110685

NOAA FORM 76-35A

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

DESCRIPTIVE REPORT

Hydrographic Type of Survey Side Scan Sonar Field No. AHP-10-5-96 Registry No. H-10685 LOCALITY State Florida General Locality Tampa Bay Sublocality Coffeepot Bayou to Port Tampa Dock 19 96 CHIEF OF PARTY LT J. A. Illg LIBRARY & ARCHIVES MAR 27 1998

NOAA FORM 77-28 U.S. DEPARTMENT OF COMMERCE (10/72) NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	REGISTER NO.
HYDROGRAPHIC TITLE SHEET	H-10685
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.
inited in as completely as possible, when the sheet is followarded to the Office.	AHP-10-05-96
State Florida	
General locality Gulf of Mexico, Tampa Bay	
Locality Coffie Pot Bayou to Port Tampa Dock	
Scale 1 10000 Date of survey	16 May 1996 to 24 October 1996
Instructions dated 3-12-96 * Project No. O	PR-J343-AHP
Vessel 0518 & 0519	
Chief of party Lt. James A. Illg	
Surveyed by DBE/RWR/PW/SS **	
Soundings taken by echo sounder, hand lead, pole	
Graphic record scaled by DBE/RWR/PW/SS**	
Graphic record checked by DBE/RWR/PW/SS **	
Protracted by Automated	plot by HDAPS with Brunning Plotter
Verification by Atlantic Hydrographic Branch PERSONNEL	
_ , ,	
REMARKS: *= Change No.1 3-19-96 4 1/2	1011 / SURF 2/18/98 MCR
**= DBE= David B. Elliott	30.00 1000000000000000000000000000000000
RWR= Robert W. Ramsey Jr.	
PW= Philip Wolf	
SS= LTJG Scott Shaulis	
NOTES IN SED WERE HADE IN	THE DEGISTING ABOUT
During of the fearesing.	

NOAA FORM 77-28 SUPERSEDES FORM C & GS-837.

Hydrographic Sheets and Parameters

OPR-J343-AHP AHP-10-05-96 H-10685 Sheet "H"

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.

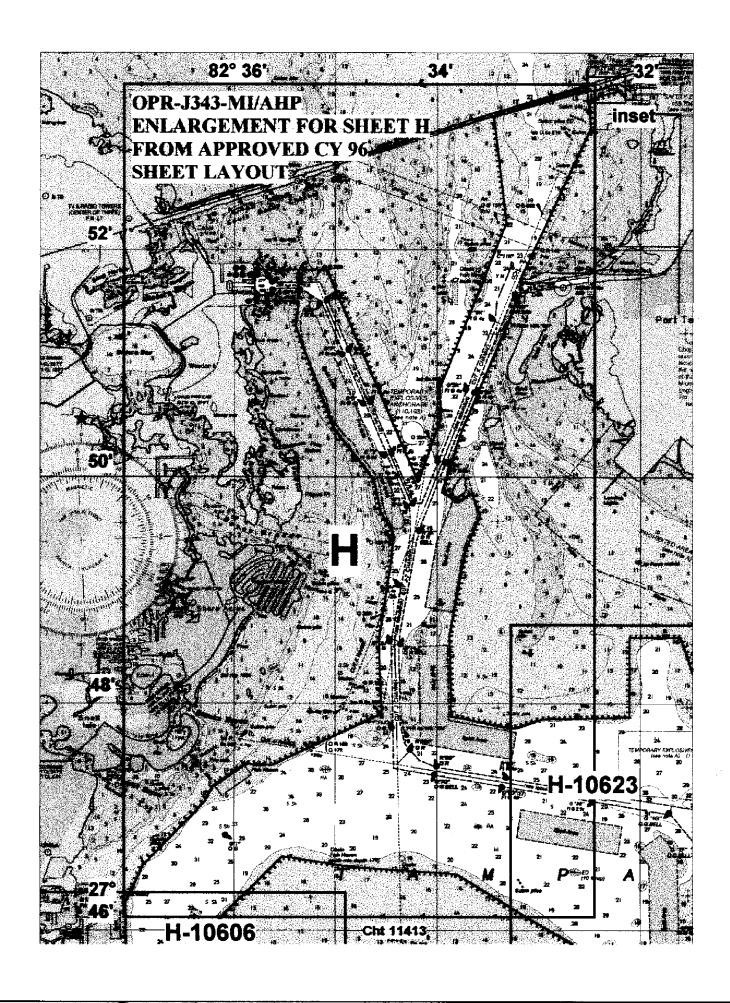
There were three plotter sheets created to conduct this survey; plotter sheet number six covers the central section of this survey ("H"e), and plotter sheet number seven covers the western section of this survey ("H"w), and plotter sheet number eight covers the inset area to the northeast corner of this survey.

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

Plot type	PS#6	<u>PS#7</u>	PS#8
Field Sheet	1	1	1
Edited Track Plot	1	1	1
Edited Excessed Sound	1	1	1
100 % SSS Swath	1	1	0
200 % SSS Sworth	1	combined	0

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.



DESCRIPTIVE REPORT TO ACCOMPANY HYDROGRAPHIC SURVEY H-10685 FIELD NO. AHP-10-5-96

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 "H" as specified by the Project Instructions.

B. AREA SURVEYED

COFFEEDOT

The area surveyed for H-10685 is Tampa Bay, Florida, from Coffee Pot Bayou to Port Tampa Dock. The approximate survey limits are:

North: 27° 53' 40"N South: 27° 46' 00"N East: 082° 32' 00"W West: 082° 37' 00"W

This survey was conducted from May 16, 1996 (DN 137) through October 25, 1996 (DN 298).

C. <u>SURVEY VESSELS</u>

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 JE ALSO THE EVALUATION REPORT

Coastal Oceanographic, Inc. HYPACK version 5.9 was used for on-line data acquisition. A list of all HDAPS 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 EG&G model 260-TH image correcting side scan sonar recorder (S/N 0012104) with a model 272-T towfish (S/N 016700), was used from DN 169 through DN 232. Side scan sonar recorder (S/N 0010884), was used from DN 233 through the end of the survey. The side scan sonar equipment was used to obtain 200% bottom coverage in areas deeper than 6 meters and to investigate AWOIS items. 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 meters. The confidence checks were performed daily on existing buoys in the Tampa Bay channels at 100kHz.

A coverage of 200% was obtained on all the required survey areas and AWOIS items where water depth and/or hazards permitted. Side scan coverage was conducted to the 6-meter curve and single beam 25-meter line spacing was performed in areas less than the 6 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 readings with the echo sounder. No problems were encountered with any of the sounding equipment.

& FIED 1000 THE ORIGINAL FIELD RECORDS.

G. CORRECTIONS TO ECHO SOUNDINGS

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

Cast No.	Table No.	Deepest Depth(m)	Applicable DN(s)	Cast I	Position	Day Taken
			<u></u>			
1	1	16.3	137-150	27°51'24"N	082°33'19"W	137
2	2	14.9	157	27°49'42"N	082°34'13"W	157
3	3	15.3	169-172	27°49'30"N	082°34'12"W	171
4	4	16.2	177-179	27°51'00"N	082°33'30"W	177
5	5	15.6	183-184	27°49'36"N	082°34'00"W	184
6	6	16.0	190-193	27°47'30"N	082°34'18"W	192
7	7	16.3	197-200	27°49'24"N	082°34'12"W	198
8	8	16.1	204-207	27°49'12"N	082°34'36"W	204
9	9	15.3	211-214	27°49'53"N	082°34'20"W	211
10	10	16.1	218-221	27°51'36"N	082°33'18"W	218
11	11	15.6	226	27°47'04"N	082°31'44"W	225
12	12	15.7	240	27°47'30"N	082°33'18"W	240
13	13	13.9	248	27°47'00"N	082°35'06"W	248
14	14	16.1	277	27°47'30"N	082°34'18"W	277
15	15	13.1	290-292	27°48'00"N	082°35'00"W	290
16	16	16.0	297-298	27°45'42"N	082°32'48"W	297
7 8 9 10 11 12 13 14 15	7 8 9 10 11 12 13 14 15	16.3 16.1 15.3 16.1 15.6 15.7 13.9 16.1 13.1	197-200 204-207 211-214 218-221 226 240 248 277 290-292	27°49'24"N 27°49'12"N 27°49'53"N 27°51'36"N 27°47'04"N 27°47'30"N 27°47'30"N 27°47'30"N 27°47'30"N	082°34'12"W 082°34'36"W 082°34'20"W 082°33'18"W 082°31'44"W 082°33'18"W 082°35'06"W 082°34'18"W 082°35'00"W	198 204 211 218 225 240 248 277 290

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 speed of sound 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 each 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 (DN 088). These measurements were made 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.

* PLED WITH THE ORIGINAL FIELD SELERAG.

St. Petersburg station 872-6520 was the reference station for predicted tides for hydrography in Tampa Bay and its approaches. 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. The zones were numbered with the following applicable correctors:

	Time ((min.)	
	High Water	Low Water	Range Ratio
Zone # 1	Direct	Direct	Direct
Zone # 2	+10 min	+10 min	x1.03
Zone # 3	+45min	+45 min	x1.07

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-10685 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 THES AND ZONING WERE APPRICED DERING OFFICE PROCESSING.

All tides gauges required for survey H-10685 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 JEZ AUSO THE 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.

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.

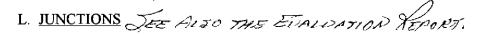
DGPS performance checks were conducted in accordance with FPM 3.4.4, by comparing the DGPS position of the vessel to the position of calibration point 1 at Apollo Beach, FL, located at 27°49'04.560"N, 082°25'27.662"W. To obtain a performance check, the launch was brought alongside the checkpoint and 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. ** The ORIGINAL TIELD Separates.

J. SHORELINE

There was no photogrammetric source data for this project.

K. CROSSLINES

A total of 18.7 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 sonar hydrography. These overlapping data were not included in the crossline percentage, although it served the same intended 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.



This survey junctions with the following:

Survey No.	<u>Year</u>	<u>Scale</u>	Junction Area
H-10606	1995	1:10,000	South
H-10623	1995	1:10,000	East

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

M. COMPARISON WITH PRIOR SURVEYS TEE DISO THE ENDINATION REVERT.

See the Atlantic Hydrographic Branch's "Evaluation Report for H-10685."

N. ITEM INVESTIGATION REPORTS SEE ALSO THE EVALUATION (EPORT

There were a total of 12 AWOIS items addressed on 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 12 AWOIS items, there were a total of 72 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 home in on and 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.

During this survey, contacts were located on all range scales of the DLS-1 with the most distant target found 170 meters from the search center. This gave divers a high degree of confidence in this search technique and in the DLS-1 instrument itself.

After conducting all diver investigations, the positions computed using the HDAPS contact tables were compared to the diver LD and positions to check for other contacts which may have warranted investigation and which 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. Appeared to the position of th

O. COMPARISON WITH THE CHART DEE ALSO THE EVALUATION PEROLA

Comparison was made with the following charts:

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

Most survey soundings agree with those currently charted within 0.2 meter. A few survey soundings are as much as one meter deeper. A comparison of this survey with the charted depths for the channels on this survey follows.

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

1) Published Controlling Depth:

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

2) Surveyed Controlling Depth:

LOQ=32.4' (9.9m)	LIQ=36.0' (11.3m)'	RIQ=36.0' (11.0m)	ROQ=32.4' (9.9m)
27°47'16.0"N	27°47'15.5"N	27°47'17.1"N	27°47'20.5"N
082°33'18.5"W	082°33'04.7"W	082°33'04.7"W	082°33'25.5"W
Fx:7067	Fx:19731	Fx:19730	Fx:7164

- 3) The channel is buoyed at 150 meter (492 feet) width; the published width is 400 feet.
- 4) The southern channel edge shows a 50-meter migration into the channel of the 10-meter contour between 27°47′16.0″N, 082°33′18.5″W and 27°47′16.3″N, 082°33′20.4″W.
- 5) The northern channel edge shows a 50-meter migration into the channel of the 10-meter contour between 27°47'20.5"N, 082°33'25.5"W and 27°47'25.8"N, 082°33'58.4"W.

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

1) Published Controlling Depth:

LOQ=34'	LIQ=34'	RIQ=34'	ROQ=34'

2) Surveyed Controlling Depth:

LOQ=25.5' (7.8m)	LIQ=36.0' (11.0m)	RIQ=38.3' (11.7m)	ROQ=26.2'(8.0m)
27°48'18.7"N	27°47'31.2"N	27°47'30.5"N	27°47'38.2"N
082°34'27.3"W	082°34'20.4"W	082°34'18.7"W	082°34'17.4"W
Fx:3811+1	Fx:7014	Fx:7013	Fx:7133

- 3) The channel is buoyed at 150 meter (492 feet) width; the published width is 400 feet.
- 4) The western channel edge shows a 40-50-meter migration into the channel of the 10-meter contour between 27°47'47.6"N, 082°34'26.2"W and 27°48'36.4"N, 082°34'27.2"W.
- 5) The eastern channel edge shows a 40-meter migration into the channel of the 10-meter contour between 27°47'38.2"N, 082°34'17.4"W and 27°48'14.8"N, 082°34'21.7"W.

Cut "J2" Channel (C.O.E. Maintained)

1) Published Controlling Depth:

	LOQ=34'	LIQ=34'	RIQ=34'	ROQ=34'
2)	Surveyed Controlling De	epth:		
	LOQ=29.5' (9.0m) 27°48'56.4"N 082°34'23.2"W Fx:3834	LIQ=32.4' (9.9m) 27°49'18.1"N 082°34'18.4"W Fx:20853+3	RIQ=32.1' (9.8m) 27°48'36.8"N 082°34'21.3"W Fx;6533	ROQ=24.2' (7.4m) 27°48'40.6"N 082°34'20.7"W Fx:19797

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

1) Published Controlling Depth:

LOQ=33.5'	LIQ=34'	RIQ=34'	ROQ=33.8'
-----------	---------	---------	-----------

2) Surveyed Controlling Depth:

LOQ=24.2' (7.4m)	LIQ=30.8' (9.4m)	RIQ=37.7' (11.5m)	ROQ=35.0' (10.7m)
27°50'50.6"N	27°50'10.7"N	27°49'32.2"N	27°50'10.2"N
082°33'41.1"W	082°33'56.9"W	082°34'12.3"W	082°33'53.5"W
Fx:2520+1	Fx20889+1	Fx:19850	Fx:2738

3) The channel is buoyed at 125 meter (475 feet) width; the published width is 400 feet.

- 4) An uncharted wreck was found to lie just outside of the channels eastern side at 27°50'43.38"N, 082°33'35.73"W, with a least depth of 7.9 meters (25.9 feet). This wreck was included in a danger to navigation letter to the 7th Coast Guard District, dated January 3, 1997. A copy is appended to this report. IEEE ALSO TECTION O. B. 1. OF THE EVALUATION REPORT
- 5) A destroyed range tower was found lying on the bottom just outside of the channels western side at 27°50'10.85"N, 082°33'59.68"W with a least depth of 5.3 meters (17.3 feet). This obstruction was reported in a danger to navigation letter to the 7th Coast Guard District, dated January 10, 1997. A copy is appended to this report. The ALSO SECTION O.S. THE EVALUATION REPORT.

Weedon Island Channel (Privately Maintained)

1) Charted Controlling Depths:

Main Channel (A) = 32 ft Top Channel E/W (B) = 29 ft Turning Basin (C) = 32 ft

Surveyed Controlling Depth:

(A) 30.1' (9.2m)	(B) 30.5' (9.3m)	(C) 18.0' (5.5m)
27°51'10.9"N	27°51'41.8"N	27°51'45.2"N
082°34'54.8"W	082°3 <i>5</i> '27.2"W	082°35'44.6"W
Fx:20959+1	Fx:3145	Fx:5820+1

- 3) The Main Channel is buoyed at 100 meter (328 feet) width; the published width is 270 feet.
- 4) The Top Channel E/W is buoyed at 80 meters (262 feet) width; the published width is 150 feet.
- 5) The channel shows evidence of collapse, predominantly along its entire western edge, with migration of the 10-meter contour into the channel by approximately 50 meters.
- 6) The Weedon Island Channel is listed in the USCG Light List, Volume 3, 1996 but its name is not charted. RECOMMEND REVISING CHANNEL NOTES WITH THE LATEST DEPTHS.

P. ADEQUACY OF SURVEY JEE ALGO THE EVALUATION REMORT

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 JEE ALSO THE EVALUATION REPORT.

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. The positions of all aids to

navigation were determined by DGPS during this survey. 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 between the charted and USCG Light List, Volume 3, 1996 positions. The results are shown in the following table:

Pos. No.	e e		Survey Position	Distance/Bearing From Charted Position
8	Upper Rng Rear LT Cut K Channel (LL#21145)	none	27° 52' 58.43"N 082° 32' 40.6"W	On Station
9	Upper Rng Front LT Cut K Channel (LL#21140)	27° 52.3' 082° 33.0'	27° 52' 19.75"N 082° 32' 57.85"W	79m/047°30' *
13	LT 8K Cut K Channel (LL#21175)	none	27° 51' 17.52"N 082° 33' 21.52"W	On Station
18	Upper Rng Front LT Cut J Two Channel (LL#21110)	27° 50.3' 082° 34.1'	27° 50' 19.26"N 082° 34' 03.47"W	79m/60°44' *
19	Upper Rng Rear LT Cut J Two Channel (LL#21115)	none	27° 50' 44.06"N 082° 33' 58.43"W	On Station
28	Rng Front LT Weedon Island Channel (LL#21153.15)	27° 50.2' 082° 34.5'	27° 51' 44.52"N 082° 35' 11.71"W	3068m/338°09' *
29	Rng Rear LT Weedon Island Channel (LL#21153.2)	none	27° 52' 06.91"N 082° 35' 22.14"W	On Station
38	Upper Rng Rear LT Cut J Channel (LL#21075)	none	27° 49' 57.99"N 082° 34' 26.68"W	On Station
42	Upper Rng Front LT Cut J Channel (LL#21070)	27° 49.9' 082° 34.5'	27° 49' 27.08'N 082° 34' 25.99"W	835m/172°27' *
44	Lower Rng Front LT Cut K Channel (LL#21195)	27° 48.8' 082° 34.6'	27° 48' 47.09"N 082° 34' 32.86"W	90m/108° 03' *
47	Lower Rng Front Lt Cut J Two Channel (LL#21125)	27° 48.1' 082° 34.5'	27° 48' 04.79"N 082° 34' 30.65"W	41m/205° 31' *

48	Lower Rng Rear LT Cut J Two Channel (LL#21130)	none	27° 47' 55.00"N 082° 34' 32.50"W	On Station
49	Lower Rng Rear LT Cut K Channel (LL#21200)	none	27° 47' 57.28"N 082° 34' 55.07"W	On Station
51	LT 12J Cut J Channel (LL#21095)	none	27° 47' 47.56"N 082° 34' 20.42"W	On Station
2000	Rng Front LT Cut G Channel (LL# 21025)	27° 47.6'N 082° 35.2'W	27° 47' 34.75"N 082° 35' 13.61"W	517m /355° 06' *
2001	Rng Rear LT Cut G channel (LL#21030)	none	27° 47' 40.88"N 082° 35' 56.57"W	

^{*} 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

Quantity
21310
497
18
252
227
6
40
149
50
16

S. MISCELLANEOUS JEE ALGO THE EVALUATION REPORT.

A total of 50 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 samples were submitted to the Smithsonian Institution as requested in the Project Instructions. * FILED WITH THE ORIGINAL FIELD XELDANS

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

<u>Title</u>	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.

Atlantic Hydrographic Party

Hydrographer in Charge Launch 0519

APPROVAL SHEET Basic Hydrographic Survey

OPR-J343-AHP AHP-10-5-96 H-10685 1996

This basic hydrographic survey, conducted under the navigable area concept, was completed in accordance with the Project Instructions for OPR-J343-AHP, the <u>Hydrographic Manual</u>, the <u>Hydrographic Survey Guidelines</u>, and the <u>Field Procedures Manual</u>. 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



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

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

January 3, 1997

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

Dear Sir:

While conducting hydrographic surveys of Tampa Bay, Florida (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:

CHART NO.	EDITION	DATE
11413 11412	41st 36th	Apr. 22/95 June 4/94
DESCRIPTION	NAD 83 POSITION	DEPTH (ft)
Wreck Wreck	27°50'43.38"N 082°33'35.7 27°47'26.85"N 082°28'04.1	

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

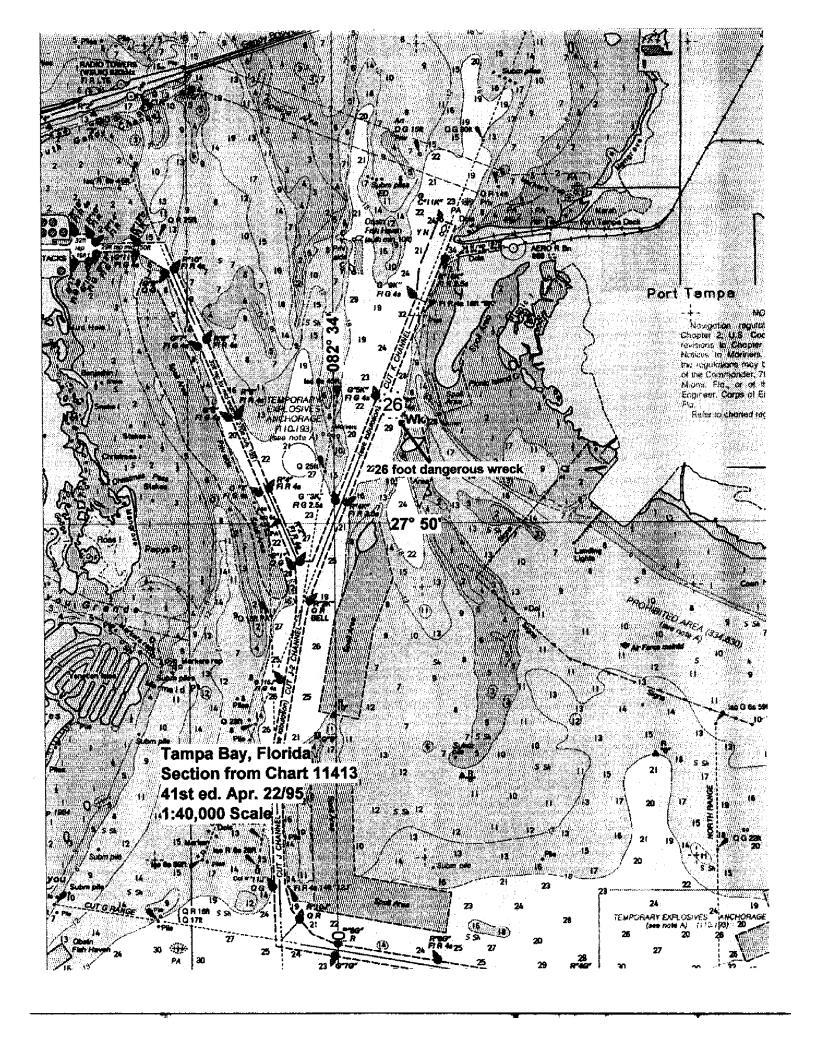
Sincerely,

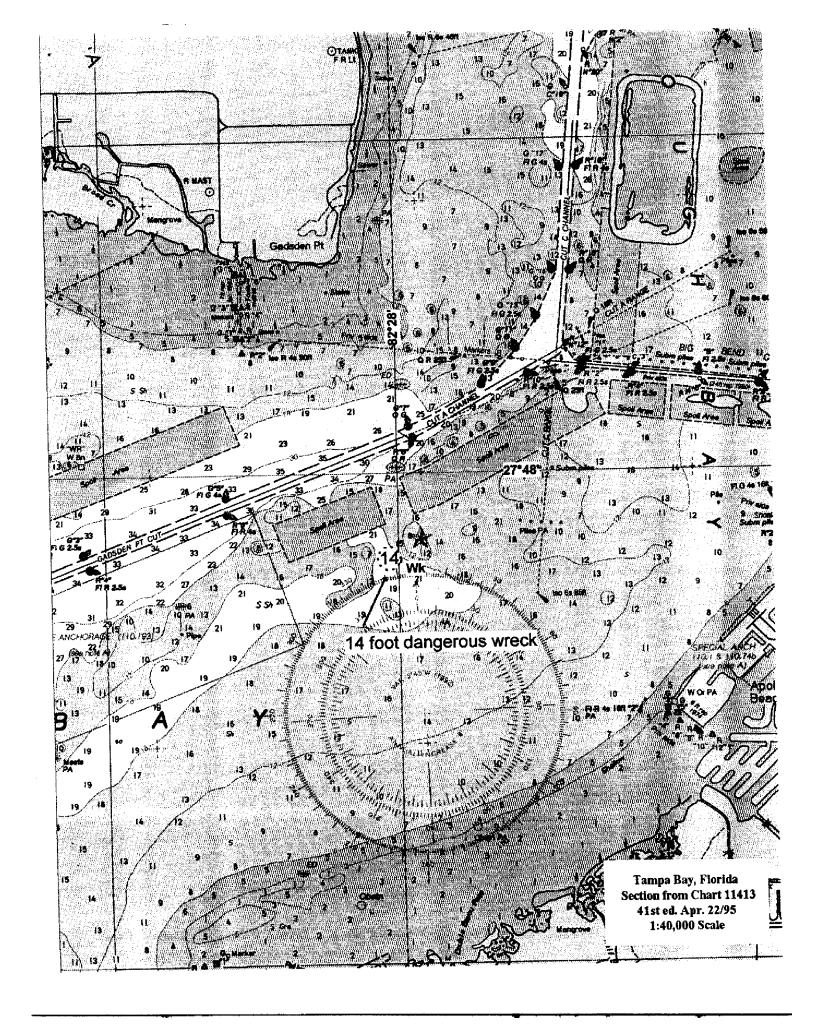
Chief, Atlantic Hydrographic Party

Attachment

cc: N/CS26 N/CS33 DMAHTC









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

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

October 29, 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-10685, 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:

CHART NO.	<u>EDITION</u>		DATE	
11413 11412	41st 36th		Apr. 22/95 June 4/94	5
DESCRIPTION	NAD 83 P	<u>OSITION</u>		DEPTH (ft)
Obstruction WA'	27-47-08.6	082-35-38.3		30
Obstruction	27-47-10.5	082-35-42.2		21
Obstruction	27-47-15.5	082-35-31.9		19
Obstruction W	27-47-18.1	082-35-29.4		19
Obstruction	27-47-21.0	082-35 - 24.2		26

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,

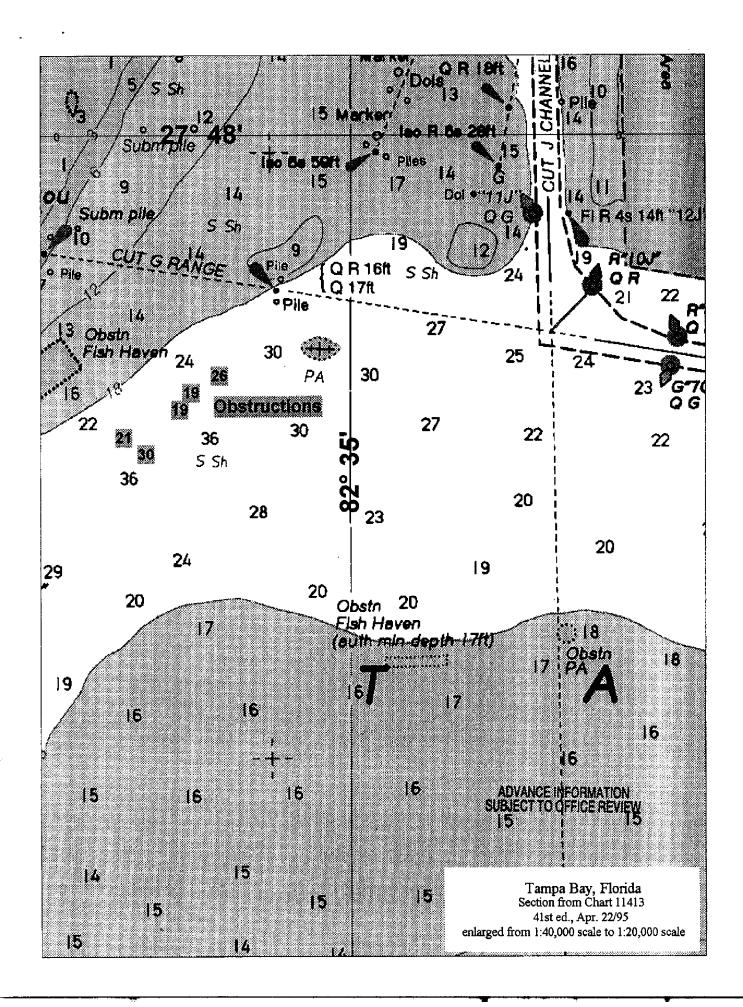
LT James A Illg, NOAA

Chief, Atlantic Hydrographic Party

Attachment

cc: N/CS26 N/CS33 DMAHTC







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

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

January 10, 1997

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 (project OPR-J343-AHP, registry H-10685), the following item was identified as a danger to navigation. I recommend this item be included in the Local Notice to Mariners. The position is based on NAD 83 datum and the sounding has been reduced to Mean Lower Low Water (MLLW) using predicted tides. The item was located using Differential GPS and was verified by diver investigation.

<u>DESCRIPTION</u>	NAD 83 1	NAD 83 POSITION				
Obstruction (toppled range tower)	27°50' <u>10.85"N</u>	082°33'59.68''W	17			

This information affects the following charts:

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

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

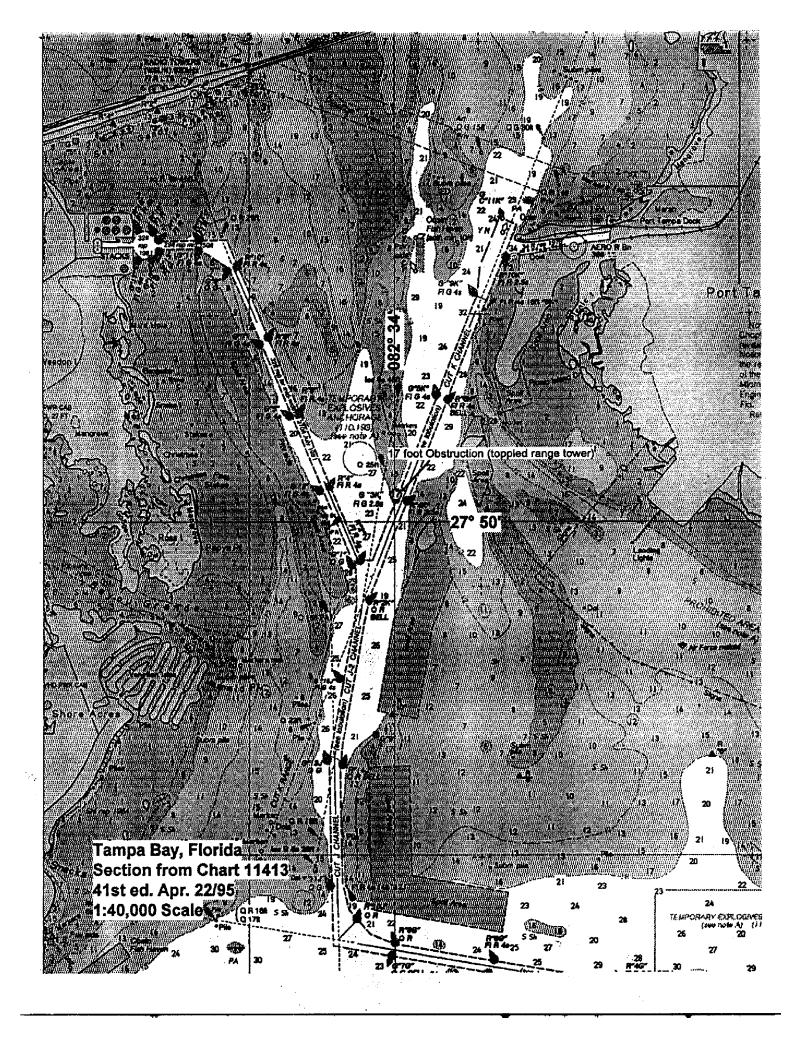
Sincerely,

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

Attachment

cc: N/CS26 N/CS33 DMAHTC





CONTROL STATIONS as of 9 Oct 1996

No	Type	Latitude	Longitude	H C	art	Freq	Uel Co	de 1111/00/YY	Station Name	
1	0 0	127:36:01.482	082:45:37.145	ß	Ō	0.0	0.0	03/01/96	USCE OGPS BEACOL	I EGMONT KEY,FL
2	9 0	127:47:04.560	082:25:27.662	9	0	0.0	0.0	03/01/96	CAL #1, DOCKSION	RPOLLO O/T

.

The following table was used to determine the significance of side scan contacts and relative position to AWOIS items for further investigation:

Geographic positions and descriptions can be found in on the DP Editor printout.

4 137 8845 none N/A 6 137 8849 none N/A 4007 172 8846 15.0 c-79 4008 172 8846 16.7 c-81 4009 172 8846 15.4 c-82 4010 172 8846 15.4 c-78 4011 172 8846 16.0 c-80 4012 172 8846 16.7 c-77 4014 172 19.3 c-3; 2260.1; 2568.1 4016 177 8848 23.6 N/A 4018 177 8847 N/A c-70a; c-70b; 2333.1(No Contacts) 4021 177 18.3 2567.1 4024 177 17.3 2369.1 4026 177 18.0 c-68 4027 177 21.9 c-68a 4029 177 16.0 2297.1 4031 179 14.1 c-69 4033 179 19.3 2399.1 4035 179 17.3 2492.1 4037 179 20.6 2491.p1,p2,p3 4039 179 27.5 c-63; 2477.1 4043 179 21.6 2782.1 4043 179 38.0 2180.1 15342 214 36.0 3069.1; 3068.1 15342 214 20.6 10547.1; 10531.1 15343 214 21.9 10778.1; 10548.1 15344 218 17.0 10139.p1.p2,s1; 10194.p1 15346 218 17.0 10139.p1.p2,s1; 10194.p1 15346 218 20.9 10447.1; 10388.1 15348 218 20.9 10447.1; 10388.1 15348 218 20.9 10447.1; 10388.1 15355 219 25.5 10380.1; 10309.1; 10282.1; 10525.1 15355 219 25.5 10289.1; 10303.1	LD Fx #	DN	AWOIS #	LD feet	Common SSS contacts #=s
4007 172 8846 15.0 c-79 4008 172 8846 16.7 c-81 4009 172 8846 16.4 c-82 4010 172 8846 15.4 c-78 4011 172 8846 16.0 c-80 4012 172 8846 17.7 N/A 4013 172 8846 16.7 c-77 4014 172 19.3 c-3; 2260.1; 2568.1 4016 177 8848 23.6 N/A 4018 177 8847 N/A c-70a; c-70b; 2333.1(No Contacts) 4021 177 18.3 2567.1 4022 177 18.0 c-68 4021 177 18.0 c-68 4027 177 18.0 c-68 4028 177 16.0 2336.1 4029 177 16.0 2297.1 4031 179 17.3 2492.1 <	4	137	8845	none	N/A
4008 172 8846 16.7 c-81 4009 172 8846 16.4 c-82 4010 172 8846 16.0 c-80 4011 172 8846 16.0 c-80 4012 172 8846 17.7 N/A 4013 172 8846 16.7 c-77 4014 172 19.3 c-3; 2260.1; 2568.1 4016 177 8848 23.6 N/A 4018 177 8847 N/A c-70a; c-70b; 2333.1(No Contacts) 4021 177 18.3 2567.1 4024 177 17.3 2369.1 4024 177 18.0 c-68 4027 177 21.9 c-68a 4028 177 16.0 2336.1 4029 177 16.0 2297.1 4031 179 14.1 c-69 4033 179 17.3 2492.1	6	137	8849	none	N/A
4009 172 8846 16.4 c-82 4010 172 8846 15.4 c-78 4011 172 8846 16.0 c-80 4012 172 8846 17.7 N/A 4013 172 8846 16.7 c-77 4014 172 19.3 c-3; 2260.1; 2568.1 4016 177 8848 23.6 N/A 4018 177 8848 23.6 N/A 4021 177 18.3 2567.1 4021 177 18.0 c-68 4021 177 18.0 c-68 4027 177 21.9 c-68a 4028 177 16.0 2336.1 4029 177 16.0 2297.1 4031 179 14.1 c-69 4033 179 17.3 2492.1 4037 179 20.6 2491.pl.p2,p3 4039 179	4007	172	8846	15.0	c-79
4010 172 8846 15.4 c-78 4011 172 8846 16.0 c-80 4012 172 8846 17.7 N/A 4013 172 8846 16.7 c-77 4014 172 19.3 c-3; 2260.1; 2568.1 4016 177 8848 23.6 N/A 4018 177 8847 N/A c-70a; c-70b; 2333.1(No Contacts) 4021 177 18.3 2567.1 4024 177 17.3 2369.1 4026 177 18.0 c-68 4027 177 21.9 c-68a 4028 177 16.0 2336.1 4029 177 16.0 2297.1 4031 179 14.1 c-69 4033 179 19.3 2399.1 4037 179 20.6 2491.p1.p2.p3 4039 179 27.5 c-63; 2477.1 4045 <t< td=""><td>4008</td><td>172</td><td>8846</td><td>16.7</td><td>c-81</td></t<>	4008	172	8846	16.7	c-81
4011 172 8846 16.0 c-80 4012 172 8846 17.7 N/A 4013 172 8846 16.7 c-77 4014 172 19.3 c-3; 2260.1; 2568.1 4016 177 8848 23.6 N/A 4018 177 8847 N/A c-70a; c-70b; 2333.1(No Contacts) 4021 177 18.3 2567.1 4024 177 17.3 2369.1 4024 177 18.0 c-68 4027 177 21.9 c-68a 4028 177 16.0 2336.1 4029 177 16.0 2297.1 4031 179 14.1 c-69 4033 179 19.3 2399.1 4037 179 20.6 2491.p1,p2,p3 4037 179 20.6 2491.p1,p2,p3 4043 179 38.0 2180.1 15340 214	4009	172	8846	16.4	c-82
4012 172 8846 17.7 N/A 4013 172 8846 16.7 c-77 4014 172 19.3 c-3; 2260.1; 2568.1 4016 177 8848 23.6 N/A 4018 177 8847 N/A c-70a; c-70b; 2333.1(No Contacts) 4021 177 18.3 2567.1 4024 177 17.3 2369.1 4026 177 18.0 c-68 4027 177 21.9 c-68a 4028 177 16.0 2336.1 4029 177 16.0 2297.1 4031 179 14.1 c-69 4033 179 19.3 2399.1 4035 179 17.3 2492.1 4037 179 20.6 2491.p1,p2,p3 4043 179 27.5 c-63; 2477.1 4045 179 38.0 2180.1 15340 214 33.4	4010	172	8846	15.4	c-78
4013 172 8846 16.7 c-77 4014 172 19.3 c-3; 2260.1; 2568.1 4016 177 8848 23.6 N/A 4018 177 8847 N/A c-70a; c-70b; 2333.1(No Contacts) 4021 177 18.3 2567.1 4024 177 17.3 2369.1 4026 177 18.0 c-68 4027 177 21.9 c-68a 4028 177 16.0 2336.1 4029 177 16.0 2297.1 4031 179 14.1 c-69 4033 179 19.3 2399.1 4035 179 17.3 2492.1 4037 179 20.6 2491.p1,p2.p3 4039 179 27.5 c-63; 2477.1 4043 179 38.0 2180.1 15340 214 33.4 3091.p1,p2 15341 214 20.6 10547.1;	4011	172	8846	16.0	c-80
4014 172 19.3 c-3; 2260.1; 2568.1 4016 177 8848 23.6 N/A 4018 177 8847 N/A c-70a; c-70b; 2333.1(No Contacts) 4021 177 18.3 2567.1 4024 177 17.3 2369.1 4026 177 18.0 c-68 4027 177 21.9 c-68a 4028 177 16.0 2336.1 4029 177 16.0 2297.1 4031 179 14.1 c-69 4033 179 19.3 2399.1 4035 179 17.3 2492.1 4037 179 20.6 2491.p1,p2.p3 4039 179 27.5 c-63; 2477.1 4043 179 21.6 2782.1 4045 179 38.0 2180.1 15340 214 33.4 3091.p1,p2 15341 214 20.6 10547.1; 10531.1 </td <td>4012</td> <td>172</td> <td>8846</td> <td>17.7</td> <td>N/A</td>	4012	172	8846	17.7	N/A
4016 177 8848 23.6 N/A 4018 177 8847 N/A c-70a; c-70b; 2333.1(No Contacts) 4021 177 18.3 2567.1 4024 177 17.3 2369.1 4026 177 18.0 c-68 4027 177 21.9 c-68a 4028 177 16.0 2336.1 4029 177 16.0 2297.1 4031 179 14.1 c-69 4033 179 19.3 2399.1 4035 179 17.3 2492.1 4037 179 20.6 2491.p1,p2,p3 4039 179 27.5 c-63; 2477.1 4043 179 21.6 2782.1 4045 179 38.0 2180.1 15340 214 33.4 3091.p1,p2 15341 214 20.6 10547.1; 10531.1 15342 214 20.6 10547.1; 10549.1; 10548.1	4013	172	8846	16.7	c-77
4018 177 8847 N/A c-70a; c-70b; 2333.1(No Contacts) 4021 177 18.3 2567.1 4024 177 17.3 2369.1 4026 177 18.0 c-68 4027 177 21.9 c-68a 4028 177 16.0 2336.1 4029 177 16.0 2297.1 4031 179 14.1 c-69 4033 179 19.3 2399.1 4035 179 17.3 2492.1 4037 179 20.6 2491.pl,p2.p3 4039 179 27.5 c-63; 2477.1 4043 179 21.6 2782.1 4045 179 38.0 2180.1 15340 214 33.4 3091.pl,p2 15341 214 36.0 3069.1; 3068.1 15342 214 20.6 10547.1; 10531.1 15343 214 21.9 10778.1; 10549.1; 10548.1	4014	172		19.3	c-3; 2260,1; 2568,1
4021 177 18.3 2567.1 4024 177 17.3 2369.1 4026 177 18.0 c-68 4027 177 21.9 c-68a 4028 177 16.0 2336.1 4029 177 16.0 2297.1 4031 179 14.1 c-69 4033 179 19.3 2399.1 4035 179 17.3 2492.1 4037 179 20.6 2491.pl.p2.p3 4039 179 27.5 c-63; 2477.1 4043 179 21.6 2782.1 4045 179 38.0 2180.1 15340 214 33.4 3091.pl.p2 15341 214 36.0 3069.1; 3068.1 15342 214 20.6 10547.1; 10531.1 15343 214 21.9 10778.1; 10549.1; 10548.1 15345 218 17.0 10139.pl.p2.st; 10194.pl 15345 218 17.0 10149.p2 15348 218	4016	177	8848	23.6	N/A
4021 177 18.3 2567.1 4024 177 17.3 2369.1 4026 177 18.0 c-68 4027 177 21.9 c-68a 4028 177 16.0 2336.1 4029 177 16.0 2297.1 4031 179 14.1 c-69 4033 179 19.3 2399.1 4035 179 17.3 2492.1 4037 179 20.6 2491.pl,p2,p3 4039 179 27.5 c-63; 2477.1 4043 179 21.6 2782.1 4045 179 38.0 2180.1 15340 214 33.4 3091.pl,p2 15341 214 36.0 3069.1; 3068.1 15342 214 20.6 10547.1; 10531.1 15343 214 21.9 10778.1; 10549.1; 10548.1 15345 218 17.0 10139.pl,p2,s1; 10194.pl 15345 218 17.0 10147.1; 10388.1 15348 218	4018	1 77	8847	N/A	c-70a; c-70b; 2333.1(No Contacts)
4026 177 18.0 c-68 4027 177 21.9 c-68a 4028 177 16.0 2336.1 4029 177 16.0 2297.1 4031 179 14.1 c-69 4033 179 19.3 2399.1 4035 179 17.3 2492.1 4037 179 20.6 2491.p1,p2,p3 4039 179 27.5 c-63; 2477.1 4043 179 21.6 2782.1 4045 179 38.0 2180.1 15340 214 33.4 3091.p1,p2 15341 214 36.0 3069.1; 3068.1 15342 214 20.6 10547.1; 10531.1 15343 214 21.9 10778.1; 10549.1; 10548.1 15344 218 17.0 10194.p2 15345 218 17.0 10194.p2 15346 218 20.9 10447.1; 10388.1 15348 218 20.6 10465.1; 10617.1 15350 218	4021	177		18.3	
4027 177 21.9 c-68a 4028 177 16.0 2336.1 4029 177 16.0 2297.1 4031 179 14.1 c-69 4033 179 19.3 2399.1 4035 179 17.3 2492.1 4037 179 20.6 2491.p1,p2,p3 4039 179 27.5 c-63; 2477.1 4043 179 21.6 2782.1 4045 179 38.0 2180.1 15340 214 33.4 3091.p1,p2 15341 214 36.0 3069.1; 3068.1 15342 214 20.6 10547.1; 10531.1 15343 214 21.9 10778.1; 10549.1; 10548.1 15344 218 17.0 10139.p1,p2,s1; 10194.p1 15345 218 17.0 10194.p2 15346 218 20.9 10447.1; 10388.1 15349 218 20.6 10465.1; 10617.1 15350 218 25.9 4092.1; 4122.1; c-65 1	4024	177		17.3	2369.1
4028 177 16.0 2336.1 4029 177 16.0 2297.1 4031 179 14.1 c-69 4033 179 19.3 2399.1 4035 179 17.3 2492.1 4037 179 20.6 2491.p1,p2,p3 4039 179 27.5 c-63; 2477.1 4043 179 21.6 2782.1 4045 179 38.0 2180.1 15340 214 33.4 3091.p1,p2 15341 214 36.0 3069.1; 3068.1 15342 214 20.6 10547.1; 10531.1 15343 214 21.9 10778.1; 10549.1; 10548.1 15344 218 17.0 10139.p1,p2,s1; 10194.p1 15345 218 17.0 10194.p2 15346 218 20.9 10447.1; 10388.1 15349 218 23.6 10465.1; 10617.1 15350 218 23.6 10489.p2; 10346.1 15352 218 22.3 4058.1; 4155.1	4026	177		18.0	c-68
4029 177 16.0 2297.1 4031 179 14.1 c-69 4033 179 19.3 2399.1 4035 179 17.3 2492.1 4037 179 20.6 2491.pl,p2,p3 4039 179 27.5 c-63; 2477.1 4043 179 21.6 2782.1 4045 179 38.0 2180.1 15340 214 33.4 3091.pl,p2 15341 214 36.0 3069.1; 3068.1 15342 214 20.6 10547.1; 10531.1 15343 214 21.9 10778.1; 10549.1; 10548.1 15344 218 17.0 10139.pl,p2,s1; 10194.pl 15345 218 17.0 10194.p2 15346 218 20.9 10447.1; 10388.1 15348 218 20.6 10465.1; 10617.1 15349 218 23.6 10489.p2; 10346.1 15350 218 25.9 4092.1; 4122.1; c-65 15352 218 22.3 4058.1; 4155.1 <td>4027</td> <td>177</td> <td>*</td> <td>21.9</td> <td>c-68a</td>	4027	177	*	21.9	c-68a
4031 179 14.1 c-69 4033 179 19.3 2399.1 4035 179 17.3 2492.1 4037 179 20.6 2491.p1,p2,p3 4039 179 27.5 c-63; 2477.1 4043 179 21.6 2782.1 4045 179 38.0 2180.1 15340 214 33.4 3091.p1,p2 15341 214 36.0 3069.1; 3068.1 15342 214 20.6 10547.1; 10531.1 15343 214 21.9 10778.1; 10549.1; 10548.1 15344 218 17.0 10139.p1,p2,s1; 10194.p1 15345 218 17.0 10194.p2 15346 218 20.9 10447.1; 10388.1 15348 218 20.6 10465.1; 10617.1 15349 218 23.6 10489.p2; 10346.1 15350 218 25.9 4092.1; 4122.1; c-65 15352 218 22.3 4058.1; 4155.1 15353 219 25.5 10310.1; 10309.1; 1	4028	177		16.0	2336.1
4033 179 19.3 2399.1 4035 179 17.3 2492.1 4037 179 20.6 2491.p1,p2,p3 4039 179 27.5 c-63; 2477.1 4043 179 21.6 2782.1 4045 179 38.0 2180.1 15340 214 33.4 3091.p1,p2 15341 214 36.0 3069.1; 3068.1 15342 214 20.6 10547.1; 10531.1 15343 214 21.9 10778.1; 10549.1; 10548.1 15344 218 17.0 10139.p1,p2,s1; 10194.p1 15345 218 17.0 10194.p2 15346 218 20.9 10447.1; 10388.1 15348 218 20.6 10465.1; 10617.1 15349 218 23.6 10489.p2; 10346.1 15350 218 25.9 4092.1; 4122.1; c-65 15352 218 22.3 4058.1; 4155.1 15353 219 25.5 10310.1; 10309.1; 10282.1; 10525.1 15354 219 26.8 <td>4029</td> <td>177</td> <td></td> <td>16.0</td> <td>2297.1</td>	4029	177		16.0	2297.1
4035 179 17.3 2492.1 4037 179 20.6 2491.p1,p2,p3 4039 179 27.5 c-63; 2477.1 4043 179 21.6 2782.1 4045 179 38.0 2180.1 15340 214 33.4 3091.p1,p2 15341 214 36.0 3069.1; 3068.1 15342 214 20.6 10547.1; 10531.1 15343 214 21.9 10778.1; 10549.1; 10548.1 15344 218 17.0 10139.p1,p2,s1; 10194.p1 15345 218 17.0 10194.p2 15346 218 20.9 10447.1; 10388.1 15348 218 20.6 10465.1; 10617.1 15349 218 23.6 10489.p2; 10346.1 15350 218 25.9 4092.1; 4122.1; c-65 15352 218 22.3 4058.1; 4155.1 15353 219 25.5 10310.1; 10309.1; 10282.1; 10525.1 15354 219 26.8 10284.1; 10527.2;	4031	179		14.1	c-69
4037 179 20.6 2491.p1,p2,p3 4039 179 27.5 c-63; 2477.1 4043 179 21.6 2782.1 4045 179 38.0 2180.1 15340 214 33.4 3091.p1,p2 15341 214 36.0 3069.1; 3068.1 15342 214 20.6 10547.1; 10531.1 15343 214 21.9 10778.1; 10549.1; 10548.1 15344 218 17.0 10139.p1,p2,s1; 10194.p1 15345 218 17.0 10194.p2 15346 218 20.9 10447.1; 10388.1 15348 218 20.6 10465.1; 10617.1 15349 218 23.6 10489.p2; 10346.1 15350 218 25.9 4092.1; 4122.1; c-65 15352 218 22.3 4058.1; 4155.1 15353 219 25.5 10310.1; 10309.1; 10282.1; 10525.1 15354 219 26.8 10284.1; 10527.2;	4033	179		19.3	2399.1
4039 179 27.5 c-63; 2477.1 4043 179 21.6 2782.1 4045 179 38.0 2180.1 15340 214 33.4 3091.p1,p2 15341 214 36.0 3069.1; 3068.1 15342 214 20.6 10547.1; 10531.1 15343 214 21.9 10778.1; 10549.1; 10548.1 15344 218 17.0 10139.p1,p2,s1; 10194.p1 15345 218 17.0 10194.p2 15346 218 20.9 10447.1; 10388.1 15348 218 20.6 10465.1; 10617.1 15349 218 23.6 10489.p2; 10346.1 15350 218 25.9 4092.1; 4122.1; c-65 15352 218 22.3 4058.1; 4155.1 15353 219 25.5 10310.1; 10309.1; 10282.1; 10525.1 15354 219 26.8 10284.1; 10527.2;	4035	179		17.3	2492.1
4039 179 27.5 c-63; 2477.1 4043 179 21.6 2782.1 4045 179 38.0 2180.1 15340 214 33.4 3091.p1,p2 15341 214 36.0 3069.1; 3068.1 15342 214 20.6 10547.1; 10531.1 15343 214 21.9 10778.1; 10549.1; 10548.1 15344 218 17.0 10139.p1,p2,s1; 10194.p1 15345 218 17.0 10194.p2 15346 218 20.9 10447.1; 10388.1 15348 218 20.6 10465.1; 10617.1 15349 218 23.6 10489.p2; 10346.1 15350 218 25.9 4092.1; 4122.1; c-65 15352 218 22.3 4058.1; 4155.1 15353 219 25.5 10310.1; 10309.1; 10282.1; 10525.1 15354 219 26.8 10284.1; 10527.2;	4037	1 7 9		20.6	2491.p1,p2,p3
4043 179 21.6 2782.1 4045 179 38.0 2180.1 15340 214 33.4 3091.p1,p2 15341 214 36.0 3069.1; 3068.1 15342 214 20.6 10547.1; 10531.1 15343 214 21.9 10778.1; 10549.1; 10548.1 15344 218 17.0 10139.p1,p2,s1; 10194.p1 15345 218 17.0 10194.p2 15346 218 20.9 10447.1; 10388.1 15348 218 20.6 10465.1; 10617.1 15349 218 23.6 10489.p2; 10346.1 15350 218 25.9 4092.1; 4122.1; c-65 15352 218 22.3 4058.1; 4155.1 15353 219 25.5 10310.1; 10309.1; 10282.1; 10525.1 15354 219 26.8 10284.1; 10527.2;	4039	179		27.5	
15340 214 33.4 3091.p1,p2 15341 214 36.0 3069.1; 3068.1 15342 214 20.6 10547.1; 10531.1 15343 214 21.9 10778.1; 10549.1; 10548.1 15344 218 17.0 10139.p1,p2,s1; 10194.p1 15345 218 17.0 10194.p2 15346 218 20.9 10447.1; 10388.1 15348 218 20.6 10465.1; 10617.1 15349 218 23.6 10489.p2; 10346.1 15350 218 25.9 4092.1; 4122.1; c-65 15352 218 22.3 4058.1; 4155.1 15353 219 25.5 10310.1; 10309.1; 10282.1; 10525.1 15354 219 26.8 10284.1; 10527.2;	4043	179		21.6	2782.1
15341 214 36.0 3069.1; 3068.1 15342 214 20.6 10547.1; 10531.1 15343 214 21.9 10778.1; 10549.1; 10548.1 15344 218 17.0 10139.p1,p2,s1; 10194.p1 15345 218 17.0 10194.p2 15346 218 20.9 10447.1; 10388.1 15348 218 20.6 10465.1; 10617.1 15349 218 23.6 10489.p2; 10346.1 15350 218 25.9 4092.1; 4122.1; c-65 15352 218 22.3 4058.1; 4155.1 15353 219 25.5 10310.1; 10309.1; 10282.1; 10525.1 15354 219 26.8 10284.1; 10527.2;	4045	179		38.0	2180.1
15341 214 36.0 3069.1; 3068.1 15342 214 20.6 10547.1; 10531.1 15343 214 21.9 10778.1; 10549.1; 10548.1 15344 218 17.0 10139.p1,p2,s1; 10194.p1 15345 218 17.0 10194.p2 15346 218 20.9 10447.1; 10388.1 15348 218 20.6 10465.1; 10617.1 15349 218 23.6 10489.p2; 10346.1 15350 218 25.9 4092.1; 4122.1; c-65 15352 218 22.3 4058.1; 4155.1 15353 219 25.5 10310.1; 10309.1; 10282.1; 10525.1 15354 219 26.8 10284.1; 10527.2;	15340	214		33.4	3091.p1,p2
15342 214 20.6 10547.1; 10531.1 15343 214 21.9 10778.1; 10549.1; 10548.1 15344 218 17.0 10139.p1,p2,s1; 10194.p1 15345 218 17.0 10194.p2 15346 218 20.9 10447.1; 10388.1 15348 218 20.6 10465.1; 10617.1 15349 218 23.6 10489.p2; 10346.1 15350 218 25.9 4092.1; 4122.1; c-65 15352 218 22.3 4058.1; 4155.1 15353 219 25.5 10310.1; 10309.1; 10282.1; 10525.1 15354 219 26.8 10284.1; 10527.2;	15341	214		36.0	
15344 218 17.0 10139.p1,p2,s1; 10194.p1 15345 218 17.0 10194.p2 15346 218 20.9 10447.1; 10388.1 15348 218 20.6 10465.1; 10617.1 15349 218 23.6 10489.p2; 10346.1 15350 218 25.9 4092.1; 4122.1; c-65 15352 218 22.3 4058.1; 4155.1 15353 219 25.5 10310.1; 10309.1; 10282.1; 10525.1 15354 219 26.8 10284.1; 10527.2;	15342	214		20.6	
15344 218 17.0 10139.p1,p2,s1; 10194.p1 15345 218 17.0 10194.p2 15346 218 20.9 10447.1; 10388.1 15348 218 20.6 10465.1; 10617.1 15349 218 23.6 10489.p2; 10346.1 15350 218 25.9 4092.1; 4122.1; c-65 15352 218 22.3 4058.1; 4155.1 15353 219 25.5 10310.1; 10309.1; 10282.1; 10525.1 15354 219 26.8 10284.1; 10527.2;	15343	214		21.9	10778.1; 10549.1; 10548.1
15345 218 17.0 10194.p2 15346 218 20.9 10447.1; 10388.1 15348 218 20.6 10465.1; 10617.1 15349 218 23.6 10489.p2; 10346.1 15350 218 25.9 4092.1; 4122.1; c-65 15352 218 22.3 4058.1; 4155.1 15353 219 25.5 10310.1; 10309.1; 10282.1; 10525.1 15354 219 26.8 10284.1; 10527.2;	15344	218		17.0	,
15348 218 20.6 10465.1; 10617.1 15349 218 23.6 10489.p2; 10346.1 15350 218 25.9 4092.1; 4122.1; c-65 15352 218 22.3 4058.1; 4155.1 15353 219 25.5 10310.1; 10309.1; 10282.1; 10525.1 15354 219 26.8 10284.1; 10527.2;	15345	218		17.0	· · · · · · · · · · · · · · ·
15349 218 23.6 10489.p2; 10346.1 15350 218 25.9 4092.1; 4122.1; c-65 15352 218 22.3 4058.1; 4155.1 15353 219 25.5 10310.1; 10309.1; 10282.1; 10525.1 15354 219 26.8 10284.1; 10527.2;	15346	218		20.9	10447.1; 10388,1
15349 218 23.6 10489.p2; 10346.1 15350 218 25.9 4092.1; 4122.1; c-65 15352 218 22.3 4058.1; 4155.1 15353 219 25.5 10310.1; 10309.1; 10282.1; 10525.1 15354 219 26.8 10284.1; 10527.2;	15348	218		20.6	10465.1; 10617.1
15350 218 25.9 4092.1; 4122.1; c-65 15352 218 22.3 4058.1; 4155.1 15353 219 25.5 10310.1; 10309.1; 10282.1; 10525.1 15354 219 26.8 10284.1; 10527.2;	15349	218		23.6	
15352 218 22.3 4058.1; 4155.1 15353 219 25.5 10310.1; 10309.1; 10282.1; 10525.1 15354 219 26.8 10284.1; 10527.2;	15350				_ ·
15353 219 25.5 10310.1; 10309.1; 10282.1; 10525.1 15354 219 26.8 10284.1; 10527.2;					· · ·
15354 219 26.8 10284.1; 10527.2;					•
, , ,					
					, ,

LD Fx #	DN	AWOIS#	LD feet	Common SSS contacts
15357	219		31.4	12837.1
15359	219		37.3	12823.1
15360	219		26.8	6800.1
15361	219		16.4	13005.1
15362	220		23.2	12856.1
15363	220		28.8	7167.1
15364	220		22.6	6978.1
15365	220		N/A	13122.1 (No Contacts)
15366	220		22.6	13255.1
15366	221	8805	N/A	N/A (No Contacts)
15367	221	8805	N/A	N/A (No Contacts)
15367	221	8805	N/A	N/A (No Contacts)
15369	221	8810	N/A	N/A (No Contacts)
15370	221	8810	22.9	N/A (No Contacts)
15371	221	8810	22.6	N/A (No Contacts)
15372	221	8804	N/A	N/A (No Contacts)
15373	221	8809	28.5	13319.1
20044	277		29.8	17223.1*
20045	277		20.9	17223.0*
20046	277		21.3	17260.2*
20047	277		30.1	17259.0*
20048	277		19.6	17540.2*
20049	277		21.6	17513.1*
20050	277		19.3	17513.1*
20051	277		20.9	17537.2*
20052	277		25.5	17515.1*
21284	297		21.3	19037.1/18092.1
21285	297		N/A	19007.1 (No Contact)
21286	297		21.3	7000.1
21287	297		N/A	7143.1 (No Contact)
21288	297		N/A	13248.1 (No Contact)
21289	297		20.9	15278.1/15313.1
21290	297		14.7	16694,1
21291	297		14.4	16842.1
21292	297		N/A	16708.1 (No Contact)
21293	297		N/A	3651.1 (No Contact)
21294	297		N/A	3805.1 (No Contact)
21295	297		24.2	3838.1
21296	297		N/A	3735.1 (No Contact)
21297	298		20.6	10131.1
21298	298		21.3	10385.1/10133.1
21299	298		16.7	C-71
21300	298		15.4	C-70
	-			

LD Fx #	DN	AWOIS#	LD feet	Common SSS contacts
21301	298		17.3	2345 .1
21302	298		15.4	10404.1
21303	298		N/A	2302.1 (No Contact)
21304	298		15.0	10704.1
21305	298		23.9	10455.1
21306	298		20.6	10088.1
21308	298		12.7	10332.1
21309	298		23.9	10056,1
21310	298		24.2	2479.1

^{*} These contacts were within the debris field noted with an established geographic limit depicted on the Field Sheet (Boat Sheet), and in a Danger to Navigation letter dated 29 October, 1996. There were no comparisons made for common SSS contacts due to the density of contacts in this field. The above dives listed on DN 277 were on contacts of prominence, and a safety limit was established to cover all contacts in this area, and defined as the debris field.

Item Description: Obstruction, Artificial Reef

Source: CL422/66- City of St. Petersburg

AWOIS Position: Lat - 27/46/34.09N Lon - 082/34/47.34W

Required Investigation: S2, ES, DI

Charts Affected: 11412, 11413, 11414

INVESTIGATION

Date(s)/DN(s): 08/27/96 (DN:240)

Position Numbers: N/A Launch Number: 0518

Investigation Used: S2, VS, ES, Water Visibility: N/A

Position Determined By: DGPS

Investigation Summary: The required area was covered with 200-percent side scan sonar coverage and no contacts were found within the recommended AWOIS search radius.

CHARTING RECOMMENDATION

The hydrographer recommends that the artificial reef be removed from chart. Do war Concuse.

JEE JECTION N.1. OF

Recommended AWOIS Position: Lat -

Lon -

THE EVALUATION RESORT.

Recommended AWOIS Least Depth:

COMPILATION NOTES

Chart

Applied As

ADD TWO OF

Item Description: Submerged Steel Structure

Source: LNM23/83--7th CGD

AWOIS Position: Lat - 027/46/38.29W Lon - 082/34/20.34

Required Investigation: S2, BD, DI

Charts Affected: 11412, 11413, 11414

INVESTIGATION

Date(s)/DN(s): 08/08/96 (DN:221) DI, 08/27/96 (DN:240) SSS

Position Numbers: 15372 Launch Number: 0518

Investigation Used: S2, VS, ES, DI, DLS Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: A diver investigation was conducted using the Diver Locator Sonar (DLS-1). A 20/60/120-meter sweep was performed and no contacts were heard. A 200-percent coverage side scan sonar survey was also conducted and no contacts were found within the recommended AWOIS search radius.

CHARTING RECOMMENDATION

The hydrographer recommends that the submerged steel structure be removed from the chart. Concert

Recommended AWOIS Position: Lat - Lon -

Recommended AWOIS Least Depth:

COMPILATION NOTES

<u>Chart</u> <u>Applied As</u>

DELETE (OboTN PA

Item Description: Obstruction (Survey Markers)

Source: H8429/58, BP89103--OPR-505-HFP-745, CES

AWOIS Position: Lat - 27/46/24.59N Lon - 082/33/11.84W

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

Charts Affected: 11412, 11413, 11414

INVESTIGATION

Date(s)/DN(s): 08/08/96(DN:221) DI, 08/27/96(DN:240) SSS

Position Numbers: 15366-15368 Launch Number: 0518

Investigation Used: S2, VS, ES, DI, DLS Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: A diver investigation was conducted using the Diver Locator Sonar (DLS-1). A 20/60/120-meter sweep was performed and no contacts were heard. A 200-percent side scan sonar survey was also conducted and no contacts were found in the recommended AWOIS search radius.

CHARTING RECOMMENDATION

The hydrographer recommends the obstruction be removed from chart. Comcuse

Recommended AWOIS Position: Lat - Lon -

Recommended AWOIS Least Depth:

COMPILATION NOTES

<u>Chart</u> <u>Applied As</u>

Applied As

DELETE 00 Juban pices

Item Description: Unknown (Partially Visible Wreck)

Source: CL825/89--NM Marine Information Report

AWOIS Position: Lat - 27/47/26.00N Lon - 082/35/05.00W

Required Investigation: S2, BD, SD -- 300m Search Radius

Charts Affected: 11412, 11413, 11414

INVESTIGATION

Date(s)/DN(s): 07/11/96 (DN:193)

Position Numbers: N/A Launch Number: 0518

Investigation Used: S2, VS, ES Water Visibility: N/A

Position Determined By: DGPS

Investigation Summary: A 200-percent side scan sonar survey was conducted and no contacts were found in the recommended AWOIS search radius.

CHARTING RECOMMENDATION

The hydrographer recommends the unknown obstruction (partially visible wreek) be removed from the chart. Concer.

Recommended AWOIS Position: Lat - Lon -

Recommended AWOIS Least Depth:

COMPILATION NOTES

Chart

Applied As

DELETE DEET PA

Item Description: Fishing Vessel CAPT "J"

Source: LNM03/86--7th CGD

AWOIS Position: Lat - 27/46/55.09N Lon - 082/33/35.34W

Required Investigation: S2, BD, DI, SD -- 300m Search Radius

Charts Affected: 11412, 11413, 11414

INVESTIGATION

Date(s)/DN(s): 08/08/96 (DN:221) DI, 08/13/96 (DN:226)

Position Numbers: 15370-15371 Launch Number: 0518

Investigation Used: S2, VS, ES, DI, DLS Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: A diver investigation was conducted using the Diver Locator Sonar (DLS-1). A 20/60/120-meter sweep was performed and a submerged wreck was found within the search radius. Detached position 15370 is the north end and 15371 is the south end of the submerged wreck. A 200-percent coverage side scan sonar survey was also conducted in this area. The side scan sonar data confirmed the location of the submerged wreck.

CHARTING RECOMMENDATION

The hydrographer recommends that the currently charted wreck be removed and a submerged wreck be charted at the position listed below.

Recommended AWOIS Position: Lat-27/47/00 AN Lon-082/33/34:1W (North end)

Lat -27/46/59.9N Lon-082/33/34.1W (South end)

Recommended AWOIS Least Depth: Position 15370, 7.0 meters at MLLW. (20 F7)

Position 15371, 6.9 meters at MLLW.

COMBILATION NOTES

COMPILATION NOTES

<u>Chart</u> <u>Applied A</u>

DELETE (HT) PA

nem Description: Unknown (Sunken Ba	ige/vessel)					
Source: CL1290/85USPS						
AWOIS Position: Lat - 27/51/57.08N Lon - 082/33/04.34W						
Required Investigation: S2, BD,SD 2	00m Search Radius					
Charts Affected: 11412, 11413, 11414						
	VESTIGATION					
Date(s)/DN(s): 06/19/96 (DN:171)SSS						
Position Numbers: N/A	Launch Number: 0518					
Investigation Used: S2, VS, ES,	Water Visibility: N/A					
Position Determined By: DGPS						
Investigation Summary: A 200-percent contacts were found in the recommended	coverage side scan sonar survey was conducted and no AWOIS search radius.					
CHARTING	G RECOMMENDATION					
The hydrographer recommends that the un	TUNEN A A Name of the chart. Concurrence of the chart. Concurrence of the chart.					
Recommended AWOIS Position: Lat	- Lon -					
Recommended AWOIS Least Depth:						
**********	***********					
COMPILATION NOTES						
<u>Chart</u>	Applied As DELETE (H) /A.					

Item Description: Obstruction (Row of Six Markers)

Source: H8424/58--C&GS, CL1067/81--USPS

AWOIS Position: Lat - 27/52/06.48N Lon - 082/33/40.14W

Required Investigation: S4, BD, DI

Charts Affected: 11412, 11413, 11414

INVESTIGATION

Date(s)/DN(s): 05/16/96 (DN:137)

Position Numbers: 1-4

Investigation Used: VS, ES, DI, DLS Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: A visual search found detached position 1 to be an exposed 3 pile dolphin, 5.4 meters in height. Detached position 2 is a single exposed pile, 5.4 meters in height, which lies between positions 1 and 3. Detached position 3 is a 3 pile exposed dolphin, 4.6 meters in height. Photographs were taken and are included with the survey data. Detached position 4 is the location of a diver investigation conducted using the Diver Locator Sonar (DLS-1). A 20/60/120-meter sweep was performed and no other contacts were found in the recommended AWOIS search radius.

CHARTING RECOMMENDATION

The hydrographer recommends that the Z charted submerged piles be removed and the 2 dolphins and the single exposed pile be charted at the recommended positions below. Concur.

05.90

Recommended AWOIS Position: Lat -27/52/85.8N Lon -082/33/39.8W (Pos#1) Lat -27/52/86.8N Lon -082/33/40.8W (Pos#2)

Lat -27/52/86.2N Lon -082/33/42.8W (Pos#3)

06.23

Recommended AWOIS Least Depth:

COMPILATION NOTES

Chart

Launch Number: 0518

DELETE COOD JUBA PILES ED CHART 000 DOS

Item Description: Obstruction (Line of Approximately 14 Markers)

Source: H8424/58--USC&GS, CL1466/80--USPS

AWOIS Position: Lat - 27/52/44.88N Lon - 082/32/54.54W

Required Investigation: S4, BD, DI

Charts Affected: 11412, 11413, 11414

INVESTIGATION

Date(s)/DN(s): 06/19/96 (DN:171) SSS, 06/20/96 (DN:172) DI

Position Numbers: 3534-3556 SSS Launch Number: 0518

4007-4013 DI

Investigation Used: S2, ES, DI, DLS Water Visibility: 3m

Position Determined By: DGPS

Investigation Summary: A 200-percent side scan sonar survey was conducted and seven contacts were found in the recommended AWOIS search radius. A diver investigation was then conducted using the Diver Locator Sonar (DLS-1). A 20/60/120-meter sweep was performed which found the rotting remains of the charted piling, all lying on their sides half buried in the sandy bottom. The piling were 10"-12" diameter. The piling were found between 27°52'41"N, 082°32'47"W (east end) and 27°52'44"N, 082°32'57"W (west end). Least depths ranged from 15.1' (4.6m) to 17.7' (5.4m) in water depths of 15' (4.6m) to 18' (5.5m), with none of the piles rising more than 0.1m off the bottom. Severe

CHARTING RECOMMENDATION

Because these piles are flush with or nearly flush with the bottom, this item is recommended for Concur JURBUNDING DEPTHS ARE 15 TO 17 FT. removal from the chart.

Recommended AWOIS Position: Lat-Lon -

Recommended AWOIS Least Depth:

COMPILATION NOTES

Chart

DELETE Applied As

Item Description: Obstruction (Two Markers)

Source: 1945 Air Photo Revision, CL1466/80--USPS

AWOIS Position: Lat - 27/53/03.50N Lon - 082/32/43.00W

Required Investigation: S4, BD, DI

Charts Affected: 11412, 11413, 11414

INVESTIGATION

Date(s)/DN(s): 06/19/96 (DN:171) SSS, 06/25/96 (DN:177) DI

Position Numbers: 4018 Launch Number: 0518

Investigation Used: S2, ES, DI, DLS Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: A 200-percent side scan sonar survey was conducted and seven minor contacts were found in the recommended AWOIS search radius. Results from the HDAPS contact table showed three of the seven contacts appeared significant enough to perform diving operations on. A diver investigation was conducted using the Diver Locator Sonar (DLS-1). A 20/60/120-meter sweep was performed and found no contacts in the recommended AWOIS search radius.

CHARTING RECOMMENDATION

The hydrographer recommends that the markers/piles be removed the from chart. Comcure

Recommended AWOIS Position: Lat - Lon -

Recommended AWOIS Least Depth:

COMPILATION NOTES

<u>Chart</u> <u>Applied As</u>

DELETE o John piles

Item	Descript	ion: C	Obstruction ((Row	of A	pproximately	y 1 4	Markers)	
------	----------	--------	---------------	------	------	--------------	--------------	----------	--

Source: H8424/58--C&GS,CL1080/81--USPS

AWOIS Position: Lat - 27/53/11.68N Lon - 082/32/42.64W

Required Investigation: S4, BD, DI

Charts Affected: 11412, 11413, 11414

INVESTIGATION

Date(s)/DN(s): 06/19/96 (DN:171) SSS, 06/25/96 (DN:177) DI

Position Numbers: 3395-4006 (SSS)

Launch Number: 0518

4016 (DI)

Investigation Used: S2, ES, DI, DLS Water Visibility: 2m

Position Determined By: DGPS

Investigation Summary: A 200-percent side scan sonar survey was conducted and two contacts were found in the recommended AWOIS search radius. A diver investigation was conducted using the Diver Locator Sonar (DLS-1). A 20/60/120-meter sweep was performed and found two crab pots. No piles/markers were found within the recommended AWOIS search radius.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted submerged piles be removed from the chart. Concer

Recommended AWOIS Position: Lat - Lon -

Recommended AWOIS Least Depth:

COMPILATION NOTES

<u>Chart</u> <u>Applied As</u>

DELETE JUBM piles ED 0000000

Item Description: Obstruction (Pile)

Source: H8424/58--C&GS, CL409/82--USPS

AWOIS Position: Lat - 27/53/14.58N Lon - 082/32/33.54W

Required Investigation: S4, BD, DI -- 30m Search Radius

Charts Affected: 11412, 11413, 11414

INVESTIGATION

Date(s)/DN(s): 05/16/96 (DN:137)

Position Numbers: 6 Launch Number: 0518

Investigation Used: VS, ES, DI, DLS Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: A diver investigation was conducted using the Diver Locator Sonar (DLS-1). A 20/60/120-meter sweep was performed and no contacts were found within the recommended AWOIS search radius.

CHARTING RECOMMENDATION

The hydrographer recommends that the single pile be removed from the chart. Concor

Recommended AWOIS Position: Lat - Lon -

Recommended AWOIS Least Depth:

COMPILATION NOTES

<u>Chart</u> <u>Applied As</u>

DELETE Juden DIE O

Item Description: Obstruction (Sounding)

Source: BP89100-05--OPR-505-HFP, CL837/74

AWOIS Position: Lat - 27/53/23.00N Lon - 082/32/23.00W

Required Investigation: ES

Charts Affected: 11412, 11413, 11414

INVESTIGATION

Date(s)/DN(s): 06/05/96 (DN:157)

Launch Number: 0518 Position Numbers: 2057-2149

Water Visibility: N/A Investigation Used: ES

Position Determined By: DGPS

Investigation Summary: An echo sounder development at 20-meter line spacing was conducted in the inlet with the 12 foot reported 1974 depth. The least depth found in the inlet was 19 feet at position 2126.

CHARTING RECOMMENDATION

The hydrographer recommends that the 12 foot reported 1974 notation be removed from the chart and replaced with 19 feet 1996. Concue IN PARS. CHART PIESERT JURIEY JONIDAY:

Recommended AWOIS Position: Lat - 27/53/22.9N Lon - 082/32/27.4W

Recommended AWOIS Least Depth:

COMPILATION NOTES

Chart

DELETE NOTATION "12 ft rep 1974"



UNITED STATES DEPARTMENT OF COMMERCE National Gosanic 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-10685

LOCALITY: Tampa Bay, Florida, Coffee Pot Bayou to Port Tampa Bay

TIME PERIOD: May 16 - Oct 24,1996

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: 872-6607 Old Port Tampa, Florida

Lat. 27° 51.4′N Lon. 82° 33.2′W

PLANE OF REFERENCE (MEAN LOWER LOW WATER): 0.000 m HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 0.665 m

REMARKS: RECOMMENDED ZONING

Use zone(s) identified as: TB45, TB48, TB49, TB53 & TB54

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

		EANIC AND AT	MOSPHER		MERCE		/EY NU 0685	MBER	
Name on Survey	A OH	CHART NO. 111	SURVEY SURVEY DUPO	ROME OF AL	ocat ware	G RANG	MAP NEWALL	s. Liekr Lis	
BAYOU GRANDE	Х	Х							1
BENJAMIN ISLAND	Х	Х							2
CHRISTMAS ISLAND	Х	х					_		3
CHRISTMAS PASS	Х	х							4
COFFEEPOT BAYOU(title)	х	X							5
FLORIDA (title)	х	х						_	6
INTERBAY PENINSULA	Х	X							7
MERMAID POINT	х	х							8
MUD HOLE ISLAND	Х	X					<u>.</u> .		9
PAPYS POINT	х	Х							10
PORT TAMPA DOCK (title)	Х	х							11
ROSS ISLAND	Х	х						-	12
SAINT PETERSBURG	χ	х							13
SHORE ACRES (pp1)	Х	x							14
SMACKS BAYOU	Х	х							15
SNAKE ISLAND	Х	X							16
SNELL ISLAND HARBOR	Х	X							17
TAMPA BAY	Х	Х				<u> </u>			18
VENETIAN ISLES	Х	Х							19
WEEDON ISLAND	Х	Х	<u> </u>						20
				Appro	redi:			3 5	21
				1		91			22
					to c	-10	1		23
				Chlaf	Geogran	ther /			24
				APF	10	997			25

HYDROGRAPHIC SURVEY STATISTICS REGISTRY NUMBER: H-10685

NUMBER OF CONTROL STATIONS		2
NUMBER OF POSITIONS		21310
NUMBER OF SOUNDINGS		21310
	TIME-HOURS	DATE COMPLETED
PREPROCESSING EXAMINATION	16	01/31/97
VERIFICATION OF FIELD DATA	157	06/19/97
QUALITY CONTROL CHECKS	0	
EVALUATION AND ANALYSIS	43	
FINAL INSPECTION	79	01/20/98
COMPILATION	98	02/09/98
TOTAL TIME	393	
ATLANTIC HYDROGRAPHIC BRANCH AP	PROVAL	01/20/98

NOAA FORM 61-29 (12-71) NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	REFERENCE NO.		
	N/CS33-11-98		
LETTER TRANSMITTING DATA	DATA AS LISTED BELOW WERE FORWARDED TO YOU BY (Check):		
	ORDINARY MAIL AIR MAIL		
TO:	REGISTERED MAIL SEXPRESS		
NOAA/National Ocean Service	GSL (Give number)		
Chief, Data Control Group, N/CS3x1			
SSMC3, Station 6815	DATE FORWARDED		
1315 East-West Righway			
L Silver Spring, MD 20910-3282	February 11, 1998		
	NUMBER OF PACKAGES 1 Box, 1 Tube		
NOTE: A separate transmittal letter is to be used for each type of da etc. State the number of packages and include an executed copy of the tion the original and one copy of the letter should be sent under se receipt. This form should not be used for correspondence or transmitt	e transmittal letter in each package. In addi- parate cover. The copy will be returned as a		
H-10685			
Florida, Tampa Bay, Coffeepot Bayo	u to Port Tampa Dock		
1 Box Containing:			
1 Original Descriptive Report for H~10685 1 Envelope with HISTORY OF CARTOGRAPHIC WORK chart 11417	(NOÃA form 76-71) for H-10685 for		
1 Tube Containing:			
1 Original Smooth Sheet for H-10685 1 Paper Composite plot (1 of 2) of survey H- 1 Paper Composite plot (2 of 2) of survey H- 1 Mylar H-Drawing of H-10685 for NOS chart 1	10685 for chart 11417		
	•••		
FROM: (Signature)	RECEIVED THE ABOVE (Name, Division, Date)		
Richard H. Whitfield	4		
Return receipted copy to:			
r			
Atlantic Hydrographic Branch N/CS331			
439 W. York Street			
Norfolk, VA 23510-1114			
L 1			

ATLANTIC HYDROGRAPHIC BRANCH EVALUATION REPORT FOR H-10685 (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 an ENCAD NovaJet III 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 1.091 seconds (33.599 meters or 3.36 mm at the scale of the survey) north in latitude, and .651 seconds (17.814 meters or 1.78 mm at the scale of the survey) east in longitude.

J. SHORELINE

Shoreline for the present survey originates with National Ocean Service (NOS) chart 11413 ($41^{\rm st}$ Ed., Apr 22/95). The shoreline is shown on the present survey smooth sheet in brown and is for orientation purposes only.

L. JUNCTIONS

H-10606 (1995) to the southwest H-10623 (1995) to the southeast

A standard junction could not be made with the junctional surveys. The smooth sheets for the junctional surveys are archived at NOS headquarters, Silver Spring, Maryland. In this case the note "ADJOINS" has been shown on the present survey smooth sheet. Any adjustments to the depth curves in

the junctional areas will have to be made on the chart during compilation.

There are no contemporary surveys to the north and south of the present survey. Present survey depths are in harmony with the charted hydrography to the north and south.

M. COMPARISON WITH PRIOR SURVEYS

H-8424 (1958) 1:20,000 H-8425 (1958) 1:10,000 H-8426 (1958) 1:10,000 H-8429 (1958) 1:20,000

- 1. Prior survey H-8424 covers a small section of the north east section of the present survey. Prior survey soundings are in good agreement with scattered soundings varying plus or minus 1 foot with present survey soundings.
- 2. Prior survey H-8425 covers the central area of the present survey from Latitude 27°48'30"N, to Latitude 27°51'45"W. Prior survey soundings are in good agreement with the present survey. Scattered prior survey depths vary plus or minus 1 foot with present survey depths.
- a. The following charted <u>piles</u> originate with the prior survey. The piles were neither verified nor disproved by the present survey and have been brought forward from the prior survey to supplement the present survey. The piles are shown as submerged on the present survey.

<u> Feature</u>	<u>Latitude (N)</u>	Longitude (W)
pile	27°48'40.5"	82°34'34.5"
pile	27°48'48.0"	82°34'34.6"
pile	27°51'13.0"	82°33'22.5"

It is recommended that these piles be revised to submerged piles as shown on the present survey.

- b. The charted <u>row of four markers</u>, in the vicinity of Latitude 27°50'32"N, Longitude 82°34'01"W originates with the prior survey. These markers are considered disproved by 200% side scan sonar. It is recommended that the <u>four markers</u> be deleted from the chart.
- c. A charted visible <u>pile</u> was verified and located by the hydrographer in Latitude 27°50'07.783"N, Longitude 82°34'32.871"W. No change in charting is recommended.

- 3. Prior survey H-8426 covers a small area of the southwest section of the present survey. Prior survey soundings are in good agreement with the present survey. Scattered prior survey depths vary plus or minus 1 foot with present survey depths.
- 4. Prior survey H-8429 covers the southern section of the present survey. Prior survey soundings are in good agreement with the present survey. Scattered prior survey depths vary plus or minus 1 foot with present survey depths.
- a. The following charted <u>piles</u> originate with the prior survey. These piles were neither verified nor disproved by the present survey and have been brought forward from the prior survey to supplement the present survey.

<u>Features</u>	<u>Latitude (N)</u>	<u>Longitude (W)</u>
pile	27°47'58.8"	82°34'57.0"
pile	27°47'56.8"	82°34'53.5"

It is recommended that the <u>piles</u> be retained as charted.

- b. A charted <u>dolphin</u> originating with the prior survey in Latitude 27°47'50.8"N, Longitude 82°34'37.5"W was neither verified nor disproved by the present survey. The dolphin has been brought forward from the prior survey to supplement the present survey. The dolphin is shown as submerged on the present survey. It is recommended that the charted dolphin be revised to a <u>submerged dolphin</u> as shown on the present survey.
- c. A charted visible <u>pile</u> originating with the prior survey in Latitude 27°47'33.0"N, Longitude 82°35'13.8"W is considered adequately disproved by 200% side scan sonar. It is recommended that the visible <u>pile</u> be deleted from the chart.
- d. A charted visible <u>pile</u> originating with the prior survey in Latitude 27°47'36.8"N, Longitude 82°35'13.0"W is charted immediately outside the limits of the present survey. This pile is not considered disproved by the present survey and has been brought forward from the prior survey to supplement the present survey. It is recommended that the <u>pile</u> be retained as charted.

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

N. ITEM INVESTIGATIONS

1. Automated Wreck and Obstruction Information System (AWOIS) item #8803 is a charted Obstruction, Fish Haven (auth min depth 17-ft) in Latitude 27°46'34.09"N, Longitude 82°34'47.34"W. Two uncharted obstructions with depths of 14 feet were located by the present survey in Latitude 27°46'34.67"N, Longitude 82°34'51.18"W, and Latitude 27°46'34.68"N, Longitude 82°34'42.87"W. Because the obstructions are shoaler than the authorized minimum depth of the fish haven, the obstructions are considered dangers to navigation. It is recommended that the two obstructions with depths of 14-ft be charted as shown on the present survey. It is also recommended that the Marine Chart Division, Source Data Unit ascertain the pertinent information for application of this feature to the nautical chart.

O. <u>COMPARISON WITH CHARTS 11412 (36th Edition, Jun 04/94)</u> 11413 (41st Edition, Apr 22/95) 11414 (36th Edition, Jun 04/94)

a. Hydrography

The charted hydrography originates with the previously discussed prior surveys and requires no further consideration. The hydrographer makes an adequate chart comparison in section O. of the Descriptive Report. The following should be noted:

- 1. A charted visible <u>pile</u>, originating with an unknown source in Latitude 27°48'05"N, Longitude 82°34'21"W, was neither verified nor disproved by the present survey. The present survey shows no indication of a visible pile in the vicinity. It is recommended that the <u>pile</u> be revised to submerged.
- 2. Three charted <u>Spoil Areas</u> in the vicinities of Latitude 27°48'00"N, Longitude 82°34'00"W, Latitude 27°49'15"N, Longitude 82°33'50"W, and Latitude 27°50'45"N, Longitude 82°35'00"W, were developed by the field unit. It is recommended that the charted <u>limits</u> and the notations <u>Spoil Area</u> be retained. It is also recommended that the <u>blue tint</u> be deleted within the limits of the spoil areas and depths from the present survey be charted as shown on the present survey.
- 3. The charted Obstruction (fish haven), in the vicinity of Latitude 27°47'18"N, Longitude 82°36'00"W, has been developed by the present survey. The fish haven is charted approximately 700 meters to the west of the dump site of all the debris, or the debris for the fish haven was not dumped in

the correct area. It is recommended that the Marine Chart Division, Source Data Unit ascertain the pertinent information for application of this feature to the nautical chart.

4. The following uncharted <u>features</u> were located by the present survey.

<u>Feature</u>	<u>Latitude (N)</u>	Longitude (W)	
16 Rk	27°52'36.12"	82°32'52.52"	
14 Rk	27°52'15.38"	82°32'57.43"	
17 Rk	27°52'22.05"	82°32'59.43"	
15 Rk	27°52'20.47"	82°32'56.30"	
14 Rk	27°52'23.53"	82°33'10.78"	
17 Rk	27°52'02.50"	82°33'16.49"	
21 Rk	27°51'59.50"	82°33'21.59"	
18 Obstr	27°51'46.77"	82°33'09.23"	
14 Rk	27°51'48.20"	82°33'30.61"	
23 Rk	27°50'53.09"	82°33'51.39"	
20 Rk	27°50'43.39"	82°33'49.43"	
22 Rk	27°50'03.88"	82°34'04.17"	
23 Obstr	27°49'53.55"	82°34'07.08"	
22 Obstr	27°49'51.84"	82°34'00.80"	
23 Obstr	27°49'03.29"	82°34'23.03"	
21 Obstr	27°46'35.96"	82°35'59.99"	
22 Obstr	27°47'13.47"	82°33'18.82"	
20 Obstr	27°47'21.18"	82°33!58.17"	GHCA1 3-17-98
17 RK	270 52'04.50"	82033'09.49"	3-17-98

It is recommended that these <u>features</u> be charted as shown on the present survey.

5. The following uncharted <u>features</u> were located by the present survey. Because these features have shoaler depths in the immediate vicinity or are deeper than controlling depths, they are not considered hazards to navigation.

<u>Feature</u>	<u>Latitude (N)</u>	Longitude (W)
16 Rk	27°52'55.43"	82°32'42.24"
16 Obstr	27°52'19.15"	82°32'56.93"
23 Rk	27°51'45.10"	82°33'26.71"
21 Rk	27°51'30.90"	82°33'34.37"
19 Obstr	27°51'15.86"	82°33'22.47"
12 Rk	27°50'32.03"	82°33'58.92"
33 Rk	27°50'33.96"	82°34'38,42"
35 Rk	27°49'59.20"	82°34'20.34"
27 Rk	27°49'45.51"	82°34'19.28"
31 Rk	27°49'38.58"	82°34'15.97"
37 Rk	27°49'36.20"	82°34'12.41"
38 Rk	27°50'01.45"	82°34'01.74"

27 Obstr	27°49'25.28"	82°34'02.38"
16 Obstr	27°47'36.29"	82°34'04.05"
28 Obstr	27°47'20.63"	82°33'19.64"
23 Rk	27047124.614	82033139.30"

It is recommended that these features not be charted.

- 6. Three uncharted <u>rocks with depths of 23-ft, 25-ft, and 27-ft</u> were located by the hydrographer in Latitude 27°49'54.53"N, Longitude 82°34'13.79"W, Latitude 27°49'57.51"N, Longitude 82°34'15.66"W, and Latitude 27°49'54.44"N, Longitude 82°34'16.80"W, respectively. Because of the scale of the chart, it is recommended that the rock with a depth of 27 feet not be charted and the <u>rocks with depths of 23 feet and 25 feet</u> be charted as rocks with a danger curve covering the area of all three rocks.
- 7. Two uncharted rocks with depths Of 20-ft and 21-ft were located by the hydrographer in Latitude 27°49'49.90"N, Longitude 82°34'21.75"W, and Latitude 27°49'52.50"N, Longitude 82°34'22.30"W, respectively. Because of the scale of the chart, it is recommended that the rock with a depth of 21 feet not be charted and the rock with a depth of 20 feet be charted as 20 Rks with a danger curve covering the area of both rocks.
- 8. Two uncharted <u>rocks with depths of 20-ft and 21-ft</u> were located by the hydrographer in Latitude 27°51'52.91"N, Longitude 82°33'17.99"W, and Latitude 27°51'53.40"N, Longitude 82°33'20.55"W, respectively. Because of the scale of the chart, it is recommended that the rock with a depth of 21 feet not be charted and the <u>rock with a depth of 20 feet</u> be charted as <u>20 Rks</u> with a danger curve covering the area of both rocks.

The present survey is adequate to supersede the charted hydrography within the common area.

b. Dangers to Navigation

Three Danger to Navigation reports were submitted 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. Copies of the reports are appended to the Descriptive Report. The following should be noted:

1. The following features have been submitted as dangers to navigation and are presently shown on chart 11417 (1st Ed. June 21/97).

<u>Feature</u>	<u>Latitude (N)</u>	<u>Longitude (W)</u>
26 Wk	27°50'43.38"	82°33'35.73"
17 Obstn	27°50'11.00"	82°33'59.82"

It is recommended that these features be retained as charted.

- 2. A danger to navigation report was submitted by the hydrographer on an uncharted <u>dangerous submerged obstruction</u> with <u>a depth of 26 feet</u> (26 Obstn) in Latitude 27°47'21.07"N, Longitude 82°35'24.29"W. The depth on the obstruction was computed with predicted tides. The obstruction is presently charted on the latest edition of chart 11417. During office processing approved tides were applied to the present survey. The rock is shown on the present survey as an obstruction with a depth of 25 feet. It is recommended that the charted dangerous submerged obstruction with a depth of 26 feet (26 Obstn) be revised to a <u>dangerous submerged obstruction</u> with a depth of 25 feet (25 Obstn).
- 3. A danger to navigation report was submitted by the hydrographer on two uncharted <u>dangerous submerged obstructions</u> with depths of 19 feet in Latitude 27°47'18.18"N, Longitude 82°35'29.49"W, and Latitude 27°47'15.53"N, Longitude 82°35'31.98"W. These obstructions are presently charted on the latest edition of chart 11417. The northern most of the two is shown as a sunken wreck on the present survey. It is recommended that dangerous 19-ft obstruction be revised to a <u>dangerous sunken wreck</u> (19 Wk). It is also recommended that the southern most obstruction be revised from 19 Obstns to <u>19 Obstn</u>.
- 4. A danger to navigation report was submitted by the hydrographer on an uncharted <u>dangerous submerged obstruction</u> with a <u>depth of 30 feet</u> in Latitude 27°47'08.63"N, Longitude 82°35'38.38"W. The obstruction is presently charted on the latest edition of chart 11417. The obstruction is a wreck as shown on the present survey with a depth of 29 feet after application of approved tides during office processing. An obstruction with a depth of 20 feet was found in Latitude 27°47'08.63"N, Longitude 82°35'38.38"W. This obstruction is in the immediate vicinity of the wreck. It is recommended that the charted <u>dangerous submerged obstruction</u> with a <u>depth of 30 feet</u> (30 *Obstn*) be deleted and a <u>dangerous submerged obstruction</u> with a <u>depth of 20 feet</u> (20 *Obstn*) be charted as shown on the present survey.
- 5. A danger to navigation report was submitted by the hydrographer on an uncharted <u>dangerous submerged obstruction</u>

with <u>a depth of 21 feet</u> in Latitude 27°47'10.58"N, Longitude 82°35'42.27"W. The obstruction is presently charted on the latest edition of chart 11417. It is recommended that the <u>dangerous submerged obstruction</u> with <u>a depth of 21 feet</u> be retained as charted.

6. A Danger to Navigation report was submitted during office processing to Commander (oan), Seventh Coast Guard District, Miami, Florida for inclusion in the local Notice to Mariners, and to Marine Chart Division, N/CSx1, Silver Spring, Maryland. A copy of the report is appended to this report. See also section N.1. of this report.

P. ADEQUACY OF SURVEY

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

Q. AIDS TO NAVIGATION

Fixed aid to navigation Tampa Bay Cut J Channel Upper Range Rear Light in Latitude 27°49'57.99"N, Longitude 82°34'26.68"W is presently charted as Position Approximate (PA). It is recommended that the notation PA be removed from the chart unless other information indicates otherwise.

s. 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.

NOAA chart 11417 (1^{st} Ed., June 21/97) was used for compilation of the present survey.

Robert Snow

Cartographic Technician Verification of Field Data Evaluation and Analysis



UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration NATIONAL OCEAN SERVICE, Office of Coast Survey Atlantic Hydrographic Branch 439 W. York Street Norfolk, VA 23510-1114

January 6, 1998

Commander (oan)
Seventh Coast Guard District
Brickell Plaza Building
909 SE 1 Avenue
Miami, FL 33131-3050

Dear Sir,

The following items were discovered during office processing and are considered a danger to navigation.

Hydrographic Survey Registry Number...H-10685 State......Florida General Locality......Tampa Bay

Sublocality......2.3 NM mi SE of Coffeepot

Bayou

Project Number.....OPR-J343

Surveyed by NOAA Atl Hydrographic Party

Two uncharted dangerous submerged obstructions (concrete rubble) with depths of 14 feet in Latitude 27°46'34.67"N, Longitude 82°34'51.18"W and Latitude 27°46'34.68"N, Latitude 82°34'42.87"W. These obstructions are within the limits of a charted Fish Haven with an authorized minimum depth of 17 feet.

Affected Nautical Chart:

CHART EDITION NO. DATE HORIZ. DATUM
11417 1st Jun 21/97 NAD 83

Questions concerning this report should be directed to the Atlantic Hydrographic Branch, by calling (757) 441-6746.

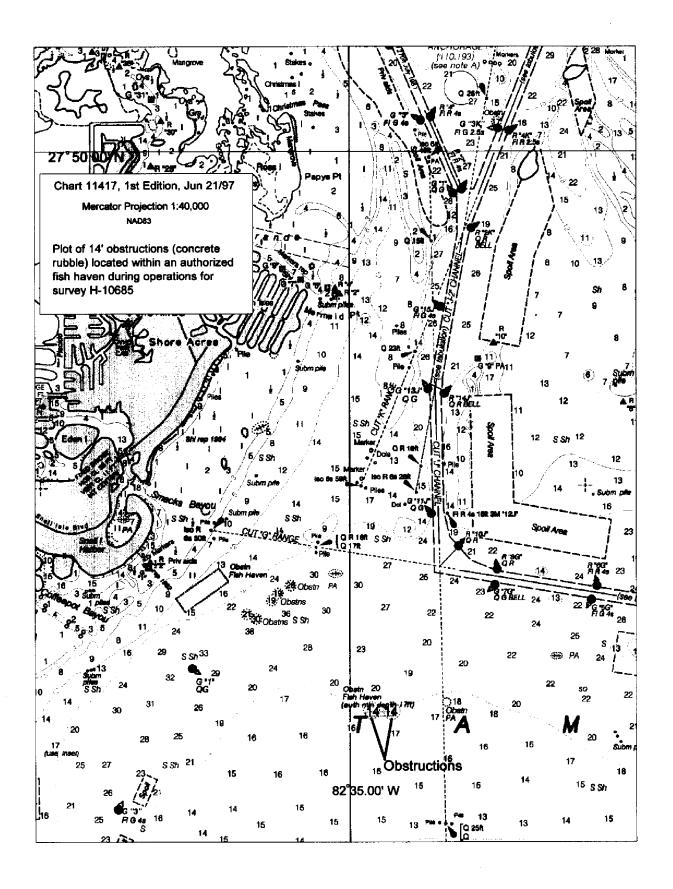
Sincerely,

Nicholas Perugini, CDR, NOAA

Chief, Atlantic Hydrographic Branch

Attachment





APPROVAL SHEET H-10685

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 disapproval 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.

Sorned	H. Whiel	eld)	Date: <u>/AN 20, 199</u>	3
Richard H.	Whitfield			

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, CDR, NOAA
Chief, Atlantic Hydrographic Branch

Final Approval:

Approved: Whank Chmothur A

Andrew A. Armstrong/ II

Captain, NOAA

Chief, Hydrographic Surveys Division

Date: March 25, 1998

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

MARINE CHART BRANCH **RECORD OF APPLICATION TO CHARTS**

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO.

- A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.
- 1. Letter all information.
- 2. In "Remarks" column cross out words that do not apply.
- 3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

CHART	DATE	CARTOGRAPHER	REMARKS
11417	2/2/98	14 Wicheld	Full Part Before After Marine Center Approval Signed Via
	//		Drawing No.
			Full Part Before After Marine Center Approval Signed Via
			Drawing No.
			Full Part Before After Marine Center Approval Signed Via
			Drawing No.
			Full Part Before After Marine Center Approval Signed Via
			Drawing No.
			Full Part Before After Marine Center Approval Signed Via
		-1-	Drawing No.
			Full Part Before After Marine Center Approval Signed Via
			Drawing No.
		9,-5,-	
			Full Part Before After Marine Center Approval Signed Via
			Drawing No.
			Full Part Before After Marine Center Approval Signed Via
	-		Drawing No.
-			Full Part Before After Marine Center Approval Signed Via
-			Drawing No.
			Full Part Before After Marine Center Approval Signed Via
			Drawing No.
-1-			
· · · · · · · · · · · · · · · · · · ·			
	+		
			
	—	-	
	1	1	