

**H11306**

NOAA FORM 76-35A

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

**DESCRIPTIVE REPORT**

*Type of Survey:*     **Hydrographic**

*Field No.:*             Sheet C

*Registry Number:*    **H11306**

**LOCALITY**

*State:*                 Alabama

*General Locality:* Mobile Bay

*Sub-locality:* Southwest Entrance to  
Mobile Bay

**2004-2007**

CHIEF OF PARTY

**Mark McMann, NRT-1**

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DATE:

**HYDROGRAPHIC TITLE SHEET**

**H11306**

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

State: **Alabama**

General Locality: **Mobile Bay**

Sub-Locality: **Southwest Entrance to Mobile Bay**

Scale: **1:10,000** Date of Survey: **04/24/04 to 09/13/07**

Instructions Dated: **06/09/04** Project Number: **OPR-J373 –NRT1-04**

Vessel: **NOAA S1211**

Chiefs of Party: **Mark McMann, NOAA**

Surveyed by: **MJM, LAM, KAM, JM, EAL, IW, LTP**

Soundings by: **VB echo sounder.**

Graphic record scaled by: **N/A**

Graphic record checked by: **N/A**

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

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

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

***Red, Bold, Italic notes in the Descriptive Report were made during Office Processing.***

Remarks:

- 1) All Times are in UTC.***
- 2) This is a Navigable Area Hydrographic Survey 200% Side Scan Sonar coverage.***
- 3) Projection is UTM Zone 16.***

## TABLE OF CONTENTS

<b><u>A. AREA SURVEYED</u></b> .....	<b>2</b>
<b><u>B. DATA ACQUISITION AND PROCESSING</u></b> .....	<b>3</b>
<b><u>B. DATA ACQUISITION AND PROCESSING</u></b> .....	<b>4</b>
B.1. EQUIPMENT.....	4
B.2. QUALITY CONTROL.....	4
<i>Side Scan Sonar</i> .....	4
<i>Crosslines</i> .....	5
<i>Junctions</i> .....	5
B.3. CORRECTIONS TO ECHO SOUNDING.....	5
<b><u>C. VERTICAL AND HORIZONTAL CONTROL</u></b> .....	<b>5</b>
C.1. VERTICAL CONTROL.....	5
C.2. HORIZONTAL CONTROL.....	6
<b><u>D. RESULTS AND RECOMMENDATIONS</u></b> .....	<b>6</b>
D.1. CHART COMPARISON.....	6
<i>General Agreement with Charted soundings</i> .....	6
<i>AWOIS Item Investigations</i> .....	7
<i>Dangers to Navigation</i> .....	7
<i>Shoreline</i> .....	7
D. 2. ADDITIONAL RESULTS.....	8
<i>Aids to Navigation and Other Detached Positions</i> .....	8
<i>Ferry Routes</i> .....	8
<i>Submarine Cables and Pipelines</i> .....	8
<i>Bridges and Overhead Cables</i> .....	8

**DESCRIPTIVE REPORT**

to accompany

Basic Hydrographic Survey H11306  
OPR-J373-NRT1-04

Year of Survey: 2004-2006  
Navigation Response Team 1  
NOAA Launch S1211  
Mark McMann - Team Leader

**A. AREA SURVEYED**

This Basic Hydrographic Survey was conducted in accordance with the Project Letter Instructions\* for project OPR-J373-NRT1-04, Mobile Bay, Alabama. The instructions are dated June 9, 2004. *Concur.*

Mobile Bay is a major port in the Gulf of Mexico and listed as the 17<sup>th</sup> largest port in the United States, by cargo value, as identified in the 1999 NSD plan. It is also listed as a priority port for chart evaluation by the NOS' Marine Chart Division. Constituents have recently requested, through the NSD's Navigation Manager, surveys of the approaches to Mobile Bay and the GIWW in the area. In addition MCD has identified Mobile Bay as a priority in 2004 for the Coastal Shoreline Change Analysis Program.

The area surveyed by NRT1, consisted of approximately 10.0 square nautical miles (SNM) of Mobile Bay in the entrance to Mobile Bay. Both singlebeam echosounder and side scan sonar were acquired within the survey limits, wherever possible. *Concur.*

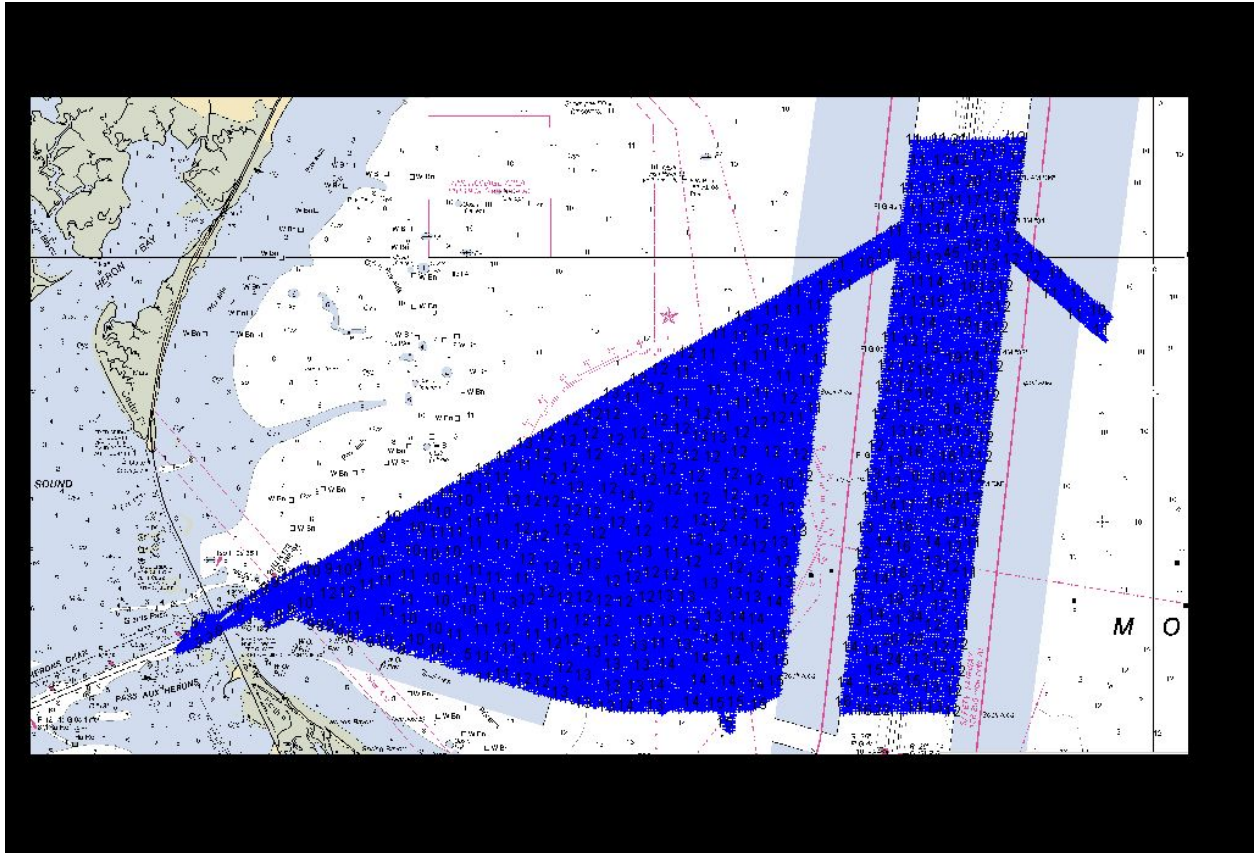
Survey Limits for Sheet C, H11306 are as follows:

30° 20'52" N 88°00'23" W  
30°16'43" N 88°08'05" W

Survey Dates: July 07, 2004 (DN: 189) to September 13, 2007 (DN: 256). Data acquisition on this survey was interrupted by hurricanes Ivan, Dennis, Katrina, Rita and Wilma. Primary main scheme coverage was completed prior to Ivan and check sounding lines were performed after Ivan and Katrina to ensure sounding accuracy subsequent to the storms. The others storms required response work by NRT-1 that prevented completion of this survey. There have also been approximately 11 different people involved in the processing of this survey accounting for over 300% turnover in NRT-1 personnel.

*\*Filed with original field records.*

Survey limits are displayed graphically:



## B. DATA ACQUISITION AND PROCESSING *See also Evaluation Report.*

### B.1. EQUIPMENT

Data were acquired by Navigation Response Team 1 using survey Launch 1211. The vessel was configured as described in the Data Acquisition and Processing Report (DAPR). Major data acquisition systems are summarized below.

NOAA Survey Launch 1211 was used to acquire position, sounding, imagery, and sound velocity data. Positions were acquired with a Trimble DSM212L Differential GPS (DGPS) beacon receiver. Soundings were acquired with an Innerspace 464 singlebeam echosounder and an ODOM CVX2 single-beam echosounder (SBES) system. Imagery was acquired with a stern-towed KLEIN 3000 side scan sonar (SSS) system. Water column sound velocity data was acquired with a SeaBird Seacat 19 and an ODOM Digibar Pro DB1200 sound velocity profiler.

*Concur.*

### B.2. QUALITY CONTROL

The integrity of the survey data for H11306 was insured by following the Field Procedures Manual v2.1\*, dated May, 2006, and the NOS Hydrographic Surveys Specifications and Deliverables Manual\*, dated June, 2006.

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

#### Side Scan Sonar

The side scan sonar system frequencies used were 100kHz and 500kHz. The recorder was set to 50 meter range. There were no water depths greater than 35 meters in areas where side scan data was collected.

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 both frequencies. 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 where possible.

All side scan contacts were selected during processing in CARIS. Only contacts that could be positively identified while underway (ATONS, piles, platforms, other visible features) were selected in Sonarpro to facilitate their identification while processing. Any contacts, which were determined to be significant, were developed using SBES. *Concur.*

*\*Filed digitally @ AHB*

## **Crosslines**

Crosslines were collected in a zig-zag pattern over the length of the project area. A total of 22.0 linear nautical miles (LNM) of crosslines were acquired by the field party. This is approximately 4.2 percent of mainscheme acquisition (520.0 LNM). A visual inspection of crossline data and main scheme data showed good comparison. *Concur.*

## **Junctions**

No junctioning surveys were provided for comparison with this project. *See Evaluation Report.*

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

Echosounder data were corrected for sound velocity using the methods defined in the DAPR. A list of sound velocity profiles (SVP) can be found in the Daily Acquisition Log, located in the Separates directory\*. SVPs have also been added to the Pydro PSS for this project.

## **C. VERTICAL AND HORIZONTAL CONTROL**

### **C.1. VERTICAL CONTROL *(See also Evaluation Report).***

All soundings were reduced to Mean Lower Low Water (MLLW) with preliminary observed water levels and preliminary zoning.

The operating water level station at Dauphin Island (873-5180) provided water level reducers for this project.

Verified water levels from the Tides & Currents website (<http://tidesandcurrents.noaa.gov/olddata/>) were downloaded and applied to all soundings for this sheet. Water level corrections were applied to the soundings using CARIS HIPS and SIPS v6.1. Zoning was provided on the project CD. *Concur.*

A Request for Approved Water Levels letter was sent to N/OPS1 on Nov. 14, 2007 and is included in Appendix IV. Approved Water Levels were received by the NRT and the approved water levels were reapplied in CARIS. *Concur with clarification; Preliminary water levels for H11306 were superseded by Final water levels.*

*\*Filed with original field records.*

## C.2. HORIZONTAL CONTROL

The horizontal datum used for this survey is the World Geodetic System (WGS84), projected using UTM zone 16. The control reference station used for this survey was the USCG DGPS Beacon in the auto-select mode.

Horizontal dilution of precision (HDOP) was monitored daily on Hypack. At no point did HDOP exceed 4.00, and adequate satellite coverage was maintained throughout the survey period.

All positioning equipment was operated in a manner consistent with the manufacturer requirements and as described in the DAPR\*. There were no equipment malfunctions which affected the positional quality of the data. *Concur.*

## D. RESULTS AND RECOMMENDATIONS

### D.1. CHART COMPARISON

There are five charts and three ENC's affected by this survey:

Chart	Edition	Print Date	Scale
11378	34 <sup>th</sup>	02/2005	1:40,000
11377	6 <sup>th</sup>	01/2007	1:40,000
11376	52nd	06/2007	1:80,000

ENC Cell	Last Updated	Corresponding Chart	Version
US5AL13M	2008-09-22	11378	22

*\*Filed with original field records.*



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

Comparison with the latest chart revealed excellent agreement with charted soundings. Current survey depths are 1 to 2 feet deeper than charted depths in most areas. *Concur. See also Evaluation Report D.1.1).*

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

Comparison with the latest chart revealed excellent agreement with charted soundings. Current survey depths are 1 to ~~2~~ 3 feet deeper than charted depths in most areas. *Concur.*

A submerged wreck charted PA at 30.28N Lat, 88.06 W Lon was not assigned as an AWOIS item, however it was covered by 200% side scan coverage and nothing was found. The hydrographer recommends removal of the charted submerged wreck. *Concur.*

There is a "PILINGS PA" symbol and note at 30.29N Lat., 88.03W Lon. This area was covered by 200% Side Scan Sonar and nothing was found. The hydrographer recommends removal of the pilings from the chart. *Do not concur. Due to the poor quality of the SSS images, it is possible that these pilings are still there, but are now submerged. Revise "Pilings PA" to "Subm Pilings PA".*

A "Pile PA" is charted at 30.30N Lat., 88.03W Lon. The area was covered by 200% Side Scan Sonar and nothing was found. The hydrographer recommends removal of the pile from the chart. *Do not concur. Due to the poor quality of the SSS images, it is possible that this pile is still there, but is now submerged. Revise "Pile PA" to "Subm Pile PA".*

A visible wreck is charted at 30.30N Lat, 88.02W Lon. The area was covered by 200% Side Scan Sonar coverage and nothing was found. The hydrographer recommends removal of the wreck from the chart. *Concur.*

### **AWOIS Item Investigations**

There were a total of 5 AWOIS items assigned to the Field Party in Sheet C. The radius of these items were covered using 200% SSS, where possible.

Results of all AWOIS investigations are contained in Appendix II.

### **Dangers to Navigation**

No DTONS were identified in this survey. *Concur.*

### **Shoreline**

No shoreline features were investigated by the field party. *Concur.*

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

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

All Aids to Navigation in the survey area were found to be on station and serving their intended purpose. The field party has no recommendations on these Aids to Navigation. *Concur.*

### **Ferry Routes**

There are no ferry routes in the survey area. *Concur.*

### **Submarine Cables and Pipelines**

There were several charted submarine pipelines within the survey area. The field party did not attempt to identify or position any submerged cables or pipelines. *Concur.*

### **Bridges and Overhead Cables**

The Dauphin Island Bridge (Alabama Rt. 193) was located at the western edge of the survey area. Overhead power cables were located immediately west of the bridge. Clearances were not verified. *Concur.*

# **APPROVAL SHEET**

**OPR-J373-NRT1-04  
Alabama  
Mobile Bay  
Southwest Entrance to Mobile Bay  
Survey Registry No. H-11306**

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

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

**Submitted: \_\_\_\_\_**  
**Mark J. McMann - Team Leader**  
**Navigation Response Team 1**

**APPENDIX I**  
**DANGER TO NAVIGATION RECORDS**

## **Dangers to Navigation**

No dangers to navigation were submitted for H11306.

**APPENDIX II**  
**FEATURE REPORT**

# H11306 Survey Features for DR

**Registry Number:** H11306  
**State:** Alabama  
**Locality:** Mobile Bay  
**Sub-locality:** Southwest Entrance to Mobile Bay  
**Project Number:** OPR-J373-NRT1-04  
**Survey Dates:** 11/18/2005 - 05/21/2009

## Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
11378	35th	03/01/2008	1:40,000 (11378_6)	USCG LNM: 09/25/2007 (05/13/2008) NGA NTM: 12/13/1997 (05/24/2008)
11377	8th	04/01/2009	1:40,000 (11377_1)	USCG LNM: 02/24/2009 (04/21/2009) NGA NTM: 11/19/2005 (04/25/2009)
11376	51st	02/01/2006	1:80,000 (11376_1)	[L]NTM: ?
11360	41st	03/01/2005	1:456,394 (11360_1)	[L]NTM: ?
1115A	41st	03/01/2005	1:456,394 (1115A_1)	[L]NTM: ?
11006	32nd	08/01/2005	1:875,000 (11006_1)	[L]NTM: ?
411	51st	12/01/2006	1:2,160,000 (411_1)	[L]NTM: ?

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

## Features

No.	Name	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	Retain platform as charted.	SSS	[None]	30° 18' 21.0" N	088° 03' 02.8" W	---
1.2	Retain platform as charted.	SSS	[None]	30° 17' 13.5" N	088° 04' 04.7" W	---
1.3	OBSTRUCTION Pipe submerged	Obstruction	[None]	30° 17' 46.1" N	088° 05' 17.4" W	---
1.4	Retain charted Pilings PA	GP	[None]	30° 17' 46.5" N	088° 01' 43.8" W	---
1.5	Retain charted Pile PA	GP	0.00 m	30° 17' 37.7" N	088° 07' 16.1" W	---
1.6	Delete visible wreck PA	Wreck	0.00 m	30° 18' 28.2" N	088° 01' 30.6" W	---
1.7	Retain charted Pile PA	GP	0.00 m	30° 18' 22.2" N	088° 02' 08.9" W	---
2.1	9 ft Obstruction.	Obstruction	2.85 m	30° 17' 04.0" N	088° 05' 40.1" W	---
2.2	326/1	Obstruction	3.99 m	30° 17' 18.9" N	088° 07' 55.7" W	---

3.1	AWOIS 11626 insig	Obstruction	6.76 m	30° 17' 20.9" N	088° 01' 58.0" W	11626
3.2	UNKNOWN	AWOIS	[no data]	[no data]	[no data]	---
3.3	OBSTRUCTION Pipe submerged	AWOIS	[no data]	[no data]	[no data]	---
3.4	OBSTRUCTION Pipe submerged	AWOIS	[no data]	[no data]	[no data]	---
3.5	AWOIS Item 12362 Disproved Pile	AWOIS	[no data]	[no data]	[no data]	---



# **1 - Charted Features**

## 1.1) Contact/Point - 0001/1 from h11306 / 1211sss500k / 2004-229 / mb040816180400

### Survey Summary

**Survey Position:** 30° 18' 21.0" N, 088° 03' 02.8" W  
**Least Depth:** [None]  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2005-336.02:44:43 (12/02/2005)  
**Survey Line:** h11306 / 1211sss500k / 2004-229 / mb040816180400  
**Contact/Point:** 0001/1  
**Charts Affected:** 11377\_1, 11378\_6, 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

#### Remarks:

Gas platform exists as charted.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11306/1211sss500k/2004-229/mb040816180400	0001	0.00	000.0	Primary
h11306/1211sss500k/2006-228/sonar_data060816140800	0002	3.31	133.8	Secondary
h11306/1211sss500k/2006-228/sonar_data060816140800	0001	6.75	170.0	Secondary
h11306/1211sss500k/2004-229/mb040816184500	0001	22.09	334.0	Secondary

### Hydrographer Recommendations

Retain as charted.

### S-57 Data

**Geo object 1:** Offshore platform (OFSPFL)  
**Attributes:** INFORM - Retain platform as charted.

### Office Notes

Concur. Retain platform as charted.

## 1.2) Contact/Point - 0001/1 from h11306 / 1211sss500k / 2004-231 / mb040818161300

### Survey Summary

**Survey Position:** 30° 17' 13.5" N, 088° 04' 04.7" W  
**Least Depth:** [None]  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2005-322.04:51:53 (11/18/2005)  
**Survey Line:** h11306 / 1211sss500k / 2004-231 / mb040818161300  
**Contact/Point:** 0001/1  
**Charts Affected:** 11377\_1, 11378\_6, 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

#### Remarks:

Gas platform exists as charted..

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11306/1211sss500k/2004-231/mb040818161300	0001	0.00	000.0	Primary
h11306/1211sss500k/2004-253/mb040909170400	0001	10.45	058.5	Secondary
h11306/1211sss500k/2004-231/mb040818154800	0001	20.06	100.1	Secondary
h11306/1211sss500k/2004-253/mb040909173000	0001	59.92	143.5	Secondary (grouped)

### Hydrographer Recommendations

Retain as charted.

### S-57 Data

**Geo object 1:** Offshore platform (OFSPLF)  
**Attributes:** INFORM - Retain platform as charted.

### Office Notes

Concur. Retain platform as charted.

### 1.3) GP No. - 1 from ChartGPs - Digitized

#### Survey Summary

**Survey Position:** 30° 17' 46.1" N, 088° 05' 17.4" W  
**Least Depth:** [None]  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2009-125.16:13:02 (05/05/2009)  
**GP Dataset:** ChartGPs - Digitized  
**GP No.:** 1  
**Charts Affected:** 11377\_1, 11378\_6, 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

#### Remarks:

[None]

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	1	0.00	000.0	Primary

#### Hydrographer Recommendations

[None]

#### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** CATOBS - 1:snag / stump  
 INFORM - Revise Pipes as submerged  
 QUASOU - 2:depth unknown  
 SORDAT - 20040424  
 SORIND - US,US,survey,H11306  
 WATLEV - 3:always under water/submerged

#### Office Notes

Office processing determined the feature was not sufficiently disproved due to degraded side scan sonar data quality in the common area. Additionally the Pipes in this area were not visually conspicuous during field investigation.

Therefore, delete charted Pipe. Chart dangerous obstruction, least depth unknown and text "Submerged Pipes PA".

## 1.4) GP No. - 3 from ChartGPs - Digitized

### Survey Summary

**Survey Position:** 30° 17' 46.5" N, 088° 01' 43.8" W  
**Least Depth:** [None]  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2009-140.15:53:05 (05/20/2009)  
**GP Dataset:** ChartGPs - Digitized  
**GP No.:** 3  
**Charts Affected:** 11377\_1, 11378\_6, 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

#### Remarks:

[None]

### Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	3	0.00	000.0	Primary

### Hydrographer Recommendations

[None]

### S-57 Data

**Geo object 1:** Pile (PILPNT)  
**Attributes:** INFORM - Retain as charted

### Office Notes

Feature was not addressed or disproved by field unit. Office processing determined the feature was not sufficiently disproved. Retain as charted.

## 1.5) GP No. - 4 from ChartGPs - Digitized

### Survey Summary

**Survey Position:** 30° 17' 37.7" N, 088° 07' 16.1" W  
**Least Depth:** 0.00 m (= 0.00 ft = 0.000 fm = 0 fm 0.00 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2009-141.09:19:41 (05/21/2009)  
**GP Dataset:** ChartGPs - Digitized  
**GP No.:** 4  
**Charts Affected:** 11377\_1, 11378\_6, 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

#### Remarks:

[None]

### Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	4	0.00	000.0	Primary

### Hydrographer Recommendations

[None]

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

0ft (11377\_1, 11378\_6, 11376\_1)

0fm (1115A\_1, 11360\_1, 11006\_1, 411\_1)

### S-57 Data

**Geo object 1:** Pile (PILPNT)  
**Attributes:** INFORM - Retain as charted.

### Office Notes

Feature was not addressed or disproved by field unit. Office processing determined the feature was not sufficiently disproved. Retain as charted.

## 1.6) GP No. - 6 from ChartGPs - Digitized

### Survey Summary

**Survey Position:** 30° 18' 28.2" N, 088° 01' 30.6" W  
**Least Depth:** 0.00 m (= 0.00 ft = 0.000 fm = 0 fm 0.00 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2009-141.10:56:42 (05/21/2009)  
**GP Dataset:** ChartGPs - Digitized  
**GP No.:** 6  
**Charts Affected:** 11377\_1, 11378\_6, 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

#### Remarks:

Disproved by 200% SSS

### Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	6	0.00	000.0	Primary

### Hydrographer Recommendations

[None]

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

0ft (11377\_1, 11378\_6, 11376\_1)

0fm (1115A\_1, 11360\_1, 11006\_1, 411\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** INFORM - Delete charted wreck.  
 VALSOU - 0.00 m

### Office Notes

Delete disproved charted dangerous visible wreck PA.



## 1.7) GP No. - 7 from ChartGPs - Digitized

### Survey Summary

**Survey Position:** 30° 18' 22.2" N, 088° 02' 08.9" W  
**Least Depth:** 0.00 m (= 0.00 ft = 0.000 fm = 0 fm 0.00 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2009-141.11:04:36 (05/21/2009)  
**GP Dataset:** ChartGPs - Digitized  
**GP No.:** 7  
**Charts Affected:** 11377\_1, 11378\_6, 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

#### Remarks:

[None]

### Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	7	0.00	000.0	Primary

### Hydrographer Recommendations

[None]

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

0ft (11377\_1, 11378\_6, 11376\_1)

0fm (1115A\_1, 11360\_1, 11006\_1, 411\_1)

### S-57 Data

**Geo object 1:** Pile (PILPNT)

**Attributes:** INFORM - Feature not present during time of survey. Retain as charted.

### Office Notes

Feature not present during time of survey. Retain charted Pile PA as charted.

## **2 - New Features**

## 2.1) Profile/Beam - 199/1 from h11306 / 1211sb / 2007-177 / 000\_1515

### Survey Summary

**Survey Position:** 30° 17' 04.0" N, 088° 05' 40.1" W  
**Least Depth:** 2.85 m (= 9.35 ft = 1.559 fm = 1 fm 3.35 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2007-177.15:16:12.284 (06/26/2007)  
**Survey Line:** h11306 / 1211sb / 2007-177 / 000\_1515  
**Profile/Beam:** 199/1  
**Charts Affected:** 11377\_1, 11378\_6, 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

#### Remarks:

Contact detected in 200%SSS coverage and investigated with SBES in a star pattern. Contact determined to be insignificant.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11306/1211sb/2007-177/000_1515	199/1	0.00	000.0	Primary
h11306/1211sss500k/2006-228/sonar_data060816144100	0001	4.94	191.7	Secondary

### Hydrographer Recommendations

Chart current survey soundings.

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

9ft (11377\_1, 11378\_6, 11376\_1)

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

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 SORDAT - 20070913  
 SORIND - US,US,nsurf,H11306  
 TECSOU - 1:found by echo-sounder  
 VALSOU - 2.851 m

WATLEV - 3:always under water/submerged

### **Office Notes**

Do not concur. Chart dangerous obstruction, least depth 9 ft and text "Obstn" at the present survey position.

## 2.2) Profile/Beam - 326/1 from h11306 / 1211sb / 2007-177 / 000\_1632

### Survey Summary

**Survey Position:** 30° 17' 18.9" N, 088° 07' 55.7" W  
**Least Depth:** 3.99 m (= 13.08 ft = 2.180 fm = 2 fm 1.08 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2007-177.16:33:21.410 (06/26/2007)  
**Survey Line:** h11306 / 1211sb / 2007-177 / 000\_1632  
**Profile/Beam:** 326/1  
**Charts Affected:** 11377\_1, 11378\_6, 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

#### Remarks:

Contact detected in 200%SSS coverage and investigated with SBES in star pattern. Contact determined significant, but not a DTON. Least depth on contact is 13.1ft.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11306/1211sb/2007-177/000_1632	326/1	0.00	000.0	Primary
h11306/1211sss500k/2006-165/sonar_data060614130200	0001	18.45	069.7	Secondary
h11306/1211sss500k/2006-165/sonar_data060614115200	0002	31.66	036.2	Secondary

### Hydrographer Recommendations

Hydrographer recommends charting object as Submerged Obstruction.

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

13ft (11377\_1, 11378\_6, 11376\_1)

2fm (1115A\_1, 11360\_1, 11006\_1, 411\_1)

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 SORDAT - 20070626  
 SORIND - US,US,nsurf,H11306  
 TECSOU - 1:found by echo-sounder

VALSOU - 3.987 m

WATLEV - 3:always under water/submerged

### **Office Notes**

Concur with clarification. Chart dangerous obstruction, least depth 13 ft and text "Obstn" at the present survey position.

## **3 - AWOIS Features**

### 3.1) Profile/Beam - 389/1 from h11306 / 1211sb / 2007-165 / 000\_1646

#### Primary Feature for AWOIS Item #11626

**Search Position:** 30° 17' 21.1" N, 088° 01' 58.1" W  
**Historical Depth:** 6.10 m  
**Search Radius:** 0  
**Search Technique:** S2,MB,ES  
**Technique Notes:** [None]

#### History Notes:

HISTORY ■ LNM30/85--07/10/85, 8TH CGD; AN UNKNOWN OBSTRUCTION HAS BEEN REPORTED APPROXIMATELY 38 YARDS, 177 DEGREES TRUE FROM CHARTED POSITION OF LIGHT 26 (LLNR 2407), IN APPROXIMATE POSITION 30-17-18N, 88-01-57W (NAD 27). (ENT 8/02, PSH). ■

S-J610-WH-02--HLS: Hydrographer recommends removing charted Obstn rep PA and charting Obstn 20 ft in position 30°17'19.659"N , 088°01'57.885"W. Evaluator revises this and recommends to chart two obstructions with a least depth of 21 ft and 20 ft were found in Lat. 30-17-19.65 N, Lon. 088-01-58.27 W and Lat. 30-17-21.073 N Lon. 088-01-58.07 W . UPDATED 3/04 MCR

#### Survey Summary

**Survey Position:** 30° 17' 20.9" N, 088° 01' 58.0" W  
**Least Depth:** 6.76 m (= 22.19 ft = 3.699 fm = 3 fm 4.19 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2007-165.16:47:11.387 (06/14/2007)  
**Survey Line:** h11306 / 1211sb / 2007-165 / 000\_1646  
**Profile/Beam:** 389/1  
**Charts Affected:** 11377\_1, 11378\_6, 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

#### Remarks:

Unknown contact detected in 200%SSS. Contact was investigated using SBES in a star shaped pattern. Contact found but height insignificant.

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11306/1211sb/2007-165/000_1646	389/1	0.00	000.0	Primary
h11306/1211sss500k/2006-173/sonar_data060622115100	0001	2.75	179.5	Secondary
J373awois04	AWOIS # 11626	7.78	162.6	Secondary
h11306/1211sss500k/2004-195/mb040713163000	0008	9.77	065.3	Secondary



h11306/1211sss500k/2006-173/sonar_data060622115100	0002	42.70	004.9	Secondary
h11306/1211sss500k/2004-195/mb040713163000	0006	43.88	019.7	Secondary

## Hydrographer Recommendations

Hydrographer recommends removing charted obstruction from chart.

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

22ft (11377\_1, 11378\_6, 11376\_1)

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

## S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 1:depth known  
 SORDAT - 20070626  
 SORIND - US,US,nsurf,H11306  
 TECSOU - 1:found by echo-sounder  
 VALSOU - 6.765 m  
 VERDAT - 12:Mean lower low water  
 WATLEV - 3:always under water/submerged

## Office Notes

Concur with clarification. Office processing determined that AWOIS Item 11626 is insignificant. Delete charted dangerous obstruction, least depth 20 ft and text "Obstn". Chart survey soundings in common area and update AWOIS database.

## 3.2) AWOIS #3530 - UNKNOWN

### No Primary Survey Feature for this AWOIS Item

**Search Position:** 30° 18' 30.7" N, 088° 04' 30.0" W  
**Historical Depth:** [None]  
**Search Radius:** 500  
**Search Technique:** S2,ES,MB,SD,VS  
**Technique Notes:** [None]

#### History Notes:

HISTORY ■ LNM50/79--UCSG; SPUD BARGE REPORTED SUNK 3.25 EAST OF CEDAR POINT IN APPROX. ■ POSITION LAT.30-18.5N, LONG.88-04.5W, WITH SPUD VISIBLE ABOVE SURFACE AND WAS ■ NOT MARKED. SCALED IN LAT.30-18-30N, 88-04-30W AT 1:40,000 (CHT 11378-B) ■ D65/D78/84-87--OPR-J482-84; NEITHER VERIFIED NOR DISPROVED. (UPDATE 3/89 LQ)

### Survey Summary

**Charts Affected:** 11377\_1, 11378\_6, 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

#### Remarks:

Entire AWOIS radius covered in 200%SSS. No contact detected within AWOIS radius in SSS data.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
J373awois04	AWOIS # 3530	0.00	000.0	Primary

### Hydrographer Recommendations

Hydrographer recommends removing WRK Masts PA from chart.

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 4:wreck showing mast/masts  
 SORDAT - 20070626  
 SORIND - US,US,survey,H11306  
 TECSOU - 1,2:found by echo-sounder,found by side scan sonar  
 VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## **Office Notes**

Concur with clarification. Delete disproved AWOIS Item 3530, charted dangerous wreck and text "Masts PA". Chart survey soundings in common area and update AWOIS database.

### 3.3) AWOIS #12348 - OBSTRUCTION Pipe submerged

#### No Primary Survey Feature for this AWOIS Item

**Search Position:** 30° 17' 50.7" N, 088° 05' 24.0" W  
**Historical Depth:** [None]  
**Search Radius:** 200  
**Search Technique:** SD, S2, SWMB, ES, DI, VS  
**Technique Notes:** CONDUCT AND ADDITIONAL 100 METER RADIUS SEARCH AROUND POSITION 30/17/46.04 - 088/05/17.35 (SOUTHERNMOST CHARTED PIPE)

#### History Notes:

HISTORY ■ LNM23/86--A 10 INCH DIAMETER STEEL PIPE APPROXIMATELY 1 FOOT EXTENDING OUT OF THE WATER HAS BEEN REPORTED 2 MILES EAST OF THE DAUPHIN ISLAND BRIDGE; 3/4 MILES NORTH OF PASS AUX HERONS CHANNEL IN APPROXIMATE POSITION 30-17-50N, 88-05-24W. ■■■PIPE LOCATED TO THE NORTH AND EAST IS AWOIS ITEM 12349. NO INDICATION OF WHERE PIPE LOCATED TO THE SOUTHEAST AT 30/17/46.03 - 088/05/17.38 (SCALED FROM CHART) CAME FROM. THE COORDINATES IN THE HISTORY DO NOT QUITE MATCH THE COORDINATES PUBLISHED IN THE LNM - THIS MAY ACCOUNT FOR SOUTHERNMOST PIPE.

### Survey Summary

**Charts Affected:** 11377\_1, 11378\_6, 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

#### Remarks:

Entire AWOIS 12348 radius covered in 200%SSS coverage. AWOIS item not identified in SSS data nor confirmed visually by survey team. Item not found.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
J373awois04	AWOIS # 12348	0.00	000.0	Primary

### Hydrographer Recommendations

Hydrographer recommends removing obstruction "pipe PA" from chart.

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 2:depth unknown

SORDAT - 20040424

SORIND - US,US,survy,H11306

WATLEV - 3:always under water/submerged

**Geo object 2:** Pile (PILPNT)

**Attributes:** SORDAT - 20070626

SORIND - US,US,nsurf,H11306

### Office Notes

Do not concur. AWOIS Item 12348, office processing determined the feature was not sufficiently disproved due to degraded side scan sonar data quality in the common area. Additionally the Pipes in this area were not visually conspicuous during field investigation. Therefore, delete charted Pipe. Chart dangerous obstruction, least depth unknown and text "Submerged Pipes PA".

### 3.4) AWOIS #12349 - OBSTRUCTION Pipe submerged

#### No Primary Survey Feature for this AWOIS Item

**Search Position:** 30° 17' 54.0" N, 088° 05' 18.0" W  
**Historical Depth:** [None]  
**Search Radius:** 200  
**Search Technique:** SD, S2, SWMB, ES, DI, VS  
**Technique Notes:** [None]

#### History Notes:

HISTORY ■ LNM-09/93--ADD SYMBOL: "PIPE (PA)" AND LEGEND: "(PIPE)" (CGD8 042-93) 30/17/54.0N 88/05/18.0W ■ ■ ■ ■ ■ PER TELCON WITH USCG, 4x7 FOOT DREDGE PONTOON REPORTED PROTRUDING 3 FEET ABOVE THE WATER IN APPROXIMATE POSITION 30-17-54.0N 088-05-18.0w, AS OF 2/27/93. (UPDATED 4/04, SPS)

### Survey Summary

**Charts Affected:** 11377\_1, 11378\_6, 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

#### Remarks:

Entire AWOIS 12349 radius covered with 200% SSS. AWOIS item not detected in 200% SSS data nor was visually confirmed as item reported as 3 foot protruding pipe. Item not found.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
J373awois04	AWOIS # 12349	0.00	000.0	Primary

### Hydrographer Recommendations

Hydrographer recommends removing charted obstruction "pipe PA".

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** CATOBS - 1:snag / stump  
 QUASOU - 2:depth unknown  
 SORDAT - 20040424  
 SORIND - US,US,survey,H11306

WATLEV - 3:always under water/submerged  
**Geo object 2:** Pile (PILPNT)  
**Attributes:** SORDAT - 20070626  
SORIND - US,US,nsurf,H11306

### Office Notes

Do not concur. AWOIS Item 12349, office processing determined the feature was not sufficiently disproved due to degraded side scan sonar data quality in the common area. Additionally the Pipes in this area were not visually conspicuous during field investigation. Therefore, delete charted Pipe. Chart dangerous obstruction, least depth unknown and text "Submerged Pipes PA".

### 3.5) AWOIS #12362 - AWOIS Item 12362 Disproved Pile

#### No Primary Survey Feature for this AWOIS Item

**Search Position:** 30° 17' 17.6" N, 088° 07' 46.3" W  
**Historical Depth:** [None]  
**Search Radius:** 50  
**Search Technique:** SD, S2, SWMB, ES, DI, VS  
**Technique Notes:** [None]

#### History Notes:

HISTORY ■ UNABLE TO LOCATE SOURCE OF PILE THROUGH RESEARCH, HOWEVER IT APPEARS BETWEEN JANUARY OF 1969 AND FEBRUARY OF 1972. POSSIBLY ADDED THROUGH AERIAL PHOTOGRAPHY. (ENTERED 3/04, SPS)

#### Survey Summary

**Charts Affected:** 11377\_1, 11378\_6, 11376\_1, 1115A\_1, 11360\_1, 11006\_1, 411\_1

#### Remarks:

Part of AWOIS radius covered with 200% SSS coverage. Portion of AWOIS radius not covered due to water depths. Item not found within area of coverage.

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
J373awois04	AWOIS # 12362	0.00	000.0	Primary

#### Hydrographer Recommendations

Retain as charted.

#### S-57 Data

**Geo object 1:** Pile (PILPNT)  
**Attributes:** SORDAT - 20070626  
 SORIND - US,US,survey,H11306



## Office Notes

Do not concur. Unsurveyed portion of AWOIS 12362 search radius is navigationally insignificant, where side scan sonar data could not be acquired due to shallow water depths . Delete disproved AWOIS Item 12362 charted Pile and text "Pile".

**APPENDIX V**  
**SUPPLEMENTAL CORRESPONDENCE**

**REPORT OF CHANNEL CONDITIONS  
FOR CHANNELS 400 FEET WIDE OR GREATER**

(ER 1130-2-316)

PAGE: 1 OF 1

DATE: 30-Jul-08

1036

TO: OP-T George Hopkins

FROM: OP-GW Stephen H. Reid  
Debbie Carter

2008  
JW

THRU: OP-T Duane Poiroux

RIVER/HARBOR NAME AND STATE

MINIMUM DEPTHS IN EACH 1/4 WIDTH OF  
CHANNEL ENTERING FROM SEAWARD

Mobile Harbor, Alabama

NAME OF CHANNEL	DATE OF SURVEY	AUTHORIZED PROJECT			LEFT OUTSIDE QUARTER (feet)	LEFT INSIDE QUARTER (feet)	RIGHT INSIDE QUARTER (feet)	RIGHT OUTSIDE QUARTER (feet)
		WIDTH (feet)	LENGTH (miles)	DEPTH (feet)				
<b>Mobile Bar Channel</b> 700' south of Buoy 1 to 200' north of Buoy 22 Sta.1760+10-2189+59		600	8.1	47				
700' south of Buoy 1 to Buoy 3	Jul-08				47	47	47	47
Buoy 3 to Buoy 5	Jul-08				47	47	47	46.1
Buoy 5 to Buoy 7	Jul-08				47	47	47	46.9
Buoy 7 to Buoy 9	Jul-08				47	47	47	47
Buoy 9 to Buoy 11	Jul-08				46.9	47	47	42
Buoy 11 to Buoy 13	Jul-08				45.8	47	47	42.9
Buoy 13 to Buoy 15	Jul-08				46.1	47	46.8	43.3
Buoy 15 to Buoy 17	Jul-08				47	47	47	43.9
Buoy 17 to Buoy 19	Jul-08				47	47	47	47
Buoy 19 to Buoy 21	Jul-08				47*44.7	47	47	47
Buoy 21 to 200' north of Buoy 22	Jul-08				46.7	47	47	47*46.4

ED PRODUCTS  
11378 17  
11377 2887  
11376 50  
USSAL13M  
11378 15(NC)  
11360 NC

REMARKS(Continue on reverse)

All elevations shown are referenced to Mean Lower Low Water ( M.L.L.W )

\* Indicates shoaling exists in bend widening area

**REPORT OF CHANNEL CONDITIONS**  
**100 TO 400 FEET WIDE**  
 (EP 1130-2-520)

PAGE: **845**  
 DATE: 10-JUN-08

TO: OP-T George Hopkins  
 THRU: OP-T Duane Poiroux

FROM: OP-GW Steve H. Reid  
 Joy Smith  
**2008**  
**LCR**

RIVER/HARBOR NAME AND STATE  
 Dauphin Island, Alabama

MINIMUM DEPTHS IN CHANNEL  
 ENTERING FROM SEAWARD

NAME OF CHANNEL	DATE OF SURVEY	AUTHORIZED PROJECT			LEFT OUTSIDE QUARTER (feet)	MIDDLE HALF (feet)	RIGHT OUTSIDE QUARTER (feet)
		WIDTH (feet)	LENGTH (miles)	DEPTH (feet)			
<b>Fort Gaines Ent. Channel</b> Approx. 115' west of Beacon 14 to Approx. 845' West of Beacon 17 (Sta. 8+24-Sta. 20+24)	Jun-08	<del>15</del> 150 NDB	0.22	7	7	7	4.5
<b>Fort Gaines Anchorage Basin</b> Approx. 845' West of Beacon 17 to Approx. 150' West of Ferry Dock	Jun-08	Varies	0.15	7	5.5	6.9	7

COMP	DATE	
LR	B	7/8/08

**(E) (D)**  
**PRODUCTS**  
 CP5  
 11377 2887  
 11378 15  
 11378 17  
 11376 50  
 USSAL13M  
 USSAL12M  
 US4AL11M  
 11360 NC

REMARKS(Continue on reverse)  
**All elevations shown are referenced to Mean Lower Low Water ( M.L.L.W )**

**REPORT OF CHANNEL CONDITIONS**  
**100 TO 400 FEET WIDE**  
*(EP 1130-2-520)*

PAGE: 1 OF 1

DATE: 5-Jun-08

TO: OP-T George Hopkins

FROM: OP-GW Stephen H. Reid  
Debbie Carter

THRU: OP-T Duane Poiroux

RIVER/HARBOR NAME AND STATE

MINIMUM DEPTHS IN CHANNEL  
ENTERING FROM SEAWARD

Dauphin Island, Alabama

NAME OF CHANNEL	DATE OF SURVEY	AUTHORIZED PROJECT			LEFT OUTSIDE QUARTER (feet)	MIDDLE HALF (feet)	RIGHT OUTSIDE QUARTER (feet)
		WIDTH (feet)	LENGTH (miles)	DEPTH (feet)			
<b>Pass Drury Channel</b> approx 435' NE of Ferry Dock to approx 4401' NW of Ferry Dock (Sta. 0+00-44+01)  approx 435' NE of Ferry Dock to approx 4401' NW of Ferry Dock	Jun-08	40	0.83	6	6	5.4	5.6

COMP	DATE	BY	CHKD
LR	B	7/8/08	

REMARKS(Continue on reverse)

**All elevations shown are referenced to Mean Lower Low Water ( M.L.L.W )**

**REPORT OF CHANNEL CONDITIONS**  
**100 TO 400 FEET WIDE**  
*(EP 1130-2-520)*

PAGE: 1 OF 1

DATE: 10-Jun-08

TO: OP-T George Hopkins

FROM: OP-GW Stephen H. Reid  
Juliet T. Rowell

THRU: OP-T Duane Poiroux

RIVER/HARBOR NAME AND STATE

MINIMUM DEPTHS IN CHANNEL  
ENTERING FROM SEAWARD

Dauphin Island, Alabama

NAME OF CHANNEL	DATE OF SURVEY	AUTHORIZED PROJECT			LEFT OUTSIDE QUARTER (feet)	MIDDLE HALF (feet)	RIGHT OUTSIDE QUARTER (feet)
		WIDTH (feet)	LENGTH (miles)	DEPTH (feet)			
<b>Dauphin Island Village Channel</b> 500' west of Beacon B/A (Sta.0+00-153+80) to 580' east of Daymarker 10		100	2.86	7			
500' west of Beacon B/A to Daymarker 7	Jan-08				7	7	7
Daymarker 7 to Daymarker 10	Jan-08				7	7	5
Daymarker 10 to 580' east of Daymarker 10	Jan-08				5.1	4.1	5.1/*3.8

COMP	CODE	DATE
LR	B	7/8/08

REMARKS(Continue on reverse)

**All elevations shown are referenced to Mean Lower Low Water ( M.L.L.W )**

\* Shoaling exists in anchorage basin on western side



DEPARTMENT OF THE ARMY  
MOBILE DISTRICT, CORPS OF ENGINEERS  
P.O. BOX 2288  
MOBILE, ALABAMA 36628-0001

429  
2006  
X

REPLY TO  
ATTENTION OF:

CESAM-OP-TN

COMP	CODE	OUT	IN
SC	B	4/14	


SUBJECT: Data for National Oceanic and Atmospheric Administration Nautical Charts

Director, Defense Mapping Agency  
Hydrographic/Topographic Center  
Attention: Scientific Data Department  
6500 Brooks Lane  
Washington, DC 20315

In accordance with the requirements of EP 1130-2-520, ENG Form 4021-R showing changes in the channel condition as of the dates shown are submitted on:

1. Grand Lagoon Harbor, Panama City, FL
2. Blackwater Bay & River, FL (3 pages)
3. Escambia & Conecuh Rivers, FL (3 pages)
4. Dauphin Island, AL (2 pages)
5. Bayou Coden, AL
6. Mobile Harbor, AL (2 pages)
7. Bay St. Louis, MS (2 pages)
8. Fly Creek, AL
9. Bayou La Batre, AL
10. Pascagoula Harbor, MS

©D  
**PRODUCTS**

  
DUANE B. POIROUX  
Acting Chief, Technical Support Branch

Enclosures

CP5  
11377 2887  
11378 15  
11378 17  
11376 50  
US 5 AL 13M  
US 5 AL 12M  
US 4 AL 11M  
11360 WL

429

APR 14 2006

<b>REPORT OF CHANNEL CONDITIONS</b> <b>100 TO 400 FEET WIDE</b> <small>(EP 1130-2-520)</small>						PAGE: 1 OF 1	
TO: OP-T George Hopkins				FROM: OP-GW Steve Reid		DATE: 6-Mar-06	
THRU: OP-T Duane Poiroux				D. CARTER			
RIVER/HARBOR NAME AND STATE						MINIMUM DEPTHS IN CHANNEL ENTERING FROM SEAWARD	
Dauphin Island, Alabama							
NAME OF CHANNEL	DATE OF SURVEY	AUTHORIZED PROJECT			LEFT OUTSIDE QUARTER	MIDDLE HALF	RIGHT OUTSIDE QUARTER
		WIDTH (feet)	LENGTH (miles)	DEPTH (feet)	(feet)		(feet)
<b>Pass Drury Channel</b> approx 435' NE of Ferry Dock to approx 4401' NW of Ferry Dock (Sta. 0+00-44+01)  approx 435' NE of Ferry Dock to approx 4401' NW of Ferry Dock	Mar-06	40	0.83	6	6	6	5.7
REMARKS(Continue on reverse)							
All elevations shown are referenced to Mean Lower Low Water ( M.L.L.W )							



REPORT OF CHANNEL CONDITIONS 100 TO 400 FEET WIDE <small>(EP 1130-2-520)</small>					PAGE: 1 OF 1		
TO: OP-T George Hopkins				FROM: OP-GW Steve Reid		DATE: 7-Mar-06	
THRU: OP-T Duane Poiroux				D. Carter			
RIVER/HARBOR NAME AND STATE					MINIMUM DEPTHS IN CHANNEL ENTERING FROM SEAWARD		
Dauphin Island, Alabama					LEFT OUTSIDE QUARTER	MIDDLE HALF	RIGHT OUTSIDE QUARTER
NAME OF CHANNEL	DATE OF SURVEY	AUTHORIZED PROJECT			QUARTER <small>(feet)</small>	MIDDLE HALF <small>(feet)</small>	QUARTER <small>(feet)</small>
		WIDTH <small>(feet)</small>	LENGTH <small>(miles)</small>	DEPTH <small>(feet)</small>			
<b>Fort Gaines Ent. Channel</b> Approx. 350' east of Daymarker 16 to Approx. 260' West of Beacon 17 (Sta. 8+24-Sta. 20+24)	Mar-06	15	0.22	7	7	7	4.4
<b>Fort Gaines Anchorage Basin</b> Approx. 260' West of Beacon 17 to Approx. 150' West of Ferry Dock (Sta. 0+00 - Sta. 8+24)	Mar-06	Varies	0.15	7	2.6	4.6	5.5
REMARKS(Continue on reverse) All elevations shown are referenced to Mean Lower Low Water ( M.L.L.W )							

L1342 (06)

**REPORT OF CHANNEL CONDITIONS  
FOR CHANNELS 400 FEET WIDE OR GREATER**  
(ER 1130-2-316)

PAGE: 1 OF 1

**237**  
21-Dec-06.

TO: OP-T George Hopkins  
THRU: OP-T Duane Poiroux

FROM: OP-GW Stephen H. Reid  
James Gibson **2007**  
**HR**

RIVER/HARBOR NAME AND STATE: **Mobile Harbor, Alabama**

NAME OF CHANNEL	DATE OF SURVEY	AUTHORIZED PROJECT			MINIMUM DEPTHS IN EACH 1/4 WIDTH OF CHANNEL ENTERING FROM SEAWARD			
		WIDTH (feet)	LENGTH (miles)	DEPTH (feet)	LEFT OUTSIDE QUARTER (feet)	LEFT INSIDE QUARTER (feet)	RIGHT INSIDE QUARTER (feet)	RIGHT OUTSIDE QUARTER (feet)
<b>Mobile Bar Channel</b> 700' south of Buoy 1 to 200' north of Buoy 22 Sta.1760+10-2189+59		600	8.1	47				
700' south of Buoy 1 to Buoy 7	Dec-06				47	47	47	47
Buoy 7 to Buoy 9	Dec-06				45.6	47	47	47
Buoy 9 to Buoy 11	Dec-06				46.1	47	47	46.7
Buoy 11 to Buoy 13	Dec-06				45.8	47	47	45.6
Buoy 13 to Buoy 15	Dec-06				47	47	47	45.8
Buoy 15 to Buoy 17	Dec-06				47	47	47	46.8
Buoy 17 to Buoy 18	Dec-06				47	47	47	47
Buoy 18 to Buoy 20	Dec-06				47	47	47	47
Buoy 20 to Buoy 21	Dec-06				47	47	47	47
Buoy 21 to 200' north of Buoy 22	Dec-06				47	47	47	47

**(E) (D)**  
**PRODUCTS**  
11378 17  
11377 2887  
11376 50  
USSAL 13M  
US36C 15M  
11378(15) NC  
11360 NC

REMARKS(Continue on reverse)  
All elevations shown are referenced to Mean Lower Low Water ( M.L.L.W )



**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
National Ocean Service  
Silver Spring, Maryland 20910

**TIDE NOTE FOR HYDROGRAPHIC SURVEY**

**DATE :** December 13, 2007

**HYDROGRAPHIC BRANCH:** Atlantic

**HYDROGRAPHIC PROJECT:** OPR-J373-NRT1-2004

**HYDROGRAPHIC SHEET:** H11306

**LOCALITY:** Southwest Entrance to Mobile Bay, Mobile Bay, AL

**TIME PERIOD:** July 7 - September 9, 2004  
August 24, 2005  
January 9 - August 23, 2006  
June 14 - June 26, 2007

**TIDE STATION USED:** 873-5180 Dauphin Island, AL  
Lat. 30° 15.08'N Long. 088° 04.77' W

**PLANE OF REFERENCE (MEAN LOWER LOW WATER):** 0.000 meters  
**HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE:** 0.361 meters

**TIDE STATION USED:** 874-1533 Pascagoula NOAA Lab, MS  
Lat. 30° 21.5' N Long. 088° 34.0' W

**PLANE OF REFERENCE (MEAN LOWER LOW WATER):** 0.000 meters  
**HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE:** 0.448 meters

**REMARKS: RECOMMENDED ZONING**

**Use zone(s) identified as:** CGM46, CGM46A, CGMCGM47, CGM48, CGM49 & CGM55

**Refer to attachments for zoning information.**

**Note 1:** Provided time series data are tabulated in metric units (meters), relative to MLLW and on Greenwich Mean Time on the 1983-2001 National Tidal Datum Epoch (NTDE).

**Note 2:** Dauphin Island water level gauge (8735180) was not operating during survey work on January 9, 2006. Pascagoula NOAA Lab (8741533) water level station can be used as control during that time period. Use tide data from the appropriate station with applicable zoning correctors for each zone according to the order in which they are listed in the Tidezone corrector file (\*.ZDF). For example, tide station one (TS1) would be the first choice for an applicable zone followed by TS2, etc. when data are not available.

**Peter J. Stone**

Digitally signed by Peter J. Stone  
DN: cn=Peter J. Stone, c=US, o=CO-OPS,  
ou=NOAA/NOS, email=peter.stone@noaa.gov  
Reason: I am approving this document  
Date: 2007.12.20 06:43:48 -05'00'

CHIEF, PRODUCTS AND SERVICES DIVISION



ALA  
MISS

**Final Tide Zoning  
for OPR-J373-NRT1-2004, H11306  
Southwest Entrance to Mobile Bay  
Mobile Bay, AL**

Pascagoula

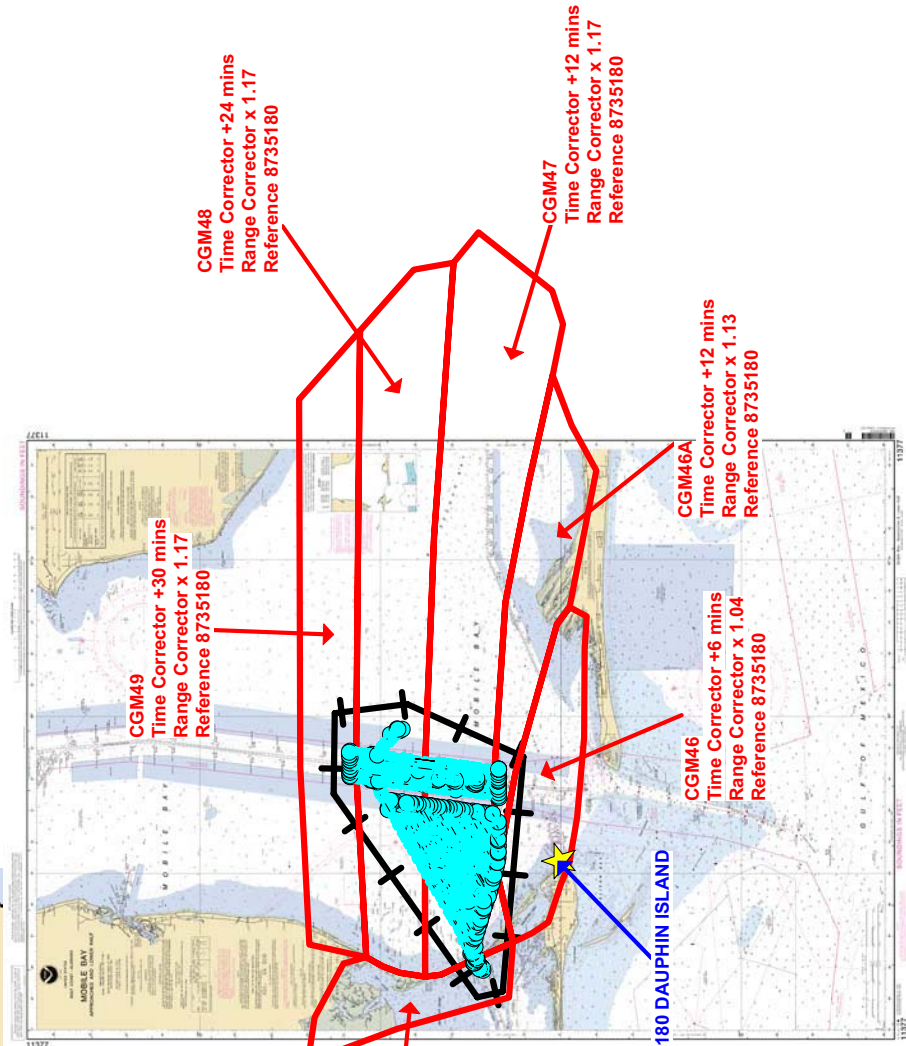
8741533 PASCAGOULA NOAA LAB

MOBILE BAY

pass a

CGM55  
Time Corrector +12 mins  
Range Corrector x 1.13  
Reference 8735180

8735180 DAUPHIN ISLAND



This Document is for Office Process use only and is intended to supplement, not supersede or replace, information/recommendations in the Descriptive or Evaluation Reports

## AHB PRE-COMPILATION PROCESS

REGISTRY No.	<b>H11306</b>
PROJECT No.	<b>OPR-J373-NRT1-04</b>
FIELD UNIT	<b>NRT-1</b>
PRE-COMPILER	<b>M. LEONARD TYSON</b>
LARGEST SCALE CHART	<b>11377, 8<sup>th</sup> Ed., 20090401</b>
CHART SCALE	<b>1:40,000</b>
SURVEY SCALE	<b>1:10,000</b>
DATE OF SURVEY	<b>09/13/2007</b>
CONTENT REVIEW DATE	

Components	File Names
<i>Product Surface</i>	
<i>Shifted Surface</i>	
<i>Contour Layer</i>	<b>H11306_Contours.hob</b>
<i>Survey Scale Soundings</i>	<b>AHB_H11306_SS_Soundings.hob</b>
<i>Chart Scale Soundings</i>	<b>AHB_H11306_CS_Soundings.hob</b>
<i>ENC Retain Soundings</i>	<b>H11306_ENC_OBJECTS</b>
<i>Feature Layer</i>	<b>AHB_H11306_Features.hob</b>
<i>Meta-Objects Layer</i>	<b>H11306_MetaObjects.hob</b>
<i>Blue Notes</i>	<b>H11306_BlueNotes.hob</b>

### SPECIFICATIONS:

- I. COMBINED SURFACE:
  - a. File name: N/A
  - b. Resolution: \_\_\_\_\_m
  - c. Final Grid Location: \_\_\_\_\_
- II. PRODUCT SURFACE (SOUNDINGS):
  - a. Scale: 1: \_\_\_\_\_
  - b. Radius: \_\_\_\_\_m
  - c. Resolution: \_\_\_\_\_m
  - d. Depth
    - i. Minimum: **0.881m** \_\_\_\_\_m
    - ii. Maximum: **15.325m** \_\_\_\_\_m

PRODUCT SURFACE (CONTOURS):

  - a. Scale: 1: \_\_\_\_\_
  - b. Radius: \_\_\_\_\_m
  - c. Resolution: \_\_\_\_\_m
- III. SHIFTED SURFACE:
 

Single Shift Value: **-0.229m** \_\_\_\_\_ [-0.229m (feet), ( $\leq 10$  fathoms)]  
 [-1.372m (fathoms), ( $> 10$  fathoms)]
- IV. CONTOUR LAYER:
  - a. Use a Depth List: **H11306\_NOAA\_depth\_curves\_list.txt**  
 Depth List:

Version 1.0

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- b. Output Options:
  - i. Create contour lines:
    - 1. Line Object: DEPCNT
    - 2. Value Attribute: VALDCO

- V. SOUNDING SELECTION:
  - a. Selection Criteria:
    - i. Radius
    - ii. Shoal biased
    - iii. Use Single-Defined Radius:     distance on ground (m)
    - iv. Filter: Generalized !=1

- VI. FEATURES:
  - a. Brought in from Survey  
Total No.
  - b. Brought in from ENC  
ENC:     #            
Total No.

- VII. META-OBJECTS:
  - a. M\_COVR attributes

Acronym	Value
SORDAT	09/03/12
CATCOV	1
SORIND	Us,Us,Survy,H11306

- b. M\_QUAL attributes

Acronym	Value
CATZOC	U
INFORM	H11306,OPR-J373,NRT1
POSACC	10
SORDAT	09/03/12
SORIND	Us,Us,Survy,H11306
SUREND	2007/09/13
SURSTA	2004/07/07
TECSOU	1

- c. DEPARE attributes

Acronym	Value
DRVALV 1	0.881m
DRVALV2	15.325m
SORDAT	09/13/2007
SORIND	Us,Us,nsurf,H11306

- d. M\_CSCL attributes: **N/A**

Acronym	Value
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- VIII. NOTES:

**ATLANTIC HYDROGRAPHIC BRANCH  
EVALUATION REPORT to Accompany  
Survey H11306 (1:10,000)**

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**

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.

HSTP PYDRO version 9.4 r2680  
CARIS HIPS/SIPS version 6.1 SP1  
CARIS Bathy Manager version 2.1  
DKART INSPECTOR, version 5.0 Build 732 SP1  
CARIS HOM version 3.3  
CARIS S57 Composer version 2.0  
MAPINFO 9.0 RB36

**B.2. QUALITY CONTROL**

**B.2.1. H-Cell**

The AHB source depth grid for the survey's nautical chart update product entailed the creation of a single grid at two meter resolution for all the vertical beam bathymetry. The survey scale selected soundings were extracted from the two meter grid. The selected sounding set is more than 16-32 times the number of charted depths generated at a scale of 1:10,000. The chart scale selected soundings are a subset of the survey scale selected soundings at a scale of 1:40,000. The surface model was referenced when selecting the chart scale soundings, to ensure that the selected soundings portrayed the bathymetry within the common area.

The pre-compilation products or components (Stand Alone HOB files (SAHOB)) are detailed in the Pre-Compile Process Log attached at the end of this document. The SAHOB files included, sounding selections (SOUNDG), features (OBSTNS, SBDARE, BCNSPP, BOYSPP, OFSPLF, PILPNT), meta objects (M\_COVR, M\_QUAL,), depth areas (DEPARE) and cartographic Blue Notes (\$CSYMB). The individual SAHOB files were inserted into one BASE Editor feature layer and exported to S57 format in order to create the H-Cell deliverable.

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

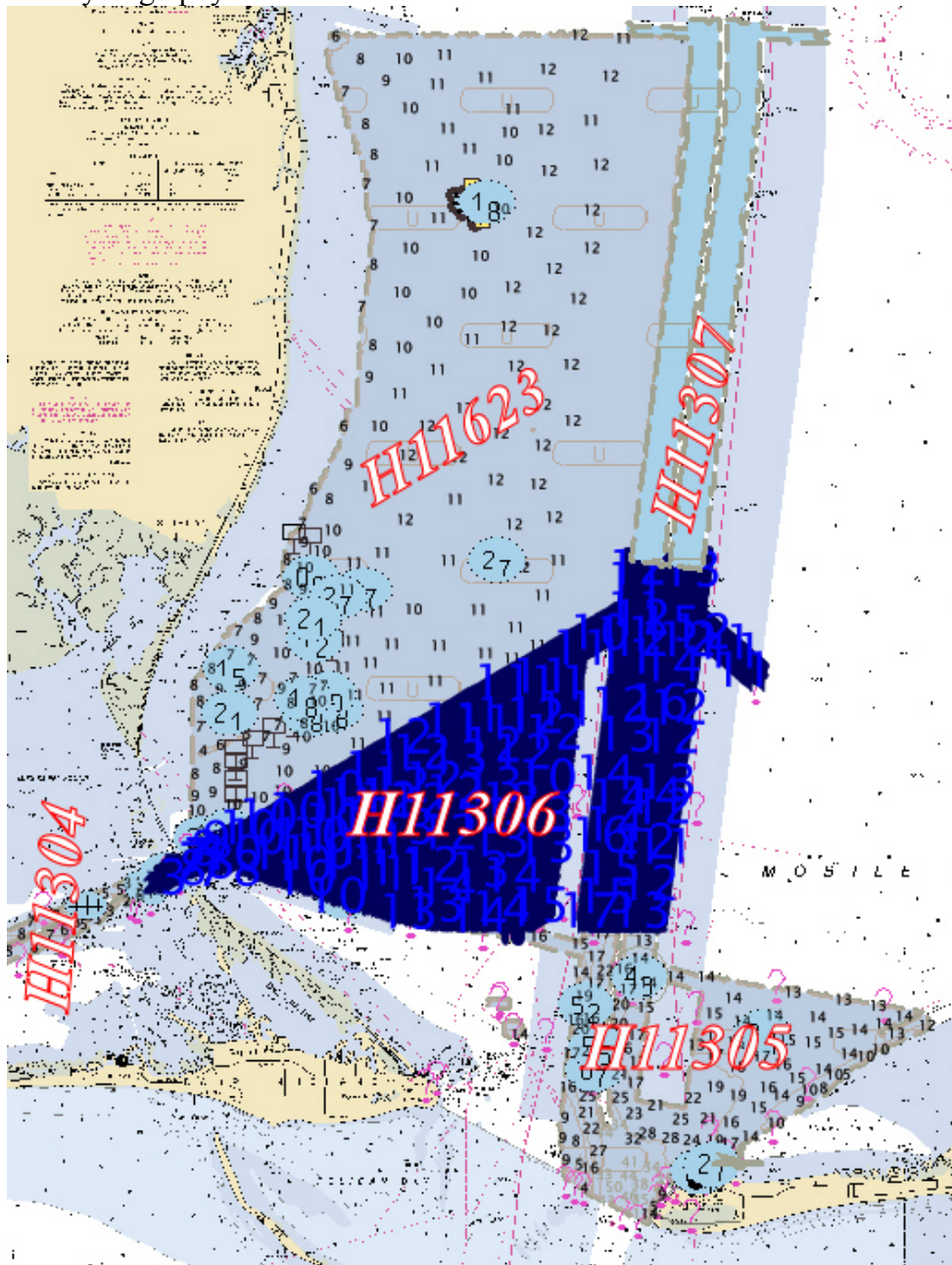
Chart compilation was performed by Atlantic Hydrographic Branch personnel in Norfolk, Virginia. Compilation data will be forwarded to Marine Chart Division, Silver Spring, Maryland.

The H11306 CARIS H-Cell final deliverables include the following products:

US511306_CS.000	1:40,000 Scale	H11306 H-Cell with Chart Scale Selected Soundings
US511306_SS.000	1:10,000 Scale	H11306 Selected Soundings (Survey Scale)

**B.2.2. Junctions**

Survey H11306 junctions with survey H11304 to the west, H11305 to the southeast, H11625 to the northeast, and H11307 to the northeast. Present survey soundings compare within 1 foot with junction surveys. Present survey depths are in harmony with the charted hydrography to the southwest and east.





## C. VERTICAL AND HORIZONTAL CONTROL

Final vertical correction processing was completed by the field unit/office personnel with no additional correction required by Atlantic Hydrographic Branch. The field unit/office personnel applied verified water levels in conjunction with the final zoning for H11305. Sounding datum is Mean Lower Low Water (MLLW). The operating National Water Level Observation Network (NWLON) station at Dauphin Island (873-5180) served as datum control for the survey area.

Horizontal control used for this survey during data acquisition is based upon the North American Datum of 1983 (NAD83), UTM projection zone 16. Office ENC processing of this survey required translating the datum to meet S-57 ENC requirements.

## D. RESULTS AND RECOMMENDATIONS

### D.1 CHART COMPARISON:

11377 (7th Edition, 20071001)

Corrected through NM 10/01/2007

Corrected through LNM 01/13/2009

Scale 1:40,000

11378 6 (35th Edition, 20080301)

Corrected through NM 03/01/2008

Corrected through LNM 01/13/2009

Scale 1:40,000

### ENC Comparison

US5AL13M.000

Mobile Bay Approaches and Lower Half  
Edition 22

Update Application Date 2008-09-22

Issue Date 2009-02-12

References: Chart 11377

### D.1.1 Hydrography

#### **USACE Project Depths**

All current surveyed sounding in the Mobile Channel have been superseded by US Army Corp of Engineers survey and dredge work. These USACE operations took place in July of 2008 (see also USACE\_Projected Depths\_REPORT OF CHANNEL CONDITIONS) located in the AHB survey, Supplemental Support Data folder.

### D.2.1. Aids to Navigation

All ATON's addressed and positioned are discussed in the DR. AHB recommends deferring the charting disposition of these navigational aids to Marine Chart Division, Nautical Data Branch.

**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.

**APPROVAL SHEET**  
**H11306**

**Initial Approvals:**

The completed survey has been inspected with regard to survey coverage, delineation of depth curves, and 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 reviews per the Hydrographic surveys Division Office Processing Manual and are verified to be accurate and complete except where noted.

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**Leonard Tyson**  
Hydrographic Intern  
Atlantic Hydrographic Branch

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**Edward A. Owens**  
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: \_\_\_\_\_  
**Shepard Smith**  
Lieutenant Commander, NOAA  
Chief, Atlantic Hydrographic Branch