydrographer Recommendations**

[None]

S-57 Data

[None]

#### **Office Notes**

## 1.117) charted private marker

## **Survey Summary**

**Survey Position:** 28° 23′ 11.9″ N, 080° 39′ 46.5″ W

**Least Depth:** [None]

**TPU** ( $\pm 1.96\sigma$ ): **THU** (**TPEh**) [None]; **TVU** (**TPEv**) [None]

**Timestamp:** 2009-026.14:05:00 (01/26/2009)

**GP Dataset:** ChartGPs - Digitized

**GP No.:** 6

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

[None]

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	6	0.00	0.000	Primary

## **Hydrographer Recommendations**

[None]

S-57 Data

[None]

#### **Office Notes**

## 1.118) charted private marker

## **Survey Summary**

**Survey Position:** 28° 23′ 12.5″ N, 080° 39′ 46.5″ W

**Least Depth:** [None]

**TPU** ( $\pm 1.96\sigma$ ): **THU** (**TPEh**) [None]; **TVU** (**TPEv**) [None]

**Timestamp:** 2009-026.14:05:02 (01/26/2009)

**GP Dataset:** ChartGPs - Digitized

**GP No.:** 7

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

[None]

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	7	0.00	0.000	Primary

## **Hydrographer Recommendations**

[None]

S-57 Data

[None]

#### **Office Notes**

## 1.119) charted private marker

## **Survey Summary**

**Survey Position:** 28° 23′ 12.6″ N, 080° 39′ 45.5″ W

**Least Depth:** [None]

**TPU** ( $\pm 1.96\sigma$ ): **THU** (**TPEh**) [None]; **TVU** (**TPEv**) [None]

**Timestamp:** 2009-026.14:05:05 (01/26/2009)

**GP Dataset:** ChartGPs - Digitized

**GP No.:** 8

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

[None]

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	8	0.00	0.000	Primary

## **Hydrographer Recommendations**

[None]

S-57 Data

[None]

#### **Office Notes**

## 1.120) charted private marker

## **Survey Summary**

**Survey Position:** 28° 23′ 12.0″ N, 080° 39′ 45.3″ W

**Least Depth:** [None]

**TPU** ( $\pm 1.96\sigma$ ): **THU** (**TPEh**) [None]; **TVU** (**TPEv**) [None]

**Timestamp:** 2009-026.14:05:09 (01/26/2009)

**GP Dataset:** ChartGPs - Digitized

**GP No.:** 9

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

[None]

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	9	0.00	000.0	Primary

## **Hydrographer Recommendations**

[None]

S-57 Data

[None]

#### **Office Notes**

## 1.121) charted private marker

## **Survey Summary**

**Survey Position:** 28° 23′ 12.6″ N, 080° 39′ 44.6″ W

**Least Depth:** [None]

**TPU** ( $\pm 1.96\sigma$ ): **THU** (**TPEh**) [None]; **TVU** (**TPEv**) [None]

**Timestamp:** 2009-026.14:05:12 (01/26/2009)

**GP Dataset:** ChartGPs - Digitized

**GP No.:** 10

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

[None]

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	10	0.00	0.000	Primary

## **Hydrographer Recommendations**

[None]

S-57 Data

[None]

#### **Office Notes**

## 1.122) charted private marker

## **Survey Summary**

**Survey Position:** 28° 23′ 11.9″ N, 080° 39′ 44.5″ W

**Least Depth:** [None]

**TPU** ( $\pm 1.96\sigma$ ): **THU** (**TPEh**) [None]; **TVU** (**TPEv**) [None]

**Timestamp:** 2009-026.14:05:15 (01/26/2009)

**GP Dataset:** ChartGPs - Digitized

**GP No.:** 11

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

[None]

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	11	0.00	0.000	Primary

## **Hydrographer Recommendations**

[None]

S-57 Data

[None]

#### **Office Notes**

## 1.123) charted private marker

## **Survey Summary**

**Survey Position:** 28° 23′ 12.0″ N, 080° 39′ 42.9″ W

**Least Depth:** [None]

**TPU** ( $\pm 1.96\sigma$ ): **THU** (**TPEh**) [None]; **TVU** (**TPEv**) [None]

**Timestamp:** 2009-026.14:05:18 (01/26/2009)

**GP Dataset:** ChartGPs - Digitized

**GP No.:** 12

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

[None]

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	12	0.00	000.0	Primary

## **Hydrographer Recommendations**

[None]

S-57 Data

[None]

#### **Office Notes**

## 1.124) charted private marker

## **Survey Summary**

**Survey Position:** 28° 23′ 12.2″ N, 080° 39′ 41.3″ W

**Least Depth:** [None]

**TPU** ( $\pm 1.96\sigma$ ): **THU** (**TPEh**) [None]; **TVU** (**TPEv**) [None]

**Timestamp:** 2009-026.14:05:21 (01/26/2009)

**GP Dataset:** ChartGPs - Digitized

**GP No.:** 13

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

[None]

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	13	0.00	0.000	Primary

## **Hydrographer Recommendations**

[None]

S-57 Data

[None]

#### **Office Notes**

## 1.125) charted private marker

## **Survey Summary**

**Survey Position:** 28° 23′ 12.0″ N, 080° 39′ 40.5″ W

**Least Depth:** [None]

**TPU** ( $\pm 1.96\sigma$ ): **THU** (**TPEh**) [None]; **TVU** (**TPEv**) [None]

**Timestamp:** 2009-026.14:05:23 (01/26/2009)

**GP Dataset:** ChartGPs - Digitized

**GP No.:** 14

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

[None]

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	14	0.00	000.0	Primary

## **Hydrographer Recommendations**

[None]

S-57 Data

[None]

#### **Office Notes**

## 1.126) charted private marker

## **Survey Summary**

**Survey Position:** 28° 23′ 12.1″ N, 080° 39′ 39.3″ W

**Least Depth:** [None]

**TPU** ( $\pm 1.96\sigma$ ): **THU** (**TPEh**) [None]; **TVU** (**TPEv**) [None]

**Timestamp:** 2009-026.14:05:27 (01/26/2009)

**GP Dataset:** ChartGPs - Digitized

**GP No.:** 15

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

[None]

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	15	0.00	0.000	Primary

## **Hydrographer Recommendations**

[None]

S-57 Data

[None]

#### **Office Notes**

## 1.127) charted private marker

## **Survey Summary**

**Survey Position:** 28° 23′ 12.7″ N, 080° 39′ 36.1″ W

**Least Depth:** [None]

TPU ( $\pm 1.96\sigma$ ): THU (TPEh) [None]; TVU (TPEv) [None]

**Timestamp:** 2009-026.14:05:31 (01/26/2009)

**GP Dataset:** ChartGPs - Digitized

**GP No.:** 16

**Charts Affected:** 11481\_1, 11476\_1, 11484\_1, 11460\_1, 11451\_17, 11009\_1, 411\_1

Remarks:

[None]

#### **Feature Correlation**

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	16	0.00	0.000	Primary

## **Hydrographer Recommendations**

[None]

S-57 Data

[None]

#### **Office Notes**

August 28, 2007

MEMORANDUM FOR: Chief, Requirements and Development Division, N/OPS1

FROM: D.B. Elliott, NOAA NRT-2 (N/CS53x2)
SUBJECT: Request for Approved Tides/Water Levels

#### Please provide the following data:

- 1. Tide Note
- 2. Final zoning in MapInfo and .MIX format
- 3. Six Minute Water Level data (Co-ops web site)

#### Transmit data to the following:

NOAA/NOS/Atlantic Hydrographic Branch N/CS33, Building #2 439 West York Street Norfolk, VA 23510 ATTN: Chief AHB

These data are required for the processing of the following hydrographic survey:

Project No.: OPR-H320-NRT2-06

Registry No.: F00520 State: Florida

Locality: Port Canaveral

Sublocality: : Entrance to Canaveral Harbor Channel to Barge Channel

#### Attachments containing:

- 1) an Abstract of Times of Hydrography,
- 2) digital MID MIF files of the track lines from Pydro

cc: N/CS33



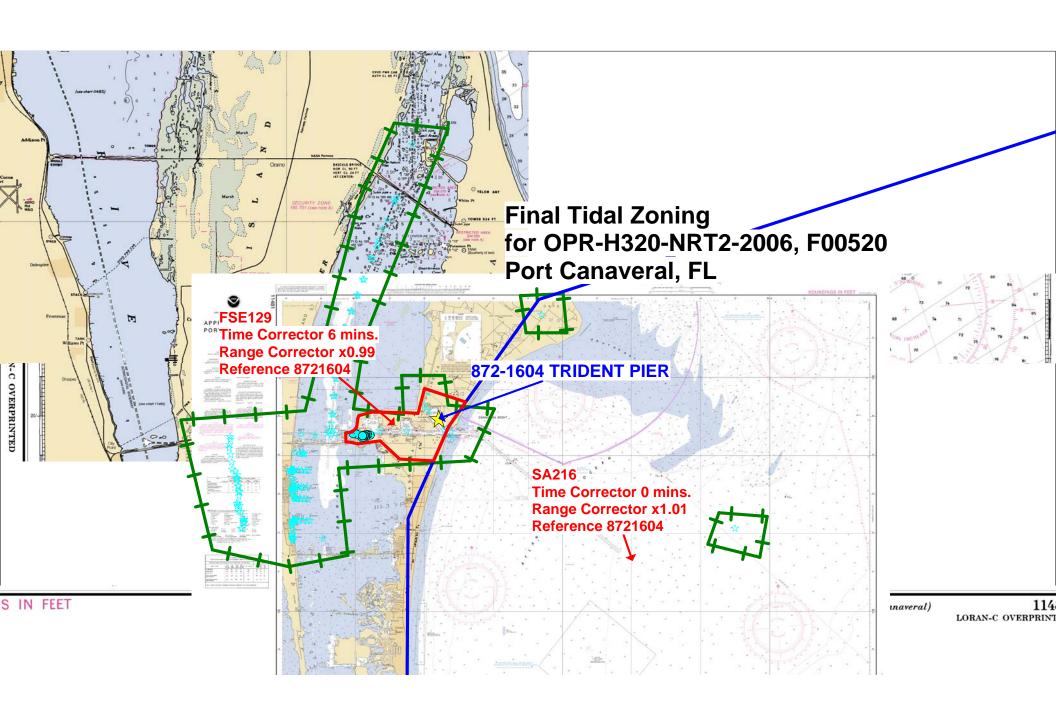
Year_DOY	Min Time	Max Time
2006_340	14:06:39	16:05:35
2006_341	13:07:14	17:54:21
2007_108	12:52:00	12:52:00
2007_109	15:08:24	15:14:50
2007_163	12:25:52	13:21:00
2007_232	13:41:00	15:20:49
2007_233	13:30:42	18:43:00
2007_239	15:07:09	15:07:09



# UNITED STATES DEPARMENT OF COMMERCE National Oceanic and Atmospheric Administration

National Ocean Service Silver Spring, Maryland 20910





### ATLANTIC HYDROGRAPHIC BRANCH EVALUATION REPORT to ACCOMPANY SURVEY F00520 (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 data at the Atlantic Hydrographic Branch:

HSTP PYDRO version 8.7 r2537 CARIS HIPS/SIPS version 6.1 SP2 HF 1-4 CARIS Bathy Manager version 2.1 SP1 HF 1-8 DKART INSPECTOR, version 5.0 Build 707 CARIS HOM version 3.3

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

#### **B.2.1. H-Cell**

The source of bathymetry for the H-Cell is the shoal layer from the 2-m resolution swathweighted BASE surface AHB F00520 VBES 2m.hns.

The SS sounding layer was generated using the radius selection criteria, with a single-defined radius of 2 mm at 1:10,000.

No contours were generated for the small area of acquired VBES data.

The F00520 H-Cell final deliverables include the following products:

F00520_CS.000	1:10,000 Scale	F00520 H-Cell with chart-scale selected
		soundings, features, and bluenotes
F00520_SS.000	n/a	F00520 Selected Soundings

#### C. <u>VERTICAL AND HORIZONTAL CONTROL</u>

Horizontal control used for this survey during data acquisition is based upon the North American Datum of 1983 (NAD83), UTM projection zone 17. Office ENC processing of this survey required translating the datum to meet S-57 ENC requirements.

#### D. <u>RESULTS AND RECOMMENDATIONS</u>

The following RNCs and ENCs were used during compilation.

RNC	<u>Scale</u>	<u>Edition</u>	Updated through LNM
11478	1:10,000	21	12/30/08
11481	1:25,000	6	12/30/08
11484	1:80,000	23	12/30/08
11485	1:40,000	35	12/30/08

<u>ENC</u>	<u>Edition</u>	<u>Update</u>	Issue Date
US5FL81M	12	0	20081216
US5FL82M	9	0	20081114

#### D.1.1 Hydrography

The charted hydrography originates with prior surveys and requires no further consideration, except as follows:

- 1. The hydrographer acquired VBES data in a small marina (28°24'33.2" N, 080°37'59.1" W) at the request of marina personnel. The annotation 11 FT NOV 1999 is currently charted in the immediate area. Depths shoaler than 11 feet were observed near the bulkhead along the southern boundary of the marina. The H-Cell contains two depths to reflect this discrepancy.
- 2. A surveyed channel extends across a charted landmass near 28°23'39.207" N, 080°39'50.873" W. The AHB compiler recommends retaining the two islets, but modifying the small peninsula (see image below). The landmass that is currently charted between the charted R"4" and R"2" beacons clearly does not exist, as indicated by the survey and as seen in 0.5-meter USGS orthoimagery collected in 2006. A thumbnail of the orthoimagery and associated metadata is appended to this Evaluation Report.

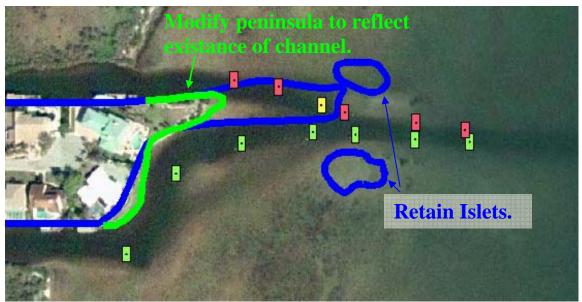


Figure 1: USGS 0.5-meter orthoimagery overlain with surveyed beacons, existing shoreline (solid blue lines), and recommended shoreline modification (solid bright-green line)



Figure 2: USGS 0.5-meter orthoimagery overlain with RNC 11481, surveyed beacons, existing shoreline (solid blue lines), and recommended shoreline modification (solid bright-green line)

#### D. 2. ADDITIONAL RESULTS

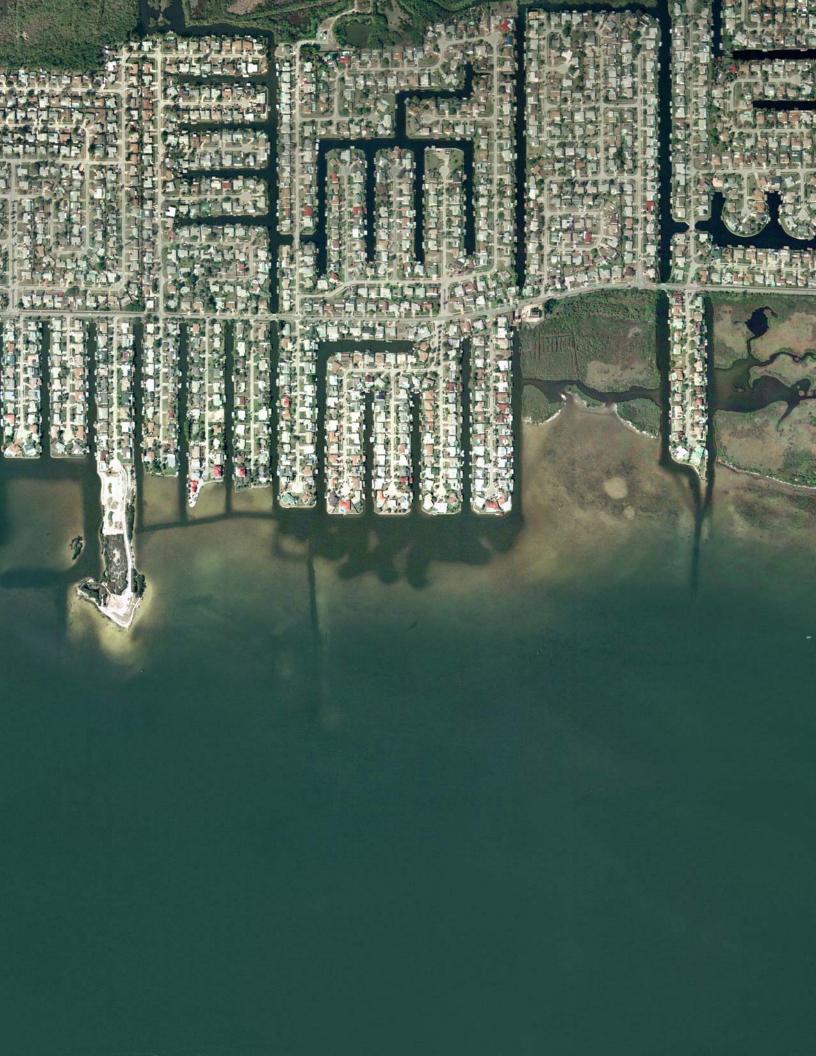
The purpose of F00520 was to verify the existence and position of numerous navigation aids. The H-Cell contains numerous private, and select federal, navigation aids for which the hydrographer acquired detached and geographic positions. The INFORM field of the various navigation aids contains a description of the survey position relative to the charted position. Only one S57 object was used to represent each navigation aid; no master/slave relationships were established. Defer to MCD for charting disposition of reported navigation aids.

#### **D.3. 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:

#### **D.4.** 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 BASE Cell File or the Blue Notes should be retained as charted. Refer to the Descriptive Report for further recommendations by the hydrographer.



# USGS High Resolution Orthoimagery for Coastal Florida

Metadata also available as

## Metadata:

- Identification\_Information
- Data\_Quality\_Information
- Spatial Data Organization Information
- Spatial\_Reference\_Information
- Entity and Attribute Information
- Distribution\_Information
- Metadata Reference Information

#### *Identification\_Information:*

#### Citation:

Citation Information:

Originator: U.S. Geological Survey

Publication\_Date: 2007

*Title:* USGS High Resolution Orthoimagery for Coastal Florida *Geospatial\_Data\_Presentation\_Form:* SDE raster digital data

*Series\_Information:* 

Series\_Name: Atlantic Coastal Imagery

*Issue\_Identification:* 2006

Publication\_Information:

Publication\_Place: Sioux Falls, SD

Publisher: USGS Other\_Citation\_Details:

For more detailed information on this data, please contact:

Aerials Express, LLCSales Representative 7855 River Parkway, Suite 211Tempe, AZ 85284Telephone: 480-777-9909Fax: 480-777-9966Email spetersen@Aerials Express.com

*Online\_Linkage:* <a href="http://seamless.usgs.gov">http://seamless.usgs.gov</a>

#### Description:

#### Abstract:

"Aerial imagery is a critical geospatial data component in identyfing, planning, and preparing for the protection of the US and its people. This dataset includes approximately 78,000 square miles of coverage along or near the Gulf Coast and the Atlantic coastline, terminating north of Wilmington, North Carolina. The imagery was collected in 2006 using aircraft to produce a 0.5 meter pixel resolution. It is color and ortho-rectified."

#### Purpose:

"The dataset was collected to insure digital imagery coverage of the urban areas along

the coastlines most prone to hurricane forces and devastation. The coverage allows all government entities an inter operable common operating picture during a critical event or in pre or post planning."

Supplemental\_Information:

The data obtained through The Seamless Server is considered to be the "best available" data from USGS. Historical data and other data may be obtained by contacting Customer Services, Center for Earth Resources Observation & Science, at 1-800-252-4547. Information in quotation marks, initial processing steps, accuracy reports, and source information is taken directly from the original metadata. Spatial-specific information not available

Time\_Period\_of\_Content:

*Time\_Period\_Information:* 

Single\_Date/Time:

Calendar\_Date: 2006

Currentness\_Reference: ground condition

Status:

*Progress:* Complete

Maintenance\_and\_Update\_Frequency: Irregular

Spatial\_Domain:

Bounding\_Coordinates:

West\_Bounding\_Coordinate:-80.67892952 East\_Bounding\_Coordinate:-80.64820778 North\_Bounding\_Coordinate:28.39622978 South\_Bounding\_Coordinate:28.38065791

#### Keywords:

#### Theme:

*Theme\_Keyword\_Thesaurus:* None

Theme\_Keyword: digital spatial data

Theme\_Keyword: 0.50 meter orthoimage

Theme\_Keyword: rectified image

*Theme\_Keyword:* orthophoto

Theme\_Keyword: natural color orthophoto

Theme\_Keyword: orthoimage

Theme\_Keyword: image map

Theme\_Keyword: imagery

*Theme\_Keyword:* GeoTIFF

#### Theme:

*Theme\_Keyword\_Thesaurus:* ISO 19115 Category *Theme\_Keyword:* imageryBaseMapsEarthCover

Theme\_Keyword: 010

Theme\_Keyword: geoscientificInformation

Theme Keyword: 008

*Theme\_Keyword:* location

Theme\_Keyword: 013

#### Theme:

*Theme\_Keyword\_Thesaurus:* American Society of Photogrammetry and Remote Sensing *Theme\_Keyword:* National Standards for Spatial Digital Accuracy (NSSDA)

#### Place:

#### Place Keyword Thesaurus:

U.S. Department of Commerce, 1995, Countries, dependencies, areas of special sovereignty, and their principal administrative divisions, Federal Information

Processing Standard 10-4,): Washington, D.C., National Institute of Standards and Technology

Place\_Keyword: United States

Place\_Keyword: U.S. Place\_Keyword: US

#### Place:

Place\_Keyword\_Thesaurus:

U.S. Department of Commerce, 1987, Codes for the identification of the States, the District of Columbia and the outlying areas of the United States, and associated areas (Federal Information Processing Standard 5-2): Washington, D.C., National Institute of Standards and Technology

Place\_Keyword: FL

#### Place:

Place\_Keyword\_Thesaurus: Geographic Names Information System

Place\_Keyword: Brevard County, Florida
Place\_Keyword: Indian River County, Florida
Place\_Keyword: St. Lucie County, Florida
Place\_Keyword: Okeechobee County, Florida

Place\_Keyword: Martin County, Florida Place\_Keyword: Clay County, Florida Place\_Keyword: Bradford County, Florida Place\_Keyword: Alachua County, Florida Place Keyword: Putnam County, Florida

Place\_Keyword: Flagler County, Florida Place\_Keyword: Volusia County, Florida

Place\_Keyword: Marion County, Florida Place\_Keyword: Gilchrist County, Florida

Place\_Keyword: Levy County, Florida Place\_Keyword: Citrus County, Florida Place\_Keyword: Sumter County, Florida Place\_Keyword: Lake County, Florida Place\_Keyword: Seminole County, Florida Place\_Keyword: Orange County, Florida

Place\_Keyword: Orange County, Florida
Place\_Keyword: Hernando County, Florida
Place\_Keyword: Pasco County, Florida

Place\_Keyword: Hillsborough County, Florida

Place\_Keyword: Polk County, Florida
Place\_Keyword: Osceola County, Florida
Place\_Keyword: Pinellas County, Florida
Place\_Keyword: Manatee County, Florida
Place\_Keyword: Hardee County, Florida
Place\_Keyword: Highlands County, Florida

#### Access Constraints:

Any downloading and use of these data signifies a user's agreement to comprehension and compliance of the USGS Standard Disclaimer. Insure all portions of metadata are read and clearly understood before using these data in order to protect both user and USGS interests.

#### *Use Constraints:*

There is no guarantee of warranty concerning the accuracy of the data. Users should be aware that temporal changes may have occurred since this data set was collected and that some parts of this data may no longer represent actual surface conditions. Users should not use this data for critical applications without a full awareness of its limitations. Acknowledgement of the originating

agencies would be appreciated in products derived from these data. Any user who modifies the data is obligated to describe the types of modifications they perform. User specifically agrees not to misrepresent the data, nor to imply that changes made were approved or endorsed by the U.S. Geological Survey. Please refer to <a href="http://www.usgs.gov/privacy.html">http://www.usgs.gov/privacy.html</a> for the USGS disclaimer.

Contact Information:

*Point\_of\_Contact:* 

Contact\_Organization\_Primary:

Contact\_Organization: U.S. Geological Survey

Contact Position: Customer Services Representative

Contact Address:

*Address\_Type:* mailing and physical address

Address: USGS Center for Earth Resources Observation & Science

Address: 47914 252nd Street

City: Sioux Falls
State\_or\_Province: SD
Postal\_Code: 57198-0001

Country: USA

Contact\_Voice\_Telephone: 605/594-6151 Contact\_Voice\_Telephone: 1-800-252-4547 Contact\_TDD/TTY\_Telephone: 605/594-6933 Contact\_Facsimile\_Telephone: 605/594-6589

Contact\_Electronic\_Mail\_Address: custserv@usgs.gov

Hours\_of\_Service: 0800 - 1600 CT, M - F (-6h CST/-5h CDT GMT)

Contact\_Instructions:

The USGS point of contact is for questions relating only to the data display from this web site. For questions regarding data content and quality or for product availability by the general public, refer to the original processor. Skyla Petersen Aerials Express,

LLCSales Representative 7855 River Parkway, Suite 211Tempe, AZ

85284Telephone: 480-777-9909Fax: 480-777-9966Email

spetersen@AerialsExpress.com

Data\_Set\_Credit:

Aerials Express, LLC, Jerry Landis, Bill Landis, Kevin Fowkes, Skyla Petersen, Brad Mattison *Security\_Information:* 

Security\_Classification\_System: None Security\_Classification: Unclassified Security\_Handling\_Description: N/A

Native\_Data\_Set\_Environment:

Microsoft Windows XP Version 5.1 (Build 2600) Service Pack 2; ESRI ArcCatalog 9.1.0.722

Data\_Quality\_Information:

Attribute\_Accuracy:

Attribute\_Accuracy\_Report: N/A

Logical\_Consistency\_Report: The photography was acquired using a film camera.

Completeness\_Report:

"Imagery is seamless and nearly cloud free. Ocean water has been colorized to mask out most light reflections and color issues."

Positional Accuracy:

Horizontal\_Positional\_Accuracy:

Horizontal\_Positional\_Accuracy\_Report:

"The horizontal positional accuracy and the assurance of that accuracy depend, in part, on the accuracy of the data inputs to the rectification process. The positions of existing USGS photoidentifiable ground control were evaluated on the Geotiff image and compared with their ground values in order to determine an overall accuracy for the final Urban Area. After image coordinate measurement was completed, a radial RMSE was calculated for the entire block. This value is an estimate of the horizontal accuracy of the tile expressed in meters. Aerials Express does not warrant horizontal accuracy to exceed that of 5.0 meters at 90% (NMAS for 1:12000-scale products)."

Quantitative\_Horizontal\_Positional\_Accuracy\_Assessment:

Horizontal\_Positional\_Accuracy\_Value: 5.0

Horizontal\_Positional\_Accuracy\_Explanation:

Federal Geographic Data Committee, 1998, Geospatial Positioning Accuracy Standard, Part 3, National Standard for Spatial Data Accuracy, FGDC-STD-007.3-1998

Vertical\_Positional\_Accuracy:

Vertical\_Positional\_Accuracy\_Report: N/A

Lineage:

Source\_Information:

Source\_Citation:

Citation\_Information:

Originator: Aerials Express, LLC Publication Date: unpublished material

*Title:* Aerial Photography

Geospatial\_Data\_Presentation\_Form: remote-sensing image

*Publication\_Information:* 

Publication\_Place: Sioux Falls, SD Publisher: U.S. Geological Survey

*Type\_of\_Source\_Media:* Hard Drive

Source\_Time\_Period\_of\_Content:

*Time\_Period\_Information:* 

Single\_Date/Time:

Calendar\_Date: 200603

Source\_Currentness\_Reference: ground condition

Source Citation Abbreviation: PHOTO

*Source\_Contribution:* Provides the imagery for the orthorectification process.

Process\_Step:

*Process\_Description:* 

"The production process starts when the film is received from the processing lab. The process is broken into four phases: scanning, Automatic-Triangulation, Color Balancing, Seamlines, and quality control. Scanning

Much is determined in the first step of scanning. It is important that this step is done correctly in order for the remaining steps to run smoothly. It is for this reason that a ZEISS Photo Scan photogrammetric scanner is used to perform all scanning in-house. This provides complete control for both resolution and color balance at the start of the process.

Automatic Triangulation and Rectification We use Intergraph's Image Station Auto-Triangulaton (ISAT) system that works hand-in-hand with IMU/ABGPS data to match photos together. It is an automated process to create automatic tie

points between photos. The process uses a bundle adjustment to tighten the accuracy of the tie points. Upon good AT results, we then use a DEM to rectify the photos with Intergraph's Image Station Ortho Pro (ISOP) software. Color Balancing and Seamline Generation

After rectification an overall tone balancing using ER MAPPER Software is applied to the aerial photo project. Seamlines or a stitching process are then assigned between each image to ensure a more seamless mosaic. The mosaic is then tiled into tiff images.

#### **Quality Control**

Aerials Express takes great care in the tone and color balance of the imagery. The ER Mapper software provides the automatic color correction of the imagery in batch mode. As a final review, Adobe Photoshop is used to correct color and image density where stitching is not able to fully disguise the match lines. The final step in this process is to color balance the entire image file to the best color, which gives the photography a completely natural look.

#### Production Process for ADS40 LEICA DIGITAL IMAGERY

Data processing of ADS40 imagery and metadata is a streamlined digital workflow process utilizing commercial softcopy photogrammetric software including Applanix POSPAC, Leica GPro, ORIMA, SOCET SET and Orthovista.

The ADS40 sensor GPS/IMU position and attitude data is directly processed through three separate but continuous steps: Applanix POSPAC for data extracting, POSGPS for data orientation, and POSProc for creating a Smoothed Best Estimate of Trajectory (SBET) for each flight lift. The post-processed GPS data output is displayed onto the flight profile plot, which clearly shows the RMS values of the combined forward and reverse run separations, C/A Code and Carrier Phase. The output IMU data is also verified by a PDOP plot and its value compared to an acceptable threshold range.

The processing of ADS40 images is run on Leica GPRO and ORIMA for bundle adjustment. The image is linked to the local coordinate system through the corresponding GPS/IMU SBET data with correct position and orientation. The residual of the tie-points are displayed instantly to reflect the accuracy of the processed data. After the bundle adjustment, ORIMA automatically displays the unit weight standard deviation, the RMS of tie points and the accuracy of the sensor position and orientation. The iteration process on the bundle adjustment is based on the selected parameters to ensure the data integrity and accuracy is within the project specification. The software also provides the measurement of reliability for variance and co-variance component analysis. This ensures the processed data is statistically satisfied on the application demand.

The triangulation process involves automatic measurement of tie points. All operations are performed using the graphical working environment of ORIMA.

For automatic tie point measurement, the Auto Point Measurement (APM) from Orima, using a very dense point measuring algorithm adapted for the ADS40, is called directly. Highest quality orientation results are obtained by a combined bundle adjustment. The Combined Adjustment Program CAP-A has been extended to handle all types of observations required for ADS40. The observations are image coordinates, and position and attitude values from GPS and IMU computed by the IMU/GPS post-processing software. The post-processing includes the transformation of the raw data into the reference image frame used for the aerial triangulation. The resultant values of this transformation are the same as orientation elements of standard photogrammetry procedures and results.

"The use of the high precision GPS/IMU data combined with these traditional triangulation techniques gives rise to a very robust and flexible system. The adjustment process can determine calibration, datum deficiencies, errors in GPS and more precisely register the imagery to ground control. It should be noted that very little ground control is required. Owing to the GPS/IMU data, ground control is essentially unnecessary." Hinsken, et al, Program author of Orima.

Raw imagery is checked and radiometric balanced in a parallel process that utilizes custom gradient correction software and the Leica GPRO Tonal Transfer Curve (TTC) application. While operators are refining a good AT result, others are carefully reviewing the imagery for good color band balance, contrast and tone.

Once both processes have passed rigid AT and QC milestones, the imagery bands, red, green and blue or NIR, red, and green are rectified to an RGB or CIR product. These orthos are passed to the mosaic team for QC, seam line placement and tiling using the vigorous interactive capabilities of Orthovista software.

For this project, the latest available National Elevation Dataset NED surface model is used for rectification."

Process\_Date: 200606

Process\_Step:

*Process\_Description:* 

The original coastal metadata were imported and updated for display through the Seamless Data Distribution System at <a href="http://seamless.usgs.gov">http://seamless.usgs.gov</a> The metadata are available in several formats: HTML, TEXT, XML, FAQ and SGML.

Process\_Date: 200709
Process Contact:

*Contact\_Information:* 

Contact\_Organization\_Primary:

Contact\_Organization: U.S. Geological Survey

*Contact\_Position:* Customer Service Representative

Contact\_Address:

Address\_Type: mailing and physical address

Address: USGS Center for Earth Resources Observation & Science

Address: 47914 252nd Street

City: Sioux Falls
State\_or\_Province: SD
Postal\_Code: 57198-0001

Country: USA

Contact\_Voice\_Telephone: 605-594-6151 Contact\_Voice\_Telephone: 1-800-252-4547 Contact\_TDD/TTY\_Telephone: 605-594-6933 Contact\_Facsimile\_Telephone: 605-594-6589

Contact\_Electronic\_Mail\_Address: custserv@usgs.gov

Hours\_of\_Service: 0800 - 1600 CT, M - F (-6h CST/-5h CDT GMT)

Contact Instructions:

The USGS point of contact is for questions relating only to the data display and download from this web site. For questions regarding data content and quality, refer to original processor.

Raster\_Object\_Information:
Raster\_Object\_Type: Pixel

Row\_Count: 200000 Column\_Count: 136000

Vertical\_Count: 1

*Spatial\_Reference\_Information:* 

*Horizontal\_Coordinate\_System\_Definition:* 

Planar:

*Grid\_Coordinate\_System:* 

Grid\_Coordinate\_System\_Name: Universal Transverse Mercator

Universal Transverse Mercator:

UTM\_Zone\_Number: 17

*Transverse\_Mercator:* 

Scale\_Factor\_at\_Central\_Meridian: 0.999600 Longitude\_of\_Central\_Meridian: -81.000000

Latitude\_of\_Projection\_Origin: 0.000000

False\_Easting: 500000.000000

False\_Northing: 0.000000

*Planar\_Coordinate\_Information:* 

Planar\_Coordinate\_Encoding\_Method: row and column

Coordinate\_Representation:

Abscissa\_Resolution: 0.500000 Ordinate\_Resolution: 0.500000

Planar\_Distance\_Units: meters

Geodetic Model:

Horizontal\_Datum\_Name: North American Datum of 1983

Ellipsoid\_Name: Geodetic Reference System 80

Semi-major Axis: 6378137.000000

Denominator\_of\_Flattening\_Ratio: 298.257222

*Vertical\_Coordinate\_System\_Definition:* 

*Altitude\_System\_Definition:* 

Altitude\_Datum\_Name: North American Vertical Datum of 1988

Altitude\_Resolution: 1.000000 Altitude\_Distance\_Units: meters Altitude\_Encoding\_Method:

Explicit elevation coordinate included with horizontal coordinates

#### *Entity\_and\_Attribute\_Information:*

Overview\_Description:

Entity\_and\_Attribute\_Overview:

"Geotiff Images 4000 meters by 4000 meters distributed by county." For color-infrared and natural color DOQs, a digital number from zero to 255 will be assigned to each pixel but that number will refer to a color look-up table which will contain the RGB red, blue and green (RGB) values, each from zero to 255, for that digital number. Areas where the rectification process is incomplete due to incomplete data (i.e., lack of elevation data, gaps), are represented with the numeric value of zero.

Entity\_and\_Attribute\_Detail\_Citation:

U.S. Department of the Interior, U.S. Geological Survey, 1999, Standards for Digital Orthoimagery: Reston, VA

#### Distribution Information:

Distributor:

*Contact\_Information:* 

Contact\_Organization\_Primary:

Contact\_Organization: U.S. Geological Survey Contact Position: Customer Services Representative

Contact\_Address:

Address Type: mailing and physical address

Address: USGS Center for Earth Resources Observation & Science

Address: 47914 252nd Street

City: Sioux Falls

State\_or\_Province: SD Postal Code: 57198-0001

Country: USA

Contact\_Voice\_Telephone: 605/594-6151 Contact\_Voice\_Telephone: 1-800-252-4547 Contact\_TDD/TTY\_Telephone: 605/594-6933 Contact\_Facsimile\_Telephone: 605/594-6589

Contact\_Electronic\_Mail\_Address: custserv@usgs.gov

Hours\_of\_Service: 0800 - 1600 CT, M - F (-6h CST/-5h CDT GMT)

Contact\_Instructions:

The USGS point of contact is for questions relating only to the data display and download from this web site. For questions regarding data content and quality, refer to the original processor.

Resource Description: Downloadable Data

#### *Distribution\_Liability:*

Although these data have been processed successfully on a computer system at the USGS, no warranty expressed or implied is made by the USGS regarding the use of the data on any other system, nor does the act of distribution constitute any such warranty. Data may have been compiled from various outside sources. Spatial information may not meet National Map Accuracy Standards. This information may be updated without notification. The USGS shall not be liable for any activity involving these data, installation, fitness of the data for a particular purpose, its use, or analyses results.

Standard\_Order\_Process:

Digital\_Form:

*Digital\_Transfer\_Information:* 

Format\_Name: Arc/Info Export Format and/or ArcView Shapefile

Format\_Version\_Number: ArcGIS 9.1

Format\_Specification: ASCII

Transfer\_Size: 0.001 Digital\_Transfer\_Option:

Online\_Option:

Computer\_Contact\_Information:

*Network\_Address:* 

*Network\_Resource\_Name:* <a href="http://seamless.usgs.gov">http://seamless.usgs.gov</a>>

Access Instructions:

The URL <a href="http://seamless.usgs.gov">http://seamless.usgs.gov</a> provides a map interface that allows for data downloads within a customer defined area of interest. Zoom tools are available that can be used to investigate areas of interest on the map interface. The download tool allows the customer to capture layers from the map, utilizing the Seamless Data Distribution System process for downloading. A request summary page is then generated with the download layers listed. By clicking the "download" button on the summary page, a zipped file will be generated that can be saved on the customer's computer. The file can then be unzipped and imported into various user software applications.

Online\_Computer\_and\_Operating\_System: Not available for dissemination

Fees: None

Turnaround: Variable

*Technical\_Prerequisites:* 

ESRI ArcGIS Suite and/or Arc/Info or other compatible software, and supporting operating systems.

Available\_Time\_Period:

*Time\_Period\_Information:* 

Range of Dates/Times:

Beginning\_Date: 2007 Ending\_Date: unknown

*Metadata\_Reference\_Information:* 

Metadata Date: 20070917

Metadata\_Contact:

Contact\_Information:

Contact\_Organization\_Primary:

Contact\_Organization: U.S. Geological Survey

Contact\_Position: Customer Services Representative

Contact Address:

Address\_Type: mailing and physical address

Address: USGS Center for Earth Resources Observation & Science

Address: 47914 252nd Street

City: Sioux Falls

State\_or\_Province: SD Postal\_Code: 57198-0001

Country: USA

Contact\_Voice\_Telephone: 605/594-6151 Contact\_Voice\_Telephone: 1-800-252-4547 Contact\_TDD/TTY\_Telephone: 605/594-6933 Contact\_Facsimile\_Telephone: 605/594-6589

Contact\_Electronic\_Mail\_Address: custserv@usgs.gov

Hours\_of\_Service: 0800 - 1600 CT, M - F (-6h CST/-5h CDT GMT)

Contact Instructions:

The above is the contact information for the USGS Center for Earth Resources Observation and Science in Sioux Falls, SD. This is the digital data storage and distribution center for the USGS. Metadata information can also be obtained through online services using The National Map Viewer, at

<a href="http://nationalmap.usgs.gov">http://nationalmap.usgs.gov</a>

Metadata\_Standard\_Name: FGDC Content Standards for Digital Geospatial Metadata

Metadata\_Standard\_Version: FGDC-STD-001-1998

Metadata\_Time\_Convention: local time Metadata\_Access\_Constraints: None Metadata\_Use\_Constraints: None Metadata\_Security\_Information:

Metadata\_Security\_Classification\_System: None Metadata\_Security\_Classification: Unclassified Metadata\_Security\_Handling\_Description: None

*Metadata\_Extensions:* 

Online\_Linkage: <a href="http://www.esri.com/metadata/esriprof80.html">http://www.esri.com/metadata/esriprof80.html</a>

Profile\_Name: ESRI Metadata Profile

Generated by mp version 2.8.6 on Mon Sep 17 09:53:43 2007

## APPROVAL SHEET F00520

#### **Initial Approvals:**

The completed survey has been inspected with regard to survey coverage, delineation of depth curves, representation of critical depths, cartographic symbolization, and verification or disproval 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 per the Hydrographic Surveys Division Office Processing Manual and are verified to be accurate and complete except where noted.

Nicholas A. Forfinski Physical Scientist 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: \_\_\_\_\_

**CDR Shepard M. Smith, NOAA**Chief, Atlantic Hydrographic Branch