

H10562

NOAA FORM 76-35A

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

DESCRIPTIVE REPORT

Type of Survey **HYDROGRAPHIC/
SIDE SCAN SONAR**

Field No. **HE-10-7-94**

Registry No. **H-10562**

LOCALITY

State **TEXAS**

General Locality **GULF OF MEXICO**

Sublocality **11.6 NM EAST OF
ARANSAS PASS**

19 94

CHIEF OF PARTY
LCDR. G. E. WHITE, NOAA

LIBRARY & ARCHIVES

DATE **MAR 18 1996**

HYDROGRAPHIC TITLE SHEET

H-10562

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.

HE-10-7-94

State TEXAS

General locality GULF OF MEXICO

Locality 11.6nm EAST OF ARANSAS PASS

Scale 1:10,000

Date of survey 17 AUG 94 - 15²⁰ SEPT 94

Instructions dated 17 SEPTEMBER 1992

Project No. OPR-K320-HE-93

Vessel NOAA Ship HECK S591 (EDP 9140)

Chief of party George E. White, LCDR, NOAA

Surveyed by LCDR George E. White, LT Gerd F. Glang, ENS Larry Krepp, ST Kevin Shaver

Soundings taken by echo sounder, hand lead, pole Echosounder

Graphic record scaled by ENS Krepp, ST Shaver

Graphic record checked by ENS Larry Krepp

Protracted by N/A

ENCAD NOVASET III PLOTTER (AHS)

Automated plot by HDAPS (FIELD)

Verification by Atlantic Hydrographic Section, N/06244
BRANCH PERSONNEL

Soundings in ~~METERS~~ ~~XDMMX~~ ~~MMX~~ at MLW MLLW FEET

REMARKS: Change #1 to project instructions dated 14 September 1993

Project number changed from OPR-K220 to OPR-K320

Change #2 to project instructions dated 22 March 1994.

NOTED IN THE ORIGINAL DESCRIPTIVE REPORT WERE MADE IN RED

DURING OFFICE PROCESSING.

AWOIS/SURF-V 5/8/96 SJV

MAR 18 1996

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OPR-K320-HE-93
Southwest Texas Coast
NOAA Ship HECK
LCDR George E. White, CMDG

97-00

HE-10-5-94
FE-402ss

HE-10-5-94
FE-402ss

HE-10-5-94
FE-402ss

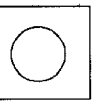
HE-10-2-93
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HE-10-9-94
FE-405ss

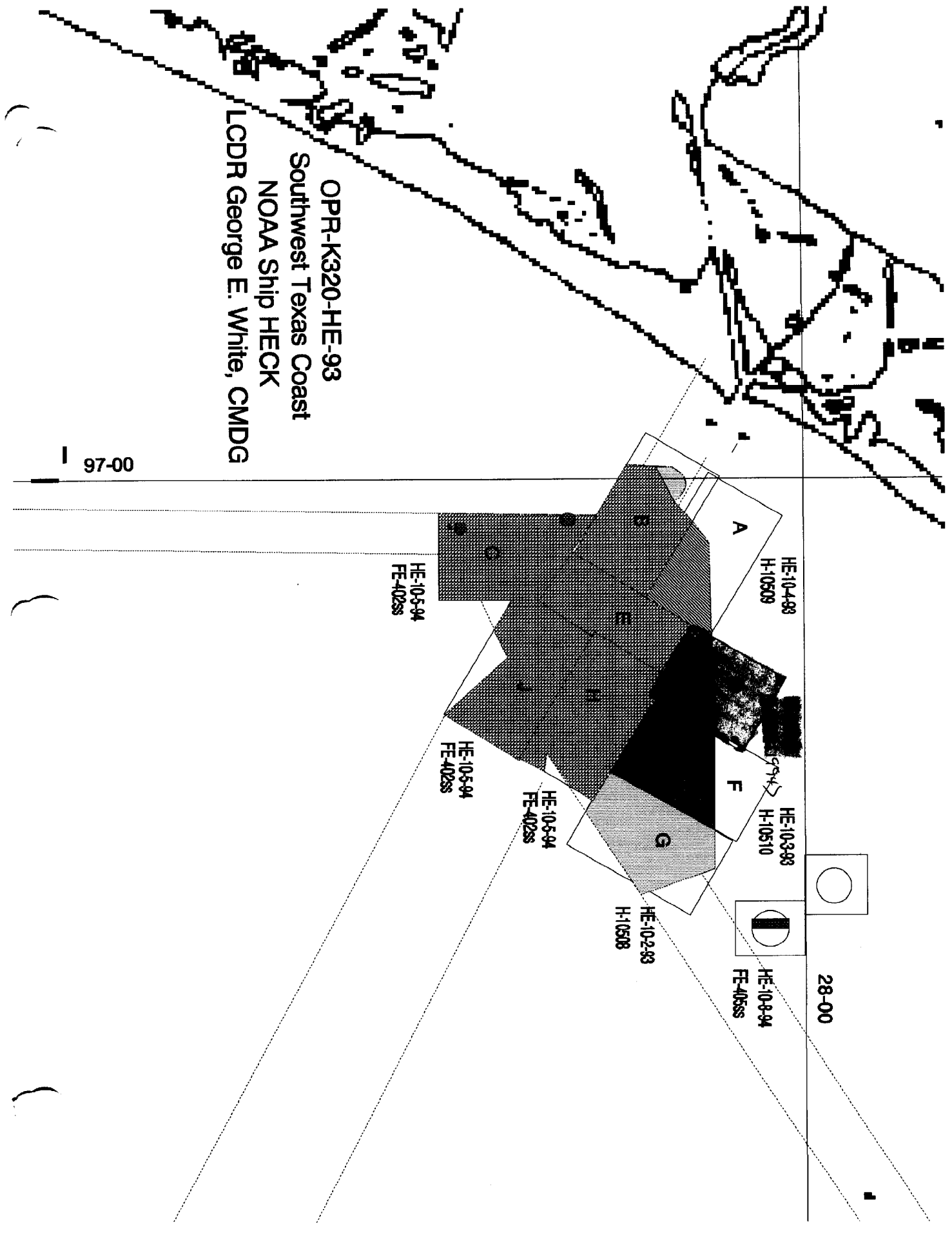


HE-10-3-93
H:10510

HE-10-4-93
H:10509



28-00



DESCRIPTIVE REPORT TO ACCOMPANY
SURVEY H-10562
FIELD NUMBER HE-10-7-94
TEXAS
GULF OF MEXICO
11.6nm EAST OF ARANSAS PASS
Scale 1:10,000
NOAA SHIP HECK S-591
LCDR George E. White, NOAA, CMDG.

A. PROJECT

1. This survey was conducted in accordance with Hydrographic Project Instructions OPR-K320-HE, Southwest Texas Coast, Texas. Data was collected during the 1994 field season. This project was originally assigned to the WHITING. The WHITING was unable to complete this project and did not conduct survey operations on this sheet.
2. Original Project Instructions are dated September 17, 1992.
3. Change One to the Project Instructions is dated September 14, 1993. The project number has been changed from OPR-K220 to OPR-K320 according to the updated instructions. Change Two to the Project Instructions is dated March 22, 1994.
4. This sheet has been designated as Sheet "D".
5. The purpose of this project is to accomplish complete side scan sonar coverage (200%, <20 meters of water and 100%, >20 meters of water) of the safety fairway and the fairway anchorages at the approaches to Aransas Pass, Texas. The project area is traversed by vessels accessing the port of Corpus Christi. Tankers and cargo vessels are frequently anchored in the anchorage area to the north of the safety fairway. Aransas Pass also has a large shrimp boat fleet. Port Ingleside on the north side of Corpus Christi Bay serves as a home port to the U.S. Naval mine sweeping fleet.

B. AREA SURVEYED

1. The survey area, designated Sheet "D" in the Project Instructions, lies in the Gulf of Mexico, 11.6nm east of the entrance to Aransas Pass, Texas.

2. The beam width and down angle are not adjustable on this unit. The grazing angle dip switches are normally set to 01, unless otherwise noted on the sonargram.

3. All SSS data was collected using 100 Khz frequency.

4. a. Line spacing of 260 meters on the 150 meter scale, 160 meters on the 100 meter scale, 110 meters on the 75 meter scale, and 80 meters on the 50 meter scale were used to maintain the required line overlap as determined by the equation in FPM 7.3.2.2.

b. Confidence checks were obtained, and annotated on the sonargrams, by towing the side scan unit either past known items or linear bottom features. Whenever possible, a minimum of two confidence checks were obtained on a daily basis as required.

c. Required proof of sonar coverage is demonstrated through sonar coverage plots produced as HDAPS plots. Quality of bottom coverage to the outer edges of the sonargrams was assured during check scanning to the best of the hydrographer's ability.

d. No anomalies were observed.

e. The towfish was deployed from the stern. All offset and layback information is provided in the offset table located in section IV of the separates.*

5. Contacts were investigated using side scan sonar developments and a two or three pass "wagon wheel" pattern over the target. Diver investigations are normally conducted on items that are determined to be significant as a result of the side scan sonar developments. Echosounder developments utilizing reduced line spacing or multiple passes drifting over a target are normally used for targets if diving operations are considered dangerous. No dives or echosounder developments were necessary during this survey.

6. The sonar contact list (Side Scan Sonar Manual 3.1.1.1.) is provided through the HECK's side scan survey contact abstract table and the automated HDAPS contact printout that is produced during the computation and logging of contacts. Depths on HDAPS contact printout are raw. However, depths on the side scan survey contact list are manually corrected for draft (+2.1 meters). Both are located in the separates.*

* DATA FILED WITH FIELD RECORDS.

One contact table was used during this survey. In order to prevent confusion all items were identified using their position number. Some contacts have more than one target number from successive hits during 200% or 400% coverage, developments, and detached positions. In this case the targets plotted on top of each other and the recommended charting positions were derived from their DP's.

Targets to develop were chosen based on contact height, strength of return, and shape. All contacts with heights greater than 0.6 meters were chosen for further development with side scan sonar or echosounder. Also chosen were contacts with strong returns or interesting shapes. Upon development, those contacts still meeting the criteria for significance (1.0 meter height in depths <20 meters and heights 10% in depths of water over 20 meters) are normally investigated by divers, with least depths determined by pneumatic depth gauge. No dives were necessary in this survey.

Annotations required by section 2.6 of the Side Scan Sonar manual (weather data and sea state) are on the sonagrams. Ship's speed and heading are located in the digital records and can be examined in the "Depth/Position Edit" sub-routine of the Post-Survey routine. Weather information is in the weather logs found in Appendix VI. *DATA FILED WITH FIELD RECORDS.*

F. SOUNDING EQUIPMENT

1. The following Raytheon DSF-6000N echosounder was used during this survey:

S/N A116N

DOY 229-258 (1994)

2. A pneumogauge, normally used to determine diver least depths, was not needed in this survey.

3. There were no equipment faults that affected the accuracy or quality of sounding data.

4. Both low and high frequency depths were digitized, but only high frequency depths were plotted.

G. CORRECTIONS TO ECHOSOUNDINGS

1. a.1. The following table shows dates and locations of velocity casts conducted using the ODOM Digibar sound velocimeter (S/N 168):

<u>TABLE</u>	<u>DATE</u>	<u>LOCATION</u>
8	08/15/94 (DOY 227)	27°47'36"N 096°45'12"W
9	08/22/94 (DOY 234)	27°49'42"N 096°47'42"W
10	09/06/94 (DOY 249)	27°51'36"N 096°44'30"W
11	09/20/94 (DOY 253)	27°57'02"N 096°34'52"W

The velocity cast data were reduced and velocity corrections calculated using program VELOCITY version 2.10.

The Digibar was calibrated on December 14, 1992 and February 8, 1994 by ODOM and found to be functioning correctly. Field checks using the prescribed fresh water method were accomplished prior to each cast and recorded on the velocity cast form.

b. There are no variations in the instrument initial on the DSF-6000N.

c. There are no instrument correctors on the DSF-6000N.

d. On DOY 154 (1994) a dual leadline comparison was conducted. A mean difference of 0.04 meter was obtained resulting in a corrector of 0.0 meter.

e. The computed velocity correctors were applied on line to echosounder depths (both high and low frequency) by entering the correction data into the HDAPS sound velocity table.

f. The static draft of 2.10 meters was applied on line to all echosoundings via the HDAPS offset table.

g. Settlement and squat values for the HECK were determined on March 03, 1993 in the vicinity of Craney Island fuel pier in Norfolk, Virginia using the level rod method. These correctors are on file at N/CG244 and are included in separates section IV. *

Settlement and squat values were applied on line to hydrographic soundings via the HDAPS offset table located in section IV of the separates. *

* DATA WAS FILED WITH FIELD RECORDS

h. Heave is measured by a Datawell B.V. (S/N 19110-C) heave, roll, and pitch sensor (HIPPY) located midships near the transducer. The sensor gathers on line data which is applied to the soundings in near real time. Heave correctors have been applied to all data collected for this survey.

2. No unusual methods or instruments for determination of correction to soundings were used.

3. No zoning or special correctors were used.

4. Pneumogauge calibrations are provided in separates section IV. * Any correctors are applied to the pneumogauge readings.

5. There were no unusual factors affecting DSF records.

6. a. The tidal datum for this survey was mean lower low water (MLLW). The tide station at Bob Hall Pier, Corpus Christi, Texas (877-8570) was the reference station. The station was inspected and bracketing levels were run by HECK's crew. No tide stations were established by HECK in support of this survey.

b. All hydrographic depths have been corrected for predicted tides. Zone correctors were specified in the project instructions. Tidal correctors were applied on line via the HDAPS predicted tide table.

c. Zoning was in accordance with project instructions. No zoning was used. APPROVED TIDES AND ZONING WERE APPLIED DURING OFFICE PROCESSING.

H. CONTROL STATIONS - SEE ALSO EVALUATION REPORT.

1. The horizontal datum for this project is the North American Datum of 1983 (NAD 83).

2. Horizontal control was accomplished using GPS in conjunction with the DGPS beacons at Port Aransas, TX and Galveston, TX.

3. Coast Guard DGPS beacons were positioned by N/CG241. All control stations were positioned to Third order, Class 1 standards.

4. Horizontal control stations were neither installed nor maintained by HECK.

5. No horizontal control report has been submitted to NOAA Atlantic Hydrographic Section, N/CG244.

6. No known anomalies or unconventional methods of horizontal control were used.

I. HYDROGRAPHIC POSITION CONTROL

1. Position control was by Differential Global Positioning System (DGPS). Control station positions were entered into the HDAPS control station Table. The first, and most commonly used, was the Port Aransas beacon. The Galveston beacon was also used for performance checks and occasionally for primary positioning. The list of the DGPS beacons and their positions appear in Appendix III, LIST OF HORIZONTAL CONTROL STATIONS submitted with this survey. *DATA APPENDED TO THIS REPORT.*

2. Accuracy requirements were met as specified by the Hydrographic Manual and Field Procedures Manual.

3. Equipment serial numbers appear as part of the header information on each day's data print out. The two GPS receivers on board are Ashtech OEM sensors (s/n 700417B1012 and 7004178B1195, both with version 1E11 D-P EPROMs). The differential receivers are Magnavox MX50R receivers. The serial number for DGPS receiver 1 is 077. The serial number for DGPS receiver 2 is 079.

4. The DGPS beacons used for this survey were the USCG beacons located at Port Aransas, TX (304 kHz) and Galveston, TX (296 kHz).

5. Performance checks using both DGPS positions (Port Aransas and Galveston) were conducted using the SHIPDIM program. These checks compare positions computed by both DGPS beacons and compare their subsequent position differences. The performance checks were sent to Atlantic Hydrographic Section N/CG244 as part of the data. *DATA FILED WITH FIELD RECORDS.*

6. When Differential GPS was used, the maximum allowable HDOP was set at 3.7 for the Port Aransas beacon and 3.0 for the Galveston beacon to avoid EPE's in excess of the allowable 15 meters for this scale survey. Data not meeting these requirements were examined and either accepted, smoothed or rejected.

7. a. No unusual methods of operating or calibrating electronic equipment were used.

b. There were no problems receiving DGPS correctors from either the Port Aransas or Galveston stations during this project.

- c. No unusual atmospheric conditions were noted and did not effect our reception of the DGPS signals.
- d. The positioning accuracy using the DGPS beacons was not compromised at all during the survey.
- e. No systematic errors were discovered.
- f. and g. All survey offsets were applied on-line using the HDAPS Offset Table 1.

J. SHORELINE

Not applicable as per project instructions.

K. CROSSLINES

1. Crosslines were not run as part of this survey. However, the first and second 100% coverages were run perpendicular to each other. The second 100% coverage was used as crossline to compare against the first 100% soundings.
2. Comparison to mainscheme soundings showed fair agreement with random differences of ± 0.2 meters. A maximum difference of 0.4 meters was observed.
3. No significant discrepancies were noted.
4. There were no sounding equipment changes made during this survey.

L. JUNCTIONS-SEE ALSO EVALUATION REPORT.

This survey junctions with one HECK survey of 1993, H-10509, and two WHITING surveys of 1991, H-10399 and H-10400. These sheets are designated as sheets "A", "E" and "H" respectively. A comparison of sounding junctions show good agreement with differences less than ± 0.4 meters. There is no shoaling or deepening trend evident.

M. COMPARISON WITH PRIOR SURVEYS-SEE ALSO THE EVALUATION REPORT.

The Atlantic Hydrographic Section HECK processing team is completing survey comparisons as agreed upon at the start of the 1994 field season.

N. ITEM INVESTIGATION REPORTS - SEE ALSO SECTION O. OF THE EVALUATION REPORT.

N1. SUMMARY OF ITEMS INVESTIGATED

AWOIS/ TARGET #	SECTION	STATUS	RECOMMENDATION
4182	N2	Disproved	Delete Wreck
76.20	N3	Not Found	Do Not Chart
477.78	N3	Not Found	Do Not Chart
528.12	N3	Not Found	Do Not Chart
712.10	N3	Not Found	Do Not Chart
988.36	N3	Not Found	Do Not Chart
1020.25	N3	Not Found	Do Not Chart
1061.79	N3	Not Found	Do Not Chart
1121.355	N3	Not Found	Do Not Chart

N2 AWOIS 4182

1. Area of Investigation

Reported Position:
Latitude: 27°51'01.09"N
Longitude: 096°50'00.94"W
Datum: NAD 83
Depth: N/A
Feature: Wreck

2. Description of Item

This item is listed as the fishing vessel "JANE AND JULIE", 64.4 feet in length, beam of 22.7 feet and draft of 12.2 feet. In March of 1981 the Eighth Coast Guard District reported this vessel sunk. Later, in June of 1981 the Eighth Coast Guard District reported that the wreck could not be located at the given position and recommended the charted position be revised from "PA" to "PD".

3. Survey Requirements

Survey requirements specify determining the existence of this item through salvage documentation, 200% side scan sonar coverage over a 3000 meter radius or diver investigation.

4. Method of Investigation

200% side scan sonar coverage was completed over the assigned search radius.

5. Results of Investigation

No significant contacts were discovered within the area surveyed. This item is disproved.

Recommendation: Delete the wreck from the chart. *CONCUR*

N3 CONTACT DESCRIPTION

All of the contacts listed in section N1 above can be found in contact table number 14 and were chosen for further development based on computed heights scaled from side scan sonar or echosounder records. All of the contacts were further investigated using the side scan sonar on the 75 meter range scale. None of the contacts investigated were proven to be significant during development. Therefore, no significant contacts were located as a result of this survey. *CONCUR*

O. COMPARISON WITH THE CHART - SEE ALSO THE EVALUATION REPORT.

1. The Atlantic Hydrographic Section is responsible for comparisons with current editions of the following NOS charts:

<u>CHART</u>	<u>EDITION</u>	<u>DATE</u>	<u>SCALE</u>
11300	32nd	APR 94	1:460,732
11307	32nd	AUG 94	1:80,000
11313	20th	JUL 92	1:80,000

2. No Danger to Navigation report has been submitted during the course of this survey.

3. a. The charted soundings are consistent with the survey depths.

b. No shoaling or deepening has been observed. The depths from this survey should replace all prior depths in the area.

c. No extraordinary hydrographic features were noted.

d and e. No safety fairways or controlled channels are located within the survey area.

4. There are no non-sounding features other than those mentioned in Section N in this survey.

5. No changes are recommended to scale coverage or format of published charts within the survey area.

P. ADEQUACY OF SURVEY - SEE ALSO THE EVALUATION REPORT.

1. This survey meets or exceeds 1:10,000 specifications, and is adequate to supersede all prior surveys for the purposes of charting the depths and hazards to navigation within the survey area.

2. No portion of this survey has been identified as substandard or incomplete.

Q. AIDS TO NAVIGATION

1. No correspondence was initiated with the Coast Guard regarding floating aids to navigation.

2. There are no floating aids to navigation within the survey area.

3. There are no platforms or wells within the survey area.

4. There are no bridges or tunnels within the survey area.

5. No submarine cables, submarine pipelines, or ferry routes were noted within the survey area.

6. There are no uncharted ferry terminals within this survey area.

R. STATISTICS

	<u>ITEM</u>	<u>AMOUNT</u>
a.	Square NM Hydrography	17.02 Nmi ²
b.	Days of Production	11 Days
c.	Detached Positions	5
d.	Bottom Samples	5
e.	Tide Stations Established	None
f.	Current Stations Established	None
g.	Velocity Casts Performed	4 Casts
h.	Magnetic Stations Established	None
i.	XBT Drops	None

S. MISCELLANEOUS - SEE ALSO THE EVALUATION REPORT.

1. a. The water in this area of the Gulf of Mexico is silty which results in a muddy bottom type.

- b. No unusual submarine features were noted.
- c. No unusual tide conditions were observed.
- d. No unusual current conditions were observed.
- e. No magnetic anomalies were noted.

2. Five bottom samples were taken during the course of this survey as per project instructions. Bottom types are the same as those charted. Bottom samples were not sent to the Smithsonian Institution.

T. RECOMMENDATIONS - *SEE ALSO SECTION P. OF THE EVALUATION REPORT.*

1. No additional field work is recommended.
2. No salvage or dredging operations should affect this survey.
3. No further investigation of unusual features or sea conditions is recommended.

U. REFERRAL TO REPORTS

1. A User Evaluation Report will be submitted to N/CG241 and N/CG244 at the end of this project.
2. A Coast Pilot Report was submitted to N/CG244 and N/CG221 on October 27, 1994.
3. A LORAN-C Chart Verification Report will not be submitted for this survey.
4. No Horizontal Control Report or Electronic Control Report will be submitted for this survey.

SUBMISSION

Respectfully Submitted,

Larry T Krepp

Larry Krepp, ENS, NOAA
Operations Officer
NOAA Ship HECK

CONTROL STATION TABLE FOR FE-381SS

No	Latitude	Longitude	Cart	Name
100	029:19:45.092	094:44:10.484	250	GALVESTON TX, GPS, 1992
200	027:50:18.156	097:03:32.646	250	PORT ARANSAS TX, GPS, 1992

LETTER OF APPROVAL

Field operations contributing to the accomplishment of this survey were conducted under my direct supervision with daily personal checks of progress and data quality. This report, field sheets, and data records have been closely reviewed and are complete and adequate for charting.

George E. White

George E. White, LCDR, NOAA
Commanding Officer
NOAA Ship HECK

GEOGRAPHIC NAMES

Name on Survey	A ON CHART NO. 11307		B ON PREVIOUS SURVEY NO. 11313		D FROM LOCAL INFORMATION	E ON LOCAL MAPS	F P.O. GUIDE OR MAP	G GRAND McNALLY ATLAS	H U.S. LIGHT LIST	K
ARANSAS PASS (title)	X		X							1
MEXICO, GULF OF	X		X							2
TEXAS (title)	X		X							3
										4
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										25

Approved

Clayton

Chief Geographer

APR 3 1995



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
Office of Ocean and Earth Sciences
Silver Spring, Maryland 20910

TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE: March 17, 1995

HYDROGRAPHIC SECTION: Atlantic

HYDROGRAPHIC PROJECT: OPR-K320

HYDROGRAPHIC SHEET: H-10562

LOCALITY: Gulf of Mexico, 11.6 Nautical Miles East of Port Aransas,
Tx.

TIME PERIOD: August 17 - September 20, 1994

TIDE STATION USED: 877-5870 Bob Hall Pier, Tx.
Lat. $27^{\circ}34.8'N$ Lon. $97^{\circ}13.0'W$

PLANE OF REFERENCE (MEAN LOWER LOW WATER): 20.58 ft.

HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 1.6 ft.

REMARKS: RECOMMENDED ZONING

Times are direct, and apply a X1.07 range ratio to heights using
Bob Hall Pier, Tx. (877-5870).

- Notes: 1. Times are tabulated in Greenwich Mean Time.
2. Data for Bob Hall Pier, Tx. (877-5870) was temporarily
stored in file #677-5870.

William M. Huber

CHIEF, DATUMS SECTION



LETTER TRANSMITTING DATA

N/CS33-51-96

DATA AS LISTED BELOW WERE FORWARDED TO YOU BY
(Check):

- ORDINARY MAIL
- AIR MAIL
- REGISTERED MAIL
- EXPRESS
- GBL (Give number) _____

TO:

CHIEF, DATA CONTROL GROUP, N/CS3x1
 NOAA/NATIONAL OCEAN SERVICE
 SSMC3, STATION 6813
 1315 EAST-WEST HIGHWAY
 SILVER SPRING, MARYLAND 20910-3282

DATE FORWARDED

MAR 15^{5 DAD} 13, 1996

NUMBER OF PACKAGES

1 (ONE) TUBE, 1 (ONE) BOX

NOTE: A separate transmittal letter is to be used for each type of data, as tidal data, seismology, geomagnetism, etc. State the number of packages and include an executed copy of the transmittal letter in each package. In addition the original and one copy of the letter should be sent under separate cover. The copy will be returned as a receipt. This form should not be used for correspondence or transmitting accounting documents.

OPR-K320

TEXAS, GULF OF MEXICO

1 BOX CONTAINING:

- 1 COPY OF THE DESCRIPTIVE REPORT FOR H-10509
- 1 COPY OF THE DESCRIPTIVE REPORT FOR H-10510
- COPY OF THE DESCRIPTIVE REPORT FOR H-10562

1 TUBE CONTAINING:

- 1 SMOOTH SHEET FOR H-10509
- 1 SMOOTH SHEET FOR H-10510
- 1 SMOOTH SHEET FOR H-10562
- 1 PAPER PLOT FOR EACH OF THE ABOVE SURVEYS FOR NOS CHART 11313
- 1 MYLAR H-DRAWING FOR NOS CHART 11313
- 1 PAPER COMPOSITE PLOT OF SURVEY H-10562 FOR NOS CHART 11307
- 1 MYLAR H-DRAWING FOR NOS CHART 11307

FROM: (Signature)

DEBORAH A. BLAND

Deborah A. Bland

RECEIVED THE ABOVE
(Name, Division, Date)

Return receipted copy to:

ATLANTIC HYDROGRAPHIC BRANCH
 N/CS331
 439 WEST YORK STREET
 NORFOLK, VA 23510-1114

03/15/96

HYDROGRAPHIC SURVEY STATISTICS
REGISTRY NUMBER: H-10562

NUMBER OF CONTROL STATIONS	2
NUMBER OF POSITIONS	1684
NUMBER OF SOUNDINGS	9598

	TIME-HOURS	DATE COMPLETED
PREPROCESSING EXAMINATION	60	01/25/95
VERIFICATION OF FIELD DATA	77	10/05/95
QUALITY CONTROL CHECKS	13	
EVALUATION AND ANALYSIS	7.50	
FINAL INSPECTION	3	11/17/95
COMPILATION	36	03/14/96
TOTAL TIME	197	
ATLANTIC HYDROGRAPHIC BRANCH APPROVAL		11/29/95

**ATLANTIC HYDROGRAPHIC BRANCH
EVALUATION REPORT FOR H-10562 (1994)**

This Evaluation Report has been written to supplement and/or clarify the original Descriptive Report. Sections in this report refer to the corresponding sections of the Descriptive Report.

D. AUTOMATED DATA ACQUISITION AND PROCESSING

The following software was used to process data at the Atlantic Hydrographic Branch:

AutoCAD, Release 12
Hydrographic Processing System (HPS)
Microstation, version 5.0
NADCON, version 2.10

The smooth sheet was plotted using an ENCAD NovaJet III plotter.

H. CONTROL STATIONS

Horizontal control used for this survey during data acquisition is based upon the North American Datum of 1983 (NAD 83). Office processing of this survey is based on these values. The smooth sheet has been annotated with ticks showing the computed mean shift between the survey datum and the North American Datum of 1927 (NAD 27).

To place this survey on the NAD 27 datum move the projection lines 1.090 seconds (33.564 meters or 3.36 mm at the scale of the survey) north in latitude, and 0.945 seconds (25.851 meters or 2.59 mm at the scale of the survey) west in longitude.

L. JUNCTIONS

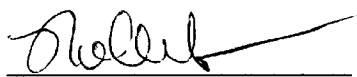
Standard junctions were effected with surveys H-10509 (1993-94) and H-10510 (1993-94). Standard junctions could not be effected with surveys H-10399 (1991) and H-10400 (1991). These surveys are archived at National Ocean Service (NOS) Headquarters, Silver Spring, Maryland. Junctions will have to be effected during chart compilation.

There were no junctional surveys to the north. Present survey depths are in harmony with the charted hydrography to the north.

APPROVAL SHEET
H-10562

Initial Approvals:

The completed survey has been inspected with regard to survey coverage, delineation of depth curves, development of critical depths, cartographic symbolization, and verification or disproof of charted data. The digital data have been completed and all revisions and additions made to the smooth sheet during survey processing have been entered in the magnetic tape record for this survey. A final sounding printouts of the survey has been made. The survey records and digital data comply with NOS requirements except where noted in the Evaluation Report.



Date: 11/29/95

Norris A. Wike
Cartographer
Atlantic Hydrographic Branch

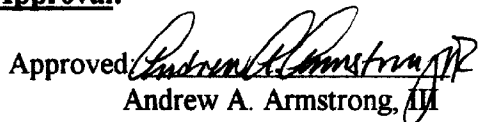
I have reviewed the smooth sheet, accompanying data, and reports. This survey and accompanying digital data meet or exceed NOS requirements and standards for products in support of nautical charting except where noted in the Evaluation Report.



Date: NOV 29, 1995

Nicholas E. Perugini
Commander, NOAA
Chief, Atlantic Hydrographic Branch

Final Approval:

Approved: 

Date: 3-20-96

Andrew A. Armstrong, III
Captain, NOAA
Chief, Hydrographic Surveys Division

