10321

Diagram No. 1285

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-10-13-89

Registery No. ... H-10321

LOCALITY

State Texas

General Locality Aransas Bay

Sublocality Blackjack Point to

.....Deadman Island

1989

CHIEF OF PARTY LCDR V.D. Ross

LIBRARY & ARCHIVES

DATE August 21, 1990

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

10321

GP Olt 11314

1/3/32€

NOAA FORM 77-28 (11-72)

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

REGISTER NO.

FIELD NO.

HYDROGRAPHIC TITLE SHEET

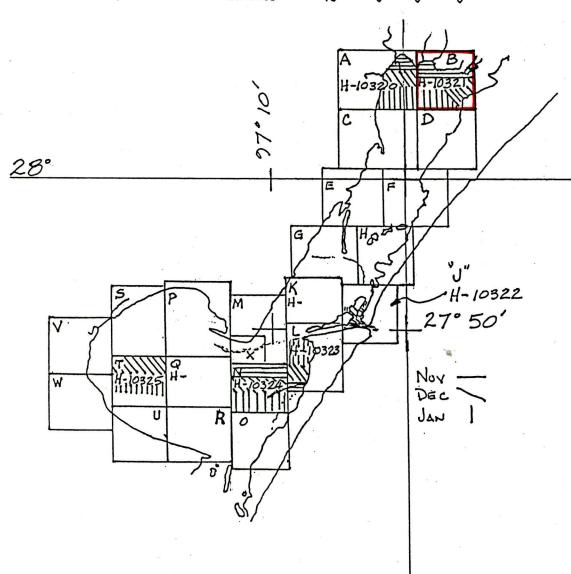
INSTRUCTIONS - The Hydrographic Sheet should be accompanied by this form,

H-10321

	filled in as completely	as possible, when the sheet is forwarded to the Office.	AHP 10-13-89
	State	Texas	
	General locality	Aransas Bay	
	Locality	Blackjack Point to Deadman Island	
	Scale	1:10,000 Date of surv	yey Nov. 16, 1989 - Jan. 22, 1990
	Instructions dated_	September 14, 1989 Project No.	OPR-K229
	Vessel	Launch 0517	
	Chief of party	LCDR V. Dale Ross	
	Surveyed by	Mark J. McMann, Mike J. Briscoe	
	Soundings taken by	echo sounder, hand lead, *** Raytheon DE-7	7190
	Graphic record scal	ed by M.J. McMann, M.J. Briscoe, V.P. I C. Bradley	Lanius, M. Conricote,
	Evaluation by:	Automa	ted plot by PHS Xynetics Plotter
	Verification by	g: Gordon E. Kay	2
		and tenths	
	REMARKS: Al	l times are UTC. Revisions and marginal	l notes in black were
	gen	nerated during office processing. All s	separates are filed with
	the	e hydrographic data, as a result page nu	umbering may interrupted
	or	non-sequential.	
		· · · · · · · · · · · · · · · · · · ·	<i></i>
2	2		
		AWOISSURE V	9/7/90, 55/
	A1-30-	97	

Progress Sketch

	LEGEND			ľ	
OPR-K229-AHP2-89		OCT	NOV	DEC	JAN
Corpus Christi	SONMI SDG	0	13	13	21
Texas	LNMI SDG	0	309	712	674
	LNMI TO/FRM	0	258	422	527
Atlantic Hydrographic Party Two	LNMI MISC	0	129	259	350
V. Dale Ross	DP/BS	0	88	177	455
Lieutenant Commander, NOAA	TIDE STA	6	0	0	0
Chief of Party	CONTROL	18	0	0	0



DESCRIPTIVE REPORT TO ACCOMPANY HYDROGRAPHIC SURVEY H-10321 AHP-10-13-89 OPR-K229-HFP 1989/1990

A. PROJECT

This survey was conducted in accordance with Hydrographic Project Instructions OPR-K229-HFF, Aransas Bay, Texas, dated September 14, 1989, Change Number 1, dated October 19, 1989, and Change Number 2, dated January 10,1990.

The purpose of project OPR-K229-HFP 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 "B" as specified by the project instructions.

B. AREA SURVEYED

The area surveyed for H-10321 covers the northeast end of Aransas Bay, Texas, from Goose Island to Blackjack Point and Jay Bird Point to Deadman Island. The survey limits are as follows:

Blackjack Point to Jay Bird Point on the North Latitude 28°64 on the South Longitude 096°58'25" on the West

This survey was conducted from November 16 (day 320) to January 22 (day 022), 1990.

The bottom composition of the survey area is primarily mud with shoal areas of oyster shell scattered throughout.

C. SOUNDING VESSELS

Vessel 0517 (EDP #0517) is a 21-foot MonArk which was used as a sounding vessel during this survey. Field support was accomplished with a 17-foot MonArk.

D. SOUNDING EQUIPMENT AND CORRECTIONS TO ECHO SOUNDINGS

The following Raytheon DE-719 Fathometer, with Odom Digitrace, was used for this survey, in depths from 0-18 feet.

EDP #	<u>s/n</u>	<u>Days</u>
0517	V-5 10348	320-022

When using the Raytheon, Model DE-719C, Fathometer calibration checks were made frequently on each day of hydrography. Any necessary adjustments were made and noted on the fathogram. Any departures from the initial zero was corrected during the scanning process.

Lead lines were used to obtain least depths on detached positions.

Survey records were scanned by AHP-2 employees. Significant peaks and deeps, which occured between selected soundings, missed depths, incorrectly digitized soundings, and the effects of sea and swell action were corrected while scanning.

The Raytheon DE-719C Fathometer was calibrated for a speed of sound through water of 4800 ft/sec. Corrections for the speed of sound through water were computed from data obtained with Odom Hydrographic Systems, Inc. DIGIBAR electronic speed of sound probes (SN 154 and 169). Program "Velocity" Version 1.00, was used for the speed of sound corrections computations. A copy of the tables in the Separates Following Text to Velocity support documentation is in the cahier for H-10321.* Filed with the hydrographic data.

All speed of sound correctors were applied to the final field sheet.

Cast	Day	<u>Depth</u>	<u>Digibar SN</u>
1	333/1989	2 meters	154
2	347	4 meters	154
3	008/1990	4 meters	169
4	017	4 meters	169

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AHP-2 experienced technical difficulties with the Digibar SN 154 (it was failing the DQA) and returned it to Odom for repairs. On January 8, 1990 AHP-2 received the Digibar SN 169, on loan, from the NOAA Ship RUDE.

Lead line comparisons were conducted to determine instrument error and static draft. Correctors for instrument

error were not consistent, ranging from -0.3 to 0.3 feet. Since lead line comparisons were not performed daily and the correctors computed were not uniform, instrument correctors were not applied to the final field sheet soundings, but are included for reference. Lead line comparison logs are included in the **Separates Following Text. * were not applied to the Sanoth sheet soundings

Settlement and squat measurements for vessel 0517 were performed on day 319 at the Sea Gun Resort in Lamar, Texas. Settlement and squat correctors were applied to all survey data.

The rough sheets were plotted using predicted tides determined from the Galveston Channel using zones and correctors contained in the project instructions.

The final field sheets were plotted using unverified actual tides obtained from the Copano Bay bridge station (877-4513). Records were reduced to mean lower low water through a corrector provided by the tidal liaisons unit in Rockville, MD.

Actual tide heights were requested from the Sea and Lake Levels Branch, N/OMA12, in a letter dated January 31,1990. A copy of the letter is included in the Separates Following Text **

E. HYDROGRAPHIC SHEETS

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The survey scale is 1:10,000. All sheets were produced by AHP-2 with the HDAPS on the Bruning ZETA 824 plotter. A list of sheets submitted for H-10321 follows:

<u>Sheet</u>	<u>Scale</u>	Quantity
Edited Trackline	1:10,000	1
Rough Sounding Sheet	1:10,000	1
Final Field Sheet	1:10,000	1
Final Field Sheet Overlay	1:10,000	1

Boat sheets, trackline plots and rough sheets were used to monitor and evaluate the survey data. Main scheme hydrography, splits, crosslines, shoreline, aids to navigation, and horizontal control stations used during the survey are plotted on the final field sheet. Channel lines, detached positions, development and bottom samples are plotted on the overlay.

All survey sheets will be submitted with the descriptive report to the Pacific Hydrographic Section, (N/CG 245), Seattle, Washington.

* * Filed with the hydrographic later.

F. CONTROL STATIONS

The horizontal control datum for this project is the North American Datum of 1983. The following stations were used as Falcon Mini-Ranger shore stations during this survey:

No.	Name	Source	<u>Year</u>	
101	Rogan	N/CG233	1989 (Field praction)	ļ
102	Goose	NGS	1987	
104	Condo	N/CG233	1989 🕡	
106	Good 2	N/CG233	1989 "	
108	Sas	N/CG233	1989 ('')	ŧ
112	Ham	NGS	1934	

The Coastal Surveys Unit from the Norfolk, Va. used third order, class I traverse and intersection methods to establish horizontal control for this project. The horizontal control report was written by the Coastal Surveys Unit personnel and will be forwaded by them.

G. HYDROGRAPHIC POSITION CONTROL

Range/range positioning was the only method used to control this survey. Multiple lines of position (up to four) using Motorola Falcon 484 Mini-Rangers were used. The following Falcon Mini-Ranger equipment was used:

<u>VESNO</u>	Equipment	<u>s/N</u>
0517	RPU RT	F0244 E2967
	R/S R/S R/S R/S R/S	E2977 E2912 E2909 C2907 C2889
	R/S	F3237

Baseline calibrations of the Motorola Falcon 484 equipment were performed on October 25, 1989 and January 8, 1990. The correctors were applied on-line through the Comflex "C-O" tables. Baseline calibration forms and the "C-O" tables are included in the separates. Filed with the hydrographic data.

All critical check values were less than 5 meters which is within the required limits specified in the field procedures manual. Results of the calibrations are included in the Separates Following Text. This data was never received.

Critical system checks were performed by visually observing the error circle radius (ECR) and residual (Res) values on the Comflex screen in the survey vessels.

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

H. SHORELINE See FUAL Report section 2

Shoreline detail shown on the final field sheet was manually transferred from TP-01196, which was compiled at 1:20000 and enlarged to 1:10000. The shoreline manuscript was compiled on the NAD 1927. The data shift to NAD 1983 was accomplished by transferring the grid from the adjoining TP map, TP-01611, which contains grids for both NAD 1927 and NAD 1983.

Detached positions were taken on new piers or other new items located within the survey area along the shoreline. On those items which were displayed on the topographic map but which no longer exist, detached positions were taken to verify that the survey vessel was in the vicinity of the item in question. The symbol for each item verified along the shoreline was drawn in black ink on the final field sheet. The was no new features platform the field sheet.

Shoreline was verified by its junction with hydrographic data and by visual inspection. On features which no longer exist, if the bottom was visible and there were no indications of salvage operations or ruins of any sort, the hydrographer identified the feature as no longer existing.

Shoreline details were also verified during hydrographic operations using the photographic print of the "Notes to Hydrographer" TP-01196.

There is no red shouling on this Furnay.

Changes in shoreline are shown in red ink on the final field sheet. Verified shoreline is shown in black ink on the final field sheet. The majority of the shoreline consists of sand and marsh.

I. CROSSLINES

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A total of 24.1 linear nautical miles of crosslines were run on H-10321 which equals 12% of the main scheme hydrography. Crossline soundings agree to within 1 foot of the main scheme soundings.

J. JUNCTIONS See Fine Rook Section 5

This sheet junctions with H-10320 (1989/90) on the west. Junction soundings between the present survey and H-10320 agree well. Depths varied by no more than 2 feet.

K. COMPARISON WITH PRIOR SURVEYS See Eine Right section 6

This survey was compared with the following prior survey:

Registry #	Scale	Year Surveyed
H-5875	1:20000	1935
T-9297	1:20000	1946-48

A comparison between the present survey and the above prior surveys reveals only minor changes in the general bottom configuration. The most drastic change is the creation of the intracoastal waterway crossing the survey area from the southwest to the northeast corner. Depths in the area of the channel have increased to a minimum of 12 feet, which is the controlling depth. Spoil material from the dredging of the channel was deposited along both sides of the channel, creating spoil islands and shoals paralleling the dredged channel.

Prior survey T-9297 accurately shows, these spoil islands and the shoreline but no depths are shown.

Charters as shamen the smooth shut.

Soundings throughout the rest of the survey area agree within 2 feet, generally being shoaler on the present survey.

No AWOIS items originate from prior surveys. See cutt Mart section 6

The present survey adequately defines the depths and the bottom configuration and should supersede the above listed prior concerns surveys.

L. COMPARISON WITH THE CHART Sec Eval Report section 7

This survey was compared to the 15th edition of chart 11314 dated August 15,1987.

All shoal areas within the limits of the survey were developed by running 50-meter splits of the main scheme and 50-meter lines perpendicular to the main scheme.

The discrepancies with the chart are as follows:

1. A charted 6-foot channel in the vicinity of latitude

28°06'95" N, longitude 96°56'20" W defined by privately maintained markers no longer exists. Main scheme hydrography was split to 50 meters across this area and depths were found to be slightly deeper than the surrounding area (3-4 ft) but no depths over 5 feet were found. Most of the charted markers along this channel are no longer visible. The hydrographer recommends removal of the dashed lines signifying channel and "6 ft reported 1972" note. This is Awais Hem 6/21

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2. The area charted in the vicinity of latitude 28°05'20"N, longitude 96°56'00"W identified as Jay Bird Reef and shown on the chart as a shoal baring at low water now has depths up to 2°100°t at mean lower low water. This could be a result of oyster boats dredging the shoal. The hydrographer recommends removal of the baring shoal from the chart and charting representative soundings from H-10321.

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3. A row of piles not shown on the chart was located roughly paralleling the 3-foot depth curve south of the shoreline between Blackjack Pt. and Dunham Pt., and extending east to the intracoastal waterway. These piles display "AREA CLOSED NATIONAL WILDLIFE REFUGE" signs. The hydrographer recommends charting of piles as located. Chart are as shown as the smooth short.

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4. A three inch diameter steel pipe was located at latitude 28°06'17.7"N, longitude 96°58'40.2"W, which marks a small unnamed oyster reef that is exposed at low water. The hydrographer recommends charting pipe as located. Chartans as shown the smooth that

CMACHE !

(Source 7-7277)

5. A submerged pipe charted in the vicinity of latitude 28°04'41.8"N, longitude 96°58'00.2"W was searched for visually at low water with 4-5 feet water visibility and 4-3 foot depths. Nothing was found. The hydrographer recommends removal of submerged pipe from chart.

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6. An obstruction shown on T-map 01196 in the vicinity of latitude 28°07'12.6%N, longitude 96°57'56.8%W, was searched for visually in 2-3 feet of water with good visibility and nothing was found. Do not chart this obstruction.

concer-

7. A 3 inch diameter steel pipe baring 3 feet was located by detached position at latitude 28°06'19.4"N, longitude 96°57'14.2"W. This pipe marks a small unnamed oyster reef that bares at low water. The Hydrographer recommends charting pipe as found.

There are 42 AWOIS items in the present survey area. Descriptions of these items can be found in the Separates Following Text.

There are no newly found, unreported dangers to navigation in the survey area. $\,$

There are no submarine cables or ferry routes in the survey area.

There are no submarine pipelines evident in the survey area.

The present survey is adequate to supersede the charted hydrography.

M. ADEQUACY OF SURVEY

This survey is a complete basic hydrographic survey and is adequate to supersede all prior surveys within the common area. With the transfer of the features from survey H-5875(1905) this survey superseles all prior surveys in the area.

N. AIDS TO NAVIGATION Sec Evac lipset section 7

All of the floating aids to navigation in this area were located with detached positions, and appear to serve their intended purpose.

There are three non-floating lighted aids to navigation in the survey area. All were verified with detached positions. and agree well with the charted positions and the light list See Each Light positions.

o. STATISTICS

Description

	<i>00</i> 1
Total Positions	2 124
Detached Positions	48
Duplicate Positions	5
Total Miles of Hydrography	208.7
Sq. Nautical Miles of Hydrography	9
Bottom Samples	32
Digibar Casts	4
Tide Stations Leveled	3
Days of Production	20
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Bottom samples were taken and submitted to the Smithsonian Institution as directed in Section 6.7 of the project instructions. Bottom sample positions were plotted on the overlay with the channel lines, and 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.

P. MISCELLANEOUS

No anomalous currents were observed in the survey area.

The draft correctors applied on-line to D.N.'s 320-361 are incorrect. This problem was solved by applying the proper draft table while plotting in the office. The correct draft correctors were applied to the smooth sheet Soundings.

Significant variations in the tidal cycle were observed due to winds and high pressure weather systems. Generally, winter cold fronts and associated north winds suppress normal tidal flows and result in below normal water levels.

Q. RECOMMENDATIONS

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Recommendations may be found in sections H, K, L, and N of this report.

R. AUTOMATED DATA PROCESSING

Data is collected on-line using a Comflex 1030 NX hard disk and raw data is transferred to the off-line processing system using a 3.5" floppy disk. Off-line processing is accomplished on the HDAPS consisting of the following components: a Hewlett Packard (HP) 9000 Model 300 computer, an HP 9153C Disk Drive with a Winchester hard disk storage capacity of 20 Mbytes, an HP 7959B 300 Mbyte hard drive, an HP 98785A color monitor, a Bruning ZETA 824 plotter, an HP Ruggedwriter printer, and an HP model 9145 tape drive. All off-line software programs are written in HP BASIC while all on-line programs are written in QUICK BASIC.

Raw data on the floppy disks, and edited data stored on magnetic tapes have been submitted to the Pacific Hydrographic Section, Seattle, WA., with the survey data.

During data acquisition, high frequency digitized depths are recorded while simultaneously applying draft and settlement and squat corrections. Baseline calibration correctors for each line of position are also applied on-line. Unverified actual water levels and speed of sound correctors are applied to the final field sheet from the respective corrector tables. Sounding plots and trackline plots are produced during post processing.

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

VELOCITY VERSION 1.00 9/1/88 Velocity Computations (IBM PC) MTEN 3 Geodetic Computations (IBM PC)

REFERRAL TO REPORTS

<u>Title</u>

Descriptive Report To Accompany Survey H-10321

Horizontal Control Report

For OPR-K229-HFP
Geolatic Control Survey: Job HC-9901 and
Job CM-8716

Chart Sales Agent Report OPR-K229-HFP

User Evaluation Report OPR-K229-HFP

Chart Inspection Report OPR-K229-HFP

Coast Pilot Report

Transmittal Information

Pacific Hydrographic Section Seattle, Washington

Field Photogrammetry Section Norfolk, Va.

Written by: R. DeCroix

Chart Distribution Branch N/GC33 Rockville, MD.

Atlantic Hydrographic Section N/CG244 Norfolk, Va.

Atlantic Hydrographic Section N/CG244 Norfolk, Va.

Coast Pilot Unit N/CG 22 Mapping and Charting Branch Rockville, MD

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

SIGNAL LIST OPR-K229-AHP2 H-10321 AHP-10-13-89

			4				
101	28°	08'	05.048"N	097≎	00'	21.412"W	ROGAN 1989
* 102	280	07'	31.119"N	096°	58'	52.436"W	GOOSE 1987
104	28°	06'	12.876"N	097°	01'	19.666"W	CONDO 1989
105	28°	04'	58.923"N	097°	00'	36.774"W	COPANO BAY APPROACH LT 2
106	28°	04'	35.443"N	096°	57 '	55.110"W	GOOD 2 1989
108	28°	00'	49.662"N	096°	58'	12.654"W	SAS 1989
112	28°	07'	34.090"N	096°	55'	47.455"W	HAM 1934

All signals with a 1989 date were located to third order class 1 standards by the Field Photogrammetry Section, Coastal Surveys Unit (N/CG2442). Signal 102 is a GPS station located by N/CG2442 in 1987. The remaining signals are published NGS. Signal 105 was used only as a critical system check static point.

* Goose was used as two Projects: CM 8716 used NAD 1927 position HC-9901 used NAD 1923 "

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PRE-SURVEY REVIEW ITEM #5216

PLATFORM

SOURCE:CL1685/75--USPS

INVEST. DATE: 12/27/89 TIME: 190038 UTC VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10321 (OPR-K229-AHP)

POSITION # 1568

CORRECTORS APPLIED:

VELOCITY: No

TRA CORRECTORS: No

PREDICTED TIDES: No

GEODETIC POSITION:

LATITUDE

LONGITUDE

CHARTED:

28° 04' 09.05"

96° 57' 57.96"

OBSERVED:

28° 04' 09.91" 96° 57' 57.93"

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POSITION DETERMINED BY: Multiple Lines of Position, Falcon Mini-Rangers.

METHOD OF ITEM INVESTIGATION: The platform was found while conducting a visual search. The platform is in ruins. There are three twelve inch wooden piles baring one feet at the time of the survey. A photograh of the item was taken and may be found in the separates following text.

CHARTING RECOMMENDATIONS: Chart, at the found position, as a platform in ruins.

COMPILATION USE

CHART:

CHART #11314 PRE-SURVEY REVIEW ITEM #5217,5219,5221,5223,5225,5228 5230,5241,5242,5244,5249,5252,5259,6107,6111,6114,6116. PILINGS

SOURCE:CL1695/73--USPS

INVEST. DATE: 12/27/89

TIME: Various VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10321 (OPR-K229-AHP)

POSITION # Numerous

CORRECTORS APPLIED:

VELOCITY: No

TRA CORRECTORS: No

PREDICTED TIDES: No

GEODETIC POSITION:

LATITUDE

LONGITUDE.

CHARTED:

See AWOIS Listing

OBSERVED:

See Method of Investigation

POSITION DETERMINED BY: Multiple lines of position Falcon Mini-Ranger

METHOD OF ITEM INVESTIGATION: A visual search was conducted on DN 361 during an extreme low water period with water visibility up to 5 feet vertically. These items constitute a row of submerged piles charted vertically. These items constitute a row of submerged piles charted parallel to the east side of the intracoastal waterway. Item #5217 was located at latitude 28°04'07.4"N, longitude 96°58'00.5"W (pos.#1569), #5223 was located at latitude 28°04'32.4"N, longitude 96°57'39.0"W (pos.#1572), #5230 was located at latitude 28°04'55.8"N, longitude 96°57'18.8"W (pos.#1573), #5241 was located at latitude 28°05'03.5"N, longitude 96°57'12.1"W (pos.#1574), #5244 was located at latitude 28°05'10.9"N, longitude 96°57'05.8"W (pos.#1575). All of these items were 6 inch diameter wood piles in ruins, ranging in depth from barring 5 feet to submerged to 4 feet. Item #5219 (pos.#1570) was the center of a 100 meter visual search. Nothing was found. Visual searches were done for all the remaining piles in this row. but nothing was found. While searching for the remaining piles in this row, but nothing was found. While searching for these items, the seas were calm and a man was positioned atop the boat while the coxswain steered lines across the charted positions of the items. Although less than 50% of the charted piles were located and conditions for the searches were excellant, the close proximity to the channel and depth of water at some of the items prevents absolute disproval of these items.

charted.

CHARTING RECOMMENDATIONS: Recommend submerged piles remain as. See Evac Report section 7.6 for listing of unverified submerged piles to be retained as charted.

* Chart STAKE at position some (1569) ** Rumone Plat Sour (ruins) ch

COMPILATION USE

APPLIED AS:

& Aword 524

CHART:

Appended during office processing

Additional Information for AWOIS 5244

The item, in the vicinity of 28°05′10"N and 96°57′06"W, is described in the listing as a submerged pile. Its position coincides with the T-sheet position for a platform. The chart depicts a submerged pile, with as additional note "Platform (ruins)". These are all the same item.

Mr. Steve Verry, N/CG241, researched this item and came up with the following information:

In 1964, the U.S. Army Corps of Engineers erected a line of piles and survey table platforms along the current Aransas Bay Channel for use in dredging operations. The platforms were constructed of four one-foot diameter piles and a wooden platform with a ladder and railing. The piles projected approximately eight feet above MLLW, and the top of the platform projected approximately 11 feet above MLLW. These platforms and piles are located 262.5 feet east of the channel centerline.

A 1973 report from the U.S. Power Squadron noted that the platform was no longer visible, so the ruins note was added, and the platform symbol removed, leaving the submerged pile symbol.

AHP2 personnel located the submerged pile as described in the AWOIS listing, but found no evidence of the platform or ruins.

CHARTING RECOMMENDATION: Chart the submerged obstruction, pile, at the survey location and remove the "Platform (ruins)" note from the chart.

PRE-SURVEY REVIEW ITEM #5247

PVC PILING

SOURCE: CL1109/77--SCIENTIFIC SERVICES LAB

INVEST. DATE: 01/22/90

TIME: 181943 VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10321 (OPR-K229-AHP)

POSITION # 2111

CORRECTORS APPLIED:

VELOCITY: No

TRA CORRECTORS: No

PREDICTED TIDES: No

GEODETIC POSITION:

LATITUDE

LONGITUDE

CHARTED:

28° 05' 19.05" 96° 58' 50.96"

OBSERVED:

Not Found

POSITION DETERMINED BY: Multiple lines of position, Falcon Mini-Ranger

METHOD OF ITEM INVESTIGATION: A 100 meter visual search was 3 conducted during low water with water visibility 2-3 feet and depths of $\frac{1}{4}$ -4 feet. Nothing was found.

CHARTING RECOMMENDATIONS: Recommend removal of marker from chart. Company

COMPILATION USE

CHART:

PRE-SURVEY REVIEW ITEM #5250

PVC PILING

SOURCE: CL1109/77--SCIENTIFIC SERVICES LAB

INVEST. DATE: 12/27/89 TIME: 211454 UTC VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10321 (OPR-K229-AHP)

POSITION # 1577

CORRECTORS APPLIED:

VELOCITY: N/A

TRA CORRECTORS: N/A

PREDICTED TIDES: N/A

GEODETIC POSITION: LATITUDE

LONGITUDE

CHARTED: 28° 05' 22.05" 96° 56' 24.96"

OBSERVED:

---- Not found -----

POSITION DETERMINED BY: Multiple Lines of Positions, Falcon Mini-Rangers

METHOD OF ITEM INVESTIGATION: A visual search was conducted in 3-4 ft. of water, the bottom was visible, nothing was found.

MAKER

CHARTING RECOMMENDATIONS: Remove pile symbol from chart concer

COMPILATION USE

CHART:

PRE-SURVEY REVIEW ITEM #5258

PVC-PILINGS

SOURCE: SCIENTIFIC SRVS LAB

INVEST. DATE: 12/27/89 TIME: 210709 UTC VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10321 (OPR-K229-AHP)

POSITION # 1576

CORRECTORS APPLIED:

VELOCITY: N/A

TRA CORRECTORS: N/A

PREDICTED TIDES: N/A

GEODETIC POSITION:

LATITUDE

LONGITUDE

CHARTED:

28° 05' 25.05" 096° 56' 00.96"

OBSERVED:

---- Not Found

POSITION DETERMINED BY: Multiple Lines of Position, Falcon Mini-Rangers

METHOD OF ITEM INVESTIGATION: A visual search was conducted in two to-three feet of water. The bottom was visible, nothing was found.

CHARTING RECOMMENDATIONS: Remove, pile symbol from chart.

COMPILATION USE

CHART:

PRE-SURVEY REVIEW ITEM #6110

VISIBLE PILE

SOURCE: UNKNOWN

INVEST. DATE 12/20/90

TIME:200158

Chief of Party: LCDR V. Dale Ross

REFERENCE:H-10321 (OPR-K229-AHP)

POSITION #1565

CORRECTORS APPLIED:

VELOCITY: No

TRA CORRECTORS: No

PREDICTED TIDES: No

GEODETIC POSITION:

LATITUDE

LONGITUDE

CHARTED:

28°05'41.05"

96°56'29.96"

OBSERVED:

28°05'41.212

96°56'31.5%

POSITION DETERMINED BY: Multiple lines of position, Falcon

Mini-Rangers

METHOD OF ITEM INVESTIGATION: Pile was found by visual search. A $\frac{12}{100}$ inch diameter, wood pile baring 12 feet was located by detached position.

CHARTING RECOMMENDATIONS: Recommend pile be charted as located.

COMPILATION USE

CHART:

PRE-SURVEY REVIEW ITEM #6117-6119, 6121-6123,

6125-6132,6134-6136

4136 as Survey H-10320

MARKERS

SOURCE: CL 431/66

INVEST. DATE: 12/19/89 TIME: Various

VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE:H-10321_(OPR-K229-AHP)

POSITION # Numerous

CORRECTORS APPLIED:

VELOCITY: No

TRA CORRECTORS: No

PREDICTED TIDES: No

GEODETIC POSITION:

LATITUDE

LONGITUDE

CHARTED:

See AWOIS Listing

OBSERVED:

See Method of Investigation

POSITION DETERMINED BY: Multiple lines of position, Falcon Mini-Rangers

METHOD OF ITEM INVESTIGATION: A visual search was conducted for these items which constitute a line heading westward from the intracoastal waterway. The piles that were found were located by detached position. Item #6118 (pos.#1441) was located at latitude 28°06'08.8"N, longitude 96°56'31.6"W, #6125 (pos.#1442) was located at latitude 28°06'18.4"N, longitude 96°57'03.2"W, #6126 (pos.#1443) was located at latitude 28°06'22.5"N, longitude 96°57'11.7"W, #6127 (pos.#1444) was located at latitude 28°06'22.9"N, longitude 96°57'22.4"W, #6131 (pos.#1445) was located at latitude 28°06'28.6"N, longitude 96°57'55.6"W. The remaining piles were searched for but not found.

CHARTING RECOMMENDATIONS: Recommend piles not located be charted as submerged.

Piles that were located should be charted as found. Concur See Figs. Light 3 act 7.13

Listing of markers to be relatived as Submerged. Delote Charles markers in preximily to these found.

COMPILATION USE

CHART:

PRE-SURVEY REVIEW ITEM #6120

MARKER

SOURCE: CL431/66

INVEST. DATE: 12/19/89 TIME: 181152 VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10321 (OPR-K229-AHP)

POSITION # 1440

CORRECTORS APPLIED:

VELOCITY: No

TRA CORRECTORS: No

PREDICTED TIDES: No

GEODETIC POSITION:

LATITUDE

LONGITUDE

CHARTED:

28° 06' 11.05"

096° 56' 27.96"

OBSERVED:

28° 06' 11.1\"

096° 56' 27.9"

POSITION DETERMINED BY: Multiple lines of position, Falcon

Mini-Rangers

METHOD OF ITEM INVESTIGATION: Three 12 inch diameter wood piles with a sign in ruins were located by detached position. A photograph of this item was taken and may be found in the separates following text.

CHARTING RECOMMENDATIONS: Recommend sign remain as charted.

Conun

COMPILATION USE

CHART:

PRE-SURVEY REVIEW ITEM #6121

CHANNEL REP DEPTH

SOURCE: CL 1815/72

INVEST. DATE: 01/22/90 TIME: Various VESSEL #,0517

Chief of Party: LCDR V. Dale Ross

REFERENCE:H-10321 (OPR-K229-AHP)

POSITION # 2082-2106

CORRECTORS APPLIED:

VELOCITY: No

TRA CORRECTORS: No

PREDICTED TIDES: Yes

GEODETIC POSITION:

LATITUDE

LONGITUDE

CHARTED:

28° 06' 11.05" 096° 56' 30.96"

OBSERVED:

Not Found

POSITION DETERMINED BY: Multiple lines of position, Falcon

Mini-Rangers

METHOD OF ITEM INVESTIGATION: Hydrography was run at 50 meter spacing across the charted 6 foot channel. No depths over 5 feet were found, and least depths in the charted channel were 3 feet.

CHARTING RECOMMENDATIONS: Recommend removal of "6 ft reported 1972" note and dashed lines defining channel from chart.

Chart depths as shown on the smooth sheet

COMPILATION USE

CHART:

PRE-SURVEY REVIEW ITEM #6133

MARKER

SOURCE: SCIENTIFIC SERVICES LAB

INVEST. DATE: 01/08/90

TIME: 210528

VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE:H-10321 (OPR-K229-AHP)

POSITION # 1852

CORRECTORS APPLIED:

VELOCITY: No

TRA CORRECTORS: No

PREDICTED TIDES: No

GEODETIC POSITION:

LATITUDE

LONGITUDE

CHARTED:

28° 06' 31.05"

096° 56' 54.96"

OBSERVED:

28° 06' 28.5**5**"

096° 56' 56.34"

POSITION DETERMINED BY: Multiple lines of position, Falcon

Mini-Rangers

METHOD OF ITEM INVESTIGATION: A 4 inch diameter PVC pipe was located by detached position. Pipe marks oyster sheel reef which bares at low water. A photograph of this item was taken and may be found in the separates following text.

CHARTING RECOMMENDATIONS: Recommend charting marker as found.

CONCER

Delite charled marker

COMPILATION USE

CHART:

	ORIGINATING ACTIVITY DROGRAPHIC PARTY ODETIC PARTY	ACTIVITY	PINAL REVIEWER QUALITY CONTROL & REVIEW GRP. COAST PILOT RRANCH	(See reverse for responsible personnel)			CHARTS	AFFECTED		-	- 11314										
		<u> </u>	FINAL REVIEWER QUALITY CONTROL & R	See reverse for re.		TE OF LOCATION	on reverse side)	<u> </u>		7	1-9-6-4										
	ENT OF COMMERCE C ADMINISTRATION	DATE	06/02/1			METHOD AND DATE OF LOCATION	(See instructions on reverse side)	7 D	<u>}</u>												
	U.S. DEPAKTAIIC AND ATMOSPHERI		ARANGAC 124	alve as landmarks.	,	7		LONGITUDE	D.P. Meters	18,817 S6.812	``										
	NATIONAL OCEAN	LOCALITY	ARANG	to determine their v	WI.	NA), 1983	POSITION	LATITUDE "	SEE	17.363											
	NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION B. 567.	REPORTING UNIT		HAVE MAVE NOT been inspe	JOB NUMBER	P1201-4 06-11-01 010	MHP 10-1-10 11 10341	DESCRIPTION (Percent researe for defeation of fandmark or sid to need testing	Show triangulation station names, where applicable, in perentheses)	ARANSAS 18AY LIGHT '25' 28°04"	4.5.c.6. 1.1. Noc.4 1990 # 35570										
07 75 HOOS 1 100N	(8-74) Replaces C&GS Form 567.	LTO BE CHARTED	TO BE REVISED	The following objects	OPR PROJECT NO.	4 119	10017	CHARTING		THOTT											

O

	RESPONSIBLE	RESPONSIBLE PERSONNEL	
	42		DRIGINATOR
TYPE OF ACTION OBJECTS INSPECTED FROM SEAWARD	BLINK - AHP3		PHOTO FIELD PARTY THYDROGRAPHIC PARTY GEODETIC PARTY OTHER (Specify)
	B. LINK-AHD 2		FIELD ACTIVITY REPRESENTATIVE
FUST TONS DETERMINED AND/OR VERIFIED			OFFICE ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW			REVIEWER QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE
631	INSTRUCTIONS FOR ENTRIES UNDER	INSTRUCTIONS FOR ENTRIES UNDER "METHOD AND DATE OF LOCATION" (Consult Photogrammetric Instructions No. 64).	•
OFFICE DENTIFIED AND LOCATED OBJECTS	CATED OBJECTS	FIELD (Cont'd) B. Photogrammetric fie	<pre>D (Cont'd) B. Photogrammetric field positions** require</pre>
Enter the number and date (Includ day, and year) of the photograph	e (including month, otograph used to	date of field work	entry of method of location or verification, date of field work and number of the photo-
identify and locate the bject. EXAMPLE: 75E(C)6042 8-12-75	.bject.	EXAMPLE: P-8-V 8-12-75 74L(C) 2982	25
FIELD I. NEW POSITION DETERMINED OR VERIFIED Enter the applicable data by symbols as follows: F - Field I - Located Vis - Visually	NED OR VERIFIED data by symbols as follows: P - Photogrammetric Vis - Visually	ATION STAT andmark or on station th date of	also , ente
d lation 5 -	Field identified	EXAMPLE: Triang. Rec. 8-12-75	
9/8	Theodolite Planetable Sextant	III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH Enter 'V-Vis.' and date.	SUALLY ON PHOTOGRAPH
A. Field positions* requi	Field positions* require entry of method of		
		**PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established	SITIONS are dependent son control established
*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.	ned by field obser- ground survey methods.	by photogrammetric methods	·spc
NOAA FORM 76-40 (8-74)	SUPERSEDES NOAA FORM 7 EXISTING STOCK SHOULD E	SUPERSEDES NOAA FORM 78-40 (2-71) WHICH IS OBSOLETE, AND EXISTING STOCK SHOULD BE DESTROYED UPON RECEIPT OF REVISION,	, vo

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\$ U. S. GP0:1975-0-665-080/1155

APPROVAL SHEET

BASIC HYDROGRAPHIC SURVEY
OPR-K229
AHP-10-13-89
H-10321
1989/90

This basic hydrographic survey was conducted in accordance with the project instructions for OPR-K229-AFP2, the hydrographic manual, the hydrographic survey guidelines, and the field procedures manual. The survey data and reports were completed and 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.

V. Dale Ross

LCDR NOAA

Chief, Atlantic Hydrographic Party Two

NOAA FORM 77-27(H) (9-83) HYDROGRAPHIC SURVEY STATISTICS			ENT OF COMMERCE	REGISTRY NUMBER	l	
			•	H-1032		
RECORDS AC			d when survey is processe			
RECORD DESCRIPTION		AMOU	NT	RECORD DESCRIP	TION	AMOUNT
SMOOTH SHEET		1	SMOOTH	OVERLAYS: POS., AR	R, EXCESS	8
DESCRIPTIVE REPORT		1	FIELD SHE	ETS AND OTHER OVERLAYS		3
DESCRIP- TION	DEPTH/POS RECORDS	HORIZ. CONT. RECORDS	SONAR- GRAMS	PRINTOUTS	ABSTRACTS/ SOURCE DOCUMENTS	
ACCORDION FILES						
ENVELOPES						
VOLUMES						
CAHIERS	1					-
BOXES						
SHORELINE D						
SHORELINE MAR	S (List):	TP-01196		.,		
	ETRIC MAPS (List):	None None				
NOTES TO THE	HYDROGRAPHER (List):	None				
NAUTICAL CH		Chart 1131	4 15th Editio	n, August 15, 1	987	
THE THORIE OF	Alt (Liot).		OFFICE PROCESSING			
		The following statistics	will be submitted with the	cartographer's report on the s	urvey	
	PROCESS	SING ACTIVITY		ļ .	AMOUNTS	
				VERIFICATION	EVALUATION	1997
POSITIONS ON SH						
OSITIONS REVIS						0
OUNDINGS REVI						308
CONTROL STATIO	NS REVISED					0
				VEDICIONALION	TIME-HOURS	707410
PRE-PROCESSING				VERIFICATION	EVALUATION	TOTALS
VERIFICATION OF						
				/7.5		
VERIFICATION OF POSITIONS VERIFICATION OF SOUNDINGS				47.5 79.0		47.5 79.0
				17.0		19.0
VERIFICATION OF	PHOTOBATHYMETRY					
	CATION/VERIFICATION					
	· · · · · · · · · · · · · · · · · · ·			12 5		12 5
COMPARISON WITH PRIOR SURVEYS AND CHARTS			13.5	13.5	13.5 13.5	
	SIDE SCAN SONAR REC				13.3	13.3
	VIRE DRAGS AND SWE					
L VALUATION OF 1	TITLE DINGS AND SWE	LIJ				
EVALUATION REP	ORT			i	26	26

OTHER* 39.5 TOTALS 140 179.5 'USE OTHER SIDE OF FORM FOR REMARKS Pre-processing Examination by Mike Brown Beginning Date 3/8/90 Ending Date 3/29/90 Ending Date 6/22/90 Verification of Field Data by Time (Hours) 140 Gordon E. Kay erification Check by
James S. Green, C.R. Davies Time (Hours) Ending Date 19.0 7/23/90 Ending Date 7/15 / 90 Ending Date 8/3/90 Evaluation and Analysis by Gordon E. Kay Time (Hours) 39.5 Inspection by Dennis J. Hill Time (Hours) 3

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

TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE: April 12, 1990

MARINE CENTER: Pacific

OPR: K229

HYDROGRAPHIC SHEET: H-10321

LOCALITY: Texas, Aransas Bay, Blackjack to Deadman Island

TIME PERIOD: November 16, 1989 - January 22, 1990

TIDE STATION USED: 877-4513 Copano Bay Bridge, Texas

PLANE OF REFERENCE (MEAN LOWER LOW WATER): 3.87 ft.

HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 0.4 ft.

REMARKS: RECOMMENDED ZONING PRELIMINARY

Zone direct.

CHIEF, TIDAL DATUM QUALITY
ASSURANCE SECTION

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

TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE: July 9, 1990

MARINE CENTER: Pacific

OPR: K229

HYDROGRAPHIC SHEETS: H-10320, 10321, 10322, 10323, and

10324

REMARKS: The above tide notes of April 12 and 14, 1990 are

final.

CHIEF, TIDAL DATUM QUALITY ASSURANCE SECTION

SURVEY NUMBER U.S. DEPARTMENT OF COMMERCE NOAA FORM 76-155 NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION H-10321 **GEOGRAPHIC NAMES** CON U.S. RAPS ROW OCAL TON OH PREWOUS SURVEY E OH LOCAL WAPS GRAPATURS LLY H U.S. Llahr List Name on Survey
ARANSAS BAY
BLACKJACK POINT TO
DEADMAN ISLAND A 5916 5875 1 ARANSAS BAY Х X 2 Х BARTELL ISLAND X X 3 5865 5875 4 Х Х X BLACKJACK PENINSULA 5 X X X 5875 Х BLACKJACK POINT 6 X Х 5693 Х DEADMAN ISLAND offshut 7 X X Х DUNHAM ISLAND 8 Х X Х DUNHAM POINT X 9 EAST POCKET Х X 10 GOOSE ISLAND Х 11 HALFMOON REEF Х 5875 12 Х Х X JAYBIRD POINT 13 JAYBIRD REEF X 14 X MACK REEF 15 TEXAS (TITLE) 16 Х THOMPSONS TOWHEADS 17 Approved: 18 19 20 Chief Geographer 21 22 APR 1990 23 24 25

NOAA FORM 76-155 SUPERSEDES CAGS 197

EVALUATION REPORT H-10321

1. INTRODUCTION

Survey H-10321 is a basic hydrographic survey accomplished by the NOAA Atlantic Hydrographic Party 2 under the following Project Instructions.

OPR-K229-AHP2, dated September 14, 1989 CHANGE NO. 1, dated December 21, 1989 CHANGE NO. 2, dated January 10, 1990

This survey occurred in Texas and covers an area in Aransas Bay between Blackjack Point and Deadman Island. The surveyed area extends from latitude 28°07'27"N south to latitude 28°03'57"N and from longitude 96°55'44"W to longitude 96°58'55"W. Aransas Bay is extremely shallow with a diurnal tide range of less than 0.5 feet. The variation in water level depends principally on the wind. The influence of storms and hurricanes can propagate extreme changes in the bay bottom.

The shoreline consists of sand, salt marshes and dredge spoil areas. The bottom consists of mud and broken shells. Depths range from one foot along the shoreline to twenty feet in the Intracoastal Waterway.

Predicted tides for Galveston Channel, Texas, were used for the reduction of soundings during preliminary processing. The final field sheet was plotted using unverified actual tides from the Copano Bay Bridge gage (877-4513). Approved hourly heights zoned from the Copano Bay Bridge gage were also 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 and sound velocity correctors are adequate. An accompanying computer printout contains the parameters and the correctors. The electronic control correctors have been determined according to the established procedures and are adequate.

A digital file has been generated for this survey as required by the specifications contained in Hydrographic Survey Guideline No. 52, Standard Digital Data Exchange Format, April 15, 1986. The file, however, is incomplete. Certain feature descriptive information, all line type data and miscellaneous isolated features are not in the digital record due to the present lack of digitizing resources. The user should refer to the smooth sheet for complete depiction of survey data.

2. CONTROL AND SHORELINE

Sections F and G of the hydrographer's report contain adequate discussions of horizontal control and hydrographic positioning. Additional detailed information on horizontal control is in the following reports, filed with the survey records.

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

Positions of horizontal control stations used during hydrography are 1989 field and published values based on NAD 83. These values were used for the computation of positions. The smooth sheet and accompanying overlays are annotated with NAD 27 adjustment ticks based on values determined by N/CG121. Geographic positions based on NAD 27 may be plotted on the smooth sheet utilizing the NAD 83 projection by applying the following corrections.

Latitude: 1.056 seconds (32.5 meters) Longitude: 0.982 seconds (26.3 meters)

The year of establishment of control stations shown on the smooth sheet originates with the hydrographer's signal list.

The quality of 264 positions fails to meet specifications, in terms of error circle radius or residual. A review of the data, however, indicates that none of these fixes are used to position dangers to navigation. The soundings located by these fixes are consistent with surrounding soundings. These fixes are considered acceptable.

The following reviewed shoreline map applies to this survey.

Photo Date Class
TP-01196 December 1982 and November 1983 III

3. HYDROGRAPHY

Because of the small tide variation it was impossible for the hydrographer to acquire sounding data in water shoaler than one foot. Therefore, the zero curve was not developed. With this exception, hydrography is adequate to:

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

4. CONDITION OF SURVEY

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

The hydrographer did not make a comparison with prior surveys H-5693 and H-5916 as required. Section 6 of this report contains these comparisons.

A pier, located in the vicinity of latitude 28°07'20.4"N, longitude 96°58'38.4"W, was noted in the Preprocessing Examination Report as being inadequately investigated. Described as a "T-shaped pier" in the field records, the pier is depicted on the smooth sheet with a straight end. The t-shaped configuration is not supported by the final field sheet or the shoreline manuscript. This discrepancy should be addressed during a future survey.

5. JUNCTIONS

Survey H-10321 junctions with the following surveys.

Survey	<u>Year</u>	<u>Scale</u>	<u>Area</u>
H-10320	1989-90	1:10,000	West
H-10329	1990	1:10,000	South

The junction with survey H-10320 is complete.

Survey H-10329 is in a preliminary stage of processing. This junction will be addressed in the Evaluation Report for survey H-10329.

There are no junction surveys to the northeast, therefore a comparison was made to chart 11314, 15th edition. Survey soundings are generally two feet deeper than charted depths.

6. COMPARISON WITH PRIOR SURVEYS

H-5693(1935) 1:20,000 H-5875(1935) 1:20,000 H-5916(1935) 1:20,000 T-9297(1946-48) 1:20,000

Survey H-5693 covers the extreme southwest corner of the present survey. Considering the differences in the scales of the survey and the methods of surveying, comparison with this prior survey is satisfactory. Halfmoon Reef is still in existence, with present survey depths one to two feet deeper. Survey H-5875 covers the entire area of the present survey. Generally, soundings have deepened by one to two feet. There are three iron pipes that were neither verified or disproven during this survey. They are located as follows.

Feature	<u> Latitude North</u>	<u>Longitude West</u>		
iron pipe	28°05′31"	96.56/16"	(NAD	83)
iron pipe	28°04'48"	96°57 ' 48#	(NAD	83)
iron pipe	28*04'43"	96°57′54"	(NAD	83)

These pipes have been transferred in red ink to the smooth sheet as submerged obstructions (pipe). Additional information can be found in section K, page 6 of the hydrographer's report.

Survey H-5916 covers the extreme northwest corner of the present survey. Present soundings and the three-foot curve agree with this prior survey.

Survey T-9297 covers the entire area of the present survey. This shoreline map lacks sounding data and contains only the high water line and a few obstructions. Many small reefs on this prior survey have decreased in size or are no longer present on the present survey. There are many spoil areas that have eroded and disappeared since this prior survey.

There are no AWOIS items originating from prior surveys H-5693, H-5875, H-5916 applicable to the present survey.

AWOIS item 6110 appears to originate with survey T-9297 although not specifically identified as such in the AWOIS listing. The hydrographer verified the feature by locating a pile at latitude 28°05'41.22"N, longitude 97°56'31.50"W. See hydrographer's report for charting recommendation.

With the transfer of the above pipes to the smooth sheet survey H-10321 is adequate to supersede the prior surveys within the common area.

7. COMPARISON WITH CHART

Chart 11314, 15th Edition, dated August 15, 1987; scale 1:40,000; (NAD 27)

a. <u>Hydrography</u>

Charted hydrography originates with surveys H-5693, H-5875, H-5916, T-9297 and miscellaneous sources.

The following feature charted as a dashed line, was neither verified or disproved during this survey. The feature, assumed to be a pier in ruins, should remain as charted.

Feature Latitude North Longitude West pier in ruins 28°07′28" 96°58′35" (NAD 27)

Except for the above item and the unresolved AWOIS items listed in the next section of this report, survey H-10321 is adequate to supersede charted hydrography.

b. AWOIS

Refer to the attachments to the hydrographer report, for discussions and disposition of AWOIS items. The following AWOIS items (submerged piles or markers) originate with miscellaneous sources. These features were visually searched for but were not located and not disproven during this survey. These features, should continue to be charted as submerged piles or submerged markers as appropriate.

		*1		MOTE listed mosition
AWOIS				NOIS listed position
<u>Number</u>	<u>Charted Feature</u>			Longitude West
5217	submerged pile		28'04'08"	96°57′58" /
5219	submerged pile		28°04'16"	96°57′52" /
5221	submerged pile		28°04'23"	96°57′45" /
5225	submerged pile		28°04'39"	96.57.32" <
5228	submerged pile		28°04'47"	96°57′24"
5242	submerged pile (P	?A)	28°05'09"	96°57′03" -
5249	submerged pile		28.02,13,	96°56′57" ~
5252	submerged pile		28°05'22"	96°56′53" -
5259	submerged pile		28°05'26"	96°56′51"
6107	submerged pile		28°05'34"	96°56′44"
6111	submerged pile		28°05'42"	96°56′38"
6114	submerged pile		28.05.50"	96°56′31" ′
6116	submerged pile		28°05'57"	96°56′24"
6117	marker		28°06′04"	96°56′26" ´
6119	marker		28.06,08	96°56′22"
6122	marker		28°06′10"	96°56′40"
6123	marker		28°06'15"	96°56′51"
6128	marker		28.06,56	96°57′10"
6129	marker		28°06'26"	96°57′35"
6130	marker		28°06'27"	96°57′46"
6132	marker		28°06'30"	96°58'09"
6134	marker		28°06'32"	96°58′19" 🥠
6135	marker		28°06'34"	96°58′32"

c. Controlling Depths

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

There is an unnamed charted channel (AWOIS 6121) at latitude 28°06'10"N, longitude 96°56'30"W. This channel no longer exists and should be removed from the chart.

d. Aids to Navigation

There are three fixed and nine floating aids located within the area of this survey. The nine floating aids were located and serve their intended purpose. However, buoy 23 (Light List number 35565) was identified by the hydrographer as a black can. The light list indicated that it is a green can. The smooth sheet portrays a black can as identified by the hydrographer.

Aransas Light 13 (Light List number 35815) was located by a detached position 1567 at latitude 28.06.05.73.N, longitude 96.56.19.89.W. It agrees with the charted position.

Aransas Bay Light 19 (Light List number 35545) was located by detached position 1561 at latitude 28°05'05.72"N, longitude 96°57"10.92"W. This position, differs from the charted position by 190 meters to the southwest.

NOAA 76-40 forms were not submitted for Aransas Bay Lights 13 and 19.

Aransas Bay Light 25 (Light List number 35570) was located on April 30, 1990, by AHP2 after the completion of the survey. This was done because on January 9, 1990, the U.S. Coast Guard moved Light 25. The updated position of this light is latitude 28°04'12.36"N, longitude 96°57"56.81"W, 60 meters northeast of the charted position. A NOAA form 76-40 for light 25 is attached.

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-10321 adequately complies with the Project Instructions, except as noted in section 4 of this report.

9. ADDITIONAL FIELD WORK

This is a good hydrographic survey. Additional field work is recommended on a time availability basis to verify or disprove the pier noted in section 4 and the two charted items and the twenty three unresolved AWOIS items listed in section 7.a and 7.b of this report.

Gordon E. Kay Cartographer

APPROVAL SHEET H-10321

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.

Lemester D	Date: 8-3-90
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.

Commander Pamela Chelgren-Koterba, NOAA
Chief, Pacific Hydrographic Section

Final Approval

Approved:

_____Date: 8/22/90

Rear Admiral, NOAA

Director, Charting and Geodetic Services

DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration

National Ocean Survey Rockville, Maryland Hydrographic Index No. 90 C Scale 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 40000 40000 40000 80000 20000 80000 20000 80000 80000 20000 80000 80000 80000 20000 800000 80000 On Scales of 1:10000 6.34 inches=1 statute 1:20000 3.17 inches=1 statute Date | 1935 | 1937 | 1937 | 1937 | 1937 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 1938 | 19 No.
H-5916
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H-639 Diagram No. 1285 Date 1999 1993-34 1993-34 1994-35 1994 H-6405 H-5488 H-5489 H-5521 H-5612 H-5613 H-5634 H-5845 H-5865 H-6401 CHRIST H-10321 Complete through August 1978 HYDROGRAPHIC SURVEYS RIVER - CORPUS 1899-1966 BRAZOS

MARINE CHART BRANCH RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. H-10321

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.

- 1. Letter all information.
- 2. In "Remarks" column cross out words that do not apply.
- 3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

CHART	DATE	CARTOGRAPHER	REMARKS
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1314	8-9-90	Russ Davis	Full Par Before After Marine Center Approval Signed Via full anshire
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11200	1-10-97	KR. Forster	Full Part Before After Marine Center Approval Signed Via
11300	6-10-92	KK. POWCE	Drawing No. 45 Exam-n/c-10 coverage.
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