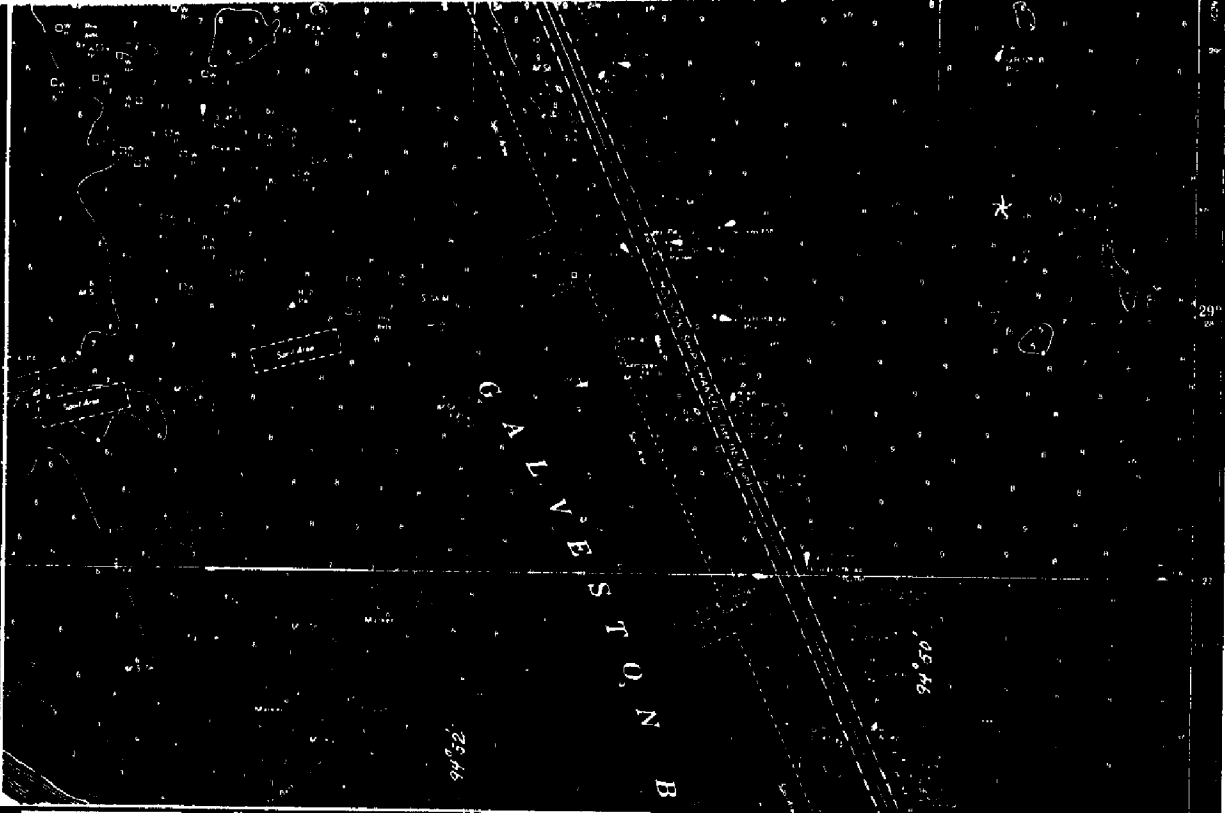


H10614

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-10-3-95
Registry No.	H-10614
LOCALITY	
State	TEXAS
General Locality	GALVESTON BAY
Sublocality	TEXAS CITY TO REDFISH BAR
19 95	
CHIEF OF PARTY	
Lt. K.N. HARRISON, NOAA	
LIBRARY & ARCHIVES	
DATE	DEC 8 1997

NOAA FORM 77-28 (11-72) U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION HYDROGRAPHIC TITLE SHEET	REGISTER NO. H-10614
INSTRUCTIONS - The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.	FIELD NO. AHP 10-03-95
State <u>Texas</u> General locality <u>Galveston Bay</u> Locality <u>Texas City to Redfish Bar</u> Scale <u>1:10,000</u> Date of survey <u>1995 May - Oct 1995</u> Instructions dated <u>16 Sept 1994 *</u> Project No. <u>OPR-K204-AHP</u> Vessel <u>0519</u> Chief of party <u>Lt Kevin Harbison</u> Surveyed by <u>RWR / DBE / PW / JG</u> Soundings taken by echo sounder and lead, pole & <u>Leadline, Pole</u> Graphic record scaled by <u>RWR / DBE / PW / JG</u> Graphic record checked by <u>RWR / DBE / PW / JG</u> Protracted by _____ Automated plot by <u>ENCAD NOAA JAT III Plotter (AHB)</u> <u>Brunning plotter (Add)</u> Verification by <u>ATLANTIC Hydrographic Branch Personnel</u> Soundings in <u>Meters Feet</u> at <u>MLLW</u>	
REMARKS: <u>* Change No. 1 Dtd 06 June 1995</u> <u>RWR = Robert W Ramsey Jr DBE = David B. Elliott</u> <u>PW = Phil Wolf JG = John Gaskins</u> <u>Notes in Descriptive Report were made in Red during</u> <u>Office Processing.</u> <u>AWOIS/SURF 10/30/97 mcr</u>	

"E1"
PS#2



H-10614

DESCRIPTIVE REPORT TO ACCOMPANY
HYDROGRAPHIC SURVEY H-10614
FIELD NO. AHP-10-3-95
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.

The purpose of project OPR-K204-AHP is to respond to requests from the Houston Pilots Association, the Houston/Galveston Navigation Safety Advisory Committee, West Gulf Maritime Association, the Houston Safe Boating Council, Inc., and the U. S. Coast Guard, to update hydrographic and bathymetric data of this area for use in proposed studies and in the construction of new charts. The most recent prior surveys in this area were conducted from 1962-1965.

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

B. AREA SURVEYED

The area surveyed for H-10614 covers Galveston Bay, from Texas City to Redfish Bar. The approximate survey limits are as follows:

North: 29° 29' 08"N
South: 29° 23' 06"N
East : 094° 48' 40"W
West : 094° 53' 25W

This survey was conducted from May 31^c, 1995 (DN 151) to 19^b October, 1995 (DN 292).

C. SURVEY VESSELS

NOAA launch 0519, a 21-foot MonArk, was used to collect all survey data. There were no unusual vessel configurations or problems encountered with the vessel.

D. AUTOMATED DATA ACQUISITION AND PROCESSING *See Also Evaluation Report.*

Version 5.01 of the PC-DAS programs was used for on-line data acquisition. A list of all HP-DPS programs and versions used for data processing can be found in the appendix of this report.* The NOS programs VELOCITY (Ver. 2.10) and WordPerfect (Ver. 6.1) were also used during this survey.

E. SONAR EQUIPMENT

Not applicable to this survey.

F. SOUNDING EQUIPMENT

An Innerspace model 448 depth sounder, S/N 186, was used to collect all echo soundings on this survey. A standard lead line calibrated in meters, S/N 0519, 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(m)</u>	<u>Applicable DN(s)</u>	<u>Cast Position</u>		<u>Day Taken</u>
1	1	10.5	166-167	29°27'49"N	094°50'00"W	167
2	2	16.9	170-171	29°28'00"N	094°51'10"W	171
3	3	16.6	191-192	29°23'51"N	094°49'01"W	193
4	4	16.5	198-202	29°26'00"N	094°50'10"W	201
5	5	16.9	205-209	29°26'00"N	094°50'12"W	208
6	6	19.7	240-249	29°48'00"N	094°22'00"W	241
7	7	19.6	256-257	29°22'00"N	094°48'12"W	257
8	8	16.9	278-279	29°26'00"N	094°50'10"W	278
9	9	17.0	282-293	29°24'00"N	094°49'00"W	285

* DATA filed with Field Records.

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, which was calibrated by the manufacturer on February 8, 1995. 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 velocity tables and support documentation are in the "Survey Separates."*

The lead line for launch 519 was calibrated using a steel tape on December 6, 1994. 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 0519, 0.6 meter above the transducer, to the water surface.

Settlement and squat measurements for launch 0519 were made on December 6, 1994 (DN 340). These measurements were conducted in the Galveston Ship Channel, 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 sheet using the HDAPS REAPPLY program. Data from the settlement and squat test are in the "Survey Separates."*

Predicted tides for this project were provided on diskette by N/OES231 for the Galveston Pier 21 reference station 877-1450. Correctors for two tidal zones on sheet "E" were used as designated by the project instructions. The zones were numbered and are defined by the following geographic locations and correctors:

Zone # 4 - This zone was applied to all hydrography acquired on plotter sheet No. 1, defined as "ES".

Zone # 5 = This zone was applied to all hydrography acquired on plotter sheet No. 2, defined as "EN".

	<u>Time (min.)</u>		
	<u>High Water</u>	<u>Low Water</u>	<u>Range Ratio</u>
Zone # 4	1 hr	2 hr	x 0.64
Zone # 5	2 hr	4 hr	x 0.64

All elevations and soundings on survey H-10614 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 October 25, 1995. A copy is appended to this report. *Approved Tides and Zoning were Applied during Office Processing.*

** DATA Filed With Field Records*

Because this project is expected to be completed in less than six months and closing levels will be run at all applicable tide gauge stations upon project completion, bracketing levels were not necessary.

H. CONTROL STATIONS *see also Evaluation Report.*

The horizontal control datum for this project is the North American Datum of 1983. The control reference station used for this survey was the USCG Galveston DGPS beacon, located at 29° 19'45.092"N, 094° 44'10.484"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 700417B1207) and antenna (S/N 700378A0232) were used as the remote station on launch 0519.

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

J. SHORELINE *see also Evaluation Report.*

This project was team processed with the Atlantic Hydrographic Branch. Shoreline shown on the sounding plot was created by digital shoreline data from DM-10236. Shoreline verification was accomplished during inshore hydrographic data acquisition and by visual inspection. Reference numbers, descriptions, field notes, and explanations of new shoreline features are located on the graphic record or on the boat sheet. Photographs are included with the survey data as well. Charted shoreline should be superseded by shoreline data from DM-10236.

See Section O for more information regarding shoreline changes.

* DATA Filed with Field Records.

K. CROSSLINES

A total of 54 linear nautical miles of crosslines were run, which is approximately 13% of the main scheme hydrography mileage. Crossline soundings agree with the main scheme soundings within 0.2 meter, with minor exceptions of 0.3-0.4m attributed to sea state and tides. The application of smooth tides will create a closer agreement in sounding comparison.

L. JUNCTIONS *See ALSO EVALUATION REPORT.*

This survey junctions with the following:

<u>Survey No. / Sheet</u>	<u>Year</u>	<u>Scale</u>	<u>Junction Area</u>
H-10588 / J	1995	1:10,000	North
H-10589 / B	1995	1:10,000	South

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 *See ALSO EVALUATION REPORT.*

See the Atlantic Hydrographic Branch's "Evaluation Report for H-10614."

N. ITEM INVESTIGATION REPORTS *SEE ALSO EVALUATION REPORT*

There were a total of 33 AWOIS items addressed on this survey. All AWOIS reports are ~~appended to this report.~~ *DATA Filed with Field Records.*
included with

O. COMPARISON WITH THE CHART *see ALSO EVALUATION REPORT.*

Comparison was made with the following charts:

<u>Chart No.</u>	<u>Edition</u>	<u>Edition Date</u>
11323	54th	Aug 6/94
11324	28th	Jan 22/94
11326SC	26th	Jan 1/94
11327	26th	Oct 16/93

Four dangers to navigation were identified on this survey. An obstruction, a visible wreck, and a pipeline were reported to the Eighth District USCG in a letter dated June 21, 1995. A visible pipe was reported to the Eight District USCG in a letter dated September 6, 1995. Copies of both letters are appended to this report.

Numerous white beacons (WBn) are charted in the northwest section of this survey. These beacons no longer exist, however, numerous markers composed of stakes, tree limbs, and small poles with black and white flags attached, were found to exist in this area. Contact was made with the commercial fisherman working the area who said that the charted beacons had been replaced over the years with the more temporary markers mentioned above. These are private markers delineating boundary limits for commercial oyster bed leases. These markers are set to allow the fishing vessels to pass over top of them while working the oyster beds. The markers were not positioned because of their temporary nature. The hydrographer recommends that the currently charted markers be removed from the charts and that a general remark or special note be added in the area of 29°28'30"N, 094°53'00"W, stating "Oyster Beds, numerous private markers, use caution transiting this area". *CONCUR*

A row of evenly spaced piles and platforms were established along the eastern side of the Houston Ship Channel in the mid-1960's by the U.S. Army Corp of Engineers (COE), to maintain and dredge this channel. This line of charted features crosses this survey from a point at 29°22'59.5"N, 094°48'26.5"W, along an axis of 336°48'05" true, for 12.4 kilometers to a point at 29°29'10"N 094°51'28"W. Contact with Mr. Richard Whitmire at the COE, obtained verbal confirmation that these features no longer exist. These items have been removed during the continuing dredging operations throughout the years. Diver searches using a 75-meter search radius were conducted on all charted platforms and ruins to verify and support this removal information. All dive searches for these platforms were negative. It is recommended that these charted items, 7 platforms and 26 piles, be removed from the chart. *CONCUR*

The following table lists uncharted features found on this survey:

<u>Day No.</u>	<u>Fix</u>	<u>Latitude N</u>	<u>Longitude W</u>	<u>FL</u>	<u>Description/Depth</u>
* 157	30	29-23-18.20 ⁴	094-52-33.30	2	obstruction (-1.3) ^{0.7}
* 157	31	29-23-44.85 ⁴	094-52-33.05 ⁴	-7	vis wreck (-2.0 ³ m)
* 159	100	29-23-17.38 ⁴	094-51-28.59	-3	pipeline (-0.06 ⁹ m)
* 240	1527	29-24-09.74	094-49-48.35	-8	pipeline (-2.2 ⁴ m)
285	3665	29-23-56.43	094-53-12.44	-3	pipe (-0.4 ⁵ m) ^{1.0}
285	3794	29-23-29.04	094-52-53.88	-0	pile (-0.1 ⁵ m)
285	3795	29-23-31.64	094-52-48.29	-2	priv marker (-0.04 ⁵ m)

Items marked with an asterisk were reported as dangers to navigation. Items not marked were not considered dangers to navigation because of their proximity to shore. All of the items are recommended for charting. *CONCUR - CHART AS SHOWN ON THE PRESENT SURVEY.*

P. ADEQUACY OF SURVEY *See Also Evaluation Report.*

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

Q. AIDS TO NAVIGATION

The following 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. All aids to navigation were positioned by DGPS during hydrographic operations. Equipment and personnel resources were not available for 3rd-order positions of all the non-floating navigational aids. It should be noted that aids are constantly being changed by the USCG, due to damage from shipping as a result of the narrow confines of the Houston Ship Channel (HSC). A comparison of the positions of the fixed aids located on this survey is shown in the following table:

<u>Pos. No.</u>	<u>Name and USCGLL#</u>	<u>LL Position</u>	<u>Survey Pos.</u>	<u>Distance/Bearing from Charted Position</u>
3	LT "35" (22925)	29°24.0'N 094°49.5'W	29°24'39.27"N 094°49'31.61"W	On Station
4	LT "36" (22930)	120 FT outside chan	29°24'42.79"N 094°49'23.64"W	On Station
7	Wrk LT WR (22940)	29°25.4'N 094°50.0'W	29°25'23.68"N 094°50'02.87"W	On Station
8	LT "39" (22940)	29°25.9'N 094°50.1'W	29°25'52.55"N 094°50'07.38"W	On Station
9	LT "40" (22965)	29°25.9'N 094°50.0'W	29°25'55.18"N 094°49'59.23"W	On Station
13	LT "43" (22980)	29°27.0'N 094°50.7'W	29°26'59.43"N 094°50'41.35"W	On Station
17	LT "47" Pipeline Marker (23000)	None	29°27'49.93"N 094°51'12.31"W	On Station
18	Lower Galv. Bay Inner RNG LT, Rear (23045)	None	29°28'18.94"N 094°50'55.79"W	On Station
20	LT "49" (23010)	29°28.2'N 094°51.3'W	29°28'11.89"N 094°51'18.39"W	On Station

21	Dbn "1" (24895)	29°28.1N 094°51.5'W	29°28'04.07"N 094°51'31.86"W	On Station
24	Lower Galv. Bay Inner RNG LT,FNT (22950)	29°30.5'N 094°52.4'W	29°28'55.76"N 094°51'23.99"W	On Station Note: Published position disagrees by 1' longitude
26	LT "F" Pipeline Marker (25010)	29°28.6'N 094°53.3'W	29°28'41.38"N 094°53'09.31"W	On Station

R. STATISTICS

<u>Description</u>	<u>Quantity</u>
Total Number of Positions	3950
Total Lineal Nautical Miles of Hydrography	485
Total Lineal Nautical Miles of Cross Lines	54
Square Nautical Miles of Hydrography	26
Days of Production	29
Detached Positions	78
Bottom Samples	54
Velocity Casts	9

S. MISCELLANEOUS *see also EVALUATION REPORT.*

Bottom samples were taken as directed in Section 6.7 of the Project Instructions. Bottom sample positions and descriptions can be found on the DP editor printout appended to this report.* The Oceanographic Log Sheet-M, NOAA Form 75-44, is included in the "Survey Separates."* Bottom sample density was reduced to sampling at charted characteristic sites at their scaled positions. There was no evidence of major change. Therefore, the standard six- to ten-centimeter spacing was not required on this survey.

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..

* DATA Filed with Field Records.

T. RECOMMENDATIONS *SEE SECTION P. OF EIA REPORT*

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 Reports for H-10588 and H-10589	Atlantic Hydrographic Section N/CG244, Norfolk, VA (Winter 1996)
Chart Sales Agent Report	Chart Distribution Branch N/CG33, Rockville, MD (Spring 1996)
User Evaluation Report	Atlantic Hydrographic Section N/CG244, Norfolk, VA (Spring 1996)
Chart Inspection Report	Atlantic Hydrographic Section N/CG244, Norfolk, VA (Spring 1996)
Coast Pilot Report	Atlantic Hydrographic Section N/CG244, Norfolk, VA (Spring 1996)

Submitted by: Robert W. Ramsey /Hydrographer in charge Launch 0519.
Atlantic Hydrographic Party

** DATA Filed With Field Records*

AWOIS NO: 3046

Item Description: CAPT. GUEL, 32' F/V Rpt. grounded

Source: LNM36/84--8th CGD

AWOIS Position: Lat - 29/27/42.83N Lon - 094/51/30.71W

Required Investigation: ES, VS, BD, SD, ##-- 250m radius

Charts Affected: 11323, 11324, 11326, 11331.

INVESTIGATION

Date(s)/DN(s): 7/19/95 (DN 200)

Position Numbers: 1395; 1396-1428

Launch Number: 0519

Investigation Used: VS, ES, DI

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: Conducted A 100-meter radius diver circle search was conducted from the reported center, with no contacts encountered. A sounding line development using 50-meter line spacing was also conducted on a north/south axis, crossing the normal east/west mainscheme sounding lines throughout the 250 meter search radius. No evidence of this feature was found..

CHARTING RECOMMENDATION

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

CONCUR

Recommended Position:

Recommended Least Depth:

COMPILATION NOTES

DELETE [symbol] PA

AWOIS NO: 9115

Item Description: Pile

Source: BP66218--1964,COE

AWOIS Position: Lat - 29/24/21.00N Lon - 094/49/07.50W

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

Charts Affected: 11323, 11324, 11326, 11331.

INVESTIGATION

Date(s)/DN(s): 1/18/95

Position Numbers: N/A

Launch Number: 0519

Investigation Used: VS, ES, S2

Water Visibility: 2m

Position Determined By: DGPS

Investigation Summary: A representative of the Atlantic Hydrographic Party, Mr. David Elliott, met with Mr. Richard Whitmire (phone 409-766-6315), at the U.S. Army Corps of Engineers office. Mr. Whitmire is the USCOE project engineer for the Galveston ship channel and Fort Point region. The detailed conversation on this day included many charted items and features within the confines of the Houston/Galveston Ship channel. Among the main topics discussed were AWOIS numbers 9115; 9121; 9138; 9141; and 9143. These items were established in 1964-65, and according to Mr. Whitmire, they no longer exist. Some of the piles and survey platforms were removed by hurricane Alicia and others were removed by the COE. Mr. Whitmire has had survey crews in this area and is confident no piles, or survey platforms exist in these locations. AHP conducted extensive visual and echo sounder searches in these areas with negative results.

CHARTING RECOMMENDATION

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

concern

Recommended Position: Lat - // . N Lon - // . W

Recommended Least Depth: N/A

COMPILATION NOTES

DELETE o Subm PILE

AWOIS NO: 9116

Item Description: Wreck

Source: NM16-78

AWOIS Position: Lat - 29/24/06.34N Lon - 094/49/06.71W

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

Charts Affected: 11323, 11324, 11326, 11331.

INVESTIGATION

Date(s)/DN(s): 8/28/95 (240)

Position Numbers: 1525

Launch Number: 0519

Investigation Used: VS, ES, S2

Water Visibility: 2m

Position Determined By: DGPS

Investigation Summary: This item falls within the eastern quarter of the Houston Ship Channel. Its required search limit falls within the dredging limits of the maintained channel. Contact was made with Mr. Richard Whitmire (phone 409-766-6315), of the U.S. Army Corps of Engineers office in Galveston, who advised AHP that recent dredge surveys in the area (July/August 95) revealed no evidence of this feature.

CHARTING RECOMMENDATION

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

Recommended Position: Lat - // . N Lon - // . W

Concur

Recommended Least Depth: N/A

COMPILATION NOTES

DELETE ###: PA

AWOIS NO: 9117

Item Description: F/V D.S. JUNIOR

Source: NM36/64

AWOIS Position: Lat - 29/24/12.84N Lon - 094/49/30.71W

Required Investigation: ES, VS, BD, SD, ##-- 150m radius

Charts Affected: 11323, 11324, 11326, 11331.

INVESTIGATION

Date(s)/DN(s): 8/28/95 (240)

Position Numbers: 1526

Launch Number: 0519

Investigation Used: VS, ES, DI

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: No visual or sounding contacts were made with this reported feature. A 100m radius diver search was conducted as well, with no contacts encountered. This feature does not exist.

CHARTING RECOMMENDATION

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

concur

Recommended Position: Lat - / / . N Lon - / / . W

Recommended Least Depth: N/A

COMPILATION NOTES

DELETE ~~(H)~~

AWOIS NO: 9118

Item Description: 22' P/C reported sunk in 3 ft

Source: NM27/65

AWOIS Position: Lat - 29/24/30.84N Lon - 094/49/36.71W

Required Investigation: ES, VS, BD, SD, ##-- 100m radius

Charts Affected: 11323, 11324, 11326, 11331

INVESTIGATION

Date(s)/DN(s): 8/9/95 (221)

Position Numbers: 1484

Launch Number: 0519

Investigation Used: VS, ES, DI

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: The search area of this item lies on the edge of a charted spoil area. A visual and echo sounder search was conducted over the area with no evidence of the reported feature. A 100-meter radius diver circle search was also conducted with negative results.

CHARTING RECOMMENDATION

The hydrographer recommends that this feature be removed from the chart.

Concur

Recommended Position: Lat - // . N Lon - // . W

Recommended Least Depth: N/A

COMPILATION NOTES

DELETE (H) PA

AWOIS NO: 9119

Item Description: D'Boat

Source: LNM 1/71--8th CGD

AWOIS Position: Lat - 29/24/34.84N Lon - 094/49/41.71W

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

Charts Affected: 11323, 11324, 11326, 11331.

INVESTIGATION

Date(s)/DN(s): 8/9/95 (221)

Position Numbers: 1483

Launch Number: 0519

Investigation Used: VS, ES, DI

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: The search area for this item lies on the edge of a charted Spoil Area. A visual and echo sounder search was conducted throughout this area with no evidence of the reported feature found. A 50-meter radius diver circle search was also conducted over the required search area with negative results.

CHARTING RECOMMENDATION

The hydrographer recommends that this feature be removed from the chart.

Recommended Position: Lat - / / . N Lon - / / . W

Concern

Recommended Least Depth: N/A

COMPILATION NOTES

DELETE [circled] PA

AWOIS NO: 9120

Item Description: F/V sunk, mast and 2 outriggers reported to be exposed

Source: NM49/67

AWOIS Position: Lat - 29/24/36.83N Lon - 094/49/54.71W

Required Investigation: ES, VS, BD, SD, -- 100m radius

Charts Affected: 11323, 11324, 11326, 11331

INVESTIGATION

Date(s)/DN(s): 8/9895 (221)

Position Numbers: 1482

Launch Number: 0519

Investigation Used: VS, ES, DI

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: The search area for this item lies on the edge of a charted Spoil Area. A visual and echo sounder search was conducted throughout this area with no evidence of the reported feature found. A 100-meter radius diver circle search was also conducted over the required search area with negative results.

CHARTING RECOMMENDATION

The hydrographer recommends that this feature be removed from the chart.

Recommended Position: Lat - / / . N Lon - / / . W

Concur

Recommended Least Depth: N/A

COMPILATION NOTES

DELETE (H)

AWOIS NO: 9121

Item Description: Pile, COE established

Source: BP66216-COE,1964

AWOIS Position: Lat - 29/24/39.50N Lon - 094/49/16.50W

Required Investigation: ES, VS, BD, SD, -- 100m radius

Charts Affected: 11323, 11324, 11326, 11331.

INVESTIGATION

Date(s)/DN(s): 1/18/95

Position Numbers: N/A

Launch Number: 0519

Investigation Used: VS, ES, S2

Water Visibility: 2m

Position Determined By: DGPS

Investigation Summary: A representative of the Atlantic Hydrographic Party, Mr. David Elliott, met with Mr. Richard Whitmire (phone 409-766-6315), at the Army Corps of Engineers office. Mr. Whitmire is the USCOE project engineer for the Galveston ship channel and Fort Point region. The conversation on this day included many charted items and features within the confines of the Houston/Galveston Ship channel. Among the main topics discussed were AWOIS item numbers 9115, 9121, 9138, 9141, and 9143. These items were established in 1964-65 and according to Mr. Whitmire, they no longer exist. Some of the piles and survey platforms were removed by hurricane Alicia in 1983, and others were removed by the COE. Mr. Whitmire has had survey crews in this area and is confident no piles or survey platforms exist in these locations.

CHARTING RECOMMENDATION

The hydrographer recommends that this feature be removed from the chart.

Concur

Recommended Position: Lat - // . N Lon - // . W

Recommended Least Depth: N/A

COMPILATION NOTES

DELETE o Subm PILE

AWOIS NO: 9122

Item Description: Obstruction, reported to be oil & gas platform ruins

Source: CL409/78--USPS

AWOIS Position: Lat - 29/25/05.83N Lon - 094/49/00.71W

Required Investigation: ES, VS, BD, SD, -- 200m radius

Charts Affected: 11323, 11324, 11326, 11331.

INVESTIGATION

Date(s)/DN(s): 8/28/95 (240)

Position Numbers: 1488-1523; 1524

Launch Number: 0519

Investigation Used: VS, ES, DI

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: A 100-meter diver circle search centered at the center of the required search area found no evidence of this item. Hydrography at 50 meter line spacing was conducted throughout search area also with negative results. Because of pipeline throughout Galveston Bay, bottom dragging was not an option and the area was too shallow for side scan sonar.

CHARTING RECOMMENDATION

The hydrographer recommends that this feature be removed from the chart.

Recommended Position: Lat - // . N Lon - // . W

Concur

Recommended Least Depth: N/A

COMPILATION NOTES

DELETE [] RUINS REP

AWOIS NO: 9126

Item Description: Obstruction, reported as pipe markers of COE's

Source: CL1768/68--USPS

AWOIS Position: Lat - 29/23/29.84N Lon - 094/50/59.71W

Required Investigation: ES, VS, BD, SD, -- 100m radius

Charts Affected: 11323, 11324, 11326, 11331.

INVESTIGATION

Date(s)/DN(s): 8/28/95 (240)

Position Numbers: 1528

Launch Number: 0519

Investigation Used: VS, ES, DI

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: A 100-meter radius diver circle search was conducted centered around the reported position, with negative results.

CHARTING RECOMMENDATION

The hydrographer recommends that this feature be removed from the chart.

Recommended Position: Lat - // . N Lon - // . W

*Do Not Concur
SEE E+A SECTION N.*

Recommended Least Depth: N/A

COMPILATION NOTES

AWOIS NO: 9127

Item Description: Wreck

Source: CL65/90--USPS

AWOIS Position: Lat - 29/23/48.84N Lon - 094/52/06.71W

Required Investigation: ES, VS, BD, SD, -- 200m radius

Charts Affected: 11323, 11324, 11326, 11331.

INVESTIGATION

Date(s)/DN(s): 6/6/95 (157)
8/28/95 (240)

Position Numbers: 31, 1530-1563

Launch Number: 0519

Investigation Used: VS, ES, DI

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: This visible wreck was identified during early field operations on this survey, but was found to be 721m west southwest of the reported position. It is believed that the wreck was moved during heavy weather, or reported with a bad position. An echo sounder search was run from the located position of the wreck (position 31) to the reported geographic position, with nothing found. The required search area was sounded at 50m line spacing across 100m mainscheme, also with nothing found. A 100-meter radius diver circle search was conducted centered at the reported position with negative results as well.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted visible wreck be repositioned to the location listed below.




CONCERN W/ CLARIFICATION

Recommended Position: Lat - 29/23/44.8 N Lon - 094/52/33.0 W
(7.5 ft)

Recommended Least Depth: exposed ^{2.3m} 2 meters above the surface at the time of survey
(corrected for predicted tides)

APPROVED

COMPILATION NOTES

CHART 
DELETE  PA
DELETE  PA

AWOIS NO: 9128

Item Description: Piles, two reported in vicinity of one charted

Source: CL949/73--USPS

AWOIS Position: Lat - 29/23/20.00N Lon - 094/52/18.00W

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

Charts Affected: 11323, 11324, 11326, 11331.

INVESTIGATION

Date(s)/DN(s): 6/6/95 (157)

Position Numbers: 28, 29

Launch Number: 0519

Investigation Used: VS, ES

Water Visibility: 2m

Position Determined By: DGPS

Investigation Summary: These items were visually identified and located by detached positions 28 and 29. Position 28 located 2 mooring piles less than 1 meter apart and exposed 2 meters; position 29 located a 3-pile dolphin exposed 3 meters.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted features be repositioned on the chart, and identified as dols.

Recommended Position: Lat - 29/23/19.4 N Lon - 094 /52/18.3 W
29/23/23.4 N 094/52/17.5 W

Recommended Least Depth: position 28 - 2m above at time of survey
position 29 - 3m above at time of survey
(Corrected for predicted tides)

*Concern
w/ CLARIFICATION*

COMPILATION NOTES

CHART o DOL - DELETE o Subm PILE
CHART o PILES - DELETE o PILES REP

AWOIS NO: 9129

Item Description: Submerged Wreck w/LD of 4.0' at MLLW

Source: H-8693/62--OPR-428

AWOIS Position: Lat - 29/25/05.33N Lon - 094/52/45.71W

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

Charts Affected: 11323, 11324, 11326, 11331.

INVESTIGATION

Date(s)/DN(s): 8/28/95 (240)

Position Numbers: 1529

Launch Number: 0519

Investigation Used: VS, ES, DI

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: A 50-meter radius diver circle search was conducted centered at the reported position of this item. Nothing was found..

CHARTING RECOMMENDATION

The hydrographer recommends that this feature be removed from the chart.

Concur

Recommended Position:

Recommended Least Depth:

COMPILATION NOTES

DELETE (4) WK

AWOIS NO: 9130

Item Description: Sunken shrimp boat w/superstructure exposed

Source: CL 66/90--USPS

AWOIS Position: Lat - 29/25/24.83N Lon - 094/51/00.71W

Required Investigation: ES, VS, BD, SD, -- 400m radius

Charts Affected: 11323, 11324, 11326, 11331.

INVESTIGATION

Date(s)/DN(s): 8/9/95 (221)

9/13/95 (256)

Position Numbers: 1481; 2203-2281

Launch Number: 0519

Investigation Used: VS, ES, DI

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: A visual search was conducted throughout this area with no signs of reported feature. A 100-meter radius diver circle search was conducted centered around the reported position, also with negative results. Hydrography at 50m N/S axis line spacing run over the 400-meter radius search area, in addition to the normal 100m E/W mainscheme. The echo sounder search only revealed a shoal area in the northeast quadrant of the search area, approximately 80 meters in diameter, rising to 2.8m depths in surrounding 3.8m depths.

CHARTING RECOMMENDATION

The hydrographer recommends that this feature be removed from the chart and representative shoal soundings found in the search area be charted..

Recommended Position:

concur

Recommended Least Depth:

COMPILATION NOTES

DELETE (H) PA

AWOIS NO: 9131

Item Description: Sunken Barge

Source: CL 66/90--USPS

AWOIS Position: Lat - 29/25/19.83N Lon - 094/50/01.71W

Required Investigation: ES, VS, BD, SD,-- 100m radius

Charts Affected: 11323, 11324, 11326, 11331.

INVESTIGATION

Date(s)/DN(s): 8/9/95 (221)

Position Numbers: 1480

Launch Number: 0519

Investigation Used: VS, ES, DI

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: This item appears to be a duplicate report of the AWOIS item 9132 wreck. A 100-meter radius diver circle search was conducted centered on the reported position of this item. The only contact was with the reported submerged barge referenced in item 9132, in the northwest section of this items search quadrant.

CHARTING RECOMMENDATION

The hydrographer recommends that this submerged wreck be removed from the chart.

Concur

Recommended Position:

Recommended Least Depth:

COMPILATION NOTES

DELETE *PA*

AWOIS NO: 9132

Item Description: Sunken Barge (believed to be same as AWOIS 9131)

Source: LNM38/91--CGD

AWOIS Position: Lat - 29/25/21.70N Lon - 094/50/04.00W

Required Investigation: ES, VS, BD, SD, -- 100m radius

Charts Affected: 11323, 11324, 11326, 11331.

INVESTIGATION

Date(s)/DN(s): 8/9/95 (221)

Position Numbers: 1479

Launch Number: 0519

Investigation Used: VS, ES,

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: A visual identification was made of this feature in the vicinity of the "WR" light. The barge is awash during sea action with a least depth of 0.7 meters. The barge lies on its keel in a SW/NE axis extending southwest from light "WR" to position 1479, which marks the barge end and least depth.

CHARTING RECOMMENDATION

The hydrographer recommends that the this submerged wreck be repositioned on the chart with the proper axis from light "WR"

concur

Recommended Position: Lat - 29/25/22.0 N Lon - 094/50/04.2W

Recommended Least Depth: 0.7⁵ meter below MLLW (predicted tides)
-1.6 ft *Approved*

COMPILATION NOTES

DELETE ~~PA~~ PA

ADD 

AWOIS NO: 9133

Item Description: 65' F/V sunk w/exposed outriggers

Source: LNM 26/86--8th CGD

AWOIS Position: Lat - 29/25/28.83N Lon - 094/50/04.71W

Required Investigation: ES, VS, BD, SD, -- 100m radius

Charts Affected: 11323, 11324, 11326, 11331.

INVESTIGATION

Date(s)/DN(s): 8/9/95 (221)

Position Numbers: 1478

Launch Number: 0519

Investigation Used: VS, ES, DI

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: This item was not identified by visual or echo sounder searches. A 100-meter radius diver circle search centered around the reported position also found nothing. The light "WR" is located to the SSW marking AWOIS 9132 , a sunken barge, at the outer limits of this search area.

CHARTING RECOMMENDATION

The hydrographer recommends that this submerged wreck be removed from the chart.

Recommended Position:

concur

Recommended Least Depth:

COMPILATION NOTES

AWOIS NO: 9134

Item Description: 35' F/V " Miss PJ", Visible Wreck

Source: LNM 44/93--8th CGD

AWOIS Position: Lat - 29/25/30.00N Lon - 094/50/18.00W

Required Investigation: ES, VS, BD, SD, -- 100m radius

Charts Affected: 11323, 11324, 11326, 11331.

INVESTIGATION

Date(s)/DN(s): 8/8/95 (220)

Position Numbers: 1476

Launch Number: 0519

Investigation Used: VS, ES, DI

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: No evidence of this item, which lies within an active spoil area, was found during a visual and echo sounder search. A 100-meter radius diver circle search centered around the reported position was also conducted and nothing was found.

CHARTING RECOMMENDATION

The hydrographer recommends that this submerged wreck be removed from the chart.

Concur

Recommended Position:

Recommended Least Depth:

COMPILATION NOTES

AWOIS NO: 9135

Item Description: Visible Wreck of F/V

Source: LNM 38/91--8thCGD

AWOIS Position: Lat - 29/25/36.90N Lon - 094/50/19.20W

Required Investigation: ES, VS, BD, SD, -- 100m radius

Charts Affected: 11323, 11324, 11326, 11331.

INVESTIGATION

Date(s)/DN(s): 8/8/95 (220)

Position Numbers: 1473

Launch Number: 0519

Investigation Used: VS

Water Visibility: 2m

Position Determined By: DGPS

Investigation Summary: This item was found visually and was located by detached position number 1473. The wreck has a trawler A-frame exposed 1.3 meters above at MLLW corrected using predicted tides.

CHARTING RECOMMENDATION

The hydrographer recommends that a visible wreck be charted at the surveyed position below, and the currently charted symbol be removed from the chart.

Concur

Recommended Position: Lat - 29/25/37.2 N Lon - 094/50/19.5 W

Recommended Least Depth: 1.3⁷m above at MLLW (predicted tides)

5.6 ff

Approved

COMPILATION NOTES

REVISE



PA.

TO



AWOIS NO: 9136

Item Description: Visible Wreck , 35' S/V

Source: LNM 39/89--8th CGD, CL65/90--USPS

AWOIS Position: Lat - 29/25/42.83N Lon - 094/50/30.71W

Required Investigation: ES, VS, BD, SD, -- 150m radius

Charts Affected: 11323, 11324, 11326, 11331.

INVESTIGATION

Date(s)/DN(s): 8/8/95 (220)

Position Numbers: 1474

Launch Number: 0519

Investigation Used: VS, ES, DI

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: A visual search was conducted throughout the 150-meter radius and no evidence of the item was found. A 100-meter diver circle search was also conducted centered around the reported position. Nothing was found.

CHARTING RECOMMENDATION

The hydrographer recommends that this feature be removed from the chart.

Recommended Position:

Concur

Recommended Least Depth:

COMPILATION NOTES

DELETE ~~HH~~ PA

AWOIS NO: 9137

Item Description: 50' F/V reported holed and grounded

Source: LNM 20/86--8th CGD

AWOIS Position: Lat - 29/25/48.83N Lon - 094/50/24.71W

Required Investigation: ES, VS, BD, SD, -- 150m radius

Charts Affected: 11323, 11324, 11326, 11331.

INVESTIGATION

Date(s)/DN(s): 8/8/95 (220)

Position Numbers: 1475

Launch Number: 0519

Investigation Used: VS, ES, DI

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: A 150-meter radius visual search was conducted over the required search area . No evidence was found. A 100-meter radius diver circle search centered around the reported position was also conducted, also with nothing foundl. The water depths in the area are less than 3 meters in an active spoil area. The original report in 1986 was of a 50 foot F/V "holed", not sunk. The F/V was most likely grounded for repair of the hole prior to being towed to port.

CHARTING RECOMMENDATION

The hydrographer recommends that this feature be removed from the chart.

concur

Recommended Position:

Recommended Least Depth:

COMPILATION NOTES

DELETE ~~So~~

AWOIS NO: 9138

Item Description: Pile, COE established

Source: BP-66216--COE, CL590/82--USPS

AWOIS Position: Lat - 29/25/33.50N Lon - 094/49/44.50W

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

Charts Affected: 11323, 11324, 11326, 11331.

INVESTIGATION

Date(s)/DN(s):

Position Numbers: N/A

Launch Number: 0519

Investigation Used: VS, ES, S2

Water Visibility: 2m

Position Determined By: DGPS

Investigation Summary: A representative of the Atlantic Hydrographic Party, Mr. David Elliott, met with Mr. Richard Whitmire (phone 409-766-6315), at the U.S. Army Corps of Engineers office. Mr. Whitmire is the USCOE project engineer for the Galveston ship channel and Fort Point region. The detailed conversation on this day included many charted items and features within the confines of the Houston/Galveston Ship channel. Among the main topics discussed were AWOIS numbers 9115; 9121; 9138; 9141; and 9143. These items were established in 1964-65, and according to Mr. Whitmire, they no longer exist. Some of the piles and survey platforms were removed by hurricane Alicia and others were removed by the COE. Mr. Whitmire has had survey crews in this area and is confident no piles, or survey platforms exist in these locations. AHP conducted extensive visual and echo sounder searches in these areas with negative results.

CHARTING RECOMMENDATION

The hydrographer recommends that this feature be removed from the chart.

concur

Recommended Position:

Recommended Least Depth:

COMPILATION NOTES

DELETE o Subm Pile

AWOIS NO: 9139

Item Description: 34' P/C Calypso, Sunk

Source: LNM 15/77--8th CGD

AWOIS Position: Lat - 29/25/48.83N Lon - 094/49/48.71W

Required Investigation: ES, VS, BD, SD, -- 150m radius

Charts Affected: 11323, 11324, 11326, 11331.

INVESTIGATION

Date(s)/DN(s): 8/9/95 (221)

Position Numbers: 1477

Launch Number: 0519

Investigation Used: VS, ES, DI

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: A visual search was conducted over the required 150-meter radius search area and nothing was found. A 100-meter radius diver circle search centered at the reported position was also conducted, and again nothing was found.

CHARTING RECOMMENDATION

The hydrographer recommends that this feature be removed from the chart.

concur

Recommended Position:

Recommended Least Depth:

COMPILATION NOTES

DELETE  *PA*

AWOIS NO: 9140

Item Description: 32' F/V Miss Betty, Sunk

Source: LNM 48/79--8th CGD, LNM 3/80--8th CGD

AWOIS Position: Lat - 29/26/27.83N Lon - 094/49/45.71W

Required Investigation: ES, VS, BD, SD, -- 200m radius

Charts Affected: 11323, 11324, 11326, 11331.

INVESTIGATION

Date(s)/DN(s): 7/20/95 (DN 201)

Position Numbers: 1434-1456, 1457

Launch Number: 0519

Investigation Used: VS, ES, DI

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: An echo sounder investigation using 50-meter line spacing was run in a north/south direction which crossed the normal east/west mainscheme lines throughout the search radius. No contacts were observed in any sounding data. A 100-meter radius diver circle search centered at the reported position was also conducted. No contacts were encountered during the dive search either.

CHARTING RECOMMENDATION

The hydrographer recommends that this feature be removed from the chart.

Recommended Position:

concur

Recommended Least Depth:

COMPILATION NOTES

DELETE (H) PD

AWOIS NO: 9141

Item Description: Pile, COE established

Source: BP66216--COE, CL590/82--USPS

AWOIS Position: Lat - 29/26/45.50N Lon - 094/50/20.20W

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

Charts Affected: 11323, 11324, 11326, 11331.

INVESTIGATION

Date(s)/DN(s): 7/19/95 (DN 200)

Position Numbers: 1430

Launch Number: 0519

Investigation Used: VS, ES, DI

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: A representative of the Atlantic Hydrographic Party, Mr. David Elliott, met with Mr. Richard Whitmire (phone 409-766-6315), at the U.S. Army Corps of Engineers office. Mr. Whitmire is the USCOE project engineer for the Galveston ship channel and Fort Point region. The detailed conversation on this day included many charted items and features within the confines of the Houston/Galveston Ship channel. Among the main topics discussed were AWOIS numbers 9115; 9121; 9138; 9141; and 9143. These items were established in 1964-65, and according to Mr. Whitmire, they no longer exist. Some of the piles and survey platforms were removed by hurricane Alicia and others were removed by the COE. Mr. Whitmire has had survey crews in this area and is confident no piles, or survey platforms exist in these locations. AHP conducted extensive visual and echo sounder searches in these areas with negative results. A 50-meter radius dive search was made and encountered no signs of this pile.

CHARTING RECOMMENDATION

The hydrographer recommends that this feature be removed from the chart.

concur

Recommended Position:

Recommended Least Depth:

COMPILATION NOTES

DELETE o Subm Pile

AWOIS NO: 9142

Item Description: 3 piles

Source: CL 1275/77--USPS, CL1104/80--USPS

AWOIS Position: Lat - 29/26/55.00N Lon - 094/50/04.00W
29/26/56.00N 094/50/02.00W
29/26/53.00N 094/50/06.00W

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

Charts Affected: 11323, 11324, 11326, 11331.

INVESTIGATION

Date(s)/DN(s): 7/20/95 (DN 201); 7/27/95 (DN 208)

Position Numbers: 1432-1433; 1462 **Launch Number:** 0519

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

Position Determined By: DGPS

Investigation Summary: A 75-meter radius diver circle search was conducted around each of the three reported positions of piles and no contacts were encountered.

CHARTING RECOMMENDATION

The hydrographer recommends that these features be removed from the chart.

Recommended Position:

amcur

Recommended Least Depth:

COMPILATION NOTES

DELETE 0° Subm piles PA

AWOIS NO: 9143

Item Description: Pile, COE established

Source: BP 66216--COE

AWOIS Position: Lat - 29/26/55.00N Lon - 094/50/25.00W

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

Charts Affected: 11323, 11324, 11326, 11331.

INVESTIGATION

Date(s)/DN(s): 7/19/95 (DN 200)

Position Numbers: 1429

Launch Number: 0519

Investigation Used: VS, ES, DI

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: A representative of the Atlantic Hydrographic Party, Mr. David Elliott, met with Mr. Richard Whitmire (phone 409-766-6315), at the U.S. Army Corps of Engineers office. Mr. Whitmire is the USCOE project engineer for the Galveston ship channel and Fort Point region. The detailed conversation on this day included many charted items and features within the confines of the Houston/Galveston Ship channel. Among the main topics discussed were AWOIS numbers 9115; 9121; 9138; 9141; and 9143. These items were established in 1964-65, and according to Mr. Whitmire, they no longer exist. Some of the piles and survey platforms were removed by hurricane Alicia and others were removed by the COE. Mr. Whitmire has had survey crews in this area and is confident no piles, or survey platforms exist in these locations. AHP conducted extensive visual and echo sounder searches in these areas with negative results. A 50-meter radius dive search was made and encountered no signs of this pile.

CHARTING RECOMMENDATION

The hydrographer recommends that this pile be removed from the chart.

concur

Recommended Position:

Recommended Least Depth:

COMPILATION NOTES

DELETE o Subm Pile

AWOIS NO: 9253

Item Description: 36' F/V, TX-4158-XX, Sunk

Source: LNM 34/85--8th CGD

AWOIS Position: Lat - 29/27/00.83N Lon - 094/49/00.71W

Required Investigation: ES, VS, BD, SD, -- 1000m radius

Charts Affected: 11323, 11324, 11326, 11331.

INVESTIGATION

Date(s)/DN(s): 8/8/95 (220)

Position Numbers: 1471

Launch Number: 0519

Investigation Used: VS, ES, DI

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: Sidescan operations were attempted on this item unsuccessfully because of shallow water. No chain drags were attempted due to the numerous uncharted pipelines in the area. No signs of this feature appeared on any sounding data conducted in this area. A 100-meter radius diver search showed no contacts either. Time and lack of a shallow water multi-beam system prevented the hydrographer from investigating the requested 1000-meter radius search for this feature.

CHARTING RECOMMENDATION

This item was not resolved as explained above and should be retained as charted.

Recommended Position:

concur

Recommended Least Depth:

COMPILATION NOTES

RETAIN ~~+++~~: PA

AWOIS NO: 9254

Item Description: Pile, revised to subm (COE established)

Source: CL-966/86--USPS, CL-389/93--USPS

AWOIS Position: Lat - 29/27/36.83N Lon - 094/50/50.71W

Required Investigation: ES, VS, BD, SD, -- 150m radius (outside channel)

Charts Affected: 11323, 11324, 11326, 11331.

INVESTIGATION

Date(s)/DN(s): 8/8/95 (220)

Position Numbers: 1472

Launch Number: 0519

Investigation Used: VS, ES, DI

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: A 150-meter diver half radius circle search along the channel edge was conducted for this feature with no contacts other than lighted buoy "44" . This pile was most likely removed by the COE during Channel maintainance or dredging operations like the other piles addressed along the channel edge.

CHARTING RECOMMENDATION

The hydrographer recommends that this feature be removed from the chart.

CONNOR

Recommended Position:

Recommended Least Depth:

COMPILATION NOTES

DELETE o Subm PILE PA

AWOIS NO: 9255

Item Description: Pipe, exposed

Source: LNM 19/89--8th CGD

AWOIS Position: Lat - 29/27/47.83N Lon - 094/51/11.71W

Required Investigation: ES, VS, BD, SD, -- 100m radius

Charts Affected: 11323, 11324, 11326, 11331.

INVESTIGATION

Date(s)/DN(s): 9/19/95 (DN 200)

Position Numbers: 1394

Launch Number: 0519

Investigation Used: VS, ES, DI

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: A 100-meter radius diver circle search was conducted centered around the reported position of this item. No contacts were encountered exceptio the charted "Pipeline Crossing" marker.

CHARTING RECOMMENDATION

The hydrographer recommends that this feature be removed from the chart.

Concur

Recommended Position:

Recommended Least Depth:

COMPILATION NOTES

DELETE o Subm PILE PA

AWOIS NO: 9257

Item Description: Subm Obstr

Source: LNM 29/87--8th CGD

AWOIS Position: Lat - 29/28/14.83N Lon - 094/51/10.71W

Required Investigation: ES, VS, BD, SD, -- 100m radius (outside channel)

Charts Affected: 11323, 11324, 11326, 11331.

INVESTIGATION

Date(s)/DN(s): 7/19/95 (DN 200)

Position Numbers: 1393

Launch Number: 0519

Investigation Used: VS, ES, DI

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: A combined dive sweep was made for both items 9257 and 9258. The search swath was 75-meters wide along the channel edge and 200-meters along (position number 1393 lying in the center of this search area). For detailed sketch of search area, see fathogram for this day. There were no contacts made with this item. The proximity to the channel would indicate any item in this vicinity would have been removed, if it existed, during dredging operations.

CHARTING RECOMMENDATION

The hydrographer recommends that this feature be removed from the chart.

concur

Recommended Position:

Recommended Least Depth:

COMPILATION NOTES

DELETE : Obstr PA

AWOIS NO: 9258

Item Description: F/V Mullet Masher sunk

Source: NM27/68(4126)

AWOIS Position: Lat - 29/28/15.83N Lon - 094/51/10.71W

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

Charts Affected: 11323, 11324, 11326, 11331.

INVESTIGATION

Date(s)/DN(s): 7/19/95 (DN 200)

Position Numbers: 1393

Launch Number: 0519

Investigation Used: VS, ES, DI

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: A combined dive sweep was made for both items 9257 and 9258. The search swath was 75-meters wide along the channel edge and 200-meters along (position number 1393 lying in the center of this search area). For detailed sketch of search area, see fathogram for this day. There were no contacts made with this item. The proximity to the channel would indicate any item in this vicinity would have been removed, if it existed, during dredging operations.

CHARTING RECOMMENDATION

The hydrographer recommends that this feature be removed from the chart.

Recommended Position:

Concur

Recommended Least Depth:

COMPILATION NOTES

DELETE (C) WK PA

AWOIS NO: 9259

Item Description: Pile, revised to subm

Source: CL 966/86--USPS, CL389/93--USPS

AWOIS Position: Lat - 29/28/39.83N Lon - 094/51/36.71W

Required Investigation: ES, VS, BD, SD, -- 150m radius

Charts Affected: 11323, 11324, 11326, 11331.

INVESTIGATION

Date(s)/DN(s): 7/19/95 (DN 200)

Position Numbers: 1392

Launch Number: 0519

Investigation Used: VS, ES, S2

Water Visibility: N/A

Position Determined By: DGPS

Investigation Summary: A 3" diameter PVC private marker exposed 1 meter was found by visual inspection of the item area. This feature helps to mark the boundry of an oyster harvesting area. The numerous W/B daybeacons charted east of this item no longer exist according to several oystermen questioned while working in the area. This area now has numerous stakes with flags, all less than 2" in diameter, scattered throughout the oystering area. These stakes, as well as the PVC marker are temporary markers and are not recommended for individual charting, but should be addressed by a warning note in the area currently charted with the W/B daybeacons.

CHARTING RECOMMENDATION

The hydrographer recommends that the item pile be retained on the chart as submerged and PA, since an adequate disproval was not possible. *

CONCUR

Recommended Position: AWOIS position above

* IT IS ALSO RECOMMENDED THAT A
PRIV MARKER (PIPE) BE CHARTED
IN LAT 29° 28' 37.688"N LON 94° 51' 37.976"W

Recommended Least Depth:

COMPILATION NOTES

RETAIN o Subm PILE PA
ADD o MARKER

CONTIN: STATIONS as of 6 Jan 1998

No	Type	Latitude	Longitude	H Card	Freq	Vel Code	MM/DD/YY	Station Name
081	0	029:19:45.092	094:44:10.484	0	250	0.0	12/01/94	USCG BERDON, GALVESTON TX
082	0	029:19:58.727	094:46:22.784	3	250	0.0	12/01/94	CG 18, 1974 (GGPS CAL POINT)
083	0	029:20:04.823	094:46:12.776	0	250	0.0	12/13/94	USCG VTS TWR (5675 BASE)



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
Coast and Geodetic Survey
Norfolk, Virginia 23510-1114
Atlantic Hydrographic Party
439 West York St.
Norfolk, VA 23510-1114

September 6, 1995

Commander, 8th U.S. Coast Guard District
Hale Boggs, Federal Bldg
501 Magazine Street
New Orleans, LA 70130-3396

CAUTION
ADVANCE INFORMATION
SUBJECT TO OFFICE REVIEW

Dear Sir:

While conducting a basic hydrographic survey (Registry No. H-10614) of Galveston Bay, Texas, the following item was identified as a danger to navigation and is recommended for inclusion in the Local Notice to Mariners:

<u>DESCRIPTION</u>	<u>POSITION</u>	<u>DEPTH</u>
Visible Pipe	29°24' 09.7"N, 094°49' 48.4"W	Exposed 7ft

The position is on the NAD 83 datum and the sounding has been reduced to Mean Lower Low Water (MLLW) using predicted tides. The feature was located using Differential GPS. This information affects the following charts:

<u>CHART NO.</u>	<u>EDITION</u>	<u>DATE</u>
11324	28th	Jan. 22/94
13326	26th	Jan 1/94

This is advance information which is subject to office review. A chart section of this area, showing the location of the danger, is attached. Questions concerning this report should be directed to myself at 713-474-3533 or to CDR Nicholas Perugini, chief of the Atlantic Hydrographic Branch, at 804-441-6746.

Sincerely,

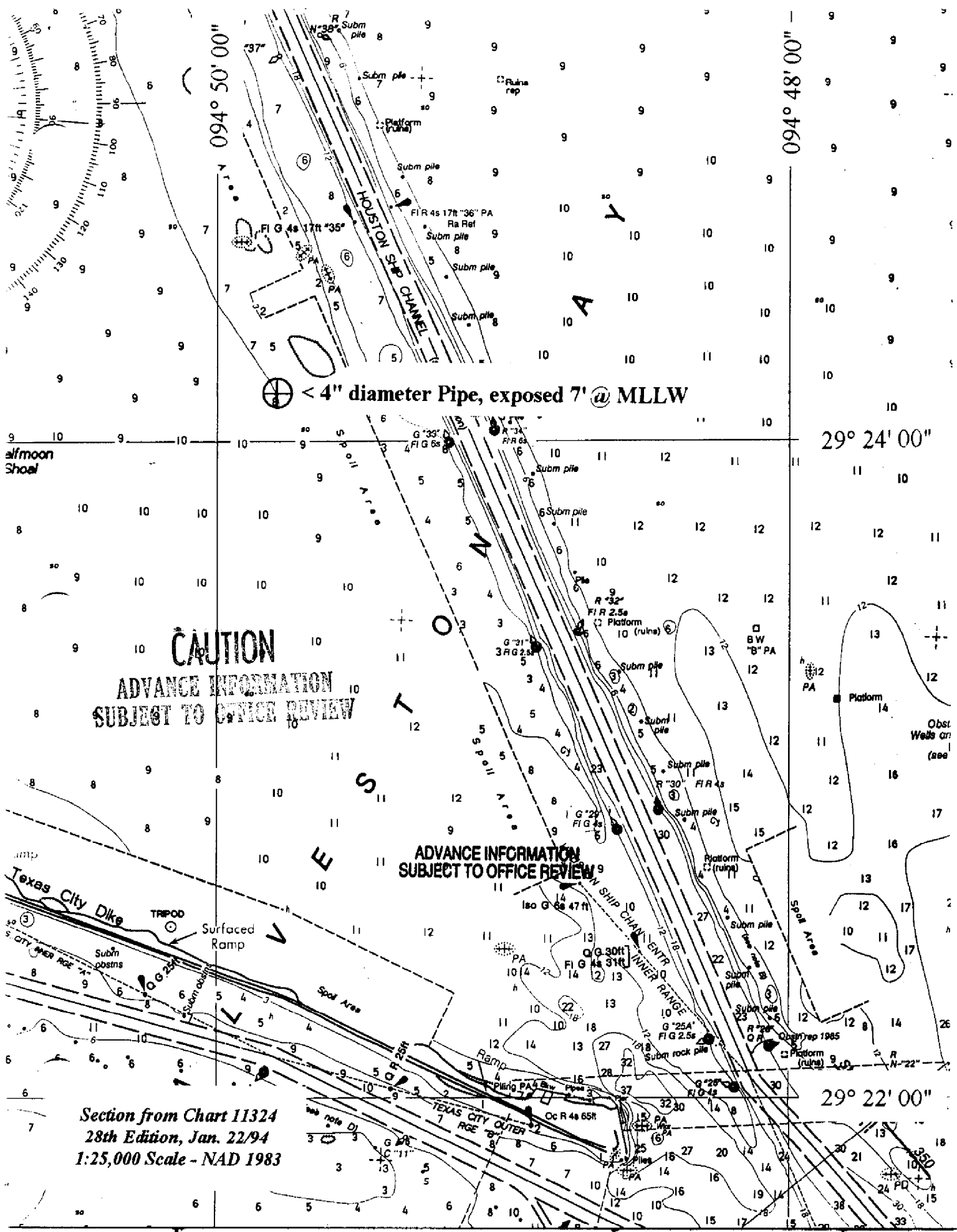
Brian A. Link
Assistant Chief, Atlantic Hydrographic Party

Attachment

cc: N/CS26
N/CS33
DMAHTC

CAUTION
ADVANCE INFORMATION
SUBJECT TO OFFICE REVIEW





094° 50' 00"

094° 48' 00"

29° 24' 00"

29° 22' 00"

< 4" diameter Pipe, exposed 7' @ MLLW

CAUTION
 ADVANCE INFORMATION
 SUBJECT TO OFFICE REVIEW

ADVANCE INFORMATION
 SUBJECT TO OFFICE REVIEW

Section from Chart 11324
 28th Edition, Jan. 22/94
 1:25,000 Scale - NAD 1983

AY

WEST

INNER RANGE

Halfmoon Shoal

Texas City Dike

HOUSTON SHIP CHANNEL

INNER ENTRANCE

TEXAS CITY OUTER RICE

Obst. Wells on (see)

see note D1

see note D1



UNITED STATES DEPARTMENT
National Oceanic and Atmospheric
NATIONAL OCEAN SERVICE
Coast and Geodetic Survey
Norfolk, Virginia 23510-1114
Atlantic Hydrographic Party
439 West York St.
Norfolk, VA 23510-1114

21 June 1995

Commander, 8th U.S. Coast Guard District
Hale Boggs, Federal Bldg.
501 Magazine Street
New Orleans, LA 70130-3396

CAUTION
ADVANCE INFORMATION
SUBJECT TO OFFICE REVIEW

Dear Sir:

While conducting a basic hydrographic survey (Registry No. H-10614) of Galveston Bay, Texas, the following items were identified as dangers to navigation and are recommended for inclusion in the Local Notice to Mariners:

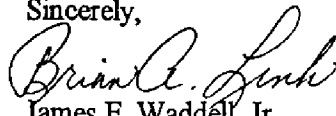
<u>DESCRIPTION</u>	<u>POSITION</u>	<u>DEPTH</u>
Obstruction	29°23'18.2"N, 094°52'33.3"W	Exposed 1.3ft
Visible wreck	29°23'44.8"N, 094°52'33.0"W	Exposed 6.5ft
Pipeline	29°23'17.3"N, 094°51'28.6"W	Exposed 1.9ft

The positions are on the NAD 83 datum and the soundings have been reduced to Mean Lower Low Water (MLLW) using predicted tides. The features were located using Differential GPS. This information affects the following charts:

<u>CHART NO.</u>	<u>EDITION</u>	<u>DATE</u>
11324	28th	Jan. 22/94
13326	26th	Jan 1/94

This is advance information which is subject to office review. A chart section of this area, showing the location of the dangers, is attached. Questions concerning this report should be directed to myself at 410-636-7600 or to the Atlantic Hydrographic Section at 804-441-6746.

Sincerely,

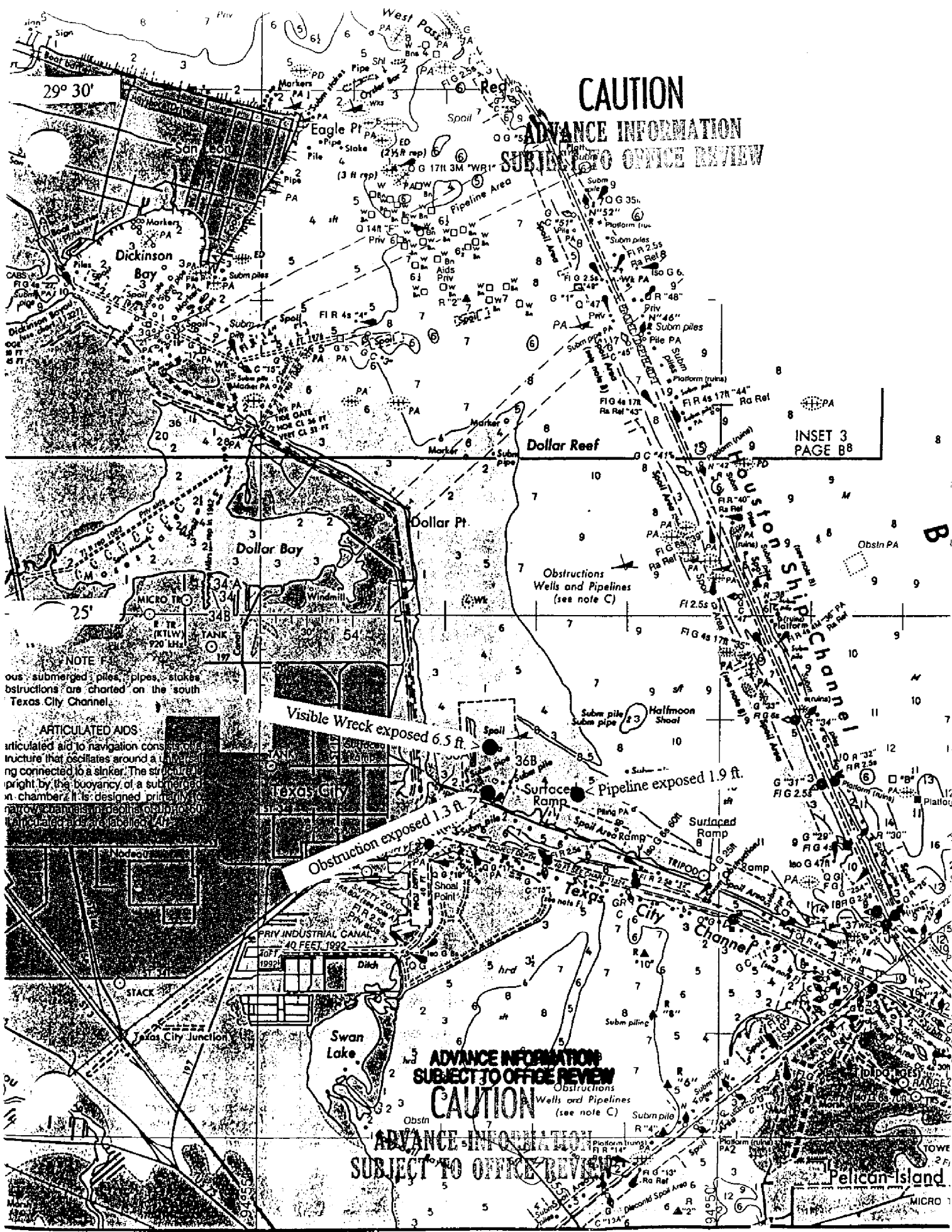
for 
James E. Waddell, Jr.
Lieutenant Commander, NOAA
Chief, Atlantic Hydrographic Party

Attachment

cc: N/CG221
N/CG244
DMAHTC

CAUTION
ADVANCE INFORMATION
SUBJECT TO OFFICE REVIEW





CAUTION

**ADVANCE INFORMATION
SUBJECT TO OFFICE REVIEW**

**INSET 3
PAGE BB**

Dollar Reef

Dollar Pt.

Dollar Bay

Visible Wreck exposed 6.5 ft.

Surface Ramp Pipeline exposed 1.9 ft.

Obstruction exposed 1.3 ft.

**ADVANCE INFORMATION
SUBJECT TO OFFICE REVIEW**

CAUTION

**ADVANCE INFORMATION
SUBJECT TO OFFICE REVIEW**

Pelican Island

NOTE
ous, submerged piles, pipes, stakes, obstructions are charted on the south Texas City Channel.

ARTICULATED AIDS
articulated aid to navigation consists of a structure that oscillates around a vertical axis being connected to a sinker. The structure is kept upright by the buoyancy of a submerged chamber. It is designed primarily for narrow channels or being obstructions to navigation.

Obstructions
Wells and Pipelines
(see note C)

B

TOWE

MICRO

APPROVAL SHEET

BASIC HYDROGRAPHIC SURVEY

OPR-K204-AHP

AHP-10-3-95

H-10614

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-10614

LOCALITY: Galveston Bay, Texas City to Red Fish Bar, Texas

TIME PERIOD: May 31 - October 19, 1995

TIDE STATION USED: 877-1013 Eagle Point, Tx.
Lat. 29° 28.8'N Lon. 94° 55.1'W

PLANE OF REFERENCE (MEAN LOWER LOW WATER): 3.39 ft.

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

TIDE STATION USED: 877-1328 Port Bolivar, Tx.
Lat. 29° 21.9'N Lon. 94° 46.8'W

PLANE OF REFERENCE (MEAN LOWER LOW WATER): 3.37 ft.

HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 1.4 ft.

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.



GEOGRAPHIC NAMES

H-10614

Name on Survey	REPORT NO. 11324, 11327, 11326 ON PREVIOUS SURVEY CON U.S. QUADRANGLE MAPS FROM LOCAL INFORMATION ON LOCAL MAPS P.O. GUIDE OR MAP RAND MCNALLY ATLAS U.S. LIGHT LIST									
	A	B	C	D	E	F	G	H	K	
DOLLAR POINT	X		X							1
DOLLAR REEF	X									2
GALVESTON BAY	X		X							3
HALFMOON SHOAL	X		X							4
HOUSTON SHIP CHANNEL	X		X							5
REDFISH BAR (title)	X									6
SHELL BANK	X									7
TEXAS (title)	X		X							8
TEXAS CITY (title)	X		X							9
										10
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										24
										25

Approved:

Charles C. Long
Chief Geographer

AUG 30 1996

LETTER TRANSMITTING DATA

N/CS33-62-97

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

- ORDINARY MAIL
- AIR MAIL
- REGISTERED MAIL
- EXPRESS
- GBL (Give number) _____

TO:

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

DATE FORWARDED

27 October 1997

NUMBER OF PACKAGES

ONE TUBE

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

H-10614

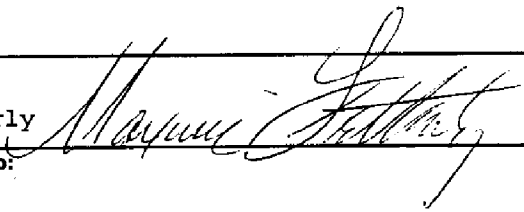
Texas, Galveston Bay, Texas City to Redfish Bar

1 Tube containing:

- 1 Original Descriptive Report
- 2 Drawing History forms (76-71) for NOS Charts 11324 & 11327
- 1 Mylar Smooth sheet
- 1 Mylar H-Drawing of H-10614 for NOS Chart 11324
- 1 Mylar H-Drawing of H-10614 for NOS Chart 11327
- 2 Paper Composite plots of H-10614 for NOS Chart 11324
- 2 Paper Composite plots of H-10614 for NOS Chart 11327

FROM: (Signature)

Maxine Fetterly



RECEIVED THE ABOVE
(Name, Division, Date)

Return receipted copy to:

Atlantic Hydrographic Branch
 N/CS331
 439 West York Street
 Norfolk, VA 23510-1114

10/27/97

HYDROGRAPHIC SURVEY STATISTICS
REGISTRY NUMBER: H-10614

NUMBER OF CONTROL STATIONS		2
NUMBER OF POSITIONS		3950
NUMBER OF SOUNDINGS		21290
	TIME-HOURS	DATE COMPLETED
PREPROCESSING EXAMINATION	24	08/10/96
VERIFICATION OF FIELD DATA	167	03/14/97
QUALITY CONTROL CHECKS	0	
EVALUATION AND ANALYSIS	21	
FINAL INSPECTION	21	03/14/97
COMPILATION	287.50	10/21/97
TOTAL TIME	521	
ATLANTIC HYDROGRAPHIC BRANCH APPROVAL		03/14/97

**ATLANTIC HYDROGRAPHIC BRANCH
EVALUATION REPORT FOR H-10614 (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 0.837 seconds (25.772 meters or 2.58 mm at the scale of the survey) north in latitude, and 0.716 seconds (19.309 meters or 1.93 mm at the scale of the survey) west in longitude.

J. SHORELINE

Shoreline originates with shoreline manuscript DM-10236 of 1994. The shoreline data were provided in digital format and were transferred to the smooth sheet using both MicroStation 95 and AutoCAD.

L. JUNCTIONS

H-10589 (1995) to the southeast
H-10664 (1995) to the west

A standard junction was not effected between the present survey and H-10589 (1995). The field unit failed to

adequately junction with H-10589 (1995) in the vicinity of Latitude 29°23'30"N, Longitude 94°49'30"W. A standard junction was effected between the present survey and H-10644 (1995).

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

M. COMPARISON WITH PRIOR SURVEYS

H-8693	(1962)	1:10,000
H-8695	(1962)	1:12,500
H-8745	(1963-65)	1:20,000
<u>H-8747</u>	<u>(1963-65)</u>	<u>1:10,000</u>

H-8693 (1962) compares favorably with the present survey. Prior survey depths are generally 1-2 feet (0³-0⁶ m) shoaler than present survey depths.

H-8695 (1962) compares favorably with the present survey. Prior survey depths are generally 1-2 feet (0³-0⁶ m) shoaler than present survey depths.

H-8745 (1963-65) compares favorably with the present survey. Present survey depths are generally 1-2 feet (0³-0⁶ m) shoaler than present survey depths.

H-8747 (1963-65) compares favorably with the present survey. Present survey depths are generally 1-3 feet (0³-0⁹ m) shallower than the present survey depths.

Depths have been brought forward from the above prior surveys to supplement the present survey and are shown in various colors on the smooth sheet.

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

N. ITEM INVESTIGATION

Automated Wreck and Obstruction Information System (AWOIS) Item #9126, an obstruction described as three pipe markers, in Latitude 29°23'29.84"N, Longitude 94°50'59.71"W, originates with Chart Letter 1768/1968 (CL1768/68). During office verification, it was noted that the geographic position published in the AWOIS listing for this item was in error. The investigation for this item was conducted in the wrong

search area. The correct location of the charted subm pipes is Latitude 29°22'59.84"N, Longitude 94°50'59.71"W. This AWOIS item is considered unresolved by the present survey. This item should be charted as a submerged obstruction in Latitude 29°22'59.84"N, Longitude 94°50'59.71"W.

- O. COMPARISON WITH CHARTS 11323 (54th Edition, Aug 6/94)
11324 (28th Edition, Jan 22/94)
11326SC (26th Edition, Jan 1/94)
11327 (26th Edition, Oct 16/93)

Hydrography

The charted hydrography originates with prior surveys and requires no further consideration. The hydrographer makes adequate chart comparisons in sections N. and O. of the Descriptive Report. The following should be noted:

1) Numerous charted private markers, in the vicinity of Latitude 29°28'30"N, Longitude 94°53'00"W, no longer exist; however, there are now numerous private markers composed of stakes, tree limbs, and small poles that are marking the limits of commercial oyster beds. It is recommended that this area be shown on the chart with the note "Oyster Beds, use caution transiting this area"

2) An uncharted pipe with an elevation of 2 feet (0⁶ m), in Latitude 29°23'56.43"N, Longitude 94°53'12.44"W, was located by the field unit. It is recommended that the pipe be charted as shown on the present survey.

3) An uncharted pile awash, in Latitude 29°23'29.05"N, Longitude 94°52'53.88"W, was located by the field unit. It is recommended that the Pile be charted as shown on the present survey.

4) The following uncharted private markers were located by the field unit:

	<u>Latitude N</u>	<u>Longitude W</u>
marker	29°23'31.64"	94°52'48.29"
marker	29°28'37.69"	94°51'37.98"

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

5) A charted submerged pile, in Latitude 29°23'29.87"N,

Longitude 94°50'59.74"W, originates with an unknown source. This feature was mistakenly investigated by field unit as AWOIS Item #9126. A dive investigation was performed with negative results. It is recommended that the feature be removed from the chart.

6) The following charted items originate with unknown sources. These items appear on the 1997 editions of charts 11324 and 11327 and therefore were not investigated by the field unit. No change in charting status is recommended:

	<u>Latitude (N)</u>	<u>Longitude (W)</u>
Obstruction PA	29°24'40"	94°49'31"
Wreck PA	29°25'11"	94°50'20"
Pile	29°27'00"	94°50'42"
Pile	29°27'01"	94°50'32"
Subm Pipe	29°26'32"	94°52'29"
Obstr PA	29°28'50"	94°51'34"
(less than 9 ft rep)		
Obstruction symbol	29°26'57"	94°52'12"
Wreck PA	29°27'42"	94°53'24"

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

Dangers to Navigation

Two Danger to Navigation reports were submitted to Commander(oan), Eighth Coast Guard District, New Orleans, Louisiana 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.

P. ADEQUACY OF SURVEY

This is an adequate hydrographic/side scan sonar survey. No additional work is recommended except as noted in section O. of this report.

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.

WHITING Processing Team

Robert Snow

Robert Snow
Cartographic Technician
Verification of Field Data
Evaluation and Analysis

APPROVAL SHEET
H-10614

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 disproval 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 G. Roberson Date: MARCH 14, 1997
Robert G. Roberson
Chief, Cartographic Section

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: March 14, 1997
Nicholas E. Perugini
Commander, NOAA
Chief, Atlantic Hydrographic Branch

Final Approval:

Approved: Andrew A. Armstrong, III Date: Dec. 5, 1997
Andrew A. Armstrong, III
Captain, NOAA
Chief, Hydrographic Surveys Division

