

10415

10415

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. AHP2-10-2-92
Office No. H-10415

LOCALITY

State Texas
General Locality Matagorda Bay
Sublocality Approaches to
..... Carancahua Bay
..... 19 92
CHIEF OF PARTY
..... LT T.R. Waddington

LIBRARY & ARCHIVES

DATE April 26, 1993

U.S. GOV. PRINTING OFFICE: 1982-566-108

025
11317
11316

HYDROGRAPHIC TITLE SHEET

H-10415

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.
AHP2-10-2-92

State Texas

General locality Matagorda Bay

Locality Approaches to Carancahua Bay

Scale 1:10,000 Date of survey DN 24 - DN 64
1/24/92 - 3/5/92

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

Vessel Launch 0517

Chief of party LT Thomas R. Waddington, NOAA

Surveyed by Atlantic Hydrographic Party Two

Soundings taken by echo sounder, hand lead, pole

Graphic record scaled by MJM, JLB, CBM

Graphic record checked by MJM, JLB, CBM

Evaluation by: R.N. Mihailov Automated plot by PHS Xynetics Plotter

Verification by R.N. Mihailov

Soundings in meters and decimeters
fathoms fms at MLLW

REMARKS: *Change No. 1 dated June 4, 1991; change No. 2 dated July 11, 1991
and change No. 3 dated August 15, 1991.

MJM- Mark J. McMann, JLB - Jan L. Budlong, CMB - Cory B. Miller

Time meridian used was UTC. Revisions and marginal notes in

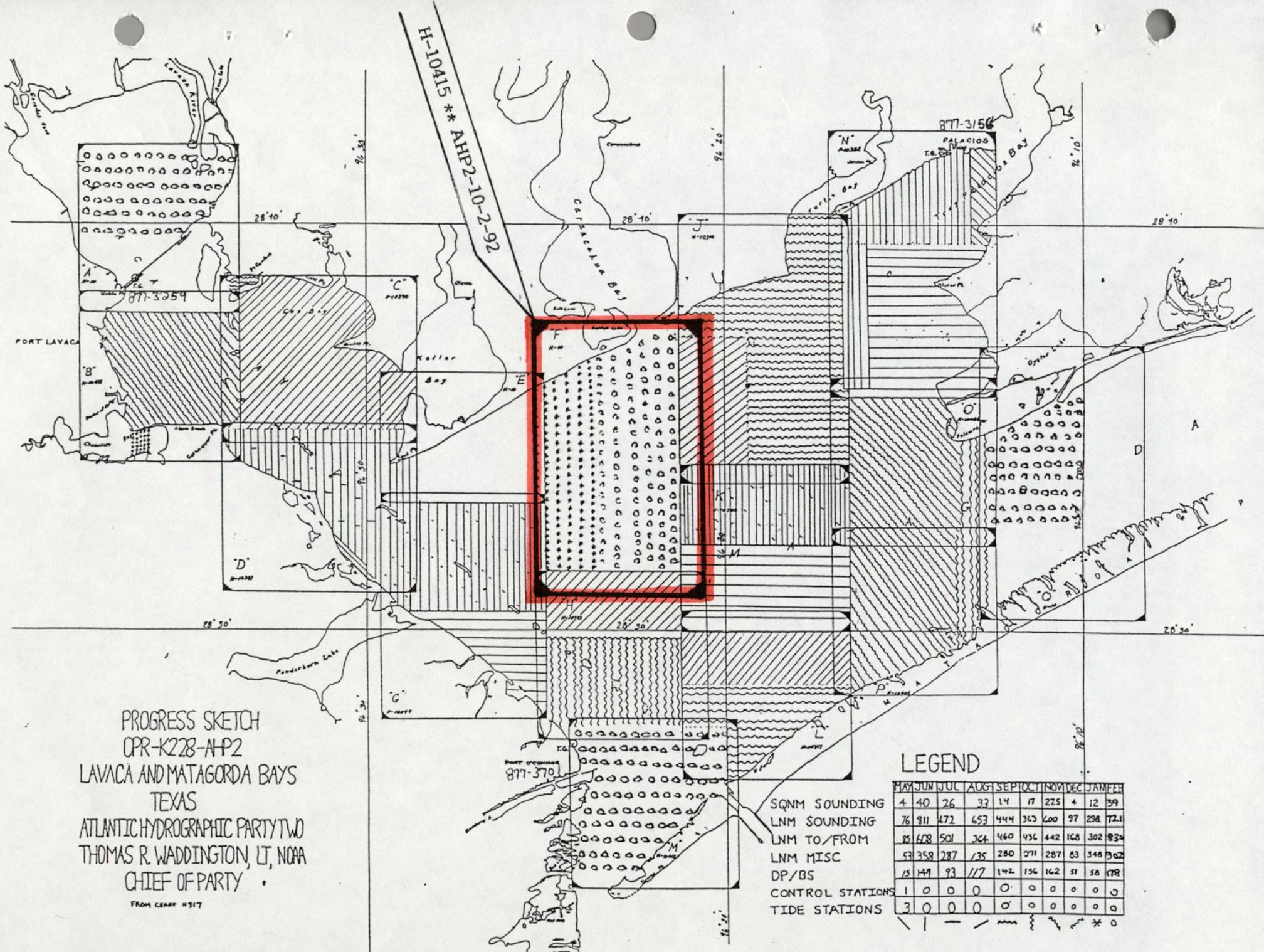
black were generated during office processing. All separates are

filed with the hydrographic data, as a result page numbering may

be interrupted or non-sequential.

AWARDS/SURPV 6/30/93 SV

SWW 9/28/93



PROGRESS SKETCH
 OPR-K228-AHP2
 LAVACA AND MATAGORDA BAYS
 TEXAS
 ATLANTIC HYDROGRAPHIC PARTY TWO
 THOMAS R. WADDINGTON, LT, NOAA
 CHIEF OF PARTY
 FROM CERRY 4517

LEGEND

	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB
SQNM SOUNDING	4	40	26	33	14	17	27.5	4	12	39
LN M SOUNDING	76	911	472	653	444	343	600	97	298	72.1
LN M TO/FROM	85	608	501	364	460	436	442	168	302	834
LN M MISC	53	358	287	135	280	271	287	83	348	502
DP/BS	15	49	93	117	142	156	162	51	58	178
CONTROL STATIONS	1	0	0	0	0	0	0	0	0	0
TIDE STATIONS	3	0	0	0	0	0	0	0	0	0

SQNM SOUNDING
 LN M SOUNDING
 LN M TO/FROM
 LN M MISC
 DP/BS
 CONTROL STATIONS
 TIDE STATIONS

DESCRIPTIVE REPORT TO ACCOMPANY
HYDROGRAPHIC SURVEY H-10415
FIELD NO. AHP2-10-2-92
SCALE: 1:10,000
1992
ATLANTIC HYDROGRAPHIC PARTY TWO
CHIEF OF PARTY: Lt. Thomas R. Waddington

A. PROJECT ✓

This survey was conducted in accordance with Hydrographic Project Instructions OPR-K228-AHP2, Matagorda and Lavaca Bays, Texas, dated March 1, 1991 and amended by Change No. 1, dated June 4, 1991, Change No. 2, dated July 11, 1991, and Change No. 3, dated August 15, 1991.

The purpose of project OPR-K228-AHP2 is to provide contemporary hydrography for the maintenance of existing charts. Prior surveys in this area were conducted in 1934-35.

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

B. AREA SURVEYED ✓ See Evaluation Report, Section 1

The area surveyed for H-10415 covers the north central portion of Matagorda Bay including Carancahua Pass but not Carancahua Bay. The shoreline within the survey area is all undeveloped sand beach. The survey limits are as follows:

North - Latitude	28°38'00"N	28° 37' 55" N
South - Latitude	28°32'00"N	28° 31' 55" N
East - Longitude	96°21'00"W	96° 20' 48" W
West - Longitude	96°25'15"W	96° 25' 15" W

This survey was conducted from January 24, 199² (DN 024) to March 05, 1992 (DN 065).

C. SURVEY VESSELS ✓

Vessel 0517 (EDP No. 0517) a 21-foot MonArk was the sounding vessel used to collect all survey data. There were no unusual vessel configurations nor problems encountered.

The following speed of sound casts were taken during the survey.

<u>Table Applied</u>	<u>Day</u>	<u>Cast Depth Meters</u>	<u>Location NAD 1983</u>	<u>Days Used</u>
1	024	3	28°34'30"N 96°22'00"W	024
2	028	10	28°37'50"N 96°34'00"W	028-032
3	037	6	28°35'48"N 96°34'00"N	037-041
4	043	13	28°36'50"N 96°34'00"W	043-049
5	050	13	28°35'48"N 96°34'00"N	050-057
6	057	5	28°35'40"N 96°10'50"W	not used

Cast
2-6
plot
outside
the survey
limits

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

<u>Table No.</u>	<u>Use for Days</u>
2	24 - 32
3	37 - 41
4	43 - 49
5	49-51 50-67
6	59-65 not used

Cast number one was performed within the limits of H-10415, sheet "F". Because only one Digibar unit was available, all subsequent casts were taken by launches 770 and 0518, in both Lavaca and Matagorda Bays. Cast one and a cast taken in Lavaca Bay on the same day were compared and found to be in very close agreement.

The Innerspace 448 depth sounder is semi-automated and does not need adjustments of the tide and draft and speed of sound. Any required adjustments of the gain and chart speed were made and noted on the echogram. The digitized soundings matched the Innerspace 448 echo sounder's trace to plus or minus 0.1 meter. Any necessary corrections were made during scanning of the echogram.

Weather permitting, lead line comparisons were conducted each day of hydrography to determine an instrument corrector. No instrument error was detected from these comparisons. The lead line comparison form can be found in the "Separates to be Included With Survey Data".

A static draft of 0.3 meter was applied to the on-line data. The draft was determined by first measuring the distance from a punch mark on the side of launch 0517, 0.6 meters above the transducer, down to the water surface. This distance was then subtracted from the 0.6m punch mark height to obtain the static draft.

Settlement and squat measurements were performed on October 31, 1991 (DN 304), at Tres Palacios Bay, Palacios, Texas using Zeiss level, S/N 08754. Settlement and squat correctors and the static draft corrector were applied on-line through the offset tables. Copies of the field data, the graphs of the settlement and squat correctors vs. RPM, and the offset tables are included in the "Separates to be Included With Survey Data".

The final field sheet was plotted using predicted tides determined from the Port O'Connor, Texas tide station, number 877-3701, using time and height correctors listed in the project instructions for the north side of Matagorda Bay; the tides are direct from Port O'Connor for the area covered by this survey.

The final field sheet was plotted after the HDAPS "Reapply" program had been used to log the proper depth correctors (from the tide table, velocity table, and offset table) to each data record.

Approved tides were requested from the Sea and Lake Levels Branch, N/OMA1212, in a letter dated March 11, 1992. A copy of the letter is included in Appendix V*of this report.

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, missed depths, incorrectly digitized soundings, and the effects of sea and swell action were inserted or corrected, as appropriate, while scanning.

H. CONTROL STATIONS ✓ See Evaluation Report, Section 2

The horizontal control datum for this project is the North American Datum of 1983. Four stations were used to control this survey. A copy of the HDAPS Control Station Table is included ~~the~~ in Appendix ~~III~~ 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

* Filed with the hydrographic data.

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 ✓

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>
0517	RPU	F0241	
	RT	E2919	
	R/S	F3290	E
	R/S	G3572	D
	R/S	F3293	1
	R/S	F3237	8

Baseline calibrations were performed as specified in the Field Procedures Manual on August 29, 1991 (DN 241), September 19, 1991 (DN 262), December 12, 1991 (DN 346), and January 8, 1992 (DN 008). The baseline values were incorporated into the survey computer "C-O" table and applied directly to all on-line data. Baseline calibration forms and the "C-O" tables are included in the "Separates to be Included With Survey Data" of this report. A closing baseline calibration was not performed since the survey was conducted in less than a six month period from the opening baseline.

When using three or four lines of position, the error circle radius (ECR) and the residual values computed by the survey computer provide a critical system check each second. When the ECR is greater than 15 meters (1.5m at the survey scale) or the residuals are greater than 5 meters (0.5m at the survey scale) for more than three minutes, survey operations are suspended in the area until the problem can be resolved. Position data exceeding the 1:10,000 scale specifications were edited.

Periodically, the residual values were greater than 5 meters or error circle radius values were greater than 15 meters, yet the track line plot showed that the position of the survey vessel was realistic. In those instances, the data were considered adequate and were plotted without smoothing on the final field sheet.

* Filed with the hydrographic data.

An occasional problem was encountered when an apparently good position plotted unrealistically on the raw track plot. This problem is attributable to the survey computer's inability to immediately compute an accurate position after an extended period of questionable Falcon data. These positions were rejected, smoothed, or recomputed using the point computation routine. This data was checked during office processing and found to have been adequately addressed by the hydrographer.

J. SHORELINE ✓ See Evaluation Report, Section 2

Shoreline shown on the final field sheet was transferred by hand from TP-01648 and TP-01649. These shoreline manuscripts were compiled on NAD 1983 at 1:20,000 scale and enlarged to 1:10,000 scale for use with this survey.

Shoreline verification was accomplished by visual inspection. While main scheme hydrography rarely approached closer than 200 meters from shore, no obvious changes from that shown on the shoreline manuscripts were 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-01648 and TP-01649. - CONCUR

Field notes are located on the graphic records. No sounding volumes or notebooks were used. A complete list of all detached positions by day, generated through the HDAPS Detached Position Editor is included in the accordion file. It lists the feature or item number, and position.

K. CROSSLINES

A total of 49.5 linear nautical miles of crosslines were run on H-10415 which equals 13.9% of the main scheme hydrography. Cross line soundings agree to within 0.5 meter of the main scheme soundings; the only exception occurs on day 037 hydrography, where disagreements of as much as $\pm 0.7m$ are seen, particularly near shore. The application of actual tide heights will correct this disagreement. Crossline agreement is within 0.2 meters after application of actual tides.

L. JUNCTIONS See Evaluation Report, Section 5

This survey junctions with H-10380, sheet "K" (1991) and H-10396, sheet "J" (1991) to the east, and with H-10395, sheet "H" (1991) to the south. This survey also junctions with H-10379, sheet "G" (1991) and sheet "E" to the west. The latter is scheduled to be completed in April 1992, and the registry number was not yet available. Sheet "E" is H-10417 (1992).

Junction soundings between the present survey and H-10396 and H-10380 agree well, with differences 0.4 meter or less. Sounding

agreement between this survey and H-10395 and H-10379 is also good, with differences 0.5 meter or less. These differences are attributable to the use of different vessels and the predicted tide anomalies in this area. See the comments made in section R, "Miscellaneous", of this report about these predicted tide anomalies. Junctional soundings are within 0.2 meters after application of approved tides.

M. COMPARISON WITH PRIOR SURVEYS ✓ See Evaluation Report, Section 6

This survey was compared with prior surveys H-5866 (1934-35) and H-5813 (1934-35) both 1:20,000 scale.

(H-5813)
AWOIS item number 5386 originates from the prior survey. All AWOIS items are discussed completely on item investigation reports found in ~~Appendix VI~~ of this report. Search locations for features not addressed as items, were scaled directly from chart 11317, 20th edition, March 23, 1991, 1:50,000 scale and discussed below.

6"
A ✓ post charted at latitude 28°37'37.2"N, longitude 096°22'18.0"W, originating from prior survey H-5813, was investigated on DN 059 by a 25 meter radius diver circle search. Nothing was found. Bottom time was 30 minutes. Detached position 1954 was taken in the center of the search area. The hydrographer recommends the post be removed from the chart. - CONCUR ✓

A pipe charted at latitude 28°37'42.0"N, longitude 096°22'16.8", originating from prior survey H-5813, was investigated on DN 059 by a 25 meter radius diver circle search and nothing was found. Water depths were less than 1.5 meters and bottom time was 20 minutes. Detached position 1953 was taken in the center of the search area. The hydrographer recommends removal of the pipe from the chart. - CONCUR ✓

A pipe charted at latitude 28°36'40.2"N, longitude 096°21'53.4"W, originating with prior survey H-5813, was investigated on DN 060 with a 25 meter radius chain drag and nothing was found. 40 feet of line and 60 feet of chain were deployed for the drag. The hydrographer recommends removal of the pipe from the chart. The track line plot of this drag is included on a 1:5,000 scale page size plot* in ~~Appendix VI~~ of this report. ✓
* Position numbers 2071-2082 on track plot filed with the hydrographic data.

Agreement between H-5866 and this survey is fair, with current soundings within 0.6 meter of prior survey soundings; current survey soundings are generally deeper. - CONCUR

Agreement between H-5813 and the current survey is fair, with current soundings within 0.5 meter of prior survey soundings. H-5813 covers the area at the entrance to Carancahua Bay only.

There are only slight shoreline changes in the area east and west of Carancahua Pass. TP-01649 ^{PG} is correct in this area.

7 and TP-01648

N. COMPARISON WITH THE CHART ✓ See Evaluation Report, Section 7

Comparisons were made with the following charts of the area:

<u>Chart</u>	<u>Edition</u>	<u>Edition Date</u>
11316	34th	June 6, 1992
11316	33rd	January 19, 1991
11317	20th	March 23, 1991
11317	21st	July 4, 1992 (H-5313)

In addition to the item originating from a prior survey, four AWOIS items, numbers 5350, 5385, 5387 and 5388, from other sources were addressed on this survey. Item 5511, which falls within the limits of this survey, is for information only and was not assigned. All other ^{AWOIS} items are discussed on the item investigation report forms found in ~~Appendix VI~~ of this report.

Nine dangers to navigation were identified on this survey. They are all isolated shoals 0.5 to 1.2 meters in height in areas with charted depths of 12-13 feet, ^(8.6-4.2 meters) on a relatively flat bottom. They were investigated by 25 meter splits of the main scheme hydrography. The hydrographer believes these shoal areas to be made up of shell dumped by oil companies to aid in construction of oil and gas platforms. These shell piles occur throughout Matagorda Bay, particularly in areas of gas platforms. A copy of the danger to navigation report is included in ~~Appendix I~~ of this report.

General sounding comparison results are the same as those discussed in section M "Comparison with Prior Surveys" of this report.

All charted and discovered shoal areas within the limits of the survey were developed by running reduced line spacing splits of the main scheme. The present survey soundings are adequate to supersede charted soundings within the common areas. *Concur*

Discrepancies with the chart are as follows:

A spoil area charted at latitude 28°36'45"N, longitude 096°22'30.0"W' (position scaled from chart 11317) was investigated on Feb. 13, 1992, DN 044, with 50 meter splits perpendicular to the main scheme. No evidence of a spoil area was found. The sounding data for this development was designated "NSP" to eliminate congestion on the final field sheet. The soundings were plotted on a page sized sheet included in Appendix VI* of this report. Discussions with Mr. Domingo Galindo at the Corpus Christi area office of the U.S. Corps of Engineers (512-884-3385), indicate this area was never a COE spoil area and they have no records of this charted spoil area. The hydrographer recommends removing the "Spoil Area (rep 1967)" notation and the dashed limit lines from the chart. Survey mainscheme lines show 2-7 foot soundings in this area, with no indication of significant shoaling. *Concur with hydrographer.* ✓✓

8

* Filed with the hydrographic data.

A marker charted at latitude 28°37'51.6"N, longitude 096°21'43.8"W was located by detached position 1951 at latitude 28°37'53.1"N, longitude 096°21'50.2"W. This position agrees well with the T-map position. The hydrographer recommends charting the marker at the surveyed position. *Chart marker (priv Maint) at position shown on smooth sheet.*

An unlabeled pile symbol charted at latitude 28°37'42.6"N, longitude 096°21'57.0"W, was investigated on DN 059 by a 50 meter radius diver circle search in water depths less than 1 meter and nothing was found. Detached position 1952 was taken in the center of the search area. The hydrographer recommends removal of the pile symbol from the chart. - CONCUR

A post charted at latitude 28°37'36.0"N, longitude 096°22'09.9"W, was investigated on DN 059 by a 25 meter radius diver circle search. Bottom time was 20 minutes and water depth was less than 2 meters. Nothing was found. Detached position 1955 was taken in the center of the search area. The hydrographer recommends removal of the post from the chart. - CONCUR

The remaining charted features are addressed as items. Search locations for features not addressed as items, were scaled directly from chart 11317, 20th edition, March 23, 1991, 1:50,000 scale. *Reference discussion of the items listed above.*

Five uncharted lighted gas platforms were located by detached positions 1894-1898 on DN 049, 2/18/92. The locations and heights (corrected for ~~predicted~~ ^{actual} tides) of these platforms are listed in the table below. *An additional platform (2²) was transferred from junctional survey H-10395. latitude 28/32/04 N, 96/24/48 W.*

<u>Pos #</u>	<u>Description.</u>	<u>Location</u>	<u>Height</u>
1894	Platform w/Red Lt	28° 32' 06.8 ³ "N 096° 24' 36.0 ³ "W 35.98	-2.9 -3.0m
1895	Platform w/Red Lt	28° 32' 15.4 ³⁷ "N 096° 24' 30.6 ³⁷ "W	-3.9 -4.0m
1896	Platform w/Red Lt	28° 32' 13.8 ⁷⁹ "N 096° 24' 06.1 ⁷⁹ "W	-5.9 -6.0m
1897	Platform w/Red Lt	28° 32' 11.5 ² "N 096° 23' 53.6 ² "W	-3.9 -4.0m
1898	Platform w/Red Lt	28° 32' 11.5 ⁴⁹ "N 096° 23' 38.8 ⁴⁹ "W 75	-3.9 -4.0m

Photographs of these platforms may be found in the data cahier. The hydrographer recommends these platforms be charted as located. *shown on smooth sheet.*

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 ✓

There are no aids to navigation in the survey area. CONCUR

There are no apparent submerged pipelines within the survey area. No submerged pipeline signs were found. Mr. Alan Taylor, Pipeline Technologist, Dow Pipeline Co., informed the hydrographer that all their pipelines are buried under the bottom. The hydrographer recommends that the "caution" notes warning of wells and pipelines remain as charted. CONCUR

There are no bridges, overhead cables, nor ferry crossings within the limits of this survey. CONCUR

No landmarks are located within the survey area. CONCUR

Q. STATISTICS

<u>Description</u>	<u>517</u>
Total Number of Positions	8
Total Linear Nautical Miles of Hydrography	2147
Square Nautical Miles of Hydrography	363.7
Days of Production	15
Detached Positions	21
Bottom Samples	66
Tide Stations	3
Velocity Casts	6
Duplicated Positions	22

R. MISCELLANEOUS ✓

No significant current conditions were observed while conducting this survey.

Sixty-six bottom samples were taken and submitted to the Smithsonian Institution on March 9, 1992, as directed in section 6.7 of the project instructions. Bottom sample positions are plotted on the overlay and are listed on the Oceanographic Log Sheet-M, NOAA Form 75-44, which may be found in the "Separates to be Included With Survey Data". *

* Filed with hydrographic data.

There were predicted tide anomalies caused by wind conditions observed during this survey. These caused depths on adjacent sounding lines to differ. Application of actual tide heights will resolve these differences. Agreement between adjacent lines is satisfactory. Application of actual tides.

Position numbers were duplicated nine times during this survey. When an on-line "system crash" occurs no position number is assigned at the end of that line. When survey operations are resumed the beginning fix number is sometimes duplicated.

All chain drag data was track plotted on page sized sheets* and included with the AWOIS item investigation forms in Appendix VI, to show the area covered by the chain drag. All chain drag data has been checked and edited for bad positional data and labeled "NOT FOR SMOOTH PLOT." * Filed with the hydrographic data.

The ASSIGN FIX program was used to assign position numbers to the beginning or ending of a line as needed.

S. RECOMMENDATIONS

Specific recommendations concerning this survey are made in sections "J", "N", and "P" of this report. No inadequacies, additional work, nor further investigations were identified after field work was completed. Do not concur. AWOIS item 5511, a charted dangerous wreck PA, depth unknown, could not be disproved using conventional hydrographic methods. See section T6 of this report.

T. REFERRAL TO REPORTS

<u>Title</u>	<u>Transmittal Information</u>
Descriptive Report to Accompany Survey H-10380	Pacific Hydrographic Section N/CG245 Seattle, WA (1991)
Descriptive Report to Accompany Survey H-10395	Pacific Hydrographic Section N/CG245 Seattle, WA (1991)
Descriptive Report to Accompany Survey H-10396	Pacific Hydrographic Section N/CG245 Seattle, WA (1991)
Descriptive Report to Accompany Survey H-10379	Pacific hydrographic Section N/CG245 Seattle, WA (1991)
Horizontal Control Report for OPR-K228-AHP2	Field Photogrammetry Section Norfolk, VA (N/CG23322)(1991)

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: Mark J. McMann, Launch Hydrographer-in-Charge



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
Coast and Geodetic Survey
Norfolk, Virginia 23510-1114

**ADVANCE
INFORMATION**

Atlantic Hydrographic Party 2
439 W. York St.
Norfolk, VA 23510-1114

March 13, 1992

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

Dear Sir,

While conducting a basic hydrographic survey of Matagorda Bay for nautical charting, survey H-10415, Approaches to Carancahua Bay, nine uncharted shoals were found southwest of Carancahua Pass. These shoals were investigated by sounding lines, and are small shell mounds. The locations of these shoals are listed in the table below and labeled on an attached section of chart 11317, 20th Ed., March 23, 1991.

<u>Shoal</u>	<u>Latitude (N)</u>	<u>Longitude (W)</u>	<u>Depth (ft)</u>
A	28° 33' 30.0"	096° 25' 12.5"	10.2
B	28° 33' 33.0"	096° 24' 29.0"	11.1
C	28° 32' 40.0"	096° 24' 51.0"	11.1
D	28° 32' 30.5"	096° 25' 01.0"	12.4
E	28° 32' 24.0"	096° 24' 54.0"	10.8
F	28° 32' 29.5"	096° 24' 28.0"	10.8
G	28° 32' 12.0"	096° 23' 53.0"	9.8
H	28° 32' 46.5"	096° 22' 50.0"	9.2
I	28° 32' 25.0"	096° 22' 45.0"	11.1

These shoals 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. The depth on the shoals was corrected for predicted tides for Port O'Connor, Texas. The geographic positions of the shoals are North American Datum of 1983.

**ADVANCE
INFORMATION**



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.

Questions regarding this letter can be directed to me at telephone (804)441-6746 or Mr. Dennis Hill of the Pacific Hydrographic Section, Seattle, Washington, at (206) 526-6853.

Sincerely,

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

cc: N/CG221
N/CG2451
DMAHTC

THIS IS ADVANCE FIELD INFORMATION
SUBJECT TO OFFICE VERIFICATION

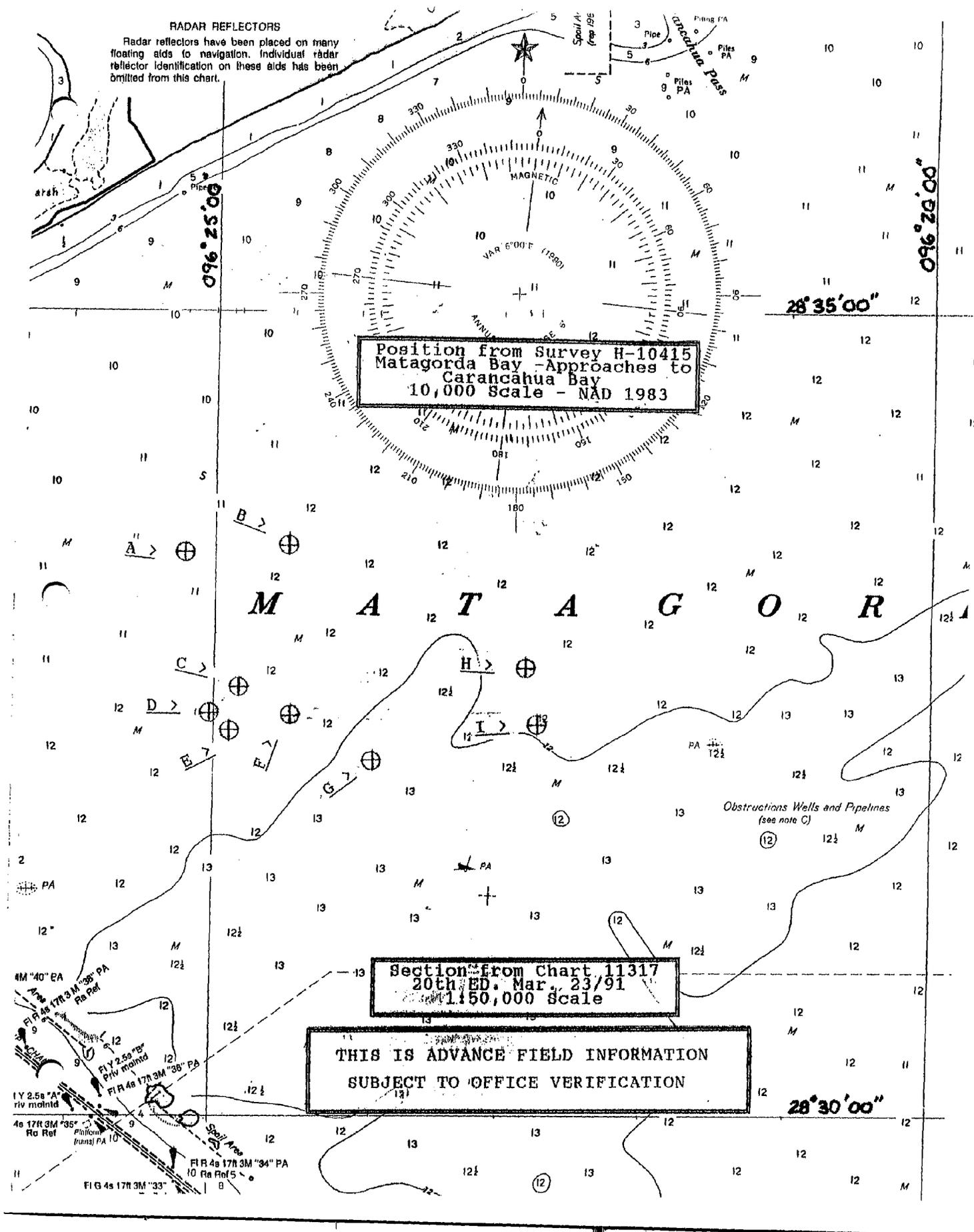
RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

Position from Survey H-10415
Matagorda Bay - Approaches to
Carancahua Bay
10,000 Scale - NAD 1983

Section from Chart 11317
20th ED, Mar. 23/91
1:50,000 Scale

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



CONTROL STATIONS as of 11 Mar 1997

No	Type	Latitude	Longitude	H Cart	Freq	Uel Code	MM/DD/YY	Station Name
001	F	028:39:08.751	096:33:48.617	0 250	0.0	0 0	05/08/91	ALCOA 1990
002	F	028:40:17.831	096:38:14.547	0 250	0.0	0 0	05/08/91	BLUF 1990
003	F	028:39:44.601	096:34:56.487	0 250	0.0	0 0	05/08/91	CAHS 1990
004	F	028:34:59.694	096:36:29.910	0 250	0.0	0 0	05/08/91	CHOC 1990
005	F	028:33:23.435	096:31:27.214	0 250	0.0	0 0	05/08/91	INDI 1990
006	F	028:30:25.466	096:28:47.523	0 250	0.0	0 0	05/08/91	IOLA 1990
007	F	028:41:53.224	096:34:34.009	0 250	0.0	0 0	05/08/91	LAJACA RIVER LIGHT 3
008	F	028:34:07.669	096:33:55.899	0 250	0.0	0 0	05/08/91	MAGNOLIA 1934
009	F	028:35:58.914	096:34:14.621	0 250	0.0	0 0	05/08/91	MATAGORDA SHIP CH RNG C FRT LT
010	F	028:36:35.747	096:35:07.085	0 250	0.0	0 0	05/08/91	MATAGORDA SHIP CH RNG C R LT
011	F	028:35:46.233	096:34:02.389	0 250	0.0	0 0	05/08/91	MATAGORDA SHIP CH RNG D FRT LT
012	F	028:35:26.693	096:34:02.932	0 250	0.0	0 0	05/08/91	MATAGORDA SHIP CH RNG D R LT
013	F	028:38:45.466	096:33:40.337	0 250	0.0	0 0	05/08/91	MITCHELL 2 1956
014	F	028:38:23.410	096:36:38.092	0 250	0.0	0 0	05/08/91	NOLE 1990
015	F	028:39:26.181	096:35:09.366	0 250	0.0	0 0	05/08/91	PIER PK 1990
016	F	028:36:57.750	096:30:48.191	0 250	0.0	0 0	05/08/91	RHOD 1990
017	F	028:34:12.754	096:29:19.105	0 250	0.0	0 0	05/08/91	SAND 1990
018	F	028:43:17.941	096:36:36.066	0 250	0.0	0 0	05/08/91	VEDO 1990
019	F	028:38:37.047	096:33:47.871	0 250	0.0	0 0	05/08/91	ZEPP 1989
020	F	028:26:10.961	096:20:01.576	0 250	0.0	0 0	05/08/91	TEMP 01
021	F	028:27:39.775	096:17:46.171	0 250	0.0	0 0	05/08/91	OSGOOD 2 1906
022	F	028:35:28.457	096:11:22.074	0 250	0.0	0 0	05/08/91	LAKE 2 1906
023	F	028:40:34.424	096:16:14.008	0 250	0.0	0 0	05/08/91	TURT 1991
024	F	028:36:26.852	096:24:20.045	0 250	0.0	0 0	05/08/91	DUNG 1991
025	F	028:35:13.034	096:26:49.244	0 250	0.0	0 0	05/08/91	VACA 1991
026	F	028:23:56.881	096:24:25.772	0 250	0.0	0 0	05/08/91	RUIN 1991
027	F	028:32:20.570	096:18:44.040	0 250	0.0	0 0	05/08/91	PLAT PK 1991
028	F	028:41:52.040	096:12:37.978	0 250	0.0	0 0	05/08/91	PALA 1991
029	F	028:38:33.081	096:14:06.706	0 250	0.0	0 0	05/08/91	INDY 1991
030	F	028:35:08.621	096:17:11.587	0 250	0.0	0 0	05/08/91	CHAN PK 1991
031	F	028:34:45.981	096:13:33.884	0 250	0.0	0 0	05/08/91	EROD 1991
032	F	028:36:02.270	096:14:05.710	0 250	0.0	0 0	05/08/91	BULL 1991
033	F	028:26:58.572	096:24:12.880	0 250	0.0	0 0	05/08/91	EARL 1991
034	F	028:27:04.927	096:24:15.671	0 250	0.0	0 0	05/08/91	3701 E 1989
035	F	028:26:44.591	096:23:42.325	0 250	0.0	0 0	05/08/91	IW MB PORT O CONNOR LT 2
036	F	028:27:29.804	096:21:39.302	0 250	0.0	0 0	05/08/91	MATAGORDA SHIP CH N DREDGE LT
037	F	028:27:15.806	096:21:29.031	0 250	0.0	0 0	05/08/91	MATAGORDA SHIP CH S DREDGE LT
038	F	028:26:50.318	096:25:20.875	0 250	0.0	0 0	05/08/91	PORT O CONNOR MUN TANK
039	F	028:28:50.457	096:17:17.626	0 250	0.0	0 0	05/08/91	MATAGORDA BAY RANGE L REAR LT
040	F	028:28:23.778	096:18:36.611	0 250	0.0	0 0	05/08/91	MATAGORDA BAY RANGE L FRONT LT
041	F	028:27:50.191	096:19:46.085	0 250	0.0	0 0	05/08/91	MATAGORDA BAY RANGE K FRONT LT
042	F	028:27:02.189	096:21:02.812	0 250	0.0	0 0	05/08/91	MATAGORDA BAY RANGE K REAR LT
043	F	028:27:01.247	096:21:41.033	0 250	0.0	0 0	05/08/91	MATAGORDA BAY RANGE A REAR LT
044	F	028:26:33.966	096:20:41.967	0 250	0.0	0 0	05/08/91	MATAGORDA BAY RANGE A FRONT LT
045	F	028:26:27.482	096:26:34.785	0 250	0.0	0 0	05/08/91	PORT O CONNOR CABLE TV MAST
046	F	028:25:18.494	096:19:05.925	0 250	0.0	0 0	05/08/91	MATAGORDA BAY RANGE B REAR LT
047	F	028:25:50.351	096:20:07.985	0 250	0.0	0 0	05/08/91	MATA 1934
048	F	028:25:40.634	096:19:37.260	0 250	0.0	0 0	05/08/91	MATAGORDA BAY RANGE B FRONT LT
049	F	028:29:45.812	096:15:16.338	0 250	0.0	0 0	05/08/91	MATAGORDA BAY RANGE H REAR LT
050	F	028:38:33.045	096:19:19.991	0 250	0.0	0 0	05/08/91	TRULL SAT
051	F	028:43:28.301	096:15:09.749	0 250	0.0	0 0	05/08/91	PALAPORT
052	F	028:28:36.298	096:15:07.070	0 250	0.0	0 0	05/08/91	SMYTH SAT
053	F	028:30:56.831	096:10:21.410	0 250	0.0	0 0	05/08/91	PDE 1934
054	F	028:39:16.001	096:13:41.524	0 250	0.0	0 0	05/24/91	COON 1991

AWOIS NO: 5350

Item Description: PIPE rep

Source: CL292/72--USPS

AWOIS Position: Lat - 28°35 40.98"N, Lon - 96°25'14.90"W

Required Investigation: VS, BD, DI, SD - 100m radius.

Charts Affected: 11316, 11317

INVESTIGATION

Date(s)/DN(s): 2-29-92 / 060

Position Numbers: 2029 - 2082

Launch Number: 0517

Investigation Used: Bottom Drag

Position Determined By: Falcon Multiple LOP

Investigation Summary: A chain drag, covering a 100-meter radius about the charted location of the pipe, was conducted; nothing was hung. The drag was run at 10 meter line spacing using 40 feet of tow line and 60 feet of chain.

CHARTING RECOMMENDATION

The Hydrographer recommends deleting the ^{visible rep} Pipe charted at the AWOIS Position listed above. -CONCUR

Recommended Position: None

Recommended Least Depth: None

COMPILATION NOTES

Chart

Applied As

AWOIS NO: 5385

Item Description: TWO PILES, PA

Source: CL1252/75--USPS

AWOIS Position: Lat - 28°36'28.98"N, Lon - 96°21'55.89"W

Required Investigation: BD - 150m radius.

Charts Affected: 11316, 11317

INVESTIGATION

Date(s)/DN(s): 03-05-92 / 065

Position Numbers: 2114-2125

Launch Number: 0517

Investigation Used: Bottom Drag

Position Determined By: Falcon Multiple LOP

Investigation Summary: Two 150-meter radius circle drags were conducted centered at the charted locations of each of the two piles designated as AWOIS 5285. A center weight was deployed under a buoy at the center location of the AWOIS item. A line with additional weights attached every 25 meters was connected between the center weight and the bow of launch 0517. A center position target was entered in the PC-DAS computer and the coxswain steered an arc 150 meters from the target. This ensured that the search areas were covered completely. At the conclusion of the circle a detached position was taken at the target position for each pile. Nothing was hung during these searches. The positions of the piles were scaled from chart 11317.

CHARTING RECOMMENDATION

The Hydrographer recommends removal of the piles PA note and the symbols from the chart. - CONCUR

visible pile

Recommended Position: None

✓

Recommended Least Depth: None

COMPILATION NOTES

Chart

Applied As

AWOIS NO: 5386

Item Description: IRON PIPES (Subm pipes PA)

Source: H-5813, CL881/73

AWOIS Position: Lat - 28°37'09.98"N, Lon - 96°21'49.89"W

Required Investigation: VS,BD,DI,SD 100m radius

Charts Affected: 11316, 11317

INVESTIGATION

Date(s)/DN(s): 2-28-92 / 059

Position Numbers: 1959

Launch Number: 0517

Investigation Used: DI

Position Determined By: Falcon Multiple LOP

Investigation Summary: A 100-meter radius diver circle search was conducted about the AWOIS position in water depths less than 1 meter; nothing was found. A detached position was taken in the center of the search area. (1959)

CHARTING RECOMMENDATION

The Hydrographer recommends removing the submerged pipes from the chart. ^{PA} CONCW ✓

Recommended Position: None

Recommended Least Depth: None

COMPILATION NOTES

Chart

Applied As

AWOIS NO: 5387

Item Description: FILES (Piling PA - 4 symbols)

Source: CL1435/75--USPS

AWOIS Position: Lat - 28°36'35.98"N, Lon - 96°21'36.89"W

Required Investigation: VS,ED,DI,SD 100m radius

Charts Affected: 11316, 11317

INVESTIGATION

Date(s)/DN(s): 03-05-92 / 065

Position Numbers: 2126-2147

Launch Number: 0517

Investigation Used: Bottom Drag

Position Determined By: Falcon Multiple LOP

Investigation Summary: Four 100 meter radius circle drags were conducted, centered at the charted positions of the four piles that are designated AWOIS 5387. A center weight was deployed under a buoy at the center location of the AWOIS item. A line with additional weights attached every 25 meters was connected between the center weight and the bow of launch 0517. A center position was entered in the PC-DAS and the coxswain steered an arc 100 meters from the target position. This ensured that the search areas were covered completely. Detached positions were taken at the center points of the searches. Nothing was found. - CONCUR

CHARTING RECOMMENDATION

The Hydrographer recommends removing the charted Piles PA note and symbols from the chart. Concur

visible pile

Recommended Position: None

✓

Recommended Least Depth: None

COMPILATION NOTES

Chart

Applied As

AWOIS NO: 5388

Item Description: PILES

Source: CL292/72--USPS

AWOIS Position: Lat - 28°37'19.98"N, Lon - 96°22'08.89"W

Required Investigation: VS, BD, DI, SD 100m radius

Charts Affected: 11316, 11317

INVESTIGATION

Date(s)/DN(s): 2-28-92 / 059

Position Numbers: 1958, 1960 Launch Number: 0517

Investigation Used: DI *pos # 1957 is center for the divers circle search*

Position Determined By: Falcon Multiple LOP

Investigation Summary: A 100-meter radius (about the listed AWOIS position) diver circle search was conducted in water less than 1.0 meter deep; nothing was found. Two piles were visually located, one about ~~120~~¹²⁰ meters south of the AWOIS position (PN 1958) and another about 400 meters east (PN 1960) of the AWOIS position. These two piles are identical, and in the opinion of the hydrographer, constitute the "Piles Rep" charted and referred to by this item. *Remove piles rep and chart piles at lat. 28/37/16.25 N, long. 96/22/06.98 W and lat. 28/37/16.21 N, long. 96/21/52.57 W as shown on smooth sheet.*

CHARTING RECOMMENDATION

The Hydrographer recommends charting the piles as located by detached positions 1958 and 1960. ✓

Recommended Position: PN 1958 > 28°37'16.2⁵"N, 096°22'07.0^{06.98}"W
PN 1960 > 28°37'16.2⁴"N, 096°21'52.6⁵⁷"W

Recommended Least Depth: *visible piles* Both ⁴ ~~v~~ ⁴ ~~bare~~ 1.5 meters corrected by ~~predicted~~ ^{smooth} tides at MHW.

COMPILATION NOTES

APPROVAL SHEET

BASIC HYDROGRAPHIC SURVEY
OPR-K228-AHP2
AHP2-10-2-91
H-10415
1992

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

Lt. Thomas R. Waddington
Chief, Atlantic Hydrographic Party Two



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-10415

LOCALITY: Matagorda Bay, approaches to Carancahua Bay, TX

TIME PERIOD: January 24 - March 5, 1992

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

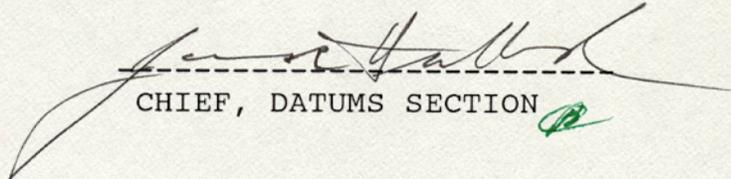
PLANE OF REFERENCE (MEAN LOWER LOW WATER): 3.44 feet

HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 1.0 foot

REMARKS: RECOMMENDED ZONING

Port O'Connor, TX (877-3701) data was invalid for most of the time period required for this sheet, so, it was not used. Apply a -00 hr 10 min correction for all times and a X0.84 range ratio to all heights on Palacios, TX (877-3156).

NOTE: Hourly heights are tabulated on Central Standard Time.


CHIEF, DATUMS SECTION 



H-10415

GEOGRAPHIC NAMES

Name on Survey	<div style="display: flex; justify-content: space-between;"> A ON CHART NO. 11316 B ON PREVIOUS SURVEY NO. C ON U.S. QUADRANGLE MAPS N2837.5 D FROM LOCAL INFORMATION E ON LOCAL MAPS F P.O. GUIDE OR MAP G RAND McNALLY ATLAS H U.S. LIGHT LIST K Chart 11317 </div>											
	CARANCAHUA PASS			X								
MATAGORDA BAY	X			X	X						X	2
REDFISH LAKE	X		X	X	X						X	3
SCHICKE POINT * SCHICKE POINT	X			X	X						X	4
TEXAS (title)	X		X								X	5
												6
* Per phone conversation												7
with Mr. Harrington. 3/31/93												8
												9
												10
												11
												12
												13
												14
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												18
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												21
												22
												23
												24
												25

Approved

Charles E. Harrington
Chief Geographer - N/C 215

APR 15 1992

HYDROGRAPHIC SURVEY STATISTICS

H-10415

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

RECORD DESCRIPTION		AMOUNT	RECORD DESCRIPTION			AMOUNT
SMOOTH SHEET		1	SMOOTH OVERLAYS: POS., ARC, EXCESS			6
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						
ENVELOPES						
VOLUMES						
CAHIERS	1					
BOXES						

SHORELINE DATA	
SHORELINE MAPS (List):	TP-01648, TP-01649
PHOTOBATHYMETRIC MAPS (List):	
NOTES TO THE HYDROGRAPHER (List):	
SPECIAL REPORTS (List):	
NAUTICAL CHARTS (List):	11316, 11317

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			2060
POSITIONS REVISED			
SOUNDINGS REVISED			112
CONTROL STATIONS REVISED			
	TIME-HOURS		
	VERIFICATION	EVALUATION	TOTALS
PRE-PROCESSING EXAMINATION			
VERIFICATION OF CONTROL			
VERIFICATION OF POSITIONS	40		
VERIFICATION OF SOUNDINGS	67		
VERIFICATION OF JUNCTIONS			
APPLICATION OF PHOTOBATHYMETRY			
SHORELINE APPLICATION/VERIFICATION			
COMPILATION OF SMOOTH SHEET	41		
COMPARISON WITH PRIOR SURVEYS AND CHARTS		8	
EVALUATION OF SIDE SCAN SONAR RECORDS			
EVALUATION OF WIRE DRAGS AND SWEEPS			
EVALUATION REPORT		41	
GEOGRAPHIC NAMES			
OTHER*			
*USE OTHER SIDE OF FORM FOR REMARKS	TOTALS	148	49
			197
Pre-processing Examination by J. Griffin	Beginning Date 4/8/92	Ending Date 5/6/92	
Verification of Field Data by R. Mihailov, J. Stringham	Time (Hours) 107	Ending Date 2/2/93	
Verification Check by J. Green, B. Olmstead	Time (Hours) 4	Ending Date 3/14/93	
Evaluation and Analysis by R. Mihailov	Time (Hours) 49	Ending Date 3/22/93	
Inspection by B. Olmstead	Time (Hours) 6	Ending Date 4/12/93	

EVALUATION REPORT

H-10415

1. INTRODUCTION

Survey H-10415 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

This survey was conducted in Texas and covers the north portion of Matagorda Bay including Carancahua Pass, the entrance to Carancahua Bay. The surveyed area is bounded by latitude 28/31/55N to the south, latitude 28/37/55N to the north, longitude 96/20/48W to the east and longitude 96/25/15W to the west. The shoreline is undeveloped and consists of sand and marsh beaches. The bottom consists mainly of mud. Depths generally range from 0.6 meters to 4.8 meters.

Predicted tides for Port O'Connor, Texas, were used for the reduction of soundings during field processing. Approved hourly heights zoned from Port O'Connor, Texas, gage 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 and electronic control correctors are adequate. An accompanying computer printout contains the parameters and the correctors. Velocity Table No. 6 for days 59-65 was not used. Velocity Table No.5 was revised to provide correctors for days 50-67.

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

2. CONTROL AND SHORELINE

Sections H and I of the hydrographer's report contain adequate discussions of horizontal control and hydrographic positioning.

More detailed information on horizontal control is found 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.

Positions of horizontal control stations used during hydrography are 1989, 1990 and 1991 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 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: 0.997 seconds (30.682 meters)
Longitude: 0.891 seconds (24.233 meters)

The year of establishment of control stations shown on the smooth sheet originates with the above mentioned horizontal control reports and the hydrographer's signal list.

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 shorelines maps were compiled on NAD 83 and apply to this survey.

	<u>Photo Date</u>	<u>Class</u>	<u>Scale</u>
TP-01648	Feb., Mar. 1989	III	1:20,000
TP-01649	Feb., Mar. 1989	III	1:20,000

3. HYDROGRAPHY

Except for the delineation of the zero curve, 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.

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.

5. JUNCTIONS

Survey H-10415 junctions with the following surveys.

<u>Survey</u>	<u>Year</u>	<u>Scale</u>	<u>Area</u>
H-10380	1991	1:10,000	East
H-10396	1991	1:10,000	East
H-10395	1991	1:10,000	South
H-10379	1991	1:10,000	West
H-10417	1992	1:10,000	West

The junction with surveys H-10380 and H-10395 could not be formally completed since these surveys were previously processed and forwarded for charting. The junction comparisons were made using office copies. The soundings are in good agreement.

The junctions with surveys H-10396, H-10379 and H-10417 are complete and the soundings are in good agreement.

6. COMPARISON WITH PRIOR SURVEYS

H-5813 (1934-35) 1:20,000
H-5866 (1934-35) 1:20,000

Prior survey H-5813 covers the area adjacent to the entrance to Carancahua Bay. A comparison with prior survey H-5813 reveals that the present depths are generally deeper by 0.6 meters throughout the common area. In addition, during the past fifty-eight years, the high water line has shifted landward in some places as much as 300 meters. Shoreline and sounding differences are largely attributed to a general subsidence of the region caused by the pumping of oil and fresh water from underlying reservoirs. To a lesser extent, frequent storm activity over the last fifty years has also contributed to some accretion and erosion of the shoreline throughout Matagorda Bay.

Survey H-5866 covers the offshore area of the present survey. Soundings agree to within 0.7 meters with the present survey depths deeper. Sounding differences are likely attributed to the type of equipment and survey methods employed during 1934-35. AWOIS item 5386 originates from this prior survey and has been satisfactorily addressed in the hydrographer's report, attached as an investigation form.

Survey H-10415 is adequate to supersede these prior surveys within the common area.

7. COMPARISON WITH CHART

<u>Chart</u>	<u>Edition</u>	<u>Date</u>	<u>Scale</u>	<u>Datum</u>
11317	20th edition	March 23, 1991	1:50,000	NAD83
11317	21st edition	July 4, 1992	1:50,000	NAD83
11316	33rd edition	January 19, 1991	1:40,000	NAD83
11316	34th edition	June 6, 1992	1:40,000	NAD83

The 20th and 21st editions of chart 11317 are identical.

The 33rd and 34th editions of chart 11316 have a few soundings added from a miscellaneous source.

a. Hydrography

Charted hydrography originates with prior surveys H-5813, H-5866 and miscellaneous sources.

Comparison with the prior surveys has been addressed in the hydrographer's report, section M, supplemented by section 6 in this report. With the following exception survey H-10415 is adequate to supersede hydrography within the common area.

<u>Feature</u>	<u>Latitude</u>	<u>Longitude</u>	<u>AWOIS</u>
submerged wreck PA	28/32/20N	96/21/31W	5511

b. AWOIS

All AWOIS items within the survey area originate with prior survey H-5386 and miscellaneous sources. Refer to the hydrographer's report, and as follows for the discussions and disposition of these features.

AWOIS item 5511, a submerged wreck PA, charted at latitude 28/32/20N, longitude 96/21/31W was revised to an information item by N/CG 241 and not assigned for investigation. The submerged wreck PA, should be retained as charted.

c. Controlling Depths

There are no charted channels with controlling depths within the area of this survey.

d. Aids to Navigation

There are no aids to navigation in the survey area.

There are no landmarks within the area of this survey.

e. Geographic Names

Names appearing on the smooth sheet and in the survey title have been approved by the Chief Geographer. Geographic name SCHICKE POINT as shown on chart 11316, 33rd and 34th editions, is spelled incorrectly. Recommend this name be corrected on the next chart edition. Reference the attached Geographic Names List.

f. Dangers to Navigation

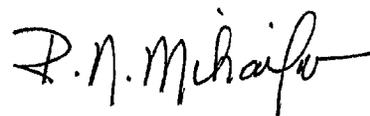
The hydrographer reported nine isolated shoals as dangers to navigation to the USCG and DMAHTC. Copies of these reports are attached to this report. No additional dangers to navigation were discovered during office processing.

8. COMPLIANCE WITH INSTRUCTIONS

Survey H-10415 adequately complies with the Project Instructions except where noted in this report.

9. ADDITIONAL FIELD WORK

This is a good hydrographic survey. Additional field work on a low priority basis is recommended to investigate the feature not found or disproved during this survey, as noted in section 7 of this report.



R. N. Mihailov
Cartographer

APPROVAL SHEET
H-10415

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.

Bruce A. Olmstead
for Dennis J. Hill Date: April 12, 1993
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: 4/14/93
Chief, Pacific Hydrographic Section

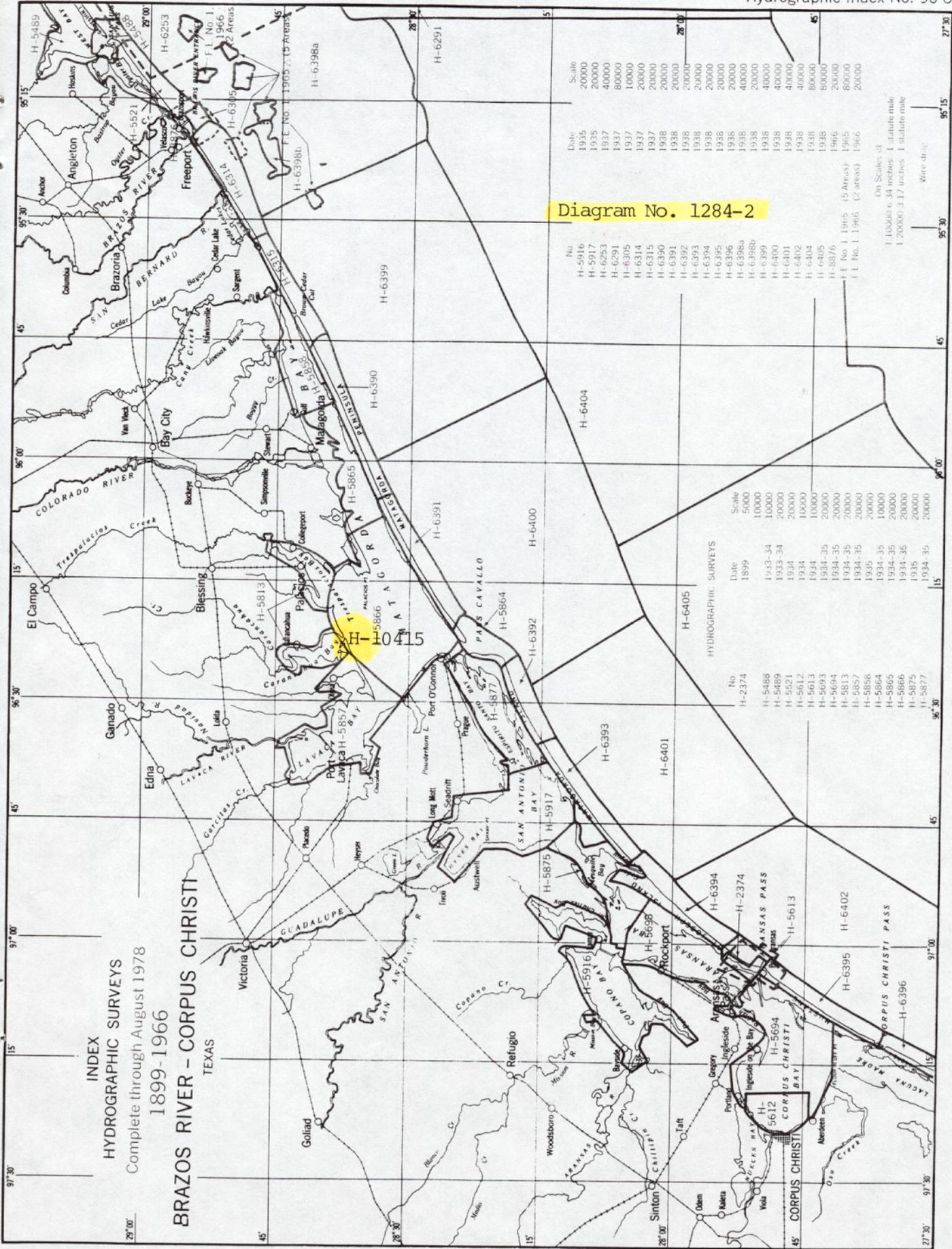
Final Approval

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



INDEX
HYDROGRAPHIC SURVEYS
Complete through August 1978
1899-1966
BRAZOS RIVER - CORPUS CHRISTI
TEXAS

Diagram No. 1284-2

No.	Date	Scale
H-5916	1935	20000
H-5917	1935	20000
H-6253	1937	40000
H-6291	1937	80000
H-6305	1937	10000
H-6314	1937	20000
H-6315	1937	20000
H-6350	1938	20000
H-6391	1938	20000
H-6392	1938	20000
H-6393	1938	20000
H-6394	1938	20000
H-6395	1938	20000
H-6396	1938	20000
H-6398a	1938	40000
H-6398b	1938	20000
H-6399	1938	40000
H-6400	1938	40000
H-6401	1938	40000
H-6402	1938	40000
H-6404	1938	40000
H-6405	1938	80000
H-6876	1966	20000
F.E. No. 1, 1965 (5 Areas)		
F.E. No. 1, 1966 (2 Areas)		

HYDROGRAPHIC SURVEYS

No.	Date	Scale
H-2374	1899	5000
H-5488	1933-34	10000
H-5489	1933-34	20000
H-5521	1934	20000
H-5612	1934	10000
H-5613	1934	10000
H-5693	1934-35	20000
H-5694	1934-35	20000
H-5813	1934-35	20000
H-5857	1934-35	20000
H-5858	1935	20000
H-5864	1934-35	10000
H-5865	1934-35	20000
H-5866	1934-35	20000
H-5875	1935	20000
H-5877	1934-35	20000

On Scales of
1:10000 6.34 inches 1 statute mile
1:20000 3.17 inches 1 statute mile

Wire draw

