

# 10360

Diagram No. 1285-2

NOAA FORM 76-35A

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

## DESCRIPTIVE REPORT

Type of Survey ... Hydrographic .....  
Field No. .... AHP-10-15-90 .....  
Registry No. .... H-10360 .....

### LOCALITY

State ..... Texas .....  
General Locality .. Redfish Bay .....  
Sublocality ..... Aransas Pass .....

19 90-91

CHIEF OF PARTY  
LCDR V.D. Ross

### LIBRARY & ARCHIVES

DATE ..... April 6, 1992 .....

# 10360

EC/G

PRODUCTS

11309

11314

11307 N/C

H-10360

**HYDROGRAPHIC TITLE SHEET**

AHP-10-15-90

INSTRUCTIONS - The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

State Texas

General locality Redfish Bay

Locality Aransas Pass

Scale 1:10,000 Date of survey 11-6-90 to 2-27-91

Instructions dated September 14, 1990 Project No. OPR-K229-AHP-90

Vessel 0517

Chief of party LCDR V. Dale Ross

Surveyed by MJM, MJB, LJG, GVT

Soundings taken by echo sounder, hand lead, pole All

Graphic record scaled by MJM, MJB, LJG, GVT

Graphic record checked by MJM, MJB, LJG, GVT

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

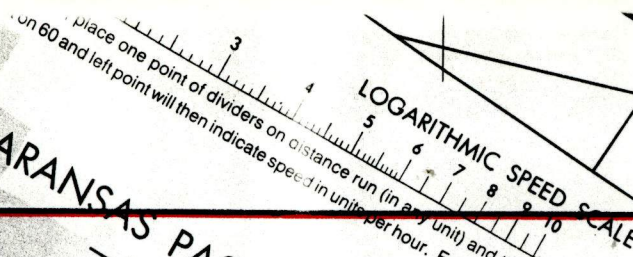
Evaluation by: C.R. Davies

Soundings in ~~fathoms~~ ~~feet~~ ~~xxx~~ ~~MLLW~~ ~~MLLW~~ Meters at MLLW

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

*A0015/SURF ✓ 4/28/92 JTV*

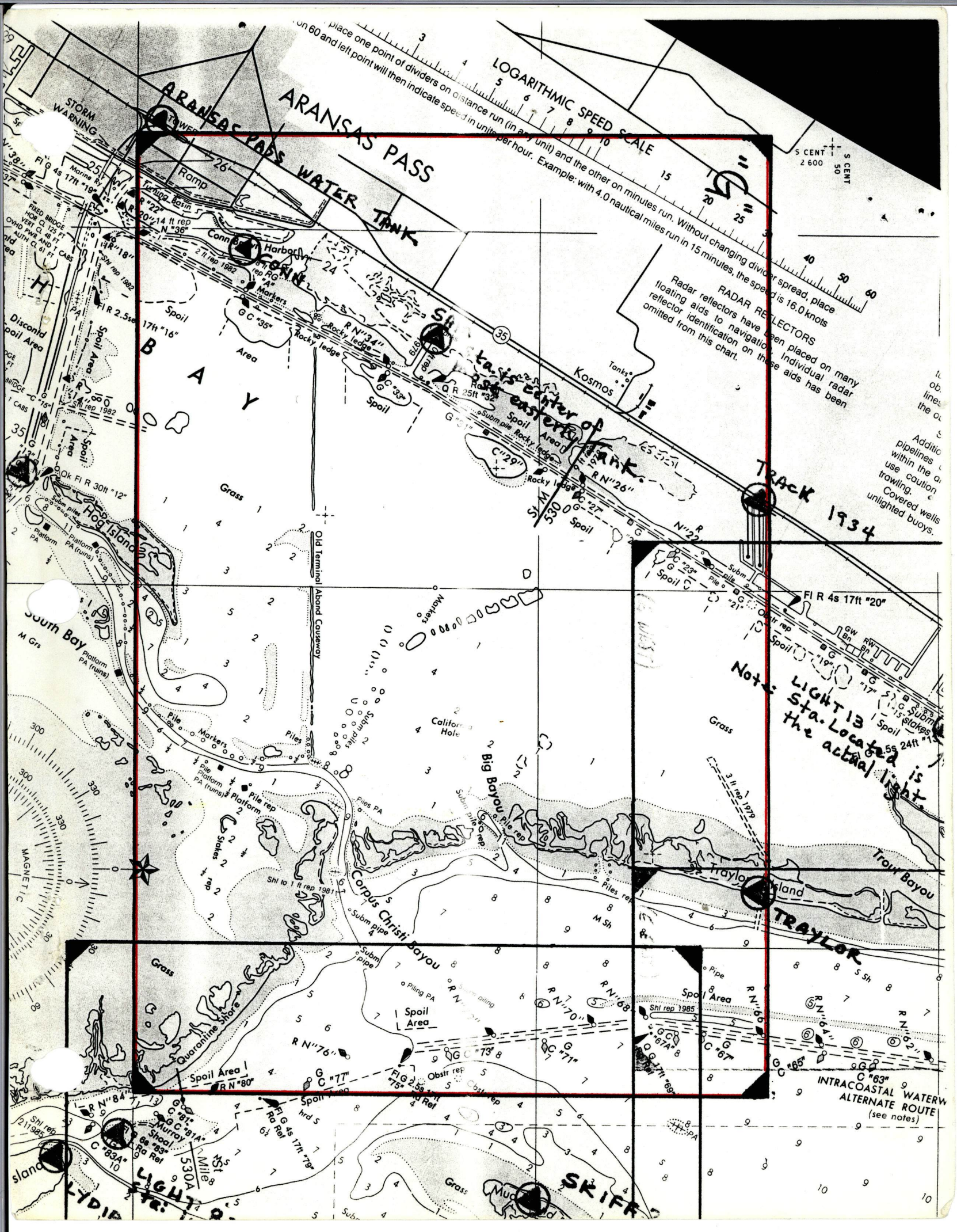
*SC-28-97*  
*Rhh*



**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.

**Note:** LIGHT 13 Sta. Located is the actual light.



DESCRIPTIVE REPORT TO ACCOMPANY  
HYDROGRAPHIC SURVEY H-10360  
Field No. AHP-10-15-90  
OPR-K229-AHP2  
Scale: 1:10,000  
Atlantic Hydrographic Party Two  
Chief of Party: Lt. Cdr. V.Dale Ross, NOAA  
1990-91

A. PROJECT ✓

This survey was conducted in accordance with Hydrographic Project Instructions OPR-K229-AHP2, Corpus Christi and Aransas Bays, Texas, dated September 14, 1990.

The purpose of project OPR-K229-AHP2 is to provide contemporary hydrography for the maintenance of existing charts and to compile a new chart for the naval base at Ingleside, Texas.

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

B. AREA SURVEYED ✓

The area surveyed for H-10360 covers the northern half of Redfish Bay from Aransas Pass, Texas on the west to the southern tip of Aransas Bay on the east including the intra-coastal waterway running along the mainland. Survey limits are as follows:

North - Latitude  $27^{\circ}56'50''$ <sup>36</sup>N  
South - Latitude  $27^{\circ}53'45''$ <sup>16</sup>N (Aransas Pass)  
East - Longitude  $097^{\circ}03'30''$ <sup>16</sup>W (Center of Aransas Bay)  
West - Longitude  $097^{\circ}08'30''$ <sup>22</sup>W (Aransas Pass)

This survey was conducted from November 6, 1990 (DN 310) to February 27, 1991 (DN 058).

C. SURVEY VESSELS ✓

NOAA launch 0517 (EDP No. 0517), a 21-foot MonArk, was used to collect all data on this survey. No problems were encountered with this vessel.

D. AUTOMATED DATA ACQUISITION AND PROCESSING ✓

Hewlett-Packard HDAPS Programs:

<u>Program</u>	<u>Version</u>	<u>Date</u>
Survey	4.33	5/26/90
Survey	4.61	11/28/90
Constat	2.02	3/9/90
Constat	2.05	11/28/90
Postsur	4.14	7/20/90
Postsur	4.17	11/28/90
Printout	2.23	7/12/90
Baseline	1.01	6/15/90
Backup	1.02	3/9/90
Backup	1.03	11/28/90
Quick	1.01	7/27/90
Quick	1.04	11/28/90
Conplot	1.02	6/25/90
Diagnostic	2.50	3/9/90
Compute	2.02	3/9/90
Compute	2.03	11/28/90
Point	1.20	7/27/90
Install	1.20	3/26/90
Install	1.31	11/28/90
Plotall	1.70	7/27/90
Plotall	1.77	11/28/90
Loadnew	1.00	7/27/90
Loadnew	1.22	11/28/90
Convert	2.34	6/20/90
Convert	2.36	11/28/90
Filesys	1.55	5/26/90
Filesys	1.72	11/28/90
Inverse	1.21	7/27/90
Abst	3.05	5/26/90
Listawois	1.10	11/20/90
Reject	1.00	11/20/90
Carto	1.00	10/26/90

PC-DAS program, NOAAEXE directory, Version 3.6 was used for on-line data acquisition on the survey vessel.

In addition to the HDAPS, the following non-HDAPS computer programs were used:

VELOCITY (IBM PC)	Ver. 1.11 (3/9/90)
MTEN 3 with enhancements (IBM PC)	Ver. 6/88
WordPerfect	Ver. 5.1 (1989)

E. SONAR EQUIPMENT ✓

Not applicable.

F. SOUNDING EQUIPMENT ✓

Raytheon DE-719CM Fathometer, serial number 8652, modified with Odom Hydrographic Systems, Inc. Digitrace, was used for the data collected with launch 0517. No problems were encountered with this depth sounder.

Depths on this survey ranged from <sup>0.3-7.8</sup> ~~0-6~~ meters.

G. CORRECTIONS TO SOUNDINGS ✓

Weather permitting, lead line comparisons were conducted each day of hydrography to determine an instrument corrector. The average corrector for Fathometer S/N 8652 was 0.0 meter. No instrument error was applied to the soundings on the final field sheet. A lead line comparison form can be found in the "Separates to be Included With Survey Data".\*

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 effects of sea and swell action were inserted or corrected, as appropriate, while scanning.

The depth sounder was calibrated for a speed of sound through water of 1500 m/sec. Corrections for the speed of sound through water were computed from data obtained with Odom Hydrographic Systems, Inc. DIGIBAR electronic speed of sound probe serial number 155. Data quality assurance tests were performed prior to all of the casts. Program "Velocity" version 1.11 was used for the speed of sound corrections computations. The following casts were taken:

<u>Cast</u>	<u>Day</u>	<u>Depth (m)</u>
0	302	7.5
1	317	4.0
2	324	6.0
3	334	6.0
4	339	4.0
5	354	6.0
6	010	6.0
7	035	6.0
8	043	6.0

A zero speed of sound correction was obtained for depths averaging 4.8 meters or less. One tenth of one meter applies to average depths greater than 4.8 meters. No speed of sound correctors were applied on the final field sheet. Copies of the tables are in the "Separates to be Included With Survey Data". \* Speed of sound support documentation is in the cahier for H-10360.

A static draft of 0.3 meter was applied on-line. This was measured from a punch mark on the side of launch 0517, 0.6 meter above the transducer, to the water surface, then subtracting the difference.

Settlement and squat measurements for vessel 0517 were performed on October 4, 1990 (day 277). The level method was used. Settlement and squat correctors were applied to all survey data. Data from the settlement and squat test are included in the "Separates to be Included With Survey Data". \*

The final field sheet was plotted using predicted tides determined from the Galveston, Texas permanent tide station using time and height correctors furnished with the project instructions. *Approved tides were applied to the smooth sheet.*

Actual tide heights were requested from the Sea and Lake Levels Branch, N/OMA12, in a letter dated March 7, 1991. A copy of the letter is included in the appendices of this report. \*

On day no. 310-338 the draft of the vessel logged with the data was incorrect. This was corrected by applying draft values from the office HDAPS tables during the final plot.

#### H. CONTROL STATIONS ✓

The horizontal control datum for this project is the North American Datum of 1983. Stations 108, 110, 114, 118, 120, 121, 124, and 126 were used to control this survey. Signal 127 was used only for initial pointings. A signal list, as well as a copy of the PC-DAS Control Station Table\*, is included in the appendices of this report.

The Coastal Surveys Unit from Norfolk, Virginia used third order, class I traverse and intersection methods to establish horizontal control for this project. The horizontal control report was written and submitted by the Coastal Surveys Unit employees for OPR-K229-AHP2. *These reports are identified as Geodetic Control Report for CM-8716 and Geodetic Control Survey Job HC-9901*

#### I. HYDROGRAPHIC POSITION CONTROL ✓

Range/range and range/azimuth positioning methods were used to control this survey. Multiple lines of position, up to four, using Motorola Falcon 484 MiniRangers, were used for the range/range

method. A Nikon NT2D theodolite, serial number 031033, was used for angle observations for the range/azimuth method. The following Falcon MiniRanger equipment was used:

<u>VESNO</u>	<u>Equipment</u>	<u>S/N</u>	<u>Code</u>
0517	RPU	F0241	
	RT	E2967	
	RT	G3646	
	R/S	G3572	1
	R/S	F3180	2
	R/S	F3290	3
	R/S	E2977	4
	R/S	E2926	5
	R/S	C2059	6

Baseline calibrations of the Motorola Falcon 484 equipment were performed on October 25, 1990, and January 25, 1991. The master RT, s/n E2967, failed on January 22, 1991 and was replaced by RT s/n G3646. The correctors were applied on-line through the Complex "C-O" tables. Baseline calibration forms and the "C-O" tables are included in the "Separates to be Included With Survey Data".\*

When using three or four lines of position, a critical system check is continuously being obtained by observing the error circle radius (ecr) and residual (res) values on the Complex screen on the survey vessels. When the error circle radius (ecr) is greater than 15m (1.5m at the survey scale) or the residuals are greater than 5m (.5m at the survey scale) for more than three to five minutes, survey operations are suspended in the area until the problem can be resolved. Any positions which had high error circle radii or residuals in an otherwise good line are smoothed during processing.

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

J. SHORELINE See EVAE Report, section 2

Shoreline shown on the final field sheet was transferred by hand from T-map 1198. The document was compiled at 1:20,000 scale on NAD 1927 and enlarged to 1:10,000 scale for use with this survey. The datum shift was accomplished through the use of grid ticks on the manuscript to convert to NAD 1983.

Shoreline verification was accomplished by comparison of the main scheme hydrography which junctions at shore, or by visual inspections. Shoreline detail verified by this survey is shown in

\* Filed with the hydrographic data.



black ink on the final field sheet. Two shoreline detail changes were identified and are shown in red ink on the final field sheet and described as follows:

Along the southern shore near the mouth of Corpus Christi Bayou there is an apparent shoreline change of less than 5 meters, where the channel line plotted on or slightly inside the manuscript shoreline. The water depths in this area drop off sharply from shore, and while conducting hydrography in this area the survey launch was less than 10 meters from shore. *Dashed red shoreline at latitude 27°55'50N, longitude 97°04'43W shown on the smooth sheet.*

In the vicinity of lat. 27° 56' 10", lon. 97° 06' 50" where the chart shows a "9 ft rep 1978" note there has been a significant shoreline change including the addition of a fuel loading dock, a dredged small boat harbor with piers, and a concrete seawall surrounding the harbor. This area was defined by taking detached positions on each significant point along the seawall and on the piers. *Depicted in dashed red on smooth sheet.*

A channel line run on the east side of Conn Brown harbor that plotted on the shoreline was caused by the range/azimuth program, which plots a straight line between fixes instead of the arc which the boat follows. There is no shoreline change in this area. *Concur One sounding (49) was rejected, in conflict with the HWL.*

All field notes regarding these changes are recorded on the graphic records for each day of hydrography. No sounding volumes nor notebooks were used. A complete list of all detached positions, generated through the HDAPS Contact File Utility is included in the "Separates to be Included With Survey Data".\* It lists the feature or item number, position, and the elevation corrected to mean low water using predicted tides.

#### K. CROSSLINES ✓

A total of 7.9 linear nautical miles of crosslines were run on H-10360 which equals 12.0% of the main scheme hydrography. Crosslines agree within 0.3 meter throughout the entire survey.

#### L. JUNCTIONS See Enac Report, section 5

This survey junctions with sheet "E" on the north (H-10359), sheet "K" on the south (H-10328), and sheet "H" on the east, which is to be completed later in the field season. Surveys "E" and "K" are AHP2-OPR-K229-90, survey "H" is AHP2-OPR-K229-91. *(H-10360)*

Comparison on the north with H-10359 shows disagreement of as much as 0.5 meter. This is caused by differences between predicted and actual tide values. The survey was plotted with an average

\* Filed with the hydrographic data.

value of zero while the actual tide value on the day of the junction area was run averaged -0.25 meter. The agreement on the east and south is good, ranging from 0.1 to 0.4 meter. *with approved tides for survey H-10359, the junction is complete.*

M. COMPARISON WITH PRIOR SURVEYS *See EVAL Report, section 6*

This survey was compared with prior survey H-5693, dated August 1934 to March 1935, and T-maps 9178 and 9179.

Soundings from H-10360 generally agree with the prior survey within 0.3 meter in the deeper water areas of the survey. Inside the 2-meter depth curve the current survey depths are deeper by as much as 1 meter. In the vicinity of lat. 27° 55' 00", lon. 97° 04' 20", (the mouth of Corpus Christi Bayou) there is poor agreement with both the charted and prior soundings. There is no explainable trend in this area, with some prior soundings deeper and some shoaler.

The prior survey and T-9179 do not show the intracoastal waterway along shore of the mainland or the alternate route in the center of the bay. In these areas sounding agreement is good except for the dredged channels and the spoil areas immediately outside the channels.

In the area known as the California Hole the prior soundings are generally shoaler than the present depths by 0.3 to 0.4 meter. This can be resolved by the application of smooth tides. The on-line tide corrector for that day of hydrography was 0.0 meter. Tide records for that day reveal an actual corrector of -0.2 to -0.4 meter. *Comparison with the chart reveals good agreement after approved tides were applied.*

On T-9178 Conn Brown Harbor shoreline is no longer accurate. Considerable shoreline has been added south to the entrance channel. On T-9179 the shoreline is adequate but the channel shown as Morris and Cummings Cut north of Corpus Christi Bayou and the daybeacons charted with it no longer exist.

N. COMPARISON WITH THE CHART *See EVAL Report, section 7*

This survey was compared to the 16th edition of chart 11314, dated January 20, 1990.

~~three~~ There were no items originating from prior surveys. ~~six~~ Twenty-  
six items from other sources were addressed on this survey. These are discussed on item investigation report forms in the "Separates to be Included With Survey Data". \* ~~Seven~~ <sup>Four</sup> items that fall within the

\* Attached to this report

limits of this sheet were resolved on sheet "K", H-10328. The item nos. are 5031, 5036, ~~5037~~, ~~5038~~, 5039, 5040, and ~~5041~~. <sup>FIVE</sup> Four other items that fall within the limits of this sheet were addressed on sheet "E", H-10359. The item nos. are 5079, 5080, 5081, 5084, and 5085.

The area shown as Big Bayou on the chart has been dredged to allow access to a natural gas drilling site being developed by Sante Fe Energy. The existing natural channel was extended west to the platform site, and was dredged to a depth of 7 feet below sea level or 6 feet below mean low tide. The platform <sup>(2,3m)</sup> site was staked at the time of the survey and located by detached positions at each corner stake, however awarding the contract for the dredging of this site has not yet occurred, and the hydrographer recommends contacting Mr. Steve Hopkins at Sante Fe Energy (713-268-5436) to determine when the work will be completed. The contract depth for the dredging in the drilling site is 7 feet below sea level. The original sounding lines run in this area <sup>(2,3m)</sup> prior to the dredging work were rejected and rerun after the dredging of the entrance channel was completed. Every effort was made by the hydrographer to insure the soundings in this area were accurate, but delays in the dredging project prevented completion of the updated sounding lines. *Soundings in this area, between lat 27/55/53N, long. 97/04/31 and lat. 27/55/49N, long. 97/05/03W are between 1.2m and 5m (4ft and 16ft)*

A charted submerged pipe in the vicinity of lat. 27° 55' 10"N, lon. 97° 03' 58"W was investigated by 100-meter radius chain drag and nothing was found. The hydrographer recommends this feature be removed from the chart. *COMMIT*

A charted submerged pipe in the vicinity of lat. 27° 55' 06"N, lon. 97° 04' 13"W was located by chain drag and a detached position (#1277) was taken on a small diameter metal pipe laying flat on the bottom. The hydrographer recommends the pipe be charted as located above. *Chart 1.7 Obstrn at the above position.*

Sounding comparison results between charted soundings and those found on survey H-10360, are the same as those discussed in section M of this report.

O. ADEQUACY OF SURVEY ✓

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

P. AIDS TO NAVIGATION ✓

<sup>Fifteen</sup> Fourteen floating aids to navigation exist within the survey area. Buoy RN "76" (U.S. Coast Guard Light List no. 36210) was found 70 meters southeast of the charted position but still serves

the apparent purpose for which it was established. All other buoys were found on station and serve the apparent purpose for which they were established. *Concur*

There are ~~six~~<sup>nine</sup> non-floating aids to navigation in the survey area. Aransas Bay Alternate Route Lt 79 (U.S. Coast Guard Light List no. 36220) was found 75 meters NNW of its charted position, but still serves its intended purpose. G dbn "25" (U.S. Coast Guard Light List no. 35865) was located 110 meters southwest of the charted position but still serves its intended purpose. All other non-floating aids were found on station. *Concur*

*See section 7.d of Envr report for a list of Aids (Fixed) found on this survey.*  
Positions and descriptions for all aids to navigation are entered on the graphic records for this survey.

There are no bridges, overhead cables, submarine cables, pipelines nor ferry routes within the limits of this survey.

#### Q. STATISTICS ✓

##### Description

Total Positions	1341
Detached Positions	61
Duplicate Positions	3
Total Miles of Hydrography	98.2
Sq. Nautical Miles of Hydrography	3
Bottom Samples	18
Velocity Casts	5
Tide Stations	3
Days of Production	16

#### R. MISCELLANEOUS

No anomalous tidal nor current conditions were observed while conducting this survey.

Bottom samples taken were submitted to the Smithsonian Institution as directed in Section 6.7 of the project instructions. Bottom samples were plotted on the overlay with the other detached positions. The bottom samples were listed on the Oceanographic Log Sheet-M, NOAA form 75-44, and may be found in the Separates Following Text.\*

Geographic positions for all detached positions are shown on the listing of the HDAPS cartographic tables used to compile the final field sheet. These tables contain the DP to GP conversions and are included in the "Separates To Be Included With Survey Data".

\* Filed with the hydrographic data

The chain drag conducted on day no.010 for AWOIS item 5064 was of 200-meter radius. However, the easternmost four drag lines did not plot on the survey sheet due to the proximity of the sheet edge. Nothing was found. *CMC*

S. RECOMMENDATIONS ✓

Not applicable.

T. REFERRAL TO REPORTS ✓

<u>Title</u>	<u>Transmittal Information</u>
Descriptive Report To Accompany Survey H-10360	Pacific Hydrographic Section Seattle, Washington
Descriptive Report To Accompany Survey H-10359	Pacific Hydrographic Section Seattle, Washington
Descriptive Report To Accompany Survey H-10328	Pacific Hydrographic Section Seattle, Washington
Horizontal Control Report for OPR-K229-AHP2	Field Photogrammetry Section Norfolk, VA (N/CG233)
Chart Sales Agent Report for OPR-K229-AHP2	Chart Distribution Branch (N/CG33) Rockville, MD.
User Evaluation Report OPR-K229-AHP2	Atlantic Hydrographic Section (N/CG244) Norfolk, Va.
Chart Inspection Report OPR-K229-AHP2	Atlantic Hydrographic Section (N/CG244) Norfolk, Va.
Coast Pilot Report	Coast Pilot Section Mapping and Charting Branch (N/CG22) Rockville, MD

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

CHART #11314

PRE-SURVEY REVIEW ITEM #5037  
FILE

SOURCE: CL138/71--USPS

INVEST. DATE:

TIME:

VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10360 (OPR-K229-AHP)

POSITION:

CORRECTORS APPLIED: N/A

VELOCITY:

TRA CORRECTORS:

PREDICTED TIDES:

GEODETTIC POSITION:

LATITUDE (N)

LONGITUDE (W)

CHARTED:

27° 54' 21.1"

97° 04' 56.0"

OBSERVED:

POSITION DETERMINED BY: Multiple LOP, Falcon Mini Rangers

METHOD OF ITEM INVESTIGATION: Resolved on sheet "K", H-10328.

CHARTING RECOMMENDATIONS:

*Not resolved on H-10328, retain position, change notation to subm pile*

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COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM 5038  
STAKE *rep*

SOURCE: CL1826/72--USPS

INVEST. DATE:

TIME:

VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10360 (OPR-K229-AHP)

POSITION:

CORRECTORS APPLIED: N/A

VELOCITY:

TRA CORRECTORS:

PREDICTED TIDES:

GEODETTIC POSITION:

LATITUDE (N)

LONGITUDE (W)

CHARTED:

27° 54' 24.1"

97° 04' 31.0"

OBSERVED:

POSITION DETERMINED BY: Multiple LOP, Falcon Mini Rangers

METHOD OF ITEM INVESTIGATION: Resolved on sheet "K", H-10328.

CHARTING RECOMMENDATIONS:

*Not resolved on H-10328, retain position + notation.*

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COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM #5041  
PLATFORM PA

SOURCE: TPO1198-(1986)

INVEST. DATE:

TIME:

VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10360 (OPR-K229-AHP)

POSITION:

CORRECTORS APPLIED: N/A

VELOCITY:

TRA CORRECTORS:

PREDICTED TIDES:

GEODETTIC POSITION:

LATITUDE (N)

LONGITUDE (W)

CHARTED:

27° 54' 27.1"

97° 04' 59.0"

OBSERVED:

POSITION DETERMINED BY: Multiple LOP, Falcon Mini Rangers

METHOD OF ITEM INVESTIGATION: Resolved on sheet "K", H-10328.

CHARTING RECOMMENDATIONS: *Not resolved on H-10328, retain position  
change notation to subm ruins (Platform) PA.*

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COMPILATION USE

CHART:

APPLIED AS:



CHART #11314

PRE-SURVEY REVIEW ITEM #5043  
PILE

SOURCE: CL1695/73--USPS

INVEST. DATE:12/4/90(D.N.338)

TIME:1855Z

VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10360 (OPR-K229-AHP)

POSITION:None

CORRECTORS APPLIED:N/A

VELOCITY:

TRA CORRECTORS:

PREDICTED TIDES:

GEODETTIC POSITION:

LATITUDE (N)

LONGITUDE (W)

CHARTED:

27° 54' 33.1"

97° 07' 43.0"

OBSERVED: Not Found

POSITION DETERMINED BY: Multiple LOP, Falcon Mini Rangers

METHOD OF ITEM INVESTIGATION: A visual search was conducted in this area and nothing was found. The entire 25 meter search area is on a large shoal that uncovers at low water and is not navigable at normal tide stages. The visual search was conducted from the edge of the shoal.

CHARTING RECOMMENDATIONS: The hydrographer recommends the charted pile be removed from the chart.

*CONCURRED*

---

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM 5044  
SOUNDING 8 ft rep

SOURCE: CL1297/82--USPS

INVEST. DATE: 12/4/90 (D.N.338) TIME: 172526-173004Z VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10360 (OPR-K229-AHP) POSITION: 623-628

CORRECTORS APPLIED:

VELOCITY: No

TRA CORRECTORS: Yes

PREDICTED TIDES: Yes

GEODETIC POSITION:

LATITUDE (N)

LONGITUDE (W)

CHARTED:

27° 54' 33.1"

97° 07' 38.0"

OBSERVED: See method of item investigation Lat 27/54/35N, Long 97/07/41W

POSITION DETERMINED BY: Multiple LOP, Falcon Mini Rangers

METHOD OF ITEM INVESTIGATION: Three channel lines were run in this area, which is defined by a row of wood piles on each side of the channel. A center line, right side, and left side of channel were run between the piles. A least depth of 2.3<sup>4</sup> meters (7.5<sup>8</sup>ft) was found in the center of the channel

CHARTING RECOMMENDATIONS: The hydrographer recommends charting a controlling depth of 7<sup>8</sup> feet in the channel pending verification with smooth tides. Remove "8 ft rep". Chart "8 ft 1990"

---

COMPILATION USE

CHART:

APPLIED AS:

11 309  
deleted from chart  
1/26

CHART #11314

PRE-SURVEY REVIEW ITEM #5045+6180  
PLATFORM & PILE Rep

SOURCE: CL1826/72--USPS

INVEST. DATE: 11/30/90 (D.N.334)

TIME: 170123

VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10360 (OPR-K229-AHP)

POSITION: 535

CORRECTORS APPLIED:

VELOCITY: No

TRA CORRECTORS: Yes

PREDICTED TIDES: Yes

GEODETTIC POSITION:

LATITUDE (N)

LONGITUDE (W)

CHARTED: #5045

27° 54' 34.1"

97° 04' 53.0"

#6180

27° 54' 34.1"

97° 04' 54.0"

OBSERVED: #535

27° 54' 36.7"

97° 04' 55.6"

POSITION DETERMINED BY: Multiple LOP, Falcon Mini Rangers

METHOD OF ITEM INVESTIGATION: A visual search was performed in this area and a detached position (#535) was taken on a U-shaped wooden mooring platform which is approx. 10 meters wide by 20 meters deep. There are several piles at both sides of the entrance to this platform. In the opinion of the hydrographer these piles are the source of AWOIS #6180. Although Pos.#535 is over 100 meters away from the charted position of AWOIS #5045, this is the only structure in the area. To the east of the platform, the water is too shoal to navigate by boat. A photograph was taken of this item and may be found in the separates following the text of this report.

CHARTING RECOMMENDATIONS: The hydrographer recommends the platform be charted as observed above. The pile symbol and note, "pile rep", should be removed from the chart.

---

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM #5046  
MARKERS

SOURCE: CL1695/73--USPS

INVEST. DATE: 1/28/91(D.N.028)

TIME:191339Z

VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10360 (OPR-K229-AHP)

POSITION:1336

CORRECTORS APPLIED: None

VELOCITY:

TRA CORRECTORS:

PREDICTED TIDES:

GEODETTIC POSITION:

LATITUDE (N)

LONGITUDE (W)

CHARTED:

27° 54' 39.1"

97° 07' 37.0"

OBSERVED: See method of item investigation

POSITION DETERMINED BY: Multiple LOP, Falcon Mini Rangers

METHOD OF ITEM INVESTIGATION: A visual search was conducted on both sides of the Intracoastal Waterway for the charted markers and nothing was found. Water depths in the area of the charted markers is extremely shoal (0-1 meter).

CHARTING RECOMMENDATIONS: The hydrographer recommends removal of the markers from the chart.

*Concur*

---

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM #5047  
WRECK

T-9179 (1948-51)  
SOURCE: TP01198 (1986)

INVEST. DATE: 11/30/90 (DN 334)      TIME: 165200      VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10360 (OPR-K229-AHP)      POSITION: 534

CORRECTORS APPLIED:

VELOCITY: No      TRA CORRECTORS: Yes

PREDICTED TIDES: Yes

GEODETIC POSITION:	LATITUDE (N)	LONGITUDE (W)
CHARTED:	27° 54' 54.1"	97° 05' 03.0"
OBSERVED: # 534	27° 54' 55.5 $\frac{3}{4}$ "	97° 05' 01. <sup>86</sup> 9"

POSITION DETERMINED BY: Multiple LOP, Falcon Mini Rangers

METHOD OF ITEM INVESTIGATION: A visible wreck approx. 5 meters wide by 10 meters long and baring 1.5 meters was located by detached position #534.

CHARTING RECOMMENDATIONS: The hydrographer recommends the visible wreck be charted at the position observed above. *Concur*  
*Remove subm WK on the chart.*

---

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM 5049  
PILE

SOURCE: UNKNOWN

INVEST. DATE: 01/08/91 (D.N.008)

TIME: 1643-1728Z

VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10360 (OPR-K229-AHP)

POSITION: 1134

CORRECTORS APPLIED: None

VELOCITY:

TRA CORRECTORS:

PREDICTED TIDES:

GEODETTIC POSITION:

LATITUDE (N)

LONGITUDE (W)

CHARTED:

27° 54' 54.1"

97° 07' 24.0"

OBSERVED: Not Found

POSITION DETERMINED BY: Multiple LOP, Falcon Mini Rangers

METHOD OF ITEM INVESTIGATION: A 100 meter radius visual search was executed in water depths of one meter or less. Nothing was found.

CHARTING RECOMMENDATIONS: The hydrographer recommends removal of the of the pile symbol from the chart. *Concur*

---

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM #5050  
PILE CLUSTER

SOURCE: BP57662(9/58)--COE

INVEST. DATE:01/08/91(D.N.008)

TIME: 173155Z

VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10360 (OPR-K229-AHP)

POSITION: 1135

CORRECTORS APPLIED: None

VELOCITY:

TRA CORRECTORS:

PREDICTED TIDES:

GEODETIC POSITION:

LATITUDE (N)

LONGITUDE (W)

CHARTED:

27° 54' 56.1"

97° 07' 38.0"

OBSERVED:

27° 54' 54.4"

97° 07' 33.2"

POSITION DETERMINED BY: Multiple LOP, Falcon Mini Rangers

METHOD OF ITEM INVESTIGATION: The item was located visually in an area that is inaccessible by boat. The piles, apparently the remains of a railroad bed that crossed the area, are not a danger to navigation. A detached position was taken (#1135) with a bearing and estimated range to the area of piles in ruins.

CHARTING RECOMMENDATIONS: The hydrographer recommends the piles remain as charted. *Concur*

---

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM #5051  
WRECK

SOURCE: <sup>J-9179(1948-51)</sup>  
~~CL138/71-USPS~~

INVEST. DATE: 01/10/91 (D.N.010) TIME: 200753Z

VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10360 (OPR-K229-AHP)

POSITION: 1278

CORRECTORS APPLIED: None

VELOCITY:

TRA CORRECTORS:

PREDICTED TIDES:

GEODETTIC POSITION:

LATITUDE (N)

LONGITUDE (W)

CHARTED:

27° 55' 00.1"

97° 04' 25.5"

OBSERVED:

#1278

27° 54' 59.8

97° 04' 25.4"

POSITION DETERMINED BY: Multiple LOP, Falcon Mini Rangers

METHOD OF ITEM INVESTIGATION: A fathometer search in the area of this item revealed scattered wreckage with a least depth of 0.45m measured with a sounding pole.

CHARTING RECOMMENDATIONS: The hydrographer recommends the submerged wreck remain as charted. *CMCW*

---

COMPILATION USE

CHART:

APPLIED AS:



CHART #11314

PRE-SURVEY REVIEW ITEM #5052  
WRECK

SOURCE: <sup>T-9179 (1948-51)</sup>  
~~GL138/71-USPS~~

INVEST. DATE: 11/30/90 (D.N.334)

TIME: 164455Z

VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10360 (OPR-K229-AHP)

POSITION: 533

CORRECTORS APPLIED:

VELOCITY: No

TRA CORRECTORS: Yes

PREDICTED TIDES: Yes

GEODETIC POSITION:

LATITUDE (N)

LONGITUDE (W)

CHARTED:

27° 55' 02.6"

97° 04' 48.0" <sup>AWOIS #</sup> 5052

OBSERVED:

#533

27° 54' 57.3"

97° 04' 55.9" 10439

POSITION DETERMINED BY: Multiple LOP, Falcon Mini Rangers

METHOD OF ITEM INVESTIGATION: A visible wreck<sup>(AWOIS ITEM 10439)</sup> was located by detached position #533. The wreck is 6 meters long by 3 meters wide and bears 1.5 meters. The wreck is in ruins. This wreck lies 275 meters southwest of the charted position of AWOIS #5052. A visual search was conducted in the area of the charted wreck, which lies on shore, and nothing was found. Due to the extreme age of the ~~located wreck, and its location in the same general vicinity, the~~ <sup>located</sup> ~~hydrographer feels the visible wreck located by pos.#533 is actually the~~ <sup>new</sup> ~~wreck reported as AWOIS #5052, and that the wreck has either~~ <sup>and is</sup> ~~moved or was initially positioned incorrectly.~~

*it is considered disproved.*

CHARTING RECOMMENDATIONS: The hydrographer recommends charting a visible wreck in the position observed above, <sup>Correct</sup> ~~Delete charted wreck, Awois item 5052.~~ <sup>AWOIS item 10439.</sup>

*PWD 12/99*

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM 5054  
~~SUBM FILE~~ Piling PA

SOURCE: CL532/84--USPS

INVEST. DATE: 12/20/90 (D.N.354)

TIME: 160003-171724Z VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10360 (OPR-K229-AHP)

POSITION: 983-1037

CORRECTORS APPLIED:

VELOCITY: No

TRA CORRECTORS: Yes

PREDICTED TIDES: Yes

GEODETTIC POSITION:

LATITUDE (N)

LONGITUDE (W)

CHARTED:

27° 55' 22.1"

97° 03' 48.0"

OBSERVED: Not Found

POSITION DETERMINED BY: Multiple LOP, Falcon Mini Rangers

METHOD OF ITEM INVESTIGATION: A 100 meter radius chain-drag with 10 meter line spacing was performed on D.N.354 and nothing was found.

CHARTING RECOMMENDATIONS: The hydrographer recommends removal of the piling from the chart.

*CMW*

---

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM #5055  
SOUNDING *Shoaling to 1ft rep 1981*

SOURCE: CL827/81--USCG AUX.

INVEST. DATE: 12/11/90 (D.N.345) TIME:160901-161907Z VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10360 (OPR-K229-AHP) POSITION:776-782

CORRECTORS APPLIED:

VELOCITY: No TRA CORRECTORS: Yes

PREDICTED TIDES: Yes

GEODETTIC POSITION: LATITUDE (N) LONGITUDE (W)

CHARTED: 27° 55' 03.1" 97° 04' 21.0"

OBSERVED: See method of item investigation

POSITION DETERMINED BY: Multiple LOP, Falcon Mini Rangers

METHOD OF ITEM INVESTIGATION: Three channel lines; a right side, center line, and left side were run in the bayou and mainscheme hydrography was split to 50 meters in the mouth of the bayou and the least depth in the center of the channel was <sup>2.4</sup>~~2.1~~ meters (~~6.9~~ft). However, this is an unmarked channel with large shoal areas on both sides, and without knowledge of the channels' location it is extremely hard to locate and maintain a course that will carry that depth as one traverses the entrance to the bayou.

CHARTING RECOMMENDATIONS: The hydrographer recommends removal of the Sh1 to 1 ft rep note and the charting of representative *concur* soundings from H-10360. *Depths range from 1.4m to 1.8m (4ft to 6ft)*

---

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM 5056  
SUBM PILE

SOURCE: CL532/84--USPS

INVEST. DATE:12/20/90 (D.N.354) TIME:180947-192942Z VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10360 (OPR-K229-AHP) POSITION:1038-1087

CORRECTORS APPLIED:

VELOCITY: No

TRA CORRECTORS: Yes

PREDICTED TIDES: Yes

GEODETTIC POSITION:

LATITUDE (N)

LONGITUDE (W)

CHARTED:

27° 55' 35.1"

97° 03' 49.0"

OBSERVED: Not Found

POSITION DETERMINED BY: Multiple LOP, Falcon Mini Rangers

METHOD OF ITEM INVESTIGATION: A 100 meter radius chain drag at 10 meter line spacing was conducted on D.N.354 and nothing was found.

CHARTING RECOMMENDATIONS: The hydrographer recommends removal of the submerged piling from the chart. *concur*

---

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM #5057  
PILE (Subm)

SOURCE: CL-1418/80--USPS

INVEST. DATE: 1/28/91(D.N.028)

TIME: 185735Z

VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10360 (OPR-K229-AHP)

POSITION: 1335

CORRECTORS APPLIED: None

VELOCITY:

TRA CORRECTORS:

PREDICTED TIDES:

GEODETIC POSITION:

LATITUDE (N)

LONGITUDE (W)

CHARTED:

27° 55' 42.1"

97° 06' 59.0"

OBSERVED:

27° 55' 42.4"

97° 06' 59.9"

POSITION DETERMINED BY: Multiple LOP, Falcon Mini Rangers

METHOD OF ITEM INVESTIGATION: A 0.1m dia. wood stake was located by detached position # 1335 in the area of the charted pile. The stake bared ~~1.0m~~<sub>0.9</sub> at ~~MLLW~~<sub>in HW</sub> using predicted tides values.

CHARTING RECOMMENDATIONS: The hydrographer recommends the stake be charted as located above. *concur*  
*Inadequate investigation for removal of subm pile. A visual search is not adequate for dispersal of this subm. feature.*  
Subm pile (Awois 5057) should be retain as charted.

---

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM #5057  
PILE (Subm)

SOURCE: CL-1418/80--USPS

INVEST. DATE: 1/28/91(D.N.028)

TIME: 185735Z

VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10360 (OPR-K229-AHP)

POSITION: 1335

CORRECTORS APPLIED: None

VELOCITY:

TRA CORRECTORS:

PREDICTED TIDES:

GEODETIC POSITION:

LATITUDE (N)

LONGITUDE (W)

CHARTED:

27° 55' 42.1"

97° 06' 59.0"

OBSERVED:

27° 55' 42.4"

97° 06' 59.<sup>8</sup>"

POSITION DETERMINED BY: Multiple LOP, Falcon Mini Rangers

METHOD OF ITEM INVESTIGATION: A 0.1m dia. wood stake was located by detached position # 1335 in the area of the charted pile. The stake bared ~~1.0m~~ <sup>0.9m</sup> at ~~MLLW~~ <sup>mHW</sup> using ~~predicted~~ <sup>approved</sup> tides values.

CHARTING RECOMMENDATIONS: The hydrographer recommends the stake be charted as located above. *Concur Remove subm pik.*

---

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM 5058  
ROCKY LEDGE

SOURCE: CL1385/69--USPS

INVEST. DATE: 01/08/91 (D.N.008)

TIME: 1737-1752Z

VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10360 (OPR-K229-AHP)

POSITION: 1136

CORRECTORS APPLIED: None

VELOCITY:

TRA CORRECTORS:

PREDICTED TIDES:

GEODETIC POSITION:

LATITUDE (N)

LONGITUDE (W)

CHARTED:

27° 54' 55.1"

97° 07' 22.0"

OBSERVED: See method of item investigation.

POSITION DETERMINED BY: Multiple LOP, Falcon Mini Rangers

METHOD OF ITEM INVESTIGATION: A visual search in the area of the "Rocky Ledge" notes on both the east and west sides of the Intracoastal Waterway found spoil areas of rock deposited outside of the edges of the channel, which was apparently dredged from the channel during construction. The sides of the channel are quite steep in this area, and immediately outside of the channel there is very little water, making navigation impossible. These rocky ledges are not deemed to be a hazard to navigation since the lack of water outside of the dredged channel prohibits passage by any except extreme shallow draft vessels.

CHARTING RECOMMENDATIONS: The hydrographer recommends the "Rocky Ledge" notes remain as charted. *Concur*

---

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM #5061  
PILES PA

SOURCE: CL1926/76--USPS

INVEST. DATE: 11/30/90 (DN 334) TIME: 163500 VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10360 (OPR-K229-AHP) POSITION: 532

CORRECTORS APPLIED: None

VELOCITY: TRA CORRECTORS:

PREDICTED TIDES:

GEODETIC POSITION: LATITUDE (N) LONGITUDE (W)

CHARTED: 27° 55' 08.1" 97° 04' 46.0"

OBSERVED: #532 27° 55' 06.9" 97° 04' 46.1"

POSITION DETERMINED BY: Multiple LOP, Falcon Mini Rangers

METHOD OF ITEM INVESTIGATION: An 0.2 meter square wood pile was located by detached position #532. This pile bares <sup>2.7</sup>3 meters and has a board on the west facing side labeled "Nueces County" and a board on the east facing side labeled "Aransas County".

CHARTING RECOMMENDATIONS: The hydrographer recommends removal of the Piles PA note and the charting of the single pile as located by pos.# 532. *CONCUR*

---

COMPILATION USE

CHART:

APPLIED AS:



CHART #11314

PRE-SURVEY REVIEW ITEM 5062  
PILE

SOURCE: BP57662--9/58, COE

INVEST. DATE: 12/04/90 (D.N.338)

TIME: 191943Z

VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10360 (OPR-K229-AHP)

POSITION: 648

CORRECTORS APPLIED: None

VELOCITY:

TRA CORRECTORS:

PREDICTED TIDES:

GEODETTIC POSITION:

LATITUDE (N)

LONGITUDE (W)

CHARTED:

27° 55' 17.1"

97° 07' 16.0"

OBSERVED:

27° 55' 14.9"<sup>86</sup>

97° 07' 17.7"

POSITION DETERMINED BY: Multiple LOP, Falcon Mini Rangers

METHOD OF ITEM INVESTIGATION: A visual search conducted in the area of this item revealed two 0.2m dia. wood piles, baring 1.3<sup>8</sup>m. A photograph of this item was taken and may be found in the separates\* following the text of this report.

CHARTING RECOMMENDATIONS: The hydrographer recommends the piles be charted as located above. *Concur* *Delete charted pile*

*\*Photos filed w/survey data*

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM 5063  
PILE

SOURCE: BP-57662--9/58,COE

INVEST. DATE:01/08/91(D.N.008)

TIME: 193107Z

VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10360 (OPR-K229-AHP)

POSITION: 1151

CORRECTORS APPLIED: None

VELOCITY:

TRA CORRECTORS:

PREDICTED TIDES:

GEODETIC POSITION:

LATITUDE (N)

LONGITUDE (W)

CHARTED:

27° 55' 25.1"

97° 07' 10.5"

OBSERVED:

#1151

27° 55' 25.34"

97° 07' 12.34"

POSITION DETERMINED BY: Multiple LOP, Falcon Mini Rangers

METHOD OF ITEM INVESTIGATION: A single wood 0.3m dia. pile was located by detached position(#1151).

CHARTING RECOMMENDATIONS: The hydrographer recommends charting the pile as located above. *Correct* *Delete charted pile.*

---

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM 5064  
SUBM OBSTRUCTION *rep*

SOURCE: CL1564/74--USPS

INVEST. DATE: 01/10/91 (D.N.010)      TIME: 151154-191741Z      VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10360 (OPR-K229-AHP)      POSITION: 1153-1276

CORRECTORS APPLIED: None

VELOCITY:

TRA CORRECTORS:

PREDICTED TIDES:

GEODETTIC POSITION:

LATITUDE (N)

LONGITUDE (W)

CHARTED:

27° 55' 26.6"

97° 03' 15.5"

OBSERVED: Not found

POSITION DETERMINED BY: Multiple LOP, Falcon Mini Rangers

METHOD OF ITEM INVESTIGATION: A 200 meter radius chain drag was conducted with 10 meter line spacing, and nothing was found.

CHARTING RECOMMENDATIONS: The hydrographer recommends removal of the obstruction from the chart. *Concur*

---

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM #5065  
SUBM OBSTRUCTION *rep*

SOURCE: CL1815/72--USPS

INVEST. DATE:12/19/90(D.N.353) TIME:152628-201744Z VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10360 (OPR-K229-AHP) POSITION:837-981

CORRECTORS APPLIED:

VELOCITY: No

TRA CORRECTORS: Yes

PREDICTED TIDES: Yes

GEODETTIC POSITION:

LATITUDE (N)

LONGITUDE (W)

CHARTED:

27° 55' 37.1"

97° 03' 19.0"

OBSERVED: Not Found

POSITION DETERMINED BY: Multiple LOP, Falcon Mini Rangers

METHOD OF ITEM INVESTIGATION: A 200 meter radius chain drag at 10 meter line spacing was performed on D.N.353 and nothing was found.

CHARTING RECOMMENDATIONS: The hydrographer recommends removal of the obstruction reported label from the chart. *Concur*

---

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM 5066  
SUBM PILE *rep*

SOURCE: CL138/71--USPS

INVEST. DATE: 11/30/90 (DN 334)      TIME: 161302      VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10360 (OPR-K229-AHP)      POSITION: 531

CORRECTORS APPLIED: NONE

VELOCITY:

TRA CORRECTORS:

PREDICTED TIDES:

GEODETTIC POSITION:

LATITUDE (N)

LONGITUDE (W)

CHARTED:

27° 55' 44.1"

97° 04' 41.0"

OBSERVED: Not Found

POSITION DETERMINED BY: Multiple LOP, Falcon Mini Rangers

METHOD OF ITEM INVESTIGATION: A 100 meter radius visual search was conducted in water from 0-1 meter deep and nothing was found.

CHARTING RECOMMENDATIONS: The hydrographer recommends removal of the submerged pile from the chart. *Concur*

---

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM 5067  
PILE *rep*

SOURCE: CL138/71--USPS

INVEST. DATE: 11/30/90 (DN 334)

TIME: 155836

VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10360 (OPR-K229-AHP)

POSITION: 530

CORRECTORS APPLIED: NONE

VELOCITY:

TRA CORRECTORS:

PREDICTED TIDES:

GEODETTIC POSITION:

LATITUDE (N)

LONGITUDE (W)

CHARTED:

27° 55' 51.6"

97° 04' 44.5"

OBSERVED: Not Found

POSITION DETERMINED BY: Multiple LOP, Falcon Mini Rangers

METHOD OF ITEM INVESTIGATION: A 100 meter radius visual search was performed on D.N.334 in water from 0-2 meters deep and nothing was found.

CHARTING RECOMMENDATIONS: The hydrographer recommends the removal of the pile reported note from the chart. *Do not concur*

*Inadequate investigation, retain charted "position, change notation to "subm pile rep".  
The depth of water (2 meters) in the Awaris item search radius should preclude a visual search.  
A bottom drag or diver search should have been done to disprove this item.*

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM 5072  
SOUNDING 9 ft rep 1978

SOURCE: CL1082/79--COE

INVEST. DATE: 01/08/91 (D.N.008)

TIME: 1848-1900Z

VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10360 (OPR-K229-AHP)

POSITION: 1139-1148

CORRECTORS APPLIED: None

VELOCITY:

TRA CORRECTORS:

PREDICTED TIDES:

GEODETTIC POSITION:

LATITUDE (N)

LONGITUDE (W)

CHARTED:

27° 56' 13.1"

97° 06' 43.0"

OBSERVED: See method of item investigation.

POSITION DETERMINED BY: Multiple LOP, Falcon Mini Rangers

METHOD OF ITEM INVESTIGATION: Three channel lines were run into a barge oil loading facility. A left side, right side, and center line of channel were run to determine the least depth in the channel. Center channel lines were run into a private marina just south of and adjoining the oil dock.

CHARTING RECOMMENDATIONS: The hydrographer recommends charting representative soundings from H-10360 and charting the oil dock, and piers as located above. *Do not concur, remove charted note "9ft rep 1978" chart "9ft 1990". Depth range between 2.6m to 4.7m (9ft to 15ft)*

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM 5074  
6 PILES

SOURCE: CL138/71--USPS

INVEST. DATE: 11/30/90 (DN 334)

TIME: 152704

VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10360 (OPR-K229-AHP)

POSITION: 529

CORRECTORS APPLIED: N/A

VELOCITY:

TRA CORRECTORS:

PREDICTED TIDES:

GEODETIC POSITION:

LATITUDE (N)

LONGITUDE (W)

CHARTED:

27° 56' 21.1"

97° 04' 25.0"

OBSERVED:

27° 56' 19.1"

97° 04' 30.5"

POSITION DETERMINED BY: Multiple LOP, Falcon Mini Rangers

METHOD OF ITEM INVESTIGATION: A double row of wood piles in ruins were located by detached position #529. They range in height from awash to baring 2 meters. A photograph\* of this item was taken and may be found in the separates following the text of this report.

CHARTING RECOMMENDATIONS: The hydrographer recommends the charting of these piles as located above. *Concur.*

*Remove charted note "Piles rep" and symbols.*

*\* Photo filed with this survey records*

COMPILATION USE

CHART:

APPLIED AS:



```

=====
Station Number ?
No T C Carto Latitude Longitude H Freq Vel Date
108 F 250 28: 0:49.662 96:58:12.654 0 0.0 0 10/10/90
110 F 250 27:59:23.706 96:58:52.815 0 0.0 0 10/10/90
114 F 250 28: 1:27.412 97: 1:14.362 0 0.0 0 10/10/90
118 F 250 27:54:28.873 97: 7:57.049 0 0.0 0 10/10/90
120 F 250 27:53:27.057 97: 6:40.209 0 0.0 0 10/10/90
121 F 250 27:55:28.634 97: 7:27.771 0 0.0 0 10/10/90
124 F 250 27:57: 7.493 97: 4:21.062 0 0.0 0 10/10/90
126 F 250 27:51:50.992 97: 3:22.978 0 0.0 0 10/10/90
127 F 250 27:54: 8.000 97: 8:38.000 0 0.0 0 10/10/90
    
```

<u>Station No.</u>	<u>Station Name</u>
108	SAS 1989
110	Allyn 1989
114	Nine Mile Pt. Lt. 2 1990
118	Conn 1989
120	Draw 1989
121	Sam 1989
124	Traylor 1989
126	Aransas Pass Lighthouse 1989
127	Aransas Pass Water Tank 1989

**APPROVAL SHEET**

**BASIC HYDROGRAPHIC SURVEY**

**OPR-K229-AHP2**

**AHP-10-15-90**

**H-10360**

**1990**

This survey was conducted in accordance with the project instructions for OPR-K229-AHP2, the hydrographic manual, the hydrographic survey guidelines, and the field procedures manual. The survey data and reports were completed under frequent supervision. All boat sheets and final field sheets were reviewed and all supporting records were also checked.

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



**V. Dale Ross**

**Lieutenant Commander, NOAA**

**Chief, Atlantic Hydrographic Party Two**

ORIGINAL

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

TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE: June 20, 1991

MARINE CENTER: Pacific

OPR: K229

HYDROGRAPHIC SHEET: H-10360

LOCALITY: Redfish Bay, Aransas Pass, Texas

TIME PERIOD: November 6, 1990 - February 27, 1991

TIDE STATIONS USED: 877-5083 Aransas Pass (Conn Brown Harbor), Tx.  
Lat.  $27^{\circ} 53.9'N$  Lon.  $97^{\circ} 8.1'W$

PLANE OF REFERENCE (MEAN LOWER LOW WATER): 2.55 ft.



HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 0.6 ft.

REMARKS: RECOMMENDED ZONING

1. North of latitude of  $27^{\circ} 55.5'N$ , apply a +30 min. time correction and a x0.67 range ratio.
2. North of latitude of  $27^{\circ} 54.6'N$  and south of latitude of  $27^{\circ} 55.5'N$ , times are direct and apply a x0.67 range ratio.
3. South of latitude of  $27^{\circ} 54.6'N$ :
  - a. In Aransas Channel, west of  $97^{\circ} 07.1'W$  and in the Intracoastal Waterway, west of  $97^{\circ} 07.1'W$ , south of  $27^{\circ} 54.6'N$ , north of  $27^{\circ} 53.0'N$  and in Conn Brown Harbor, zone direct.
  - b. In Redfish Bay, north of Aransas Channel and west of  $97^{\circ} 7.1'W$ , apply a x0.67 range ratio to all heights and times are direct.

- c. In Redfish Bay, north of Aransas Channel, and north and east of South Bay and east of  $97^{\circ} 7.1'W$ , apply a  $\times 0.67$  range ratio to all heights and a -0 hr. 30 min. time correction.
- d. In South Bay, north of Aransas Channel, apply a  $\times 0.67$  range ratio to all heights and a -0 hr. 45 min. time correction.

Note: Times are tabulated in Local Standard Time.

  
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CHIEF, TIDAL DATUM QUALITY  
ASSURANCE SECTION 

GEOGRAPHIC NAMES

H-10360

Name on Survey	ON CHART NO. 11309 OR 11314 ON PREVIOUS SURVEY											
	A	B	C	D	E	F	G	H	K			
ARANSAS BAY	X											1
ARANSAS PASS (title)	X											2
BIG BAYOU	X											3
CALIFORNIA HOLE	X											4
CONN BROWN HARBOR	X											5
CORPUS CHRISTI BAYOU	X											6
GRASS ISLAND	X											7
KOSMOS	X											8
HARBOR ISLAND	X											9
HOG ISLAND	X											10
REDFISH BAY	X											11
SHELLBAND ISLAND	X											12
TEXAS (title)	X											13
TRAYLOR ISLAND	X											14
QUARANTINE SHORE	X											15
												16
												17
												18
												19
												20
												21
												22
												23
												24
												25

Approved:

*Charles E. Harrington*

Chief Geographer - N/CG2x5

APR 30 1991

**HYDROGRAPHIC SURVEY STATISTICS**

H-10360

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					

<b>SHORELINE DATA</b>					
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			1341	
POSITIONS REVISED				
SOUNDINGS REVISED				
CONTROL STATIONS REVISED				
	TIME-HOURS			
	VERIFICATION	EVALUATION	TOTALS	
PRE-PROCESSING EXAMINATION				
VERIFICATION OF CONTROL				
VERIFICATION OF POSITIONS	11		11	
VERIFICATION OF SOUNDINGS	37		37	
VERIFICATION OF JUNCTIONS				
APPLICATION OF PHOTOBATHYMETRY				
SHORELINE APPLICATION/VERIFICATION				
COMPILATION OF SMOOTH SHEET	24		24	
COMPARISON WITH PRIOR SURVEYS AND CHARTS		15	15	
EVALUATION OF SIDE SCAN SONAR RECORDS				
EVALUATION OF WIRE DRAGS AND SWEEPS				
EVALUATION REPORT		27	27	
GEOGRAPHIC NAMES				
OTHER* <b>Digitization</b>				
*USE OTHER SIDE OF FORM FOR REMARKS	TOTALS	72	42	114

Pre-processing Examination by <b>M. Brown</b>	Beginning Date 4/10/91	Ending Date 4/26/91
Verification of Field Data by <b>R. Davies</b>	Time (Hours) 72	Ending Date 3/6/92
Verification Check by <b>J. Green</b>	Time (Hours) 15	Ending Date 3/11/92
Evaluation and Analysis by <b>R. Davies</b>	Time (Hours) 42	Ending Date 3/6/92
Inspection by <b>D. Hill</b>	Time (Hours) <b>4</b>	Ending Date <b>3/25/92</b>

# EVALUATION REPORT

**H-10360**

## **1. INTRODUCTION**

Survey H-10360 is a basic hydrographic survey accomplished by the Atlantic Hydrographic Party 2 under the following Project Instructions.

OPR-K229-AHP, dated September 14, 1990  
CHANGE NO. 1, dated February 12, 1991

This survey was conducted in Texas and covers the northern portion of Redfish Bay, between the town of Aransas Pass and Trout Bayou. The surveyed area extends from latitude 27/53/49N to latitude 27/56/36N, and from longitude 97/03/16W to longitude 97/08/22W. The surveyed area includes Conn Brown Harbor, the Intracoastal Waterway, Intracoastal Waterway Alternate Route, various small channels and many small offshore islands. The shoreline consists of sand, low-lying salt marshes, dredged spoil islands and small harbors and marinas. The bottom consists of sand. Depths range from 0.3 to 7.8 meters.

Predicted tides for Galveston Channel, Texas, were used for the reduction of soundings during field processing. Approved hourly heights zoned from Aransas Pass, Texas, gage 877-5083, were used during office processing.

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

A digital file has been generated for this survey 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.

Geodetic Control Report for CM-8716 and  
Geodetic Control Survey Job-HC-9901

Positions of horizontal control stations used during hydrography are 1989 and 1990 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: 1.081 seconds (33.287 meters)  
Longitude: 0.962 seconds (26.298 meters)

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

The quality of several positions exceeds limits in terms of error circle radius and residual. 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 surroundings. These fixes are considered acceptable.

The following shoreline map applies to this survey.

	<u>Photo Date</u>	<u>Class</u>
TP-01198	Dec. 82, Nov. 83	III

The following shoreline change is depicted in red with supporting positional information. This revision is considered adequate to supersede the common photogrammetrically delineated shoreline.

	<u>Latitude(N)</u>	<u>Longitude(W)NAD 83</u>
HWL	27/56/12	97/06/58

The following shoreline changes are depicted in dashed red without supporting positional information. These revisions are considered adequate to supersede the common photogrammetrically delineated shoreline.

	<u>Latitude(N)</u>	<u>Longitude(W)NAD 83</u>
HWL	27/55/50	97/04/43
HWL	27/56/11	97/06/57
HWL	27/56/11	97/06/53
HWL	27/56/13	97/06/53
HWL	27/56/08	97/06/48

### 3. HYDROGRAPHY

Except as noted, 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.

A holiday exists in the channel into Corpus Christi Bayou at latitude 27/55/03N, longitude 97/04/50W.



#### 4. CONDITION OF SURVEY

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

A detailed comparison with all prior surveys common with the present survey was not accomplished. Several features were brought forward to the present survey because of inadequate investigations.

#### 5. JUNCTIONS

Survey H-10360 junctions with the following surveys.

<u>Survey</u>	<u>Year</u>	<u>Scale</u>	<u>Area</u>
H-10328	1990	10000	South
H-10359	1990/91	10000	North
H-10367	1991	10000	East

The junctions with surveys H-10359 and H-10367 are complete.

The junction with survey H-10328 has not been formally completed since that survey was previously processed and forwarded for charting. The junction comparison was made using a copy. The depths on survey H-10328 are in feet, while soundings on survey H-10360 are in meters. Soundings are in good agreement, however the depth curves shown on these surveys delineate different depths and, therefore, do not agree.

#### 6. COMPARISON WITH PRIOR SURVEYS

H-5693 (1934/35) 1:20000

Survey H-5693 covers the entire area of the present survey. Generally, the soundings between the present and the prior survey compare within one meter. The area centered at latitude 27/54/30N and longitude 97/06/00W has shoaled considerably and the causeway between Aransas Bay and the Intracoastal Waterway (ICW) at latitude 27/54/54N has all but disappeared, leaving only small islands. The Aransas Bay Channel, the ICW and Conn Brown Harbor have either been created or enlarged since this prior survey. Several small marinas and cuts have also been created along the ICW.

Several features, piles and pipes originating from prior survey H-5693 were not found or disproved during the course of this survey. These features, listed below, have been brought forward onto this survey as submerged.

<u>Feature</u>	<u>Latitude(N)</u>	<u>Longitude(W)NAD83</u>
subm pile	27/54/53	97/05/04
subm pile	27/54/53	97/05/06
subm pile	27/54/53	97/05/08
subm pile	27/54/53	97/05/10
subm pile	27/54/54.5	97/05/04
subm pile	27/55/14	97/03/52

subm pile	27/55/02	97/04/17
subm pipe	27/54/22	97/05/03

With the transfer of these items listed above, survey H-10360 is adequate to supersede the prior survey within the common area.

T-9178 (1948/51) 1:20000  
T-9179 (1948/51) 1:20000

Shoreline maps T-9178 and T-9179 cover the entire area of the present survey. Many small reefs and islands have either decreased in size or disappeared. Man-made changes, mostly through dredging and the deposition of spoil material, have increased the size of small islands on either side of the Intracoastal Waterway, which is not on the prior shoreline maps. Dredging has also changed the shoreline along the mainland, especially in Conn Brown Harbor, centered at latitude 27/54/15N, longitude 97/08/09W.

Several features, piles, originating from prior shoreline map T-9179 were not found or disproved during this survey. These features, listed below, have been brought forward onto this survey as submerged.

<u>Feature</u>	<u>Latitude(N)</u>	<u>Longitude(W)NAD83</u>
subm piles from	27/55/30	97/06/01
subm piles to	27/55/01	97/04/58.5
subm pile	27/54/51	97/05/03.5
subm pile	27/54/47.5	97/05/03

With the transfer of these items above, survey H-10360 is adequate to supersede the prior shoreline maps as a source for the charting of hydrographic information for the common area.

AWOIS items 5047, 5051 and 5052 originate with prior surveys mentioned above. Refer to the AWOIS item investigation forms, attached to the hydrographer's report, for the disposition of these items.

## 7. COMPARISON WITH CHART

Chart 11309, 29th edition, dated November 15, 1986; scale 1:40000  
Chart 11309, 31st edition, dated August 31, 1991; scale 1:40000  
Chart 11314, 15th edition, dated September 13, 1986; scale 1:40000  
Chart 11314, 16th edition, dated January 20, 1990; scale 1:40000

### a. Hydrography

Charted hydrography originates with surveys H-5693, T-9178, T-9179 and miscellaneous sources and requires no further discussion, except for the following.

The area of charted soundings centered in the vicinity of latitude 27/54/30N, longitude 97/06/00W is presently too shallow to conduct hydrography. The soundings should be removed from the chart in accordance with the smooth sheet depiction.

Several charted features were not found or investigated during this survey, or not 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>
subm pile	27/54/22.0	97/05/02.4	5037
stakes rep	27/54/24.1	97/04/31.0	5038
subm ruins (platform)	27/54/27.1	97/04/59.0	5041
piles	27/54/56.1	97/07/32.0	5050
subm pile	27/55/42.1	97/06/59.0	5057
rocky ledge	27/54/55.1	97/07/22.0	5058
subm pile rep	27/55/48.3	97/04/44.5	5067
rocky ledge	27/56/01.2	97/06/47.9	5070
rocky ledge	27/56/05.2	97/06/36.9	5071

Except for the features listed previously in this section, survey H-10360 is adequate to supersede charted hydrography within the common area.

#### b. AWOIS

All AWOIS items originate with miscellaneous sources except for the items mentioned in section 6 of this report. Refer to the hydrographer's report and sections 7.a and 7.b of this report for discussion and disposition of these features.

The geographic positions of AWOIS items 5070 and 5071 in the AWOIS listing are in error. The listed latitude for both items is 26 degrees, it should be 27 degrees. These features, rocky ledges at latitude 27/56/01.2N, longitude 97/06/47.9W and latitude 27/56/05.2N, longitude 97/06/36.9W, were not investigated. These features should be retained as charted.

#### c. Controlling Depths

The Intracoastal Waterway and the ICW Alternate Route cuts through this survey in a southwest to northeast direction. The project depths for the waterway are 12 feet from Carrabelle, Florida, to Brownsville, Texas. The survey verified the project depth, although most waterway depths are deeper than project depths.

The note, "10 ft rep 1979", at latitude 27/55/27N, longitude 97/07/18W, should be revised to "9 ft 1990". Depths range from 2.7 to 4.2 meters (9 to 14 ft) in the area.

The note, "9 ft rep 1978", at latitude 27/56/15N, longitude 97/06/48W, should be revised to "8 ft 1990". Depths range from 2.6 to 4.7 meters (8 to 15 ft) in the area. This is AWOIS item 5072.

#### d. Aids to Navigation

There are fifteen floating and nine fixed aids located within the area of this survey. These aids were located and serve their intended purpose.

The following fixed aids were located hydrographically in this survey.

<u>Light List Name</u>	<u>Latitude(N)</u>	<u>Longitude(W)</u>
Aransas Bay Light 69	27/56/34.95	97/03/32.84
Aransas Bay Light 75	27/55/20.53	97/03/20.67
Aransas Bay Light 79	27/54/42.12	97/03/09.57

Aransas-Corpus Christi Bay		
Cut Off Channel Light 32	27/55/28.34	97/07/09.41
Aransas Channel Light 19	27/53/51.28	97/08/06.34
Aransas-Corpus Christi Bay		
Cut Off Channel Daybeacon 25	27/56/23.82	97/06/27.34
Aransas-Corpus Christi Bay		
Cut Off Channel Daybeacon 31	27/55/44.71	97/06/54.92
Aransas Channel Daybeacon 20	27/53/55.13	97/08/07.95
Aransas Channel Daybeacon 22	27/53/57.39	97/08/12.50

Aransas Channel Daybeacon 22 is presently located approximately 75 meters south of its charted location.

Charted landmarks which fall within the survey area were not addressed for adequacy. All landmarks within the survey limits should be retained.

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

No reports of dangers to navigation were generated during the survey or office processing.

**8. COMPLIANCE WITH INSTRUCTIONS**

Survey H-10360 adequately complies with the Project Instructions, except where mentioned in this report.

**9. ADDITIONAL FIELD WORK**

This is an adequate hydrographic survey. Additional field work is recommended to investigate the features not found or disproven during this survey, as noted in sections 6 and 7 of this report.

*Charles R. Davies*

Charles R. Davies  
Cartographer

APPROVAL SHEET  
H-10360

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.

*Dennis J. Hill*

Date: 3-25-92

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

I have reviewed the smooth sheet, accompanying data, and reports. This survey and accompanying digital data meet or exceed NOS requirements and standards for products in support of nautical charting except where noted in the Evaluation Report.

*Douglas G. Hennick*

Date: 3/27/92

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

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Final Approval

Approved:

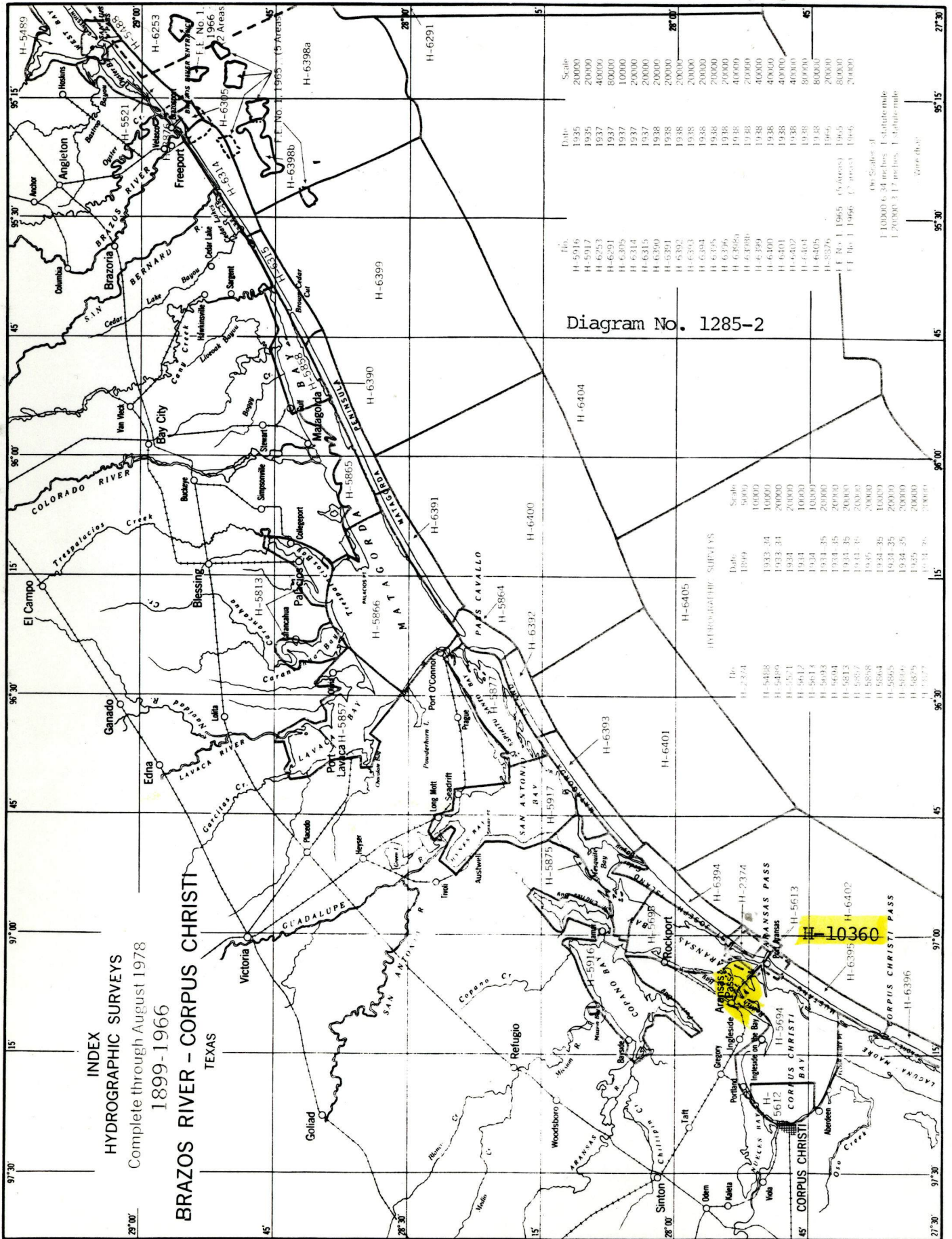
*J. Austin Yeager*

Date: 12-12-94

J. Austin Yeager  
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





D. AUTOMATED DATA ACQUISITION AND PROCESSING ✓

Hewlett-Packard HDAPS Programs:

<u>Program</u>	<u>Version</u>	<u>Date</u>
Survey	4.33	5/26/90
Survey	4.61	11/28/90
Constat	2.02	3/9/90
Constat	2.05	11/28/90
Postsur	4.14	7/20/90
Postsur	4.17	11/28/90
Printout	2.23	7/12/90
Baseline	1.01	6/15/90
Backup	1.02	3/9/90
Backup	1.03	11/28/90
Quick	1.01	7/27/90
Quick	1.04	11/28/90
Conplot	1.02	6/25/90
Diagnostic	2.50	3/9/90
Compute	2.02	3/9/90
Compute	2.03	11/28/90
Point	1.20	7/27/90
Install	1.20	3/26/90
Install	1.31	11/28/90
Plotall	1.70	7/27/90
Plotall	1.77	11/28/90
Loadnew	1.00	7/27/90
Loadnew	1.22	11/28/90
Convert	2.34	6/20/90
Convert	2.36	11/28/90
Filesys	1.55	5/26/90
Filesys	1.72	11/28/90
Inverse	1.21	7/27/90
Abst	3.05	5/26/90
Listawois	1.10	11/20/90
Reject	1.00	11/20/90
Carto	1.00	10/26/90

PC-DAS program, NOAAEXE directory, Version 3.6 was used for on-line data acquisition on the survey vessel.

In addition to the HDAPS, the following non-HDAPS computer programs were used:

VELOCITY (IBM PC)	Ver. 1.11 (3/9/90)
MTEN 3 with enhancements (IBM PC)	Ver. 6/88
WordPerfect	Ver. 5.1 (1989)