

10397

Diagram No. 1284-2

NOAA FORM 76-35A

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

DESCRIPTIVE REPORT

Type of Survey . . . Basic  
Field No. . . . . AHP-10-13-91  
Registry No. . . . . H-10397

LOCALITY

State . . . . . Texas  
General Locality . . . Matagorda Bay  
Sublocality . . . . . 4.5 NM East of  
Port O'Connor  
19 91  
CHIEF OF PARTY  
LT T.D. Waddington

LIBRARY & ARCHIVES

DATE . . . . . July 1, 1992

☆U.S. GOV. PRINTING OFFICE: 1985-566-054

10397

CP-5  
11319B  
11317  
11316  
11300  
4111

HYDROGRAPHIC TITLE SHEET

H-10397

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 10-13-91

State Texas

General locality Matagorda Bay

Locality 4.5 NM East of Port O'Connor

Scale 1:10,000 Date of survey 8/20/91 - 9/27/91

Instructions dated March 1, 1991 Project No. OPR-K228/AHP-2

Vessel Launch 0519

Chief of party LT Tom Waddington

Surveyed by R.W. Ramsey, Jr., LTJG R.R. Rogers

Soundings taken by echo sounder, hand lead, pole Innerspace Model 448

Graphic record scaled by R. Ramsey, R. Rogers, D. Elliott & D. Nelson

Graphic record checked by R. Ramsey

Verification by:

~~Processed by~~ I. Almacen Automated plot by PHS Xynetics Plotter

Evaluation by: I. Almacen

~~Verification by~~

Soundings in Meters ~~fathoms~~ ~~feet~~ at ~~MLLW~~ MLLW and Decimeters

REMARKS: Time in UTC. Revisions and marginal notes in black were generated during office processing. Some separates are filed with the hydrographic data, as a result page numbering may be interrupted or non-sequential.

*AWS/SUPP 7/9/92, SJV*

*SC* JAN 29 1997  
*R.W.*







DESCRIPTIVE REPORT TO ACCOMPANY  
HYDROGRAPHIC SURVEY H-10397  
(Field No. AHP-10-13-91/3)  
Scale: 1:10,000  
1991

Atlantic Hydrographic Party Two  
Chief of Party: Lt. Thomas R. Waddington, NOAA

A. PROJECT

This survey was conducted in accordance with Hydrographic Project Instructions OPR-K228-AHP, Matagorda Bay, Texas dated March 1, 1991, change No. 1 dated 4 June, 1991, change No. 2 dated 11 June 1991, and change No. 3 dated 15 August 1991.

The purpose of project OPR-K228-AHP is to provide modern hydrographic data to revise the existing nautical charts. Considerable oil development, fishing and oyster industries exist in Matagorda Bay and its main tributaries.

This survey is designated as sheet "L" in the project instructions.

B. AREA SURVEYED (See EVAL RPT. Sec 1)

The area surveyed for H-10397 is located 4.5 NM East of Port O'Connor, TX from Palacios Channel South to Matagorda Peninsula. The limits are as follows:

North - Latitude 28°30'00"N  
South - Latitude 28°26'<sup>28</sup>00"N  
East - Longitude 096°17'<sup>45</sup>05"W  
West - Longitude 096°20'57"W

The southwest section of these limits will be surveyed on sheet "M". (H-10412)

This survey was conducted from August 20, 1991 (DN 232) to September 27, 1991 (DN 270).

C. SOUNDING VESSEL

Vessel 0519 (EDP No. 0519), a 21-foot MonArk, was used to collect all data on this survey. No problems were encountered with this vessel.

Sounding lines were run at 100 meter spacing, per Section 4.3 of the hydrographic manual, 50 meter splits were run where required in order to develop areas.

D. AUTOMATED DATA ACQUISITION AND PROCESSING

A list of all Hewlett-Packard HDAPS Programs used can be found in Appendix VI. \*

PC-DAS program, NOAAEXE directory, Version 3.6 was used for on line data acquisition on the survey vessel. In addition to the HDAPS, the following non-HDAPS computer programs were used:

VELOCITY (IBM PC) 1.11	3/9/90
MTEN3 with enhancements geodetic computations (IBM PC)	6/88

\* Filed with the hydrographic data.



## E. SONAR EQUIPMENT

Not applicable.

## F. SOUNDING EQUIPMENT

The following Innerspace 448 echo sounder was used for this survey:

EDP#	S/N #	Days utilized:
0519	186	232,233,234,235,239,240,241, 248,252,253,254,255,256,261, 267,269,270.

Soundings were recorded in meters, with an assumed speed of sound through water of 1500 m/sec. Depths encountered in the survey area range from 0.8 meters to 7.9 meters. The digitized soundings from the echosounder were closely monitored for comparison with the analog trace to ensure agreement between the two. Any necessary adjustments in this comparison were noted on the fathogram. Although the deepest depth of water is 7.5 meters, generally, depths within the survey limits are 4 meters or less.

## G. CORRECTIONS TO ECHO SOUNDINGS

Corrections for the speed of sound through the water column were computed from data obtained with an Odom Hydrographic Systems Inc., Digibar, Model DB1100 speed of sound probe, serial number 155. This instrument was calibrated by the manufacturer on May, 1991 and a copy of this calibration may be found in the Separates IV. In addition to this, simultaneous velocity casts were performed on May 29, 1991 with Digibar serial numbers 154 and 155 to assure the units were operating properly. Program "Velocity" was used for determining the speed of sound correctors. Velocity cast were taken in the project area and speed of sound correctors were applied (when applicable) to all soundings taken during hydrography, during semi-smooth and final plotting with the HDAPS.

HDAPS Table#	DN	Date	Applied Fm	To
11	232	8/20/91	232	241
12	248	9/5/91	248	254
13	255	9/12/91	255	270

Speed of sound tables and cast data are included in the Separates\* Following Survey Data IV.

Lead line comparisons were taken daily to determine instrument error and to verify static draft. No instrument errors were observed or applied. The results of these comparisons are included in the Separates IV,\* along with a lead line comparison log, for reference. The lead line was calibrated on May 14, 1991 with a metal tape and found to be in concordance.

A static draft of 0.3 meters was applied on-line via the offset table. This was measured from a punch mark on the side of launch 0519, two feet above the transducer, to the water surface, then subtracted from the difference. The data were applied to all soundings acquired with the echosounder. The offset table is included with the Separates IV.

Settlement and squat measurements for vessel 0519 were performed last on 08 November, 1990. Settlement and squat correctors were determined and applied to all survey data by means of offset Table # 2, a copy can be found in Separates IV. \*

The final field sheet was plotted using predicted tides determined from Port O' Connor, Texas and correctors designated in zone "I" of the project instructions. The values were applied direct in accordance with these instructions.

\* Filed with the hydrographic data.



Approved water levels were requested from the Sea and Lake Levels Branch, N/OMA12, in a letter dated 30 September, 1991. A copy is included in the Appendices V.

#### H. CONTROL STATIONS

The horizontal control datum for this project is the North American Datum of 1983. A signal list and a copy of the HDAPS Control Station Table is included in the Appendices III.\*  
*(signal list is attached to this report.)*

The Coastal Surveys Unit from Norfolk, Virginia used third order, class I traverse and intersection methods to establish NAD83 horizontal control for this project. The horizontal control report was written and submitted by the Coastal Surveys Unit personnel for OPR-K228-AHP.

#### I. HYDROGRAPHIC POSITION CONTROL

##### Survey Methods

Hydrographic position control was accomplished using Motorola Mini-Ranger Falcon 484 system which provided accuracy to meet 1:10,000 scale survey requirements. Range/range positioning with three and four lines of position were used during this project.

The following Falcon Mini-Ranger equipment was used:

<u>VESNO</u>	<u>EQUIPMENT</u>	<u>S/N</u>
0519	RPU	E0146
	R/T	E2951
	R/S	C2067 CD #0
	R/S	E2911 CD #7
	R/S	F3237 CD #8
	R/S	F3298 CD #9

##### Critical System Checks

When using three or four lines of position (LOP), a critical system check is continuously being obtained by observing the error circle radii (ecr) and residual (res) values which are computed each second by the survey computer. Fixes which had erratic lines of position, were "smoothed" during processing. Positions were "smoothed" by dead reckoning between two accurate positions.

##### Mini-Ranger Falcon Calibrations

Baseline calibrations were performed on 6 May, 1991 (DN 126), and 12 August, 1991 (DN 224), to the standards of Section 3.1.2.1 of the field procedures manual. The baseline correctors were incorporated into the Complex "C-O" table and applied directly to all "on-line" data. All records of these calibrations are included in the Separates III.\*

A closing baseline calibration was not performed since the survey was conducted in less than a six month period.

#### J. SHORELINE

Shoreline changes were noted during this survey along the north shore of Matagorda Pensiula, and are identified on the Final Sheets in red ink. (TP-01646 & TP-01647)  
*The smooth sheet has portrayed the shoreline changes in dashed red without supporting positional data.*

\* Filed with the hydrographic data.



K. **CROSSLINES**

A total of 30 linear nautical miles of channel and cross-lines were run on H-10397 which serve as comparison for main scheme soundings and equals >10% of the main scheme hydrography. These soundings agree to  $\leq 0.2$  meter of the main scheme soundings. ✓

L. **JUNCTIONS** (See EVAL RPT. Sec. 5)

The hydrography run on this sheet junctions with Sheets H, K, P and M listed in the project instructions. At this time, sheets H, P, and M have yet to be completed. Sheet K (H-10380) was recently conducted by the same survey vessel, within the same survey year and therefore has no 200 meter overlap. Although Sheet K had no common isobaths with this survey, soundings between the two surveys agree to within 0.2 meter. ✓

M. **COMPARISON WITH PRIOR SURVEYS** (See EVAL RPT. Sec. 6)

The present survey was compared to the following prior survey:

<u>Survey NO.</u>	<u>Scale</u>	<u>Year</u>
H-5866	1:20,000	1934-35

The following was noted during comparison:

- 1) Palacios Channel did not exist on H-5866.
- 2) Bottom samples acquired were found to agree well.
- 4) In general soundings acquired during H-10397 were found to be  $\leq 0.3$  meter deeper.
- 5) As H-5866 was surveyed in feet and H-10397 was surveyed in meters there were no common isobaths for comparison.
- 6) The I.C.W. did not exist on H-5866.
- 7) The Matagorda Club Airfield, and associated shoreline modifications of presently charted breakwater and bkld at approximate position  $28^{\circ}28'00''N / 096^{\circ}17'30''W$  did not exist on H-5866. ✓

N. **COMPARISON WITH THE CHART** (See EVAL RPT. Sec. 7)

Comparisons were made with the following largest scale charts covering the present survey area:

<u>Chart No.</u>	<u>Edition</u>	<u>Date</u>
11317	20th	March 23, 1991
11319SC	22nd	February 10, 1990

In general, charted soundings were found to be  $\leq 0.3$  meter deeper than this survey, with the following exceptions:

a) an area lying from approximate position  $28^{\circ}26'30''N 096^{\circ}20'00''W$ , due northeast to  $28^{\circ}27'09''N 096^{\circ}19'49''W$ , with a width of 500 meters was found to exist with a mean depth of 5 to 6 meters. ✓

b) a hole was located at approximate position  $28^{\circ}26'53.8''N 096^{\circ}19'20.5''W$  with a depth of 7.3 meters; a dive conducted on DN261(FX:1695) located a large mud hole, possibly created from a bomb drop by the US Army in the 1950's. Pos# 1624 (2), 28/26/53.33; 96/19/20.52 - 5.7 m. (Excessed)  
Pos# 1624 (3), 28/26/53.86; 96/19/20.56 - 7.0 m. (plotted) ✓

c) shoaling was noted in the area of GC"97" at position  $28^{\circ}27'45.7''N 096^{\circ}20'17.8''W$  with a depth of 1.6 meters, on an axis  $042^{\circ}$  ( this lies outside of the marked channel, and is not a danger to navigation ). Shoaling in the vicinity of  $N^{\circ}100'' @ 28/27/51.47, 96/20/30.46$  with depth of 1.5 meters. ✓



d) the reported 6 foot controlling depth at position 28°28'00.9"N 096°17'28.89"W (reft AWOIS# 5477) is now controlled by a depth of  $1^{0.3}$  meter, along the breakwater, at position 28°28'06"N 096°17'31.5"W. Pos # 671(4), 28/28/06.03, 96/17/31.52 with depth of 0.9m (3ft.)

e) shoaling was found to be evident at positions 28°28'05.4"N 096°17'19.3"W and 28°28'16.8"N 096°17'04.6"W.

f) There is one cable area charted in the southwestern section of the survey area leading to the "Matagorda Club Airfield", however it should be noted that there are no signs onshore marking its entrance to shore of Matagorda Peninsula.

g) A dive was conducted on DN 261 (FX:1693) on a M/S sounding; it was found to be a gravel mound covering unknown wreckage. The shoal lies on an east/west axis and extends  $\approx 35$  m to the east, 65 m to the west, and 30 m wide. The least depth was found to be  $3^{2.5}$  m at position 1693. This shoal is not considered to be a danger to navigation. Pos # 1693, 28/27/21.99, 96/19/06.25

h) A dive was conducted on DN 261 (FX:1694) on a M/S sounding; it was found to be a shell mound with a long gradual rise and fall. The least depth was found to be  $3.5^4$  m at position 1694. This mound is not a danger to navigation. Pos # 1694, 28/27/03.48, 96/19/25.00

Bottom samples were found to be in good agreement.

There are no common isobaths for comparison as this survey was acquired in meters and the present charts are produced with soundings in feet.

There was one charted platform at position 28°29'15"N and 096°17'40"W, that could not be visually identified during this survey. Because the platform could not be visually identified, a 100 meter dive circle search was conducted about the charted position. The results of this dive investigation revealed no contacts; it is recommended that this item therefore be removed from the chart. CONCUR.

The coordinates and descriptions of all positioned items can be found in the Daily Log, which is included with the survey data, it summarizes daily activity and includes photographs, and other useful information.

The Palacios Channel Junction buoy "A", is labeled incorrectly on chart No. 11319SC (see *SEE EVAL RPT SECT (d)*) part "P" of this report.

All <sup>SIX</sup> seven AWOIS items were addressed on this survey. Two items, AWOIS 5471 and 5510, which show up on the HDAPS AWOIS printout were subsequently deleted by N/CG241. These items appear on the overlay sheet and are filed in the Separates VI. It is recommended that the verifier review the Field sheet, Overlay, and Daily log concurrently when addressing these items. It should be noted that most items originated from questionable positions.

#### O. ADEQUACY OF SURVEY

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

#### P. AIDS TO NAVIGATION

<sup>6</sup> non-floating aids to navigation are within the sheet limits. These were located by detached positions (with the exception of 3, which are horizontal control stations, and can be found in the control station table, in Appendices III.) \* Station 042 which plots on the western limit of the sheet was included.

\* Filed with the hydrographic data.



<u>Non-Floating Aid</u>	<u>Survey Position</u>	<u>Light List Position</u>
R"4"(3m)Ra Ref Daybeacon LL# 34615	28°29'44.52"N 96°17'53.17"W	None
Q FL R"2"(3m)Ra Ref FL Red Light LL# 34610	28°29'17.82"N 96°17'43.38"W	28°29.2'N 96°17.7'W

There were a total of 12 floating aids to navigation within the limits of this survey. *See EVAL RPT sec.7(d)*  
 These aids were found to compare favorable with their charted position and are believed to serve their purpose adequately. The Palacios Channel Junction buoy "A"(LL# 34605) is labeled incorrectly on chart #11319SC; it should be green over red horizontally banded can buoy.

#### Q. STATISTICS

<u>Description</u>	<u>Quantities</u>
Total Positions	1809
Detached Positions	66
Duplicated Positions	1
Total Nautical Miles of Hydro	225.3
Sq. Nautical Miles of Hydrography	11.7
Bottom Samples	30
Velocity Cast	3
Days of Production	17

#### R. MISCELLANEOUS

Bottom samples were taken and submitted to the Smithsonian Institution as directed in Section 6.7 of the project instructions. 30 bottom samples were transmitted on September 16, 1991. Bottom sample positions and descriptions are plotted on the overlays submitted with this survey, and are listed on the Oceanographic Log Sheet-M, NOAA Form 75-44, which is included in Separates II. \*

Tidal currents in the 1 to 2 kt range were evident within the surveyed area.

Strong ebb currents of the 4 to 5 kt range were encountered nearshore in the proximity of the Matagorda Ship Channel and Matagorda Peninsula at 28°26'30"N 096°20'00"W.

#### S. RECOMMENDATIONS

It should be noted that the sounding vessel used for this survey is limited by draft to approximately .6 meters on the keel line and is therefore limited in its ability to acquire sounding data in areas shallower than 0.6 meters.

#### T. REFERRAL TO REPORTS

##### Titles

Horizontal Control Report  
for OPR-K228-AHP2/3

Descriptive Report to  
Accompany Survey H-10380

##### Transmittal Information

Field Photogrammetry Section  
Norfolk, VA, N/CG233

Pacific Hydrographic Section  
N/CG 245, Seattle, WA

\* Filed with the hydrographic data.



Titles  
Descriptive Report to  
Accompany Survey H-10395

Transmittal Information  
Pacific Hydrographic Section  
N/CG 245, Seattle, WA

Submitted By:

*Robert W Ramsey Jr*

Robert W. Ramsey Jr.  
Launch Hydrographer in Charge

Date: 28 September 1991



## CONTROL STATIONS as of 7 Aug 1991

No	Type	Latitude	Longitude	H	Cart	Freq	Vel	Code	MM/DD/YY	Station Name
001	F	028:39:08.751	096:33:48.618	0	250	0.0	0.0		05/08/91	ALCOA 1990
002	F	028:40:17.832	096:38:14.547	0	250	0.0	0.0		05/08/91	BLUF 1990
003	F	028:39:44.602	096:34:56.482	0	250	0.0	0.0		05/08/91	CAUS 1990
004	F	028:34:59.695	096:36:29.911	0	250	0.0	0.0		05/08/91	CHOC 1990
005	F	028:33:23.435	096:31:27.214	0	250	0.0	0.0		05/08/91	INDI 1990
006	F	028:30:25.466	096:28:47.523	0	250	0.0	0.0		05/08/91	IOLA 1990
007	F	028:41:53.224	096:34:34.010	0	250	0.0	0.0		05/08/91	LAVACA RIVER LIGHT 3
008	F	028:34:07.670	096:33:55.900	0	250	0.0	0.0		05/08/91	MAGNOLIA 1934
009	F	028:35:58.915	096:34:14.622	0	250	0.0	0.0		05/08/91	MATAGORDA SHIP CH RNG C FRT LT
010	F	028:36:35.748	096:35:07.087	0	250	0.0	0.0		05/08/91	MATAGORDA SHIP CH RNG C R LT
011	F	028:35:46.234	096:34:02.389	0	250	0.0	0.0		05/08/91	MATAGORDA SHIP CH RNG D FRT LT
012	F	028:35:26.693	096:34:02.933	0	250	0.0	0.0		05/08/91	MATAGORDA SHIP CH RNG D R LT
013	F	028:38:45.468	096:33:40.338	0	250	0.0	0.0		05/08/91	MITCHELL 2 1956
014	F	028:38:23.410	096:36:38.092	0	250	0.0	0.0		05/08/91	NOLE 1990
015	F	028:39:26.182	096:35:09.367	0	250	0.0	0.0		05/08/91	PIER PK 1990
016	F	028:36:57.750	096:30:48.192	0	250	0.0	0.0		05/08/91	RHOD 1990
017	F	028:34:12.754	096:29:19.106	11	250	0.0	0.0		05/08/91	SAND 1990
018	F	028:43:17.942	096:36:36.067	0	250	0.0	0.0		05/08/91	VEDO 1990
019	F	028:38:37.047	096:33:47.871	0	250	0.0	0.0		05/08/91	ZEPP 1989
020	F	028:26:10.962	096:20:01.576	0	250	0.0	0.0		05/08/91	TEMP 01
021	F	028:27:39.775	096:17:46.171	0	250	0.0	0.0		05/08/91	OSGOOD 2 1906
022	F	028:35:28.458	096:11:22.074	0	250	0.0	0.0		05/08/91	LAKE 2 1906
023	F	028:40:34.424	096:16:14.007	0	250	0.0	0.0		05/08/91	TURT 1991
024	F	028:36:26.854	096:24:20.046	0	250	0.0	0.0		05/08/91	DUNG 1991
025	F	028:35:13.036	096:26:49.243	0	250	0.0	0.0		05/08/91	VACA 1991
026	F	028:23:56.880	096:24:25.771	0	250	0.0	0.0		05/08/91	RUIN 1991
027	F	028:32:20.572	096:18:44.039	0	250	0.0	0.0	0	05/08/91	PLAT PK 1991
028	F	028:41:52.040	096:12:37.980	0	250	0.0	0.0		05/08/91	PALA 1991
029	F	028:38:33.080	096:14:06.707	0	250	0.0	0.0		05/08/91	INDY 1991
030	F	028:35:08.620	096:17:11.588	10	250	0.0	0.0		05/08/91	CHAN PK 1991
031	F	028:34:45.983	096:13:33.884	0	250	0.0	0.0		05/08/91	EROD 1991
032	F	028:36:02.270	096:14:05.710	0	250	0.0	0.0		05/08/91	BULL 1991
033	F	028:26:58.573	096:24:12.880	0	250	0.0	0.0		05/08/91	EARL 1991
034	F	028:27:04.927	096:24:15.672	0	250	0.0	0.0		05/08/91	3701 E 1989
035	F	028:26:44.592	096:23:42.326	0	250	0.0	0.0		05/08/91	IW MB PORT O CONNOR LT 2
036	F	028:27:29.804	096:21:39.302	0	250	0.0	0.0		05/08/91	MATAGORDA SHIP CH N DREDGE LT
037	F	028:27:15.806	096:21:29.032	0	250	0.0	0.0		05/08/91	MATAGORDA SHIP CH S DREDGE LT
038	F	028:26:50.319	096:25:20.875	39	250	0.0	0.0	7	05/08/91	PORT O CONNOR MUN TANK
039	F	028:28:50.457	096:17:17.626	0	250	0.0	0.0		05/08/91	MATAGORDA BAY RANGE L REAR LT
040	F	028:28:23.778	096:18:36.611	0	250	0.0	0.0		05/08/91	MATAGORDA BAY RANGE L FRONT LT
041	F	028:27:50.191	096:19:46.085	0	250	0.0	0.0		05/08/91	MATAGORDA BAY RANGE K FRONT LT
042	F	028:27:02.190	096:21:02.812	20	250	0.0	0.0	9	05/08/91	MATAGORDA BAY RANGE K REAR LT
043	F	028:27:01.247	096:21:11.033	0	250	0.0	0.0		05/08/91	MATAGORDA BAY RANGE A REAR LT
044	F	028:26:33.967	096:20:41.967	0	250	0.0	0.0		05/08/91	MATAGORDA BAY RANGE A FRONT LT
045	F	028:26:27.482	096:26:34.785	0	250	0.0	0.0		05/08/91	PORT O CONNOR CABLE TV MAST
046	F	028:25:18.494	096:19:05.925	0	250	0.0	0.0		05/08/91	MATAGORDA BAY RANGE B REAR LT
047	F	028:25:50.351	096:20:07.986	0	250	0.0	0.0		05/08/91	MATA 1934
048	F	028:25:40.635	096:19:37.260	0	250	0.0	0.0		05/08/91	MATAGORDA BAY RANGE B FRONT LT
049	F	028:29:45.812	096:15:16.339	20	250	0.0	0.0	8	05/08/91	MATAGORDA BAY RANGE H REAR LT
050	F	028:38:33.045	096:19:19.991	0	250	0.0	0.0		05/08/91	TRULL SAT
051	F	028:43:28.301	096:15:09.749	0	250	0.0	0.0		05/08/91	PALAPORT
052	F	028:28:36.298	096:15:07.070	0	250	0.0	0.0		05/08/91	SMYTH SAT
053	F	028:30:56.831	096:10:21.410	0	250	0.0	0.0		05/08/91	PDE 1934
054	F	028:39:16.001	096:13:41.524	0	250	0.0	0.0		05/24/91	COON 1991



AWOIS NO:5472

Item Description: Dangerous Sunken Wreck

Source: Unknown

AWOIS Position: Lat - 28 /29/16.00N Lon - 096/19/25.89W

Required Investigation: BD, DI, SD, --500m radius

-----  
INVESTIGATION

Date(s)/DN(s): 267, 269, 270

Position Numbers: 1696-1809

Launch Number: 0519

Investigation Used: BD, & DI

Water Visibility: 2m

Position Determined By: Falcon Multiple Range

Investigation Summary: A 1sq/km chain drag of the required search area was conducted, at a 20m line spacing. The drag had 20m of chain, with 40 feet of tow line out. No snags were encountered during these operations. There was one deep noticed, and one rise noted during the drags, during two days of work. On day No.270 (9/27/91), three dives were conducted in support of resolving this item. Dive one was conducted on the reported item center to a 50m radius; dive two was conducted on the deep that was observed during the drag ops; dive three was conducted on the rise that was noted during drag ops.

The dive operations revealed no evidence of AWOIS #5472. There was one shell mound found with a least depth of 3.2m(position#1809). There was one scour found at position 1807. No dangers to navigation, were noted during the course of this items resolution.

-----  
CHARTING RECOMMENDATION

Remove charted feature at presently charted position. *Concur.*

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

Recommended Least Depth:

\*\*\*\*\*

COMPILATION NOTES

Chart

Applied As

*Applied 11319 720-92*



AWOIS No.5476

Item Description:41' Pleasure Craft "Carousal"

Source:LNMI9/84(5/9/84)--USCG 8th CGD

AWOIS Position: Lat- 28/28 /49.000N Lon- 096/17/24.890W

Required Investigation:BD,DI,SD -- 200m

---

INVESTIGATION

Date(s)/DN(s):241

Position Numbers:907-911

Launch Number:0519

Investigation Used:DI

Water Visibility:lm

Position Determined By: Falcon Multiple Range

Investigation Summary: 4-120 meter diver circle searches were conducted to cover the main search area, with 1-50 meter circle search conducted at the center reported position. There were no contacts encountered that were identifiable as the reported item. There was 1 USCG Range Tower located( STA 039 ) within the NE search radius.

---

CHARTING RECOMMENDATION

Recommend removal from charts. *Concur.*

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

Recommended Least Depth:

\*\*\*\*\*

COMPILATION NOTES

Chart

Applied As

*Applied 11319 7-20-92*



AWOIS NO:5477

Item Description: 6 ft reported

Source: CL212/67

AWOIS Position: Lat - 028/28/01.00N Lon - 096/17/28.89W

Required Investigation: ES, DI --

-----  
INVESTIGATION

Date(s)/DN(s): 239 / 241

Position Numbers: 671.40 // 912

Launch Number: 0519

Investigation Used: ES, DI

Water Visibility:

Position Determined By: Falcon Multiple Range

Investigation Summary: Dive search of the reported area to 20 meters radius revealed no ruins with a least depth of 1.7 m at position 912. Sounding line run along the breakwater revealed a controlling depth of ~~1.8~~<sup>0.9</sup> m at position ~~617~~<sup>671</sup>.40.

0.9

671

-----  
CHARTING RECOMMENDATION

Recommended Position: Lat - 028/28/06.<sup>03</sup>~~021~~ Lon - 096/17/31.<sup>52</sup>~~519~~

Recommended Least Depth: <sup>0.9</sup>~~1.8~~ meter

Concur.

\*\*\*\*\*

COMPILATION NOTES

Chart

Applied As

Applied 7-20-92  
Chrt 11319



AWOIS NO:5478

Item Description: Four piles in a row

Source: Unknown

AWOIS Position: Lat - 028/27/46.00 N Lon - 096/17/46.89W

Required Investigation: VS, BD,DI,SD --undefined search area

---

INVESTIGATION

Date(s)/DN(s): 241 // 255

Position Numbers: 914 // 1486

Launch Number: 0519

Investigation Used: VS, DI

Water Visibility: btm

Position Determined By: Falcon Multiple Range

Investigation Summary: A dive investigation to 100m, was conducted on the reported position on DN 241 ( FX:914 ) with no contacts encountered within the search area. A visual identification of reported piles set in concrete footings, in ruins, was observed during M/S work on DN 255 ( FX:1486 ). This was positioned and observed to be foul to 50m radius of position 1486, with a baring of <sup>0.9</sup> .7m ( see photograph for FX:1486 ).

---

CHARTING RECOMMENDATION

Recommend charting as foul to a 50m radius of position. *(See smooth Sheet)*

Recommended Position: Lat - 028/27/41.<sup>42</sup><sub>13</sub> Lon - 096/17/46.<sup>50.90</sup><sub>91</sub>

Recommended Least Depth: Bares 0.<sup>9</sup>7m

\*\*\*\*\*

COMPILATION NOTES

Chart

Applied As

11319 Applied 7-20-92



AWOIS No:5479

Item Description: Shoaling rpt

Source: CL1130/71--USPS

AWOIS Position: Lat - 28 /28/11.00N Lon - 096/17/40.89W

Required Investigation: ES -- 100m

-----  
INVESTIGATION

Date(s)/DN(s): 240/252/253

Position Numbers: 764.30 / 954 / 1259-1290 Launch Number: 0519

Investigation Used: ES

Water Visibility: 1m

Position Determined By: Falcon Multiple Range

Investigation Summary: Numerous M/S lines and M/S Splits were run to cover this area as well as a bottom sample taken at the reported position. Shoaling was evident in the area, and the least depth obtained within the proximity was 1.6<sup>5</sup> meter (Fx:764.30). The bottom sample acquired was fine, br, S (Fx:954).

-----  
CHARTING RECOMMENDATION

Recommend charting as shoal, with least depth of 1.6<sup>5</sup>m. *Concur.*

Recommended Position: Lat - 28/28/<sup>09.52</sup>~~08.264~~ Lon - 096/17/41.<sup>52</sup>~~472~~

Recommended Least Depth: 1.6<sup>5</sup> meter

\*\*\*\*\*

COMPILATION NOTES

Chart

Applied As

11319 - Applied 7-20-92



AWOIS NO:5480

Item Description:Iron stakes

Source:CL1535/67--USPS

AWOIS Position: Lat - 028/27/56.00N Lon - 096/17/30.89W

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

-----  
INVESTIGATION

Date(s)/DN(s): 241

Position Numbers: 913

Launch Number: 0519

Investigation Used: DI

Water Visibility: btm

Position Determined By: Falcon Multiple Range

Investigation Summary: 50m radius search was conducted off of reported position with no contacts of ruins. The area searched was found to be shoal.

-----  
CHARTING RECOMMENDATION

Recommend charting as shoal area with a least depth of 0.<sup>5</sup>m. <sup>(See Smooth Sheet)</sup>

Recommended Position: <sup>Pos # 668</sup> Lat - 028/27/55.90 <sup>56 97</sup> Lon - 096/17/30.84 <sup>49</sup>

Recommended Least Depth: 0.<sup>5</sup>m

\*\*\*\*\*

COMPILATION NOTES

Chart

Applied As

*Applied-Chart 11319 7-20-92*





UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL OCEAN SERVICE  
Coast and Geodetic Survey  
Seattle, Washington 98115-0070

Pacific Hydrographic Section  
7600 Sand Point Wy NE  
Seattle, WA 98115-0070

March 25, 1992

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

**ADVANCE  
INFORMATION**

Dear Sir:

During the final office processing of hydrographic survey H-10397, Texas, Matagorda Bay, 4.5 Nautical Miles East of Port O'Connor, two dangers to navigation previously reported on October 22, 1991 were revised after application of actual tides. These dangers affect the following charts.

<u>Chart</u>	<u>Edition/date</u>	<u>Datum</u>
11316	33rd Ed., 1/19/91	NAD 83
11317	20th Ed., 3/23/91	NAD 83
11319	22nd Ed., 2/10/90	NAD 83

It is recommended that the revised Report of Dangers to Navigation be included in the Local Notice to Mariners.

Questions concerning this report should be directed to the Pacific Hydrographic Section at (206) 526-6853.

Sincerely,

Douglas G. Hennick  
Commander, NOAA  
Chief, Pacific Hydrographic Section

Enclosure

cc: DMA/TC  
N/CG221





REPORT OF DANGERS TO NAVIGATION

Hydrographic Survey Registry Number and Title:

<u>Survey Number</u>	<u>Title</u>
H-10397	Texas, Matagorda Bay, 4.5 Nautical Miles East of Port O'Connor.

**ADVANCE  
INFORMATION**

Project Number: OPR-K228-AHP2, Atlantic Hydrographic Field Party

All soundings reduced to Mean Lower Low Water using actual tides.

Affected nautical charts:

<u>Chart</u>	<u>Edition/date</u>	<u>Datum</u>
11316	33rd Ed., 1/19/91	NAD 83
11317	20th Ed., 3/23/91	NAD 83
11319	22nd Ed., 2/10/90	NAD 83

<u>Danger to Navigation</u>	<u>LATITUDE(N)</u>	<u>LONGITUDE(W)</u>
4 ft shoal.....	28/27/05.0	96/20/00.6
Revise charted "6 ft rep" note to "3 ft rep".....	28/28/06.0	96/17/33.0

Questions concerning this report should be directed to the Pacific Hydrographic Section at (206)526-6853.





UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL OCEAN SERVICE  
Coast and Geodetic Survey  
Seattle, Washington 98115-0070

Pacific Hydrographic Section  
7600 Sand Point Way NE  
Seattle, WA 98115-0070

October 22, 1991

**ADVANCE  
INFORMATION**

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

Dear Sir:

During office review of the following hydrographic surveys,  
twenty-eight new dangers to navigation were found:

<u>Survey</u>	<u>Title</u>
H-10379	Texas, Matagorda Bay, Boggy Bayou to Powderhorn Bayou
H-10380	Texas, Matagorda Bay, 5.5 Nautical Miles Southwest of Palacios Point
H-10381	Texas, Matagorda Bay, Indianola Island to Gallinipper Point
H-10382	Texas, Matagorda Bay, Tres Palacios Bay
H-10396	Texas, Matagorda Bay, Entrance to Turtle Bay
H-10397	Texas, Matagorda Bay, 4.5 Nautical Miles East of Port O'Connor

These dangers to navigation affect the following charts:

<u>Chart</u>	<u>Edition/date</u>	<u>Datum</u>
11316	33rd ed., 1/19/91	NAD 83
11317	20th ed., 3/23/91	NAD 83
11319	22nd ed., 2/10/91	NAD 83

I recommend that the enclosed Report of Dangers to Navigation  
be included in the Local Notice to Mariners.

Questions concerning this report should be directed to the  
Pacific Hydrographic Section at (206) 526-6853.

Sincerely,

*for* Douglas G. Hennick  
Commander, NOAA  
Chief, Pacific Hydrographic Section

Enclosure

cc: DMA/TC  
N/CG221





REPORT OF DANGERS TO NAVIGATION

**ADVANCE  
INFORMATION**

Hydrographic Survey Registry Numbers and Titles:

<u>Survey Number</u>	<u>Title</u>
H-10379	Texas, Matagorda Bay, Boggy Bayou to Powderhorn Bayou
H-10380	Texas, Matagorda Bay, 5.5 Nautical Miles Southwest of Palacios Point
H-10382	Texas, Matagorda Bay, Tres Palacios Point
H-10396	Texas, Matagorda Bay, Entrance to Turtle Bay
H-10381	Texas, Matagorda Bay, Indianola Island to Gallinipper Point

Project Number: OPR-K228-AHP, Atlantic Hydrographic Party

All soundings reduced to Mean Lower Low Water using predicted tides.

Affected nautical charts:

<u>Chart</u>	<u>Edition/date</u>	<u>Datum</u>
11316	33rd ed., 1/19/91	NAD 83
11317	20th ed., 3/23/91	NAD 83

<u>Danger to Navigation</u>	<u>Latitude(N)</u>	<u>Longitude(W)</u>
8 ft shoal.....	28°29'08.0"	96°25'32.0"
8 ft shoal.....	28°29'25.0"	96°26'19.0"
9 ft shoal.....	28°30'06.0"	96°19'07.0"
10 ft shoal.....	28°30'32.0"	96°17'45.0"
9 ft shoal.....	28°30'48.0"	96°19'27.5"
7 ft shoal.....	28°31'13.0"	96°28'55.0"
9 ft shoal.....	28°31'53.0"	96°18'15.0"
5 ft shoal.....	28°32'27.0"	96°29'34.0"
7 ft soundings in the vicinity of.....	28°33'13.0"	96°28'26.0"
10 ft shoal.....	28°33'24.0"	96°19'55.0"
4 ft shoal.....	28°33'55.0"	96°31'36.0"
Submerged Platform Ruins.....	28°34'16.0"	96°17'40.0"
Charted visible platform observed as		
5 ft shoal.....	28°34'24.0"	96°32'51.0"
9 ft shoal.....	28°34'44.4"	96°17'11.4"
4 ft shoal.....	28°34'52.0"	96°33'08.0"
10 ft shoal.....	28°35'00.1"	96°19'03.8"
10 ft shoal.....	28°35'42.0"	96°19'10.8"
8 ft shoal.....	28°36'47.4"	96°18'24.0"
6 ft shoal.....	28°36'48.0"	96°17'11.4"
7 ft shoal.....	28°36'56.3"	96°16'49.2"
8 ft shoal.....	28°37'00.0"	96°20'21.0"
Visible Crib.....	28°38'24.0"	96°19'18.0"
Revise charted "5ft" note to "1/2 ft".....	28°38'27.0"	96°19'22.5"
Visible Crib.....	28°38'29.7"	96°18'46.7"
Visible Crib.....	28°38'31.8"	96°18'47.1"

Questions concerning this report should be directed to the Pacific Hydrographic Section at (206) 526-6853.



REPORT OF DANGERS TO NAVIGATION

**ADVANCE  
INFORMATION**

Hydrographic Survey Registry Numbers and Titles:

<u>Survey Number</u>	<u>Title</u>
H-10397	Texas, Matagorda Bay, 4.5 Nautical Miles East of Port O'Connor

Project Number: OPR-K228-AHP, Atlantic Hydrographic Party

All soundings reduced to Mean Lower Low Water using predicted tides.

Affected nautical charts:

<u>Chart</u>	<u>Edition/date</u>	<u>Datum</u>
11316	33rd ed., 1/19/91	NAD 83
11317	20th ed., 3/23/91	NAD 83
11319	22nd ed., 2/10/90	NAD 83

<u>Danger to Navigation</u>	<u>Latitude(N)</u>	<u>Longitude(W)</u>
5 ft shoal.....	28°27'05.0"	96°20'00.6"
Revise charted "6 ft rep" note to "5 ft rep"...	28°28'06.0"	96°17'33.0"

Questions concerning this report should be directed to the Pacific Hydrographic Section at (206) 526-6853.



APPROVAL SHEET

BASIC HYDROGRAPHIC SURVEY

OPR-K228-AHP2

AHP-10-13-91

H-10397

1991

This survey was conducted in accordance with the project instructions for OPR-K228-AHP2, the hydrographic manual, the hydrographic survey guidelines, and the field procedures manual. The survey data and reports were completed under frequent supervision. All boat sheets and final field sheets were reviewed and all supporting records were also checked.

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

*Thomas R. Waddington*

LT Thomas R. Waddington, NOAA  
Chief, Atlantic Hydrographic Party



ORIGINAL



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:** November 25, 1991

**MARINE CENTER:** Pacific

**OPR:** K228

**HYDROGRAPHIC SHEET:** H-10397

**LOCALITY:** Matagorda Bay, TX

**TIME PERIOD:** August 20 - September 27, 1991

**TIDE STATIONS USED:** 877 3701 Port O'Connor, TX  
Lat. 28° 27.2'N Lon. 96° 24.3'W

**PLANE OF REFERENCE (MEAN LOWER LOW WATER):** 2.12 feet

**HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE:** 0.9 foot

**REMARKS: RECOMMENDED ZONING**

Times and heights are direct on Port O'Connor, TX.

**NOTE:** Hourly heights are tabulated on Central Standard Time.

for *William M. Hiles*  
CHIEF, DATUMS SECTION *PP*





GEOGRAPHIC NAMES

H-10397

Name on Survey	<div style="position: absolute; top: -20px; left: 50%; transform: translate(-50%, -50%); pointer-events: none;"> <p style="margin: 0;">A ON CHART NO. 11319</p> <p style="margin: 0;">B ON PREVIOUS SURVEY NO. 11317</p> <p style="margin: 0;">C ON U.S. QUADRANGLE MAPS</p> <p style="margin: 0;">D FROM LOCAL INFORMATION</p> <p style="margin: 0;">E ON LOCAL MAPS</p> <p style="margin: 0;">F P.O. GUIDE OR MAP</p> <p style="margin: 0;">G RAND McNALLY ATLAS</p> <p style="margin: 0;">H U.S. LIGHT LIST</p> </div>										K
	A	B	C	D	E	F	G	H	K		
INTRACOASTAL WATERWAY	X										1
MATAGORDA BAY	X										2
MATAGORDA CLUB AIRFIELD (abandoned)	X										3
MATAGORDA PENINSULA	X										4
TEXAS (title)	X										5
											6
											7
											8
											9
											10
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Approved:

*Charles E. Hamilton*  
Chief Geographer - 12/06/91

DEC - 4 1991



**HYDROGRAPHIC SURVEY STATISTICS**

H-10397

RECORDS ACCOMPANYING SURVEY: To be completed when survey is processed.

RECORD DESCRIPTION		AMOUNT	RECORD DESCRIPTION		AMOUNT
SMOOTH SHEET		1	SMOOTH OVERLAYS: POS., ARC, EXCESS		5
DESCRIPTIVE REPORT		1	FIELD SHEETS AND OTHER OVERLAYS		6
DESCRIP-TION	DEPTH/POS RECORDS	HORIZ. CONT. RECORDS	SONAR-GRAMS	PRINTOUTS	ABSTRACTS/SOURCE DOCUMENTS
ACCORDION FILES	1				
ENVELOPES					
VOLUMES	1				
CAHIERS					
BOXES					

**SHORELINE DATA**

- SHORELINE MAPS (List):
- PHOTOBATHYMETRIC MAPS (List):
- NOTES TO THE HYDROGRAPHER (List):
- SPECIAL REPORTS (List):
- NAUTICAL CHARTS (List):

**OFFICE PROCESSING ACTIVITIES**

The following statistics will be submitted with the cartographer's report on the survey

PROCESSING ACTIVITY	AMOUNTS		
	VERIFICATION	EVALUATION	TOTALS
POSITIONS ON SHEET			1709
POSITIONS REVISED			
SOUNDINGS REVISED			
CONTROL STATIONS REVISED			
	TIME-HOURS		
	VERIFICATION	EVALUATION	TOTALS
PRE-PROCESSING EXAMINATION			
VERIFICATION OF CONTROL			
VERIFICATION OF POSITIONS	35.5		35.5
VERIFICATION OF SOUNDINGS	61.5		61.5
VERIFICATION OF JUNCTIONS			
APPLICATION OF PHOTOBATHYMETRY			
SHORELINE APPLICATION/VERIFICATION			
COMPILATION OF SMOOTH SHEET	17.5		17.5
COMPARISON WITH PRIOR SURVEYS AND CHARTS		13.0	13.0
EVALUATION OF SIDE SCAN SONAR RECORDS			
EVALUATION OF WIRE DRAGS AND SWEEPS			
EVALUATION REPORT		26.0	26.0
GEOGRAPHIC NAMES			
OTHER* <b>Digitizing</b>	1.0		1.0
*USE OTHER SIDE OF FORM FOR REMARKS	<b>TOTALS</b>	115.5	39.0
			154.5

Pre-processing Examination by <b>LT M. Brown</b>	Beginning Date 10/3/91	Ending Date 10/3/91
Verification of Field Data by <b>I. Almacén</b>	Time (Hours) 115.5	Ending Date 3/16/92
Verification Check by <b>J. Green, B. Olmstead</b>	Time (Hours) 20.0	Ending Date 5/29/92
Evaluation and Analysis by <b>I. Almacén</b>	Time (Hours) 39.0	Ending Date 4/28/92
Inspection by <b>D. Hill</b>	Time (Hours) <b>4</b>	Ending Date <b>6-3-92</b>



## EVALUATION REPORT H-10397

### 1. INTRODUCTION

Survey H-10397 is a basic hydrographic survey accomplished by the Atlantic Hydrographic Party 2 under the following Project Instructions.

OPR-K228-AHP2, dated March 1, 1991  
CHANGE NO. 1, dated June 4, 1991  
CHANGE NO. 2, dated July 11, 1991  
CHANGE NO. 3, dated August 15, 1991

This survey was conducted in Texas covering the southern portion of Matagorda Bay, about 4.5 nautical miles east of Port O'Connor including the Intracoastal Waterway and the south end of Palacios Channel. The survey area extends from the north coast of Matagorda Peninsula to latitude 28/30/00N and stretches from longitude 96/16/55W to longitude 96/20/57W. The coast consists of gently sloping sandy beaches. The bottom generally consists of sand and mud mixed with broken shells. Depths range from 0.3 to 7.5 meters.

Predicted tides for Port O'Connor, Texas, gage 877-3701, were used for the reduction of soundings during field processing. Approved hourly heights zoned from the same gage were used during office processing.

The field sheet parameters have been revised to center the hydrography on the smooth sheet and to change the projection to polyconic. The TRA, sound velocity and electronic control correctors are adequate. An accompanying computer printout contains the parameters and the correctors.

A digital file has been generated for this survey as required by the specifications contained in Hydrographic Survey Guideline No. 52, Standard Digital Data Exchange Format, April 15, 1986. Certain descriptive information, however, may not be in the digital record due to the restrictions of the presently available cartographic codes. The user should refer to the smooth sheet for complete depiction of survey data.

### 2. CONTROL AND SHORELINE

Sections H and I of the hydrographer's report contain adequate discussions of horizontal control and hydrographic positioning. Additional detailed information on horizontal control is contained in the following reports.

Field Report, Matagorda Bay, Texas and vicinity, Third-Order Class I Traverse, AMC Coastal Surveys Unit, January 23, 1989.

Project Report, Matagorda Bay and Vicinity, Texas, GPS Hydrographic Support Survey, March 4 to March 20, 1991.

Positions of horizontal control stations used during hydrography are 1989 field values based on NAD 83. These values were used during office processing for the computation of positions. The smooth sheet and accompanying overlays are annotated with NAD 27 adjustment ticks based on values determined with the NGS program, NADCON. Geographic positions based on



NAD 27 may be plotted on the smooth sheet utilizing the NAD 83 projection by applying the following corrections.

Latitude: 1.003 seconds (30.892 meters)  
Longitude: 0.898 seconds ( 24.426 meters)

The year of establishment of control stations shown on the smooth sheet originates with the NGS listing and the previously referenced horizontal control reports.

In some instances during the survey, the maximum allowable limits of error circle radius (ECR) and residual values of fixes have been exceeded. However, the soundings located by these fixes were found consistent with the surrounding areas and are considered acceptable. None of these survey positions are used to locate dangers to navigation.

The following shoreline maps applies to this survey.

	<u>Photo Date</u>	<u>Class</u>
TP-01646	February 1989	III
TP-01647	February 1989	III

Changes to the shoreline were noted along the north shore of Matagorda Peninsula and are depicted as dashed red lines on the smooth sheet. These changes have been transferred directly from the field sheet without positional information.

### 3. HYDROGRAPHY

With the exception of being unable to delineate the zero curve during this survey, hydrography is adequate to:

- a. delineate the bottom configuration, determine least depths, and draw the standard depth curves;
- b. reveal there are no significant discrepancies or anomalies requiring further investigation; and
- c. show the survey was properly controlled and soundings are correctly plotted.

### 4. CONDITION OF SURVEY

The hydrographic records and reports received for processing are adequate and conform to the requirements of the Hydrographic Manual, 4th Edition, revised through Change No. 3, the Hydrographic Survey Guidelines, and the Field Procedures Manual, April 1990 Edition, except as follows.

The hydrographer's determination of the changes in the shoreline during this survey is inadequate. Detached positions should have been taken along the HWL to adequately verify the actual changes to the shoreline configuration of the area.

Survey features referred to in the descriptive report should be accompanied by a geographic position to assist the reader in locating the feature on the smooth sheet.

### 5. JUNCTIONS

Survey H-10397 junctions with the following surveys.



<u>Survey</u>	<u>Year</u>	<u>Scale</u>	<u>Area</u>
H-10380	1991	1:10,000	North
H-10395	1991	1:10,000	West
H-10405	1991	1:10,000	East
H-10412	1991-92	1:10,000	Southwest

The junctions with surveys H-10380, H-10395 and H-10405 are complete. Comparison reveals satisfactory agreement with the present survey.

H-10412 junctions to the southwest of this survey. The hydrographer had not completed H-10412 at the time of the report. The junction will be addressed in the Evaluation Report for that survey.

## 6. COMPARISON WITH PRIOR SURVEYS

### H-5866(1934-35) 1:20,000

Survey H-5866 provides the basic coverage of the entire area of this survey. Except for the existence of the two federally maintained channels and the breakwater located at latitude 28/28/05N, longitude 96/17/30W, comparison with this prior survey is considered satisfactory. The soundings obtained from survey H-10397 are generally deeper by 0.1 to 0.3 meter with the exception of the following areas where shoaling is noted.

- (a) Along the breakwater, in the vicinity of latitude 28/28/05N, longitude 96/17/30W.
- (b) In the vicinity of buoys CG"97" and CG"99" at latitude 28/27/45N, longitude 96/20/17W.
- (c) North of buoy CG"100", in the vicinity of latitude 28/28/00N, longitude 96/20/30W.
- (d) South of Matagorda Bay Range K Light where a 1.1 meter shoal sounding at latitude 28/27/34.67N, longitude 96/20/03.26W and a 1.2 meter shoal sounding at latitude 28/27/45.55N, longitude 96/19/55.78W were found.

Additional information can be found in section M of the hydrographer's report.

Survey H-10397 is adequate to supersede the prior survey within the common area.

There are no AWOIS items originating from the prior survey applicable to the present survey.

## 7. COMPARISON WITH CHART

Chart 11319, 22nd edition, dated February 10, 1991; scale 1:40,000

### a. Hydrography

The charted hydrography on the 22nd edition of chart 11319 originates mostly with the prior survey and the rest from miscellaneous sources which requires no further discussion.

The shoal areas mentioned in the preceding section of this report which includes the 1.1 and 1.2 meter shoal soundings found within the vicinity of the presently charted "Discontinued Spoil Area" should be included in the compilation of the next edition of this chart.

Survey H-10397 is adequate to supersede charted hydrography within the common area.

### b. AWOIS



All of the six (6) AWOIS items within this survey area originate with miscellaneous sources. Discussion and disposition of each of these items are included in the separates that accompany the hydrographer's report.

c. Controlling Depths

The depths found on survey H-10397 are consistent with or deeper than the charted controlling depths along the Intracoastal Waterway and Palacios Channel. However, the charted note "6ft rep" at latitude 28/28/03N, longitude 96/17/32W should be revised to "3ft 1991". The present depths in the area of the charted channel range from 0.9 to 1.3 meters at MLLW and should be charted according to this survey. A copy of the Danger to Navigation report concerning this change in least depth along the channel is attached.

d. Aids to Navigation

There are six (6) fixed and twelve (12) floating aids located within the survey area. These aids were found to be in good condition and adequately serve their intended purpose. However, the following fixed and floating aids are presently located approximately 50 to 100 meters from their respective charted positions.

Contrary to what was mentioned in section N and P of the hydrographer's report, Palacios Channel Buoy "A" is correctly labeled on chart 11319.

e. Geographic Names

Names appearing on the smooth sheet and in the survey title have been approved by the Chief Geographer.

f. Dangers to Navigation

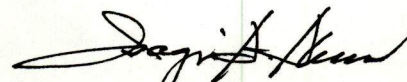
Two (2) dangers to navigation were reported to the USCG on October 22, 1991. These same two dangers were updated after application of actual tides during office processing. A revised danger to navigation report was transmitted to the USCG and N/CG221 on March 25, 1992. Copies of the previous and the revised reports are attached. No additional dangers were discovered during office processing.

8. COMPLIANCE WITH INSTRUCTIONS

Survey H-10397 adequately complies with the Project Instructions.

9. ADDITIONAL FIELD WORK

This is a good hydrographic survey and no additional field work is required.

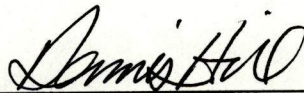
  
Isagani A. Almacén  
Cartographer



APPROVAL SHEET  
H-10397

Initial Approvals:

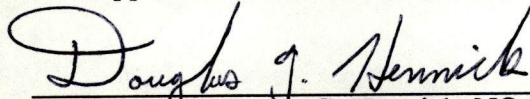
The completed survey has been inspected with regard to survey coverage, delineation of the depth curves, development of critical depths, cartographic symbolization, comparison with prior surveys and verification or disproval of charted data. The digital data have been completed and all revisions and processing have been entered in the magnetic tape record for this survey. Final control, position, and sounding printouts have been made and are included with the survey records. The survey records and digital data comply with NOS requirements except where noted in the Evaluation Report.



Date: 6-3-92

Dennis J. Hill  
Chief, Hydrographic Processing Unit  
Pacific Hydrographic 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.



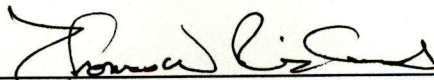
Date: 6/5/92

Commander Douglas G. Hennick, NOAA  
Chief, Pacific Hydrographic Section

\*\*\*\*\*

Final Approval

Approved:



Date: 12-12-94

J. Austin Yeager  
Rear Admiral, NOAA  
Director, Coast and Geodetic Survey







