

10327

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-10-2-90

Registry No. H-10327

LOCALITY

State Texas

General Locality Aransas Bay

Sublocality Rockport to Fulton

1990

CHIEF OF PARTY

ICDR V.D. Ross

LIBRARY & ARCHIVES

DATE September 19, 1991

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

10327

EC/G
L-607(90)
PRODUCTS
11314 A"
11313 n/c

HYDROGRAPHIC TITLE SHEET

H-10327

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

FIELD NO.

AHP 10-2-90

State Texas

General locality Aransas Bay

Locality Rockport to Fulton

Scale 1:10,000 Date of survey February 12 to April 27, 1990

Instructions dated September 14, 1989 Project No. OPR-K229-AHP2

Vessel Launch 0517 (EDP No. 0517)

Chief of party LCDR V. Dale Ross, Chief, Atlantic Hydrographic Field Party 2

Surveyed by M.J. McMann, B.A. Link, M.J. Briscoe, C.E. Parker, J. Marsicano, F. Altany

Soundings taken by ~~echo sounder, hand lead, and pole~~ Echo Sounder, Raytheon DE-719C (S/N 8652)

Graphic record scaled by M.J. McMann, B.A. Link, and M.J. Briscoe

Graphic record checked by M.J. McMann, B.A. Link, and M.J. Briscoe

Evaluation by: G.E. Kay, C.R. Davies Automated plot by PHS Xynetics Plotter

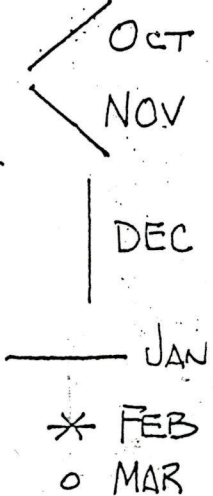
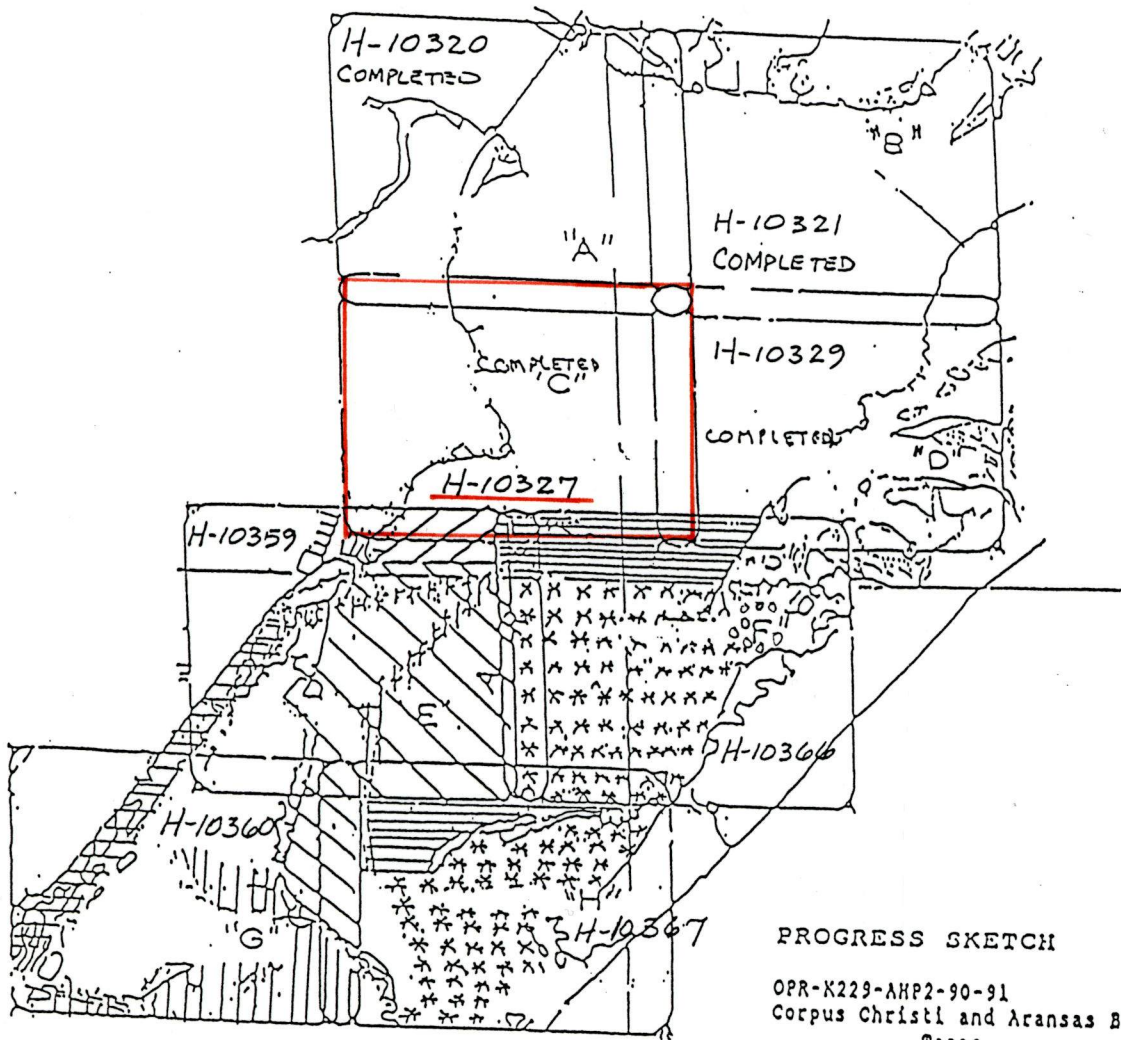
Verification by G.E. Kay, C.R. Davies

Soundings in ~~fathoms~~ feet at MKW MLLW and half feet

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

AWAIS/SURFL 1/15/92 SJ

*SC 1-30-97
XW 12/4/91*



PROGRESS SKETCH

OPR-K229-AHP2-90-91
Corpus Christi and Aransas Bays
Texas

Atlantic Hydrographic Party Two
V. Dale Ross
Lieutenant Commander, NOAA
Chief of Party

LEGEND

	OCT	NOV	DEC	JAN	FEB	MAR
SQNM SDG	3	22	9	15	16	15
LNMI SDG	63	635	357	376	500	470
LNMI TO/FROM	56	202	224	303	504	400
LNMI MISC	32	152	207	261	266	200
DP/BS	69	238	155	184	102	199
TIDE STA	5	0	0	0	0	5
CONTROL	5	0	0	0	2	0

DESCRIPTIVE REPORT TO ACCOMPANY
HYDROGRAPHIC SURVEY
H-10327
AHP-10-2-90
OPR-K229-HFP
1990

A. PROJECT

This survey was conducted in accordance with Hydrographic Project Instructions OPR-K229-HFP, Aransas Bay, Texas, dated September 14, 1989, Change Number 1, dated ~~October 19~~, 1989, and Change Number 2, dated January 10, 1990. ~~December 21~~ ✓

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 "C" as specified by the project instructions. ✓

B. AREA SURVEYED

The area surveyed for H-10327 covers the west central portion of Aransas Bay, Texas, from Rockport to Fulton. The survey limits are as follows: ✓

Latitude 28° 04' 10" on the North
Latitude 28° 01' on the South
Longitude 096° 58' 15" on the East
Live Oak Peninsula on the West

This survey was conducted from February 12 (day 043) to April 27 (day 117), 1990. Additional work was accomplished from October 10 to 26, 1990. Additional work report follows this report. ✓

The bottom composition of the survey area is primarily mud with shoal areas of sand near shore. ✓

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. ✓

<u>EDP #</u>	<u>S/N</u>	<u>Days</u>
0517	V-5 10348	043-117

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 occurred 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 probe (SN 154). Program "Velocity" Version 1.00, was used for the speed of sound corrections computations. A copy of the tables in the Separates Following Text. "Velocity" support documentation is in the cahier for H-10327. ✓

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

<u>Cast</u>	<u>Day</u>	<u>Depth</u>	<u>Digibar SN</u>
1	053/1990	4 meters	154
2	074	4 meters	154
3	094	5 meters	154
4	117	5 meters	154

Weather permitting, 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. ✓

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

Actual tide heights were requested from the Sea and Lake Levels Branch, N/OMA12, in a letter dated May 4, 1990. A copy of the letter is included in the Separates Following Text. ✗ ✓

E. HYDROGRAPHIC SHEETS

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>	<u>Quantity</u>
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, channel lines, shoreline, aids to navigation, and horizontal control stations used during the survey are plotted on the final field sheet. 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. ✓

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:

<u>No.</u>	<u>Name</u>	<u>Source</u>	<u>Year</u>
102	Goose	NGS	1987
104	Condo	N/CG233	1989
105	Copano Ent Lt 2	N/CG233	1989
106	Good 2	N/CG233	1989
108	Sas	N/CG233	1989

* Filed with the survey data

113	Little Bay Tower	AHP-2	1990
114	Nine Mile Pt Lt 2	AHP-2	1990
115	Aransas Bay Lt 25	AHP-2	1990

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 forwarded by them. An addendum to the report was submitted on April 11, 1990 for the stations established by AHP-2. ✓

G. HYDROGRAPHIC POSITION CONTROL

See Eval Report, rect 2

Range/range, range/azimuth and "see-field-sheet" positioning were the methods 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>	<u>Equipment</u>	<u>S/N</u>	<u>Code</u>
0517	RPU	F0244	
	RT	E2967	
	R/S	E2977	4
	R/S	E2912	5
	R/S	E2909	6
	R/S	F3237	2
	R/S	C2097	8
	R/S	C2096	8

Baseline calibrations of the Motorola Falcon 484 equipment were performed on October 25, 1989, January 8 and March 20, 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. ✕ ✓

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. ✕ ✓

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. ✓

On D.N.'s 057, 058, 061, 067, and 068 there were numerous areas where high ECR values were displayed on the data printouts. These high ECR's were the result of losing one station and poor geometry with the remaining three stations. These were not apparent to the hydrographer while on-line. These high ECR's did not cause plot problems with the data. These selected soundings ✓

✕ Filed with the survey data

were verified using the point recomputation program. The recomputations were stored to the data and the ECR's in error were given check marks on the printout.

On D.N. 057 and 058 these positions could not be recomputed as there was not a forth station available. Since the areas in question plotted properly the hydrographer accepted these lines as good data. *Data accepted and plotted on smooth sheet*

On D.N. 073 "see-field-sheet hydro" was run in the canals of Key Allegro and Harbor Oaks sub-divisions. These soundings, with predicted tides applied, are plotted in blue on the final field sheet. *See Eval Report, rect 2*

On D.N. 074 range/azimuth hydro. was run in Little Bay. In two areas it appears the sounding lines cross the shoreline. One was in the vicinity of latitude $28^{\circ} 02' 40''$ N, longitude $097^{\circ} 01' 58''$ W. The other is in the vicinity of latitude $28^{\circ} 02' 55''$ N, longitude $097^{\circ} 01' 50''$ W. These were the result of not having positions at the time of a jog in the line. The r/az.plot program calculates soundings between fixes as a straight line. These are not shoreline changes. *Data on smooth sheet plots at corrected position*

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

H. SHORELINE

Shoreline detail shown on the final field sheet was manually transferred from TP-01611, which was compiled at 1:20000 and enlarged to 1:10000. The shoreline manuscript was compiled on the NAD 1983. ✓

Detached positions were taken on new piers or other new items located within the survey area along the shoreline. The symbol for each item verified along the shoreline was drawn in black ink on the final field sheet. ✓

Shoreline was verified by its junction with hydrographic data and by visual inspection. ✓

Shoreline details were also verified during hydrographic operations using the photographic print of the "Notes to Hydrographer" TP-01611. ✓

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 bulkhead or rip-rap. ✓

longitude

A minor shoreline change occurred in Key Allegro in the vicinity of latitude $28^{\circ} 02' 07''$ N, ~~latitude~~ $097^{\circ} 01' 20''$ W. This is shown in red on the final field sheet. No change indicated on the field sheet. Longitude above is exact of Key Allegro. Disregard this paragraph.

I. CROSSLINES

A total of 26.9 linear nautical miles of crosslines were run on H-10327 which equals 13% of the main scheme hydrography. Crossline soundings agree to within 1 foot of the main scheme soundings.

J. JUNCTIONS See Eval Report, sect 5

This sheet junctions with H-10320 (1989/90) on the north, and H-10329 (1990) on the east. Junction soundings between the present survey and H-10320 agree well. Depths varied by no more than ~~2 feet~~ ^{1 foot}. Junction soundings between the present survey and H-10329 show excellent agreement with depths varying by 1 foot or less.

K. COMPARISON WITH PRIOR SURVEYS

This survey was compared with the following prior survey:

<u>Registry #</u>	<u>Scale</u>	<u>Year Surveyed</u>
H-5693	1:20000	1935
T-9296	1:20000	1952

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. Depths in the area of the channel have increased to a minimum of 12 feet, which is the controlling depth. There have been significant shoreline changes to the survey area such as the creation of Fulton harbor and the extensive bulkheading of the shoreline of Key Allegro (formerly Frondoleg Is.), as well as creation of the numerous canals in Key Allegro and Harbor Oaks sub-divisions.

Prior survey T-9296 accurately shows the lights and buoys defining the intracoastal waterway but does not show the shoreline changes noted previously.

Soundings throughout the rest of the survey area agree within 1 foot, generally being shoaler on the present survey.

No AWOIS items originate from prior surveys. See Eval Report, sect 6

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

L. COMPARISON WITH THE CHART

This survey was compared to the 15th edition of chart 11314 dated August 15, 1987. See *Eval Report, sect 7*

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 submerged stake in the vicinity of latitude $28^{\circ}02'58''$ N, longitude $97^{\circ}01'06''$ W was investigated with a 50-meter radius diver circle search. The center of the search area was located with detached position #2025. Nothing was found. Bottom time was approx. 20 min. The hydrographer recommends removal of this stake from the chart. *Concur*

2. A snag charted in the vicinity of latitude $28^{\circ}01'38''$ N, longitude $97^{\circ}01'25''$ W was investigated with a 50-meter radius diver circle search. The center of the search area was located with detached position #2027. Nothing was found. Bottom time was approx. 20 min. The hydrographer recommends removal of the snag from the chart. *Concur*

3. A rock groin shown on the T-map in the vicinity of latitude $28^{\circ}01'42''$ N and longitude $097^{\circ}02'48''$ W is not on the chart. This groin does exist and should be charted as shown on the T-map (TP-01611). *Concur*

4. A pier constructed on a sandbag groin shown on the T-map in the vicinity of latitude $28^{\circ}01'38''$ N, longitude $97^{\circ}01'54''$ W, is not charted. This groin and pier was located with detached position #1918. A photograph was taken and is included in the separates following text. *Chart this pier as shown on the T-map. *Concur* (TP-01611)

5. A small shoal with least depths of 6 feet was found in the vicinity of latitude $28^{\circ}01'35''$ N and longitude $097^{\circ}02'18''$ W. The hydrographer recommends charting this shoal as defined in survey H-10327. *Concur*

6. An 8 ft. depth charted in the vicinity of latitude $28^{\circ}01'40''$ N and longitude $097^{\circ}01'55''$ W was not found. A fathometer search was performed along shore in this area and nothing was found. The hydrographer recommends removal of the 8 ft sounding from the chart. *Concur. Chart area as shown on the smooth sheet*

* Filed with the survey data

7. A wreck charted PA in the vicinity of latitude 28° 01' 14"N, longitude 097° 02' 50"W was located by detached position #2018 at latitude 28° 01' 19.9"N, longitude 097° 02' 49.8"W. The hydrographer recommends charting this wreck as located. *Concur. Delete the charted wreck PA. See Eval Rpt, sect 7.a.*

8. A pier shown on the chart in the vicinity of latitude 28° 03' 56"N, longitude 097° 01' 58"W is shown on the T-map as a pier ruins. This pier is in ruins but is now shorter than shown on the T-map. This ruins was located by detached position #1696 at latitude 28° 03' 56.4"N, longitude 097° 01' 59.7"W. The hydrographer recommends this ruins be charted as located. *Concur*

Seven
~~Eight~~ oil or gas platforms, averaging 5-feet wide by 30-feet long were located and are recommended for charting at:

Chart these platforms as shown on the smooth sheet.

PN 1576	>	latitude 28° 01' 19.0"N,	longitude 097° 00' 49.5"W
PN 1884	>	latitude 28° 01' 23.6"N,	longitude 097° 02' 22.2"W
PN 1898	>	latitude 28° 01' 28.3"N,	longitude 097° 01' 08.5"W *
PN 1900	>	latitude 28° 01' 44.3"N,	longitude 097° 00' 27.3"W
PN 1901	>	latitude 28° 01' 43.3"N,	longitude 097° 00' 50.1"W
PN 1902	>	latitude 28° 01' 53.2"N,	longitude 097° 01' 03.2"W
PN 1903	>	latitude 28° 01' 39.8"N,	longitude 097° 01' 06.7"W
PN 1896	>	latitude 28° 01' 29.2"N,	longitude 097° 01' 08.3"W *
PN 1897	>	latitude 28° 01' 28.5"N,	longitude 097° 01' 07.8"W *

Position numbers 1896 and 1897 are the north and south ends of a large (25-ft. wide by 60-ft. long) gas platform. *Also PN 1898*

There are ⁸ ~~5~~ AWOIS items in the present survey area. Descriptions of these items can be found in the Separates Following Text.

The following items were unresolved due to persistent high winds and seas, which precluded dive investigations. AWOIS No.'s 5153, 5155, 5156, 5158, 5160, 5163, 5165, 5169, 5170, 5177, 5179, 5180, 5181, 5184, 5185, 5188, and 6182. These items may be reassigned when the field party returns to the area in the autumn of 1990. *See additional work report that follows*

There are no newly found, unreported dangers to navigation in the survey area. *See Eval Report, sect 7.f.*

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

Numerous pipelines exist in the survey area. No recommendation is made to chart these pipelines. Per a telephone conversation with Mr. James Dailey in the Mapping and Charting Branch (N/CG2222) the current NOAA policy regarding charting of the pipelines in the survey area is to let the magenta note warning of obstructions, wells, and pipelines suffice. ✓

* There are 3 points on the same large platform

M. ADEQUACY OF SURVEY

This survey is a complete basic hydrographic survey and is adequate to supersede all prior surveys within the common area. *Sec Eval Report, sect 6*

N. AIDS TO NAVIGATION

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

There are fifteen fixed aids to navigation in the survey area. Fulton Channel Light 2, number 35600 and Light 4, number 35610, Nine Mile Point Light 2 number 35710, and Rockport Channel Light 6, number 35713 from the 1990 USCG Light List Volume 4, agree well with their charted positions. NOAA form 76-40 may be found in the Separates Following Text. ✓

Fulton Channel Daybeacon 1, number 35595 from the 1990 USCG Light List Volume 4, was destroyed while the survey was in progress and was replaced with a temporary buoy "T-1". This buoy was located with detached position #1594. Discussion with the local Coast Guard Aids to Navigation Team indicate this daybeacon will be replaced in the near future. *PN 1594 is at latitude 28° 03' 30.73" N, longitude 97° 01' 22.63" W. Retain subm pile at position of charted daybeacon. See sect 7.a. of the Eval Report*
Fulton Channel Daybeacons 3 and 5, numbers 35605 and 35615 from the 1990 USCG Light List Volume 4, agree with their charted positions. ✓

Copano Bay Approach Light 1, number 35580 from the 1990 USCG Light List Volume 4, was located by detached position at latitude 28° 03' 36.2"N, longitude 097° 00' 49.3"W which is approx. 75 36.2 meters ~~south-southeast~~ ^{south} of the charted position. ✓

Aransas Bay Light 37, number 35670 from the 1990 USCG Light List Volume 4, was located by detached position #1585 at latitude 28° 02' 09.1"N, longitude 096° 59' 44.4"W which is 50 meters ~~south~~ ^{south} northeast of the charted position. The light appears to serve its intended purpose. ✓

Aransas Bay Light 43, number 35695 from the 1990 USCG Light List Volume 4, was located by detached position #1574 at latitude 28° 01' 06.1"N, longitude 097° 00' 41.7"W which is 100 meters south-southwest of the charted position. The light appears to serve its intended purpose. ✓

Krueger Channel Lights 1 and 2 are private markers that mark the channel into Key Allegro. Light 1, number 35710.5 from the 1990 USCG Light List Volume 4, was located by detached position #1911 at latitude 28° 01' 43.3"N, longitude 097° 01' 49.2"W which is 60 meters southeast of the charted position. Light 2, number 35711 from the 1990 USCG Light List Volume 4, was located by detached position #1909 at latitude 28° 01' 43.2"N, longitude 097° 01' 48.2"W which is 90 meters southwest of the charted position. These lights still serve their intended purpose.

Ninemile Point Dump Daybeacon 1 number 35700 from the 1990 USCG Light List Volume 4, was located by detached position #1899 at latitude 28° 01' 04.0"N, longitude 097° 00' 59.6"W which is 200 meters southwest of the charted position. Ninemile Point Dump Daybeacon 2 number 35705 from the 1990 USCG Light List Volume 4, was located by detached position #1575 at latitude 28° 01' 11.8"N, longitude 097° 00' 54.8"W which is 140 meters southwest of the charted position. The intended purpose of these daybeacons is unclear, as the spoil areas they mark are no shoaler than the surrounding areas. The local Coast Guard Auxiliary has requested the daybeacons be removed or moved southwest along the Intracoastal Waterway. In their present location mariners exiting the ICW bound for Key Allegro often run aground on the Ninemile Point shoal.

Rockport Channel Daybeacons 5 and 7 numbers 35712.5 and 35713.5 from the 1990 USCG Light List Volume 4, agree with their charted positions.

Two private markers, Aransas Bay Pipeline Markers Light A and B were located by detached positions. These lights were also located on survey H-10329 and locations of these lights may be found in the descriptive report to accompany that survey.

Light A is at 28° 02' 44.75"N, 96° 57' 21.78"W.
 Light B is at 28° 02' 39.90"N, 96° 57' 15.90"W.
 Two bridges exist in the survey area. One crosses the channel leading into Harbor Oaks on Fulton Beach Road. The charted vertical clearance of this bridge was verified as 20 feet by steel tape. The other bridge crosses the channel which is the north entrance to Key Allegro. The charted vertical clearance of this bridge was verified as 8 feet by steel tape.

O. STATISTICS

Description

Total Positions	2027
Detached Positions	155
Duplicate Positions	76
Total Miles of Hydrography	203.0
Sq. Nautical Miles of Hydrography	8
Bottom Samples	26

Digibar Casts	4
Tide Stations Leveled	3
Days of Production	20

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 development 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.

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

Several ~~Seventeen~~ AWOIS items were unresolved due to persistent high winds and seas, which precluded dive investigations. These items may be reassigned when the field party returns to the area in the autumn of 1990. See additional work report that follows.

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

* Filed with the survey data

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	9/1/89	Velocity Computations (IBM PC)
MTEN 3 WITH ENHANCEMENTS	6/88	Geodetic Computations (IBM PC)

S. REFERRAL TO REPORTS

<u>Title</u>	<u>Transmittal Information</u>
Descriptive Report For Surveys H-10329, H-10320, H-10321	Pacific Hydrographic Section Seattle, Washington
Horizontal Control Report for OPR-K229-HFP Geodetic Control Report for CM-8716 Geodetic Control Survey Job HC-9901	Field Photogrammetry Section Norfolk, Va. Written by: R. DeCroix
Chart Sales Agent Report OPR-K229-HFP	Chart Distribution Branch N/GC33 Rockville, MD.
User Evaluation Report OPR-K229-HFP	Atlantic Hydrographic Section N/CG244 Norfolk, Va. ✓
Chart Inspection Report OPR-K229-HFP	Atlantic Hydrographic Section N/CG244 Norfolk, Va.
Coast Pilot Report	Coast Pilot Unit N/CG 22 Mapping and Charting Branch Rockville, MD

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

CHART 11314

PRE-SURVEY REVIEW ITEM #5154
WRECK (ED)

SOURCE:CL1598/71, CL1926/76 USPS

INVEST. DATE:4/24/90 TIME:1357-1429 GMT VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE:H-10329 (OPR-K229-AHP) POSITION:1984-2011

CORRECTORS APPLIED:None

GEODETIC POSITION: (NAD 83) LATITUDE (N) LONGITUDE (W)

CHARTED: 28° 01' 05.05"N 097° 02' 56.96"W

OBSERVED: See Method of Item Investigation

POSITION DETERMINED BY: Multiple LOP, Falcon Mini-Ranger

METHOD OF ITEM INVESTIGATION: A 50-meter radius fatho search was conducted in the area of the charted wreck. Sounding lines were run at 10 meter spacing and no evidence of the item was found. The water depths in this area ranged from 1-7 feet. The lines were run only on the west side of the dredged channel into Rockport Harbor.

CHARTING RECOMMENDATIONS: The hydrographer recommends removal of *Concur* this item from the chart. Discussion with local shrimpers indicates this wreck no longer exists.

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM #5157
OBSTRUCTION (ONE PIER)

SOURCE: UNKNOWN

INVEST. DATE: 4/19/90 (D.N.109 TIME: 1559-1617 GMT) VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10327 (OPR-K229-AHP)

POSITION: 1918-1920

CORRECTORS APPLIED: None

GEODETIC POSITION:

LATITUDE (N)

LONGITUDE (W)

CHARTED:

28° 04' ^{01 09.05} 40.55"

97° 02' ⁵ 08.96"

OBSERVED: See Method of Item Investigation

POSITION DETERMINED BY: Multiple LOP, Falcon Mini-Rangers

METHOD OF ITEM INVESTIGATION: The shoreline in this area was compared with the T-map and agrees well. A visual search was performed along shore to locate any pier ruins and none were found.

CHARTING RECOMMENDATIONS: The hydrographer recommends the T-map take precedence in this area and any charted piers in this area not shown on the T-map be removed from the chart. *Concur. Chart area as shown on TP-01611*

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM #5159
PIERS IN RUINS

SOURCE: UNKNOWN

INVEST. DATE: 4/19/90 (D.N.109) TIME: 1559-1617 GMT VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10327 (OPR-K229-AHP)

POSITION: 1918-1920

CORRECTORS APPLIED: None

GEODETIC POSITION: (NA 083) LATITUDE (N) LONGITUDE (W)

CHARTED: 28° 04' ^{01 1} 50.05" 97° 02' ⁵⁷ 05.96"

OBSERVED: See Method of Item Investigation

POSITION DETERMINED BY: Multiple LOP, Falcon Mini-Rangers

METHOD OF ITEM INVESTIGATION: The shoreline in this area was compared with the T-map and agrees well.

CHARTING RECOMMENDATIONS: The T-map should take precedence in this area and any charted features which do not appear on the T-map should be removed from the chart. Concur. Chart area as shown on TP-01611

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM #5161
FISH HAVEN

SOURCE: CL1558/77 COE, TP01611/89

INVEST. DATE: 4/24/90 (D.N.114) TIME: 134758 GMT

VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10327 (OPR-K229-AHP)

POSITION: 1983

CORRECTORS APPLIED: Predicted Tides, TRA

GEODETIC POSITION: (NAO 83) LATITUDE (N) LONGITUDE (W)

CHARTED: 28° 01' 15.05" 097° 02' 50.96"

OBSERVED: 28° 01' 15.0" 097° 02' 50.9"

POSITION DETERMINED BY: Multiple LOP, Falcon Mini-Rangers

METHOD OF ITEM INVESTIGATION: A fatho and visual search were conducted in the area of this charted fish haven and no evidence of any obstructions were found. Water depths were found to be from 3-7 ft. Approx. 20 mins were spent searching the area.

CHARTING RECOMMENDATIONS: The hydrographer recommends the limits of the fish haven remain as charted. *Concur*

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM #5162
PIERS IN RUINS

SOURCE: UNKNOWN

INVEST. DATE: 4/19/90 (D.N.109) TIME: 1559-1615 GMT VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10327 (OPR-K229-AHP)

POSITION: Not found

CORRECTORS APPLIED: NONE

GEODETTIC POSITION: (NAO 83) LATITUDE (N) LONGITUDE (W)

CHARTED: 28° 01' 16.05" 097° 02' 57.96"

OBSERVED: See Method of Item Investigation

POSITION DETERMINED BY: Multiple LOP, Falcon Mini-Rangers

METHOD OF ITEM INVESTIGATION: The shoreline in this area was compared with the T-map and agreed well.

CHARTING RECOMMENDATIONS: The T-map should take precedence in this area and charted features not shown on the T-map should be removed from the chart. Concur. Chart according to TP-01611.

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM #5164
PIERS

SOURCE: UNKNOWN

INVEST. DATE: 4/19/90 (D.N.109) TIME: 1637-1730 VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10327 (OPR-K229-AHP) POSITION: Not found

CORRECTORS APPLIED: None

GEODETIC POSITION:	LATITUDE (N)	LONGITUDE (W)
CHARTED:	28° 01' 21.05"	097° 02' 55.96"
OBSERVED:	See Method of Item Investigation	

POSITION DETERMINED BY: Multiple LOP, Falcon Mini-Rangers

METHOD OF ITEM INVESTIGATION: The shoreline in this area was compared with the T-map and agreed well. See Field Sheet hydro was run in Rockport Harbor and a visual inspection was done along shore.

CHARTING RECOMMENDATIONS: The hydrographer recommends the piers in this area be charted as shown on the T-map. *Concur. Delete charted piers. Chart area as shown on TP-01611.*

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM #5166
WRECK

SOURCE: CL1592/76 USPS, TP01611/89

INVEST. DATE: 4/19/90 (D.N.109) TIME: 1449-1451 GMT VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10327 (OPR-K229-AHP) POSITION: 1896-1897

CORRECTORS APPLIED: None

GEODETIC POSITION:	LATITUDE (N)	LONGITUDE (W)
CHARTED: (NAO 83)	28° 01' 30.05"	97° 01' 08.96"
OBSERVED:	28° 01' 28.9"	97° 01' 08.0"

POSITION DETERMINED BY: Multiple LOP, Falcon Mini-Rangers

HEIGHT: Approx. 20 ft. at the time of survey.

METHOD OF ITEM INVESTIGATION: A large gas platform was located at the charted position of this wreck. Detached positions were taken on the north and south ends of this platform (#1896&1897). Platform was located, however, the submerged wreck was not investigated.

CHARTING RECOMMENDATIONS: The hydrographer recommends the wreck symbol be removed from the chart. Do not concv. Retain as charted.

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM #5167
SHOALING

SOURCE: CL1734/78 USPS

INVEST. DATE: 4/19/90 (D.N.109) TIME: 1533-1537 GMT VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10327 (OPR-K229-AHP)

POSITION: 1906-1908

CORRECTORS APPLIED: Predicted Tides

GEODETTIC POSITION: (NAO 83) LATITUDE (N) LONGITUDE (W)

CHARTED: 28° 01' 31.05" 097° 01' 30.96"

OBSERVED: See Method of Item Investigation

POSITION DETERMINED BY: Multiple LOP, Falcon Mini-Rangers

METHOD OF ITEM INVESTIGATION: This area was developed with a 25 meter split to the mainscheme hydrography to define the 6 ft. depth contour. This shoal has drifted slightly southward. ✓

CHARTING RECOMMENDATIONS: The hydrographer recommends removal of the shoaling reported 1978 note and this area be charted as shown on survey H-10327. *Concur*

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM #5168
PIERS

SOURCE: UNKNOWN

INVEST. DATE: 4/19/90 (D.N.109) TIME: 1637-1730 GMT VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10327 (OPR-K229-AHP)

POSITION: Not found

CORRECTORS APPLIED: None

GEODETIC POSITION: (MA0 83) LATITUDE (N) LONGITUDE (W)

CHARTED: 28° 01' 31.05" 097° 02' 54.96"

OBSERVED: See Method of Item Investigation

POSITION DETERMINED BY: Multiple LOP, Falcon Mini-Rangers

METHOD OF ITEM INVESTIGATION: A visual search was conducted along the shoreline in this area and See Field Sheet hydro was run. The shoreline was compared with the T-map and agreed well.

CHARTING RECOMMENDATIONS: The hydrographer recommends the shoreline features in this area be charted as shown on the T-map. Concur. Delete charted piers. Chart area as shown on TP-01611.

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM #5171
WRECK (ED)

SOURCE: TP9296 (1946-49) NOS, CL1563/74 USPS

INVEST. DATE: 4/24/90 (D.N.114) TIME: 151821 GMT

VESSEL: #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10327 (OPR-K229-AHP)

POSITION: 2021

CORRECTORS APPLIED: None

GEODETIC POSITION: (NAO 83) LATITUDE (N) LONGITUDE (W)

CHARTED: 28° 01' 41.05" 097° 01' 38.96"

OBSERVED: See Method of Item Investigation

POSITION DETERMINED BY: Multiple LOP, Falcon Mini-Rangers

METHOD OF ITEM INVESTIGATION: A 200 meter radius visual search was conducted with a detached position (#2021) taken in the center of the search area. The water depths in this area were from $\frac{1}{2}$ -9 ft.

CHARTING RECOMMENDATIONS: The hydrographer recommends removal of *Concur* this wreck from the chart. Discussion with local shrimpers indicates this wreck no longer exists.

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM #5172,5173
SHOALING, 8 FT. REP. DEPTH

SOURCE: LNM12/85, 8th CG DIST.

INVEST. DATE: 4/19/90 (D.N.109) TIME: 1343-1351GMT

VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10327 (OPR-K229-AHP) POSITION: 1859-1867

CORRECTORS APPLIED: Predicted tides

GEODETTIC POSITION:	LATITUDE (N)	LONGITUDE (W)
CHARTED: #5172	28° 01' 46.05"	097° 01' 48.96"
#5173	28° 01' 49.05"	097° 01' 42.96"

OBSERVED: See Method of Item Investigation

POSITION DETERMINED BY: Multiple LOP, Falcon Mini-Rangers

METHOD OF ITEM INVESTIGATION: Three channel lines were run in the channel from the lighted channel markers into Key Allegro. The channel was dredged prior to the sounding lines being run. The project depths were 9 ft. from the lighted markers into the bulkhead, thence 8 ft. for a distance of 1000 ft. into Little Bay.

CHARTING RECOMMENDATIONS: The hydro lines run in the channel indicate a least depth of 7 ft. The hydrographer recommends removal of the shoaling rep. 1985 note from the chart. Chart note "7 ft 1990"

COMPILATION USE

CHART:

APPLIED AS:

CHART 11314

PRE-SURVEY REVIEW ITEM #5174
Pier Ruins

SOURCE: UNKNOWN

INVEST. DATE: 3/15/90

TIME: 183333 GMT

VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10327 (OPR-K229-AHP)

POSITION: 1085

CORRECTORS APPLIED: None

GEODETTIC POSITION: (NAD 83)

LATITUDE (N)

LONGITUDE (W)

CHARTED:

28° 01' 54.05"

097° 02' 39.96"

OBSERVED

28° 01' 50.5"

097° 02' 43.1"

POSITION DETERMINED BY: R/AZ, Falcon Mini-Ranger, Nikon T-2

METHOD OF ITEM INVESTIGATION: A detached position (#1085) was taken on the offshore end of a row of 4 in. dia. wood stakes in ruins.

CHARTING RECOMMENDATIONS: The hydrographer recommends this pier ruins remain as charted. *Concur. Ruins found not AWS015 item. Also chart the ruins found on this survey.*

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM #5175, 5187
PIERS AND GROINS ALONGSHORE

SOURCE: CL825/75 COE PERMIT (GROINS), UNKNOWN (PIERS)

INVEST. DATE: 4/4/90 (D.N.094) TIME: 1418-1618 VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10327 (OPR-K229-AHP)

POSITION: 1666-1689

CORRECTORS APPLIED: None

GEODETIC POSITION: (NAV 83) LATITUDE (N) LONGITUDE (W)

CHARTED: PSR 5175> 28° 01' 55.05"N 097° 01' 33.96"

PSR 5187> 28° 02' 31.05" 097° 01' 33.96"

OBSERVED: See Method of Item Investigation

POSITION DETERMINED BY: Multiple LOP, Falcon Mini-Rangers

METHOD OF ITEM INVESTIGATION: A visual search was conducted along shore in this area and all piers were located by detached position and groins were verified as shown on the T-map. The T-map accurately depicts these groins with the exception of several piers that were identified as groins on the T-map.

CHARTING RECOMMENDATIONS: The hydrographer recommends the groins be charted as shown on the final field sheet for H-10327. Do not concern. Delete the presently charted pier and groins. Chart pier and groins at positions shown on TP-01611.

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM #5176
TWO PIERS

SOURCE: UNKNOWN

INVEST. DATE: 3/15/90 (D.N.074)

TIME: 183751 GMT

VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10327 (OPR-K229-AHP)

POSITION: 1086

CORRECTORS APPLIED: None

GEODETIC POSITION: (NAD 83)

LATITUDE (N)

LONGITUDE (W)

CHARTED:

28° 01' 57.05"

097° 02' 39.96"

OBSERVED:

28° 01' 52.8"

097° 02' 38.0"

POSITION DETERMINED BY: R/AZ, Falcon Mini-Ranger, Nikon T-2

METHOD OF ITEM INVESTIGATION: A detached position was taken on the offshore end of a wood pier approx. 300 ft long and 8 ft wide. The pier charted to the north was searched for visually and nothing was found.

CHARTING RECOMMENDATIONS: The hydrographer recommends the southern pier be charted as found and the northern pier be removed from the chart. *Concur*

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM #5178
3 1/2 FOOT SHOAL

SOURCE: CL1815/72 USPS

INVEST. DATE: 3/15/90 (074) TIME: 1600-1730 GMT VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10327 (OPR-K229-AHP)

POSITION: 1038-1045

CORRECTORS APPLIED: Predicted Tides, TRA

GEODETIC POSITION: (MAD 83) LATITUDE (N) LONGITUDE (W)

CHARTED: 28° 01' 59.05" 097° 02' 18.96"

OBSERVED: See Method of Item Investigation

POSITION DETERMINED BY: R/Az, Falcon Mini-Ranger, Nikon T-2

METHOD OF ITEM INVESTIGATION: Range\Azimuth hydrography was run on 3/15/90 (D.N.074) which provided full coverage of the area of the charted shoal. The minimum depth in the center of the dredged channel was five feet.

CHARTING RECOMMENDATIONS: The hydrographer recommends changing the 3 1/2 ft 1972 note to 5 feet 1990. *Concur*

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM #5182
WRECK

SOURCE: CL308/76, CL195/78 USPS

INVEST. DATE: 4/27/90 (D.N.117) TIME: 193547 GMT VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10327 (OPR-K229-AHP) POSITION: 2024

CORRECTORS APPLIED: None

GEODETIC POSITION:	LATITUDE (N)	LONGITUDE (W)
CHARTED:	28° 02' 18.05"	097° 00' 18.96"

OBSERVED: See Method of Item Investigation

POSITION DETERMINED BY: Multiple LOP, Falcon Mini-Rangers

METHOD OF ITEM INVESTIGATION: A 50 meter circle search was conducted by divers. Nothing was found. A spike on the fathogram found during D.N.113 was investigated by divers and found to be a wreck in ruins. It was located by detached position # 2023. The hydrographer believes this wreck to be the one charted PA.)

CHARTING RECOMMENDATIONS: The hydrographer recommends charting the wreck as located by D.P.#2023. Concur. Delete charted wreck PA

COMPILATION USE

CHART:

APPLIED AS:

55V
/116192
96
latitude 28° 02' 04.36" N longitude 97° 59' 58.99" W

CHART 11314

PRE-SURVEY REVIEW ITEM #5183
SHOALING

SOURCE: CL1291/78 USPS

INVEST. DATE: 3/15/90 (074) TIME: 2055-2100 GMT VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10327 (OPR-K229-AHP) POSITION: 1165-1170

CORRECTORS APPLIED: Predicted Tides, TRA

GEODETIC POSITION: (NAO 83) LATITUDE (N) LONGITUDE (W)

CHARTED: 28° 02' 19.05" 097° 01' 56.96"

OBSERVED: See Method of Item Investigation

POSITION DETERMINED BY: R/AZ, Falcon Mini-Ranger, Nikon T-2

METHOD OF ITEM INVESTIGATION: R/AZ hydrography was run on 3/15/90 (D.N. 074) which provided full coverage of the area. Minimum depths of 7₆ feet were found in this area.

CHARTING RECOMMENDATIONS: The hydrographer recommends changing the 6 ft rep 1978 note to 7₆ feet 1990. Concur.

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM #5186
7 FT REP DEPTH

SOURCE: CL195/77

INVEST. DATE: 3/15/90 (D.N.074) TIME: 1858-1957 GMT VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE:H-10327 (OPR-K229-AHP) POSITION:1089-1141

CORRECTORS APPLIED: Predicted Tides, TRA

GEODETIC POSITION: LATITUDE (N) LONGITUDE (W)

CHARTED: (NAO 83) 28° 02' 22.05" 097° 02' 02.96"

OBSERVED: See Method of Item Investigation

POSITION DETERMINED BY: R/AZ, Falcon Mini-Ranger, Nikon T-2

METHOD OF ITEM INVESTIGATION: R/AZ hydrography was run on 3/15/90 (D.N. 074) which provided full coverage of the area. Minimum depths of 6 feet were found in this area.

CHARTING RECOMMENDATIONS: The hydrographer recommends changing the 7 ft rep 1977 note to 6 ft 1990. *Concur.*

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM #5189
7 FT DEPTH

SOURCE: UNKNOWN

INVEST. DATE: 3/15/90 (D.N.074) TIME: 2012-2014 GMT VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10327 (OPR-K229-AHP) POSITION: 1144-1146

CORRECTORS APPLIED: None

GEODETIC POSITION: (NAO 83) LATITUDE (N) LONGITUDE (W)

CHARTED: 28° 02' 35.05" 097° 01' 54.96"

OBSERVED: See Method of Item Investigation

POSITION DETERMINED BY: R/AZ, Falcon Mini-Ranger, Nikon T-2

METHOD OF ITEM INVESTIGATION: R/AZ hydrography was run on 3/15/90 (D.N. 074) which provided full coverage of the area. The sounding line run in this area revealed 76 foot depths to the edge of the channel, which was 6 feet deep in this area.

CHARTING RECOMMENDATIONS: The hydrographer recommends the 7 ft note remain as charted. Do not concur. Delete the 7 ft note. Check 6 ft 1990 note.

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM #5190
SUNKEN WRECK (PA)

SOURCE: CL855/83 USPS

INVEST. DATE: 4/4/90 (D.N.094) TIME: 141805 GMT VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10327 (OPR-K229-AHP)

POSITION: 1666

CORRECTORS APPLIED: None

GEODETIC POSITION: (NAD 83)	LATITUDE (N)	LONGITUDE (W)
CHARTED:	28° 02' 35.55"	097° 01' 27.96"
OBSERVED:	28° 02' 32.2"	097° 01' 29.1"

POSITION DETERMINED BY: Multiple LOP, Falcon Mini-Rangers

METHOD OF ITEM INVESTIGATION: The wreck is visible at normal water levels and is marked with a small private float. A detached position was taken over the center of the wreck. A photograph was taken of the visible portion of the wreck and is included in the separates of the report.

HEIGHT OF ITEM: .5 feet at time of survey.

CHARTING RECOMMENDATIONS: The hydrographer recommends the wreck be charted as located. *Conc. Delete the charted submerged wreck PA.*

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM #5191
LIGHTED PLATFORM (PA)

SOURCE: CL247/80 USCG AUX

INVEST. DATE: 3/27/90 (D.N.086) TIME: 172148 GMT VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10327 (OPR-K229-AHP)

POSITION: 1590

CORRECTORS APPLIED: None

GEODETIC POSITION: (NAD 83) LATITUDE (N) LONGITUDE (W)

CHARTED: 28° 02' 47.05" 096° 59' 40.96"

OBSERVED: 28° 02' 50.2" 096° 59' 28.7"

POSITION DETERMINED BY: Multiple LOP, Falcon Mini-Rangers

METHOD OF ITEM INVESTIGATION: The item is a large gas platform, approx. 40 ft long by 40 ft wide with dolphins on all 4 corners. The platform is owned by TEXACO and bares approx. 20 ft. There is a red light on the NE and SW corners of the main platform. A detached position was taken on the west side at the center. A photograph of the platform was taken and may be found in the separates folowing text.

HEIGHT OF ITEM: Approx. 20 at the time of survey.

CHARTING RECOMMENDATIONS: The hydrographer recommends charting the platform as located. *Concur. Delete the charted PA platform.*

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM #5192
LIGHTED PLATFORM (PA)

SOURCE: CL247/80 USCG AUX

INVEST. DATE: 3/27/90 (D.N.086) TIME: 173326

VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10327 (OPR-K229-AHP)

POSITION: 1592

CORRECTORS APPLIED: None

GEODETIC POSITION: (NAD 83) LATITUDE (N) LONGITUDE (W)

CHARTED: 28° 02' 49.05" 096° 59' 44.96"

OBSERVED: 28° 03' 04.1" 096° 59' 40.4"

POSITION DETERMINED BY: Multiple LOP, Falcon Mini-Rangers

METHOD OF ITEM INVESTIGATION: The item is a gas platform 30 ft long by 5 ft wide with 2 red lights at the top of the structure. A detached position was taken in the center of the platform. A photograph of the item was taken and may be found in the separates following text.

HEIGHT OF ITEM: Approx. 15 ft at the time of survey.

CHARTING RECOMMENDATIONS: The hydrographer recommends charting the platform as located. *Concur. Delete the charted PA Platform*

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM #5195
7 FT REP 1972

SOURCE: CL1815/72

INVEST. DATE: 3/14/90 (D.N.073) TIME: 1810-1815 GMT VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10327 (OPR-K229-AHP) POSITION: 932-934

CORRECTORS APPLIED: None

GEODETTIC POSITION: (NAD 83) LATITUDE (N) LONGITUDE (W)

CHARTED: 28° 03' 00.05" 097° 02' 06.96"

OBSERVED: See Method of Item Investigation

POSITION DETERMINED BY: See Field Sheet

METHOD OF ITEM INVESTIGATION: See Field Sheet hydrography was run 5
in the canals of this area and sounding lines revealed depths from 6
feet at the bridge over the channel to 10³ feet in the approx.
location of the note.

CHARTING RECOMMENDATIONS: The hydrographer recommends removal of
the 7 ft rep note from the chart. Concr. Chart 5 ft 1990 note

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM #5196, 5199, 5202,
5204, 5210,
SHORELINE FEATURES (PIERS)

SOURCE: UNKNOWN

INVEST. DATE: 4/2/90 (D.N.092) TIME: 1524-1555 GMT VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10327 (OPR-K229-AHP)

POSITION: 1632-1641

CORRECTORS APPLIED: None

GEODETIC POSITION: (NAO 83)

	LATITUDE (N)	LONGITUDE (W)
CHARTED: PSR 5196>	28° 03' 05.05"	097° 01' 48.96"
PSR 5199>	28° 03' 09.05"	097° 01' 54.96"
PSR 5202>	28° 03' 22.05"	097° 01' 56.96"
PSR 5204>	28° 03' 28.05"	097° 01' 57.96"
PSR 5210>	28° 03' 53.05"	097° 01' 54.96"

OBSERVED: See Method of Item Investigation

POSITION DETERMINED BY: Multiple LOP, Falcon Mini-Rangers

METHOD OF ITEM INVESTIGATION: A visual search was conducted along shore in the area of these items. All existing piers and ruins were located by detached position. The T-map in this area should supercede the chart in regard to shoreline features. Two pier ruins and one pier were located which do not appear on the T-map.

<u>Position Number</u>	<u>Feature</u>	<u>Latitude N</u>	<u>Longitude W</u>
1634	Pier Ruins	28° 03' 27.92"	97° 01' 56.31"
1635	Pier Ruins	28° 03' 20.38"	97° 01' 53.51"
1639	Pier TP-01611	28° 03' 10.06"	97° 01' 54.92"

CHARTING RECOMMENDATIONS: The shoreline features should be charted as they appear on the T-map with the addition of the features located by D.P. Concur. Delete existing pier and ruins. shown on smooth sheet

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM #5200
5 FT REP 1981

SOURCE: UNKNOWN

INVEST. DATE: 3/27/90 (D.N.086) TIME: 1857-1859 GMT VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10327 (OPR-K229-AHP) POSITION: 1616-1618

CORRECTORS APPLIED: Predicted Tides

GEODETIC POSITION: (NAO 83) LATITUDE (N) LONGITUDE (W)

CHARTED: 28° 03' 10.05" 097° 01' 40.96"

OBSERVED: See Method Of Item Investigation

POSITION DETERMINED BY: Multiple LOP, Falcon Mini-Rangers

METHOD OF ITEM INVESTIGATION: A channel line was run into this marked channel and least depths of 2 feet were found.

CHARTING RECOMMENDATIONS: The hydrographer recommends removal of *Concur* the 5 ft rep 1981 note from the chart. The Harbor Oaks Home Owners Assn. is currently requesting that the Aransas Navigation District dredge this channel to ease access to Aransas Bay. Contact with the Aransas Navigation District (512-729-6661) would be advised before charting a depth notation in this channel. *Concur. In the meantime, chart 2 ft 1990 note.*

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM #5205
7 FT REP 1986

SOURCE: LNM31/86 8TH CG DIST

INVEST. DATE: 3/27/90

TIME: 1837-1854 GMT VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10327 (OPR-K229-AHP)

POSITION: 1600-1615

CORRECTORS APPLIED: Predicted tides, TRA

GEODETIC POSITION: (NAO 83) LATITUDE (N) LONGITUDE (W)

CHARTED: 28° 03' 29.05" 097° 01' 42.96"

OBSERVED: See Method of Investigation

POSITION DETERMINED BY: Multiple LOP, Falcon Mini-Rangers

METHOD OF ITEM INVESTIGATION: A red side, green side, and center line sounding lines were run in the Fulton Harbor channel. These lines showed a least depth in the center of the channel of 7 feet.

16th Edition show note changed to 6 ft June 1988.

CHARTING RECOMMENDATIONS: The hydrographer recommends changing the ~~5 ft rep 1981~~ note to 7 ft 1990. *Concur*
6 ft June 1988

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM #5207
8 FT REP 1985

SOURCE: CL731/85 COE

INVEST. DATE: 3/27/90

TIME: 1837-1854 GMT

VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10327 (OPR-K229-AHP)

POSITION: 1600-1615

CORRECTORS APPLIED: Predicted Tides, TRA

GEODETTIC POSITION: (NAD 83)

LATITUDE (N)

LONGITUDE

CHARTED:

28° 03' 40.05"

097° 01' 57.96"

OBSERVED: See Method of Item Investigation

POSITION DETERMINED BY: Multiple LOP, Falcon Mini-Rangers

METHOD OF ITEM INVESTIGATION: Three channel lines were run inside
Fulton Harbor. These sounding lines show a least depth of 8 feet.

16th Edition shows a 6 ft note.

CHARTING RECOMMENDATIONS: The hydrographer recommends the 8 ft note
remain as charted. Do not concur. Delete charted 6 ft note.

Chart 9 ft 1990 note.

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM #5208
PIERS

SOURCE: UNKNOWN

INVEST. DATE: 3/27/90 (D.N.086) TIME: 183339 GMT VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10327 (OPR-K229-AHP) POSITION: 1599

CORRECTORS APPLIED: None

GEODETIC POSITION: (NAD 83)	LATITUDE (N)	LONGITUDE
CHARTED:	28° 03' 43.05"	097° 01' 57.96"

OBSERVED: See Method of Item Investigation

POSITION DETERMINED BY: Multiple LOP, Falcon Mini-Rangers

METHOD OF ITEM INVESTIGATION: A visual inspection was performed in this area, comparing the physical shoreline with the chart and the T-Map.

CHARTING RECOMMENDATIONS: The 14 piers assigned to be investigated as AWOIS #5208 do not exist. A detached position (#1599) was taken on the longest pier in the harbor, which contains numerous finger piers. The T-map accurately depicts all shoreline features in this area. *Delete charted piers. Chart area as shown on TP-01611.*

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM #521⁰
PIER

SOURCE: UNKNOWN

INVEST. DATE: 4/2/90 (D.N.092) TIME: 1750-1815 GMT VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10327 (OPR-K229-AHP)

POSITION: 1630

CORRECTORS APPLIED: None

GEODETIC POSITION: (MA0 83)

LATITUDE (N)

LONGITUDE (W)

CHARTED: 28° 03' ³55.05"

097° 01' ⁴55.96"

OBSERVED: 28° 03' 52.7"

097° 01' 55.5"

POSITION DETERMINED BY: Multiple LOP, Falcon Mini-Rangers

METHOD OF ITEM INVESTIGATION: Visual search performed along shore.
There was no pier found, however the offshore end of a concrete
groin was located by detached position.

CHARTING RECOMMENDATIONS: The hydrographer recommends a groin be
charted as located and the pier be removed from the chart. *Concur.*

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM #5213²
T-PIER

SOURCE: UNKNOWN

INVEST. DATE: 4/4/90 (D.N.094) TIME: 175055 GMT VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10327 (OPR-K229-AHP) POSITION: 1690

CORRECTORS APPLIED: None

GEODETIC POSITION: (NAO 83)	LATITUDE (N)	LONGITUDE (W)
CHARTED:	28° 03' 57.05" ⁵	097° 01' 57.96" ⁵
OBSERVED:	28° 03' 58.5"	097° 01' 48.3"

POSITION DETERMINED BY: Multiple LOP, Falcon Mini-Rangers

METHOD OF ITEM INVESTIGATION: A visual inspection was performed along shore in the area of the item. The charted position falls inshore of the end of the Fulton fishing pier. A detached position was taken on the offshore end of the pier. This position agrees well with the T-map.

CHARTING RECOMMENDATIONS: The hydrographer recommends the Fulton pier be charted as located ~~x~~ on TP-01611. *Concur. Delete the existing pier.*

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM #5214
PIERS

SOURCE: UNKNOWN

INVEST. DATE: 4/4/90 (D.N.094) TIME: 181145 GMT VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10327 (OPR-K229-AHP)

POSITION: 1695

CORRECTORS APPLIED: None

GEODETIC POSITION: (MAD 83)

LATITUDE (N)

LONGITUDE (W)

CHARTED:

28° 03' 59.05"

097° 02' 04.96"

OBSERVED:

28° 03' 59.67"

097° 02' 02.86"

POSITION DETERMINED BY: Multiple LOP, Falcon Mini-Rangers

METHOD OF ITEM INVESTIGATION: A visual search was conducted along shore. The southern of two groins in ruins was located with a detached position (#1695).

CHARTING RECOMMENDATIONS: The visual inspection verifies the T-map, and the charted piers should be changed to groins in ruins. *Concur. Delete charted piers. Chart ruins as shown on TP-01611.*

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM #5239
SUBMERGED WRECK

SOURCE: LNM44/82 8TH CG DIST

INVEST. DATE: 4/27/90 (D.N.117) TIME: 193547 GMT VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10327 (OPR-K229-AHP)

POSITION: 2026

CORRECTORS APPLIED: None

GEODETIC POSITION: (MAD 83)

LATITUDE (N)

LONGITUDE (W)

CHARTED:

28° 03' 55.05"

097° 01' 48.96"

OBSERVED: See Method of Item Investigation

POSITION DETERMINED BY: Multiple LOP, Falcon Mini-Rangers

METHOD OF ITEM INVESTIGATION: A 50 meter radius circle search was conducted by divers. Nothing was found. Bottom time was approx. 20 mins.

CHARTING RECOMMENDATIONS: The hydrographer recommends removal of the wreck from the chart. Discussion with local shrimpers indicate the wreck does not exist. See Eval Report, sect 7. b.

COMPILATION USE

CHART:

APPLIED AS:

SIGNAL LIST (Spring 1990)

~~101 028:08:05.046 097:00:21.412 Regan,1989~~
102 028:07:30.073 096:58:51.475 Goose,1987
~~103 028:06:36.298 097:01:40.122 Causeway,1931~~
104 028:06:12.876 097:01:19.666 Condo,1989
105 028:04:58.905 097:00:36.739 Copano Bay Approach Lt. 2,1989
106 028:04:35.443 096:57:55.110 Good,1989
~~107 028:02:10.676 097:01:32.072 Nine 3,1972~~
108 028:00:49.662 096:58:12.654 Sas,1989
109 027:59:46.121 097:03:43.686 Shell - 2,1971
~~110 027:59:23.706 096:58:52.815 Allyn,1989~~
~~111 027:55:59.444 097:02:35.781 Skiff,1989~~
~~112 028:07:34.090 096:55:47.455 Ham,1934~~
113 028:01:49.582 097:02:24.587 Little Bay Tower,1990
114 028:01:27.412 097:01:14.362 Nine mile Pt. Lt.2,1990
115 028:04:12.363 096:57:56.812 Aransas Bay Lt.25 (ICW),1990

NOAA FORM 76-40
(8-74)

Replaces C&GS Form 567.

TO BE CHARTED
 TO BE REVISED
 TO BE DELETED

REPORTING UNIT
(If field Party, Ship or Office)
NOAA - AHP2

STATE
TEXAS

LOCALITY
ARANSAS BAY

DATE
5/4/90

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

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

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

The following objects HAVE BEEN INSPECTED FROM SEAWARD TO DETERMINE THEIR VALUE AS LANDMARKS.
OPR PROJECT NO.
K229

JOBS NUMBER
AHP 10-2-90

DATUM
NAD, 1983

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

CHARTING NAME	DESCRIPTION <small>(Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses.)</small>	LATITUDE		LONGITUDE		OFFICE	FIELD	CHARTS AFFECTED
		° / ' "	D.M. Meters	° / ' "	D.P. Meters			
LIGHT	COPANO BAY APPROACH LIGHT "1" U.S.C.G. L.L. Vol.4 1990 #35580	28°03'	36.2"N	097°00'	49.3"W		F-L HYDRO D.P.	11314
LIGHT	ARANSAS BAY LIGHT "37" U.S.C.G. L.L. Vol.4 1990 #35670	28°02'	09.1"N	096°59'	44.4"W		F-L HYDRO D.P.	11314
LIGHT	ARANSAS BAY LIGHT "43" U.S.C.G. L.L. Vol.4 1990 #35695	28°01'	06.1"N	097°00'	41.7"W		F-L HYDRO D.P.	11314
LIGHT	KRUEGER CHANNEL LIGHT "1" U.S.C.G. L.L. Vol.4 1990 #35710	28°01'	43.3"N	097°01'	49.2"W		F-L HYDRO D.P.	11314
LIGHT	KRUEGER CHANNEL LIGHT "2" U.S.C.G. L.L. Vol.4 1990 #35711	28°01'	43.2"N	097°01'	48.2"W		F-L HYDRO D.P.	11314
DAYBEACON	NINEMILE POINT DUMP DAYBEACON "1" U.S.C.G. L.L. Vol.4 1990 #35700	28°01'	04.0"N	097°00'	59.6"W		F-L HYDRO D.P.	11314
DAYBEACON	NINEMILE POINT DUMP DAYBEACON "2" U.S.C.G. L.L. Vol.4 1990 #35705	28°01'	11.8"N	097°00'	54.8"W		F-L HYDRO D.P.	11314

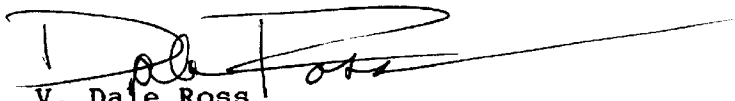
Done - 4-607(90)

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

APPROVAL SHEET
BASIC HYDROGRAPHIC SURVEY
OPR-K229
AHP-10-2-90
H-10327

This basic hydrographic 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 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

ORIGINAL

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 SHEET: H-10327

LOCALITY: Aransas Bay, Rockport to Fulton, TX

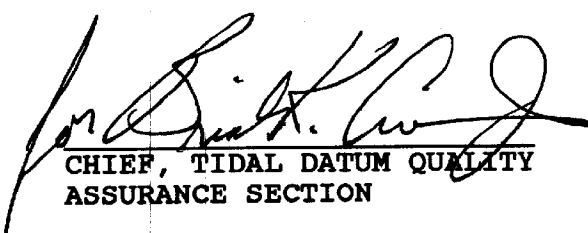
TIME PERIOD: February 12 - April 27, 1990

TIDE STATION USED: 877-4770 Rockport, TX

PLANE OF REFERENCE (MEAN LOWER LOW WATER): 5.81 feet

HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 0.4 feet

REMARKS: RECOMMENDED ZONING
Zone direct.


CHIEF, TIDAL DATUM QUALITY
ASSURANCE SECTION

GEOGRAPHIC NAMES

H-10327

Name on Survey TITLE:
TEXAS, ARANSAS BAY
FULTON TO ROCKPORT

ON CHART NO. 11314
ON PREVIOUS SURVEY NO.
ON U.S. QUADRANGLE MAPS
FROM LOCAL INFORMATION
ON LOCAL MAPS
P.O. GUIDE OR MAP
RAND McNALLY ATLAS
U.S. LIGHT LIST
K TP-01611

	A	B	C	D	E	F	G	H	K
ARANSAS BAY	X							X	1
FULTON	X							X	2
HARBOR OAKS	X							X	3
KEY ALLEGRO	X							X	4
LITTLE BAY	X							X	5
NINEMILE POINT	X							X	6
ROCKPORT	X							X	7
TEXAS (TITLE)	X								8
									9
									10
									11
									12
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									23
									24
									25

Approved

Charles E. Harrington

Chief Geographer - N/C42x5

JUL 19 1990

HYDROGRAPHIC TITLE SHEET

H-10327

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

FIELD NO.

AHP 10-2-90

State Texas

General locality Aransas Bay

Locality Rockport to Fulton

Scale 1:10,000 Date of survey October 10-26, 1990

Instructions dated September 14, 1990 Project No. OPR-K229-AHP2

Vessel NOAA LCH. 1292 (EDP No. 1292) and NOAA LCH. 0517 (EDP No. 0517)

Chief of party LCDR V. Dale Ross, Chief, Atlantic Hydrographic Party 2

Surveyed by LT Conricote, B.A. Link, M.J. McMann, M.J. Briscoe, D.B. Elliott

Soundings taken by echo sounder, ~~hook lead, pole~~ Raytheon DE-719C (S/N 8652)
Innerspace 448 (S/N 188)

Graphic record scaled by LT Conricote, B.A. Link, M.J. Briscoe, and M.J. McMann

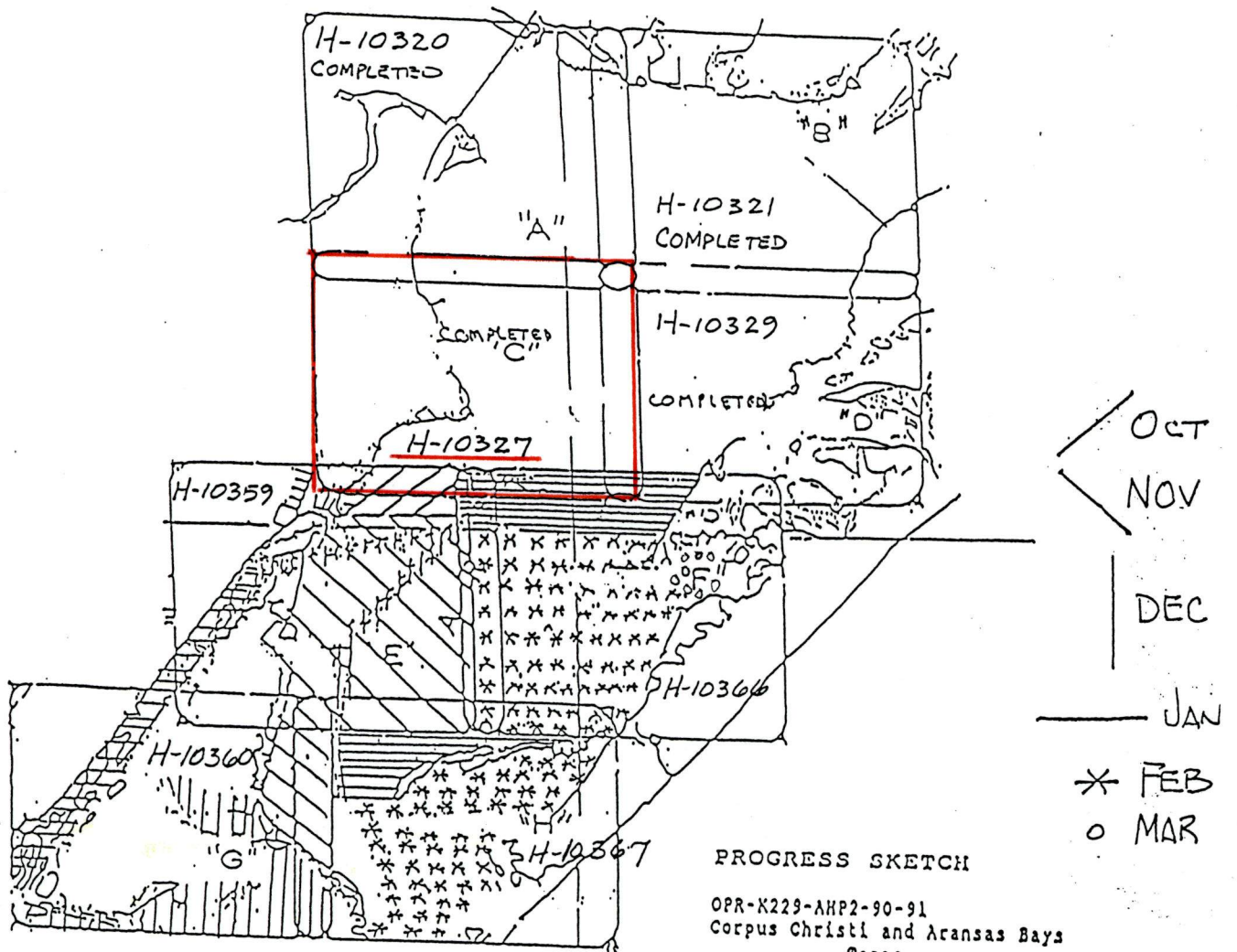
Graphic record checked by LT Conricote, B.A. Link, M.J. Briscoe, and M.J. McMann

Evaluation by: G.E. Kay Automated plot by PHS Xynetics Plotter

Verification by G.E. Kay

Soundings in fathoms feet at ~~MHW~~ MLLW and half feet

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



PROGRESS SKETCH

OPR-K229-AHP2-90-91
 Corpus Christi and Aransas Bays
 Texas

Atlantic Hydrographic Party Two
 V. Dale Ross
 Lieutenant Commander, NOAA
 Chief of Party

LEGEND

	OCT	NOV	DEC	JAN	FEB	MAR
SQNM SDG	3	22	9	15	16	15
LNMI SDG	63	635	357	376	500	470
LNMI TO/FROM	56	202	224	303	504	400
LNMI MISC	32	152	207	261	266	200
DP/BS	69	238	155	184	102	199
TIDE STA	5	0	0	0	0	5
CONTROL	5	0	0	0	2	0

DESCRIPTIVE REPORT TO ACCOMPANY ADDITIONAL WORK
FOR HYDROGRAPHIC SURVEY H-10327
Field Number: AHP-10-2-90
OPR-K229-AHP2
Scale: 1:10,000
Atlantic Hydrographic Party Two
Chief of Party: Lt. Cdr. V. Dale Ross, NOAA
1990

A. PROJECT

This survey was conducted in accordance with Hydrographic Project Instructions OPR-K229-AHP2, Aransas Bay, Texas, dated September 14, 1989, Change Number 1, dated ~~October 19~~, 1989, and Change Number 2, dated January 10, 1990. December 21 ✓

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 "C" as specified by the project instructions. ✓

B. AREA SURVEYED

The area surveyed for H-10327 covers the eastern-middle portion of Aransas Bay, Texas in the vicinity of Long Reef. The survey limits are as follows:

North - Latitude 28° 04' 20"N ✓
South - Latitude 28° 01' 00"N₁₅
East - Longitude 096° 59' 30"W
West - Longitude 097° 03' 30"W

This survey was conducted from 12 October (day 285) through 1 November (day 305) 1990. ✓

C. SOUNDING VESSELS

NOAA launch 1292 (EDP No. 1292) and NOAA launch 517 (EDP No. 0517), 21-foot MonArks, were used to collect all data on this survey. No problems were encountered with these vessels. ✓

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
Constat	2.02	3/9/90
Postsur	4.14	7/20/90
Printout	2.23	7/12/90
Baseline	1.01	6/15/90
Backup	1.02	3/9/90
Quick	1.01	7/27/90
Conplot	1.02	6/25/90
Diagnostic	2.50	3/9/90
Compute	2.02	3/9/90
Point	1.20	7/27/90
Install	1.20	3/26/90
Plotall	1.70	7/27/90
Oldpostsur	4.13	4/9/90
Oldconvert	2.33	3/12/90
Loadnew	1.00	7/27/90
Convert	2.34	6/20/90
Filesys	4.55	5/26/90
Oldplotall	1.60	5/26/90
Inverse	1.21	7/27/90
Abst	3.05	5/26/90

PC-DAS programs, in the NOAAEXE directory, version 3.6, were 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 w/ enhancements (IBM PC)		6/88

E. SONAR EQUIPMENT

Not applicable.

F. SOUNDING EQUIPMENT

Raytheon DE-719C fathometer, S/N 8652, modified with an Odom Hydrographic Systems, Inc. Digitrace was used by NOAA launch 517 during these AWOIS investigations. No problems were experienced with this fathometer.

An Innerspace Model 448 echo sounder, S/N 188, was used by NOAA launch 1292 during these AWOIS investigations. No problems were experienced with this echo sounder. ✓

The Digitrace readings were closely monitored for agreement with the analogue trace. Any necessary adjustments were made and noted on the echogram. ✓

All AWOIS investigations were done by divers' searches or chain drag. Least depths were taken using a lead line or sounding pole. Chain drags were done where possible. Chain drags could not be done in many areas due to the many well heads and pipe lines. Diver searches were done in those areas. ✓

G. CORRECTIONS TO SOUNDINGS

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

Settlement and squat measurements for vessels 1292 and 517 were performed on 4 October 1990 (day 277) in Little Bay at Rockport, Texas. The level method was used. Settlement and squat correctors were applied to all survey data through the offset table. Data from the settlement and squat tests are included in the separates of this report. ✕ ✓

A final field sheet was not plotted for these AWOIS investigations. The graphic records were scanned as a cursory check to ensure that no significant peaks or deeps were missed between selected soundings. Only positional edits were made to the data. ✓

Actual tidal heights were requested from the Sea and Lake Levels Branch, N/OMA12, in a letter dated 20 November 1990. A copy of the letter is included in the separates of this report. ✕ ✓

H. CONTROL STATIONS

The horizontal control datum for this project is the North American Datum of 1983. Stations 105, 108, 114, and 115 were used for vessel positioning during these investigations. A signal list, as well as a copy of the HDAPS Control Station Table, is included in the separates of this report. ✓

The Coastal Surveys Unit, from Norfolk, Va., used third order, class I traverse and intersection methods to establish the ground control network for this project. Additional control stations were established by the Atlantic Hydrographic Party Two. All observations and computations were forwarded to the Coastal Surveys Unit for inclusion in the Horizontal Control Report which they wrote and submitted to the Atlantic Hydrographic Section in Norfolk, Va. ✓

* Filed with the survey data.

I. HYDROGRAPHIC POSITION CONTROL

Range/range positioning was the only method used to control this survey. Up to four lines of position from the Motorola Falcon 484 MiniRangers were used. The following Falcon equipment was used:

<u>VESNO</u>	<u>Instrument</u>	<u>S/N</u>	<u>Code</u>
1292	RPU	E0154	
	R/T	E2919	
517	RPU	F0241	
	R/T	E2967	
	R/S	E2977	4
	R/S	E2926	5
	R/S	E2919	6
	R/S	F3290	8
	R/S	F3180	2
	R/S	G3572	1

Baseline calibrations of the Motorola Falcon 484 were performed on October 2nd and 3rd 1990. The correctors were applied on-line through the Complex "C-O" tables. Baseline calibrations forms and listings of the "C-O" tables are included in the separates of this report. *

When using three or four line of position, a critical system check is continuously being obtained and continually observed by noting the error circle radius (ecr) and residual values (res) on the Complex screen. When the error circle radii are greater than 1.5mm at the survey scale or the residual values are greater than 0.5mm at the survey scale for more than three minutes, survey operations are suspended until the problem can be resolved. Any positions which had high error circle radii or residual values along an otherwise good survey line were smoothed during data processing. If any five consecutive soundings had high error circle radii or residual values, the data were rejected and rerun. Position quality statistics were less than 5 meters as required according to the field procedures manual.

J. SHORELINE

Not applicable. See first hydrographer's report, sect H

K. CROSSLINES

Not applicable. See first hydrographer's report, sect I

* Filed with the survey records

L. JUNCTIONS

Not applicable. See Eval Report, sect 5.

M. COMPARISON WITH PRIOR SURVEYS

Not applicable. See first hydrographer's report, sect K

N. COMPARISON WITH THE CHART See Eval Report, sect 7

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

There were sixteen AWOIS items assigned to H-10327 that were not investigated during the 1989-90 field season. All of the item investigations data and results are in the Separates To Be Included With Survey Data accompanying this report. ✓

On day 297 while performing a chain drag investigation with vessel 1292, a pile was found. The pile was not within an AWOIS survey area, but within the channel limits. The U.S. Army Corps of Engineers and the U.S. Coast Guard were notified. A Danger to Navigation letter was issued in accordance with C&GS standing policy. The pile is at latitude $28^{\circ} 01' 43.3'' N$, longitude $97^{\circ} 00' 08.8'' W$. A copy of the letter is attached.

O. ADEQUACY OF SURVEY

This additional work, in conjunction with the survey work performed by the Atlantic Hydrographic Party Two during the 1989-90 field season, comprise a complete basic hydrographic survey adequate to supersede all prior surveys within the common areas. See Eval Report, sect 9

P. AIDS TO NAVIGATION

Not applicable. See first hydrographer's report, sect IV

Q. STATISTICS

<u>Description</u>	<u>Amounts</u>
Total positions	379
Detached positions	17
Duplicate positions	11
Total nautical miles of hydrography	17
Square nautical miles of hydrography	N/A
Bottom samples	0
Sound speed casts	0
Tide stations	8
Days of production	6

 ✓

R. MISCELLANEOUS

No anomalous currents were observed within the survey area. ✓

S. RECOMMENDATIONS

Not applicable.

T. REFERRALS TO REPORTS

<u>Title</u>	<u>Transmittal Information</u>
Descriptive Report To Accompany Survey H-10327	Pacific Hydrographic Section N/CG245 Seattle, Washington
Horizontal Control Report for OPR-K229-AHP2 Geodetic Control Report of CM-8716 Geodetic Control Survey Job HC-9901 Chart Sales Agent Report OPR-K229-AHP2	Field Photogrammetry Section N/CG233 Norfolk, Va. Chart Distribution Branch N/GC33 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 Unit N/CG223 Rockville, MD

Submitted by: Martin P. Conricote, Launch Hydrographer-in-Charge

CHART #11314

PRE-SURVEY REVIEW ITEM #5155
(SUBMERGED WRECK)

SOURCE: LM31/77

INVEST. DATE:10/26/90

TIME:153000GMT.

VESSEL:#0517

Chief of Party: LCDR V. Dale Ross

REFERENCE:H-10327 (OPR-K229-AHP)

POSITION:#5026

CORRECTORS APPLIED: None

GEODETIC POSITION: (NAO 83)

LATITUDE (N)

LONGITUDE (W)

CHARTED:

28°01'07.05"N

097°01'21.96"W

OBSERVED:

See Method of Investigation.

POSITION DETERMINED BY:

Multiple LOP, Falcon mini-rangers

METHOD OF ITEM INVESTIGATION: A 100 meter circle search was conducted by divers. Nothing was found.

CHARTING RECOMMENDATIONS: The hydrographer recommends that this item be deleted from the chart. Do not concern. Survey requirements were not met, 200 meter radius search required. Retain submerged wreck PA as charted

COMPILATION USE

CHART:

APPLIED AS:

..end

CHART #11314

PRE-SURVEY REVIEW ITEM #5156
OBSTRUCTION (PLATFORM)

SOURCE: BP51025(52)--COE

INVEST. DATE: 10/24/90

TIME:160000GMT.

VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE:H-10327 (OPR-K229-AHP)

POSITION:#5023

CORRECTORS APPLIED: None

GEODETTIC POSITION: (NAO 83)

LATITUDE (N)

LONGITUDE (W)

CHARTED:

28° 01' 09.05"N

097° 00' 40.96"W

OBSERVED:

See method of Investigation.

POSITION DETERMINED BY: Multiple LOP, Falcon Mini-Rangers

METHOD OF ITEM INVESTIGATION: A 50 meter circle search was conducted by divers. Nothing was found.

CHARTING RECOMMENDATIONS: The hydrographer recommends that the item be deleted from the chart. Do not concern. Investigation was 135 meters east of the AWOIS item. Dive did not cover the required area. Retain as charted.

COMPILATION USE

CHART:

APPLIED AS:

..end

CHART #11314

PRE-SURVEY REVIEW ITEM #5158
OBSTRUCTION (PILE)

SOURCE: CL1425(70), LNM18(70)

INVEST. DATE:10/12/90 TIME:193000GMT. VESSEL #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE:H-10327 (OPR-K229-AHP) POSITION:#5017

CORRECTORS APPLIED: None

GEODETTIC POSITION: (NAO 83) LATITUDE (N) LONGITUDE (W)

CHARTED: 28° 01' 09.55" 097° 00' 31.96"

OBSERVED: See Method of Investigation.

POSITION DETERMINED BY: Multiple LOP, Falcon Mini-Rangers

METHOD OF ITEM INVESTIGATION: A100 meter circle search was conducted by divers. Nothing was found.

CHARTING RECOMMENDATIONS: The hydrographer recommends that this item be deleted from the chart. Concur

COMPILATION USE

CHART:

APPLIED AS:

CHART:#11314

PRE-SURVEY REVIEW ITEM #5160

SOURCE:BP51025/54--COE

INVEST.DATE: 10/24/90

TIME:160000GMT.

VESSEL:#0517

Chief of Party: LCDR. V. D. Ross

REFERENCE: H-10327 (OPR-K229-AHP)

CORRECTORS APPLIED: NONE.

GEODETTIC POSITION: (NAO 83)

LATITUDE(N)

LONGITUDE(W)

CHARTED:

28°01'10.05"N

097°00'37.96"W

OBSERVED:

See Method of Investigation.

POSITION DETERMINED:

Multiple LOPs, Falcon Mini-ranger.

METHOD OF INVESTIGATION: A 50 meter circle search was conducted by divers. Nothing was found.

CHARTING RECOMMENDATIONS: The hydrographer recommends that the pile be deleted from the chart. Do not concur. 100 meter radius search required for disposal. Retain subm pile as charted.

COMPILATION USE

CHART:

APPLIED AS:

CHART #11314

PRE-SURVEY REVIEW ITEM #5169
MARKERS (2)

SOURCE: LNM52/73--USCG

INVEST. DATE: 10/24/90

TIME: 185500GMT.

VESSEL: #0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10327 (OPR-K229-AHP)

POSITION: #5024

CORRECTORS APPLIED: NONE

GEODETTIC POSITION: (NAD 83)

LATITUDE (N)

LONGITUDE (W)

CHARTED:

28°01'33.05"N

097°02'30.96"W

OBSERVED:

POSITION DETERMINED BY: Multiple LOP, Falcon Mini-Rangers

METHOD OF ITEM INVESTIGATION: A ⁵40 meter circle search was conducted
by divers. Nothing was found.

CHARTING RECOMMENDATIONS: The hydrographer recommends that these
items be deleted from the chart. Concur.

COMPILATION USE

CHART:

APPLIED AS:

..end

CHART #11314

PRE-SURVEY REVIEW ITEM #5179
PILES (PA)

SOURCE: CL995/82 USPS

INVEST. DATE: 10/26/90

TIME: 150800GMT.

VESSEL #1292

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10327 (OPR-K229-AHP)

POSITIONS: 193-254

CORRECTORS APPLIED: None

GEODETIC POSITION: (MA083) LATITUDE (N)

LONGITUDE (W)

CHARTED:

28° 02' 04.05"N

096° 59' 31.96"W

OBSERVED:

See Method of Investigation.

POSITION DETERMINED BY: Multiple LOP, Falcon Mini-Rangers

METHOD OF ITEM INVESTIGATION: A 100 meter radius Bottom Drag was performed by LCH.#1292. Nothing was found.

CHARTING RECOMMENDATIONS: The hydrographer recommends that these piles be deleted from the chart. Do not concur. 200 meter radius search required for disposal. Retain at charted position as "subm piles PA".

COMPILATION USE

CHART:

APPLIED AS:

CHART:#11314

PRE-SURVEY REVIEW ITEM #5180
PLATFORM RUINS

SOURCE:BP51025/1953--COE

INVEST.DATE: 10/24/90 TIME:152850GMT. VESSEL:#0517

Chief of Party: LCDR. V. D. Ross

REFERENCE: H-10327 (OPR-K229-AHP) POSITION:#5019

CORRECTORS APPLIED: NONE.

GEODETIC POSITION: (NAO 83) LATITUDE(N) LONGITUDE(W)

CHARTED: 28°02'10.05"N 096°59'42.96"W

OBSERVED: See Method of Investigation.

POSITION DETERMINED: Multiple LOPs, Falcon Mini-rangers.

METHOD OF INVESTIGATION: A 50 meter circle search was conducted by divers. Nothing was found.

CHARTING RECOMMENDATIONS: The hydrographer recommends that the platform ruins be deleted from the chart. *Concur*

COMPILATION USE

CHART:

APPLIED AS:

CHART: #11314 PRE-SURVEY REVIEW ITEM #5181
8 DOLPHINS

SOURCE: C/L195/78 USPS

INVEST. DATE:10/12/90 TIME:200000 GMT. VSL:#0517

Chief of Party: LCDR V. Dale Ross

REFERENCE: H-10327 (OPR-K229-AHP) POSITION:#5017

CORRECTORS APPLIED: NONE (NAO 83)

GEODETIC POSITION: LATITUDE(N) LONGITUDE(W)

CHARTED: 28°02'11.05" 097°00'24.96"

OBSERVED: See Method of Investigation.

POSITION DETERMINED BY: Multiple LOP, FALCON M/R

METHOD OF ITEM INVESTIGATION: A 100 meter circle search was conducted by divers. Nothing was found.

CHARTING RECOMMENDATIONS: The hydrographer recommends that these dolphins be deleted from the chart. Do not concern. 200 meter radius search required for disapproval. Retain at charted position as subm dol PA.

COMPILATION USE

CHART:

APPLIED AS:

CHART:#11314

PRE-SURVEY REVIEW ITEM #6182
Subm wreck

SOURCE: LNM46/87--8th CGD.

INVEST. DATE: 11/1/90

TIME: 162220GMT.

VSL: #0517

Chief of Party: LCDR.V.D.Ross

REFERENCE: H-10327 (OPR-K229-AHP)

POSITION: #5027-5194

CORRECTORS APPLIED: None

GEODETIC POSITION: (NAO 83) LATITUDE(N)

LONGITUDE(W)

CHARTED: 28°02'15.05"N

⁹⁷
079°01'08.96"W

OBSERVED: See method of Investigation

POSITION DETERMINED BY: Multiple LOPs, FALCON Mini-Rangers.

METHOD OF ITEM INVESTIGATION: A Bottom Drag investigation was conducted by LCH:#0517, running N/S lines parallel to shore, at 200 meters line spacings. Nothing was found.

CHARTING RECOMMENDATIONS: The hydrographer recommends that the submerged wreck be deleted from the chart. *Concur*

COMPILATION USE

CHART:

APPLIED AS:

CONTROL STATIONS (Fall 1990)

105	28°04'58.905"	97°00'36.739"	Copano Bay Entrance Lt.2, 1989
108	28°00'49.662"	96°58'12.654"	Sas, 1989
113	28°01'49.582"	97°02'24.586"	Little Bay Tower, 1990
114	28°01'27.412"	97°01'14.362"	Nine Mile Point Lt.2, 1990
115	28°04'12.363"	96°57'56.812"	Aransas Bay Lt.25, 1990
124	27°57'07.493"	97°04'21.062"	Traylor, 1989



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE

Atlantic Hydrographic Party 2
P.O. Box 1299
Aransas Pass, Texas 78336

November 7, 1990

MEMORANDUM FOR: Rear Admiral W. F. Merlin
Commander, U.S. Coast Guard District 8

FROM: ^{for} *Martin P. Coniglio*
Lieutenant Commander V. Dale Ross, NOAA
Chief, Atlantic Hydrographic Party Two

SUBJECT: Danger to Navigation

An obstruction was found in the channel covered by 3.5m (11.2ft) of water at latitude 28° 01' 43.3"N, longitude 097° 00' 08.8"W. This is the east side of the Intracoastal Waterway channel in Aransas Bay near buoy 39. The bottom is 3.75m (12ft) which is the controlling depth of the channel. The obstruction to navigation is located on chart 11314.

*Unrevised,
Retained as
reported.*

A diver investigation found that the obstruction appears to be a piling, 18" diameter, lying at an angle to the north. It is possible that a north bound vessel knocked over this pile and it was not reported. The chart does not show a pile in the immediate area of this obstruction.

The Corpus Christi Area Office of the Army Corp of Engineers has been contacted. Mr. Robert E. Beggs stated that the Corp of Engineers will remove the obstruction, but he does not know when.



APPROVAL SHEET

**BASIC HYDROGRAPHIC SURVEY-ADDENDUM
OPR-K229-AHP2
AHP-10-2-90
H-10327
1990**

This additional work 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 additional work completes the aforementioned basic hydrographic survey for the area described in section B of this report.



**V. Dale Ross
Lieutenant Commander, NOAA
Chief, Atlantic Hydrographic Party Two**

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		2
DESCRIP-TION	DEPTH/POS RECORDS	HORIZ. CONT. RECORDS	SONAR-GRAMS	PRINTOUTS	ABSTRACTS/SOURCE DOCUMENTS
ACCORDION FILES	1			1	
ENVELOPES					
VOLUMES					
CAHIERS	1				
BOXES					

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

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

PROCESSING ACTIVITY	AMOUNTS			
	VERIFICATION	EVALUATION	TOTALS	
POSITIONS ON SHEET			1962	
POSITIONS REVISED	7		7	
SOUNDINGS REVISED	149		149	
CONTROL STATIONS REVISED				
	TIME-HOURS			
	VERIFICATION	EVALUATION	TOTALS	
PRE-PROCESSING EXAMINATION				
VERIFICATION OF CONTROL				
VERIFICATION OF POSITIONS	24		24	
VERIFICATION OF SOUNDINGS	64		64	
VERIFICATION OF JUNCTIONS				
APPLICATION OF PHOTOBATHYMETRY				
SHORELINE APPLICATION/VERIFICATION				
COMPILATION OF SMOOTH SHEET	26		26	
COMPARISON WITH PRIOR SURVEYS AND CHARTS		8	8	
EVALUATION OF SIDE SCAN SONAR RECORDS				
EVALUATION OF WIRE DRAGS AND SWEEPS				
EVALUATION REPORT		35	35	
GEOGRAPHIC NAMES				
OTHER*				
*USE OTHER SIDE OF FORM FOR REMARKS	TOTALS	114	43	157

Pre-processing Examination by LT. M. Brown	Beginning Date 6/18/90	Ending Date 3/25/91
Verification of Field Data by R. Davies, G. Kay	Time (Hours) 114	Ending Date 8/7/91
Verification Check by J. Green	Time (Hours) 17	Ending Date 8/7/91
Evaluation and Analysis by G. Kay, J. Green	Time (Hours) 43	Ending Date 8/7/91
Inspection by D. Hill	Time (Hours) 4	Ending Date 9-5-91

EVALUATION REPORT H-10327

1. INTRODUCTION

Survey H-10327 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 Aransas Bay, Texas, and covers that area between the towns of Rockport and Fulton. The surveyed area extends from latitude 28/04/10N to latitude 28/01/00N and from the shoreline on Live Oak Peninsula east to longitude 96/59/15W. The shoreline is characterized by numerous cultural features, including marinas and small harbors in Fulton, Harbor Oaks, Key Allegro and Rockport. There is also a portion of the Intracoastal Waterway extending northeast-southwest through the survey area. The bottom consists of mud and shells. Depths range from 1 to 15 feet.

This survey was initiated in the spring of 1990 and was concluded the following fall. The hydrographer's report is divided into two parts, each addressing one of the two survey periods.

Predicted tides for the Galveston Channel, Texas, were used for the reduction of soundings during field processing. Approved hourly heights zoned from Rockport, Texas, gage 877-4770, were used during office processing.

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

A digital file has been generated for this survey as required by the specifications contained in Hydrographic Survey Guideline No. 53, Standard Digital Data Exchange Format, April 15, 1986. Certain feature descriptive information, however, may not be in the digital record due to restrictions of the presently available cartographic codes. The user should refer to the smooth sheet for complete depiction of survey data.

2. CONTROL AND SHORELINE

Sections F and G of the spring 1990 hydrographer's report and sections H and I of the fall 1990 hydrographer's report contain adequate discussions of horizontal control and hydrographic positioning. Additional detailed information on horizontal control is found 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 and published values based on NAD 83. 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: 1.065 seconds (32.8 meters)
Longitude: 0.965 seconds (26.4 meters)

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

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 soundings found by these fixes are consistent with surroundings. These fixes are considered acceptable.

Shoreline map TP-01611 (NAD 83), photography dated February 1989, Class III, applies to this survey.

The following positions were acquired by the hydrographer as "see field sheet" fixes (SFS). These positions were transferred from the final field sheet.

<u>Position Numbers</u>	<u>Latitude(N)</u>	<u>Longitude(W)</u>
912-934	28/02/57	97/02/06
935-998	28/02/24	97/01/45
1934-1941	28/01/30	97/02/54

There are numerous new piers and pier ruins along the Live Oak Peninsula that are shown in red on the smooth sheet with supporting positional information. These positions are considered adequate to supersede the common photogrammetrically delineated shoreline.

3. HYDROGRAPHY

Except as noted below, hydrography is adequate to:

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

The zero curve could not be completely drawn because of shallow water depths and the small tide range. The 3-foot and 6-foot depth curves could not be adequately drawn in some locations because of the steepness of the man-made shoreline.

There are three holiday areas on this survey. They are located as follows:

<u>Area</u>	<u>Latitude North</u>	<u>Longitude West</u>
Cove	28/01/57	97/01/57
Rockport Harbor	28/01/15	97/02/57
Outside of Rockport	28/01/09	97/02/48

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 (January 1989 Edition for the spring work and the April 1990 Edition for the fall work), except as follows.

The hydrographer did not adequately investigate, or did not investigate at all, fourteen of the AWOIS items listed in section 7.a of this report.

5. JUNCTIONS

Survey H-10327 junctions with the following surveys.

<u>Survey</u>	<u>Year</u>	<u>Scale</u>	<u>Area</u>
H-10320	1989/90	1:10,000	North
H-10329	1990	1:10,000	East
H-10359	1990	1:10,000	Southwest
H-10366	1990	1:10,000	Southeast

The junction with survey H-10329 is complete.

The junction with survey H-10320 has not been formally completed since that survey was previously processed and forwarded for charting.

Surveys H-10359 and H-10366 are in a preliminary stage of processing, therefore, these junctions cannot be completed. These junctions will be addressed in the evaluation reports for those surveys.

6. COMPARISON WITH PRIOR SURVEYS

H-5693 (1935) 1:20,000

Survey H-5693 covers the entire area of the present survey. Extensive dredging and cultural development alongshore has occurred since the prior survey was accomplished. Generally offshore of the 6-foot depth curve the two surveys agree within plus or minus one foot, except in the dredged Intracoastal Waterway. Inside the 6-foot depth curve, soundings are between 1-2 feet deeper, except where channels have been dredged for entrances to either marinas or harbors. For additional discussion see the spring 1990 hydrographer's report, section K.

Survey H-10327 is adequate to supersede the prior survey H-5693 within the common area.

T-9296 (1952) 1:20,000

Prior shoreline map T-9296 covers the entire area of the present survey. The prior shoreline map's features were compared to the present survey. The shoreline has changed considerably through either man-made or natural forces.

AWOIS item 5171 originates from shoreline map T-9296 and was adequately resolved and discussed in the spring 1990 hydrographer's report.

This survey is adequate to supersede prior shoreline map T-9296 as a source for charted hydrography.

7. COMPARISON WITH CHART

<u>Chart</u>	<u>Edition</u>	<u>Date</u>	<u>Scale</u>	<u>Datum</u>
11314	15th	August 15, 1987	1:40,000	NAD 27
11314	16th	January 20, 1990	1:40,000	NAD 83

The 15th edition and 16th edition of chart 11314, except for being on different datums, contain identical soundings. Some minor differences for new aids to navigation and notes can be found.

a. Hydrography

All charted hydrography originates with surveys H-5693, T-9296 and miscellaneous sources.

The fish haven charted at latitude 28/01/15.05N, longitude 97/02/50.96W (AWOIS Item 5161), was investigated with no evidence of obstructions found. Due to the apparent lack of use, the status of the fish haven, active or discontinued, should be investigated and the chart revised accordingly.

Fulton Channel Daybeacon 1, charted at latitude 28/03/31N, longitude 97/01/54W, was destroyed while the survey was in progress. Until this aid is replaced and the non-existence of ruins established, a submerged pile should be shown at the charted position of the aid.

The wreck PA charted in the vicinity of latitude 28/01/14N, longitude 97/02/50W, originates from a Power Squadron report (CL 1200/85). This report describes the wreck as inside the breakwater near the position of the wreck as found during this survey. The charted position of the wreck is outside the breakwater, within a charted fish haven (AWOIS Item 5161). This fish haven was investigated by an echo sounder and visual search during this survey, with no obstructions found. This wreck should be deleted from its charted position and charted as found during this survey.

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 No.</u>
Subm Pile	28/01/03.05	97/00/43.96	5153
Subm Wreck PA	28/01/07.05	97/01/21.96	5155

<u>Feature</u>	<u>Latitude(N)</u>	<u>Longitude(W)</u>	<u>AWOIS No.</u>
Subm Ruins	28/01/09.05	97/00/40.96	5156
Subm Pile	28/01/10.05	97/00/37.96	5160
Fish Haven	28/01/15.05	97/02/50.96	5161
Subm Pile	28/01/18.05	97/00/29.96	5163
Subm Pile	28/01/26.05	97/00/22.96	5165
Subm Wreck	28/01/30.65	97/01/08.96	5166
Subm Pile	28/01/34.05	97/00/15.96	5170
Pier Ruins	28/01/54.05	97/02/39.96	5174
Subm Pile	28/01/58.05	96/59/52.96	5177
Subm Piles PA	28/02/04.05	96/59/31.96	5179
Subm Dols	28/02/11.05	97/00/24.96	5181
Subm Piling	28/02/20.05	96/59/34.96	5184
Subm Piling	28/02/21.05	96/59/28.96	5185
Subm Piles	28/03/31	97/01/54	

Except for the features listed above, survey H-10327 is adequate to supersede charted hydrography within the common area.

b. AWOIS

There were 58 AWOIS items assigned for investigation. Of these, fourteen were not adequately investigated, or not investigated at all.

All AWOIS positions listed in both hydrographer's reports have been converted to NAD 83 with preliminary adjustment values of 1.05" in latitude and 0.96" in longitude. For consistency, the coordinates for AWOIS items listed in this report have been adjusted by the same values.

Except for AWOIS Item 5171, all AWOIS items originate with miscellaneous sources. The discussion and disposition of the items investigated follow the spring and fall hydrographer's reports, depending upon when it was investigated, supplemented by the following.

AWOIS Item 5213, a pier charted at latitude 28/03/57.05N, longitude 97/01/57.96W, was not discussed in either hydrographer's report. Pier ruins are located on the shoreline map within 5 meters of the charted position of this feature. The charted pier should be deleted and pier ruins should be charted as shown on TP-01611.

AWOIS Item 5239, a submerged wreck PA, charted at latitude 28/03/55.05N, longitude 97/01/48.96W, was investigated by a diver 50-meter radius circle search and nothing was found. A 100-meter radius search was required for disproval. However, in view of the proximity of the charted wreck to the Fulton Fishing Pier (approximately 50 meters south), the shallow depths in the area (4 to 9 feet) and the local knowledge indicating that the wreck does not exist, this investigation is considered sufficient for disproval of this wreck. This feature should be removed from the chart and the area charted according to this survey.

A listing of the AWOIS items not adequately resolved is contained in section 7.a of this report.

c. Controlling Depths

The following charted channels have controlling depths within the area of this survey.

- (1) The channel into Key Allegro, AWOIS item 5173, at latitude 28/01/49.05N, longitude 97/01/42.96W, presently is charted as, "8 ft rep". This survey indicates a minimum depth of 7 feet. The present note should be deleted and a "7 ft 1990" note should be charted.
- (2) The southern end of Little Bay, AWOIS item 5178, at latitude 28/01/59.05N, longitude 97/02/18.96W, presently is charted as, "3 1/2 FT 1972". This survey indicates a 5-foot minimum depth. The present chart note should be deleted and depths from the smooth sheet should be charted.
- (3) The west central area of Little Bay, AWOIS item 5186, at latitude 28/02/22.05N, longitude 97/02/02.96W, presently is charted as, "7 ft rep 1977". This survey indicates a 5-foot minimum depth. The present survey note should be deleted and a "5 ft 1990" note should be charted.
- (4) The east central area of Little Bay, AWOIS item 5183, at latitude 28/02/19.05N, longitude 97/01/56.96W, located on the west side of Key Allegro, presently is charted as, "6 ft rep 1978". The present survey note should be deleted and depths from the smooth sheet should be charted.
- (5) The northern end of Little Bay, AWOIS item 5189, at latitude 28/02/35.05N, longitude 97/01/54.96W, presently is charted as, "7 FT". This survey indicates a 5-foot minimum depth. The present survey note should be deleted and a "5 ft" note should be charted.
- (6) Harbor Oaks, AWOIS item 5195, at latitude 28/03/00.05N, longitude 97/02/06.96W, presently is charted as, "7 ft rep". This survey indicates a 5-foot minimum depth, just under the bridge. The present survey note should be deleted and a "5 ft" note should be charted.
- (7) The entrance to Harbor Oaks and Little Bay, AWOIS item 5200, at latitude 28/03/10.05N, longitude 97/01/40.96W, presently is charted as, "5 ft rep 1981". This survey indicates a 2-foot minimum depth. The present survey note should be deleted and a "2 ft 1990" note should be charted.
- (8) The channel, AWOIS item 5205, at latitude 28/03/29.05N, longitude 97/01/42.96W, presently is charted as, "6 FT JUNE 1988". This survey indicates a 6-foot minimum depth on the right side of the channel. The present survey note should be deleted and a "6 ft 1990" note should be charted.
- (9) The Fulton harbor area, AWOIS item 5207, at latitude 28/03/29.05N, longitude 97/01/42.96W, presently is charted as, "6 FT". The survey indicates a 8-foot minimum depth. The present survey note should be deleted and a "8 ft 1990" note should be charted.
- (10) The Intracoastal Waterway has a project depth of 12 feet. This survey found depths deeper than the project depths.

(11) The Rockport harbor, at latitude 28/01/15N, longitude 97/02/21W, presently is charted as, "3 FT". This survey indicates that this area has been dredged with 11 feet the minimum depth found. The present survey note should be deleted and an "11 ft " note charted.

d. Aids to Navigation

There are 15 fixed and 7 floating aids located within the area of this survey. All of the fixed and floating aids were located and serve their intended purpose.

The charted aids were located to less than 3rd order class I specifications. Aids that differ from their charted position are listed in section N of the spring 1990 hydrographer's report and on the NOAA form 76-40 attached to this report.

There is no indication that the landmarks on the chart, or shown on the shoreline map, have been verified.

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

There was one danger to navigation report generated during this survey. A copy of this report is attached. No other dangers to navigation were reported.

8. COMPLIANCE WITH INSTRUCTIONS

Survey H-10327 adequately complies with the Project Instructions.

9. ADDITIONAL FIELD WORK

This is an adequate hydrographic survey. Additional field work is recommended to resolve the "Subm Piles" and the AWOIS Items not adequately investigated listed in section 7.a of this report.



Gordon E. Kay
Cartographer

APPROVAL SHEET
H-10327

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 disproof 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 Hill Date: 9-5-91
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: 6 Sep 1991
Commander Douglas G. Hennick, NOAA
Chief, Pacific Hydrographic Section

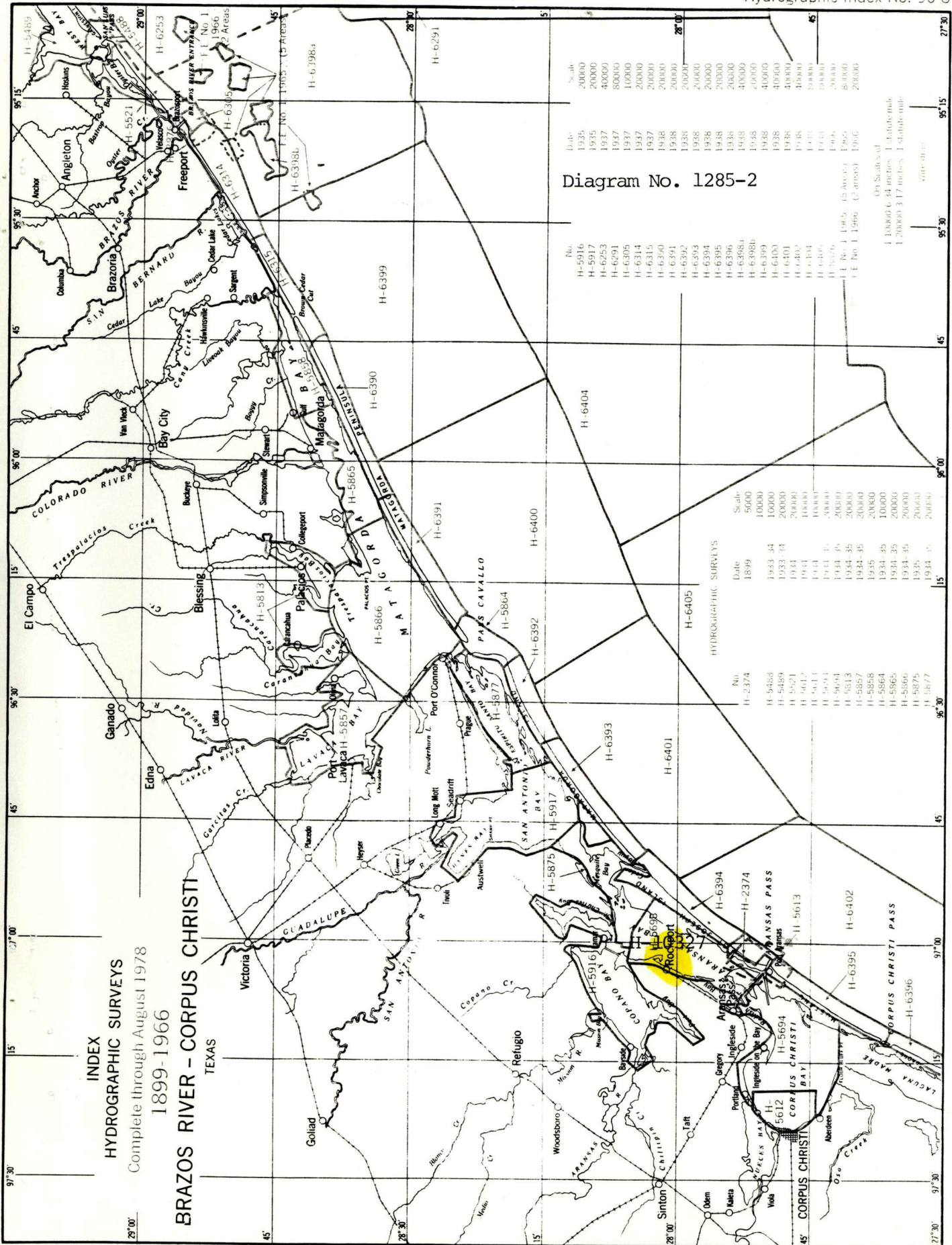
Final Approval

Approved:

J. Austin Yeager Date: 10/25/91
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



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

Diagram No. 1285-2

No.	Date	Scale
H-5916	1935	20000
H-5917	1935	20000
H-6253	1937	40000
H-6291	1937	80000
H-6305	1937	10000
H-6314	1937	20000
H-6315	1937	20000
H-6390	1938	20000
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H-6398.1	1938	20000
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H-6449	1938	20000
H-6450	1938	20000

HYDROGRAPHIC SURVEYS

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H-5489	1933-34	10000
H-5921	1931	20000
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On Scales of
1:100000 1/34 inches 1 statute mile
1:200000 1/17 inches 1 statute mile

