

10508

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|--|---------------------------------|
| NOAA FORM 76-35A | |
| U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SERVICE | |
| DESCRIPTIVE REPORT | |
| <i>Type of Survey</i> Hydrographic/Side Scan Sonar.. | |
| <i>Field No.</i> | HE-10-2-93 |
| <i>Registry No.</i> | H-10508 |
| LOCALITY | |
| <i>State</i> | Texas |
| <i>General Locality</i> | Gulf of Mexico |
| <i>Sublocality</i> | 19.4 NM East of Port Aransas |
| 19 93 | |
| CHIEF OF PARTY | |
| LCDR. G. E. White | |
| LIBRARY & ARCHIVES | |
| <i>DATE</i> | October 12, 1994 |

| | | |
|---------------------------------|--|--------------|
| NOAA FORM 77-28 (11-72) | U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION | REGISTER NO. |
| HYDROGRAPHIC TITLE SHEET | | H-10508 |

| | |
|---|-------------------------|
| 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-10-2-93 |
|---|-------------------------|

State Texas

General locality Gulf of Mexico

Locality 19.4 NM East of Port Aransas

Scale 1:10,000 Date of survey 16 September 93 - 07 Oct 93

Instructions dated 17 Sept 93 Project No. OPR-K320-HE

Vessel NOAA Ship HECK (EDP 9140)

Chief of party George E. White, LCDR, NOAA

Surveyed by G. E. White, G. F. Glang, M. Williamson, L. T. Krepp, K. B. Shaver

Soundings taken by echo sounder, hand lead, pole echo sounder

Graphic record scaled by M. Williamson, L. T. Krepp, K. B. Shaver

Graphic record checked by M. Williamson

Protracted by N/A Automated plot by HDAPS XUNETICS 120/

Verification by Atlantic Hydrographic Section, N/CG244 DOUGLAS V. MASON

Soundings in fathoms feet at MLW MLLW _____ meters at MLLW _____

REMARKS: All times recorded in UTC.

Change 1 dated 14 Sept 1993

Project Nuber has been changed from OPR-K220 to OPR-K320

100% Side Scan coverage in depths greater than 20 meters

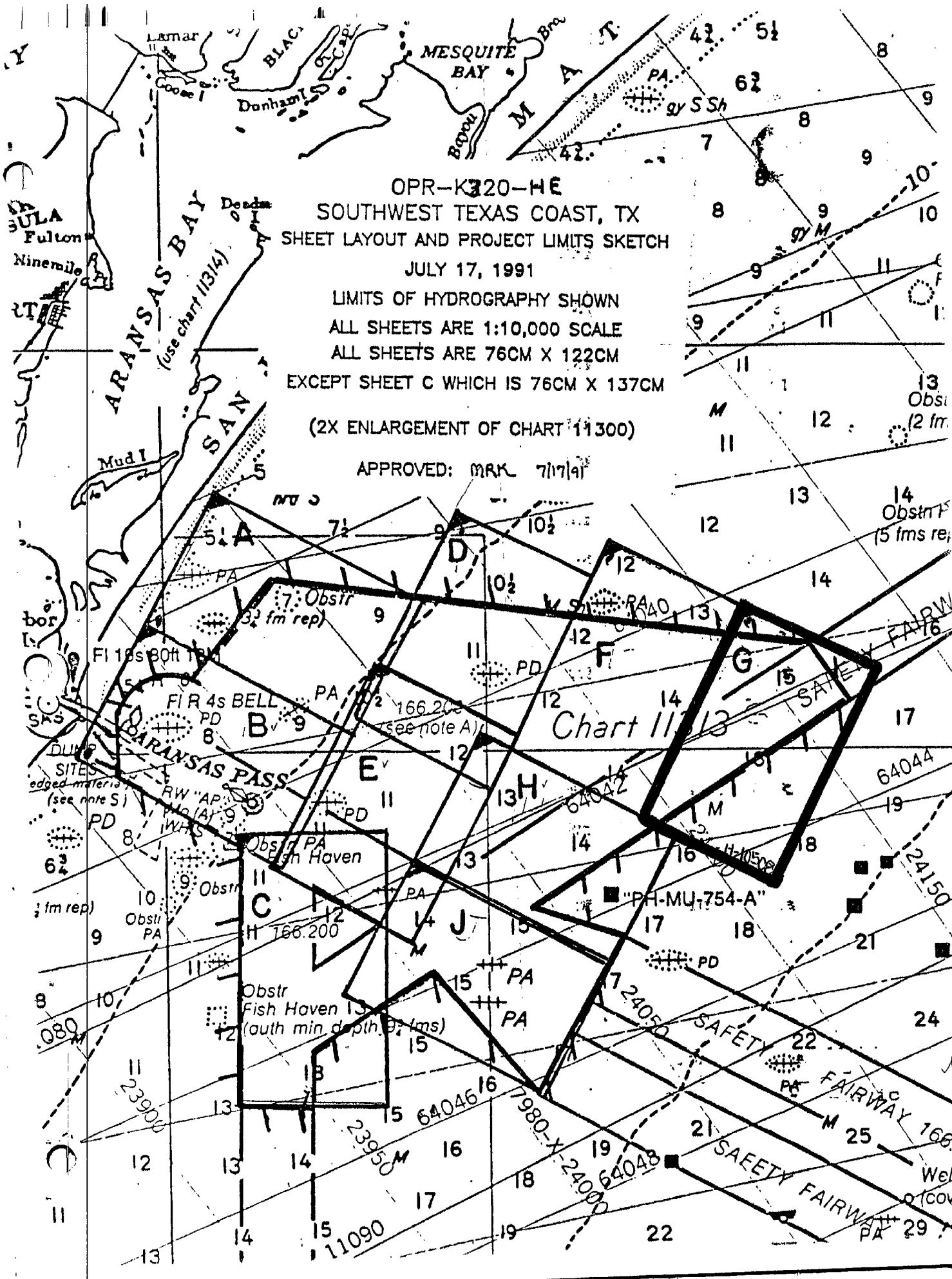
Data submitted to Atlantic Hydrographic Section, N/CG244

* NOTES in The Descriptive Report were made in red during office processing.

AW013/SURF ✓ 10/19/94 SJV

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OPR-K320-HE
 SOUTHWEST TEXAS COAST, TX
 SHEET LAYOUT AND PROJECT LIMITS SKETCH

JULY 17, 1991

LIMITS OF HYDROGRAPHY SHOWN
 ALL SHEETS ARE 1:10,000 SCALE
 ALL SHEETS ARE 76CM X 122CM
 EXCEPT SHEET C WHICH IS 76CM X 137CM

(2X ENLARGEMENT OF CHART 11300)

APPROVED: MRK 7/17/91

Chart 1113

ARANSAS BAY
 (use chart 11314)

SAN ANTONIO PASS

ARANSAS PASS

SAFETY FAIRWAY
 SAFETY FAIRWAY
 SAFETY FAIRWAY

Obstr Fish Haven
 (auth min depth 9 fms)

FI 16s 80ft 13M

FIR 4s BELL

"PH-MU-754-A"

DUNE SITES
 edged materials
 (see note S)

080

2390

2395

11090

64046

7980-X-2400

64048

64044

24150

24

Well

COV

29

14
 Obstr
 (5 fms re)

13
 Obstr
 (2 fms)

7 Obstr
 (3 1/2 fm rep)

166.200
 (see note A)

166.200

64042

14

17

7 24050

17

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DESCRIPTIVE REPORT TO ACCOMPANY
SURVEY H-10508
FIELD NUMBER HE-10-2-93
TEXAS
GULF OF MEXICO
19.4 NM EAST OF PORT ARANSAS
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, SW Texas Coast, Texas. Data was collected during the 1993 field season.
2. Original project Instructions are dated September 17, 1992.
3. Change 1 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.
4. This sheet has been designated as Sheet "G".
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 Port Aransas, Texas, and to investigate a number of wrecks and obstructions in or near the safety fairway. These fairways and anchorages are used by a large number of commercial ships bound for Corpus Christi, Navy ships stationed at Ingleside Navy Base, and a significant shrimp boat fleet, as well as pleasure craft. All depths within the survey limits are greater than 20m and 100% side scan coverage was conducted across the survey area based on an allowance by the Hydrographic Surveys Branch Operations Section (N/CG241) as a modification to the H.P.I. 1.4. requiring 200% side scan coverage in all waters.

B. AREA SURVEYED

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

2. The approximate survey area is formed by connecting, in order, the following points:

- a. LAT 27°47'00"N LON 096°45'24"W
- b. LAT 27°52'05"N LON 096°42'30"W
- c. LAT 27°51'48"N LON 096°40'00"W
- d. LAT 27°50'00"N LON 096°38'54"W
- e. LAT 27°46'44"N LON 096°44'46"W

3. Survey operations began on September 16, 1993 (DOY 259), and were completed on October 7, 1993 (DOY 280).

C. SURVEY VESSELS

1. All hydrographic and side scan data was collected by NOAA Ship HECK (EDP 9140). All offset and layback information is contained in the offset table located in section IV of the separates.

2. No unusual vessel configurations were used.

D. AUTOMATED DATA ACQUISITION AND PROCESSING

1. Survey data acquisition and processing were accomplished utilizing HDAPS hardware and the latest version of the NAVITRONIC NAVISOFT 300 software provided to the ship by N/CG24.

2. A listing of actual programs and versions is appended in Appendix VI.

3. No unusual data collection methods were used.

E. SONAR EQUIPMENT

1. HECK is equipped with an EG&G model 260 slant range corrected Side Scan Sonar (SSS) recorder and model 272 single frequency towfish. Serial numbers and dates of usage are as follows:

| | | |
|----------|-------------|---------------|
| Towfish | S/N 016697 | DOY 259 - 260 |
| Towfish | S/N 10823 | DOY 260 - 280 |
| Recorder | S/N 0012105 | DOY 259 - 265 |
| Recorder | S/N 0012102 | DOY 265 - 280 |

2. The beam width is not adjustable on this unit. The grazing angle dip switch settings are normally set to 01, unless otherwise noted on the sonar records.
3. All SSS data was collected using 100 Khz frequency.
4. a. Line spacing of 180 meters on the 100 meter scale was calculated using the line spacing equation for image correcting side scan sonars found in FPM 7.3.2.2.

An additional 10m overlap was added to allow for imprecise steering. This overlap was increased to 20m to account for imprecise steering and to be conservative in running 100% coverage across the area. This resulted in the majority of the survey being conducted at 160M line spacing.

b. Confidence checks were obtained, and annotated on the sonargrams, by towing the side scan unit either past known items or linear bottom features.

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

d. The muddy bottom type within the survey limits provides a weak sonar return. The bottom is also very flat with few natural bottom features, so a relatively drab side scan record is produced. Trawl scours from the Aransas Pass shrimp boat fleet are also found. The actual depth of these scours are typically less than 0.2 meters, as witnessed by divers, but are still detectable by the system. Also on some days when seas became relatively rough, some surface effects were observed on the sonargrams due to surface turbulence. In some instances in rough weather, bucking action induced on the towfish by the ship caused alternate light and dark bands on the sonargram. Biological masses of shrimp throughout the survey area were indicated on the sonargrams at various times during data collection.

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. Several passes were taken on each contact, keeping the target at a distance of half the range scale. These passes were done to maximize the angles between the passes. The track plots for each development were in the

shape of a wagonwheel. Diver and echosounder investigations were not conducted 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 the 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 separate Section IV.

One (1) contact table was used during this survey. A total of three (3) contacts were found within the survey limits. Developments of these contacts were conducted with side scan sonar. No significant contacts were found.

Annotations required by section 2.6 of the Side Scan Sonar manual (ship's speed, ship's head, weather/sea state) are not placed on the sonargrams. This information is 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.

F. SOUNDING EQUIPMENT

1. A Raytheon DSF-6000N echosounder (SN: A116N) was used during this survey. Both low and high frequency depths were digitized, but only high frequency depths were plotted.

2. No dives were conducted during the course of this survey.

3. Annotations for sea state and weather appear at least once a day on the printout header, or the daily data acquisition abstract. Hourly weather observations were also made and can be seen in appendix VI.

4. Heave information is recorded digitally from the HIPPY and the heave corrector is applied on line. Ship's head and speed are recorded digitally.

*G. CORRECTIONS TO ECHOSOUNDINGS *See Also Section G.7. of the Evaluation Report*

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

| a.2 | <u>TABLE</u> | <u>DATE</u> | <u>LOCATION</u> |
|-----|--------------|--------------------|---|
| | 1 | 09/16/93 (DOY 259) | ²⁷ 26°46'55"N 096°38'10"W |
| | 2 | 09/30/93 (DOY 272) | ²⁷ 26°47'57"N 096°41'38"W |
| | 3 | 10/07/93 (DOY 280) | ²⁷ 26°50'20"N 096°38'20"W *Data NOT used |

The velocity cast data were reduced and velocity corrections calculated using program VELOCITY version 1.11.

b. The Digibar was checked on December 14, 1992, 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.

The original extrapolation of velocity cast 1 is in error. Historical data was used to extrapolate the sound velocity correctors. This was corrected using most probable slope to extrapolate data. The difference is small. N/CG244 was informed of this error and informed us the corrected version of the sound velocity correctors would be used when the correctors are re-applied by them, requiring no further action in the field.

c. There are no instrument corrections to the DSF-6000N.

d. On DOY 115 (1992) a dual leadline comparison was conducted. A mean difference of 0.06 meter was obtained resulting in a corrector of 0.0 meter. Results are shown in Seperates Section IV.

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. The static draft was measured on April 24, 1992 and is shown in the HDAPS Offset Table 1 in Seperates Section IV.

g. Settlement and squat values for NOAAS 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 seperates 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.

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

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

3. No zoning or special correctors were used.

4. Pneumoguages were not used during this survey.

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 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. No zone correctors were specified in the project instructions. Tidal correctors were applied on line via the HDAPS predicted tide table. No corrections are needed for the predicted tides.

c. Zoning was in accordance with project instructions. No zoning was used.

*
*H. CONTROL STATIONS SEE ALSO SECTION H.7. of the 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 in Port Aransas and Galveston.

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

4. No horizontal control stations were installed or maintained by HECK.

5. No horizontal control report has been submitted to NOAA Atlantic Hydrographic Section, N/CG 244.

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

*

I. HYDROGRAPHIC POSITION CONTROL

1. Position control was determined 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 (304 kHz). The Galveston DGPS beacon (296 kHz) was also used. The list of the DGPS beacons and their positions appear in appendix III, LIST OF HORIZONTAL CONTROL STATIONS submitted with this survey.

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 GPS receivers on board are Ashtech OEM sensors. The serial numbers are listed in HDAPS header printout for each days data. The differential receivers are Magnavox MX50R receivers. The serial number for DGPS receiver one is 079. The serial number for DGPS receiver two is 077.

4. Performance checks using both DGPS positions (Port Aransas and Galveston) were conducted using the SHIPDIDM program. These checks compare positions computed by both DGPS beacons and compare their subsequent differences. The performance checks were sent to the processing unit as part of the data.

5. When Differential GPS was used, the maximum allowable HDOP was set at 3.7 when monitoring the Port Aransas beacon, and 3.0 when monitoring 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.

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

b. The Port Aransas beacon was prone to significant outages. The beacon would lock-up resulting in no correctors being transmitted until the beacon was reset by Coast Guard personnel. Coast Guard personnel also informed HECK that there were pieces missing out of the transmit antenna ground plane which effects signal strength in various directional sectors.

There were no outages of the Galveston DGPS beacon that can be readily attributed to mechanical or electrical failure of the beacon. There were no failures of the DGPS positioning on board HECK.

c. DGPS outages frequently occurred at sunrise, noon, sunset and midnight while surveying in the project area. During these times, there were no significant losses of visible satellites. These outages are suspected to be caused by solar disturbances of the DGPS corrector signals.

d. Problems discussed in 6b and 6c above did not effect position accuracy but did warrant frequent manual shifting between the two DGPS stations to maintain positioning while collecting data on-line.

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 See Also Section K.3. of the Evaluation Report

1. 11.4 miles of crosslines were run on this survey, representing 5.5% of all mainscheme hydrography.

2. Comparison to mainscheme soundings showed good agreement with random differences generally less than ± 0.3 meters. A few soundings had differences up to 0.7 meters (See part 3 below).

*3. Several crossline soundings were much deeper (0.7 meters) than those of the mainscheme hydrography. The discrepancies occurred where the mainscheme sounding lines were much shoaler than the adjoining lines. This is most likely due to differences between predicted tide values and actual tide values of these mainscheme lines.

4. When sounding equipment changes were made, the new echosounder was returned and adjusted as required.

*L. JUNCTIONS See Section L. of the Evaluation Report

*This survey junctions with contemporary survey H-10400 that was conducted by WHITING in 1991. Comparison of the two surveys shows a small area of overlap with H-10508. The depths of the present survey generally compare well to those

of H-10400, with H-10508 depths deeper (usually less than 0.3 meters) than those of H-10400.

M. COMPARISON WITH PRIOR SURVEYS

Prior survey comparison will be performed by the Atlantic Hydrographic Section by mutual agreement between HECK and the processing team.

N. ITEM INVESTIGATION REPORTS

N1. SUMMARY OF ITEMS INVESTIGATED

No significant contacts were found during this survey. Three contacts that warranted side-scan sonar development are as follows;

| <u>Contact</u> | <u>Remarks</u> |
|----------------|----------------|
| 162.15 | Nothing Found |
| 205.49 | Insignificant |
| 753.72 | Nothing Found |

None of these items are recommended for charting.

N2. SUMMARY OF AWOIS ITEMS

There are no AWOIS items located within the survey limits.

***O. COMPARISON WITH THE CHART** *SEE Also Section O.3.b. of the Evaluation Report*

1. The charts relevant to this project area are as follows.

| <u>CHART</u> | <u>EDITION</u> | <u>DATE</u> | <u>SCALE</u> |
|--------------------|----------------|-------------|--------------|
| 11300 <i>App'd</i> | 31st | SEP 92 | 1:460,732 |
| 11307 | 32nd | AUG 92 | 1:80,000 |
| 11309 | 31st | AUG 91 | 1:40,000 |
| 11313 <i>app'd</i> | 20th | JUL 92 | 1:80,000 |

} off Chart limits

The survey limits fall within charts 11300 and 11313, which were compared to the present survey.

2. No Danger to Navigation Reports were filed during this survey.

3. a. The charted soundings compare favorably with the depths of the present survey.

- *b. The survey shows greater (up to 0.3 meters) depths than those previously charted throughout the survey area.
- c. The depths from this survey should replace all prior depths in the area.
- f. No significant hydrographic features were noted.
- g. There are no channels located within the survey limits.
- h. Fairway soundings were compared to the chart. The soundings in the fairway compare well to those on the chart.

4. There are no non-sounding features found within the survey limits.

5. No changes are recommended to scale, coverage or format of published charts in this survey area.

*P. ADEQUACY OF SURVEY *See Also Section P.3. of 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, obstructions, and hazards to navigation within the survey area.

2. There are no areas within the survey limits that are incomplete or substandard.

*

Q. AIDS TO NAVIGATION

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

2. No floating aids to navigation were noted in the survey area.

3. There were no aids to navigation not shown in the Light List noted in the survey area.

4. No bridges, overhead cables or pipelines were observed within the limits of this survey.

5. No submarine cables, submarine pipelines, or ferry routes were noted in this survey area.

6. There are no ferry routes or terminals within this survey area.

R. STATISTICS

| ITEM | AMOUNT |
|-----------------------------------|----------------------|
| 1. Total No. of Positions | 1285 Fixes |
| 2. Lineal NM of Soundings | 218 NM |
| 3. Square NM Hydrography | 21.3 NM ² |
| 4. Days of Production | 8 Days |
| 5. Detached Positions | 5 |
| 6. Bottom Samples | 5 |
| 7. Tide Stations Established | None |
| 8. Current Stations Established | None |
| 9. Velocity Casts Performed | 3 Casts |
| 10. Magnetic Stations Established | None |

S. MISCELLANEOUS

1. a. The water in this area of the Gulf of Mexico has a high silt content which results in a muddy bottom type.
- b. No unusual submarine features were noted.
- c. No anomalies in either tide or current were noted.
- d. No current observations were made.
- e. No magnetic anomalies were noted.
2. Five bottom samples were taken and recorded on Log Sheet M. The log sheet is included in section II of the separates. Bottom characteristics were observed to be the same as the bottom types marked on the chart. Prior surveys for comparison were not available from N/CG241 during the survey but N/CG241 allowed comparison with the charted characteristics. Therefore, sampling spacing was widened as directed in H.P.I. 7.7. (September 17, 1992) and by verbal allowance from N/CG 241. Bottom samples were not sent to the Smithsonian Institution.

*T. RECOMMENDATIONS SEE ALSO Section T.A. of the Evaluation Report

1. No additional field work is recommended.
2. No dredging operations are being conducted or are planned within the limits of this survey at the time of this survey.
3. No further investigation of unusual features or sea conditions is recommended.

*

U. REFERRAL TO REPORTS

1. User Evaluation information will be sent at the completion of the project.
2. A Coast Pilot report will be sent at the completion of the project.
3. Due to the lack of detached positions on targets in the survey, no LORAN-C comparisons were made.

Respectfully Submitted,

Michael Williamson

Michael Williamson, LT(jg), NOAA
Operations Officer
NOAA Ship HECK

Station No ?

| No | Type | Lat | Lon | H | Cart | Freq | Uel Code | MM/DD/YY | Station Name |
|----|------|---------------|---------------|---|------|-------|----------|----------|---------------------------------|
| 1 | | 027:50:18.000 | 097:03:32.000 | 0 | 0 | 304.0 | 0 | 03/01/92 | PORT ARANSAS BEACH TX GPS, 1992 |
| 2 | | 029:19:44.000 | 094:44:10.000 | 0 | 0 | 296.0 | 0 | 03/01/92 | GALVESTON BEACH TX GPS, 1992 |

102 26 00/43.011 97/09/12.091 250 DEL MAR, 1991

103 26 105/06.850 97/09/41.098 250 NUTS, 1992

104 26 167/42.123 97/10/03.070 250 INUG 92, 992

105 26 111/11.400 97/10/37.572 250 Beach, 1939

106 26 114/29.466 97/11/23.293 250 Coast, 1939

VII. 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



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 16, 1994

MARINE CENTER: Atlantic

HYDROGRAPHIC PROJECT: OPR-K320

HYDROGRAPHIC SHEET: H-10508

LOCALITY: Texas Gulf of Mexico, 19.4 N.M. East of Port Aransas,
Tx.

TIME PERIOD: September 16 - October 7, 1993

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

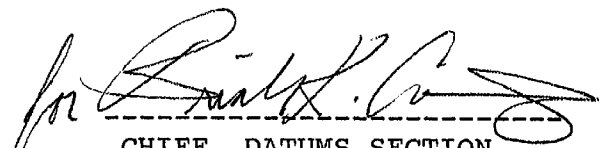
PLANE OF REFERENCE (MEAN LOWER LOW WATER): 20.58 ft.

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

REMARKS: RECOMMENDED ZONING

Times and heights are direct on Bob Hall Pier, Tx. (877-5870).

Note: Times are tabulated in Central Standard Time.



CHIEF, DATUMS SECTION



GEOGRAPHIC NAMES

H-10508

| Name on Survey | Source of Name | | | | | | | | | | | |
|----------------------|-------------------------|---|---|---|---|---|---|---|---|--|--|----|
| | A | B | C | D | E | F | G | H | K | | | |
| | ON CHART NO. | | | | | | | | | | | |
| | ON PREVIOUS SURVEY NO. | | | | | | | | | | | |
| | ON U.S. QUADRANGLE MAPS | | | | | | | | | | | |
| | FROM LOCAL INFORMATION | | | | | | | | | | | |
| | ON LOCAL MAPS | | | | | | | | | | | |
| | P.O. GUIDE OR MAP | | | | | | | | | | | |
| | GRAND McNALLY ATLAS | | | | | | | | | | | |
| | U.S. LIGHT LIST | | | | | | | | | | | |
| MEXICO, GULF OF | | | | | | | | | | | | 1 |
| PORT ARANSAS (title) | | | | | | | | | | | | 2 |
| TEXAS (title) | | | | | | | | | | | | 3 |
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Approved:

Charles E. Harrington
Chief Geographer - N/CG 2x5

FEB 17 1994

N/CG244-45-94

LETTER TRANSMITTING DATA

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

ORDINARY MAIL AIR MAIL

REGISTERED MAIL EXPRESS

GBL (Give number) _____

TO:

CHIEF, DATA CONTROL SECTION, N/CG243
NOAA/National Ocean Service
SSMC3, STATION 6815
1315 EAST-WEST HIGHWAY
SILVER SPRING, MARYLAND 20910

DATE FORWARDED

SEP 28, 1994

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.

H-10508

TEXAS, GULF OF MEXICO, 19.4NM EAST OF PORT ARANSAS

1 TUBE CONTAINING:

1 FINAL SMOOTH SHEET

1 ORIGINAL DESCRIPTIVE REPORT FOR H-10508

1 BOX CONTAINING:

1 ACCORDIAN FILE CONTAINING FATHOGRAMS AND RAW DATA PRINTOUTS FOR VESNO 9140 FOR THE FOLLOWING DAYS: 259-260, 264-266, 272-273, AND 280

11 ENVELOPES CONTAINING SONARGRAMS FOR DAYS 259-260, 264-265 (2), 266 (2), 272 (2)-273, AND 280

1 CAHIER WITH FINAL CONTROL, SOUNDING, AND LINE FILE LISTINGS

1 9-TRACK MAGNETIC TAPE FOR SURVEY H-10508

1 ENVELOPE CONTAINING APPENDICES AND SEPARATES TO ACCOMPANY H-10508

FROM: (Signature)

DEBORAH A. BLAND

Deborah A. Bland

RECEIVED THE ABOVE

(Name, Division, Date)

Return receipted copy to:

ATLANTIC HYDROGRAPHIC SECTION
N/CG244
439 WEST YORK STREET
NORFOLK, VA 23510-1114

09/30/94

HYDROGRAPHIC SURVEY STATISTICS
REGISTRY NUMBER: H-10508

| | | |
|---------------------------------------|------------|----------------|
| NUMBER OF CONTROL STATIONS | | 2 |
| NUMBER OF POSITIONS | | 1247 |
| NUMBER OF SOUNDINGS | | 8074 |
| | TIME-HOURS | DATE COMPLETED |
| PREPROCESSING EXAMINATION | 83 | 03/23/94 |
| VERIFICATION OF FIELD DATA | 44 | 06/13/94 |
| ELECTRONIC DATA PROCESSING | 50 | |
| QUALITY CONTROL CHECKS | 8 | |
| EVALUATION AND ANALYSIS | 21 | 09/22/94 |
| FINAL INSPECTION | 4 | 09/23/94 |
| TOTAL TIME | 210 | |
| ATLANTIC HYROGRAPHIC SECTION APPROVAL | | 09/28/94 |

**COAST AND GEODETIC SURVEY
ATLANTIC HYDROGRAPHIC SECTION
EVALUATION REPORT FOR H-10508 (1993)**

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.

G. CORRECTIONS TO ECHOSOUNDINGS

7. Approved tides and zoning have been applied during office processing.

H. CONTROL STATIONS

7. Horizontal control used for this survey during data acquisition is based upon the North American Datum of 1983 (NAD83). 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 (NAD27).

To place this survey on the NAD27 datum move the projection lines 1.091 seconds (33.591 meters or 3.36 mm at the scale of the survey) north in latitude, and 0.932 seconds (25.512 meters or 2.55 mm at the scale of the survey) west in longitude.

All geographic positions listed in this report are on NAD83 datum unless otherwise specified.

K. CROSSLINES

3. The Descriptive Report states that "Several crossline soundings were much deeper (0.7 meters) than those of the mainscheme hydrography. The discrepancies occurred where the mainscheme sounding lines were much shoaler than the adjoining lines. This is most likely due to differences between predicted tide values and actual tide values of these mainscheme lines." This statement should read "Several crossline soundings were much deeper (0.7 meters) than those of the mainscheme hydrography. The discrepancies occurred where the mainscheme sounding lines were much shoaler than the adjoining lines. During office verification of this survey it was found that the problem was caused by STUCK HIPPY VALUES. The bad HIPPY values were scanned out during office verification and these discrepancies were eliminated."


L. JUNCTIONS

The Descriptive Report states "This survey junctions with contemporary survey H-10400 that was conducted by WHITING in 1991. Comparison of the two surveys shows a small area of

APPROVAL SHEET
H-10508


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 disproval 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. Final control, position, and sounding printouts of the survey have been made. The survey records and digital data comply with NOS requirements except where noted in the Evaluation Report.


Leroy G. Cram
Cartographer, Atlantic Hydrographic Section

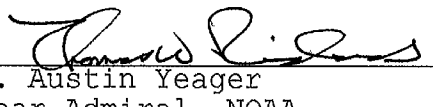
Date: 09/29/94

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.


Nicholas E. Perugini, LCDR, NOAA
Chief, Atlantic Hydrographic Section

Date: 9/28/94

Final Approval:

Approved: 
for J. Austin Yeager
Rear Admiral, NOAA
Director, Coast and Geodetic Survey

Date: 2/7/95

