

10412

Diagram No. 1284-2

NOAA FORM 76-35A

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

DESCRIPTIVE REPORT

Type of Survey Hydrographic
Field No. AHP2-10-18-91
Office No. H-10412

LOCALITY

State Texas
General Locality Matagorda Bay
Sublocality Port O'Connor

19 91-92

CHIEF OF PARTY

LT T.R. Waddington

LIBRARY & ARCHIVES

DATE May 10, 1993

10412

EC/G

Ref. L-776(92)

PRODUCTS

11317

11319 'B'

11316

CPS

11300-NC

HYDROGRAPHIC TITLE SHEET

H-10412

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.

AHP2-10-18-91

State Texas

General locality Matagorda Bay

Locality Port O'Connor

Scale 1:10,000 Date of survey Nov 11, 1991 to Mar 12, 1992

Instructions dated March 1, 1991 Project No. OPR-K228-AHP2

Vessel NOAA Launch 0518

Chief of party LT Thomas R. Waddington, NOAA

Surveyed by D. Elliott, R. Rogers

Soundings taken by echo sounder, hand lead, ~~port~~ in meters

Graphic record scaled by DBE, RRR, LAM, NY

Graphic record checked by DBE, RRR

Verification by: C.R. Davies Automated plot by PHS Xynetics Plotter

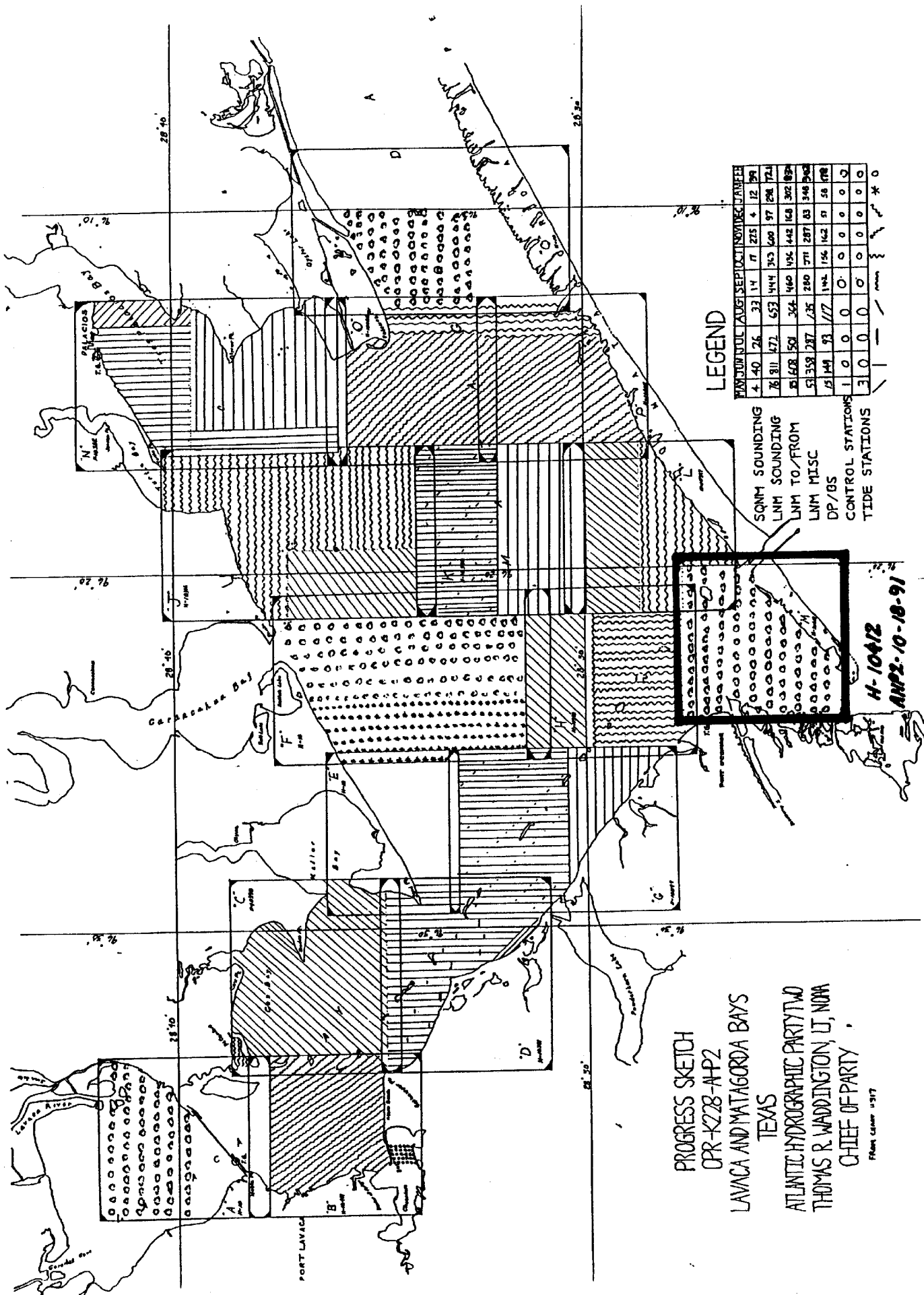
Evaluation by: C.R. Davies

Soundings in ~~fathoms~~ ~~feet~~ meters at ~~MHW~~ MLLW and decimeters

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

AWOIS/SURE 6/29/93 SJV

*501-697
KWW 7/30/93*



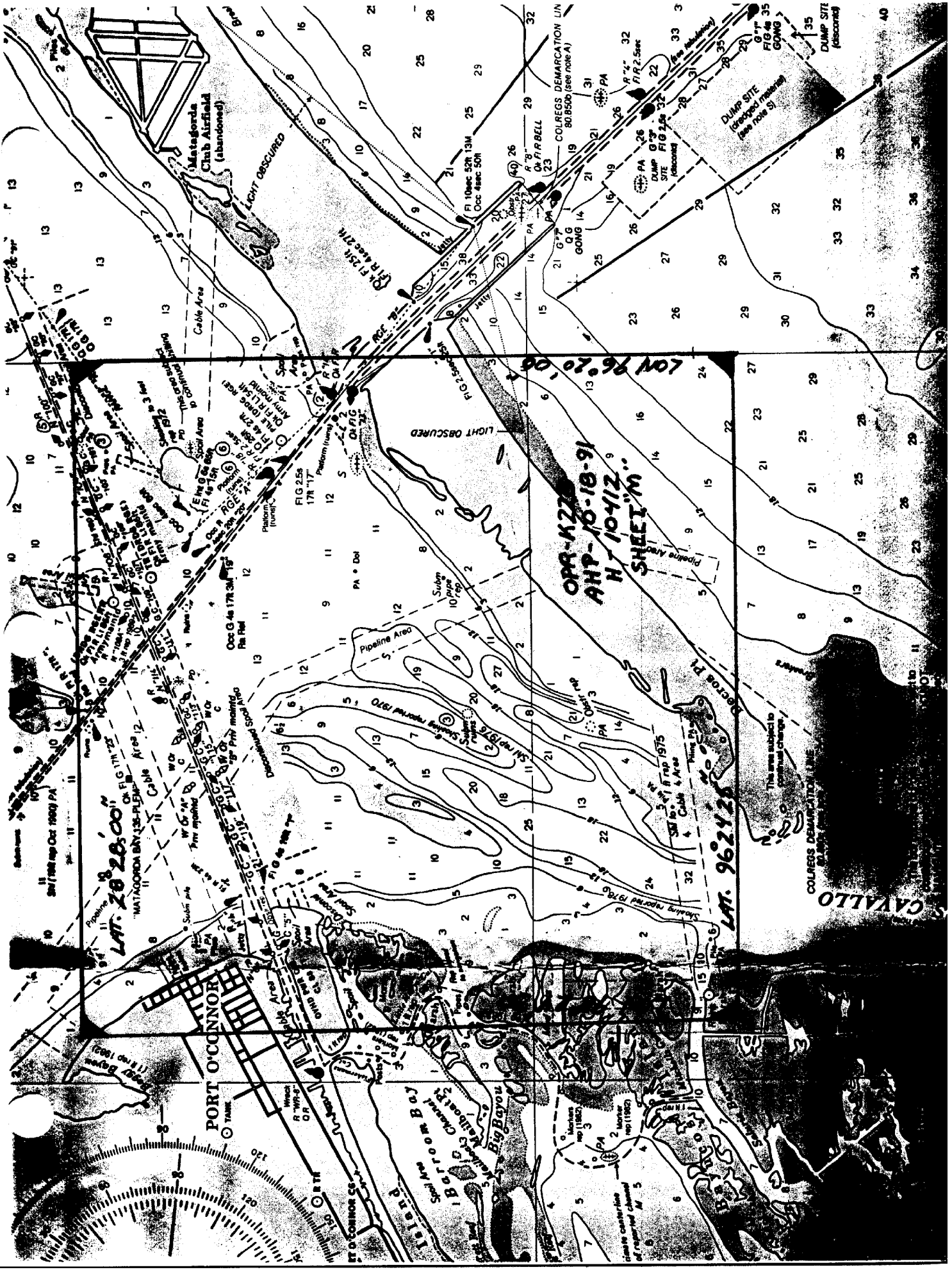
LEGEND

PLAN	NO.	TOTAL	AVG	SEPT	NOV	DEC	JAN FEB
4	40	26	33	14	17	215	4 12 39
7	811	472	652	444	313	600	97 294 721
13	628	50	364	460	495	442	162 302 824
51	358	287	235	280	271	287	83 348 302
15	144	93	177	142	156	162	51 58 178
1	0	0	0	0	0	0	0 0 0
3	0	0	0	0	0	0	0 0 0

SONM SOUNDING
 LNM SOUNDING
 LNM TO/FROM
 LNM MISC
 DP/BS
 CONTROL STATIONS
 TIDE STATIONS

PROGRESS SKETCH
 OPR-4228-AMP2
 LAVACA AND MATAGORDA BAYS
 TEXAS
 ATLANTIC HYDROGRAPHIC PARTY TWO
 THOMAS R. WASHINGTON, LT, NOAA
 CHIEF OF PARTY
 FROM GRAPHIC 11-317

H-10412
 AMP2-10-18-91



LAT. 28 28.00" N
LONG. 107 07.96 W

OPR-K22
AHP-16-18-91
HT 10412.9
SHEET 'M'

LAT. 96 24 25 W

CAVALLO



This area subject to
continual change.

COLLEGS DEMARICATION LINE
BASED ON SURVEY DATA

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(see note S)

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DESCRIPTIVE REPORT TO ACCOMPANY
HYDROGRAPHIC SURVEY H-10412
Field No. AHP2-10-18-91
Scale:1:10,000
Atlantic Hydrographic Party
Chief of Party: Lt. Thomas R. Waddington, NOAA
1991-1992

A. PROJECT ✓

This survey was conducted in accordance with Hydrographic Project Instructions OPR-K228-AHP2, Matagorda and Lavaca Bays, Texas dated March 1, 1991; these were amended by change No. 1 dated June 4, 1991, change No. 2 dated ^{July} June 11, 1991, change No. 3 dated August 15, 1991 and change No. 4 dated January 16, 1992.

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

The purpose of project OPR-K228-AHP2 is to provide contemporary hydrographic data to revise the existing nautical charts. Considerable oil development, fishing and oyster industries exist in Matagorda Bay and its main tributaries.

B. AREA SURVEYED ✓ *See EVAL Report, section 1*

The area surveyed for H-10412 is Matagorda Bay, in the vicinity of Port O' Connor, Texas. The geographic limits are as follows:

North - Latitude 28°28'00"N
South - Latitude 28°23'30"N
East - Longitude 096°20'00"W 19'52"
West - Longitude 096°24'30"W

This survey was conducted from November 11, 1991 (DN 315) to March 12, 1992 (DN 072).

C. SOUNDING VESSEL ✓

NOAA launch 0518 (EDP No. 0518), a 21-foot Mon Ark, was used to collect all data on this survey. No problems were encountered with this vessel.

D. AUTOMATED DATA ACQUISITION AND PROCESSING

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

Version 3.6 of the PC-DAS suite of programs 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) ver. 1.11, 3/9/90

MTEN3 with enhancements (IBM PC), 6/88

E. SONAR EQUIPMENT ✓

Not applicable.

F. SOUNDING EQUIPMENT ✓

An Innerspace model 448 depth sounder, serial number 175 was used to collect all echo soundings on this survey.

A standard lead line calibrated in meters, serial number 0518, was used during this survey for comparison readings with the echo sounder. A 5 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. Depths in the survey area range from 0.5₄ to 26.5₃ meters.

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 January 27, 1992. A copy of this calibration may be found in the Separates, section IV.*

* Filed with the hydrographic data

Program Velocity was used for computing the speed of sound correctors. Speed of sound corrections were applied to the final field sheet soundings using the HDAPS Reapply Depth Correctors function of the Post-Survey program as required by the Field Procedures Manual. Copies of the tables and support documentation are in the Survey Separates, section VI.*

The following speed of sound casts were taken on this survey:

Cast #	DN	DATE	Latitude	Longitude	Depth
1	315	11/11/91	28°27.3'N	096°21.7'W	12m
2	329	11/25/91	28°27.3'N	096°21.7'W	12m
3	340	12/06/91	28°26.0'N	096°20.2'W	24m
4	014	1/14/92	28°27.3'N	096°21.7'W	12m
5	042	2/11/92	28°27.3'N	096°21.7'W	12m
6	045	2/14/92	28°26.0'N	096°20.1'W	26m
7	058	2/27/92	28°27.3'N	096°21.7'W	12m
8	062	3/02/92	28°24.0'N	096°24.3'W	10m
9	072	3/12/92	28°27.3'N	096°21.7'W	12m

The following table shows the recommended tables to be used for final processing at the Pacific Hydrographic Section:

Cast No.	Table No.	Use for Days
1	1	315-318
2	2	325, 331
3	3	340
4	4	15, 21-24
5	5	31, 43
6	6	44, 45, 49
7	7	58, 59
8	8	62-64
9	9	69-72

Tables used for field processing are shown on the Daily Header Abstract, included in the Survey Separates, section IV.*

Survey records were scanned by AHP-2 employees in accordance with the Hydrographic Manual. With the digital reading taking precedence over the analog trace, significant peaks and deeps which occurred between selected soundings were inserted, and effects of sea and swell action were corrected, while scanning.

Lead line comparisons were taken daily to determine instrument error. No instrument error was observed. The lead line comparison log is included in the Separates, section IV.* The lead line was calibrated on November 10, 1991 with a steel tape. No corrections were necessary. A copy of the calibration form can be found in the Separates, section IV.*

* Filed with the hydrographic data

A static draft of 0.3 meters was applied to the final field sheet soundings using the HDAPS Reapply Depth Correctors function of the Post-Survey program as required by the Field Procedures Manual. The draft was measured by subtracting the difference from a punch mark on the side of launch 0518, 0.6 meters above the transducer, to the water surface.

Settlement and squat measurements for vessel 0518 were performed on November 8, 1990. The level method was used. Settlement and squat correctors were applied to the final field sheet soundings using the HDAPS Reapply Depth Correctors function of the Post-Survey program as required by the Field Procedures Manual. Data from the settlement and squat test are included in the survey Separates, section IV.*

The final field sheet was plotted using predicted tides determined from Port O'Connor, Texas and correctors designated in zone "I" from section 5.9 of the project instructions. The values were applied direct in accordance with these instructions. Wind conditions during this survey (i.e., speed and direction), had a far greater affect on the true water levels than did normal tidal action. This resulted in higher water levels on down-wind shores and lower water levels on lee shores. The AWOIS shoal sounding developments on March 9, 1992 (DN 069) were plotted with actual heights manually read from the Port O' Connor, TX tide gauge (Station No. 877-3701). Because of differences between main scheme and development soundings of 0.5 to 0.6 meters in this area, depth curves were difficult to draw. The application of actual heights corrected the differences and allowed depth curves to be drawn easily. These actual heights were entered into the HDAPS tide table 50 and are filed in the fan-folder with DN 069. There were no other complications with predicted tides.

Approved water levels were requested from the Sea and Lake Levels Branch, N/OMA12, in a letter dated March 18, 1992. A copy is included in Appendix V of this report.*

H. CONTROL STATIONS *See EVAL Report, section 2*

The horizontal control datum for this project is the North American Datum of 1983. A copy of the HDAPS Control Station Table is included in ~~Appendix III~~ ^{attached to} of this report.

The Coastal Surveys Unit from Norfolk, Virginia used the Global Positioning System (GPS) to establish horizontal control for this project. The horizontal control report titled "Matagorda Bay and Approaches Texas, GPS Survey, R. W. Daniel, Chief of Party, March 1991", was written and submitted by the Coastal Surveys Unit for OPR-K228-AHP.

I. HYDROGRAPHIC POSITION CONTROL✓

Survey Methods✓

Hydrographic position control was accomplished using the 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>	<u>CODE</u>
0518	RPU	D0017	
	R/T	F3419	
	R/S	C2067	0
	R/S	E2911	7
	R/S	F3298	9
	* R/S	E2979	B
	R/S	C2091	D
	R/S	D2128	F
	* R/S	C2091	C

* R/S E2979 failed on 12/16/91, DN 350.

* R/S C2091 was changed to code C due to interference.

Critical System Checks✓

When using three or four lines of position (LOP), a critical system check is being obtained each second by observing the error circle radius and residual values which are computed by the survey computer. For a 1:10,000 scale survey, the critical residual value is 5.0 meters and the critical error circle radius value is 15.0 meters. Position data exceeding these values were edited.

Mini-Ranger Falcon Calibrations✓

Baseline calibrations were performed on October 1, 1991 (DN 274), November 7, 1991 (DN 311) and December 5, 1991 (DN 339); baseline correctors were incorporated into the Comflex C-0 table number one and applied directly to all on-line data. Comflex C-0 table number three was created for all data collected after January 1, 1992. An error was discovered on the PC-DAS C-0 table three which affected data collected on day number 042, 044, and 045. After establishing code F, S/N D2128 on station 044, the corrector value for this unit was entered as 4.2 but recorded by the computer as zero. These days of main scheme hydrography had been collected before the error was detected during the convert process. A check of random positions from these three days of hydrography using the HDAPS Point Re-Computation Program showed

this error to have a negligible affect on positioning. The proper corrector was re-entered aboard the launch on DN 049. All records of these calibrations and the Daily Header Abstracts are included in the survey Separates, section III.* A closing baseline calibration was not performed since the survey was conducted in less than a six month period from the opening baseline. *All positions were accepted and are plotted on the smooth sheet.*

J. SHORELINE *See EVAL Report, section 2*

Shoreline shown on the final field sheet was transferred by hand from TP-01647 and TP-01648. These shoreline manuscripts were compiled on NAD 1983. The shoreline manuscripts were compiled at 1:20,000 scale. They were enlarged to 1:10,000 scale for use with this survey.

Shoreline verification was accomplished by visual inspection and by main scheme hydrography junctioning at shore. While main scheme hydrography rarely approached closer than 200 meters from shore, one obvious change from that shown on the shoreline manuscripts was noted. A more intense method of shoreline verification was deemed uneconomical. Verified shoreline is shown in black ink on the final field sheet. Charted shoreline should be superseded by shoreline from TP-01647 and TP-01648. Shoreline was drawn in red ink where the change was noted. This change is described below.

The shoreline at Decros Point, depicted in dashed red near ~~Pass Cavallo~~ at latitude $28^{\circ}33'36''N$, longitude $096^{\circ}23'24''W$ has changed since the T-Sheet was compiled. The change was determined by main scheme hydrography junctioning at shore and appears to be natural erosion in an area subject to continual change, as charted.

*See EVAL Report,
section 2.*

A platform shown on TP-01647 at latitude $28^{\circ}23'41''N$, longitude $096^{\circ}24'06''W$, was verified as existing, reference position 5000, on January 24, 1992. No on-line detached position was taken, however the northing and easting coordinates for this feature were recorded in the Daily Log* for this survey. This currently uncharted platform is recommended for charting based on the TP-01647 position. A danger to navigation notice was not issued because of the charted magenta note warning of "obstructions, wells, and pipelines".

Platform was transferred to the smooth sheet from TP-01647 at the above position.

Field notes are located on the field sheets, the graphic records, and in the Daily Log, included as part of this survey.

* Filed with the hydrographic data.

K. **CROSSLINES** ✓

A total of 21.3 linear nautical miles of cross-lines were run on H-10412. This is equivalent to 12 % of the main scheme hydrography. Main scheme and cross line sounding agreement is ≤ 0.3 meter, with occasional 0.4 meter variances noted; these are thought to be caused by discrepancies between actual and predicted tides as noted in section "G" of this report. *with approved tides applied, only a 0.2 meter variance was noted.*

L. **JUNCTIONS** *See EVAE Report, Section 5*

This survey junctions with surveys H-10395 (Sheet H from OPR-K228) to the north, and with H-10397 (Sheet L from OPR-K228) to the east. These surveys are both 1:10,000 scale surveys from 1991-1992. The depth curves of this survey and surveys H-10395 and H-10397 agree well and can easily be connected between surveys.

M. **COMPARISON WITH PRIOR SURVEYS** *See EVAE Report, section 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

None of the AWOIS items addressed as part of this survey originated from the prior survey

The following was noted during comparison:

- ▶ Bottom samples acquired on this survey agreed well with the prior survey. *Concur*
- ▶ In general soundings acquired during H-10412 were found to be ≤ 0.3 meter shallower than the prior survey. *Do not concur*
- ▶ As H-5866 was surveyed in feet and H-10412 was surveyed in meters there were no common depth curves for comparison. *Concur*
- ▶ The Intra-coastal Waterway channel did not exist on H-5866. *Concur*
- ▶ The Matagorda Ship Channel did not exist on H-5866. *Concur*
- ▶ Shoreline shown on H-5866 is notably different than that presently existing; the shoreline depicted on TP-01647 and TP-01648 accurately represents existing shoreline, with the exception of that area shown in dashed red at lat. 28°23'36N, long. 96°23'24W as stated in Section J, shoreline.

- ▶ There was no cut through Matagorda Island with jetties entering the Gulf of Mexico. Concur ✓

N. COMPARISON WITH THE CHART *See EVMC Report, section 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	<i>See EVMC Report, section 7</i>

Thirty-one AWOIS items, were assigned as part of this survey. Six of these items were shoal reports and are addressed in this section. The remaining items are discussed in ~~section VI of the Appendix~~ *and are attached to* of this report. Further information can be found on the Final Field Sheet and the Daily Record Log.* It is recommended that these documents be used when addressing any AWOIS feature.

There are six AWOIS items within the junction area between this survey and sheet "H" (H-10395) that were addressed on sheet "H". They are item numbers 5438, 5439, 5440, 5457, 5458 and 5507.

The following dangers to navigation were reported to the Eighth U.S. Coast Guard District, Local Notice to Mariners Office during the course of this survey.

- ▶ A submerged obstruction was found on the green side of the channel at latitude $28^{\circ}26'38.412''$ N, longitude $096^{\circ}23'41.445''$ W. This position is outside the channel on the southeast side, between the Port O'Connor jetties. The obstruction is a 12 inch diameter steel pipe lying flat, which projects 2.6 feet off the bottom. The least depth on this obstruction was 10.5 feet (3.2 meters) at MLLW, corrected by ^{approved} predicted tides, in depths of 12 feet (3.6 meters). This feature is currently charted as an "Obstr rep", and was addressed as AWOIS item 5455, position 914.

Delete rep and chart 3^a Obstr at the above position.

- ▶ A submerged obstruction was found on the red side of Matagorda Ship Channel at latitude $28^{\circ}26'27.79''$ N, longitude $096^{\circ}20'33.29''$ W (position 776). This position is ^{so} outside the channel and is charted as an Army Maintained 54 foot pile dredge range. The obstruction is an 18 inch diameter steel pipe standing upright and projecting 13 feet (4.0 meters) off the _{3.8} bottom. The least depth on this ^{approved} obstruction was 13 feet (4.0 meters) at MLLW, corrected by ^{approved} predicted tides, in depths of 28 feet (8.5 meters). This obstruction is the remains of the charted dredge range. *chart 3^B Obstruction at the above position.*

► A submerged obstruction was found, marked by a three inch diameter PVC pipe, protruding three feet, located at latitude 28°25'16.96" N, longitude 096°21'24.20" W, position 1283. This position is along the northwest shore at Matagorda Peninsula, midway between Pass Cavallo and Matagorda Ship Channel. The obstruction is a square metal container approximately ten feet square, awash at MLLW, in depths of two feet.

Chart as obstruction awash at MLLW.

Copies of the Danger to Navigation Reports for these features are in ~~Appendix I~~ of this report. *attached to*

An uncharted gas platform was located by detached position at latitude 028°25'54.3" N and longitude 096°21'29.7" W, position 336. A Danger to Navigation Report was not issued because of the charted magenta note warning of "obstructions, wells and pipelines". *Concur*

A "Rep Closed to Navigation" note appears at the entrance to Big Bayou near shore. Main-scheme hydrography ^{was} run around the entrance to Big Bayou, as well as ~~transits into the~~ portion of the bayou which is outside the limits of hydrography. ^{Hydrography} indicated this area can be navigated by shallow draft vessels, observing prudent boat handling. This note is recommended for removal from charts 11317 and 11319. *Concur, add note "Area navigable with local knowledge" in the area of lat. 28°25'30N, long. 96°24'15W.*

In general, charted soundings were found to be ≤ 0.3 meter shallower than this survey. This, in the hydrographers opinion, is caused from the scouring by prevailing winds, with the material being deposited along the Matagorda Peninsula. *Do not concur, See ERM Report, section 6*

AWOIS #5447 was a shoal report from CL1282/78--USPS at latitude 028°24'31.0" N and 096°23'45.9" W. The 50 meter development on the final field sheet clearly identifies the extent of this area with depths ranging from 2.3 feet (0.7 meters) to 5.5 feet (1.7 meters). Delete the "Shoaling rep 1978" note and chart representative soundings from this survey. *Concur*

AWOIS #5449 was a shoal report from CL1938/75--USPS at latitude 028°24'06.0" N and 096°23'00.9" W. The 50 meter development on the final field sheet clearly identifies the extent of this area with depths ranging from 2.9⁶ feet (0.98 meters) to 7.8⁸ feet (2.47 meters). Delete the "Shl to 1 ft rep 1975" note and chart representative soundings from this survey. *Concur*

AWOIS #545~~8~~ was a shoal report from an unknown source in 1976 at latitude 028°25'11.0" N and 096°22'40.9" W. The 50 meter development on the final field sheet clearly identifies the extent of this area with depths ranging from 2.6³ feet (0.87 meters) to 3.2 feet (1.0 meters). Delete the "Shl rep 1976" note and chart representative soundings from this survey. *Concur*

AWOIS #5455 was a shoal report from an unknown source in 1976 at latitude 028°25'31.0" N and 096°22'35.9" W. The 50 meter development on the final field sheet clearly identifies the extent of this area with depths ranging from 2.3 feet (0.75 meters) to 4.9 feet (1.5 meters). Delete the "Shoaling rep 1970" note and chart representative soundings from this survey. *Concur*

AWOIS #5464 was a shoal report from CL1814/72--USPS at latitude 028°27'16.0" N and 096°20'25.9" W. The 50 meter development on the final field sheet clearly identifies the extent of this area but, shows no sign of any shoal existing with the exception of the shoal depths plotting north of the spoil island that locals have named "Bird Island". The depths in this vicinity range from 13.0 feet (4.0 meters) to 22.3 feet (6.8 meters). This report was "Shoaling to 3 feet" however, no shoaling of this depth is evident. Delete the "Shoaling to 3 feet rep 1972" note and chart representative soundings from this survey. *Shoaling to 1 ft (0.4 meters) exists 300 meters to the northwest of the charted AWOIS item.* *Concur*

AWOIS #5508 was a shoal report from LNM7/87--8TH CGD at latitude 028°27'44.0" N and 096°20'30.9" W. The 50 meter development on the final field sheet clearly identifies the extent of this area with depths ranging from 4.6 feet (1.4 meters) to 18.0 feet (5.5 meters). Recommend charting the 4.6 foot (1.4m) sounding found at latitude 28°27'42"N, longitude 096°20'28"W, as well as other representative soundings from this survey. *Concur*

A charted uncovering shoal at latitude 28°25'15"N, longitude 096°23'50"W, was developed with fifty meter line spacing. The area no longer uncovers, however a large shoal area extends from shore, indicating evidence of this feature migrating toward shore. *Chart area as shown on the smooth sheet.*

The shoreline on the compared charts has not been updated to reflect the shoreline appearing on TP-01647 and TP-01648. Shoreline from these manuscripts should supersede currently charted shoreline. *Concur*

Two discontinued spoil areas charted south of and parallel to the Intracoastal Waterway between longitude 096°23'45"N and longitude 096°19'00"N, were developed with 50 meter line spacing. The charted spoil areas should be deleted, and representative soundings from this survey should be charted in these areas. *Concur*

The ^{project}controlling depth for the Intracoastal Waterway is charted at 12 foot; no depths shoaler than this were found within the channel limits. *Concur*

The controlling depth for the Matagorda Ship channel is listed as 38.8 feet for the middle half of the Sea Bar and Jetty Channel and as 33.5 feet for the middle half, to light 48. No depths shoaler than these were found. *Concur*

Bottom samples agreed with those characteristics charted. *Concur*

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

O. ADEQUACY OF SURVEY ✓

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

P. AIDS TO NAVIGATION *See Encl Report, section 7d. for a complete listing of aids*

Twenty-eight floating aids to navigation are charted within the sheet limits of this survey. Twenty-four of these aids were located by detached positions. Four privately maintained pipeline buoys charted in the vicinity of a submerged pipeline area along the Intra Coastal Waterway were not present at the time of this survey. They are charted as W Or Private Maintained "A", "B" and "C". The "C"* buoy having the same characteristic both north and south of the Intra Coastal Waterway. These buoys are identified in both the 1991 and 1992 editions of the U.S.C.G. Light List as Transco Pipeline buoys (LL# 34872 & 34873) and Buttes Resources Pipeline Buoys A & B (LL# 34890 & 34895). Contact with Chief Gary Heater (512-983-4313), of the U.S.C.G. Aids to Navigation Team at Port O'Connor, Texas indicated two of the buoys, A and B, were replaced since the field party moved, but shortly thereafter, buoy B was missing again and buoy A was off station. Chief Freeman, officer-in-charge of the private aids section for the Eighth U.S.C.G. District (OAN)(504-589-6236) was contacted for information about these buoys, and provided telephone numbers of the pipeline companies owning them. Both John Frazier (713-627-9277) with Buttes Resources Pipeline Company and Jack Brewer (512)552-3971 with Tejas Power (new owners of the Transco buoys) said the buoys owned by them are still being maintained, and should be retained as charted. *Concur*

All floating aids were found to serve the apparent purpose for which they were established. Geographic positions for the floating aids may be found in the Daily Log included as part of this survey. A comparison of their charted and surveyed position is shown in the following table:

* "C" is the characteristic not the name, c stands for can buoy.

NAVAID	USCG LL Number	Distance and Direction from Charted Location
RN "6"	34925	On Charted Station
GC "5"	34920	30 meters west
RN "4"	34915	On Charted Station
GC "121"	34900	On Charted Station
GC "119"	34885	On Charted Station
GC "117"	34880	30 meters south
GC "115"	34875	35 meters south
RN "114"	34870	30 meters southwest
GC "113"	34865	On Charted Station
GC "111"	34860	On Charted Station
GC "109"	34855	On Charted Station
RN "108"A	34852	90 meters southeast
GC "107"	34845	35 meters south
RN "108"	34850	On Charted Station
GC "105"	34840	On Charted Station
RN "104"	34835	70 meters northwest
GC "103"	34830	On Charted Station
GC "101"	34825	On Charted Station
RN "100"	34820	On Charted Station
GC "99"	34815	30 meters northwest
GC "97"	34810	30 meters southwest
FLR "18"	26190	On Charted Station
FLR "14"	26165	On Charted Station
FLG "13"	26160	On Charted Station

None of the buoys found off station pose a danger to navigation, as they are off station parallel to the axis of the channel, and still adequately mark it. *Concur*

There are eleven non-floating aids charted within the limits of this survey. Six were located to Third Order, Class I standards by the Coastal Mapping Unit for use as control on this survey.

They are as follows:

- Matagorda Ship Chan. Range A Front Light, (LL# 26105)
- Matagorda Ship Chan. Range A Rear Light, (LL# 26110)
- Matagorda Bay Range K Rear Light, (LL# 34775)
- Entrance South Side Dredging Range Rear Light, (LL# 26170)
- Entrance North Side Dredging Range Rear Light, (LL# 26180)
- Port O' Connor Light 2, (LL# 34910)

The position for these lights can be found on the Control Station List in ~~Appendix III~~ of this report *x* and *section 7.d of ERM Report.*
attached to

The Entrance North Side Dredging Range Front Light, (LL# 26175) has been destroyed. The remaining structure has been located and a dive was performed to ascertain least depth, and size. The dive was conducted on Feb. 28, 1992 (DN 059). A danger to navigation letter was submitted for this feature. *Attached to this report*
The position of this feature is lat. 28°26'27.8N, long. 96°20'33.3W, pos # 776. CHART as 3^B Obstruction
Reference section IV of this report, page 8.

There were two single pile structures in Matagorda Ship channel, Lights 17 and 19, with aero-triangulated positions. The survey detached positions were compared to the aero-triangulated positions and found to differ; light 17 was located 35m east of the aero-triangulated position while light 19 was 20m south of the aero-triangulated position. Both of these lights were rebuilt in 1991, well after the aero-triangulated positions were determined from 1989 photography. These lights should be charted based on the detached positions obtained on this survey. The positions for these two lights are included on the NOAA form 76-40 in ~~Appendix II~~ *attached to* of this report.

The remaining two non-floating aids, Port O' Connor, ^{channel} Lt 1 and Matagorda Ship channel Lt 20 were located by the Atlantic Hydrographic Party with GPS to Third Order, Class I standards. A NOAA form 76-40 was submitted with this survey for the aforementioned fixed aids to navigation. *copy attached*

Only one of the non-floating aids had a USCG LL position for comparison. This comparison is shown in the following table:

Non-Floating Aid	Survey Position	USCG LL Position
Matagorda Ship Chan.	28°26'28.64"N	28°26.4'N
Light 17 (26185)	096°20'51.31"W	096°20.8'W

An overhead cable charted at latitude 28°26'30"N, longitude 096°24'06"W no longer exists and should be deleted from charts 11317 and 11319. There were no bridges, overhead cables (as noted earlier), overhead pipelines, or ferry routes within the limits of this survey. There are several charted submerged pipelines and cable areas. No changes to chart representation of these areas is recommended.

CONCL
CONCL

Q. STATISTICS ✓

<u>Description</u>	<u>Quantities</u>
Total Positions	^{23 78} 3539
Total Nautical Miles of Hydrography	281.3
Sq. Nautical Miles of Hydrography	11.5
Total Nautical Miles of Chain Drag	46.9
Days of Production	25
Detached Positions	72
Bottom Samples	30
Tide Stations	3
Current Stations	0
Velocity Casts	9

R. MISCELLANEOUS ✓

Bottom samples were taken and submitted to the Smithsonian Institution as directed in Section 6.7 of the project instructions. There were 30 bottom samples transmitted on November 27, 1992. 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 the Separates,* section II.

It should be noted that the sounding vessel used for this survey is limited by draft to approximately 0.5 meters on the keel line and is therefore limited in its ability to acquire sounding data in areas shallower than 0.5 meters.

S. RECOMMENDATIONS ✓ *See Section 3 and 7a of EOPC Report.*

Specific recommendations concerning this survey are made in sections "J", "N" and "P" of this report.

* Filed with the hydrographic data.

T. REFERRAL TO REPORTS ✓

<u>Titles</u>	<u>Transmittal Information</u>
(1991)Horizontal Control Report for OPR-K228-AHP2	Field Photogrammetry Section Norfolk, VA, N/CG233
(1991)Descriptive Report to Accompany Survey H-10395	Pacific Hydrographic Section N/CG 245, Seattle, WA
(1991)Descriptive Report to Accompany Survey H-10397	Pacific Hydrographic Section N/CG 245, Seattle, WA
Chart Sales Agent Report for OPR-K228-AHP2	Chart Distribution Branch (N/CG33) Rockville, MD (1992)
User Evaluation Report OPR-K228-AHP2	Atlantic Hydrographic Section (N/CG244) Norfolk, VA (1992)
Chart Inspection Report OPR-K228-AHP2	Atlantic Hydrographic Section (N/CG244) Norfolk, VA (1992)
Coast Pilot Report	Pacific Hydrographic Section (N/CG245) Seattle, WA (1992)

Submitted By: ATLANTIC HYDROGRAPHIC PARTY

AWOIS NO: 5441

Item Description: Pier

Source: Unknown Source--Pier shown on chart 11319 prior to 1962.
NM37/62--Wharf(pier), reported destroyed and not rebuilt.

AWOIS Position: Lat - 28/27/11.00 N Lon - 096/24/02.90 W

Required Investigation: VS,DI,SD,##. 50 meter swath.

Charts Affected: 11316, 11317, 11319.

INVESTIGATION

Date(s)/DN(s): 1/23/92 (023)

Position Numbers: 777-805

Launch Number: 0518

Investigation Used: BD

Water Visibility: 2-3 m

Position Determined By: Falcon Multiple Range

Investigation Summary: A chain drag was conducted at the charted location with 60 feet of tow line and 100 feet of chain between the trawl doors, at 10 meter line spacing. The required swath area was covered and no snags or contacts were encountered.

CHARTING RECOMMENDATION

The hydrographer recommends removing the charted pier ruins.

Recommended Position: N/A

Concur

Recommended Least Depth: N/A

COMPILATION NOTES

Chart

Applied As

AWOIS NO: 5442

Item Description: Cluster of 7 piles on TOPO sheet

Source: T9284/46--scaled from chart 11319 (1:40,000)

AWOIS Position: Lat - 28/27/01.00N Lon - 096/24/04.90W

Required Investigation: VS,BD,DI,SD,##. 50 meter swath search on center line of row of piles.

Charts Affected: 11316, 11317, 11319.

INVESTIGATION

Date(s)/DN(s): 11/12/91 (316)

Position Numbers: 61

Launch Number: 0518

Investigation Used: VS

Water Visibility: 3-4 m

Position Determined By: Falcon Multiple Range

Investigation Summary: The remains of two piles, 3 meters apart in ruins, were discovered visually at the reported location. A wading search in knee deep water revealed no other piles or obstructions remaining in this vicinity with the exception of AWOIS 5443. The water visibility was very good. A photo can be found in the daily record log book, included with survey H-10412.

CHARTING RECOMMENDATION

The hydrographer recommends deleting the currently charted pile symbols for this item and charting a pile symbol with the notation "2 piles" centered at the following position. CONCUR

Recommended Position: Lat - 28/26/59.3² Lon - 096/24/04.5⁸

Recommended Least Depth: The piles are visible ^{0.8} 1.0 meter at predicted MLLW.
mllw.

COMPILATION NOTES

Chart

Applied As

AWOIS NO: 5443

Item Description: Wreck of F/V " Grand Prize "

Source: LNM49/72--8th CGD, CL1938/75--USPS, subm. wreck

AWOIS Position: Lat - 28/27/01.00N Lon - 096/24/00.90W

Required Investigation: BD,DI,SD. 200 meter radius.

Charts Affected: 11316, 11317, 11319.

INVESTIGATION

Date(s)/DN(s): 11/12/91 (316)

Position Numbers: 62

Launch Number: 0518

Investigation Used: VS

Water Visibility: 3-4 m

Position Determined By: Falcon Multiple Range

Investigation Summary: The center of ruins flat on the bottom approximately 12 meters long and 3 meters wide with some rocks and wooden debris was discovered at the charted location visually. The water visibility was very good. The wreckage is in one meter of water and of no danger to navigation.

CHARTING RECOMMENDATION

The hydrographer recommends revising the charted submerged wreck to the following position, and deleting the PA notation..

CHART DB WK

CMCWR

Recommended Position: Lat - 28/26/59.⁶⁰49 Lon - 096/24/03.0³2

Recommended Least Depth: 0.⁵6 meters at ~~predicted~~ MLLW.

COMPILATION NOTES

Chart

Applied As

AWOIS NO: 5444

Item Description: ^{Subm} Pile

Source: Unknown Source--Pile shown on 1965 edition of chart 11317
CL1398/75--USPS; pile reported not visible, charted as
submerged on 11319, Position scaled from chart (1:40,000)

AWOIS Position: Lat - 28/27/04.00N Lon - 096/23/54.90 W

Required Investigation: BD,DI,SD. 100 meter radius

Charts Affected: 11316, 11317, 11319.

INVESTIGATION

Date(s)/DN(s): 1/23/92 (023)

Position Numbers: 806-871

Launch Number: 0518

Investigation Used: BD

Water Visibility: 2-3 m

Position Determined By: Falcon Multiple Range

Investigation Summary: A chain drag was conducted at the charted location with 60 feet of tow line and 100 feet of chain between the trawl doors, at 10 meter line spacing. The required search radius was covered and no snags or contacts were encountered.

CHARTING RECOMMENDATION

The hydrographer recommends removing the charted ^{subm} pile. *concur*

Recommended Position: N/A

Recommended Least Depth: N/A

COMPILATION NOTES

Chart

Applied As

AWOIS NO: 5445

Item Description: Submerged Obstruction

Source: LNM46/81--8th CGD; Submerged Obstruction reported.
Position scaled from chart 11319 (1:40,000).

AWOIS Position: Lat - 28/26/38.00N Lon - 096/23/44.90W

Required Investigation: BD,DI,SD. 100 meter radius

Charts Affected: 11316, 11317, 11319.

INVESTIGATION

Date(s)/DN(s): 1/23/92 (023), 2/28/92 (059)

Position Numbers: 872-914

Launch Number: 0518

Investigation Used: BD

Water Visibility: 2 m

Position Determined By: Falcon Multiple Range

Investigation Summary: A chain drag was conducted at the charted location with 60 feet of tow line and 100 feet of chain between the trawl doors, at 10 meter line spacing. A hard snag was encountered on reference line 90. The vessel was pulled back to the snag and position number 914 was taken above the hang. According to local knowledge obtained from a crew boat captain during the investigation, a "Hopper Barge" loaded with rocks sank in this vicinity and was later salvaged. However a large portion of the rocks were lost in this location and charted as an obstruction. A dive was conducted in this area on February 28, 1992. A 12 inch diameter steel pipe lying flat on bottom was discovered projecting 0.8 of a meter off the bottom. The pipe is perpendicular to the channel and outside of the channel limits. A Danger to Navigation Report has been submitted for this item.

CHARTING RECOMMENDATION

The hydrographer recommends revising the obstruction reported to submerged obstruction at the following location. *Chart 3² Obstruction. Concur*

Recommended Position: Lat - 028/26/38.4² Lon - 096/23/41.4⁵

Recommended Least Depth: 3.2 meters by leadline at ^{approved} predicted MLLW.

COMPILATION NOTES

Chart

Applied As

AWOIS NO: 5446

Item Description: Visible ruins

Source: Unknown source -- shown on chart 11319 prior to 1966 edition. Scaled from chart 11319 (1:40,000).

AWOIS Position: Lat - 28/26/23.00N Lon - 096/23/42.90W

Required Investigation: VS,DI,##. Search 50 meters alongshore.

Charts Affected: 11316, 11317, 11319.

INVESTIGATION

Date(s)/DN(s): 11/12/91 (316)

Position Numbers: 59 & 60

Launch Number:0518

Investigation Used: VS

Water Visibility: 3-4 m

Position Determined By: Falcon Multiple Range

Investigation Summary: The remains of piles in ruins were discovered visually at the reported location in two rows perpendicular to shore. This item required two positions to accurately portray the offshore limits of the numerous wooden piles in ruins. The water visibility was very good and the limits of the ruins were easy to distinguish. The piles are visible $\frac{1.0}{0.8}$ meter at ~~predicted~~ $\frac{MLLW}{MHW}$.

CHARTING RECOMMENDATION

The hydrographer recommends revising the charted ruins to the following positions, which are the offshore end of each row of ruins, and extending them perpendicular into shore..

CONWAY
Pos#

Recommended Position: Lat -	28/26/20.8 ⁸ ₅	Lon -	096/23/45.7 ² ₃	69
	28/26/24.6 ³		096/23/44.1 ²	60

Recommended Least Depth: N/A

COMPILATION NOTES

Chart

Applied As

AWOIS NO: 5448

Item Description: Pile *rep PA*

Source: CL1930/75--USPS; A piling reported to be located at approximate position. Height of pile about 9 ft.

AWOIS Position: Lat - 28/23/56.01N Lon - 096/24/02.90W

Required Investigation: VS,DI,SD. 100 meter radius.

Charts Affected: 11316, 11317, 11319.

INVESTIGATION

Date(s)/DN(s): 1/24/92 (024)

Position Numbers: 915-979

Launch Number: 0518

Investigation Used: BD

Water Visibility: 3-4 m

Position Determined By: Falcon Multiple Range

Investigation Summary: A chain drag was conducted at the charted location with 60 feet of tow line and 100 feet of chain between the trawl doors, at 10 meter line spacing. The required radius was covered and no snags or contacts were encountered.

CHARTING RECOMMENDATION

The hydrographer recommends removing the charted ^{rep} pile *PA*. *count*

Recommended Position: N/A

Recommended Least Depth: N/A

COMPILATION NOTES

Chart

Applied As

AWOIS NO: 5450

Item Description: Pile PA

Source: CL1938/75--USPS; A pile 1 FT in diameter about 5 FT above water reported. Position scaled from chart 11319 (1:40,000).

AWOIS Position: Lat - 28/24/11.01N Lon - 096/23/05.90W

Required Investigation: VS,DI,SD. 100 meter radius.

Charts Affected: 11316, 11317, 11319.

INVESTIGATION

Date(s)/DN(s): 1/24/92 (024)

Position Numbers: 980-1042

Launch Number: 0518

Investigation Used: BD

Water Visibility: 3-4 m

Position Determined By: Falcon Multiple Range

Investigation Summary: A chain drag was conducted at the charted location with 60 feet of tow line and 100 feet of chain between the trawl doors, at 10 meter line spacing. The required search radius was covered and no snags or contacts were encountered.

CHARTING RECOMMENDATION

The hydrographer recommends removing the charted pile PA.

concur

Recommended Position: N/A

Recommended Least Depth: N/A

COMPILATION NOTES

Chart

Applied As

AWOIS NO: 5451

Item Description: Piling PA

Source: CL1813/72--USPS; piling located in cove reported to mark safe anchorage.

AWOIS Position: Lat - 28/24/03.01N Lon - 096/22/32.90W

Required Investigation: VS,DI,SD. 100 meter radius.

Charts Affected: 11316, 11317, 11319.

INVESTIGATION

Date(s)/DN(s): 1/24/92 (024)

Position Numbers: None

Launch Number: 0518

Investigation Used: VS

Water Visibility: 2-3 m

Position Determined By: Falcon Multiple Range

Investigation Summary: A visual search was conducted near the charted location with waders in ankle deep water. The survey launch was hard aground approximately 313 meters west of the target location in 0.5 meters of water. The bottom was clearly visible and no evidence of a pile or submerged pile was seen. A photograph was taken at the vessels position facing east to show the apparent shoaling that has occurred and the distance to the shoreline. This photo can be found in the Daily Log for DN 024, included with survey H-10412.

The Piling PA is not shown on chart 11319.

CHARTING RECOMMENDATION

The hydrographer recommends removing the charted piling PA. *correct*

Recommended Position: N/A

Recommended Least Depth: N/A

COMPILATION NOTES

Chart

Applied As

AWOIS NO: 5452

Item Description: Submerged Obstruction *Rep*

Source: CL1813/72--USPS; Submerged Obstruction reported
at approximate position.

AWOIS Position: Lat - 28/24/39.01N Lon - 096/22/31.90W

Required Investigation: BD,DI,SD. 200 meter radius.

Charts Affected: 11316, 11317, 11319.

INVESTIGATION

Date(s)/DN(s): 1/30/92 (030)

Position Numbers: 1043-1216

Launch Number: 0518

Investigation Used: BD

Water Visibility: 2-3 m

Position Determined By: Falcon Multiple Range

Investigation Summary: A chain drag was conducted at the charted location with 60 feet of tow line and 100 feet of chain between the trawl doors, at 10 meter line spacing. The required search radius was covered and no snags or contacts were encountered.

CHARTING RECOMMENDATION

The hydrographer recommends removing the obstruction reported PA
from the chart. *COMOW*

Recommended Position: N/A

Recommended Least Depth: N/A

COMPILATION NOTES

Chart

Applied As

AWOIS NO: 5454

Item Description: ^{Subm} Ruins of East Shoal Lighthouse

Source: CL775/35--NOS; Ruins of East Shoal Lighthouse reported submerged. Position scaled from chart 11319 (1:40,000).

AWOIS Position: Lat - 28/25/25.00 N Lon - 096/22/26.90 W

Required Investigation: BD,DI,SD. 50 meter radius.

Charts Affected: 11316, 11317, 11319.

INVESTIGATION

Date(s)/DN(s): 1/31/92 (031)

Position Numbers: 1284-1327

Launch Number: 0518

Investigation Used: BD

Water Visibility: 2-3 m

Position Determined By: Falcon Multiple Range

Investigation Summary: A chain drag was conducted at the charted location with 60 feet of tow line and 100 feet of chain between the trawl doors, at 10 meter line spacing. The required search radius was covered and no snags or contacts were encountered.

CHARTING RECOMMENDATION

The hydrographer recommends removing the charted submerged ruins. *CMCWR*

Recommended Position: N/A

Recommended Least Depth: N/A

COMPILATION NOTES

Chart

Applied As

AWOIS NO: 5456

Item Description: A 16 Ft. Aluminum boat.

Source: LNM13/83--8th CGD; Reported sunk in approx. pos.
LNM19/83--8th CGD; charted as submerged. (PD)

AWOIS Position: Lat - 28/27/07.00 N Lon - 096/22/12.90 W

Required Investigation: BD,DI,SD,##. 150 meter radius.

Charts Affected: 11316, 11317, 11319.

INVESTIGATION

Date(s)/DN(s): 1/15/92 (015)

Position Numbers: 489-541

Launch Number: 0518

Investigation Used: BD

Water Visibility: 2 m

Position Determined By: Falcon Multiple Range

Investigation Summary: A chain drag was conducted at the charted location with 60 feet of tow line and 100 feet of chain between the trawl doors, at 10 meter line spacing. A snag was encountered on reference line 290, however the vessel had difficulty staying on the snag, on several attempts. A dive was conducted in this area on February 28, 1992 (DN 059). This time when the snag was hung, the boat was able to drag it. Divers found a small boat anchor, approximately 18" x 24". The anchor was retrieved and discarded. No other snags were encountered in the required drag area.

CHARTING RECOMMENDATION

The hydrographer recommends removing the charted wreck from the chart.

Correct

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

Recommended Least Depth:

COMPILATION NOTES

Chart

Applied As

AWOIS NO: 5459

Item Description: Platform ruins

Source: Unknown Source--chart 11319(1284)1966
CL1419/75--USPS, scaled from 11319 (1:40,000)

AWOIS Position: Lat - 28/27/05.00N Lon - 096/21/40.90W

Required Investigation: VS,BD,DI,SD. 50 meter radius

Charts Affected: 11316, 11317, 11319.

INVESTIGATION

Date(s)/DN(s): 1/21/92 (021)

Position Numbers: 542-564

Launch Number: 0518

Investigation Used: BD

Water Visibility: 2-3 m

Position Determined By: Falcon Multiple Range

Investigation Summary: A chain drag was conducted on the charted location with 60 feet of tow line and 100 feet of chain between the trawl doors, at 10 meter line spacing. Several snags were encountered during the course of the investigation. While pulling back to the item the drag came off twice. The drag was reset and once again snagged on a hard feature near the scaled location. The launch was pulled back to the hang and position number 564 was taken on top of the feature. The submerged ruins are most likely flat and apparently very close to the bottom, creating a snag that is difficult to hang onto with the drag. This precluded obtaining a least depth with a pole or lead line. Because of the strong current in this area a dive was not conducted.

CHARTING RECOMMENDATION

The hydrographer recommends revising the charted platform ruins to the following location. C/MC/MV

Recommended Position: Lat - 028/27/04.⁶¹59 Lon - 096/21/42.3⁵4

Recommended Least Depth: 4.0⁴ meters at predicted MLLW.

COMPILATION NOTES

Chart

Applied As

AWOIS NO: 5460

Item Description: Submerged Object^{PA} on South side of Chan.

Source: LNM33/82--8th CGD; Submerged object, scaled from chart 11319 (1:40,000).

AWOIS Position: Lat - 28/27/41.00N Lon - 096/20/35.90W

Required Investigation: BD,DI,SD. 100 meter radius.

Charts Affected: 11316, 11317, 11319.

INVESTIGATION

Date(s)/DN(s): 1/21/92 (021), 2/28/92 (059)

Position Numbers: 565-647

Launch Number: 0518

Investigation Used: BD

Water Visibility: 2-3 m

Position Determined By: Falcon Multiple Range

Investigation Summary: A chain drag was conducted at the charted location with 60 feet of tow line and 100 feet of chain between the trawl doors, at 10 meter line spacing. Several snags were encountered during the course of the investigation. While pulling back to the item the drag came off once. The drag was reset and once again snagged on a hard feature near the item location. The launch was pulled back to the hang and position number 647 was taken on top of the feature. The submerged obstruction was investigated by divers on February 28, 1992 (DN 059). A barnacle encrusted 2 foot square block was discovered projecting 12 inches off the bottom. This obstruction could have been an anchor for an old buoy.

CHARTING RECOMMENDATION

The hydrographer recommends revising the charted submerged obstruction to the following location. *Chart 2³ Obstruction. concur*

Recommended Position: Lat - 028/27/39.5² Lon - 096/20/37.3²

Recommended Least Depth: 2.³ meters by leadline at predicted MLLW.

COMPILATION NOTES

Chart

Applied As

AWOIS NO: 5461

Item Description: Dolphin

Source: CL1813/72--USPS, Dol. reported to create a hazard to navigation. Scaled from chart 11319 (1:40,000).

AWOIS Position: Lat - 28/26/03.00N Lon - 096/21/27.90W

Required Investigation: VS,BD,DI,SD. 100 meter radius.

Charts Affected: 11316, 11317, 11319.

INVESTIGATION

Date(s)/DN(s): 11/21/91 (325), 11/27/91 (331).

Position Numbers: 312-335

Launch Number: 0518

Investigation Used: BD & DI

Water Visibility: 2-3 m

Position Determined By: Falcon Multiple Range

Investigation Summary: A chain drag was conducted on the charted location with 60 feet of tow line and 100 feet of chain between the doors, at 10 meter line spacing. A snag was encountered at position number 334 where a spike was discovered. The launch was pulled back to the spike and position number 335 was taken on top of the feature. A dive was conducted at this position on DN 331. A one meter square brick platform with wooden ruins was discovered at the snagged location. A leadline least depth was taken on the highest point of the submerged obstruction.

CHARTING RECOMMENDATION

The hydrographer recommends removing the charted dolphin rep and charting a submerged obstruction at the following position. *Concur*

Chart 1⁷ Obstruction
Recommended Position: Lat - 28/26/03.8⁴ Lon - 096/21/27.4⁸7

Recommended Least Depth: 1.7 meters by leadline at ~~predieted~~ MLLW.

COMPILATION NOTES

Chart

Applied As

AWOIS NO: 5462

Item Description: Platform ruins

Source: TP00218--Final, Class III; platform ruins identified from 1977 color photography. CL998/80--Form 76-40 recorded position.

AWOIS Position: Lat - 28/26/38.49N Lon - 096/20/46.84W

Required Investigation: VS,BD,DI,SD. 25 meter radius.

Charts Affected: 11316, 11317, 11319.

INVESTIGATION

Date(s)/DN(s): 11/21/91 (325)

Position Numbers: 337-350

Launch Number: 0518

Investigation Used: BD

Water Visibility: 2-3 m

Position Determined By: Falcon Multiple Range

Investigation Summary: A chain drag was conducted over the required search radius with 60 feet of tow line and 100 feet of chain between the trawl doors, at 10 meter line spacing. No snags or contacts were encountered.

CHARTING RECOMMENDATION

The hydrographer recommends removing the charted platform ruins. *cmw*

Recommended Position: N/A

Recommended Least Depth: N/A

COMPILATION NOTES

Chart

Applied As

AWOIS NO: 5463

Item Description: 17 ft P/C (subm. wreck) PP

Source: LNM19/83--8th CGD, LNM27/83--8th CGD--scaled from chart 11319 (1:40,000).

AWOIS Position: Lat - 28/27/03.00N Lon - 096/20/37.90W

Required Investigation: VS,BD,DI,SD,##. 200 meter radius restricted by low water curve.

Charts Affected: 11316, 11317, 11319.

INVESTIGATION

Date(s)/DN(s): 11/13/91 (317)

Position Numbers: 63-111

Launch Number: 0518

Investigation Used: BD

Water Visibility: 2-3 m

Position Determined By: Falcon Multiple Range

Investigation Summary: A chain drag was conducted at twenty meter line spacing with 60 feet of tow line and 100 feet of chain between trawl doors. Because of the close proximity to the spoil island the search was somewhat restricted by the low water curve. Depths of water in the drag area ranged from one meter to seven meters. There were no snags or contacts encountered during the investigation

CHARTING RECOMMENDATION

The hydrographer recommends removing this wreck symbol from the chart.

concur

Recommended Position: N/A

Recommended Least Depth: N/A

COMPILATION NOTES

Chart

Applied As

AWOIS NO: 5465

Item Description: Platform ruins

Source: Unknown Source--chart 11319(1284)1965
CL1419/75--USPS, scaled from 11319 (1:40,000)

AWOIS Position: Lat - 28/26/33.00 N Lon - 096/20/57.90 W

Required Investigation: VS,BD,DI,SD,##. 50 meter radius.

Charts Affected: 11316, 11317, 11319.

INVESTIGATION

Date(s)/DN(s): 11/21/91 (325)

Position Numbers: 351-353

Launch Number: 0518

Investigation Used: BD

Water Visibility: 2-3 m

Position Determined By: Falcon Multiple Range

Investigation Summary: A chain drag was conducted at the charted location with 60 feet of tow line and 100 feet of chain between the trawl doors, at 10 meter line spacing. A snag was encountered on the first pass at position number 352. While pulling back to the item the drag came off. The drag was set over again and pulled across the scaled location from the channel side. The drag once again snagged on a hard feature near the scaled location. The launch was pulled back to the hang and position number 353 was taken on top of the feature. While retrieving the drag, cables and wood were found on the chain. Because of the strong current in this area a dive was not conducted. The current also precluded obtaining a least depth by means other than the depth sounder.

CHARTING RECOMMENDATION

The hydrographer recommends revising the charted platform ruins to the following location and change to *subm destr (platform ruins)*

Recommended Position: Lat - 028/26/32.4³ Lon - 096/20/58.0⁸₇

Recommended Least Depth: 3.⁹₇ m at predicted MLLW (from fathogram).

COMPILATION NOTES

Chart

Applied As

AWOIS NO: 5466

Item Description: ^{Subm} Pipe ^{rep}

Source: NMI/66--Pipe reported extending 2 FT above water.
CL1813/72--USPS; pipe no longer existing, charted
as submerged pipe.

AWOIS Position: Lat - 28/25/34.00N Lon - 096/21/30.90W

Required Investigation: BD,DI,SD. 100 meter radius.

Charts Affected: 11316, 11317, 11319.

INVESTIGATION

Date(s)/DN(s): 1/31/92 (031)

Position Numbers: 1217-1282

Launch Number:0518

Investigation Used: BD

Water Visibility: 2-3 m

Position Determined By: Falcon Multiple Range

Investigation Summary: A chain drag was conducted at the charted location with 60 feet of tow line and 100 feet of chain between the trawl doors, at 10 meter line spacing. The required search radius was covered and no snags or contacts were encountered.

CHARTING RECOMMENDATION

The hydrographer recommends removing the charted submerged pipe, ^{rep} _{CONWAY}

Recommended Position: N/A

Recommended Least Depth: N/A

COMPILATION NOTES

Chart

Applied As

AWOIS NO: 5467

Item Description: Fishing vessel ("Terry Lynn" or "Tanya")

Source: LNM47/85--USPS, reported grounded at position approx.

AWOIS Position: Lat - 28/25/55.00 N Lon - 096/20/45.90 W

Required Investigation: VS, BD, DI, SD, ##. 200 meter radius

Charts Affected: 11316, 11317, 11319.

INVESTIGATION

Date(s)/DN(s): 11/14/91 (318), 11/27/91 (331).

Position Numbers: 251-311, 354.

Launch Number: 0518

Investigation Used: BD, DI

Water Visibility: 2-3 m

Position Determined By: Falcon Multiple Range

Investigation Summary: A chain drag was conducted on the charted location with 60 feet of tow line and 100 feet of chain between the trawl doors, at 20 meter line spacing. A snag was encountered at position number 271 where a small spike was discovered. The launch was pulled back to the spike and position number 272 was taken on top of the feature. A dive was conducted at this position on DN 331. A concrete and wood obstruction was discovered approximately 10 meters long and 5 meters wide. The relationship of this obstruction and the reported wreck is unknown. No other snags or contacts were made in this area with the exception of AWOIS 5468. A leadline least depth was taken at the highest point of the submerged feature with position number 354 on DN 331 serving as the revised location of this item.

CHARTING RECOMMENDATION

The hydrographer recommends removing the charted ^{visible}wreck symbol and charting a submerged obstruction at the following position. *concur*

Recommended Position: Lat - 28/25/57.76⁸ Lon - 096/20/43.16⁷

Recommended Least Depth: 2.9³ meters ^{at mclw} by ~~leadline~~. *Subm obstruction (platform ruins)*

COMPILATION NOTES

Chart

Applied As

AWOIS NO: 5468

Item Description: Wreckage of barge

Source: BP75188--Wreckage of barge visible at HW
CL1419/75--USPS Wreck reported missing, charted as subm.
scaled from chart 11319 (1:40,000).

AWOIS Position: Lat - 28/26/01.00 Lon - 096/20/43.90

Required Investigation: VS,BD,DI,SD,##. 200 meter radius.

Charts Affected: 11316, 11317, 11319.

INVESTIGATION

Date(s)/DN(s): 11/14/91 (318)

Position Numbers: 192-250

Launch Number: 0518

Investigation Used: BD

Water Visibility: 2-3 m

Position Determined By: Falcon Multiple Range

Investigation Summary: A chain drag was conducted over the required search radius with 60 feet of tow line and 100 feet of chain between the trawl doors, at 20 meter line spacing. A snag was encountered at position number 249 where a large spike was discovered. The launch was pulled back to the spike and position number 250 was taken on top of the feature. A leadline least depth was taken on the spike which is clearly evident on the fathogram. The size of the remains could not be adequately determined.

CHARTING RECOMMENDATION

The hydrographer recommends revising the charted wreck to the following position, and removing the PA notation. *chart 1⁹ wk.*

Recommended Position: Lat - 28/26/00.1⁴₂ Lon - 096/20/43.7¹₀ *concur*

Recommended Least Depth: 2.^{1,9}₆ meters by leadline at predicted MLLW.

COMPILATION NOTES

Chart

Applied As

AWOIS NO: 5469

Item Description: Platform ruins

Source: Unknown Source, first shown on 1965 edition of chart 11316(1284). CL1419/75--USPS; platform reported missing and charted as ruins scaled from chart 11319 (1:40,000).

AWOIS Position: Lat - 28/26/09.00N Lon - 096/20/24.90W

Required Investigation: VS,BD,DI,SD,##. 50 meter radius.

Charts Affected: 11316, 11317, 11319.

INVESTIGATION

Date(s)/DN(s): 1/22/92 (022)

Position Numbers: 714-742

Launch Number: 0518

Investigation Used: BD

Water Visibility: 1-2 m

Position Determined By: Falcon Multiple Range

Investigation Summary: A chain drag was conducted at the charted location with 100 feet of tow line and 100 feet of chain between the trawl doors, at 10 meter line spacing. The required search radius was covered and no snags or contacts were encountered.

CHARTING RECOMMENDATION

The hydrographer recommends removing the charted platform ruins.

Recommended Position: N/A

Recommended Least Depth: N/A

COMPILATION NOTES

Chart

Applied As

AWOIS NO: 5470

Item Description: Dolphins reported ^{PA}

Source: CL1813/72--USPS, Dolphins reported to mark a safe anchorage. Charted as two piles about 60 meters apart. Position scaled from chart 11319 (1:40,000).

AWOIS Position: Lat - 28/26/21.00N Lon - 096/20/07.90W

Required Investigation: VS,BD,DI,SD. 100 meter radius

Charts Affected: 11316, 11317, 11319.

INVESTIGATION

Date(s)/DN(s): 3/12/92 (072)

Position Numbers: 3537, 3538 Launch Number: 0518

Investigation Used: VS Water Visibility: 2 m

Position Determined By: Falcon Multiple Range

Investigation Summary: The reported feature was discovered at the edge of the search radius and the positions were taken beside each steel pile with no offset. Although reported as dolphins the actual charting of piles is correct. A photo may be found in the daily survey record log book included with survey H-10412.

CHARTING RECOMMENDATION

The hydrographer recommends deleting the currently charted PA ^{ref} notation, and charting the pile symbols at the following ^{concur} locations.

Recommended Position: Lat - 28/26/17.82 Lon - 096/20/07.64 ^{Pos #} 3537
28/26/17.59 Lon - 096/20/07.23 3538

Recommended Least Depth: Bares 1.5 meters at ^{mH₀} ~~predicted~~ MLLW.

COMPILATION NOTES

Chart

Applied As

AWOIS NO: 5502

Item Description: Piling^{es} PA.

Source: Unknown Source--piling first shown on 1975 edition of chart 11319(889). Scaled from chart 11319 (1:40,000)

AWOIS Position: Lat - 28/27/33.00N Lon - 096/20/35.90W

Required Investigation: VS,BD,DI,SD. 100 meter radius.

Charts Affected: 11316, 11317, 11319.

INVESTIGATION

Date(s)/DN(s): 1/21/92 (021)

Position Numbers: 648-713

Launch Number: 0518

Investigation Used: BD

Water Visibility: 2 m

Position Determined By: Falcon Multiple Range

Investigation Summary: A chain drag was conducted at the charted location with 60 feet of tow line and 100 feet of chain between the trawl doors, at 10 meter line spacing. The required search radius was covered and no snags or contacts were encountered.

CHARTING RECOMMENDATION

The hydrographer recommends removing the charted piling^{es} PA. *comment*

Recommended Position: N/A

Recommended Least Depth: N/A

COMPILATION NOTES

Chart

Applied As

AWOIS NO: 5509

Item Description: 17 ft P/C (subm. wreck) "Cheetah" PA

Source: LNM7/87--8th CGD reported subm.

AWOIS Position: Lat - 28/26/31.00N Lon - 096/20/12.90W

Required Investigation: VS, BD, DI, SD, ##. 200 meter radius.

Charts Affected: 11316, 11317, 11319.

INVESTIGATION

Date(s)/DN(s): 11/13/91 (317)

Position Numbers: 112-191

Launch Number: 0518

Investigation Used: BD

Water Visibility: 2-3 m

Position Determined By: Falcon Multiple Range

Investigation Summary: A chain drag was conducted over the required search radius, at twenty meter line spacing with 60 feet of tow line and 100 feet of chain between the trawl doors. There were no snags or contacts encountered during the investigation.

CHARTING RECOMMENDATION

The hydrographer recommends removing this wreck symbol^{PA} from the chart. *concur*

Recommended Position:

Recommended Least Depth:

COMPILATION NOTES

Chart

Applied As

CONTROL STATIONS as of 11 Mar 1992

Ho	Type	Latitude	Longitude	H Cart	Freq	Vel Code	MM/DD/YY	Station Name
001	F	028:59:08.751	096:33:48.618	0	250	0.0	05/08/91	ALCOA 1990
002	F	028:40:17.832	096:38:14.547	0	250	0.0	05/08/91	BLUF 1990
003	F	028:39:44.602	096:34:56.482	0	250	0.0	05/08/91	CAHS 1990
004	F	028:34:59.695	096:36:29.911	0	250	0.0	05/08/91	CHOC 1990
005	F	028:33:23.435	096:31:27.214	0	250	0.0	05/08/91	INDI 1990
006	F	028:30:25.466	096:28:47.523	0	250	0.0	05/08/91	INLA 1990
007	F	028:41:53.274	096:34:34.010	0	250	0.0	05/08/91	LAVACA RIVER LIGHT 3
008	F	028:34:07.670	096:33:55.900	0	250	0.0	05/08/91	MAGNOLIA 1934
009	F	028:35:58.915	096:34:14.622	0	250	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	05/08/91	MATAGORDA SHIP CH RNG C R LT
011	F	028:35:46.234	096:34:02.389	0	250	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	05/08/91	MATAGORDA SHIP CH RNG D R LT
013	F	028:38:45.468	096:33:40.338	0	250	0.0	05/08/91	MITCHELL 2 1956
014	F	028:39:23.410	096:36:38.092	0	250	0.0	05/08/91	NOLE 1990
015	F	028:39:26.181	096:35:09.366	0	250	0.0	05/08/91	PIER PK 1990
016	F	028:36:57.750	096:30:48.191	0	250	0.0	05/08/91	RHOD 1990
017	F	028:34:12.754	096:29:19.108	11	250	0.0	05/08/91	SAND 1990
018	F	028:43:17.941	096:36:36.068	0	250	0.0	05/08/91	VEDA 1990
019	F	028:38:37.046	096:33:47.871	0	250	0.0	05/08/91	ZEPP 1989
020	F	028:26:10.962	096:20:01.572	0	250	0.0	05/08/91	TEMP 01
021	F	028:27:39.776	096:17:46.172	0	250	0.0	05/08/91	OSG000 2 1906
022	F	028:35:28.459	096:11:22.074	2	250	0.0	0 10/04/91	LAKE 2 1906
023	F	028:40:34.424	096:16:14.007	0	250	0.0	05/08/91	TURT 1991
024	F	028:36:26.854	096:24:20.046	0	250	0.0	05/08/91	DUNG 1991
025	F	028:35:13.036	096:26:49.243	0	250	0.0	05/08/91	VACA 1991
026	F	028:23:56.880	096:24:25.771	10	250	0.0	F 05/08/91	RUIH 1991
027	F	028:32:20.572	096:18:44.039	0	250	0.0	05/08/91	PLAT PK 1991
028	F	028:41:52.040	096:12:37.980	0	250	0.0	05/08/91	PALA 1991
029	F	028:38:33.080	096:14:06.707	0	250	0.0	05/08/91	INDY 1991
030	F	028:35:08.620	096:17:11.588	10	250	0.0	05/08/91	CHAN PK 1991
031	F	028:34:45.983	096:13:33.884	2	250	0.0	A 05/08/91	EROD 1991
032	F	028:36:02.270	096:14:05.710	0	250	0.0	05/08/91	BULL 1991
033	F	028:26:58.573	096:24:12.879	0	250	0.0	05/08/91	EARL 1991
034	F	028:27:04.927	096:24:15.672	0	250	0.0	05/08/91	3701 E 1989
035	F	028:26:44.592	096:23:42.326	0	139	0.0	05/08/91	TW MB PORT O CONNOR LT 2
036	F	028:27:29.803	096:21:39.302	0	139	0.0	05/08/91	MATAGORDA SHIP CH N DREDGE LT
037	F	028:27:15.806	096:21:29.034	0	139	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	7 05/08/91	PORT O CONNOR MUN TANK
039	F	028:28:50.457	096:17:17.626	0	250	0.0	05/08/91	MATAGORDA BAY RANGE L REAR LT
040	F	028:28:23.779	096:18:36.611	8	250	0.0	9 05/08/91	MATAGORDA BAY RANGE L FRONT LT
041	F	028:27:50.192	096:19:46.084	10	250	0.0	05/08/91	MATAGORDA BAY RANGE K FRONT LT
042	F	028:27:02.189	096:21:02.811	20	250	0.0	9 05/08/91	MATAGORDA BAY RANGE K REAR LT
043	F	028:17:01.247	096:21:11.034	0	139	0.0	05/08/91	MATAGORDA BAY RANGE A REAR LT
044	F	028:26:33.966	096:20:41.968	10	250	0.0	C 05/08/91	MATAGORDA BAY RANGE A FRONT LT
045	F	028:28:27.481	096:26:34.784	0	250	0.0	05/08/91	PORT O CONNOR CABLE TV MAST
046	F	028:25:18.493	096:19:05.924	0	250	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	05/08/91	MATA 1934
048	F	028:25:40.636	096:19:37.260	0	250	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	E 02/24/92	MATAGORDA BAY RANGE H REAR LT
050	F	028:38:33.045	096:19:19.991	0	250	0.0	05/08/91	TRULL SAT
051	F	028:43:28.301	096:15:09.749	0	250	0.0	05/08/91	PALAPORT
052	F	028:28:36.298	096:15:07.070	0	250	0.0	05/08/91	SMYTH SAT
053	F	028:30:56.831	096:10:21.410	0	250	0.0	05/08/91	POE 1934
054	F	028:39:16.000	096:13:41.526	0	250	0.0	05/24/91	COON 1991

Replaces C&GS Form 567.

TO BE CHARTED
 TO BE REVISED
 TO BE DELETED

REPORTING UNIT
 (Field Party, Ship or Office)

AHP 2
 STATE
 Texas

LOCALITY

Matagorda Bay

DATE

4/92

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

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

ORIGINATING ACTIVITY

- HYDROGRAPHIC PARTY
 - GEODETIC PARTY
 - PHOTO FIELD PARTY
 - COMPILATION ACTIVITY
 - FINAL REVIEWER
 - QUALITY CONTROL & REVIEW GRP.
 - COAST PILOT BRANCH
- (See reverse for responsible personnel)

The following objects HAVE HAVE NOT been inspected from seaward to determine their value as landmarks.

OPR PROJECT NO. K228-AHP2

JOB NUMBER

H-10412

DATUM

N.A.D. 1983

METHOD AND DATE OF LOCATION
 (See instructions on reverse side)

CHARTING NAME	DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses)	LATITUDE		LONGITUDE		OFFICE	FIELD	CHARTS AFFECTED
		° / ' / D.M. Meters	° / ' / D.P. Meters	° / ' / D.M. Meters	° / ' / D.P. Meters			
Light	Port O'Connor Channel Light 1 (1992 USCG LL Vol.4 #34905)	28 26	37.184	96 23	39.016		Third Order GPS	11316 11317 11319
Light	Matagorda Ship Channel Light 20 (1992 USCG LL Vol.4 #26200)	28 26	54.720	96 21	17.505		Third Order GPS	11316 11317 11319
Light	Matagorda Ship Channel Light 17 (1992 USCG LL Vol.4 #26185)	28 26	28.64	96 20	51.31		Hydrographic Position Fix	11316 11317 11319
Light	Matagorda Ship Channel Light 19 (1992 USCG LL Vol. 4 #26195)	28 26	50.39	96 21	21.59		Hydrographic Position Fix	11316 11317 11319

L-776(92)

RESPONSIBLE PERSONNEL		ORIGINATOR	
ACTION		<input type="checkbox"/> PHOTO FIELD PARTY <input checked="" type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> OTHER (Specify)	
NAME		FIELD ACTIVITY REPRESENTATIVE	
David B. Elliott		OFFICE ACTIVITY REPRESENTATIVE	
Brian A. Link		<input type="checkbox"/> REVIEWER <input type="checkbox"/> QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE	
INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION' (Consult Photogrammetric Instructions No. 64.)			
OFFICE I. OFFICE IDENTIFIED AND LOCATED OBJECTS Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object. EXAMPLE: 75E(C)6042 8-12-75		FIELD (Cont'd) B. Photogrammetric field positions** require entry of method of location or verification, date of field work and number of the photograph used to locate or identify the object. EXAMPLE: P-8-V 8-12-75 74L(C)2982	
FIELD I. NEW POSITION DETERMINED OR VERIFIED Enter the applicable data by symbols as follows: F - Field L - Located V - Verified 1 - Triangulation 2 - Traverse 3 - Intersection 4 - Resection 5 - Field Identified 6 - Theodolite 7 - Planetable 8 - Sextant A. Field positions* require entry of method of location and date of field work. EXAMPLE: F-2-6-L 8-12-75 *FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.		II. TRIANGULATION STATION RECOVERED When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery. EXAMPLE: Triang. Rec. 8-12-75 III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH Enter 'V-Vis.' and date. EXAMPLE: V-Vis. 8-12-75 **PHOTOGAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.	



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

April 30, 1993

U.S. Army Corps of Engineers
Southwestern Division
Galveston District
P.O. Box 1229
Galveston, TX 77553

Dear Sir:

During office review of hydrographic survey H-10412, Texas, Matagorda Bay, Port O'Connor, several shoals have been found encroaching on the Intracoastal Waterway. These shoals have a range of depths of between 1.6 to 2.0 meters (5 to 6 ft) and are located on the south side of the Intracoastal Waterway between Buoy 97 (L.L.#35315) and Buoy 109 (L.L.#35360). These shoal areas should be carefully monitored. Enclosed is a paper copy of survey H-10412.

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

Sincerely,

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

Enclosure





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

March 13, 1992

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

**ADVANCE
INFORMATION**

Dear Sir,

While conducting basic hydrographic survey H-10412 to update nautical charts of Matagorda Bay, Texas, the following corrections to charted features, considered dangers to navigation, were identified.

► A submerged obstruction was found on the green side of the channel at latitude $28^{\circ}26'38.41''$ N, longitude $096^{\circ}23'41.44''$ W. This position is outside the channel on the southeast side, between the Port O'Connor jetties. The obstruction is a 12 inch diameter steel pipe lying flat, which projects 2.6 feet off the bottom. The least depth on this obstruction was 10.5 feet (3.2 meters) at MLLW, corrected by predicted tides, in depths of 12 feet (3.6 meters). This feature is currently charted as an "Obstr rep".

► A submerged obstruction was found on the red side of Matagorda Ship Channel at latitude $28^{\circ}26'27.78''$ N, longitude $096^{\circ}20'33.29''$ W. This position is outside the channel and is charted as an Army Maintained 54 foot pile dredge range. The obstruction is an 18 inch diameter steel pipe standing upright and projecting 13 feet (4.0 meters) off the bottom. The least depth on this obstruction was 13 feet (4.0 meters) at MLLW, corrected by predicted tides, in depths of 28 feet (8.5 meters).

This report constitutes a correction to information shown on Chart 11317, 20th ed., Mar 23/91, and 11319, 22th ed., Feb 10/90, and should be included in the Local Notice to Mariners.

The geographic positions are in the North American 1983 Datum. These features were located by four lines of position from Motorola Falcon Mini-Ranger electronic positioning system units set up on third order, class 1, ground control stations. Depths were corrected by predicted tides at Port O'Connor, Texas.



A chart section of this area, showing the location of this danger is also included.

Questions concerning this report should be directed to me at (804) 441-6746 or Mr. Dennis Hill at the Pacific Hydrographic Section, Seattle, Washington, at (206) 526-6853.

Sincerely,

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

Attachment

cc: N/CG221
N/CG2451
DMAHTC

THIS IS ADVANCE FIELD INFORMATION
SUBJECT TO OFFICE VERIFICATION



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

March 23, 1992

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

**ADVANCE
INFORMATION**

Dear Sir,

While conducting basic hydrographic surveys H-10412 and H-10414, to update nautical charts of Matagorda Bay, Texas, the following uncharted items, considered dangers to navigation, were identified.

▶ A submerged obstruction was found, marked by a three inch diameter PVC pipe, protruding three feet, located at latitude 28°25'16.96" N, longitude 096°21'24.19" W. This position is along the northwest shore of Matagorda Peninsula, midway between Pass Cavallo and Matagorda Ship Channel. The obstruction is a square metal container approximately ten feet square, awash at MLLW, in depths of two feet.

▶ A privately maintained W/Or buoy, marking an unknown obstruction, was found at latitude 28°33'46.7" N, longitude 096°10'26.5" W. This position is about 3.75 NM east southeast of Palacios Point, with a least depth obtained by leadline of 8 feet at MLLW, in depths of 10 feet.

The geographic positions are North American 1983 Datum. Depths reported are corrected for predicted tides for Port O'Connor, Texas. These features were located by four lines of position from Motorola Falcon Mini-Ranger electronic positioning system units set up on third order, class 1, ground control stations.



This report constitutes a correction to information shown on Chart 11317, 20th ed., Mar 23/91, and 11319, 22th ed., Feb 10/90, and should be included in the Local Notice to Mariners.

Chart sections of these areas, showing the locations of these dangers, are attached.

Questions concerning this report should be directed to me at (804) 441-6746 or Mr. Dennis Hill at the Pacific Hydrographic Section, Seattle, Washington, at (206) 526-6853.

Sincerely,

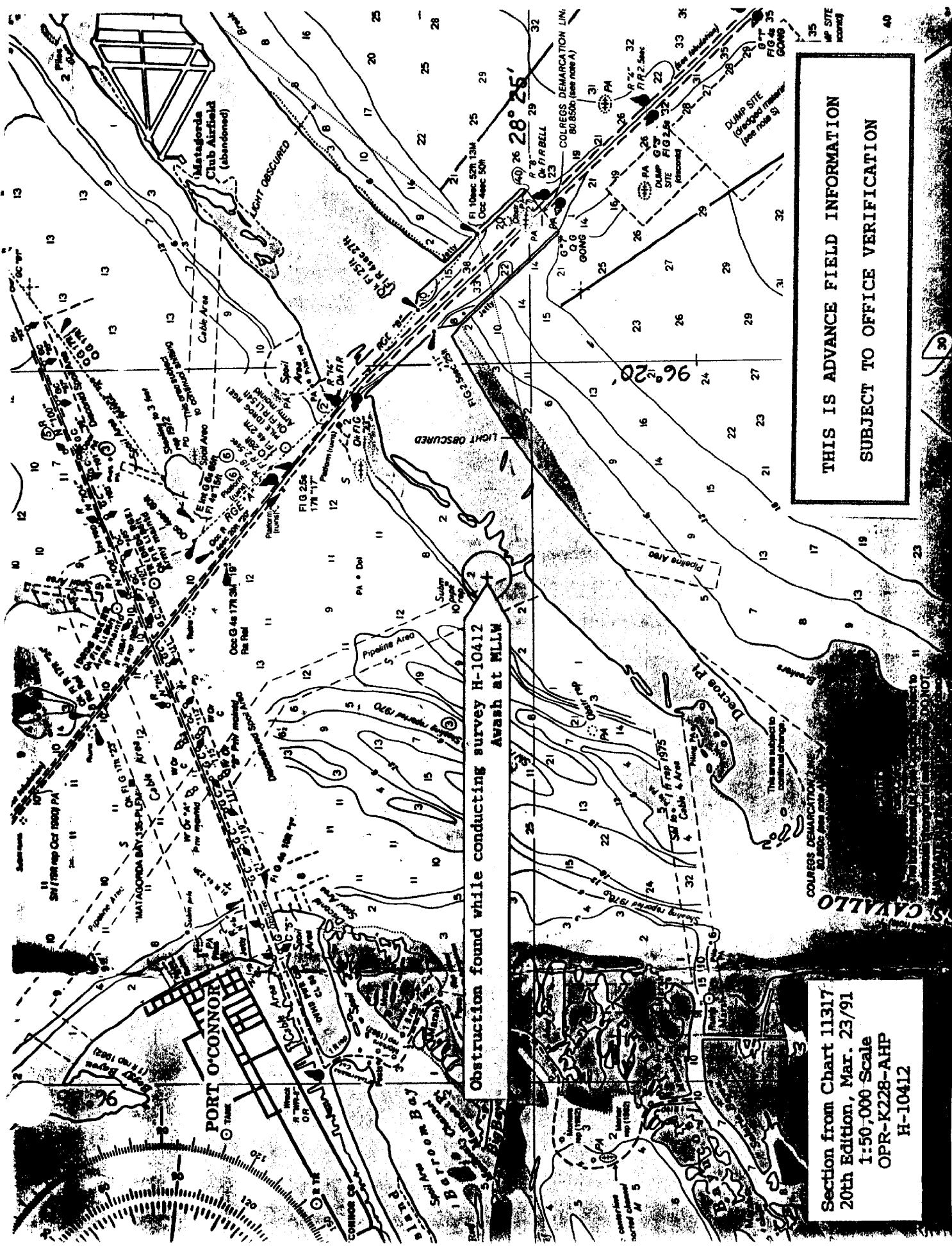
Thomas R. Waddington

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

Attachments

cc: N/CG221
N/CG2451
DMAHTC

THIS IS ADVANCE FIELD INFORMATION
SUBJECT TO OFFICE VERIFICATION



THIS IS ADVANCE FIELD INFORMATION
SUBJECT TO OFFICE VERIFICATION

Obstruction found while conducting survey H-10412
Avash at MLLW

Section from Chart 11317
20th Edition, Mar. 23/91
1:50,000 Scale
OPR-K228-AHP
H-10412

30

23

11

11

11

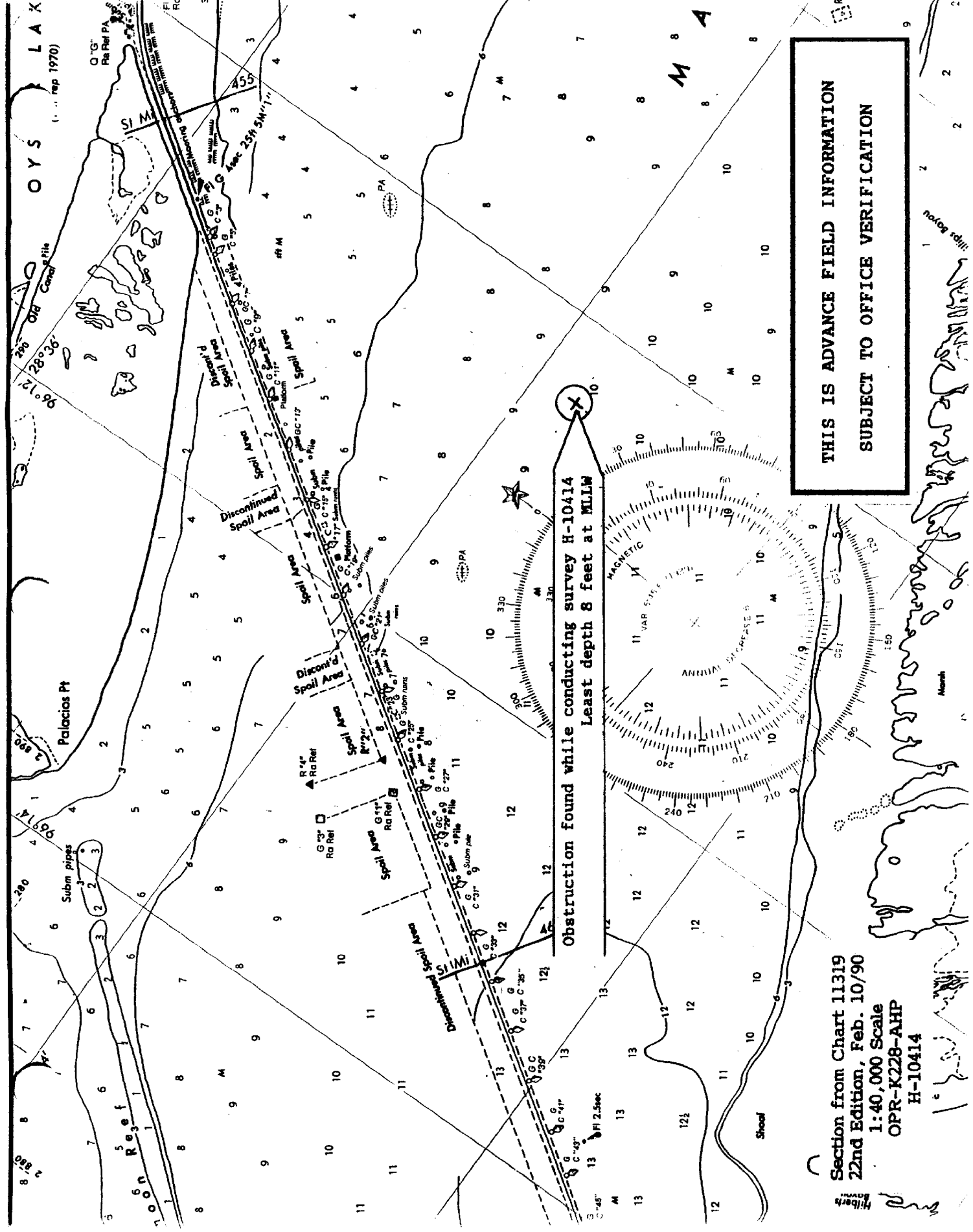
11

11

11

11

11



**THIS IS ADVANCE FIELD INFORMATION
SUBJECT TO OFFICE VERIFICATION**

**Obstruction found while conducting survey H-10414
Least depth 8 feet at MLLW**

Section from Chart 11319
22nd Edition, Feb. 10/90
1:40,000 Scale
OPR-K228-AHP
H-10414

Handwritten notes:
1. top bottom
2
3
4
5
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DEPARTMENT OF THE ARMY
GALVESTON DISTRICT, CORPS OF ENGINEERS
P.O. BOX 1229
GALVESTON, TEXAS 77553-1229

REPLY TO
ATTENTION OF:

July 2, 1991

Operations Section

Mr. Steve Verry
National Ocean Service
Hydrographic Service Branch
N/CG 241
Rockville, Maryland 20852

Dear Mr. Verry:

This is in reference to the recent telephone conversation between you and Mr. McClenan of this office. In response to your request, information is being forwarded regarding the Federally maintained channels in Matagorda and Lavaca Bays.

The enclosure provides a list of Federally maintained channels in Matagorda and Lavaca Bays. It also provides the month in which dredging of all, or a portion of, the channels were last completed. At that time any obstructions within the channel limits were removed. Subsequent to these dates, there have been no new sunken vessels or other obstructions (other than shoal areas which are now under contract to be dredged) within the channels' limits.

We hope this information is suitable for your needs. If you need more detailed information, Mr. McClenan will be available to assist you. Should you need us to verify obstructions, we will attempt to assist you if you provide specific coordinates of their location.

Sincerely,

Don Duigg
George R. Rothen
Chief, Construction-
Operations Division

Enclosure

FEDERALLY MAINTAINED CHANNELS IN MATAGORDA AND LAVACA BAYS

Matagorda Ship Channel (Entrance Channel)	Feb 89
Matagorda Ship Channel (Peninsula to Point Comfort)	Jan 90
Port Lavaca Channel	Apr 89
Channel to Red Bluff	Sep 90
Channel to Palacios	Oct 88
GIWW (East of intersection with Channel to Palacios)	May 91
GIWW (West of intersection with Channel to Palacios)	Oct 89

APPROVAL SHEET

BASIC HYDROGRAPHIC SURVEY
OPR-K228/91-3
AHP2-10-18-91
H-10412
1991-92

This basic hydrographic survey was conducted in accordance with the project instructions for OPR-K228/91-3, 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 in their entirety 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

Thomas R. Waddington
Lieutenant, NOAA
Chief, Atlantic Hydrographic Party Two

GEOGRAPHIC NAMES

H-10412

Name on Survey	A ON CHART NO. 11317		B ON PREVIOUS SURVEY NO. 11319		C ON U.S. QUADRANGLE MAPS		D FROM LOCAL INFORMATION		E ON LOCAL MAPS		F P.O. GUIDE OR MAP		G RAND McNALLY ATLAS		H U.S. LIGHT LIST	
	* PP-01647															

BAYUCOS ISLAND	X												X	1
BIG BAYOU	X												X	2
BIRD ISLAND				X										3
DECROS POINT	X												X	4
LITTLE MARYS CUT	X													5
MATAGORDA BAY	X												X	6
MATAGORDA PENINSULA	X												X	7
PORT O'CONNOR	X												X	8
SALURIA BAYOU	X													9
SALURIA ISLANDS	X												X	10
TEXAS (title)	X													11
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Approved

Charles P. Huntington
Chief Geographer - N/CG 275

AUG - 4 1992



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

ORIGINAL

TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE: May 14, 1992

MARINE CENTER: Pacific

OPR: K228

HYDROGRAPHIC SHEET: H-10412

LOCALITY: Port O'Connor, Matagorda Bay, TX

TIME PERIOD: November 11, 1991 - March 12, 1992

TIDE STATIONS USED: 877-3156 Palacios, TX.
Lat. 28° 41.8'N Lon. 96° 13.9'W

877-3701 Port O'Connor, TX
Lat. 28° 27.2'N Lon. 96° 24.3'W

PLANE OF REFERENCE (MEAN LOWER LOW WATER): 877-3156 = 3.44 feet
877-3701 = 2.16 feet

HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 877-3156 = 1.0 foot
877-3701 = 0.9 foot

REMARKS: RECOMMENDED ZONING

1. Times and heights are direct on 877-3701 when data is available.
2. Apply a -00 hr 18 min time correction, and a X0.84 range ratio to all heights on 877-3156 when data on 877-3701 is not available.

NOTE: Hourly heights are tabulated on Central Standard Time.


CHIEF, DATUMS SECTION



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

RECORD DESCRIPTION	AMOUNT	RECORD DESCRIPTION	AMOUNT
SMOOTH SHEET	1	SMOOTH OVERLAYS: POS., ARC, EXCESS	7
DESCRIPTIVE REPORT	1	FIELD SHEETS AND OTHER OVERLAYS	4

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			2378
POSITIONS REVISED			
SOUNDINGS REVISED			
CONTROL STATIONS REVISED			
	TIME-HOURS		
	VERIFICATION	EVALUATION	TOTALS
PRE-PROCESSING EXAMINATION			
VERIFICATION OF CONTROL			
VERIFICATION OF POSITIONS	37		37
VERIFICATION OF SOUNDINGS	76		76
VERIFICATION OF JUNCTIONS			
APPLICATION OF PHOTOBATHYMETRY			
SHORELINE APPLICATION/VERIFICATION			
COMPILATION OF SMOOTH SHEET	29		29
COMPARISON WITH PRIOR SURVEYS AND CHARTS		7	7
EVALUATION OF SIDE SCAN SONAR RECORDS			
EVALUATION OF WIRE DRAGS AND SWEEPS			
EVALUATION REPORT		45	45
GEOGRAPHIC NAMES			
OTHER*			
*USE OTHER SIDE OF FORM FOR REMARKS	TOTALS	142	52
			194

Pre-processing Examination by J. Griffin	Beginning Date 7/2/92	Ending Date 7/8/92
Verification of Field Data by C.R. Davies	Time (Hours) 52	Ending Date 11/5/93
Verification Check by J.S. Green	Time (Hours) 7	Ending Date 3/18/93
Evaluation and Analysis by C.R. Davies	Time (Hours) 52	Ending Date 3/24/93
Inspection by B.A. Olmstead	Time (Hours) 25	Ending Date 4/28/93

EVALUATION REPORT

H-10412

1. INTRODUCTION

Survey H-10412 is a basic hydrographic survey accomplished by the Atlantic Hydrographic Party 2, under the following Project Instructions.

OPR-K228-AHP, 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
CHANGE NO. 4, dated January 16, 1992

This survey was conducted in Texas and covers the southern portion of Matagorda Bay. Specifically, the survey area extends from Port O'Connor on the mainland eastward to the Matagorda Peninsula and between Decros Point northward into Matagorda Bay. The survey area extends from latitude 28/23/30N to latitude 28/28/00N, and from longitude 96/19/52W to longitude 96/24/30W. The shoreline consists of sand, marsh and mud flats. The bottom consists of mud and sand. Generally, depths within the survey area are from 0.4 meters along the shoreline to 10.4 meters offshore in Matagorda Bay. However, there are two federally maintained channels, Matagorda Ship Channel and the Intracoastal Waterway, which contain much deeper depths.

Predicted tides for Port O'Connor, Texas, were used for the reduction of soundings during field processing. Approved hourly heights zoned from Palacios and Port O'Connor, Texas, gages 877-3156 and 877-3701, 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. NAD 83 is used as the horizontal datum for plotting and position computation. The TRA, velocity tables 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 that includes categories of information required to comply with Hydrographic Survey Guidelines 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 information.

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 in the following.

GPS and Terrestrial Survey, San Antonio and Lavaca Bays, Texas, October 1990;
Field Report, Matagorda Bay, Texas and vicinity, January 23, 1989 to March 13, 1989;
Fixed Aids to Navigation and Landmark Features, Photogrammetric Survey CM-8715, Matagorda Bay and Vicinity, October 12, 1990;
AHP2 letter, Third-Order NAVAID Positions for OPR-K228-AHP, July 23, 1992.

Positions of horizontal control stations used during hydrography are 1989, 1991 and 1992 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: 0.999 seconds (30.744 meters)
 Longitude: 0.901 seconds (24.492 meters)

The year of establishment of control stations shown on the smooth sheet originates with the above mentioned horizontal control reports.

The quality of several positions exceeds limits in terms of error circle radius and residual or have angles of intersection less than 30 degrees or more than 150 degrees. A review of the data, however, indicates that none of these fixes are used to position dangers to navigation. The features or soundings located by these fixes are consistent with the surrounding information. These fixes are considered acceptable.

The following shoreline maps were compiled on NAD 83 and apply to this survey.

	<u>Photo Date</u>	<u>Class</u>	<u>Scale</u>
TP-01647	Feb., Mar. 1989	III	1:20,000
TP-01648	Feb., Mar. 1989	III	1:20,000

The following shoreline change is depicted on the smooth sheet with a dashed red line. It was transferred from the final field sheet without supporting position information. This revision is approximate but is adequate to supersede the common photogrammetrically delineated shoreline.

<u>Feature</u>	<u>Latitude(N)</u>	<u>Longitude(W)</u>
HWL from	28/23/26	96/23/24
to	28/23/39	96/23/17

3. HYDROGRAPHY

Except as noted below and elsewhere in this report, hydrography is adequate to:

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

Two isolated shoal soundings which differ from the surrounding soundings as much as 1.4 meters were not investigated for least depths. These soundings are listed below.

<u>Sounding</u>	<u>Position #</u>	<u>Latitude(N)</u>	<u>Longitude(W)</u>
2.6 meters	2023/2	28/26/03.76	96/20/55.67
4.4 meters	1685/4	28/26/46.20	96/20/56.21

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, March 1991 Edition, except as follows.

Two AWOIS Items, 5508 and 7873, were not investigated by the hydrographer. All AWOIS items common to the survey area need to be addressed.

Two charted shoal soundings were not investigated by the hydrographer. Line spacing was inadequate to supersede the two charted depths.

5. JUNCTIONS

Survey H-10412 junctions with the following surveys.

<u>Survey</u>	<u>Year</u>	<u>Scale</u>	<u>Area</u>
H-10395	1991	10,000	North
H-10397	1991	10,000	Northeast

The junction with surveys H-10395 and H-10397 have not been formally completed since these surveys were previously processed and forwarded for charting. The junction comparison was made using copies. Soundings are only in fair agreement as both junctional surveys are located in areas of a continuous shifting sandy bottom primarily due to the constant dredging of two federally maintained channels. Soundings have been transferred from junctional surveys, H-10395 and H-10397, to better portray the bottom in the common areas. Portions of the depth curves on both surveys should be adjusted to conform with those on survey H-10412. A sounding comparison with charted and survey depths in the area of the Matagorda Channel and the entrance to the Gulf of Mexico reveals good agreement.

6. COMPARISON WITH PRIOR SURVEYS

H-5866 (1934-35) 1:20000

Survey H-5866 covers the entire area of the present survey. Generally, depths in the vicinity of the Matagorda Ship Channel and the Intracoastal Waterway have shoaled 0.3 meters, although within the federally maintained channels which were not in existence in 1934-35, considerable change with the present survey is evident. Where depths of 11 - 12 feet (3.3 - 3.8 meters) existed in 1934-35, a controlling depth in Matagorda Ship Channel is currently 33.5 feet (16.2 meters) and present survey depths within the Intracoastal Waterway range from 12 - 18 feet (3.6 - 5.5 meters). Another area of dynamic change lies just north of Decros Point and extends approximately three miles toward the Intracoastal Waterway. This area covers approximately 1.5 miles by 3 miles and defines an area charted as subject to continual change. As an example, a shoal on the prior survey centered at latitude 28/25/30N, longitude 96/22/30W, has shifted southwest by approximately 1000 meters. Because of the current and shifting sandy bottom, depths have changed by as much as ± 4 meters (13ft).

The area south of latitude 28/24/00N contains no charted soundings and is noted on the chart as an area of continual change. This survey confirms a very unstable sandy bottom. The Project Instructions did not list prior surveys for this area for comparison, therefore, no comparison has been accomplished.

The entrance to Port O'Connor has moved 500 meters to the north and is part of the Intracoastal Waterway. Numerous spoil areas and one spoil island, Bird Island, have been created with the dredging of both the Matagorda Ship Channel and the Intracoastal Waterway. A new entrance to the Gulf has also been dredged, cutting through the Matagorda Peninsula, since the prior survey.

There are no AWOIS items which originate from the prior survey H-5866.

Survey H-10412 is adequate to supersede this prior survey within the common area.

7. COMPARISON WITH CHART

Chart 11317, 20th edition, dated March 23, 1991; scale 1:50,000
 Chart 11317, 21st edition, dated July 4, 1992; scale 1:50,000
 Chart 11319, 22nd edition, dated February 10, 1990; scale 1:40,000
 Chart 11319, 23rd edition, dated November 30, 1991; scale 1:40,000

The 20th and 21st edition of Chart 11317 are identical.
 The 22nd and 23rd edition of Chart 11319 are identical.

a. Hydrography

Charted hydrography originates with survey H-5866 and miscellaneous sources.

Several charted features and depths were not found or investigated adequately for disproval. These features, listed below, should be retained at their presently charted positions and depicted as shown below.

<u>Feature</u>	<u>Latitude(N)</u>	<u>Longitude(W)</u>	<u>AWOIS</u>
6 ft sounding	28/26/46	96/20/45	
6 ft sounding	28/26/49	96/20/39	
subm pile	28/27/01	96/24/01(NAD27)	7873
This area subject to continual shifting	28/23/33	96/22/50	
This area subject to continual shifting	28/26/50	96/20/18	

A note, Shoal (6 ft rep Sept 1990), charted at latitude 28/27/48N, longitude 96/20/20W, should be deleted. Hydrography from this survey shows a least depth of 2 meters (6.5 ft) at MLLW. Chart according to this survey.

A note, 5 ft rep, charted latitude 28/27/05N, longitude 96/20/00, should be deleted. Hydrography from this survey shows a least depth of 1.2 meters (3.9 ft) at MLLW. Chart according to this survey.

Except as noted above, survey H-10412 is adequate to supersede charted hydrography within the common area.

b. AWOIS

All AWOIS items within the survey area originate with miscellaneous sources. Refer to the hydrographer's report for discussion and disposition of these features, supplemented as follows.

AWOIS item 7873, visible pile, charted at latitude 28/27/01.0N, longitude 96/24/01.W (NAD 27), was not investigated and should be retained at the presently charted position as a submerged pile.

AWOIS item 5508, shoaling reported to 6 feet at approximate latitude 28/27/44N, longitude 96/20/31W, was not investigated during this survey. However, hydrography from the junctional survey H-10397, which has been transferred to this survey, confirms shoaling with a depth of 1.5 meters (5 ft) at latitude 28/27/51N, longitude 96/20/30W. Chart depths in the area as shown on this present survey.

c. Controlling Depths

The Matagorda Ship Channel and the Intracoastal Waterway are federally maintained channels located within the area of this survey. The depths found during this survey are consistent with or deeper than the charted project or controlling depths. However, hydrography shows a shoal, with a least depth of 2.0 meters, encroaching on the Intracoastal Waterway, at latitude 28/27/48N, longitude 96/20/19W. A letter has been sent to the U.S. Army Corps of Engineers, Galveston District, advising them of several shoal areas which need to be monitored along the southside of the Intracoastal Waterway between Buoy 97 and Buoy 109, letter attached.

d. Aids to Navigation

There are 24 floating aids and 11 fixed aids located within the survey area. These aids were located and serve their intended purpose.

The positions for the fixed aids to navigation follow.

<u>Light List Name</u>	<u>L.L.#</u>	<u>Latitude(N)</u>	<u>Longitude(W)</u>
Matagorda Ship Channel Range A Rear Light	26110	28/27/01.247	96/21/11.034
Matagorda Ship Channel Range A Front Light	26105	28/26/33.966	96/20/41.968
Matagorda Ship Channel Entrance South Dredging Range Rear Light	26170	28/27/15.806	96/21/29.034
Matagorda Ship Channel Entrance North Dredging Range Rear Light	26180	28/27/29.803	96/21/39.302
Matagorda Ship Channel Light 17	26185	28/26/28.66	96/20/51.31
Matagorda Ship Channel Light 19	26195	28/26/50.40	96/21/21.60
Matagorda Ship Channel Light 20	26200	28/26/54.720	96/21/17.505
Matagorda Bay Range K Front Light	34770	28/27/50.192	96/19/46.084
Matagorda Bay Range K Rear Light	34775	28/27/02.189	96/21/02.811
Port O'Connor Channel Light 1	34910	28/26/37.184	96/23/39.016
Port O'Connor Channel Light 2	34910	28/26/44.592	96/23/42.326

The positions for the floating aids to navigation located during this survey follow.

<u>Light List Name</u>	<u>L.L.#</u>	<u>Latitude(N)</u>	<u>Longitude(W)</u>
Matagorda Ship Channel Lighted Buoy 13	26160	28/26/02.72	96/20/13.37

Matagorda Ship Channel Lighted Buoy 14	26165	28/26/09.79	96/20/14.08
Matagorda Ship Channel Lighted Buoy 18	26190	28/26/33.44	96/20/46.16
Matagorda Bay Buoy 97	34810	28/27/49.27	96/20/14.31
Matagorda Bay Buoy 99	34815	28/27/44.18	96/20/29.77
Matagorda Bay Buoy 100	34820	28/27/47.57	96/20/33.04
Matagorda Bay Buoy 101	34825	28/27/38.90	96/20/45.04
Matagorda Bay Buoy 103	34830	28/27/33.31	96/21/01.63
Matagorda Bay Buoy 104	34835	28/27/36.81	96/21/05.74
Matagorda Bay Buoy 105	34840	28/27/27.87	96/21/18.03
Matagorda Bay Buoy 107	34845	28/27/22.82	96/21/33.19
Matagorda Bay Buoy 108	34850	28/27/25.19	96/21/34.93
Matagorda Bay Buoy 108A	34852	28/27/22.64	96/21/42.57
Matagorda Bay Buoy 109	34855	28/27/17.98	96/21/46.61
Matagorda Bay Buoy 111	34860	28/27/11.69	96/22/03.15
Matagorda Bay Buoy 113	34865	28/27/05.92	96/22/20.15
Matagorda Bay Buoy 114	34870	28/27/10.83	96/22/20.79
Matagorda Bay Buoy 115	34875	28/26/59.46	96/22/37.94
Matagorda Bay Buoy 117	34880	28/26/54.84	96/22/50.85
Matagorda Bay Buoy 119	34885	28/26/50.30	96/23/04.04
Matagorda Bay Buoy 121	34900	28/26/44.73	96/23/18.72
Port O'Connor Channel Buoy 4	34915	28/26/37.39	96/23/52.51
Port O'Connor Channel Buoy 5	34920	28/26/30.82	96/24/04.88
Port O'Connor Channel Buoy 6	34925	28/26/32.83	96/24/05.37

Four privately maintained buoys, mentioned in section P of the hydrographer's report, were missing or off station at the time of this survey. All four are still maintained and should be retained as charted.

All landmarks within the survey area should be retained as charted.

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

Five dangers to navigation, an uncharted platform and several submerged obstructions, were reported by the hydrographer. No dangers to navigation were generated during office processing. Copies of the two reports are attached.

8. COMPLIANCE WITH INSTRUCTIONS

Survey H-10412 adequately complies with the Project Instructions except where noted in this report.

9. ADDITIONAL FIELD WORK

This is an adequate hydrographic survey. Additional field work on a low priority basis is recommended to investigate the soundings, as noted in section 3, and the charted features noted in section 7.a. of this report.



C. R. Davies
Cartographer

APPROVAL SHEET
H-10412

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.

for Bruce, Alan, Olmstead
for Dennis J. Hill Date: 4/29/93
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.

Douglas G. Hennick
Commander Douglas G. Hennick, NOAA Date: 4/30/93
Chief, Pacific Hydrographic Section

Final Approval

Approved:

J. Austin Yeager
J. Austin Yeager Date: 9/28/93
Rear Admiral, NOAA
Director, Coast and Geodetic Survey

DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Ocean Survey
Rockville, Maryland

Hydrographic Index No. 90 C

