

H10709

NOAA FORM 76-35A	
U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SERVICE	
DESCRIPTIVE REPORT	
Type of Survey	HYDROGRAPHIC/ SIDE SCAN SONAR
Field No.	AHP 10-08-96
Registry No.	H-10709
LOCALITY	
State	FLORIDA
General Locality	TAMPA BAY
Sublocality	GADSDEN POINT TO DAVIS ISLANDS
19 96	
CHIEF OF PARTY LT. J. ILLG, NOAA	
LIBRARY & ARCHIVES	
DATE	MAR. 17 1998

HYDROGRAPHIC TITLE SHEET

H-10709

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

FIELD NO.

AHP-10-08-96

State Florida

General locality Gulf of Mexico, Tampa Bay

Locality Gadsden Point to Davis Islands

Scale 1:10,000

Date of survey 23 August 1996 to 22 October 1996

Instructions dated 3-12-96\*

Project No. OPR-J343-AHP

Vessel 0518 & 0519

Chief of party Lt. James Iig

Surveyed by DBE/RWR/PW/SS\*\*

Soundings taken by echo sounder, hand lead, pole Echo Sounder and LeadLine

Graphic record scaled by DBE/RWR/PW/SS\*\*

Graphic record checked by DBE/RWR/PW/SS\*\*

Protracted by \_\_\_\_\_

*Hewlett Packard DesignJet*  
Automated plot by HPDS with Brunning Plotter 350C  
*Plotter*

Verification by Atlantic Hydrographic Branch

Soundings in ~~meters~~ feet at MLW MLLW \_\_\_\_\_

REMARKS: \*= Change No. 1 3-19-96

\*\* = DBE = David B. Elliott

RWR = Robert W. Ramsey Jr.

*AUOIS/SURE 2/6/98 mCR*

PW = Phillip Wolf

SS = Ltjg Scott Shaulis

*Notes in the Descriptive Report shown in red were made during office processing*

## Hydrographic Sheets and Parameters

OPR-J343-AHP  
AHP-10-08-96  
H-10709  
Sheet "J"

All plotter sheets were created by AHP personnel, on the HDAPS office computer, and Bruning plotter, at the Field site located at Tampa Bay field site.

There were five plotter sheets created to conduct this survey; plotter sheet number one covers the central section of this survey ("J"e), and plotter sheet number two covers the western section of this survey ("J"w), and plotter sheets number three through five covers the insets for Alifia River Entrance, East Bay, and Seddon Channel, respectively.

The following plots were provided for the respective "Field Sheets":

<u>Plot type</u>	<u>PS#1</u>	<u>PS#2</u>	<u>PS#3</u>	<u>PS#4</u>	<u>PS#5</u>
Field Sheet	1	1	1	1	1
Edited Track Plot	1	1	1	1	1
Edited Excessed Sound	1	1	1	1	1
100 % SSS Swath	1	1	1	1	1
200 % SSS Swath	1	combined	combined	combined	combined

There were two Chart Enlargements submitted with this survey covering the respective Field Sheets.

All survey data will be sent to the Atlantic Hydrographic Section for verification.

SEE OTHER TWO INSETS FOR "J"

**OPR-J343-MI/AHP  
ENLARGEMENT FOR SHEET J  
FROM APPROVED  
CY 96 SHEET LAYOUT**

**J**

27° 54'

52'

**INSET**

60'

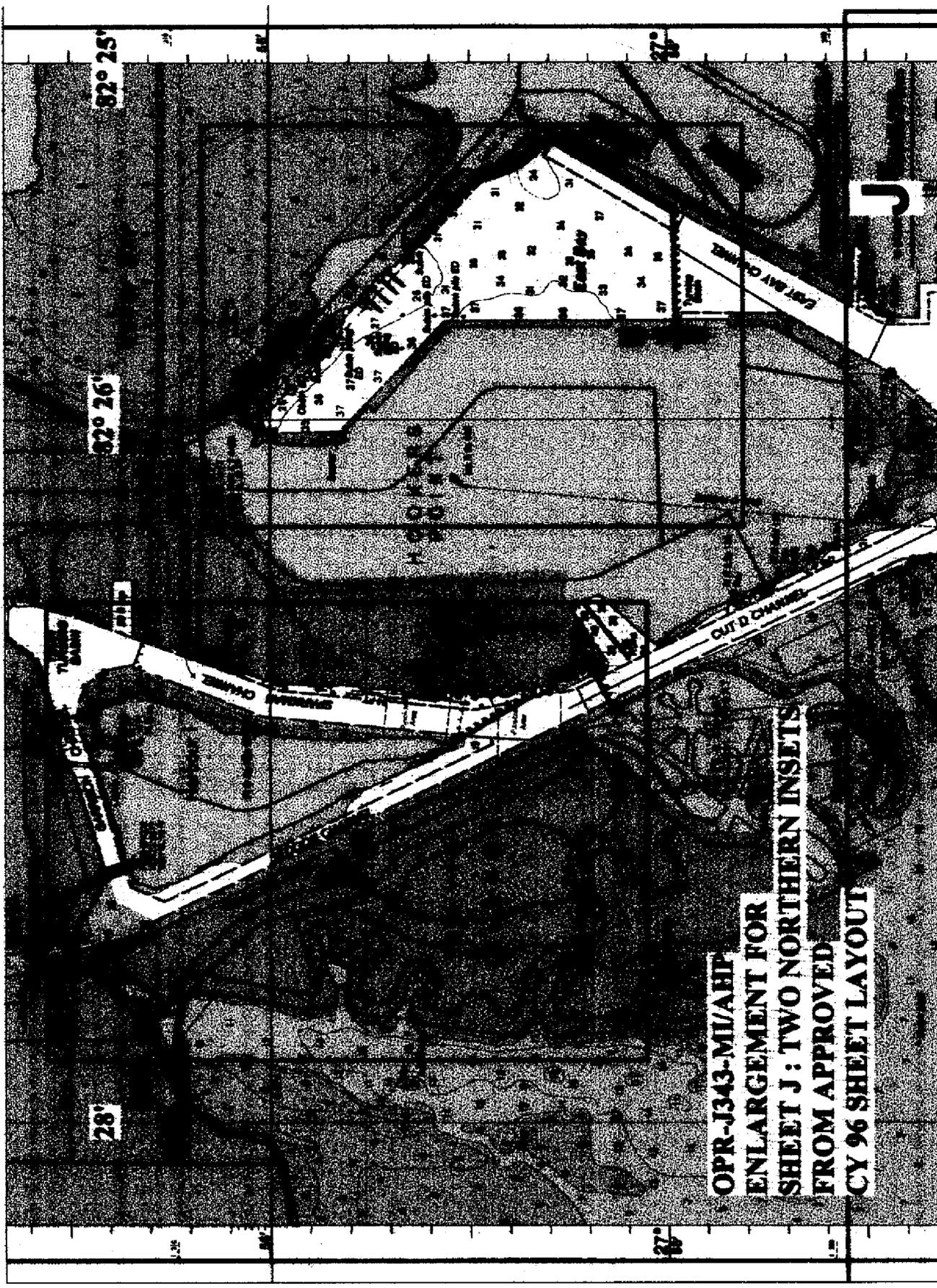
**H-10623**

28'

32° 25'

24'

Chart 11413



OPR-J343-MI/AHP  
ENLARGEMENT FOR  
SHEET J: TWO NORTHERN INSETS  
FROM APPROVED  
CY 96 SHEET LAYOUT

J

DESCRIPTIVE REPORT TO ACCOMPANY  
HYDROGRAPHIC SURVEY H-10709  
FIELD NO. AHP-10-8-96

SCALE: 1:10,000

1996

ATLANTIC HYDROGRAPHIC PARTY TWO  
CHIEF OF PARTY: LT James A. Illg, NOAA

**A. PROJECT**

This survey was conducted according to Hydrographic Project Instructions OPR-J343-AHP, Tampa Bay, Florida, dated March 12, 1996 and change No. 1, dated March 19, 1996.

This project called for a 200% side scan sonar survey in water depths deeper than six meters. In depths less than six meters, single beam hydrography at 25-meter line spacing was conducted in accordance with the chartlet which depicts the survey limits.

The purpose of project OPR-J343-AHP is to respond to requests from the Tampa Bay Pilots, the Tampa Bay Marine Advisory Council, local port authorities, the Seventh U.S. Coast Guard District, and the U.S. Army Corps of Engineers (USACE). The primary users of the shipping lanes have requested modern hydrography of the areas adjacent to the USACE dredged channels. The majority of the CY 1996 project area was last surveyed by the Coast and Geodetic Survey (C&GS) in 1957-1958.

The sheet letter is "J" as specified by the Project Instructions.

**B. AREA SURVEYED**

The area surveyed for H-10709 is Tampa Bay, Florida, from Gadsden Pt. to the Davis Islands . The approximate survey limits are:

North: 27° 56' <sup>30</sup>17"N  
South: 27° 47' 21"N  
East : 082° 23' 45"W  
West : 082° 29' 33"W

This survey was conducted from August 23, 1996 (DN 236) through October 22, 1996 (DN 296).

### C. SURVEY VESSELS

NOAA launches 0518 and 0519, both 21-foot MonArks, were used to collect all survey data. There were no unusual vessel configurations or problems encountered with the vessels.

### D. AUTOMATED DATA ACQUISITION AND PROCESSING *See also Evaluation Report*

Coastal Oceanographic, Inc. HYPACK version 5.9 was used for on-line data acquisition. A list of all HP-DPS programs and versions used for data processing can be found in the appendix of this report. The NOS programs VELOCITY (Ver. 2.10) and WordPerfect (Ver. 6.1) were also used during this survey.

### E. SONAR EQUIPMENT

An Edge Tech model 260-TH image correcting side scan sonar recorder (S/N 020417) with a model 272-TD towfish (S/N 020892), was used throughout this survey. The side scan sonar equipment was used to conduct dual beam surveying and investigate AWOIS items using NOAA launch 0518. The system frequency used was 100 kHz. The recorder was set on 50/75/100-meter range scales. There were no water depths greater than 15.6 meters. The confidence checks were performed daily on existing buoys in the Tampa Bay channels at 100kHz.

A coverage of 200% was obtained in all the required survey areas and AWOIS items where water depth and/or hazards permitted. Side scan sonar coverage was conducted to the six-meter curve and single beam 25-meter line spacing was performed in areas less than the six meters. The towfish was deployed off the starboard quarter of the vessel, which proved very stable. Distorted images caused by strong tidal currents were seen periodically. All contacts and shadows were manually scaled and entered into an HDAPS contact table to determine the height off the bottom. These heights were then edited with an offset height ratio applied, and were compared with the single beam depths in order to determine their significance. The significant contacts were then compared by position as well as common depth and relationship to channels to determine if diver investigations were warranted. A total of 89 diver investigations were made on this survey, utilizing a Diver Hand Held sonar (DLS) as the primary targeting tool. All areas surveyed were track line/swath line plotted to insure complete coverage.

### F. SOUNDING EQUIPMENT

Two Innerspace model 448 depth sounders, S/Ns 175 and 186, were used to collect all echo soundings on this survey. A standard lead line calibrated in meters, S/N 0518 or S/N 0519, was used during this survey for comparison with the echo sounder. No problems were encountered with any of the sounding equipment.

## G. CORRECTIONS TO ECHO SOUNDINGS

Correctors for the velocity of sound through water were determined from the casts listed below:

<u>Cast No.</u>	<u>Table No.</u>	<u>Deepest Depth(m)</u>	<u>Applicable DN(s)</u>	<u>Cast Position</u>		<u>Day Taken</u>
1	1	18.1	236	27°54'42"N	082°26'30"W	236
2	2	18.9	239	27°54'30"N	082°25'42"W	239
3	3	14.7	249	27°51'22"N	082°23'54"W	249
4	4	19.7	250-256	27°48'54"N	082°26'48"W	253
5	5	18.8	260-264	27°48'48"N	082°26'54"W	262
6	6	18.6	270-271	27°49'48"N	082°26'42"W	270
7	7	18.6	274-281	27°49'42"N	082°26'42"W	275
8	8	19.0	285	27°54'00"N	082°26'15"W	285
9	9	19.6	296	27°48'24"N	082°27'18"W	296

The instrument used for determining corrections for the speed of sound through the water column was a Seabird-Seacat Velocity Profiler, model 19-03, S/N 198671-1477. This unit was calibrated by the manufacturer on December 22, 1995. Data quality assurance tests were performed after each cast. Program VELOCITY was used for computing the correctors. Corrections were applied to the sounding plot using the HDAPS REAPPLY program. Copies of the velocity tables and support documentation are in the "Survey Separates." \*

The lead lines for launch 0518 and 0519 were calibrated using a steel tape on March 29, 1996. No corrections were necessary. A copy of the calibration form is in the "Survey Separates." \*

A static draft of 0.3 meters was applied to the final sounding plot by the HDAPS REAPPLY program. The draft was measured by subtracting the difference from a punch mark on the side of both launch 0518 and 0519, 0.6 meter above the transducer, to the water surface.

Settlement and squat measurements for launch 0518 and 0519 were taken on March 28, 1996 (DN088). These measurements were conducted in the Tampa Bay Ship Channel using the level method. The data from this test is included in the "Survey Separates." \*Settlement and squat correctors were applied to the final sounding plot using the HDAPS REAPPLY program.

For hydrography in Tampa Bay and its approaches, St. Petersburg station 872-6520 was the reference station for predicted tides. The Product and Services Branch, Datums Section, N/OES231, provided predicted tides for this reference station on diskette for HDAPS. Correctors for three tidal zones on sheet "H" were used as designated by the project instructions.

\* Data filed with the original field records.

The zones were numbered with the following applicable correctors:

	<u>Time (min.)</u>		
	<u>High Water</u>	<u>Low Water</u>	<u>Range Ratio</u>
Zone # 4	+ 10 min	+ 10 min	x1.10
Zone # 5	+ 20 min	+ 20 min	x1.14
Zone # 6	+ 20 min	+ 20 min	x1.18

There were periods of extreme water levels noted during hydrography that were weather induced, causing minor sounding differences. These variances will be corrected when smooth tides are applied.

All elevations and soundings on survey H-10709 are based on MLLW unless otherwise specified.

Approved tide levels were requested from the Product and Services Branch, Datums Section, N/OES231, in a letter dated December 10, 1996. A copy is appended to this report.

*Approved tides & zoning were applied during office processing*

All tides gauges required for survey H-10709, with the exception of the gage at Ballast Point (872-6639) which was installed and maintained by personnel from the Atlantic Hydrographic Party, are part of the PORTS Program and were verified to be operational by phone contact with Mr. Mark Luther, Chief Operations Officer, Greater Tampa Bay Marine Advisory Council. PORTS, Inc is the Tampa Bay PORTS Manager.

#### H. CONTROL STATIONS *See also Evaluation Report*

The horizontal control datum for this project is the North American Datum (NAD) of 1983. The control reference station used for this survey was the USCG DGPS Egmont Key beacon, located at 27°36'01.482"N, 082°45'37.145"W. The Control Station List is appended to this report. \*

*\* Data filed with original field records*

#### I. HYDROGRAPHIC POSITION CONTROL

Differential GPS (DGPS) was used for all hydrographic data acquired on this survey. An Ashtech sensor (S/N 700417A1065) and antenna (S/N 70039A10542) were used as the remote station on launch 0518. An Ashtech sensor (S/N 700417B1207) and antenna (S/N 700378A0232) were used as the remote station on launch 0519.

DGPS performance checks were conducted in accordance with FPM 3.4.4, by comparing the DGPS position of the vessel to the position of calibration point 1 at Apollo Beach, FL, located at 27°49'04.56"N, 082°25'27.66"W. To obtain a performance check, the launch was brought alongside the checkpoint and the easting, northing, number of SVs, HDOP, and time of observation were noted on the echogram. These values were then entered into a Lotus spreadsheet table which would compute the acceptable error margin (based on the HDOP) and

also our observed difference between the known and observed position. The table of these comparisons is included in the "Survey Separates." \*All of the observed differences fell well within the allowable limit.

*\* Data filed with original field records*

J. SHORELINE *See also Evaluation Report*

There was no photogrammetric source data for this project.

K. CROSSLINES

A total of 17.1 linear nautical miles of crosslines were run, which is approximately 5% of the main scheme hydrography mileage. This 5% value is misleading as major portions of the single beam hydrography ran orthogonally to and overlapped the side scan hydrography. These overlapping data were not included in the crossline percentage, although it served the same purpose. Crossline soundings agree with the main scheme soundings within 0.2 meter, with the exception of some 0.5 meter differences caused by weather influence on the tides. The application of smooth tides will create a closer agreement in sounding comparison.

L. JUNCTIONS *See also Evaluation Report*

This survey junctions with the following:

<u>Survey No. / Sheet</u>	<u>Year</u>	<u>Scale</u>	<u>Junction Area</u>
H-10623	1995	1:10,000	Southwest

Junction soundings between the present survey and the junction survey are in close agreement, with differences of 0.2 meters or less.

M. COMPARISON WITH PRIOR SURVEYS

See the Atlantic Hydrographic Branch's "Evaluation Report for H-10709."

N. ITEM INVESTIGATION REPORTS *See also Evaluation Report*

There were a total of 34 AWOIS items addressed for this survey. Methods for investigating the AWOIS items were side scan sonar (SSS) search, diver investigations, and sounding data. All AWOIS reports are appended to this report. In addition to the 34 AWOIS items, there were a total of 13 SSS contacts resolved by diver investigations.

The following procedure was used on all diver investigations:

- 1) After compiling contact tables for all SSS contacts and then transferring them to a HYPACK target file for positioning purposes, divers were deployed on these targets with a buoy drop.
- 2) Divers would then descend the buoy line to begin a circular sweep, noting any compass bearings on return signals from the Diver Locator Sonar (DLS-1). Progressive range scale sweeps were made on the 20, 60, and 120m scale ranges to determine the strongest signal return to investigate.
- 3) Upon isolating a contact, the diver would then swim to the contact with the dive buoy and diver least depth gage.
- 4) Once the contact was located, a least depth (LD) and description was obtained and relayed to the surface by wireless diver to surface communications. The survey launch was called over to the tightly strung diver buoy to obtain a survey position on the LD. Following this information relay, a second DLS-1 sweep was conducted from the top of the contact, the point at which the LD was obtained, to determine if any shoaler contacts existed within the area. If any additional contacts were noted, the divers would follow the above search method to investigate them as well.

After conducting all diver investigations, the positions computed using the HDAPS contact tables were compared with each dive's least depth and position to check for other contacts which warranted investigation and were outside of an approximate 60-meter radius from investigated contacts. Contacts were deemed insignificant if their height off the bottom was less than a feature which was already investigated nearby. The table used for determining the significance of contacts to further investigate and their relative position to AWOIS items is included in the appendix of this report.

#### O. COMPARISON WITH THE CHART *See also Evaluation Report*

Comparison was made with the following charts:

<u>Chart No.</u>	<u>Edition</u>	<u>Edition Date</u>
11412	36th	June 04/94
11413	41st	Apr 22/95
11414	36th	June 04/94

Most survey soundings were found 0.5-1.0 meter deeper than those currently charted. A few survey soundings are as much as three meters deeper. A comparison of this survey with the charted listed depths for the channels on this survey follows.

Hillsborough Bay

Gadsden Pt. Cut (C.O.E. Maintained)

1) Published Controlling Depth:

LOQ=43'                  LIQ=43'                  RIQ=43'                  ROQ=43'

2) Surveyed Controlling Depth:

LOQ=41.3' (12.6m)	LIQ=45.9' (14.0m)	RIQ=45.9' (14.0m)	ROQ=42.3' (12.9m)
27°48'07.9"N	27°47'58.4"N	27°47'57.2"N	27°47'57.2"N
082°28'17.5"W	082°28'39.4"W	082°28'37.8"W	082°28'33.0"W
Fx:991	Fx:1639	Fx:884	Fx:1764

3) The channel is buoyed at 175 meter (574 feet) width; the published width is 500 feet.

Cut "A" Channel (C.O.E. Maintained)

1) Published Controlling Depth:

LOQ=42.8'                  LIQ=43'                  RIQ=43'                  ROQ=41.7'

2) Surveyed Controlling Depth:

LOQ=44.9' (13.7m)	LIQ=46.5' (14.2m)	RIQ=45.2' (13.8m)	ROQ=43.9' (13.4m)
27°48'18.9"N	27°48'21.5"N	27°48'25.5"N	27°48'12.1"N
082°27'45.7"W	082°27'35.8"W	082°27'27.7"W	082°27'51.9"W
Fx:1670	Fx: 920	Fx:925	Fx:1740

3) The channel is buoyed at 145 to 175 meter (475-574 feet) width; the published width is 500 feet.

Cut "C" Channel (C.O.E. Maintained)

1) Published Controlling Depth:

LOQ=38.0'                  LIQ=42.7'                  RIQ=43'                  ROQ=42.3'

2) Surveyed Controlling Depth:

LOQ=39.0' (11.9m)	LIQ=41' (12.5m)	RIQ=42.6' (13.0m)	ROQ=41.3' (12.6m)
27°49'00.8"N	27°48'53.5"N	27°48'47.5"N	27°48'39.6"N
082°26'57.7"W	082°27'00.2"W	082°26'53.0"W	082°26'54.4"W
Fx:6627	Fx:6217	Fx:3774	Fx:3505

3) The channel is buoyed at 145 to 200 meter (475-656 feet) width; the published width is 500 feet.

Cut "D" Channel (Seddon Channel) (C.O.E. Maintained)

1) Published Controlling Depth:

LOQ=31.2'	LIQ=34'	RIQ=34'	ROQ=34'
-----------	---------	---------	---------

2) Surveyed Controlling Depth:

LOQ=30.1' (9.2m)	LIQ=32.4' (9.9m)	RIQ=39.0' (11.9m)	ROQ=38.0' (11.6m)
27°55'23.3"N	27°55'13.0"N	27°55'20.0"N	27°55'12.3"N
082°26'55.1"W	082°26'49.6"W	082°26'51.3"W	082°26'47.2"W
Fx:93+2	Fx:87	Fx:179	Fx:184

3) Note that only the top part of Cut "D" channel was surveyed, as requested by the Tampa Bay pilots, and that the above listed controlling depths pertain only to this section.

East Bay

1) Soundings within the surveyed area were found to agree within 2 feet (0.6m) with those currently charted. *Concur*

2) The East Bay Channel and its turnings basins were not within the survey limits.

Alafia River and Approach Channel (Privately Maintained)

The charted controlling depth for the approach is charted as "24 feet for a width of 200 feet 1994." The surveyed controlling depth was found to be 34.1 ft (10.4m) at 27°51'01.3"N, 082°24'57.7"W, at HDAPS position 728. This depth can be maintained for a <50 meter ( 164 feet ) width throughout the length of the approach. This is a very narrow channel approach with limited access for commercial vessels, which is predominantly tug and barge traffic carrying either bulk liquid or bulk solid hazardous cargo. *See section 0.2, in The Evaluation Report*

Big Bend Channel (Privately Maintained)

- 1) The charted controlling depth for the approach is 24 feet (7.3m), 1980. The controlling depth surveyed was found to be 36.4 feet (11.1m) at 27°48'38.2"N, 082°29'<sup>6</sup>49.1"W, position 7056.
- 2) The channel is buoyed at 75 meters (246 feet) width. There is no published width.
- 3) This channel is used by commercial traffic supplying bulk hazardous cargo to the power plant located at the end of the channel. The north side of the channel entrance is bounded by a shoal at 27°48'38.1"N, 082°26'37.5"W with a depth of 18.0 feet (5.5m), position 3496. The south side of the approach entrance is bounded by a shoal extending from a spoil island, with depths as follows:

11.4 ft.(3.5m)	Fx: 4637+1	27°48'35.4"N	082°26'54.5"W
18.0 ft (5.5m)	Fx: 3370	27°48'35.6"N	082°26'46.8"W
14.4 ft (4.4m)	Fx: 3373	27°48'35.1"N	082°26'41.2"W

- 5) A representative from the power plant which maintains this channel reported that dredging is planned for 1997.

P. ADEQUACY OF SURVEY

This basic hydrographic survey conducted under the navigable area concept is complete and adequate to supersede all prior surveys within the common area.

Q. AIDS TO NAVIGATION

The following non-floating aids to navigation are maintained by the U. S. Coast Guard and lie within the survey area. All of the aids serve their intended purpose. Positions of all aids to navigation were determined by DGPS during hydrographic operations. Equipment and personnel resources were not available for third-order positions of all the non-floating navigational aids. A comparison of the positions of the fixed aids located on this survey was made with the charted and USCG Light List, Volume 3, 1996 positions. The results are shown in the following table:

<u>Position No.</u>	<u>Name and (Light List No.)</u>	<u>Light List Position</u>	<u>Survey Position</u>	<u>Distance/Bearing from Charted Position</u>
<i>Hillsborough Bay - Alafia River</i>				
827	Light 12 (LL# 20680)	none	27°51'05.01"N 082°24'31.66"W	On Station
831	Daybeacon 13 (LL# 20685)	none	27°51'13.79"N 082°24'05.29"W	On Station

832	Daybeacon 11 (LL# 20675)	none	27°51'08.53"N 082°24'32.60"W	On Station
834	Daybeacon 9 (LL# 20665)	none	27°51'02.73"N 082°25'02.19"W	On Station
835	Light 7 (LL# 20655)	none	27°50'57.92"N 082°25'27.81"W	On Station
836	Light 8 (LL# 20660)	none	27°50'54.98"N 082°25'25.86"W	On Station
837	Light 6 (LL# 20650)	none	27°50'49.78"N 082°25'51.60"W	On Station
855	Range Front Light (LL# 20620)	27°50.7"N 082°26.9"W	27°50'40.59"N 082°26'51.92"W	71m/127°19' *
<i>Hillsborough Bay - Hillsborough Cut C Channel</i>				
843	North RNG Front Light (LL# 20815)	27°54.4"N 082°26.3"W	27°54'26.16"N 082°26'18.02"W	66m/ 359°31' *
<i>Hillsborough Bay - Port Sutton Channel</i>				
846	Range Front Light (LL#20935)	27°53.9"N 082°26.5"W	27°53'56.89"N 082°26'29.49"W	90m/ 008°54' *
847	Range Rear Light (LL# 20940)	none	27°53'51.31"N 082°26'37.83"W	On Station
<i>Hillsborough Bay -Hillsborough Cut A Channel</i>				
865	Range Front Light (LL# 20395)	27°48.8"N 082°26.7"W	27°48'48.85"N 082°26'40.04"W	59m/ 063°59' *
<i>Hillsborough Bay -Gadsden Point Cut</i>				
877	Cut C Channel South Range Front Light (LL# 20280)	27°48.5"N 082°26.9"W	27°48'33.56"N 082°26'54.47"W	110m /353°18' *
<i>Hillsborough Bay -Big Bend Channel</i>				
880	West Range Front Light (LL# 20415)	27°48.7"N 082°27.5"W	27°48'40.87"N 082°27'26.99"W	89m/112°53' *
<i>Hillsborough Bay - Hillsborough Cut D Channel</i>				
14289	Range Rear Light Cut "D" (LL# 20865)	none	27°53'38.40"N 082°25'56.42"W	On Station

\* These aids were found on station when compared with the chart. The distance and bearing listed is the difference between the surveyed position and the published USCG Light List, Volume 3, 1996 position.

#### R. STATISTICS

<u>Description</u>	<u>Quantity</u>
Total Number of Positions	14331
Total Linear Nautical Miles of Hydrography	379.29
Total Linear Nautical Miles of Cross Lines	17.10
Total Linear Nautical Miles of Development	239.22
Total Linear Nautical Miles of (SSS) Hydrography	140.07
Square Nautical Miles of Hydrography	6
Days of Production	21
Detached Positions	94
Bottom Samples	23
Velocity Casts	9

#### S. MISCELLANEOUS

Bottom samples were taken as directed in Section 6.7 of the Project Instructions. Bottom sample positions and descriptions can be found on the DP editor printout appended to this report. The Oceanographic Log Sheet-M, NOAA Form 75-44, is included in the "Survey Separates." Bottom sample were submitted to the Smithsonian Institution as requested in the Project Instructions.

Secchi disk observations were not acquired on this survey due to the continually poor water clarity.

No anomalous tidal currents were observed within the survey limits.

#### T. RECOMMENDATIONS

No additional field work was identified after field processing was completed. Specific recommendations are made on the Item Investigation Reports appended, and in section O of this report.

**U. REFERRAL TO REPORTS**

**Title**

**Transmittal Information**

**Descriptive Reports for  
H-10606 and H-10623**

**Atlantic Hydrographic Branch  
N/CS331, Norfolk, VA (1995)**

**User Evaluation Report**

**Atlantic Hydrographic Branch  
N/CS331, Norfolk, VA (June 1996)**

**Coast Pilot Report**

**Atlantic Hydrographic Branch  
N/CS331, Norfolk, VA (April 1996)**

**Submitted by:      Robert W. Ramsey Jr.  
Hydrographer in Charge Launch 0519  
Atlantic Hydrographic Party**

**AWOIS NO: 8812**

**Item Description:** Sunken Dredge

**Source:** CL866/83--USPS, LNM22/84--7th CGD, CL236/90--USPS

**AWOIS Position:** Lat - 27/48/31.09N Lon - 082/27/59.34W

**Required Investigation:** VS, SD, S2, ES, BD, DI -- 100m Radius

**Charts Affected:** 11412, 11413

---

**INVESTIGATION**

**Date(s)/DN(s):** 09/06/96 (DN:250)

**Position Numbers:** 1185-1275,1350-1445

**Launch Number:** 0518

**Investigation Used:** S2, VS, ES, DI

**Water Visibility:** 1m

**Position Determined By:** DGPS

**Investigation Summary:** This feature fell within the limits of the 200% coverage side scan sonar survey required for this project. There were no contacts found within the search radius of this charted wreck (ED).

---

**CHARTING RECOMMENDATION**

The hydrographer recommends that the charted wreck ED be removed from the chart.

**Recommended Position:** Lat -

Lon -

*Concur*

**Recommended Least Depth:**

\*\*\*\*\*

**COMPILATION NOTES**

Chart

Applied As

AWOIS NO: 8813

Item Description: Big Bend Channel (Sounding)

Source: CL443/82--Tampa Electric Co.

AWOIS Position: Lat - 27/48/30.00N Lon - 082/25/42.00W

Required Investigation: ES

Charts Affected: 11412, 11413

INVESTIGATION

Date(s)/DN(s): 09/13/96 (DN:257)

Position Numbers: 3295-3506

Launch Number: 0518

Investigation Used: ES, S2

Water Visibility: 2m

Position Determined By: DGPS

Investigation Summary: The controlling depth for Big Bend channel in Tampa Bay was investigated using basic hydrography and side scan sonar. The AWOIS reported depth was approximately 100 feet south of the centerline, from centerline "A" CUT to Agrico dock. The soundings in this area range from 6.9 m (22.6 ft) to 7.2 m (23.6 ft) corrected by predicted tides. These depths agree with the reported depth of 23.8 ft from 1982. The centerline controlling depth is 11.2 m (36.7 ft) at 27°48.5' N, 082°25.4' W. According to Mr. Bill Salmon, Tampa Electric Co. engineer (phone 813- 228-1080) this channel is scheduled for dredging in 1998-99.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted reported depth be updated with verified soundings from H-10709 at the following location: *Concur w/clarification O.I.A. see section 0.1.1 in the Evaluation Report*

Recommended Position: AWOIS position listed above

Recommended Least Depth: 22.6 ft @ MLLW w/ predicted tides. —

\*\*\*\*\*

COMPILATION NOTES

Chart

Applied As

**AWOIS NO: 8814**

**Item Description:** Obstruction (24 Dredging Piles)

**Source:** BP67611/64--Tampa Electric Co.

**AWOIS Position:** Lat - 27/48/41.00N Lon - 082/26/48.00W

**Required Investigation:** VS, S4, BD

**Charts Affected:** 11412, 11413

**INVESTIGATION**

**Date(s)/DN(s):** 09/13/96 (DN:257)

**Position Numbers:** 3507-3566

**Launch Number:** 0518

**Investigation Used:** VS, ES, DI

**Water Visibility:** 2m

**Position Determined By:** DGPS

**Investigation Summary:** These features were within the limits of the 200% coverage side scan sonar survey in the Big Bend channel of Tampa Bay required for H-10709. There were no contacts found along this channel which corresponded to the locations of the dredging piles.

**CHARTING RECOMMENDATION**

The hydrographer recommends that the submerged piles be removed from the chart. *Concur*

**Recommended Position:** Lat - Lon -

**Recommended Least Depth:**

\*\*\*\*\*

**COMPILATION NOTES**

Chart

Applied As

**AWOIS NO: 8815**

**Item Description:** Obstruction (Unknown 27-Ft Vessel)

**Source:** LNM 11/85--7TH CGD

**AWOIS Position:** Lat - 27/50/43.69N Lon - 082/26/21.53W

**Required Investigation:** S2, BD, ES, SD -- 100m Search Radius

**Charts Affected:** 11412, 11413

---

**INVESTIGATION**

**Date(s)/DN(s):** 09/12/96 (DN:256)

**Position Numbers:** 3128-3294

**Launch Number:** 0518

**Investigation Used:** VS, ES, DI

**Water Visibility:** 2m

**Position Determined By:** DGPS

**Investigation Summary:** This charted wreck was within the limits of the 200% coverage side scan sonar survey conducted along the Alafia channel in Tampa Bay for H-10709. There was one contact in this area which was found by diver investigation to be a concrete pile lying flat on the bottom. There were no signs or contacts of any wrecks in this area.

---

**CHARTING RECOMMENDATION**

The hydrographer recommends that the wreck be removed from the chart. *Concur*

**Recommended Position:** Lat -

Lon -

**Recommended Least Depth:**

\*\*\*\*\*

**COMPILATION NOTES**

Chart

Applied As

**AWOIS NO: 8816-8830**

**Item Description:** 15 Steel Pipe Warning Signs

**Source:** CL162/80—State of Florida /Dept. of Natural Resources

**AWOIS Position:** Lat - 27/50/40.50N Lon - 082/26/27.50W

**Required Investigation:** SD, S4, BD, VS

**Charts Affected:** 11412, 11413

---

**INVESTIGATION**

**Date(s)/DN(s):** 09/05/96 (DN:249), 09/12/96 (DN:256)

**Position Numbers:** 687-825, 829-830, 833, 3128-3294

**Launch Number:** 0518

**Investigation Used:** VS, ES, DI

**Water Visibility:** 2m

**Position Determined By:** DGPS

**Investigation Summary:** These features were within the limits of the 200% coverage side scan sonar survey conducted along the Alafia river channel in Tampa Bay for H-10709. Only three of the fifteen piles were found. There was no evidence of the remaining 12 piles in the side scan records.

---

**CHARTING RECOMMENDATION**

The hydrographer recommends that three pile/signs be charted at the following locations:

**Recommended Position:** Lat - 27/51/11.<sup>54</sup>N Lon -082/23/55.3<sup>6</sup>W (position 82<sup>2</sup>8) *CONCUR*  
27/51/15.3<sup>57</sup>N 082/23/56.1<sup>6</sup>W (position 824) *830*  
27/51/03.5N 082/24/59.8<sup>6</sup>W (position 826) *833*

**Recommended least depth:**

\*\*\*\*\*

**COMPILATION NOTES**

Chart

Applied As

**AWOIS NO: 8831**

**Item Description:** Obstruction (Iron Rail)

**Source:** H8380/57

**AWOIS Position:** Lat - 27/51/12.09N Lon - 082/24/17.83W

**Required Investigation:** BD, VS, DI -- 30m Search Radius

**Charts Affected:** 11412, 11413

**INVESTIGATION**

**Date(s)/DN(s):** 10/22/96 (DN:296)

**Position Numbers:** 14330

**Launch Number:** 0518

**Investigation Used:** VS, ES, DI

**Water Visibility:** 2m

**Position Determined By:** DGPS

**Investigation Summary:** A diver circle search using the Diver Locator Sonar (DLS-1) was conducted at the 20, 60 and 120 meter range scales in this AWOIS area. In addition to the DLS-1 investigation, a 50-meter conventional dive search/sweep with line deployed on the bottom was performed at this site as part of Phase II testing for the DLS-1. The water was one meter deep and had a sandy bottom. There were no contacts and the result of this search for the exposed iron rail was negative.

**CHARTING RECOMMENDATION**

The hydrographer recommends that the obstruction be removed from the chart. *Concur*

**Recommended Position:** Lat - Lon -

**Recommended Least Depth:**

\*\*\*\*\*

**COMPILATION NOTES**

Chart

Applied As

**AWOIS NO: 8832**

**Item Description:** Obstruction (Iron Rail)

**Source:** H8380/57

**AWOIS Position:** Lat - 27/51/13.39N Lon - 082/24/17.63W

**Required Investigation:** BD, VS, DI

**Charts Affected:** 11412, 11413

---

**INVESTIGATION**

**Date(s)/DN(s):** 10/22/96 (DN:296)

**Position Numbers:** 14331

**Launch Number:** 0518

**Investigation Used:** VS, ES, DI

**Water Visibility:** 2m

**Position Determined By:** DGPS

**Investigation Summary:** A diver circle search using the Diver Locator Sonar (DLS-1) was conducted at 20, 60 and 120 meter range scales in this AWOIS area. In addition to the DLS-1 investigation, a 50-meter conventional dive search/sweep with a line deployed on the bottom was performed at this site as part of Phase II testing for the DLS-1. The water was one meter deep and had a sandy bottom. There were no contacts and the result of this search for the exposed iron rail was negative.

---

**CHARTING RECOMMENDATION**

The hydrographer recommends that the obstruction be removed from the chart. *Concur*

**Recommended Position:** Lat -

Lon -

**Recommended Least Depth:**

\*\*\*\*\*

**COMPILATION NOTES**

Chart

Applied As

**AWOIS NO: 8833-8842**

**Item Description:** Obstruction (10 Survey Piles)

**Source:** CL341/67--Tampa Port Authority, CL1035--USPS

**AWOIS Position:** Lat - 27/55/<sup>31</sup>~~13~~.00N Lon - 082/25/42.70W

**Required Investigation:** S2, BD - 50m Search Radius

**Charts Affected:** 11412, 11413

---

**INVESTIGATION**

**Date(s)/DN(s):** 08/26/96 (DN:239)

**Position Numbers:** 210-686

**Launch Number:** 0518

**Investigation Used:** VS, ES, S2

**Water Visibility:** 2m

**Position Determined By:** DGPS

**Investigation Summary:** The ten piles in East Bay fell within the limits of the 200% coverage side scan sonar survey conducted for H-10709. There were no contacts and the result of this search with regard to the submerged piles was negative. The Tampa Bay Port Authority was contacted about these items and conducted their own search. On September 27, 1996 the Atlantic Hydrographic Party received a letter from Mr. Steven L. Fidler of the Tampa Port Authority acknowledging they had completed their field survey of the 11 sites in East Bay. The results of that survey indicated no obstructions or physical evidence of any pilings existing at any of the 11 sites. This letter can be found in the supplemental correspondence in the appendix of the Descriptive Report for H-10709. A copy is attached to this report as well.

---

**CHARTING RECOMMENDATION**

The hydrographer recommends that submerged piles be removed from the chart. *Concur*

**Recommended Position:** Lat -

Lon -

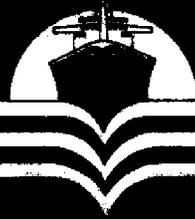
**Recommended Least Depth:**

\*\*\*\*\*

**COMPILATION NOTES**

Chart

Applied As



Florida's Largest Port

September 27, 1996

Lt. Scott A. Shaulis, NOAA  
Atlantic Hydrographic Party  
c/o Apollo Beach Marina  
6513 Surfside Blvd.  
Apollo Beach, FL 33572

Re: AWOIS Update

Dear Lt. Shaulis:

The Tampa Port Authority has conducted field surveys of the 11 sites of suspected obstructions in East Bay, Tampa Harbor. The results of that survey indicate no obstructions and no physical presence of any pilings in any of the 11 sites. These obstructions can be removed from your list.

If you need any further information please let me know.

Sincerely,

Steven L. Fidler  
Operations Manager

SLF/jf  
Enclosure.

**GEORGE B. HOWELL MARITIME CENTER**

POST OFFICE BOX 2192 • 811 WYNKOOP ROAD • TAMPA, FLORIDA 33601-2192 • 813/272-0555 • FAX 813/272-0570

AN EQUAL OPPORTUNITY EMPLOYER

**AWOIS NO: 8843**

**Item Description:** Obstruction (Unknown)

**Source:** BP98154/60--C&GS, CL1035/82--USPS

**AWOIS Position:** Lat - 27/55/56.50N Lon - 082/25/55.00W

**Required Investigation:** S4, BD -- 75m Search Radius

**Charts Affected:** 11412, 11413

---

**INVESTIGATION**

**Date(s)/DN(s):** 08/26/96 (DN:239)

**Position Numbers:** 210-686

**Launch Number:** 0518

**Investigation Used:** VS, ES, DI

**Water Visibility:** 2m

**Position Determined By:** DGPS

**Investigation Summary:** The obstruction in East Bay fell within the limits of the 200% coverage side scan sonar survey conducted in this area for H-10709. There were no contacts seen in the side scan records and the result of the search for this obstruction was negative. The Tampa Bay Port Authority was contacted about the 11 items in East Bay (numbers 8833-8842) and conducted their own search. On September 27, 1996 the Atlantic Hydrographic Party received a letter from Mr. Steven L. Fidler of the Tampa Port Authority acknowledging they had completed their field survey of the 11 items in East Bay. The results of that survey indicated no obstructions or physical evidence of any pilings or obstruction exist at any of the 11 items. This letter can be found in the supplemental correspondence in the appendix of the Descriptive Report for H-10709. A copy is attached to this report as well.

---

**CHARTING RECOMMENDATION**

The hydrographer recommends that the obstruction ED be removed from the chart. *Concur*

**Recommended Position:** Lat -

Lon -

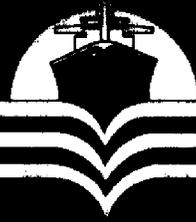
**Recommended Least Depth:**

\*\*\*\*\*

**COMPILATION NOTES**

Chart

Applied As



Florida's Largest Port

September 27, 1996

Lt. Scott A. Shaulis, NOAA  
Atlantic Hydrographic Party  
c/o Apollo Beach Marina  
6513 Surfside Blvd.  
Apollo Beach, FL 33572

Re: AWOIS Update

Dear Lt. Shaulis:

The Tampa Port Authority has conducted field surveys of the 11 sites of suspected obstructions in East Bay, Tampa Harbor. The results of that survey indicate no obstructions and no physical presence of any pilings in any of the 11 sites. These obstructions can be removed from your list.

If you need any further information please let me know.

Sincerely,

Steven L. Fidler  
Operations Manager

SLF/jf  
Enclosure.

GEORGE B. HOWELL MARITIME CENTER

POST OFFICE BOX 2192 • 811 WYNKOOP ROAD • TAMPA, FLORIDA 33601-2192 • 813/272-0555 • FAX 813/272-0570

AN EQUAL OPPORTUNITY EMPLOYER

AWOIS NO: 9379

Item Description: Unknown (Subm. Wk-35Ft Sailing Vessel)

Source: LNM/30/93--7TH CGD

AWOIS Position: Lat - 27/48/00.80N Lon - 082/28/00.60W  
Actual Reported Pos.: 27/48/48.00N 082/28/36.00W

Required Investigation: S2, ES, BD, SD -- 200m Search Radius

Charts Affected: 11412, 11413

INVESTIGATION

Date(s)/DN(s):

Position Numbers:

Launch Number: 0518

Investigation Used: VS, ES, DI

Water Visibility: 2m

Position Determined By: DGPS

Investigation Summary: The 35 ft sailing vessel listed on the AWOIS report as a submerged wreck was mistakenly positioned because of a typographical error in originally reporting this item. The actual position of this wreck was 2000 meters NNW. This position fell outside of the survey limits for OPR-J343-MI/AHP. Due to the time constraints and actual position of this wreck, no investigation was conducted. A phone call with Mr. Mike Lieberman, the LNM editor at 7th CGD (phone 305-536-5621) revealed this wreck was deleted by LNM38/96 at the erroneously reported position which would have fallen within our survey limits and is now considered by LNM to be at the location 2000 meters NNW.

CHARTING RECOMMENDATION

The hydrographer makes no recommendation for this feature. *Do not Concur  
See section 0.1. in the  
Lon - Evaluation Report*

Recommended Position: Lat -

Recommended Least Depth: N/A

\*\*\*\*\*

COMPILATION NOTES

Chart

Applied As

**AWOIS NO: 9665**

**Item Description:** Obstruction (Wooden Dolphin)

**Source:** CL1094/76--USCG 7TH Dist.; Report MSO, NOS, 6/10/76

**AWOIS Position:** Lat - 27/55/31.08N Lon - 082/26/48.33W

**Required Investigation:** VS, BD, S4, SD -- 30m Search Radius

**Charts Affected:** 11412, 11413

---

**INVESTIGATION**

**Date(s)/DN(s):** 08/23/96 (DN:236)

**Position Numbers:** 192-209

**Launch Number:** 0518

**Investigation Used:** VS, ES, DI

**Water Visibility:** 1m

**Position Determined By:** DGPS

**Investigation Summary:** There were three side scan sonar survey lines run at this location to obtain 200% coverage over this AWOIS area. There were no contacts seen on the side scan records and the result of this search for a submerged dolphin was negative.

---

**CHARTING RECOMMENDATION**

The hydrographer recommends that the submerged dolphin be removed from the chart. *Concur*

**Recommended Position:** Lat -

Lon -

**Recommended Least Depth:**

\*\*\*\*\*

**COMPILATION NOTES**

Chart

Applied As

CONTROL STATIONS as of 25 Nov 1996

No	Type	Latitude	Longitude	H	Cart	Freq	Vel Code	MM/DD/YY	Station Name
1	0	027:36:01.482	082:45:37.145	0	0	0.0	0.0	03/01/96	USCG DGPS BEACON EGDMONT KEY, FL
2	0	027:47:04.568	082:25:27.662	0	0	0.0	0.0	03/01/96	CRL #1, DOCKSIDE APOLLO Q/T



**U.S. DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration**

Atlantic Hydrographic Party  
439 West York St.  
Norfolk, VA. 23510-1114

November 15, 1996

Commander (oan)  
U.S. Coast Guard District Seven  
Brickell Plaza Federal Bldg.  
909 SE First Ave.  
Miami, Florida 33131-3050

Dear Sir:

While conducting a hydrographic survey of Tampa Bay, Florida (registry H-10709, project OPR-J343-AHP), the following items were identified as dangers to navigation. I recommend they be included in the Local Notice to Mariners. The positions are based on NAD 83 datum and the soundings have been reduced to Mean Lower Low Water (MLLW) using predicted tides. The items were located using Differential GPS and were verified by diver investigation.

This information affects the following charts:

<u>CHART NO.</u>	<u>EDITION</u>	<u>DATE</u>
11413	41st	Apr. 22/95
11412	36th	June 4/94

<u>DESCRIPTION</u>	<u>NAD 83 POSITION</u>	<u>DEPTH (ft)</u>
Obstruction	27-48-21.4N 082-27-19.6W	8
Obstruction	27-48-00.8N 082-27-17.9W	4

This is advance information which is subject to office review. A chart section of this area, showing the location of these dangers, is attached. Questions concerning this report should be directed to me at (410) 437-9811.

Sincerely,

*James A. Illg*  
LT James A Illg, NOAA  
Chief, Atlantic Hydrographic Party

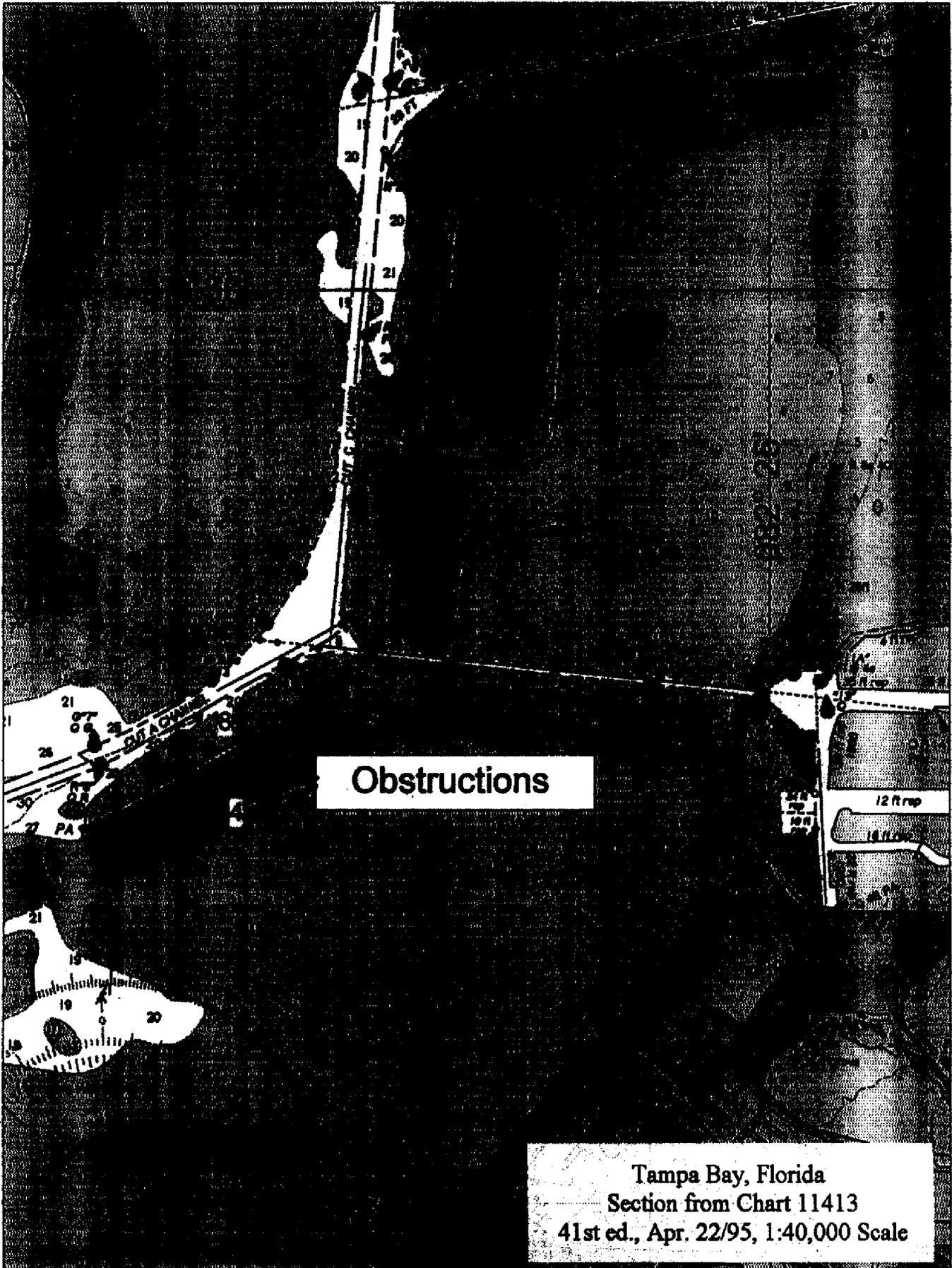
Attachment

cc: N/CS26  
N/CS33  
DMAHTC

See Section 3 a + b of  
Evaluator's report

*MR  
3-12-98*





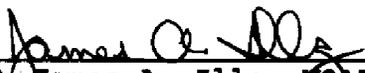
**Obstructions**

Tampa Bay, Florida  
Section from Chart 11413  
41st ed., Apr. 22/95, 1:40,000 Scale

**APPROVAL SHEET**  
**Basic Hydrographic Survey**  
**OPR-J343-AHP**  
**AHP-10-8-96**  
**H-10709**  
**1996**

This basic hydrographic survey, conducted under the navigable area concept, was completed in accordance with the Project Instructions for OPR-J343-AHP, the Hydrographic Manual, the Hydrographic Survey Guidelines, and the Field Procedures Manual. All reports, records, and survey sheets were reviewed by Mr. David B. Elliott, hydrographer in charge of daily operations. Project reports were also reviewed by Mr. Brian A. Link, Assistant Chief of Party. The chief of party did not directly supervise any part of this survey.

This survey is a complete basic hydrographic survey for the area described in Section B of this report.

  
\_\_\_\_\_  
Lt James A. Illg, NOAA  
Chief, Atlantic Hydrographic Party

  
\_\_\_\_\_  
David B. Elliott  
Hydrographer-in-charge of daily operations



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL OCEAN SERVICE  
Office of Ocean and Earth Sciences  
Silver Spring, Maryland 20910

**TIDE NOTE FOR HYDROGRAPHIC SURVEY**

**DATE:** June 11, 1997

**MARINE CENTER:** Atlantic  
**HYDROGRAPHIC PROJECT:** OPR-J343-AHP  
**HYDROGRAPHIC SHEET:** H-10709

**LOCALITY:** Tampa Bay, Florida Gadsen Point to Davis Island

**TIME PERIOD:** Aug 23 - Oct 22, 1996

**TIDE STATION USED:** 872-6520 St. Petersburg, Florida  
Lat. 27° 45.6'N Lon. 82° 37.6'W  
**PLANE OF REFERENCE (MEAN LOWER LOW WATER):** 0.000 m  
**HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE:** 0.598 m

**TIDE STATION USED:** 872-6639 Ballast Point, Florida  
Lat. 27° 53.4'N Lon. 82° 28.8'W  
**PLANE OF REFERENCE (MEAN LOWER LOW WATER) :** 0.000 m  
**HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE:** 0.729 m

**TIDE STATION USED:** 872-6667 McKay Bay Entrance, Tampa Bay, Florida  
Lat. 27° 54.8'N Lon. 82° 25.5'W  
**PLANE OF REFERENCE (MEAN LOWER LOW WATER) :** 0.000 m  
**HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE:** 0.734 m

**REMARKS: RECOMMENDED ZONING**

Use zone(s) identified as: TB48, TB69, TB70, TB71, TB72, TB73,  
TB74, TB75 & TB76

Refer to attachment(s) for zoning information.

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

  
-----  
**CHIEF, TIDAL ANALYSIS BRANCH**



GEOGRAPHIC NAMES

Name on Survey	A CHART NO. 11413 B ON PREVIOUS SURVEY NO. 11412 C ON U.S. QUADRANGLE MAPS D FROM LOCAL INFORMATION E ON LOCAL MAPS F P.O. GUIDE OR MAP G RAND McNALLY ATLAS H U.S. LIGHT LIST I										
	ALAFIA RIVER CHANNEL	X		X							
BIG BEND CHANNEL	X		X								2
BIRD ISLAND	X		X								3
DAVIS ISLANDS	X		X								4
EAST BAY	X		X								5
FLORIDA (title)	X		X								6
GADSDEN POINT (title)	X		X								7
GADSDEN POINT CUT	X										8
HARBOUR ISLAND	X		X								9
HILLSBOROUGH BAY	X		X								10
HILLSBOROUGH CHANNEL -											11
CUT A	X										12
HILLSBOROUGH CHANNEL -											13
CUT C	X										14
HILLSBOROUGH CHANNEL -											15
CUT D											16
HOOKERS POINT	X		X								17
SEDDON CHANNEL	X		X								18
SPARKMAN CHANNEL	X		X								19
TAMPA	X		X								20
TAMPA BAY	X		X								21
											22
											23
											24
											25

Approved  
*Chas. C. Boyd*  
 Chief Geographer

APR 21 1997

03/04/98

HYDROGRAPHIC SURVEY STATISTICS  
REGISTRY NUMBER: H-10709

NUMBER OF CONTROL STATIONS		2
NUMBER OF POSITIONS		14654
NUMBER OF SOUNDINGS		14654
	TIME-HOURS	DATE COMPLETED
PREPROCESSING EXAMINATION	35	03/21/97
VERIFICATION OF FIELD DATA	133	02/13/98
QUALITY CONTROL CHECKS	120	
EVALUATION AND ANALYSIS	40	
FINAL INSPECTION	46	01/16/98
COMPILATION	98	03/04/98
TOTAL TIME	472	
ATLANTIC HYDROGRAPHIC BRANCH APPROVAL		02/18/98

LETTER TRANSMITTING DATA

N/CS33-17-98

DATA AS LISTED BELOW WERE FORWARDED TO YOU BY  
(Check):

ORDINARY MAIL  AIR MAIL

REGISTERED MAIL  EXPRESS

GBL (Give number) \_\_\_\_\_

TO:

Chief, Data Control Group, N/CS3x1  
NOAA/National Ocean Service  
Station 6815, SSMC3  
1315 East-West Highway  
Silver Spring, Maryland 20910-3282

DATE FORWARDED

4 March 1998

NUMBER OF PACKAGES

ONE TUBE

**NOTE:** A separate transmittal letter is to be used for each type of data, as tidal data, seismology, geomagnetism, etc. State the number of packages and include an executed copy of the transmittal letter in each package. In addition the original and one copy of the letter should be sent under separate cover. The copy will be returned as a receipt. This form should not be used for correspondence or transmitting accounting documents.

H-10709

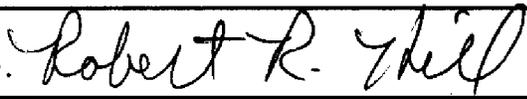
FLORIDA, TAMPA BAY, GADSDEN POINT TO DAVIS ISLANDS

1 (ONE) Tube containing the following:

- 1 SMOOTH SHEET (H-10709)
- 3 Composite Drawing for chart #11417 (one for Inset)
- 2 H-Drawing for chart #11417 (one for Inset)
- 1 Descriptive Report for H-10709
- 1 Drawing History Form #76-71 for chart #11417

FROM: (Signature)

Robert R. Hill Jr.



RECEIVED THE ABOVE  
(Name, Division, Date)

Return receipted copy to:

Atlantic Hydrographic Branch  
N/CS33  
439 West York Street  
Norfolk, VA 23510-1114

**ATLANTIC HYDROGRAPHIC BRANCH  
EVALUATION REPORT FOR H-10709 (1996)**

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.

**D. AUTOMATED DATA ACQUISITION AND PROCESSING**

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

Hydrographic Processing System  
NADCON, version 2.10  
AutoCAD, Release 12  
QUICKSURF, version 5.1  
MicroStation 95, version 5.05  
I/RAS B, version 5.01

The smooth sheet was plotted using a Hewlett Packard DesignJet 350C plotter.

**H. CONTROL STATIONS**

Horizontal control used for this survey during data acquisition is based upon the North American Datum of 1983 (NAD 83). Office processing of this survey is based on these values. The smooth sheet has been annotated with ticks showing the computed mean shift between the NAD 83 and the North American Datum of 1927 (NAD 27).

To place this survey on the NAD 27, move the projection lines 1.09 seconds (33.569 meters or 3.36 mm at the scale of the survey) north in latitude, and .661 seconds (18.079 meters or 1.81 mm at the scale of the survey) east in longitude.

**J. SHORELINE**

No photogrammetric source data was available for this project. Brown shoreline on the smooth sheet originates with National Ocean Service (NOS) chart 11413 (41<sup>st</sup> Edition, Apr 22/95) and is for orientation purposes only.

**L. JUNCTIONS**

H-10623 (1995) to the southwest

A standard junction could not be effected between the present survey and H-10623 (1995). The junctional survey is archived at National Ocean Service (NOS) headquarters, Silver Spring, Maryland. In this case, the note "ADJOINS" is shown

on the smooth sheet. Depths are in adequate agreement. Any adjustments to the depth curves will have to be made during chart compilation.

There are no junctional surveys to the north or east. Present survey depths are in harmony with the charted hydrography in these areas.

**M. COMPARISON WITH PRIOR SURVEYS**

H-8379 (1957)	1:10,000
H-8380 (1957)	1:10,000
<u>H-8411 (1958)</u>	<u>1:10,000</u>

The above prior surveys taken together cover the present survey in its entirety.

1) H-8379 (1957) covers the northern third of the present survey area. Extensive landfill and dredging has taken place in the common area to the extent that a comparison could not be made. Attention is directed to the following:

A charted dolphin, in Latitude 27°55'28.35"N, Longitude 82°26'49.15"W, originates with the prior survey. This feature was not addressed by the hydrographer. A side scan sonar investigation of AWOIS Items #9665, which is in the same general vicinity of the charted dolphin was conducted by the field unit. No indication of a visible or submerged dolphin was detected. It is recommended that the charted dolphin be removed from the chart.

2) H-8380 (1957) covers the middle third of the present survey area. The prior survey is generally in good agreement with the present survey with prior soundings shoaler by 1 to 2 feet (0<sup>3</sup> to 0<sup>6</sup> meters). However, in scattered areas on the east side of the maintained channel, significant differences are apparent, with prior soundings shoaler by 10 to 30 feet (3 to 9<sup>1</sup> meters). The differences between the present and prior surveys can be attributed to natural changes in the bottom configuration, cultural changes, and/or improved hydrographic surveying methods and equipment. Also, extensive landfill and dredging has taken place in this area. Attention is directed to the following:

a. A charted pile, in Latitude 27°53'36.4"N, Longitude 82°25'59.8"W, originates with the prior survey. This feature was neither investigated nor addressed by the hydrographer and has been brought forward from the prior survey to supplement the present survey. It is recommended

that this feature be revised and charted as shown on the present survey.

b. The following charted features and depths originate with the prior survey. These features were neither investigated nor addressed by the hydrographer:

DEPTHS/FEATURES	LATITUDE (N)	LONGITUDE (W)
<i>GKM</i> <i>3-16-78</i> H <del>M/E</del> M 9/2 <sup>1</sup>	27°52'33.32"	82°26'23.09"
4/1 <sup>2</sup>	27°51'47.04"	82°26'22.39"
rock 2/0 <sup>6</sup>	27°51'10.66"	82°26'24.37"

It is recommended that these depths and features be retained as charted.

3) Prior survey H-8411 (1958) covers the southern third of the present survey area. The prior survey is generally in good agreement with the present survey with prior soundings shoaler by 1 to 2 feet (0<sup>3</sup> to 0<sup>6</sup> m). However, in areas on the east southeast sides of the maintained channels, significant differences are apparent, with prior soundings shoaler by 8 to 30 feet (2<sup>4</sup> to 9<sup>1</sup> m). The differences between the present and prior surveys can be attributed to natural changes in the bottom configuration, cultural changes, and/or improved hydrographic surveying methods and equipment. Also, extensive landfill and dredging has taken place in this area. Attention is directed to the following:

a. The following charted features originate with the prior survey. They were neither investigated nor addressed by the hydrographer:

FEATURES	LATITUDE (N)	LONGITUDE (W)
pile	27°48'50.3"	82°26'44.4"
dolphin	27°48'49.0"	82°26'43.7"
dolphin	27°48'47.2"	82°26'42.7"
pile	27°48'46.0"	82°26'42.0"
pile	27°48'42.5"	82°26'49.2"
piles	27°48'37.9"	82°26'56.3"

Information provided by the U. S. Army Corps of Engineers (USACE) recommended removing these features based on past dredging activities in the area. Based on the information provided by the USACE it is recommended that these charted features be removed from the chart.

b. The following charted depths originate with the prior survey. They were neither investigated nor addressed by the hydrographer:

DEPTHS <u>ft/m</u>	<u>LATITUDE (N)</u>	<u>LONGITUDE (W)</u>
6/1 <sup>8</sup>	27°49'20.80"	82°26'43.00"
4/1 <sup>2</sup>	27°49'13.00"	82°26'37.60"
6/1 <sup>8</sup>	27°49'00.50"	82°27'04.70"
8/2 <sup>4</sup>	27°48'42.50"	82°27'28.75"
9/2 <sup>7</sup>	27°48'36.80"	82°27'35.40"
15/4 <sup>6</sup>	27°48'33.40"	82°27'35.10"
10/3	27°48'32.60"	82°27'46.50"
13/4	27°48'28.70"	82°27'44.20"
16/4 <sup>9</sup>	27°47'42.40"	82°27'52.80"
8/2 <sup>4</sup>	27°47'35.80"	82°27'54.60"
15/4 <sup>6</sup>	27°47'32.90"	82°27'59.20"
7/2 <sup>1</sup>	27°47'29.30"	82°28'11.50"
15/4 <sup>6</sup>	27°47'29.10"	82°28'18.10"

These depths have been brought forward from the prior survey to supplement the present survey. It is recommended that these depths be retained as charted.

c. A charted pile, in Latitude 27°48'32.1"N, Longitude 82°27'09.0"W, originates with the prior survey. This feature was neither investigated nor addressed by the hydrographer and has been brought forward from the prior survey to supplement the present survey. It is recommended that these feature be revised and charted as shown on the present survey.

Except as noted above the present survey soundings are adequate to supersede the above prior surveys within the common area.

0. COMPARISON WITH CHARTS 11413 (41<sup>st</sup> Edition, Apr 22/95)  
11414 (36<sup>th</sup> Edition, Jun 04/94)  
11417 (1<sup>st</sup> Edition, Jun 21/97)

1. Hydrography

The charted hydrography within the common area originates with the previously discussed prior surveys, miscellaneous sources and from sources not readily available. The previously addressed prior surveys require no further consideration. Attention is directed to the following:

a. Automated Wreck and Obstruction Information System (AWOIS) Item #8813, a charted note, 24 ft rep 1982, in the vicinity of Latitude 27°48'30"N, Longitude 82°25'42"W, originates with Chart Letter 443 of 1982 (CL443/82) and was subsequently revised by an unknown source to 29 ft rep 1992.

It is recommended that the charted note 29 ft rep 1992 be deleted and present survey depths be charted as shown on the present survey.

b. AWOIS Item #9379, a charted dangerous sunken wreck, PA, in the Latitude 27°48'00.8"N, Longitude 82°28'00.6"W, originates with Local Notice to Mariners 30 of 1993 (LNM30/93) and was subsequently removed from the chart by LNM33/96. No change in charting status is recommended.

c. Three charted range marker piles, in Latitude 27°48'40.0"N, Longitude 82°27'15.9"W, Latitude 27°48'40.0"N, Longitude 82°27'11.5"W and Latitude 27°48'39.4"N, Longitude 82°27'06.9"W, originating with Blueprint 67611 (1964), Tampa Electric Company, were neither investigated nor addressed by the hydrographer. However, the present survey data included side scan sonargrams in this area. Office review of these records shows no indication of visible or submerged piles in this area. Additional information provided by the USACE recommends removing these piles based on past dredging activities in the area. Based on the survey data and information provided by USACE, it is recommended that the charted range marker piles be removed from the chart.

d. The following charted depths and features originate with unknown sources and were neither investigated nor addressed by the hydrographer.

DEPTHS/FEATURES

<u>ft/m</u>	<u>LATITUDE (N)</u>	<u>LONGITUDE (W)</u>
14/4 <sup>3</sup>	27°50'45.35"	82°26'46.10"
4/1 <sup>2</sup>	27°49'32.30"	82°26'35.00"
2/0 <sup>6</sup>	27°48'27.25"	82°26'57.10"
5/1 <sup>2</sup>	27°48'19.30"	82°27'15.20"
5/1 <sup>2</sup>	27°48'15.10"	82°27'23.90"
9/2 <sup>7</sup>	27°48'16.40"	82°27'31.50"
4/1 <sup>2</sup>	27°48'08.90"	82°27'36.00"
10/3	27°48'06.40"	82°27'42.00"
6/1 <sup>2</sup>	27°48'03.40"	82°27'47.80"
Pile	27°55'34.10"	82°25'26.10"

It is recommended that these depths be retained as charted.

e. The following charted Spoil Areas were developed by the field unit.

<u>Latitude (N)</u>	<u>Longitude (W)</u>
27°47'40"	82°28'25"
27°48'05"	82°27'20"

27°48'23"	82°26'20"
27°48'20"	82°26'04"
27°48'55"	82°26'33"
27°50'37"	82°26'00"
27°51'15"	82°26'00"
27°53'25"	82°26'00"
27°54'00"	82°26'50"

It is recommended that the charted limits and the notations Spoil Area be retained, and the blue tint within the limits of the spoil areas be deleted and present survey depths be charted as shown on the present survey.

f. A charted dangerous sunken wreck with a depth of 14 feet (4<sup>3</sup> m), in Latitude 27°47'27.34"N, Longitude 82°28'03.61"W, originates with an unknown source. This feature was verified by the hydrographer. No change in charting status is recommended.

g. Two charted piles, in Latitude 27°51'00.9"N, Longitude 82°24'56.4"W and Latitude 27°50'54.5"N, Longitude 82°25'29.0"W, originate with an unknown source and were not addressed by the hydrographer. A side scan sonar investigation of AWOIS Items #8816 thru #8830, which are in the same general vicinity of the charted piles, was conducted by the field unit. No indications of visible or submerged piles were detected. It is recommended that the two piles be removed from the chart.

h. The following features were located by the present survey but are not currently charted. These features were not addressed in the Descriptive Report by the hydrographer.

<u>FEATURES</u>	<u>LATITUDE (N)</u>	<u>LONGITUDE (W)</u>
21 Obstr	27°52'46.16"	82°26'24.51" - buoy anchor
10 Obstr	27°52'10.63"	82°26'27.23" - unknown
21 Obstr	27°50'46.04"	82°26'34.39" - concrete beam
10 Obstr	27°48'27.07"	82°28'35.67" - steel tank

*MW  
8-12-98*

It is recommended that these features be charted as shown on the present survey.

Except as noted above the present survey is adequate to supersede the charted hydrography within the common area.

**2. Controlling Depths**

There are no conflicts between the present survey depths

and the controlling depths of Gadsden Point Cut Channel, Hillsborough Bay Cut "A" Channel, Big Bend Channel, Hillsborough Bay Cut "C" Channel, Port Sutton Entrance Channel, Hillsborough Bay Cut "D" Channel and the Seddon Channel. Attention is directed to the following:

Conflicts exist between the charted controlling depth note, 32½ FT FOR WIDTH OF 200 FT OCT 1994, in the Alafia River Channel from Longitude 82°24'45"W to Longitude 82°23'40"W and present survey depths. Present survey depths are 30 to 32 feet (9<sup>3</sup> - 9<sup>7</sup> m) along the northern limit of the maintained channel.

### 3. DANGERS TO NAVIGATION

A Danger to Navigation report was submitted by the hydrographer to Commander (oan), Seventh Coast Guard District, Miami, Florida for inclusion in the Local Notice to Mariners, and to the Marine Chart Division, N/CS3x1, Silver Spring, Maryland. A copy of this report is appended to the Descriptive Report. Attention is directed to the following:

a. A submerged obstruction with a depth of 8 feet (2<sup>4</sup> m), in Latitude 27°48'21.4"N, Longitude 82°27'19.6"W, was located by the field unit and reported as a danger to navigation. The feature is shown on NOS chart 11417 (1<sup>st</sup> Edition, Jun 21/97). During office processing, it was determined that the charted least depth and the depth reported in this letter need to be revised. It is recommended that the charted submerged obstruction with a depth of 8 feet be revised to a submerged obstruction with a depth of 7 feet (2<sup>1</sup> m).

pipe

MR  
3-12-98

b. An uncharted submerged obstruction with a depth of 4 feet (1<sup>2</sup> m), in Latitude 27°48'00.85"N, Longitude 82°27'17.85"W, was located by the field unit and reported as a danger to navigation. During office processing, it was determined that the least depth reported in this letter needs to be revised. It is recommended that this feature be charted as shown on the present survey. Chart as submerged obstruction with a least depth of 3 feet

steel  
pipe

Chart as submerged obstruction  
with a least depth of 3 feet

### P. ADEQUACY OF SURVEY

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

MR  
3-12-98

### S. MISCELLANEOUS

Chart compilation using the present survey data was done

H-10709

by Atlantic Hydrographic Branch personnel in Norfolk, Virginia. Compiled data will be forwarded to Nautical Chart Division, Silver Springs, Maryland upon completion of the project.

**WHITING Processing Team**

Robert Snow

Robert Snow  
Cartographic Technician  
Verification of Field Data  
Evaluation and Analysis

APPROVAL SHEET  
H-10709

**Initial Approvals:**

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

Robert R. Hill Jr. Date: 2-17-98  
Robert R. Hill Jr.  
Cartographer  
Atlantic Hydrographic Branch

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

Nicholas E. Perugini Date: February 18, 1998  
Nicholas E. Perugini,  
Commander, NOAA  
Chief, Atlantic Hydrographic Branch

\*\*\*\*\*

**Final Approval:**

Approved: Andrew A. Armstrong, III Dated: Mar 17, 1998  
Andrew A. Armstrong, III  
Captain, NOAA  
Chief, Hydrographic Surveys Division

