

H10660

NOAA FORM 76-35A

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

DESCRIPTIVE REPORT

Type of Survey ..... **HYDROGRAPHIC**

Field No. .... **AHP-10-8-95**

Registry No. .... **H-10660**

LOCALITY

State ..... **TEXAS**

General Locality ..... **GALVESTON BAY**

Sublocality ..... **OFFATTS BAYOU TO NORTH**

..... **DEER ISLAND**

..... **19 95**

..... **CHIEF OF PARTY**  
..... **LT K. N. HARBISON, NOAA**

LIBRARY & ARCHIVES

DATE ..... **JAN 16 1997**

Substitute for NOAA Form 77-28

**Hydrographic Title Sheet**

Register No. : H-10660

Field No. : AHP-10-8-95

State: Texas

General locality: Galveston Bay

Locality: Offatts Bayou to North Deer Island

Scale: 1: 10,000 Date of Survey: 6 Nov.95 - 27 Nov. 95

Instruction dated: 16 September 1994

Vessel: Launch 0518

Chief of Party: Lt. Kevin Harbison, NOAA

Surveyed by: David Elliott

Soundings taken by echo sounder, headline: in meters

Graphic record scaled by: John Gaskin, Phil Wolf and D. Elliott

Graphic record checked by: D. Elliott, B. Ramsey

Protracted:  *ENCAD NOVAJET III PLOTTER (A.H.B.)*  
Automated plot by: HDAPS/Zeta ploter

Verification by: AHB

Soundings in : ~~Meters~~ <sup>FEET</sup> at MLLW

Remarks: Change No. 1 dated 6 June, 1995.

NOTES IN THE ORIGINAL DESCRIPTIVE REPORT WERE MADE  
IN Red DURING OFFICE PROCESSING.

INDEX OF SHEETS

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INDEX OF SHEETS

OPR-K204-AHP

AHP-10-8-95

H-10660

Offatts Bayou to North Deer Island, Galveston Bay, TX

All plotter sheets were created by HDAPS with a NICOLET plotter on site in Galveston Texas prior to data acquisition.

There were no final field sheets created due to team processing with the Atlantic Hydrographic Branch.

There were four field sheets created for sheet "W" numbered PS #5 containing the following data:

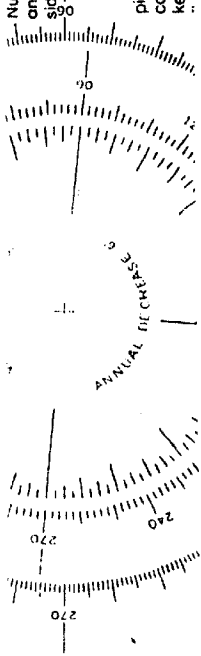
one field (boat) sheet, one edited track, one detached position plot, and one sounding plot.

A chart enlargement for this area was not requested.

All records and documents were forwarded to the Atlantic Hydrographic Branch, N/CS33.

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buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchors, snagging or towing. Covered wells may be marked by lighted or unlighted buoys.



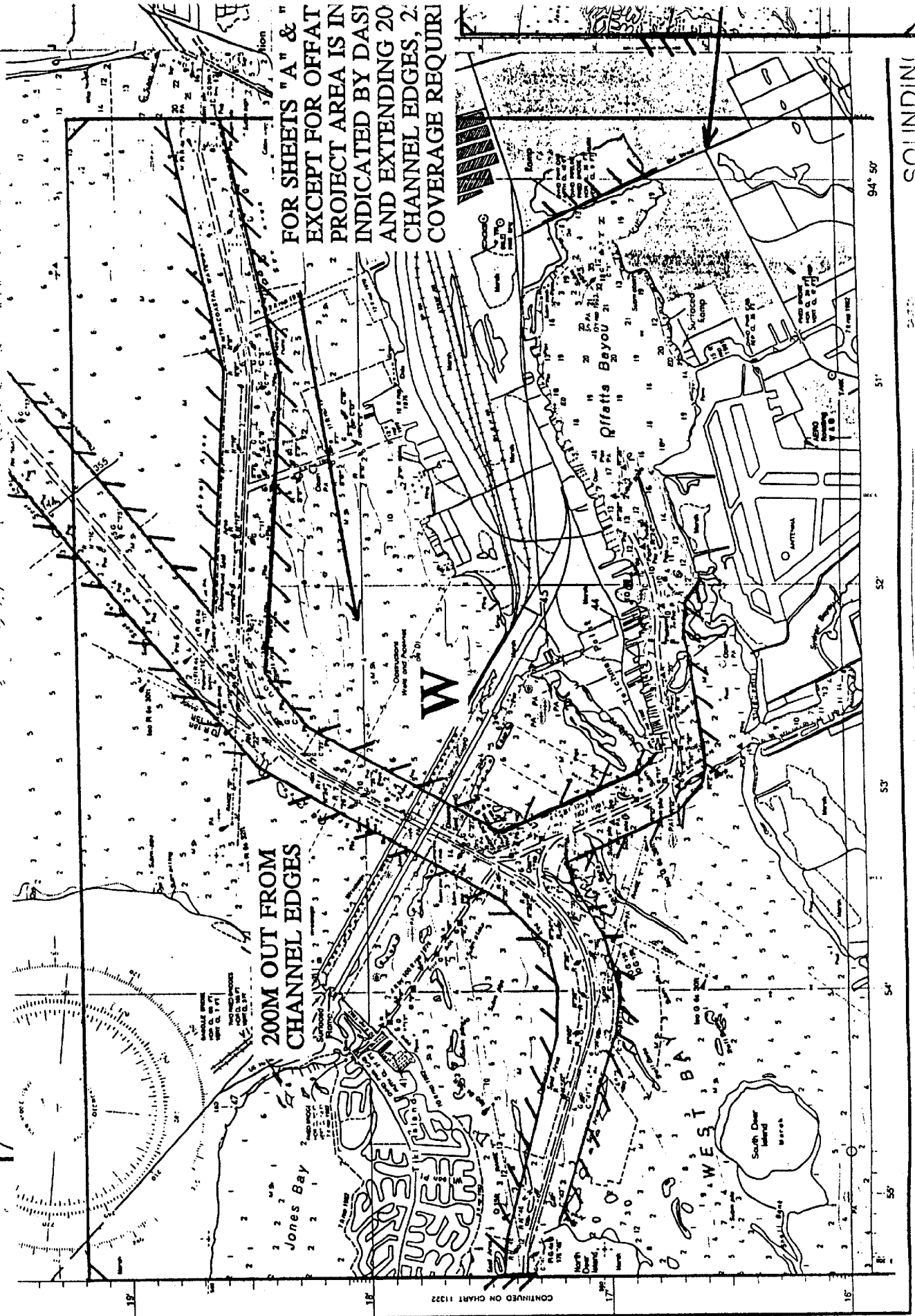
Numerous submerged piers, pipes, sikes and obstructions are charted on the south side of Texas City Channel.

**ARTICULATED AIDS**

An articulated aid to navigation consists of a pipe structure that oscillates around a universal coupling connected to a sinker. The structure is kept upright by the buoyancy of a submerged

**200M OUT FROM CHANNEL EDGES**

**FOR SHEETS "A" & " EXCEPT FOR OFFAT PROJECT AREA IS IN INDICATED BY DASI AND EXTENDING 20 CHANNEL EDGES, 2. COVERAGE REQUIR**



CONTINUED ON CHART 11322

94° 50' 51' 52' 53' 54' 55' 94° 50'

DESCRIPTIVE REPORT TO ACCOMPANY  
HYDROGRAPHIC SURVEY H-10660  
FIELD NO. AHP2-10-8-95  
SCALE: 1:10,000  
1995  
ATLANTIC HYDROGRAPHIC PARTY TWO  
CHIEF OF PARTY: LT Kevin N. Harbison, NOAA

A. PROJECT

This survey was conducted according to Hydrographic Project Instructions OPR-K204-AHP, Galveston Bay, Texas, Dated September 16, 1994, and change No. 1, dated June 6, 1995.

This project responds to requests from the Houston Pilots Association, Houston/Galveston Navigation Safety Advisory Committee, West Gulf Maritime Association, Houston Safe Boating Council, Inc., and the U. S. Coast Guard, for updated hydrographic and bathymetric data of this area for use in proposed studies and in the construction of new charts. Prior surveys in this area were conducted from 1962 to 1965.

The sheet letter is "W" as specified by the project instructions.

B. AREA SURVEYED

The area surveyed for H-10660 covers Offatts Bayou to N. Deer Island, Galveston Bay, TX. The approximate survey limits are as follows:

North: 29°18.0'N  
South: 29°16.0'N  
East: 094°50.0'W  
West: 094°55.2'W

This survey was conducted from November 6, 1995 (DN 310) to November 27, 1995 (DN 331).

C. SURVEY VESSELS

NOAA launch 0518, a 21-foot MonArk, was used to collect all survey data. There were no unusual vessel configurations nor

problems encountered.

D. AUTOMATED DATA ACQUISITION AND PROCESSING *SEE EVALUATION Report 4*

Coastal Oceanographics Hypack Version 5.9 was used for on-line data acquisition. The HDAPS version 7.12 was used for processing\*. A list of all HDAPS programs and versions used for data processing can be found in Appendix VI. The NOS program VELOCITY (Ver. 2.10) and WordPerfect (Ver. 6.1) were also used during this survey.

E. SONAR EQUIPMENT

Non-Applicable.

F. SOUNDING EQUIPMENT

An Innerspace model 448 depth sounder, S/N 175 was used to collect all echo soundings on this survey.

A standard lead line calibrated in meters, S/N 0518, was used during this survey for comparison readings with the echo sounder. A five-meter long, wooden sounding pole, constructed according to HSG No. 69, was used to obtain all pole soundings.

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</u>	<u>Applicable Days</u>	<u>Position</u>	<u>Day</u>
1	1	13.0	310-319	29°16'45"N 094°50'30"W	313
2	2	13.2	321-331	29°16'45"N 094°50'30"W	324

*\* DATA filed with ORIGINAL field Records*

The corrections were computed from data obtained with a Seabird Seacat Velocity Profiler, Model 19-03, S/N 198671-1477. This instrument was calibrated by the manufacturer on February 8, 1995 and data quality assurance tests were performed after each cast. Program VELOCITY was used for computing the speed of sound correctors. Speed of sound corrections were applied to the sounding plot using the HDAPS REAPPLY program.\* Copies of the tables and support documentation are in the "Survey Separates."

Lead line comparisons were taken daily to determine echo sounder error. No echo sounder error was observed. The lead line comparison logs are in the "Survey Separates."\* The lead lines were calibrated using a steel tape on December 7, 1994 for launch 0518. 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 launch 0518, 0.6 meter above the transducer, to the water surface.

Settlement and squat measurements for launch 0518 were determined on December 6, 1994 (DN 340). These measurements were conducted in the Galveston Ship Channel in Galveston, Texas 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.

Predicted tides for this project were provided on diskette by N/OES231 for the Galveston Pier 21, Texas reference station, No. 877-1450. Correctors for one tidal zone on sheet "W" were used as designated by the project instructions. The zone was numbered and is defined by the following geographic location:

zone # 12 = In West Bay, West of Interstate 45 (Galveston Causeway), including Offatts Bayou.

	<u>Time (min.)</u>		
	<u>High Water</u>	<u>Low Water</u>	<u>Range Ratio</u>
zone # 12	-0.50	+2:50	x0.71



All elevations and soundings on survey H-10660 are at the sounding datum of MLLW unless otherwise specified.

The sounding plot used predicted tides determined from Galveston Pier 21, Texas, with correctors designated in section 5.9 of the project instructions. Approved water levels were requested from the Product and Services Branch, Datums Section, N/OES231, in a letter dated December 12, 1995. \*A copy is included in the Appendix of this report.

Closing levels were run at the completion of this survey in accordance with section 4.2.3 of the Field Procedures Manual.  
*\* Approved tides & soundings have been applied during office processing.*

#### H. CONTROL STATIONS

The horizontal control datum for this project is the North American Datum of 1983. The control base station used for this survey was the USCG Galveston Radio Beacon at 029°19'45.092"N, 094°44'10.484"W. The Control Station List is appended to this report. ~~\* approved tides and soundings were applied~~

#### I. HYDROGRAPHIC POSITION CONTROL *SEE ALSO EVALUATION REPORT*

Differential GPS (DGPS) was used for all hydrographic data acquired on this survey. An Ashtech Sensor (S/N 700417B1065) and Ashtech antenna were used as the remote station on launch 0518.

Daily DGPS performance checks were conducted in accordance with FPM 3.4.4 by comparing the DGPS position of the vessel to the third-order position of station CG 16,1974. 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 positions. The table of these comparisons is included in the "Survey Separates." All of our observed differences fell well within the allowable limit.

*\* Data filed with original field records.*

J. SHORELINE *SEE EVALUATION Report*

There was no final field sheet for H-10660, as this project was team processed with the Atlantic Hydrographic Branch. The shoreline source for this survey was digital shoreline manuscript DM-10239. Shoreline verification was accomplished during inshore hydrographic data acquisition and by visual inspection. The hydrographer recommends that these manuscripts be revised to reflect currently charted features that have been assigned detached positions during survey H-10660. The descriptions and field notes are located on either the graphic record or the boat sheet. Photographs are included with the survey data as well. No shoreline changes were found on this survey *DO NOT CONCUR*

K. CROSSLINES

A total of 12.7 linear nautical miles of crosslines were run, which represents approximately 12.5% of the main scheme hydrography. Crossline soundings agree with the main scheme soundings within 0.2 to 0.6 meters. The application of smooth tides will create a closer agreement in sounding comparison.

L. JUNCTIONS *SEE EVALUATION Report*

This survey junctions with H-10638 to the north, a 1:10,000 scale survey, completed in 1995 as part of this project. Junction soundings between this survey and H-10638 are in good agreement, with differences of 0.2 meters or less.

M. COMPARISON WITH PRIOR SURVEYS

See Atlantic Hydrographic Section's Evaluation Report for H-10660.

N. ITEM INVESTIGATION REPORTS

There were a total of 20 AWOIS items addressed on this survey. All AWOIS reports are appended to this report.

O. COMPARISON WITH THE CHART

Comparison is made with the following charts:

<u>Chart No.</u>	<u>Edition</u>	<u>Edition Date</u>
11322SC	23rd	Aug. 6/94
11324	28th	Jan. 22/94
<del>11326SC</del>	<del>26th</del>	<del>Jan. 1/94</del> <i>survey limits do not fall within the area of 11326SC</i>

No Dangers to Navigation were identified by this survey.

The "15 ft rep 1981" at 29°16.5'N, 094°50.9'W, was verified by the existence of 14 to 16 foot soundings in this region. These soundings were found during mainscheme hydrography. This notation should be updated to reflect conditions from this survey after smooth tides are applied. *Concur*

The 7 foot sounding charted in the far east end of Offatts Bayou at 29°16.8'N, 094°50.1'W, has changed to 3 meters (10 feet). This sounding was on a small mound that could not be developed at reduced line spacing due to numerous sailboats moored in the vicinity. Because this area could not be developed, the hydrographer recommends retaining the 7 foot sounding as charted. *Concur*

The depth contours in Offatts Bayou agree well with those found by this survey.

Because of the numerous features alongshore in Offatts Bayou, detached positions were not taken to ease the burden of both field and office processing of this survey. The features all lie within a non-navigable area of the bayou and should be retained as charted.

The charted submerged obstruction at 29°16.9'N, 094°50.5'W was not an AWOIS. There are several pier ruins at this location near shore. According to local knowledge these features are the result of hurricane Alicia's presence in 1983. The hydrographer recommends the submerged obstruction be retained at it's presently charted location. *Concur*

Sounding data acquired on H-10660 shows good agreement with charted soundings, within 0.2 to 0.4 meters, with minor inconsistencies attributed to using predicted rather than actual

tidal heights during field plotting. Areas of significant discrepancies that could not be attributed to tides or other weather phenomena were developed.

An uncharted pile was located by position 3409 at 29°16'42.1"N, 094°52'11.5"W. Because of its proximity to charted daybeacon ~~R4~~ <sup>R22</sup> and other charted features, this pile is not considered a danger to navigation. The pile is recommended for charting on future editions of chart 11324. *Concave*

P. ADEQUACY OF SURVEY

This survey is a complete basic hydrographic survey for the assigned project limits and is adequate to supersede all prior surveys within the common area.

Q. AIDS TO NAVIGATION

There were no lighted fixed aids to navigation within the assigned project limits for H-10660. The only fixed aids were single pile daybeacons. All of the aids serve their intended purpose with the exception of daybeacon "R28" inside of Offatts Bayou, which needs to be moved 150 meters southeast. The USCG Galveston Aids to Navigation team was informed of the need to move this daybeacon or add a buoy.

**Fixed Aids:**

Pos.#	Name and USCGLL#	LL Position	Survey Pos.	Distance/Bearing from Charted Pos.
<i>Offatts Bayou</i>				
249	G DBN 1 34740	NONE	29/17/02.7 094/50/32.5	On Station charted as G can 1
250	R DBN 2 34745	NONE	29/16/58.4 094/50/21.9	On Station

Offatts Bayou Entrance

788	G DBN 1 34630	NONE	29/17/23.8 094/53/19.7	On Station
789	R DBN 2 34635	NONE	29/17/15.8 094/53/26.4	On Station
790	R/G DBN 34640	NONE	29/17/17.3 094/53/19.2	On Station
791	G DBN 3 34645	NONE	29/17/16.1 094/53/15.4	On Station
792	G DBN 5 34650	NONE	29/17/09.2 094/53/11.1	On Station
793	R DBN 6 34655	NONE	29/17/09.3 094/53/15.0	On Station
794	G DBN 7 34660	29/16.9 94/53.1	29/16/58.7 094/53/05.3	On Station
795	R DBN 8 34665	NONE	29/16/55.2 094/53/08.2	On Station
796	G DBN 9 34670	29/16.8 94/53.1	29/16/52.2 094/53/03.2	On Station
797	R DBN 10 34675	NONE	29/16/49.7 094/53/05.4	On Station
798	G DBN 11 34680	NONE	29/16/44.9 094/52/58.0	On Station
799	R DBN 12 34685	NONE	29/16/42.1 094/52/59.9	On Station
800	R DBN 14 34700	NONE	29/16/42.2 094/52/56.9	On Station
801	R DBN 16 34705	NONE	29/16/41.3 094/52/46.7	On Station
802	R DBN 18 34710	NONE	29/16/43.1 094/52/37.3	On Station
803	R DBN 20 34715	NONE	29/16/44.9 094/52/27.4	On Station
804	R DBN 22 34720	NONE	29/16/44.7 094/52/06.3	On Station

805	R DBN 24 34725	NONE	29/16/49.0 094/51/49.4	On Station
806	R DBN 26 34730	NONE	29/16/56.3 094/51/34.5	On Station
807	R DBN 28 34735	NONE	29/16/53.5 094/51/25.7	On Station

**Floating Aids:**

There were 17 floating aids to navigation within the assigned limits of H-10660. All aids serve their intended purpose.

There are three charted cable/pipeline crossing areas which were visually verified within the survey limits. There are two overhead cable crossings at the I-45 bridge to Galveston Island. All of these crossings are properly marked with signs and should remain as charted.

All bridge clearances were visually evaluated for accuracy and found to be charted correctly.

**R. STATISTICS**

<u>Description</u>	<u>Quantity</u>
Total Number of Positions	3540
Total Lineal Nautical Miles of Hydrography	69.2
Total Lineal Nautical Miles of Cross Lines	12.7
Square Nautical Miles of Hydrography	4.5
Days of Production	11
Detached Positions	93
Bottom Samples	6
Tide Stations	2
Velocity Casts	2

**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 in the Supplemental Correspondence. The Oceanographic Log Sheet-M, NOAA Form 75-44, is included in the "Survey Separates."


No predicted tidal anomalies were observed during this survey.

#### 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 sections J. and O. of this report.

#### U. REFERRAL TO REPORTS

<u>Title</u>	<u>Transmittal Information</u>
Descriptive Report to Accompany Survey H-10638	Atlantic Hydrographic Branch N/CS33, Norfolk, VA (1/96)
Chart Sales Agent Report	Chart Distribution Branch N/CG33, Riverdale, MD Spring 1996
User Evaluation Report	Atlantic Hydrographic Branch N/CS33, Norfolk, VA Spring 1996
Chart Inspection Report	Atlantic Hydrographic Branch N/CS33, Norfolk, VA Spring 1996
Coast Pilot Report	Atlantic Hydrographic Branch N/CS33, Norfolk, VA Spring 1996

Submitted by: Atlantic Hydrographic Party  
David B. Elliott   
Hydrographer-in-charge, Launch 0518.

AWOIS NO: 9439

Item Description: Charted Submerged Wreck, ED)

Source: H-8750/63-66, CL806/70--USPS

AWOIS Position: Lat - 29/16/39.35N Lon - 094/50/53.21W

Required Investigation: VS, ES, SD, BD, DI -- 30m radius

Charts Affected: 11324, 11325, 11326

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INVESTIGATION

Date(s)/DN(s): 11/21/95 (DN:325)

Position Numbers: 3401

Launch Number: 0518

Investigation Used: VS, ES, DI

Water Visibility: 2m

Position Determined By: DGPS

Investigation Summary: A 30-meter radius diver circle search was conducted at the geographic location of this item. The bottom was fouled with cinder blocks and rip rap from the bulkhead located at the edge of the search radius. There were no contacts made with regard to a wreck.

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CHARTING RECOMMENDATION

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

Recommended Position: Lat - Lon -

Recommended Least Depth: N/A

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COMPILATION NOTES



AWOIS NO: 9440

Item Description: Sounding (3ft shoal)

Source: LNM57/93--8th CGD

AWOIS Position: Lat - 29/17/02.30N Lon - 094/50/31.00W

Required Investigation: VS, ES, SD, BD, DI -- 50m radius

Charts Affected: 11324, 11325, 11326

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INVESTIGATION

Date(s)/DN(s): 11/22/95 (DN:326)

Position Numbers: 3414-3472

Launch Number: 0518

Investigation Used: VS, ES,

Water Visibility: 2m

Position Determined By: DGPS

Investigation Summary: A 20-meter line spacing echo sounder investigation was conducted at the geographic location of this item. The result of this search was positive and the three foot sounding from the shoal report from 10/19/93 was verified as existing.

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CHARTING RECOMMENDATION

The hydrographer recommends that the shoal reported notation be removed and a representative sounding from this survey be charted. *concur*

Recommended Position: Lat - 29/17/<sup>03.218</sup>02.3N Lon - 094/50/31.<sup>83</sup>0W

Recommended Least Depth: 1.<sup>0</sup>2m(3.<sup>2</sup>6ft)@ MLLW with <sup>SMOOTH</sup> predicted tides.

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COMPILATION NOTES

X

AWOIS NO: 9441

Item Description: Charted Submerged Wreck ED

Source: H-8750/63-66, CL1100/74--USPS

AWOIS Position: Lat - 29/17/11.15N Lon - 094/51/07.21W

Required Investigation: VS, ES, SD, BD, DI -- 30m radius

Charts Affected: 11324, 11325, 11326

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**INVESTIGATION**

Date(s)/DN(s): 11/21/95 (DN:325)

Position Numbers: 3402

Launch Number: 0518

Investigation Used: VS, ES, DI

Water Visibility: 2m

Position Determined By: DGPS

Investigation Summary: A visible wreck was found at the charted geographic location. The wreck is vertical with the bow exposed (see photo) and was found visually. The wreck encompasses an area two meters in diameter and is not a danger to navigation due to its close proximity to a bulkhead.

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**CHARTING RECOMMENDATION**

The hydrographer recommends that the charted wreck ED be revised to an exposed wreck at the following location: *CONCUR*

Recommended Position: Lat - 29/17/10.4<sup>6</sup>N Lon - 094/51/06.4<sup>6</sup>W

Recommended Least Depth: -0.<sup>7</sup>6m @ MLLW (<sup>- 2.3 FT SMOD+L</sup>predicted tides) (1) *MHW*

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**COMPILATION NOTES**

AWOIS NO: 9442

Item Description: Obstruction, (9inch dia. pipe)

Source: CL1102/80--USPS

AWOIS Position: Lat - 29/17/01.04N Lon - 094/51/22.05W

Required Investigation: VS, ES, SD, BD, DI -- 75m radius

Charts Affected: 11324, 11325, 11326

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**INVESTIGATION**

Date(s)/DN(s): 11/21/95 (DN:325)

Position Numbers: 3403

Launch Number: 0518

Investigation Used: VS, ES, DI

Water Visibility: 2m

Position Determined By: DGPS

Investigation Summary: A 75-meter radius diver circle search was conducted at the geographic location of this item. The bottom was soft and flat with limited visibility. The dive required a twenty minute investigation during which no snags or contacts were found.

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**CHARTING RECOMMENDATION**

The hydrographer recommends that the charted pipe PA be removed from the chart. *CONUR*

Recommended Position: Lat - Lon -

Recommended Least Depth: N/A

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**COMPILATION NOTES**

AWOIS NO: 9443

Item Description: Obstruction, (3 platforms)

Source: CL650/74--USPS

AWOIS Position: Lat - 29/16/49.00N Lon - 094/51/42.70W

Required Investigation: VS, ES, SD, BD, DI

Charts Affected: 11324, 11325, 11326

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**INVESTIGATION**

Date(s)/DN(s): 11/21/95 (DN:325)

Position Numbers: 3405-3407

Launch Number: 0518

Investigation Used: VS, ES

Water Visibility: 2m

Position Determined By: DGPS

Investigation Summary: Three dredge platforms were identified visually and positioned at the charted locations. The platforms are wooden and are approximately two meters square in size. (See photos)

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**CHARTING RECOMMENDATION**

The hydrographer recommends that the charted platforms be retained at the following locations: *contour*

Recommended Position: Lat - 29/16/49.3<sup>6</sup>N Lon - 094/51/42.5<sup>2</sup>W  
29/16/44.0<sup>2</sup>N 094/51/58.1<sup>2</sup>W  
29/16/42.5<sup>6</sup>N 094/52/16.2<sup>6</sup>W

Recommended Least Depth: All three exposed 2 <sup>8</sup>/m @ MLLW (<sup>SMOOTH</sup>predicted tides)

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**COMPILATION NOTES**

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AWOIS NO: 9444

Item Description: Obstruction, (4 steel stakes)

Source: H8750-63/66

AWOIS Position: Lat - 29/17/01.55N Lon - 094/51/30.11W

Required Investigation: VS, ES, SD, BD, DI -- 20m radius

Charts Affected: 11324, 11325, 11326

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INVESTIGATION

Date(s)/DN(s): 11/21/95 (DN:325)

Position Numbers: 3404

Launch Number: 0518

Investigation Used: VS, ES

Water Visibility: 2m

Position Determined By: DGPS

Investigation Summary: A visual investigation found four steel stakes at the AWOIS reported location. The stakes were exposed 0.7m at the time of positioning. The stakes are a few feet apart and the center of the four was positioned. (See photo)

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CHARTING RECOMMENDATION

The hydrographer recommends that the charted obstruction be retained at the following location: *Concur w/Clarification*

*Chart stakes*

Recommended Position: Lat - 29/17/01.<sup>4</sup>3N Lon - 094/51/30.<sup>4</sup>4W

Recommended Least Depth: exposed 0.9m @ MLLW <sup>*5m high*</sup> (predicted tides)  
*- 2.95FT (2) meters*

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COMPILATION NOTES

AWOIS NO: 9445

Item Description: Charted Submerged Wreck

Source: T-10788/57-60, H-8750/63-66

AWOIS Position: Lat - 29/16/50.65N Lon - 094/52/03.11W

Required Investigation: VS, ES, SD, BD, DI -- 30m radius

Charts Affected: 11324, 11325, 11326

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**INVESTIGATION**

Date(s)/DN(s): 11/21/95 (DN:325)

Position Numbers: 3408

Launch Number: 0518

Investigation Used: VS, ES, DI

Water Visibility: 2m

Position Determined By: DGPS

Investigation Summary: A 30-meter radius diver circle search was conducted at the geographic location of this item. This location was at the entrance to a small cove and the search was limited by the close proximity of a bulkhead. The bottom was soft. The dive required 12 minutes in limited visibility. There were no snags or contacts encountered.

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**CHARTING RECOMMENDATION**

The hydrographer recommends that the charted submerged wreck be removed from the chart. *CONCUR*

Recommended Position: Lat - Lon -

Recommended Least Depth: N/A

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**COMPILATION NOTES**

AWOIS NO: 9446

Item Description: Obstruction, (Pile)

Source: H-5822/33-34, H-8750/63-66

AWOIS Position: Lat - 29/16/43.00N Lon - 094/52/39.20W

Required Investigation: VS, ES, SD, BD, DI -- 30m radius

Charts Affected: 11324, 11325, 11326

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**INVESTIGATION**

Date(s)/DN(s): 11/21/95 (DN:325)

Position Numbers: 3410

Launch Number: 0518

Investigation Used: VS, ES, DI

Water Visibility: 2m

Position Determined By: DGPS

Investigation Summary: A 30-meter radius diver circle search was conducted at the geographic location of this item. This location was limited by the close proximity of a shoal. The bottom was soft. The dive required 10 minutes in limited visibility. There were no snags or contacts encountered

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**CHARTING RECOMMENDATION**

The hydrographer recommends that the charted submerged pile be removed from the chart. *concur*

Recommended Position: Lat - Lon -

Recommended Least Depth: N/A

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**COMPILATION NOTES**

AWOIS NO: 9447

Item Description: Sounding, (dredged marine terminal entrance)

Source: CL1429/76--USPS, CL1290/82--NOS Coast Pilot

AWOIS Position: Lat - 29/16/44.00N Lon - 094/52/45.00W

Required Investigation: VS, ES, SD, BD, DI

Charts Affected: 11324, 11325, 11326

-----  
INVESTIGATION

Date(s)/DN(s): 11/22/95 (DN:326)

Position Numbers: 3472-3482

Launch Number: 0518

Investigation Used: ES

Water Visibility: 2m

Position Determined By: DGPS

Investigation Summary: Three sounding lines were run at the marine terminal entrance as prescribed by the AWOIS report. The line spacing was approximately 10 to 15 meters and they were run parallel to the docks. These lines are in locations that a vessel would transit entering the terminal. The result of the investigation revealed several <sup>3.0 to 3.8</sup> four meter soundings which equate to 13 feet with <sup>smooth</sup> predicted tides. In verification with smooth tides this depth may chart at <sup>13</sup> 14 feet.

-----  
CHARTING RECOMMENDATION

The hydrographer recommends that the charted "14 ft rep 1982" notation be deleted and a new depth notation be charted reflecting the least depth found by this survey after the application of smooth tides. *CONCUR*

Recommended Position: Lat - 29/16/44.0N Lon - 094/52/45.0W

Recommended Least Depth: N/A

\*\*\*\*\*

COMPILATION NOTES



AWOIS NO: 9448

Item Description: Submerged Wreck PA

Source: CL994/82--USPS

AWOIS Position: Lat - 29/16/43.85N Lon - 094/52/49.71W

Required Investigation: VS, ES, SD, BD, DI -- 30m radius

Charts Affected: 11324, 11325, 11326

-----  
**INVESTIGATION**

Date(s)/DN(s): 11/21/95 (DN:325)

Position Numbers: 3412

Launch Number: 0518

Investigation Used: VS, ES, DI

Water Visibility: 2m

Position Determined By: DGPS

Investigation Summary: A 30-meter radius diver circle search was conducted at the geographic location of this item. This location was limited by the close proximity of a bulkhead and the channel entrance to Offatts Bayou. The bottom was soft with shell and sand. The dive required 15 minutes in limited visibility. There were no snags or contacts encountered.

-----  
**CHARTING RECOMMENDATION**

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

Recommended Position: Lat - Lon -

Recommended Least Depth: N/A

\*\*\*\*\*

**COMPILATION NOTES**

AWOIS NO: 9449

Item Description: Sounding, (shoaling)

Source: CL1290/78--USPS

AWOIS Position: Lat - 29/16/40.00N Lon - 094/52/56.00W

Required Investigation: VS, ES, SD, BD, DI

Charts Affected: 11324, 11325, 11326

-----  
**INVESTIGATION**

Date(s)/DN(s): 11/22/95 (DN:326)

Position Numbers: 3483-3516

Launch Number: 0518

Investigation Used: ES

Water Visibility: 2m

Position Determined By: DGPS

Investigation Summary: A twenty-meter line spacing echo sounder investigation was conducted at the geographic location of this item where shoaling was clearly visible. The result of this search revealed depths of one meter or less. The channel entrance to Sydnor Bayou is clear and easily transited by recreational boaters.

-----  
**CHARTING RECOMMENDATION**

The hydrographer recommends that the charted "shoal rep 1978" notation be replaced by a new least depth notation based on smooth tide corrected soundings from this survey. *CONCUR*

Recommended Position: Lat - 29/16/40.<sup>274N</sup>~~00~~N Lon - 094/52/56.<sup>55.819W</sup>~~00~~W

Recommended Least Depth: N/A 2 FT AT MLLW @ POS NO 2522

\*\*\*\*\*

**COMPILATION NOTES**

↓

AWOIS NO: 9450

Item Description: Obstruction, (Pile)

Source: H-5522/33-34, H-8750/63-66

AWOIS Position: Lat - 29/16/43.00N Lon - 094/52/58.00W

Required Investigation: VS, ES, SD, BD, DI -- 30m radius

Charts Affected: 11324, 11325, 11326

-----  
**INVESTIGATION**

Date(s)/DN(s): 11/22/95 (DN:325)

Position Numbers: 3529

Launch Number: 0518

Investigation Used: VS, ES, DI

Water Visibility: 2m

Position Determined By: DGPS

Investigation Summary: A 30-meter radius diver circle search was conducted at the geographic location of this item. The bottom was soft with shell and sand. The dive required 10 minutes in limited visibility. There were no snags or contacts encountered.

-----  
**CHARTING RECOMMENDATION**

The hydrographer recommends that the charted submerged pile be removed from the chart. *CONCUR*

Recommended Position: Lat - Lon -

Recommended Least Depth: N/A

\*\*\*\*\*

**COMPILATION NOTES**

✓

AWOIS NO: 9451

Item Description: Charted Submerged Wreck PA

Source: CL983/84--USPS, CL687/86--USPS

AWOIS Position: Lat - 29/16/42.40N Lon - 094/53/15.10W

Required Investigation: VS, ES, SD, BD, DI -- 75m radius

Charts Affected: 11324, 11325, 11326

-----  
**INVESTIGATION**

Date(s)/DN(s): 11/22/95 (DN:326)

Position Numbers: 3530

Launch Number: 0518

Investigation Used: VS, ES, DI

Water Visibility: 2m

Position Determined By: DGPS

Investigation Summary: A 30-meter radius wading circle search was conducted at the geographic location of this item. The bottom was hard with shell and sand. The search required 10 minutes with good bottom visibility. There were no snags or contacts encountered.

-----  
**CHARTING RECOMMENDATION**

The hydrographer recommends that the charted submerged wreck PA be removed from the chart. *CONCUR*

Recommended Position: Lat -

Lon -

Recommended Least Depth: N/A

\*\*\*\*\*

**COMPILATION NOTES**

✓

AWOIS NO: 9452

Item Description: Obstruction, (Pile)

Source: H-5522/33-34, H-8750/63-66

AWOIS Position: Lat - 29/16/55.45N Lon - 094/53/07.31W

Required Investigation: VS, ES, SD, BD, DI -- 30m radius

Charts Affected: 11324, 11325, 11326

-----  
**INVESTIGATION**

Date(s)/DN(s): 11/22/95 (DN:326)

Position Numbers: 3532

Launch Number: 0518

Investigation Used: VS, ES, DI

Water Visibility: 2m

Position Determined By: DGPS

Investigation Summary: A 30-meter radius diver circle search was conducted at the geographic location of this item. The bottom was soft and muddy. The dive required 10 minutes in limited visibility. There were no snags or contacts encountered.

-----  
**CHARTING RECOMMENDATION**

The hydrographer recommends that the charted submerged pile be removed from the chart. *COVER*

Recommended Position: Lat -

Lon -

Recommended Least Depth: N/A

\*\*\*\*\*

**COMPILATION NOTES**

v

AWOIS NO: 9453

Item Description: Obstruction, (dredge pipe)

Source: H-8750/63-66

AWOIS Position: Lat - 29/17/17.55N Lon - 094/53/22.71W

Required Investigation: VS, ES, SD, BD, DI -- 30m radius

Charts Affected: 11324, 11325, 11326

-----  
**INVESTIGATION**

Date(s)/DN(s): 11/27/95 (DN:331)

Position Numbers: 3534

Launch Number: 0518

Investigation Used: VS, ES, DI

Water Visibility: 2m

Position Determined By: DGPS

Investigation Summary: A 30-meter radius diver circle search was conducted at the geographic location of this item. The bottom was soft with shell and sand. The dive required 10 minutes in limited visibility. There were no snags or contacts encountered.

-----  
**CHARTING RECOMMENDATION**

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

Recommended Position: Lat -

Lon -

Recommended Least Depth: N/A

\*\*\*\*\*

**COMPILATION NOTES**

✓

AWOIS NO: 9454

Item Description: Obstruction, (Pile)

Source: CL1100/74--USPS

AWOIS Position: Lat - 29/17/23.00N Lon - 094/53/16.00W

Required Investigation: VS, ES, SD, BD, DI -- 75m radius

Charts Affected: 11324, 11325, 11326

-----  
**INVESTIGATION**

Date(s)/DN(s): 11/27/95 (DN:326)

Position Numbers: 3535

Launch Number: 0518

Investigation Used: VS, ES, DI

Water Visibility: 2m

Position Determined By: DGPS

Investigation Summary: A 75-meter radius diver circle search was conducted at the geographic location of this item. The bottom was soft with mud and sand. The dive required 21 minutes in limited visibility. There were no snags or contacts encountered.

-----  
**CHARTING RECOMMENDATION**

The hydrographer recommends that the charted piling PA be removed from the chart. *Concur*

Recommended Position: Lat -

Lon -

Recommended Least Depth: N/A

\*\*\*\*\*

**COMPILATION NOTES**

AWOIS NO: 9455

Item Description: Obstruction, (Platform ruins)

Source: BP72922/67--COE, CL686--USPS

AWOIS Position: Lat - 29/17/23.00N Lon - 094/53/18.70W

Required Investigation: VS, ES, SD, BD, DI -- 50m radius

Charts Affected: 11324, 11325, 11326

-----  
**INVESTIGATION**

Date(s)/DN(s): 11/27/95 (DN:326)

Position Numbers: 3536

Launch Number: 0518

Investigation Used: VS, ES, DI

Water Visibility: 2m

Position Determined By: DGPS

Investigation Summary: A 30-meter radius diver circle search was conducted at the geographic location of this item. The bottom was soft and very muddy. The dive required 15 minutes in limited visibility. There were no snags or contacts encountered.

-----  
**CHARTING RECOMMENDATION**

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

Recommended Position: Lat - Lon -

Recommended Least Depth: N/A

\*\*\*\*\*

**COMPILATION NOTES**



AWOIS NO: 9456

Item Description: Obstruction, (Pile)

Source: CL610/81--USPS

AWOIS Position: Lat - 29/17/04.55N Lon - 094/54/24.81W

Required Investigation: VS, ES, SD, BD, DI -- 75m radius

Charts Affected: 11324, 11325, 11326

-----  
**INVESTIGATION**

Date(s)/DN(s): 11/27/95 (DN:326)

Position Numbers: 3537

Launch Number: 0518

Investigation Used: VS, ES, DI

Water Visibility: 2m

Position Determined By: DGPS

Investigation Summary: A 30-meter radius diver circle search was conducted at the geographic location of this item. The bottom was soft with shell and sand. In one meter of water a pile was found just below the surface at the charted location. A least depth was taken of 0.5 meters with a sounding pole. This reduced to 0.3 meters (1.3<sup>1.3</sup>ft) with ~~predicted~~ <sup>SMOOTH</sup> tides.

-----  
**CHARTING RECOMMENDATION**

The hydrographer recommends that the charted pile PA be removed and a submerged pile be charted at the following location:

Recommended Position: Lat - 29/17/04.3<sup>9</sup>N Lon - 094/54/25.1<sup>9</sup>W

Recommended Least Depth: 0.3<sup>3</sup>m @ MLLW (SMOOTH ~~predicted~~ tides)  
98 FT

\*\*\*\*\*

**COMPILATION NOTES**

y

AWOIS NO: 9457

Item Description: Submerged Obstruction

Source: LNM39/90--8th CGD

AWOIS Position: Lat - 29/17/34.90N Lon - 094/53/17.60W

Required Investigation: VS, ES, SD, BD, DI -- 50m radius

Charts Affected: 11324, 11325, 11326

-----

#### INVESTIGATION

Date(s)/DN(s): 11/27/95 (DN:326)

Position Numbers: 3538

Launch Number: 0518

Investigation Used: VS, ES, DI

Water Visibility: 2m

Position Determined By: DGPS

**Investigation Summary:** A 50-meter radius diver circle search was conducted at the geographic location of this item. The bottom was soft and extremely muddy. The dive required 15 minutes in limited visibility. A barnacle encrusted mound, five meters in diameter was found at the edge of the reported location just inside the channel. The obstruction appears to be concrete, but what it is could not be determined. A leadline least depth of 4.4 meters (14.4ft) was taken on the center of the feature.

-----

#### CHARTING RECOMMENDATION

The hydrographer recommends that the charted obstruction PA be revised to the following location and the PA notation be deleted:

*Chart subm Obstr. Concur with clarification*

Recommended Position: Lat - 29/17/35.1N Lon - 094/53/16.7W

Recommended Least Depth: 4.4m @ MLLW with *smooth* predicted tides.  
*14 FT MLLW*

\*\*\*\*\*

#### COMPILATION NOTES

AWOIS NO: 9458

Item Description: Obstruction, (concrete slab)

Source: H-8750/63-66

AWOIS Position: Lat - 29/17/41.85N Lon - 094/53/21.21W

Required Investigation: VS, ES, SD, BD, DI -- 30m radius

Charts Affected: 11324, 11325, 11326

-----  
**INVESTIGATION**

Date(s)/DN(s): 11/27/95 (DN:326)

Position Numbers: 3539

Launch Number: 0518

Investigation Used: VS, ES

Water Visibility: 2m

Position Determined By:

Investigation Summary: The charted obstruction was found visually at the reported AWOIS location. The obstruction consists of large concrete slabs lying in a pile. This feature covers a ten-meter diameter area. This obstruction was probably the result of the old causeway bridge ruins being discarded according to local knowledge. (See photos)

-----  
**CHARTING RECOMMENDATION**

The hydrographer recommends that the charted concrete slab be retained at the following location: *CONCUR*

Recommended Position: Lat - 29/17/41.4N Lon - 094/53/20.8W

Recommended Least Depth: *- 0.10 mca - .33 ft of MLLW*  
awash @ MLLW (predicted tides)  
*- 11/29/95*

\*\*\*\*\*

**COMPILATION NOTES**

## APPROVAL SHEET

### BASIC HYDROGRAPHIC SURVEY

OPR-K204-AHP

AHP-10-8-95

H-10660

1995

This basic hydrographic survey was conducted in accordance with the project instructions for OPR-K204-AHP, the Hydrographic Manual, the Hydrographic Survey Guidelines, and the Field Procedures Manual. All reports were reviewed and approved by LT Kevin N. Harbison, NOAA, Chief of Party. All supporting data and records were approved through Team Processing with the Atlantic Hydrographic Branch in Norfolk, Virginia.

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



Kevin N. Harbison, NOAA  
Lieutenant, NOAA  
Chief, Atlantic Hydrographic Party



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL OCEAN SERVICE  
Office of Ocean and Earth Sciences  
Rockville, Maryland 20852

**TIDE NOTE FOR HYDROGRAPHIC SURVEY**

**DATE:** July 26, 1996

**HYDROGRAPHIC BRANCH:** Atlantic

**HYDROGRAPHIC PROJECT:** OPR-K204-AHP

**HYDROGRAPHIC SHEET:** H-10660

**LOCALITY:** West Bay, Offatts Bayou to North Deer Island, Texas

**TIME PERIOD:** November 6 - 27, 1995

**TIDE STATION USED:** 877-1450 Galveston Pier 21, Tx.  
Lat. 29° 18.6'N Lon. 94° 47.6'W

**PLANE OF REFERENCE (MEAN LOWER LOW WATER):** 3.74 ft.

**HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE:** 1.3 ft.

**TIDE STATION USED:** 877-1481 Tiki Island, Tx.  
Lat. 29° 18.0'N Lon. 94° 54.2'W

**PLANE OF REFERENCE (MEAN LOWER LOW WATER):** 1.71 ft.

**HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE:** 1.1 ft.

**TIDE STATION USED:** 877-1516 Offatts Bayou, Tx.  
Lat. 29° 17.1'N Lon. 94° 51.4'W

**PLANE OF REFERENCE (MEAN LOWER LOW WATER):** 2.10 ft.

**HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE:** 1.1 ft.

page 1 of 6 for H-10660



GEOGRAPHIC NAMES

Name on Survey	A 1952, 1954, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972 B ON PREVIOUS SURVEY NO. 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 K										
	GALVESTON	X		X							
GALVESTON BAY (title)	X		X								2
NORTH DEER ISLAND	X		X								3
OFFATTS BAYOU	X		X								4
TEICHMAN POINT	X		X								5
TEXAS (title)	X		X								6
VIRGINIA POINT	X		X								7
WEST BAY	X		X								8
WILSON POINT	X		X								9
											10
											11
											12
											13
											14
											15
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											17
											18
											19
											20
											21
											22
											23
											24
											25

Approved

*Chris C. Boy*

Chief Geographer

NOV 22 1996

01/13/98

HYDROGRAPHIC SURVEY STATISTICS  
REGISTRY NUMBER: H-10660

NUMBER OF CONTROL STATIONS	2
NUMBER OF POSITIONS	3540
NUMBER OF SOUNDINGS	15790

	TIME-HOURS	DATE COMPLETED
PREPROCESSING EXAMINATION	27	10/17/96
VERIFICATION OF FIELD DATA	68.50	11/27/96
QUALITY CONTROL CHECKS	0	
EVALUATION AND ANALYSIS	47	
FINAL INSPECTION	80	12/10/97
COMPILATION	119	01/14/98
TOTAL TIME	342	
ATLANTIC HYDROGRAPHIC BRANCH APPROVAL		12/11/97

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<p>NOAA FORM 61-29 (12-71)</p> <p style="text-align: center;"><b>U. S. DEPARTMENT OF COMMERCE</b> NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION</p> <p style="text-align: center;"><b>LETTER TRANSMITTING DATA</b></p>	<p>REFERENCE NO. N/CS33-4-98</p> <p>DATA AS LISTED BELOW WERE FORWARDED TO YOU BY (Check):</p> <p><input type="checkbox"/> ORDINARY MAIL                      <input type="checkbox"/> AIR MAIL</p> <p><input type="checkbox"/> REGISTERED MAIL                      <input checked="" type="checkbox"/> EXPRESS</p> <p><input type="checkbox"/> GBL (Give number) _____</p>
<p>TO:</p> <p style="text-align: center;">┌ Chief, Data Control Group, N/CS3x1 NOAA/National Ocean Service Station 6815, SSMC3 1315 East-West Highway Silver Spring, Maryland 20910-3282 └</p>	<p>DATE FORWARDED 15 January 1998</p> <p>NUMBER OF PACKAGES ONE TUBE</p>

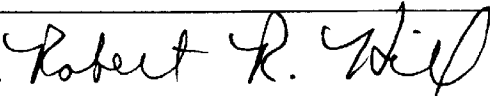
**NOTE:** A separate transmittal letter is to be used for each type of data, as tidal data, seismology, geomagnetism, etc. State the number of packages and include an executed copy of the transmittal letter in each package. In addition the original and one copy of the letter should be sent under separate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

H-10660

TEXAS, GALVESTON BAY, OFFATTS BAYOU TO NORTH DEER ISLAND

1 (ONE) Tube containing the following:

- 1 SMOOTH SHEET (H-10660)
- 2 Composite Drawing for chart #11324
- 1 H-Drawing for chart #11324
- 1 Descriptive Report for H-10660
- 1 Drawing History Form #76-71 for chart #11324

<p>FROM: (Signature)</p> <p>Robert R. Hill Jr. </p>	<p>RECEIVED THE ABOVE (Name, Division, Date)</p>
<p>Return receipted copy to:</p> <p style="text-align: center;">┌ Atlantic Hydrographic Branch N/CS33 439 West York Street Norfolk, VA 23510-1114 └</p>	



**ATLANTIC HYDROGRAPHIC BRANCH  
EVALUATION REPORT FOR H-10660 (1995)**

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 1.171 seconds (36.050 meters or 3.65 mm at the scale of the survey) north in latitude, and 0.576 seconds (15.990 meters or 1.60 mm at the scale of the survey) east in longitude.

**J. SHORELINE**

The shoreline originates with unreviewed preliminary photogrammetric shoreline manuscript DM-10239 of 1994. The manuscript was compiled by Photogrammetry Division, National Geodetic Survey personnel. A digital file of the compilation was provided and has been inserted into the smooth sheet drawing file.

**L. JUNCTIONS**

H-10638 (1995) to the north

An adequate junction was effected with H-10638(1995),

however; the surveys physical join only in the vicinity of the Intracoastal Waterway.

There are no junctional surveys to the south or west. Present survey depths are in harmony with the charted hydrography to the south and west.

**M. COMPARISON WITH PRIOR SURVEYS**

**Hydrographic**

**H-8750 (1963) 1:10000**

H-8750 (1963) covers the present survey area in its entirety. Prior survey depths compare favorably and show a general trend of being 1-4 feet (0<sup>3</sup>-3<sup>3</sup> m) shoaler than the present survey depths. The differences between the above discussed prior surveys and the present survey can be attributed to natural changes, cultural development, and improved hydrographic surveying methods and equipment. Attention is directed to the following:

1. The following charted depths and features originate with the prior survey and are not considered disproved:

<u>DEPTH/FEATURE</u> <u>(feet/meters)</u>	<u>LATITUDE (N)</u>	<u>LONGITUDE (W)</u>
subm pipe	29°17'02.40"	94°50'31.50"
pipe	29°16'36.10"	94°51'00.90"
2/0 <sup>6</sup>	29°16'35.70"	94°51'02.40"
pipe	29°16'36.50"	94°51'05.30"
subm posts	29°16'55.20"	94°51'34.40"
subm pile	29°16'46.80"	94°53'00.80"
subm pile	29°16'46.80"	94°53'02.80"
pipe	29°16'55.20"	94°53'01.40"
subm pile	29°17'00.40"	94°53'10.10"
subm pipe	29°17'27.80"	94°53'19.20"
subm pipe	29°17'36.80"	94°53'36.80"
pipe	29°17'14.70"	94°50'51.80"

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

2. Two charted dolphins, in latitude 29°17'08.3"N, longitude 94°50'14.2"W, originate with the prior survey and are not considered disproved. These features have been brought forward from the prior survey to supplement the

present survey. It is recommended that these features be retained and revised to submerged.

The present survey is considered adequate to supersede the prior survey within the common area, except as noted in this report.

O. COMPARISON WITH CHART 11322 (23<sup>rd</sup> Edition, Aug 6/94)  
11324 (28<sup>th</sup> Edition, Jan 22/94)

Hydrography

The charted hydrography within the common area originates with the previously addressed prior survey and from miscellaneous sources. The previously addressed prior survey require no further consideration. Attention is directed to the following:

1. The following features originate from miscellaneous sources subsequent to the present survey and appear on the 1997 edition of chart 11324:

<u>Feature</u>	<u>Latitude (N)</u>	<u>Longitude (W)</u>
Obstruction	29°17'06.90"	94°50'21.20"
Obstruction	29°17'10.00"	94°50'29.50"
Obstruction	29°17'14.20"	94°50'49.50"
Obstruction	29°17'14.30"	94°50'59.60"
Obstruction	29°17'11.30"	94°51'11.10"
Obstruction	29°17'08.40"	94°51'18.00"
Obstruction	29°17'07.70"	94°51'21.40"
Obstruction	29°17'04.30"	94°51'28.40"
2 Obstructions	29°16'59.30"	94°51'41.50"
Obstruction	29°16'55.70"	94°52'01.80"
Obstruction	29°16'54.10"	94°52'04.70"
Obstruction	29°16'49.60"	94°52'16.20"
Obstruction	29°16'50.80"	94°52'18.20"
Obstruction	29°16'46.20"	94°52'23.50"
Obstruction	29°16'47.50"	94°52'30.00"
Obstruction	29°16'48.20"	94°52'36.40"
11 Obstructions	29°16'48.00"	94°52'51.50"
Obstruction	29°17'01.30"	94°53'11.10"
Obstruction	29°16'59.40"	94°53'52.90"
Obstruction	29°16'59.30"	94°53'54.40"
Obstruction	29°16'41.10"	94°51'57.60"
Obstruction	29°16'52.90"	94°51'21.40"
2 Obstructions	29°16'50.00"	94°51'22.00"
10 Obstructions	29°16'37.00"	94°51'03.00"
Obstruction	29°16'52.30"	94°50'16.80"

Obstruction	29°16'49.60"	94°50'12.50"
Obstruction	29°17'13.50"	94°50'55.20"

It is recommended that these features be retained as charted.

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

<u>FEATURES</u>	<u>LATITUDE (N)</u>	<u>LONGITUDE (W)</u>
pipes	29°17'11.00"	94°50'33.00"
2 piles	29°17'12.00"	94°51'00.00"
2 piles	29°16'54.90"	94°51'44.30"
2 pipes	29°16'50.50"	94°51'56.70"
pipe	29°16'47.80"	94°51'48.70"
pile	29°16'46.20"	94°51'49.40"
pipe	29°16'44.90"	94°51'49.40"

It is recommended that these charted features be retained and revised to submerged.

3. The charted note, platform, in the vicinity of Latitude 29°17'10"N, Longitude 94°53'20"W, originates with an unknown source and is shown on NOS chart 11324. It is recommended that the charted note be deleted.

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

<u>FEATURES</u>	<u>LATITUDE (N)</u>	<u>LONGITUDE (W)</u>
submerged pile	29°16'43.90"	94°52'31.80"
submerged pile	29°16'44.10"	94°52'28.80"
submerged pile	29°16'45.40"	94°52'35.00"
2 Obstructions	29°16'45.00"	94°52'47.60"
Obstruction	29°16'47.70"	94°52'12.60"

It is recommended that these charted features be retained.

5. An uncharted platform was located in latitude 29°17'42.17, longitude 94°53'19.74". This feature was not addressed in the Descriptive Report by the hydrographer. It is recommended that this Platform be charted as shown on the present survey.

6. A charted platform in latitude 29°16'40.63, longitude 94°52'47.94", originates with an unknown source. This feature

was verified by the hydrographer and no change in it's charting status is recommended.

The present survey is adequate to supersede the charted hydrography in the common area, except as noted in this report.

**P. ADEQUACY OF SURVEY**

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

**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.

H-10660

**WHITING Processing Team**

*Franklin L. Saunders*

Franklin L. Saunders  
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

November 10, 1997

Commander (oan)  
 Eighth Coast Guard District  
 Hale Boggs Federal Building  
 501 Magazine Street  
 New Orleans, LA 70130-3396

Dear Sir,

During recent hydrographic survey operations in the vicinity of Galveston Bay, a fixed aid to navigation marking Offatts Bayou Entrance Channel was positioned and found to be approximately 100 meters SE of its currently charted position. Information concerning the NOAA survey follows:

Hydrographic Survey Registry Number...H-10660  
 State.....Texas  
 General Locality.....Galveston Bay  
 Locality.....Offatts Bayou to North Deer Island  
 Project Number.....OPR-K204-AHP-95  
 Surveyed by.....Atlantic Hydrographic Party

The daybeacon R"8" PA (light List #34665), charted in Latitude 29°16'57.9"N, Longitude 94°53'10.2"W, was located by the Atlantic Hydrographic Party at

Latitude 29°16'55.29"N  
 Longitude 094°53'08.20"W

The position was obtained using the Differential Global Positioning System and is referenced to the North American Datum of 1983 (NAD83). It is recommended that this position be updated in your current database so its "PA" representation can be removed from the chart.

Affected Nautical Charts:

<u>Chart</u>	<u>Edition</u>	<u>Chart</u>	<u>Edition</u>
<u>Number</u>	<u>No. Date</u>	<u>Number</u>	<u>No. Date</u>
11324	29 22 FEB 97	11322	24 2 AUG 97

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



**APPROVAL SHEET  
H-10660**

**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.

Robert R. Hill Jr. Date: 12-11-97  
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: 12-11-97  
Nicholas E. Perugini,  
Commander, NOAA  
Chief, Atlantic Hydrographic Branch

\*\*\*\*\*

**Final Approval:**

Approved: Andrew A. Armstrong III Dated: Jan 21, 1998  
Andrew A. Armstrong, III  
Captain, NOAA  
Chief, Hydrographic Surveys Division



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

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO.       H-10660      

**INSTRUCTIONS**

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
11324	12-24-97	<i>Robert Hill</i>	Full <del>Part Before</del> 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.
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