# DESCRIPTIVE REPORT

**Type of Survey:** Hydrographic  
**Field No.:** HFP-20-1-86  
**Registry No.:** H-10226

## LOCALITY

**State:** Alabama  
**General Locality:** Gulf of Mexico  
**Sublocality:** Approaches to Mobile Bay

---

**1986-88**  
**CHIEF OF PARTY:** LCDR K.W. Perrin & LCDR D.A. Waltz

## LIBRARY & ARCHIVES

**Date:** March 13, 1989
HYDROGRAPHIC TITLE SHEET

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

State: ALABAMA
General locality: GULF OF MEXICO
Locality: APPROACHES TO MOBILE BAY
Scale: 1:20,000 Date of survey: 17 SEPT. 1986 - 07 JAN. 1988
Instructions dated: 29 NOVEMBER 1983 * Project No.: OPR-J217-HFP
Vessel: NOAA LAUNCH 1257 (EDP 1257) & NOAA LAUNCH 0518 (EDP 0518)
Chief of party: LCDRs KENNETH W. PERRIN & DAVID A. WALTZ
Surveyed by: HYDROGRAPHIC FIELD PARTY #1, LTJG DAVID W. MOELLE, OIC
Soundings taken by echo sounder, hand lead, pole:
Graphic record scaled by: PARTY PERSONNEL: DWM, TL, GSL, GLM, GDH, MMO, RWR, BR
Graphic record checked by: DWM, MMO, GSL
Protracted by: - Smooth Sheet: XYNETICS 1201 (AMC)
Verification by: AMC HYDROGRAPHIC SURVEYS BRANCH
Field Sheet: Automated plot by PDP/e Computer
Soundings in feet at MLLW

REMARKS: * Change No. 1 - 06 AUG. 1984 DWM - David W. Moeller
Change No. 2 - 15 JAN. 1985 PLS - Paul Schattgen
Change No. 3 - 27 AUG. 1985 GSL - George S. Lloyd
Change No. 4 - 04 APR. 1986 GLM - Gary L. Merrill
Change No. 5 - 14 NOV. 1986 GDH - Glenn D. Hendrix
Change No. 6 - 06 MAR. 1987 MMO - Maria Mangular-Ortiz
RWR - Robert W. Ramsey
BR - Bruce Richards

AWOIS SURF 5/89 SRB
H-10255

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* Sited with original field records
DESCRIPTIVE REPORT
TO ACCOMPANY
HYDROGRAPHIC SURVEY H-10226
HFP-20-1-86

Scale: 1:20,000
Lt. Cdr. David A. Waltz (from 12/14/87)
Officer in Charge: Lt. (jg) David W. Moeller
Hydrographic Field Parties Section
Hydrographic Field Party #1
Launches 0518 & 1257

A. PROJECT

Hydrographic Survey H-10226, designated Sheet X, was
accomplished under Project Instructions OPR-J217-HFP, dated 29
November 1983 and amended by:

Change No. 1, dated 06 August 1984,
Change No. 2, dated 15 January 1985,
Change No. 3, dated 27 August 1985,
Change No. 4, dated 04 April 1986,
Change No. 5, dated 14 November 1986,
Change No. 6, dated 06 March 1987.

This project is a basic hydrographic survey intended to
provide modern data to support existing nautical charts and the
NOS bathymetric mapping program.

B. AREA SURVEYED

The area surveyed is located in Alabama, Gulf of Mexico,
Approaches to Mobile Bay. The survey is bounded on the north by
Mobile Point, and the south shore of Dauphin Island, Alabama as
indicated on the sheet layout on page 2 of this report, west to
088°10.7'W. The southern boundary is latitude 30°05'00"N.
This survey was conducted from 17 September 1986 to 07

C. SOUNDED VEESSEL

NOAA launches 1257 (EDP 1257) and 0518 (EDP 0518) were the
only vessels used to gather data. No unusual sounding
configurations were used nor unusual problems encountered.
D. SOUNDING EQUIPMENT AND CORRECTIONS TO ECHO SOUNDINGS

Soundings were recorded with the following Raytheon Model DE-719-C and DSF-6000N Fathometers:

<table>
<thead>
<tr>
<th>UNIT</th>
<th>SERIAL NUMBER</th>
<th>INCLUSIVE DATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recorder</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model DSF-6000N</td>
<td>B054N</td>
<td>DN 279/1986 - DN 113/1987</td>
</tr>
<tr>
<td></td>
<td>B037N</td>
<td>DN 259/1987 &amp; DN 007/1988</td>
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<tr>
<td>TMU 7191</td>
<td>AB-221</td>
<td>DN 279/1986 - DN 007/1988</td>
</tr>
</tbody>
</table>

The above equipment was used to measure depths ranging from approximately two (2) to eighty (80) feet. A sounding pole was used in depths less than two (2) feet.

The Raytheon DE-719-C Fathometer was used aboard launch 0518. The instrument initial was monitored continuously and adjustments were made either on-line or when the Fathograms were scanned.

The Raytheon DSF-6000N Fathometer was used by launch 1257. Both the high and low frequency transducers have the same draft, and settlement and squat correctors are the same. All data gathered using the DSF-6000N was in the High + Low (High Digitized) mode. (Correctors are applied equally to both high and low frequency information.)

The Fathometer SN B054N, developed a problem on DN 107/1987. The Fathometer printout would occasionally shift vertically on the paper. Scanning was difficult due to the shifting and all poor quality data was rejected. The Fathometer was replaced on DN 113/1987 by SN K110. Fathometer SN K110 failed on DN 210/1987 and was replaced by SN B037N on DN 212/1987. No data was affected by this failure.

All fathograms were scanned for peaks and deeps and for the effects of heave. The appropriate changes were made on the corrector tapes.

The following procedures were used to determine the corrections to echo soundings:

**Velocity Corrections**

Daily bar checks were taken when weather and sea conditions permitted. Twice daily bar checks as required by Sections 1.5.2. and 4.9.5.1.1. of the Hydrographic Manual were attempted but not always obtained. On several occasions it was found that tidal
currents near the entrance to Mobile Bay prevented accurate bar checks from being taken. EDO checks of the Fathometer were performed on several days in lieu of a second bar check to verify the accuracy of the instrument.

Forty two bar checks were obtained from launch 1257 and forty two bar checks from launch 0518. Copies of the Lead Line/Bar Line calibrations are included in the accordion file. Corrections to echo soundings for launch 1257 velocity of sound through water were determined from eleven TDC casts and one nansen cast. Correction to echo soundings for launch 0518 were determined from three TDC casts and six bar checks. An abstract of TDC and nansen cast dates and locations is appended. The velocity corrector tables were generated by PDP8/e program RK530, Layered Correctors for Velocity, and NOS program VELTAB using the data from these casts. Velocity table 15 (launch 0518, DE-719-C Fathometer) was determined from barcheck data only. Nansen casts were performed on DN’s 275/1986 and 141/1987 to field check the accuracy of the Martek equipment. The agreement was found to be very good. Copies of Nansen thermometer calibrations are located in the accordion file.

Two Martek Mark VII, Model 167 instruments were used for TDC casts during this survey (SN 246 during 1986 and SN 233 during 1987). Copies of the calibration data (SN 246 & 233) are included in the accordion file. SN 233 failed in December 1987 and a nansen cast was used to determine velocity table 16.

The instrument corrections were determined from comparison of bar check and TDC velocity corrector data and have been applied to all soundings on the final field sheet, except DN 007/88, via the field velocity corrector tapes. The instrument correctors have not been included in the final velocity tapes, except for velocity table 15, submitted with this survey but will be applied to the soundings on the final smooth sheet via the TC/TI tapes.

Copies of all direct comparison forms are included in the accordion file.

Settlement and Squat

Settlement and squat for the launches were measured using the level instrument method described in Section 4.9.4.2, of the Hydrographic Manual. The results of these measurements are included in the accordion file. Settlement and squat correctors were not applied to the final field sheet, but have been included on the TC/TI tapes and will be applied to the soundings on the final smooth sheet.

Draft Correction

Launch draft corrections were applied. A copy of the Sounding Correction Abstract is included in the appendix, along with printouts of the velocity and TC/TI tapes.

* Removed from original Descriptive Report and filed with Survey records
Tide Correction

Field tide reduction of soundings was based on predicted tides from Mobile, Mobile River (Tide Table Station 3673), corrected to Fort Gaines, Mobile Bay Entrance (Tide Table Station 3665).

All field tide correctors were interpolated from the predictions in the NOS Tide Tables using a PDP8/e computer and HYDROPLOT program AM500. Printouts of the predicted tide tapes are located in the accordion file.

Smooth tides have been requested from Sea and Lake Levels Branch (N/OMA12). The Field Tide Note and a copy of the Smooth Tide request are appended.

E. HYDROGRAPHIC SHEETS  (Field)

Field sheets used during this survey were prepared in the field using a PDP8/e computer and a Houston Instrument DP-3 Complot plotter. Final field sheets, overlay sheets, and an enlargement sheet are included with this survey. Mainscheme, crossline, fairway, developments, selected soundings from the enlargement, and split soundings are plotted on the final field sheets. Bottom samples, detached positions, and junction soundings are plotted on the overlay sheets. A spike development from DN 259/87 is plotted on the enlargement.

The projection parameter tapes are included with the project data. Parameter tape listings are included in the appendix.

All records will be forwarded to the Hydrographic Surveys Branch at the Atlantic Marine Center for verification and smooth plotting.

F. CONTROL STATIONS  See section 2.a. of the Evaluation Report

All control stations used during this survey were either existing geodetic control published by the National Geodetic Survey or control established by HFP-1 personnel. All stations meet a minimum of Third-order, Class I standards using standard survey practices as detailed in Chapter 3 of the Hydrographic Manual. All positions are based on the North American 1927 Datum.

A list of control stations used during this survey is included in the appendix. A copy of the Horizontal Control Reports are included in the accordion file.

* Removed from the original D.R. and filed with the original survey records.
Eight stations are located seaward of the shoreline. They are as follows:

PILE DB 3 1986 (SN 013). This station is a day beacon located in Pelican Bay that was used for fixed point calibrations.

MBEPSI WELLHEAD 822 1987 (SN 024). This station is a capped wellhead.

EXXON WELLHEAD 616 1987 (SN 025). This station is a capped wellhead.

MOBILE OIL WELLHEAD 823 1987 (SN 026). This station is a capped wellhead used as a calibration site.

EXXON WELLHEAD 112 1987 (SN 027). This station is a capped wellhead.

EXXON WELLHEAD 868 1986 (SN 028). This station is a capped wellhead that was used for fixed point calibrations.

SAND ISLAND LIGHOUSE 1930 (SN 030). This station is an abandon lighthouse that was used as an initial for range/azimuth work.

CAPPED WELLHEAD WEST 1986 (SN 032). This station is a capped wellhead used as a calibration site.

POPEYE 1986 (SN 818). This station is a survey mark set on Sand Island and was used as a Mini-Ranger and range/azimuth site.

G. HYDROGRAPHIC POSITION CONTROL

The Motorola Falcon 484, Mini-Ranger system was used for both Range/Range and Range/Azimuth hydrographic position control during this survey. The following Mini-Ranger equipment was used during this survey:

<table>
<thead>
<tr>
<th>LAUNCH</th>
<th>UNIT</th>
<th>SERIAL NUMBER</th>
<th>DAY NUMBERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1257</td>
<td>RPU</td>
<td>E0160</td>
<td>279/86 - 007/88</td>
</tr>
<tr>
<td></td>
<td>CDU</td>
<td>E 009</td>
<td>279/86 - 007/88</td>
</tr>
<tr>
<td></td>
<td>R/T</td>
<td>F3389</td>
<td>279/86 - 007/88</td>
</tr>
<tr>
<td>0518</td>
<td>RPU</td>
<td>E0162</td>
<td>260/86 - 258/87 (Pos. 1127)</td>
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<tr>
<td></td>
<td></td>
<td>E0160</td>
<td>258/87 (Pos. 1128 - 1206)</td>
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<td>E0162</td>
<td>289/87 - 302/87</td>
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<td>CDU</td>
<td>E 010</td>
<td>260/86 - 302/87</td>
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<td></td>
<td>R/T</td>
<td>F3419</td>
<td>260/86 - 258/87 (Pos. 1127)</td>
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<td></td>
<td>F3389</td>
<td>258/87 (Pos. 1128 - 1206)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>E2921</td>
<td>289/87 - 302/87</td>
</tr>
</tbody>
</table>
Baseline calibrations were performed before, during, and after the survey. Mean baseline correctors were applied to all Mini-Ranger data via the corrector tapes, except when unit failure prevented a closing calibration, then opening baseline correctors were used.

Twice daily critical system checks were conducted using the fixed point method, except when unit failure prevented a closing system check on DN 125/87. Copies of all 1257 system checks and baseline calibrations are included in the accordion file. Launch 0518 system checks are either included in the sounding volume or are located in the accordion file with the baseline calibrations.

Wild Theodolite SN T-2 110216 was used for azimuths on all range/azimuth hydrography. EDM HP-3810B, SN 1929A00438 was used to measure distances and azimuths for shoreline verification and portions of DN 302/87 hydrography.

The ANDIST correctors for both launches are 0.0 meters. An Electronic Corrector Abstract is appended.

H. SHORELINE See Section 2.6 of the Evaluation Report.

Shoreline verification was conducted on Sand Island. Comparison between the verified shoreline and that appearing on charts #11376 and #11378 and T-sheets #TP00929 and #TP00930 shows very poor agreement. Sand Island has increased in length to the northwest. A northwest displacement of the southeast end of the island was also noted. It is recommended that the surveyed shoreline be used for charting.

Additional changes in the shoreline of Mobile Point and Dauphin Island are noted in red on the final field sheet.

Nine control stations exist seaward of the shoreline. These are detailed in Section F of this report.

I. CROSSLINES See section 3.4 of the Evaluation Report.

Crosslines totaled 145.8 nautical miles or 10.4% of the hydrography.

Crossline agreement with mainscheme hydrography was very good with random differences of less than two feet.

J. JUNCTIONS See section 5 of the Evaluation Report.

This survey junctions with the following surveys:

H-10247, 1:20,000, 1987 (to the west),
H-10206, 1:40,000, 1985 (to the south),
H-10179, 1:20,000, 1985-87 (to the east).
Agreement with H-10179 was very good with random differences of less than two feet.

Agreement with H-10206 was good with differences of one to three feet. H-10206 was consistently deeper than the present survey which may be attributed to possible sound velocity errors, caused by velocity determination for H-10206 being based on offshore velocity casts. These casts would fail to compensate for the effects of bay water mixing in the junction area.

Agreement with H-10247 was very good with differences of less than two feet.

Agreement between launch 0518 and launch 1257 was very good with random differences of less than two feet.

K. COMPARISON WITH PRIOR SURVEYS

The survey area was previously covered by the following surveys:

<table>
<thead>
<tr>
<th>Survey</th>
<th>Date (yr)</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>H-4023</td>
<td>1917-18</td>
<td>1:40,000,</td>
</tr>
<tr>
<td>H-4171</td>
<td>1920</td>
<td>1:80,000,</td>
</tr>
<tr>
<td>H-8526</td>
<td>1960</td>
<td>1:10,000,</td>
</tr>
<tr>
<td>H-9109</td>
<td>1970</td>
<td>1:20,000,</td>
</tr>
</tbody>
</table>

Comparison to survey H-4023, west of 088°08' W, showed fair agreement with random differences of two to five feet. No comparison was conducted east of 088°08' W as this area was superseded by H-8526 and H-9109. Differences are attributable to the age of the survey and the variability of the area.

Comparison to survey H-4171 showed poor agreement with consistently deeper depths of two to eight feet than the present survey. These differences are random and are attributable to the age of this survey and the variability of this area.

Comparison to survey H-8526 showed good agreement in the offshore areas and in Pelican Bay with random differences of one to three feet. However, discrepancies of five feet and greater were noted in the vicinities of Mobile Ship Channel, the shoals either side of the channel, and Pelican Bay along the coasts of Dauphin and Sand Islands.

Comparison to survey H-9109 showed good agreement in the offshore area and in Pelican Bay with random differences of one to three feet. Large differences were noted in the vicinities of Mobile Ship Channel, the shoals either side of the channel, and Pelican Bay along the coasts of Dauphin and Sand Islands.
L. COMPARISON WITH THE CHART

Comparisons were made between this survey and the following NOAA charts:


Agreement between the survey and these charts showed the same quality of agreement observed in the comparison to prior surveys of the area. Fair to poor agreement in depths less than 30 feet and fair to good agreement in the deeper areas.

The shoal that extends out from Mobile Point along the east side of the entrance channel appears to have shifted to the west with the shoalest areas adjacent to the channel.

The following Dangers to Navigation were located during this survey:

Sunken Wreck, Dangerous to Surface Navigation, PA was reported to HFP-1 by Mr. Clinton Collier of the FDA Fishery Research Lab. The reported Loran-C position (30°12′08.4″N, 088°04′06.4″W) and least depth of three feet were reported to the Coast Guard on 25 August 1986. Presently Charted, Return See also section 7.2.9 of the Evaluation Report.

An Obstruction, consisting of concrete bridge rubble, was investigated by divers and located at 30°05′33.0″N 088°07′23.7″W with a lead line least depth of 85.8 feet (corrected for predicted tides). Chart as an obstruction (concrete debris) with a depth of 67 feet at MLLW (69 obs/06) (unshaded).

An Obstruction, consisting of concrete bridge rubble, was located at 30°05′28.2″N 088°07′25.0″W with a Fathometer least depth of 69.8 feet (corrected for draft, velocity, and predicted tides). Chart as an obstruction (concrete debris) with a depth of 69 feet at MLLW (69 obs/06) (unshaded).

An Obstruction, consisting of concrete bridge rubble was investigated by divers and located at 30°04′10.9″N 088°06′23.5″W with a lead line least depth of 61.2 feet (corrected for predicted tides). Chart as an obstruction (concrete debris) with a depth of 61 feet at MLLW (61 obs/06) (unshaded).

An Obstruction, Dangerous to Surface Navigation was located at 30°09′33.55″N 088°05′57.16″W with a Fathometer least depth of 27.0 feet (corrected for draft, velocity, and predicted tides) falls within the limits of the Charted Dangorsite.

The following AWOIS items were investigated during this survey:

AWOIS # 3625 - 58FT Grounding, Cleared 57FT. A Fathometer search was conducted at reduced line spacing. The surveyed depths of the area are deeper, however development is insufficient to disprove. Recommend it remain as charted. Do not concur. See Section 6.6.1 of the Evaluation Report.
AWOIS #3635, 3638, 3639, & 3645 - Reported shoaling. Survey operations revealed shoaling along the eastern side of the entrance channel in several locations. Recommend they remain as charted until the planned dredging of the entire ship channel to 55 feet is accomplished during 1988 - 90. After dredge operations are conducted, U.S. Army Corps of Engineer surveys of the channel should be used to confirm the deletion of these items from the chart. (Concur)

 AWOS # 3641 - 41FT grounding, 35FT cleared. Fathometer development of the area at reduced line spacing revealed consistent depths greater than 40 feet. Recommend the symbol be deleted and the shoallest sounding of the development be charted in its place. (Note: A recommendation for deletion dated 9/84 is noted on the AWOIS listing. See item investigation report.) (Concur)

 AWOS # 3642 - Obstruction, cleared 34FT. Fathometer development of the area at reduced line spacing revealed no evidence of the obstruction. Search insufficient to disprove existence. Recommend it remain as charted. (Concur. See also section 6.6.2) of the Evaluation Report.

 AWOS # 3643 - 47FT grounding, cleared 41FT. Fathometer development of the area at reduced line spacing revealed consistent depths greater than 47 feet. Recommend the symbol be deleted and the shoallest sounding of the development be charted in its place. (Concur. Chart present survey soundings of 47 to 50 feet.)

 AWOS # 3644 - Shoal to 28FT rep (ED). Fathometer development of the area at reduced line spacing revealed no evidence of the shoal/obstruction. Recommend the symbol be deleted and the shoallest sounding of the development be charted in its place. (Note: A recommendation for deletion dated 9/84 is noted on the AWOIS listing. See item investigation report. Also an Obstruction with a least depth of 21 feet was located, by HFP-1, due north of the reported position and may be this item.) (Concur)

 AWOS # 3648 - 58FT grounding, cleared 55FT. Fathometer investigation at reduced line spacing was conducted. Surveyed depths agree with reported depths. Recommend it remain as charted. (Do not concur. See section 6.6.5) of the Evaluation Report.

 AWOS # 0449, 3627, 3631, 3633, 3634, 3636, 3637, 3640, & 3647 were not developed. Survey lines revealed no evidence of these objects, however, they should remain as charted as sufficient evidence to disprove their existence was not obtained. (Concur. See also sections 6, and 7 for further discussion on the above AWOIS Item Reports) of the Evaluation Report.

 AWOS Item Reports are appended.

All areas where shoals or spikes were indicated by the Fathometer record were developed using reduced line spacing.
M. ADEQUACY OF SURVEY

This survey is complete and adequate to supersede all prior surveys in the common area for charting purposes.

N. AIDS TO NAVIGATION

A large number of fixed and floating aids exist on this survey.

Comparison of the floating aids with chart 11376 showed slight position discrepancies, however, these differences are all less than 100 meters and the buoys are correctly oriented to the ship channel. Descriptions given in the Light List were accurate and complete.

Comparison of the fixed aids with chart 11376 showed no position discrepancies. Descriptions given in the Light List were accurate and complete.

No bridges, overhead or submarine cables, pipelines or ferry routes exist in the survey area.

O. STATISTICS

<table>
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<th>TOTAL</th>
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<td>Days of Production</td>
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<td>Number of positions</td>
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<td>Nautical miles of sounding lines</td>
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</table>

P. MISCELLANEOUS

Several small deficiencies exist with this survey. The majority of these exist in areas shoaler than the 12-foot contour requirement of the project instructions. Additional work to complete the entire survey to the 0-foot contour was prevented by the repeated mechanical problems encountered with launch 0518 and adverse weather conditions encountered in January – February 1988. The 12-foot contour was not met in the vicinity of Mobile Ship Channel west of Mobile Point. This area was surveyed by launch 1257 and vessel safety considerations prevented completion to the required 12-foot contour.
Excessive time to complete this survey was due to equipment problems causing the survey to be run in blocks of data. Mechanical problems with launch 1257 prevented ongoing surveys from being run during September - October 1986. Survey H-10226 was begun during this down period using launch 0518. Launch 1257 resumed operations in October 1986 with surveys H-10179 and H-10180 having first priority. Survey H-10226 became first priority in April 1987 after the completion of Surveys H-10179, H-10180, CES Mobile Bay, and HFPS A-76 study. Launch 1257 completed the offshore survey area in August 1987. Launch 0518 resumed operations on H-10226 at that time. Mechanical problems with launch 0518 halted progress on H-10226 from November 1987 to January 1988. Final work on H-10226 was completed by launch 1257 in January 1988. No degradation of data quality exists due to this extended survey period.

The traffic fairway area of the east sheet of this survey was developed with 100 meter line spacing in lieu of the prescribed survey tracklines. This was due to this area being used by vessels for picking up and dropping off pilots so no single trackline was sufficient to develop the area.

A revision to the fairways of the approaches to Mobile Bay has been proposed. Correspondence dealing with this proposal is appended.

All bottom samples were sent to Smithsonian Institution. Copies of Oceanographic Log Sheet-M are appended. Filed with the original field records.

No anomalous currents were observed in the survey area.

Loran-C data was collected automatically at each fix by the HYDROPLOT system on all days except when the Loran-C was not operational.

The Coast Pilot Report for this survey is appended.

Q. RECOMMENDATIONS

No additional field work is necessary.
R. AUTOMATED DATA PROCESSING

The following HYDROPLOT system programs were used during this survey:

<table>
<thead>
<tr>
<th>PROGRAM</th>
<th>DESCRIPTION</th>
<th>VERSION</th>
</tr>
</thead>
<tbody>
<tr>
<td>RK112</td>
<td>Range-Range and Hyperbolic Real-Time HYDROPLOT</td>
<td>04/23/84</td>
</tr>
<tr>
<td>RK201</td>
<td>Grid, Signal, and Lattice Plot</td>
<td>04/18/75</td>
</tr>
<tr>
<td>RK221</td>
<td>Range-Range Non-Real Time Plot</td>
<td>07/25/86</td>
</tr>
<tr>
<td>RK226</td>
<td>Range-Azimuth Non-Real Time Plot</td>
<td>07/25/86</td>
</tr>
<tr>
<td>RK300</td>
<td>Utility Computations</td>
<td>10/21/80</td>
</tr>
<tr>
<td>RK321</td>
<td>LORAN-C Computations</td>
<td>10/21/80</td>
</tr>
<tr>
<td>RK330</td>
<td>Reformat and Data Check</td>
<td>05/04/76</td>
</tr>
<tr>
<td>PM360</td>
<td>Electronic Corrector Abstract</td>
<td>02/02/76</td>
</tr>
<tr>
<td>RA362</td>
<td>RK330 and AM602 Combined</td>
<td>08/20/84</td>
</tr>
<tr>
<td>RK407</td>
<td>Geodetic Inverse/Direct Computation</td>
<td>09/25/78</td>
</tr>
<tr>
<td>RK409</td>
<td>Geodetic Utility Package</td>
<td>09/20/78</td>
</tr>
<tr>
<td>AM500</td>
<td>Predicted Tide Generator</td>
<td>11/10/72</td>
</tr>
<tr>
<td>RK530</td>
<td>Layer Corrections for Velocity</td>
<td>05/10/76</td>
</tr>
<tr>
<td>RK561</td>
<td>H/R Geodetic Calibration</td>
<td>12/01/82</td>
</tr>
<tr>
<td>AM602</td>
<td>ELINORE--Line Oriented Editor</td>
<td>12/08/82</td>
</tr>
<tr>
<td>RK606</td>
<td>Tape Duplicator</td>
<td>08/22/74</td>
</tr>
<tr>
<td>MI999</td>
<td>Utility Plot</td>
<td>05/30/73</td>
</tr>
</tbody>
</table>

NOS program VELTAB was also used for velocity determination.

S. REFERENCE TO REPORTS

AWOIS Item Reports
Horizontal Control Reports
Coast Pilot Report
Dive Reports

Respectfully Submitted,

[Signature]

David W. Moeller, LTJG, NOAA
Officer in Charge, HFP-1
| Ø13 | 1  | 30  | 14 | 05525 | Ø88 | Ø4 | 41220 | 250 | 0000 | 000000 | PILE DB 3 1986 | QUAD 3008822 |
| Ø24 | 6  | 30  | 11 | 05236 | Ø88 | 11 | 15370 | 250 | 0006 | 000000 | MBEPSI WELLHEAD | QUAD 3008822 |
| Ø25 | 6  | 30  | 13 | 55099 | Ø88 | 11 | 10149 | 250 | 0000 | 000000 | EXXON WELLHEAD | QUAD 3008822 |
| Ø26 | 6  | 30  | 11 | 20044 | Ø88 | 09 | 47279 | 250 | 0000 | 000000 | MOBILE OIL | WELLHEAD 823 1987 | QUAD 3008822 |
| Ø27 | 6  | 30  | 11 | 17827 | Ø88 | 07 | 17876 | 139 | 0000 | 000000 | EXXON WELLHEAD | QUAD 3008822 |
| Ø28 | 6  | 30  | 08 | 59674 | Ø88 | 06 | 14092 | 250 | 0000 | 000000 | EXXON WELLHEAD | QUAD 3008822 |
| Ø30 | 1  | 30  | 11 | 14826 | Ø88 | 03 | 02236 | 139 | 0000 | 000000 | SAND ISLAND | LIGHTHOUSE 1930 | QUAD 3008822 |
| Ø32 | 7  | 30  | 11 | 53414 | Ø88 | 01 | 16909 | 139 | 0000 | 000000 | CAPPED WELLHEAD | WEST 1986 | QUAD 3008822 |
| Ø81 | 4  | 30  | 13 | 36005 | Ø88 | 01 | 30238 | 250 | 0007 | 000000 | WHITING 92 ECC 1986 | QUAD 3008812 |
| Ø81 | 6  | 30  | 13 | 49573 | Ø88 | 18 | 15159 | 250 | 0000 | 000000 | DAUPHIN 1935 | STA 1036 | QUAD 3008821 |
| Ø81 | 6  | 30  | 14 | 59866 | Ø88 | 08 | 22624 | 250 | 0009 | 000000 | PIRATE 1986 | QUAD 3008822 |
| Ø81 | 6  | 30  | 13 | 09666 | Ø88 | 06 | 19320 | 250 | 0000 | 000000 | POPEYE 1986 | QUAD 3008822 |
| Ø82 | 0  | 30  | 14 | 45634 | Ø88 | 04 | 50704 | 250 | 0000 | 000000 | BULWINKLE 1986 | QUAD 3008822 |
| Ø82 | 0  | 30  | 14 | 45548 | Ø88 | 04 | 35593 | 250 | 0000 | 000000 | ADEM D1 33 1984 | QUAD 3008822 |

CONTROL LOCATED BY: * HYDROGRAPHIC FIELD PARTY # 1
** NATIONAL GEODETIC SURVEY
The following objects **HAVE NOT** been inspected from seaward to determine their value as landmarks.

<table>
<thead>
<tr>
<th>CHARTING NAME</th>
<th>DESCRIPTION</th>
<th>LATITUDE</th>
<th>LONGITUDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>TANK</td>
<td>&quot;SE MOBILE COUNTY TANK&quot; A large water tank 158 feet tall.</td>
<td>49.1186</td>
<td>01.757</td>
</tr>
</tbody>
</table>

**CHARTS AFFECTED**
- 11376
- 11378

**DATE**
Feb. 88

**DATUM**
NAD 1927

**OPR PROJECT NO.**
OPR-J217

**SURVEY NUMBER**
H-10226

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

**CHARTS AFFECTED**
11376
11378
<table>
<thead>
<tr>
<th>Type of Action</th>
<th>Responsible Personnel</th>
<th>Origintator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objects Inspected from Seaward</td>
<td>David W. Moeller LTJG NOAA, OIC HFP-1</td>
<td></td>
</tr>
<tr>
<td>Positions Determined and/or Verified</td>
<td>Gary L. Merrill ST/ET, HFP-1</td>
<td></td>
</tr>
</tbody>
</table>

**Instructions for Entries Under 'Method and Date of Location'**

(Consult Photogrammetric Instructions No. 64)

**Office**

1. 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

**Field**

1. New Position Determined or Verified
   Enter the applicable data by symbols as follows:
   - F - Field
   - P - Photogrammetric
   - L - Located
   - V - Visually
   - V - Verified
   - 1 - Triangulation
   - 5 - Field Identified
   - 2 - Traverse
   - 6 - Theodolite
   - 3 - Intersection
   - 7 - Planetary
   - 4 - Resection
   - 8 - Sextant

   **Example:** F-2-6-L
   8-12-75

2. 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

**Field (Cont'd)**

- 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

**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

**III. Position Verified Visually on Photograph**

Enter 'V-Vis.' and date.
**Example:** V-Vis.
8-12-75

**Notes:**
- Field Positions are determined by field observations based entirely upon ground survey methods.
- Field Positions are determined by field observations based entirely upon ground survey methods.

**Supersedes NOAA Form 76-40 (5-71) Which Is Obsolete, and Existing Stock Should Be Destroyed Upon Receipt of Revision.**
<table>
<thead>
<tr>
<th>CHARTING NAME</th>
<th>DESCRIPTION</th>
<th>LATITUDE</th>
<th>LONGITUDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELL</td>
<td>&quot;SHELL WELLHEAD 113&quot; Presently charted as unnamed platform</td>
<td>30° 10'</td>
<td>8° 08'</td>
</tr>
<tr>
<td>TYPE OF ACTION</td>
<td>RESPONSIBLE PERSONNEL</td>
<td>ORIGINATOR</td>
<td></td>
</tr>
<tr>
<td>------------------------------------</td>
<td>-----------------------------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td>OBJECTS INSPECTED FROM SEAWARD</td>
<td>David W. Moeller LTJC NOAA, OIC HFP-1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FATIONS DETERMINED AND/OR VERIFIED</td>
<td>Gary L. Merrill ST/ET</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'
(Consult Photogrammetric Instructions No. 64)

OFFICE
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

FIELD (Cont'd)
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

FIELD
I. NEW POSITION DETERMINED OR VERIFIED
Enter the applicable data by symbols as follows:
F - Field
L - Located
V - Visually
F - Verified
1 - Triangulation
2 - Traverse
3 - Intersection
4 - Resection
5 - Field Identified
6 - Theodolite
7 - Planetable
8 - Sextant

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

III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH
Enter 'V-Vis.' and date.
EXAMPLE: V-Vis.
8-12-75

**PHOTOMGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.

*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.
25 August 1986

Commander, Eighth Coast Guard District
Aids to Navigation Branch
Hale Boggs Federal Building, Room 1141
500 Camp Street
New Orleans, Louisiana 70130

Dear Sir:

During hydrographic operations, by the National Ocean Service's Hydrographic Field Party 1 in the Gulf of Mexico, a sunken barge was reported at 30°12'08.44"N. 88°04'06.41"W. with a reported least depth of 3 feet (uncorrected). This position is a conversion of the reported Loran-C rates and should be considered as a Position Approximate (PA).

Hydrographic Field Party 1 will conduct a complete investigation of this wreck in the near future and an accurate position and least depth will be determined.

This information affects NOS Charts 11360, 11378, and 11376. The preceding advance field information is subject to review and verification.

Sincerely,

[Signature]

David W. Moeller, LTJG, NOAA
Officer-in-Charge
Commander, Eighth Coast Guard District  
Aids to Navigation Branch  
Hale Boggs Federal Building, Room 1141  
500 Camp Street  
New Orleans, Louisiana  70130  

Dear Sir:

During hydrographic operations, by the National Ocean Service’s Hydrographic Field Party 1 in the Gulf of Mexico, an obstruction was located by divers at 30°05'18.58"N. 88°07'27.97"W. with a least depth, by diver held leadline, of 65 feet (uncorrected). This position is a conversion of the observed Loran-C rates and should be considered as a Position Approximate (PA).

Hydrographic Field Party 1 will provide a corrected depth and more precise position in the near future.

This information affects NOS Charts 11360 and 11376. The preceding advance field information is subject to review and verification.

Sincerely,

[Signature]
David W. Moeller, LTJG, NOAA  
Officer-in-Charge
29 June 1987

Commander, Eighth Coast Guard District
Aids to Navigation Branch
Hale Boggs Federal Building, Room 1141
500 Camp Street
New Orleans, Louisiana 70130

Dear Sir:

During hydrographic operations, by the National Ocean Service's Hydrographic Field Party 1 in the Gulf of Mexico, three Obstructions, Not Dangerous to Surface Navigation, were located. They are as follows:

Obstruction previously reported on 30 September 1986, copy attached, as a Position Approximate and uncorrected depth of 65 feet. Revise this position and depth to 30°05'33.0"N 088°07'23.74"W with a least depth of 63.8 feet (corrected for predicted tides). Concur

Obstruction located at 30°05'28.22"N 088°07'25.03"W with a fathometer least depth of 69.6 feet (corrected for draft, velocity, and predicted tides). Concur

Obstruction located at 30°04'10.97"N 088°06'23.35"W with a diver held leadline least depth of 61.2 feet (corrected for predicted tides). Concur

This information affects NOS Charts 11360 and 11376. The preceding advance field information is subject to review and verification.

The obstruction reported by this office on 10 April 1987 (see attached letter) was reported in LNM 16-87 as a position approximate (PA). The position reported is accurate and the PA designation should be deleted.

Sincerely,

David W. Moeller
LTJG, NOAA
89 Officer-in-Charge
Obstruction, Not Dangerous to Surface Navigation.

30°04'10.97"N
088°06'23.42"W

Least Depth - 61.2 FT
28 September 1987

Commander, Eighth Coast Guard District
Aids to Navigation Branch
Hale Boggs Federal Building, Room 1141
500 Camp Street
New Orleans, Louisiana  70130

Dear Sir:

During hydrographic operations, by the National Ocean Service's Hydrographic Field Party 1 in the Gulf of Mexico, an Obstruction, Dangerous to Surface Navigation, was located. It is located at 30°09'32.05"N, 088°05'57.70"W (NAD 1927) with a fathometer least depth of 27.0 feet (corrected for predicted tides, sound velocity, and draft).

This information affects NOS Charts 11360 and 11376. The preceding advance field information is subject to review and verification.

Sincerely,

David W. Moeller
LTJG, NOAA
Officer-in-Charge
Obstruction, Dangerous to Surface Navigation
30°09' 32.05" W
08°05' 57.70" W (WAD 1927)
Corrected Least Depth - 27.06'

Notice to Mariners published by Hydrographic/Topographic Nautical Chart Service of the U.S. Coast Guard in the lower left hand corner.
ITEM DESCRIPTION: SUNKEN WRECK PA
SOURCE: HFP-1
INVESTIGATION DATE: TIME: VESSEL: 1257
OIC: LTJG DAVID W. MOELLER
REFERENCE: OPR-J217-HFP, HFP-20-1-86, H-10226
POSITION #: VOLUME: PAGE:
CORRECTORS APPLIED:
VELOCITY TRA CORRECTOR
PREDICTED OR ACTUAL TIDE CORRECTORS
GEODETIC POSITION:
LATITUDE 30°12'08.4" LONGITUDE 088°04'06.4"
POSITION DETERMINED BY: LORAN-C
METHOD OF ITEM INVESTIGATION:

CHARTING RECOMMENDATION:
LOCATION FROM REPORTED LORAN-C RATES. REPORTED LEAST DEPTH OF THREE FEET. SURVEY LINES IN AREA REVEAL NO EVIDENCE OF WRECK BUT ARE INSUFFICIENT TO DISPROVE EXISTENCE. CHART AS SUNKEN WRECK DANGEROUS TO SURFACE NAVIGATION, PA AT THE REPORTED POSITION.

Compilation use only
CHART APPLIED AS

94
CHART # 11376

ITEM DESCRIPTION: OBSTRUCTION

SOURCE: HFP-1

INVESTIGATION DATE: 24 JUNE 1987  TIME: 141000  VESSEL: 1257

OIC: LTJG DAVID W. MOELLER

REFERENCE: OPR-J217-HFP, HFP-20-1-86, H-10226

POSITION #: 5186  VOLUME: A  PAGE: 32

CORRECTORS APPLIED:

VELOCITY

XX PREDICTED OR

TRA CORRECTOR

ACTUAL TIDE CORRECTORS

GEODETIC POSITION:

CHARTED:  LATITUDE  LONGITUDE

OBSERVED:  30°05'33.01"  088°07'23.74"

POSITION DETERMINED BY: MINI-RANGER

METHOD OF ITEM INVESTIGATION:

DIVER INVESTIGATION

CHARTING RECOMMENDATION:

OBSTRUCTION, NOT DANGEROUS TO SURFACE NAVIGATION WITH A CORRECTED LEADLINE DEPTH OF 63.8 FEET. CHART AS LOCATED.

Compilation use only

CHART  APPLIED AS

95
CHART # 11376 ITEM # UNCHARTED

ITEM DESCRIPTION : OBSTRUCTION
SOURCE : HFP-1
INVESTIGATION DATE: 24 JUNE 1987 TIME: 145757 VESSEL: 1257
OIC: LTJG DAVID W. MOELLER
REFERENCE: OPR-J217-HFP, HFP-20-1-86, H-10226
POSITION #: 5187 VOLUME: 8 PAGE: 32
CORRECTORS APPLIED:

XX VELOCITY XX TRA CORRECTOR
XX PREDICTED OR ACTUAL TIDE CORRECTORS

GEODETIC POSITION:
CHARTED: LATITUDE
OBSERVED: 30°05'28.24"
LONGITUDE 088°07'25.03"

POSITION DETERMINED BY: MINI-RANGER
METHOD OF ITEM INVESTIGATION:
FATHOMETER SEARCH

CHARTING RECOMMENDATION:
FATHOMETER SEARCH OF SURVEY LINES IN THIS AREA REVEALED AN OBSTRUCTION WITH A CORRECTED LEAST DEPTH OF 69.60 FEET. CHART AS LOCATED.

Compilation use only

CHART APPLIED AS
CHART # 11360

ITEM DESCRIPTION: OBSTRUCTION

SOURCE: HFP-1

INVESTIGATION DATE: 24 JUNE 1987 TIME: 1610 VESSEL: 1257

OIC: LTJG DAVID W. MOELLER

REFERENCE: OPR-J217-HFP, HFP-20-1-86, H-10226

POSITION #: 5189 VOLUME: 8 PAGE: 32

CORRECTORS APPLIED:

VELOCITY

XX PREDICTED OR

TRA CORRECTOR

ACTUAL TIDE CORRECTORs

GEODETIC POSITION:

CHARTED:

LATITUDE 8

OBSERVED:

30°04'10.97" 88°06'23.42"

LONGITUDE 35°

POSITION DETERMINED BY: MINI-RANGER

METHOD OF ITEM INVESTIGATION:

DIVER INVESTIGATION

CHARTING RECOMMENDATION:

CHART AS OBSTRUCTION AT SURVEYED POSITION
LEAST DEPTH OF 61.2 FEET

Concur

Compilation use only

CHART APPLIED AS
ITEM DESCRIPTION: OBSTRUCTION, 27 FT LEAST DEPTH

SOURCE: HFP-1

INVESTIGATION DATE: 16 SEPTEMBER 1987  TIME: VESSEL: 1257

OIC: LTJG DAVID W. MOELLER

REFERENCE: OPR-J217-HFP, HFP-20-1-86, H-10226

POSITION #: 5310-5342  VOLUME: 8  PAGE: 37

CORRECTORS APPLIED:

☐ VELOCITY  ☑ TRA CORRECTOR

☑ PREDICTED OR  ☑ ACTUAL TIDE CORRECTOR

GEODETIC POSITION:

CHARTED:
OBSEIVED:

LATITUDE 088°05'57.70"
LONGITUDE 30°09'32.05"

POSITION DETERMINED BY: MINI-RANGER

METHOD OF ITEM INVESTIGATION:

FATHOMETER DEVELOPMENT (induced line spacing)

CHARTING RECOMMENDATION:

DEVELOPMENT OF THIS AREA REVEALED SEVERAL UNKNOWN
OBSTRUCTIONS WITH A SURVEYED LEAST DEPTH OF 27 FEET.
CHART AT THE SURVEYED POSITIONS

Conver Chart as shown on the present survey
Falls within the limits of charted comp site.
Compilation use only

CHART APPLIED AS
ITEM # UNCHARTED

ITEM DESCRIPTION: PILES (GROUP OF SIX)

SOURCE: HFP-1

INVESTIGATION DATE: 29 OCT 1987 TIME: 1632 VESSEL: O578

OIC: LTJG DAVID W. MOELLER

REFERENCE: OPR-J217-HFP, HFP-20-1-86, H-10226

POSITION #: 1516-17 VOLUME: 7 PAGE: 41

CORRECTORS APPLIED:

VELOCITY TRA CORRECTOR

XX PREDICTED OR ACTUAL TIDE CORRECTOR

GEODETIC POSITION:

CHARTED: LATITUDE 30°14'34.28"

OBSERVED: LONGITUDE 088°06'21.15"

POSITION DETERMINED BY: R/AZ, MINI-RANGER & T-2

METHOD OF ITEM INVESTIGATION:

VISUAL SEARCH

CHARTING RECOMMENDATION:

CHART AS EXPOSED PILES.

Chart as a row of piles having 2 feet above Hill

Compilation use only

CHART APPLIED AS
ITEM DESCRIPTION: 58FT GROUNDING, CLEARED 57FT
SOURCE: AWOIS
INVESTIGATION DATE: 05 MAY 1987    TIME: 1637    VESSEL: 1257
OIC: LTJG DAVID W. MOELLER
REFERENCE: OPR-J217-HFP, HFP-20-1-86, H-10226
POSITION #: 4709-31    VOLUME: A    PAGE: 21
CORRECTORS APPLIED:
✓ VELOCITY
✓ TRA CORRECTOR
✓ PREDICTED OR
ACTUAL TIDE CORRECTORS

GEODETIC POSITION:

CHARTED: LATITUDE
30°06'27"

OBSERVED: LONGITUDE
088°02'24"

POSITION DETERMINED BY: MINI-RANGER

METHOD OF ITEM INVESTIGATION:
FATHOMETER SEARCH (REDUCED LINE SPACING)
500M MIN. RADIUS.

CHARTING RECOMMENDATION:
REMAIN AS CHARTED

See section 6.6.) of the Evaluation Report
Compilation use only

CHART
APPLIED AS
ITEM DESCRIPTION: REPORTED SHOALING
SOURCE: HFP-1
INVESTIGATION DATE: TIME: VESSEL: 1257
OIC: LTJG DAVID W. MOELLER
REFERENCE: OPR-J217-HFP, HFP-20-1-86, H-10226
POSITION #: VOLUME: PAGE:
CORRECTORS APPLIED:
VELOCITY TRA CORRECTOR
PREDICTED OR ACTUAL TIDE CORRECTOR
GEODETIC POSITION:

CHARTED:
OBSERVED:

LATITUDE 30°12'47"
LONGITUDE 088°02'15"

POSITION DETERMINED BY: MINI-RANGER

METHOD OF ITEM INVESTIGATION:

CHARTING RECOMMENDATION:

SURVEY LINES IN THIS AREA REVEALED SHOALING ALONG THE EASTERN SIDE OF THE ENTRANCE CHANNEL. REMAIN AS CHARTED UNTIL DREDGING OF CHANNEL TO 45 FT IS COMPLETED DURING 1988.
ITEM DESCRIPTION: REPORTED SHOALING

SOURCE: HFP-1

INVESTIGATION DATE: TIME: VESSEL: 1257

OIC: LTJG DAVID W. MOELLER

REFERENCE: OPR-J217-HFP, HFP-20-1-86, H-10226

POSITION #: VOLUME: PAGE:

CORRECTORS APPLIED:

VELOCITY TRA CORRECTOR
PREDICTED OR ACTUAL TIDE CORRECTOR

GEODETIC POSITION:

CHARTED: LATITUDE

OBSERVED: LONGITUDE

30°10'55" 088°02'46"

POSITION DETERMINED BY: MINI-RANGER

METHOD OF ITEM INVESTIGATION:

CHARTING RECOMMENDATION:

SURVEY LINES IN THIS AREA REVEALED SHOALING ALONG THE EASTERN SIDE OF THE ENTRANCE CHANNEL. REMAIN AS CHARTED UNTIL DREDGING OF CHANNEL TO 45 FT IS COMPLETED DURING 1988.

Compilation use only

CHART APPLIED AS

102
ITEM DESCRIPTION: REPORTED SHOALING

SOURCE: HFP-1

INVESTIGATION DATE: TIME: VESSEL: 1257

OIC: LTJG DAVID W. MOELLER

REFERENCE: OPR-J217-HFP, HFP-20-1-86, H-10226

POSITION #: VOLUME: PAGE:

CORRECTORS APPLIED:

VELOCITY

TRA CORRECTOR

PREDICTED OR

ACTUAL TIDE CORRECTORS

GEODETIC POSITION:

CHARTED: OBSERVED:

LATITUDE 30°10'21" 088°02'52"

LONGITUDE

POSITION DETERMINED BY: MINI-RANGER

METHOD OF ITEM INVESTIGATION:

CHARTING RECOMMENDATION:

SURVEY LINES IN THIS AREA REVEALED SHOALING ALONG THE EASTERN SIDE OF THE ENTRANCE CHANNEL. REMAIN AS CHARTED UNTIL DREDGING OF CHANNEL TO 45 FT IS COMPLETED DURING 1988.

Compilation use only

CHART APPLIED AS

103
CHART # 11376

ITEM # 3641

ITEM DESCRIPTION: 41FT GROUNDING, 35FT CLEARED

SOURCE: AWOIS

INVESTIGATION DATE: 5 MAY 1987  TIME: 1404  VESSEL: 1257

OIC: LTJG DAVID W. MOELLER

REFERENCE: OPR-J217-HFP, HFP-20-1-86, H-10226

POSITION #: 4631 - 94  VOLUME: 8  PAGE: 21

CORRECTORS APPLIED:

✓ VELOCITY  ✓ TRA CORRECTOR
✓ PREDICTED OR  ACTUAL TIDE CORRECTORS

GEODETIC POSITION:

CHARTED: LATITUDE

30°08'30"

OBSERVED: LONGITUDE

088°05'33"

POSITION DETERMINED BY: MINI-RANGER

METHOD OF ITEM INVESTIGATION:

FATHOMETER SEARCH (REDUCED LINE SPACING)
250 METER MIN. RADIUS

CHARTING RECOMMENDATION:

DELETE. SURVEYED DEPTHS GREATER THAN 40FT.
(SEE ATTACHED AWOIS LISTING)

Concur. Chart presents survey depths

Compilation use only

CHART

APPLIED AS

104
ITEM DESCRIPTION: OBSTRUCTION, CLEARED 34FT
SOURCE: AWOIS
INVESTIGATION DATE: 5 MAY 1987  TIME: 1404  VESSEL: 1257
OIC: LTJG DAVID W. MOELLER
REFERENCE: OPR-J217-HFP, HFP-20-1-86, H-10226
POSITION #: 4631 - 94  VOLUME: 8  PAGE: 21
CORRECTORS APPLIED:
✓ VELOCITY  ✓ TRA CORRECTOR
✓ PREDICTED OR  ACTUAL TIDE CORRECTORS

GEODETIC POSITION:

CHARTED:            LATITUDE
30°08'16.2"   088°05'10.2"

OBSERVED:

POSITION DETERMINED BY: MINI-RANGER

METHOD OF ITEM INVESTIGATION:

FATHOMETER SEARCH (REDUCED LINE SPACING)

CHARTING RECOMMENDATION:

REMAIN AS CHARTED.

Compilation use only

CHART  APPLIED AS
CHART # 11376                ITEM # 3643

ITEM DESCRIPTION: 47FT GROUNDING, CLEARED 41FT

SOURCE: AWOIS

INVESTIGATION DATE: 5 MAY 1987    TIME: 1404    VESSEL: 1257

OIC: LTJG DAVID W. MOELLER

REFERENCE: OPR-J217-HFP, HFP-20-1-86, H-10226

POSITION #: 4631 - 94    VOLUME: 8    PAGE: 21

CORRECTORS APPLIED:
✓ VELOCITY ✓ TRA CORRECTOR
✓ PREDICTED OR ACTUAL TIDE CORRECTORS

GEODETIC POSITION:

CHARTED: LATITUDE 30°08'10.0"  LONGITUDE 088°05'15.0"

OBSERVED:

POSITION DETERMINED BY: MINI-RANGER

METHOD OF ITEM INVESTIGATION:

FATHOMETER SEARCH (REDUCED LINE SPACING)

CHARTING RECOMMENDATION:

DELETE. DEPTHS OF 47FT AND GREATER OBSERVED.

Compilation use only

CHART APPLIED AS
CHART # 11376

ITEM DESCRIPTION: SHOAL TO 28FT REP (ED)

SOURCE: AWOIS

INVESTIGATION DATE: 5 MAY 1987 TIME: 1404 VESSEL: 1257

OIC: LTJG DAVID W. MOELLER

REFERENCE: OPR-J217-HFP, HFP-20-1-86, H-10226

POSITION #: 4631 - 94 VOLUME: 8 PAGE: 21

CORRECTORS APPLIED:
✓ VELOCITY ✓ TRA CORRECTOR
✓ PREDICTED OR ✓ ACTUAL TIDE CORRECTORS

GEODETIC POSITION:

CHARTED: 30°08'00" 088°05'24"

LATITUDE LONGITUDE

OBSERVED:

POSITION DETERMINED BY: MINI-RANGER

METHOD OF ITEM INVESTIGATION:

FATHOMETER SEARCH (REDUCED LINE SPACING)

CHARTING RECOMMENDATION:

DELETE. NO EVIDENCE OF OBSTRUCTION/SHOAL OBSERVED.
(SEE ATTACHED AWOIS LISTING)

Compilation use only

CHART APPLIED AS
CHART # 11376

ITEM DESCRIPTION: REPORTED SHOALING

SOURCE: HFP-1

INVESTIGATION DATE: TIME: VESSEL: 1257

OIC: LTJG DAVID W. MOELLER

REFERENCE: OPR-J217-HFP, HFP-20-1-86, H-10226

POSITION #: VOLUME: PAGE:

CORRECTORS APPLIED:

VELOCITY

TRA CORRECTOR

PREDICTED OR

ACTUAL TIDE CORRECTORS

GEODETIC POSITION:

CHARTED:

LATITUDE 30°12'02"

LONGITUDE 088°02'27.5"

OBSERVED:

POSITION DETERMINED BY: MINI-RANGER

METHOD OF ITEM INVESTIGATION:

CHARTING RECOMMENDATION:

SURVEY LINES IN THIS AREA REVEALED SHOALING ALONG THE EASTERN SIDE OF THE ENTRANCE CHANNEL. REMAIN AS CHARTED UNTIL DREDGING OF CHANNEL TO 45 FT IS COMPLETED DURING 1988.

Compilation use only

CHART APPLIED AS
ITEM DESCRIPTION: 58FT GROUNDING, 55FT CLEARED
SOURCE: AWOIS
INVESTIGATION DATE: 5 MAY 1987  TIME: 1614  VESSEL: 1257
OIC: LTJG DAVID W. MOELLER
REFERENCE: OPR-J217-HFP, HFP-20-1-86, H-10226
POSITION #: 4695 - 4708  VOLUME: 8  PAGE: 21
CORRECTORS APPLIED:
✓ VELOCITY  ✓TRA CORRECTOR
✓ PREDICTED OR  ACTUAL TIDE CORRECTORS

GEODETCIC POSITION:

CHARTED:  LOCAL TIME: 1614

CHARTED:

LATITUDE  LONGITUDE
30°07'25"  088°03'11"

OBSERVED:

POSITION DETERMINED BY: MINI-RANGER

METHOD OF ITEM INVESTIGATION:

FATHOMETER SEARCH (REDUCED LINE SPACING)

CHARTING RECOMMENDATION:

REMAIN AS CHARTED

See section 6.6.5) of the Evaluation Report

Compilation use only

CHART  APPLIED AS
CHART # 11376

ITEM DESCRIPTION: ASSORTED AWOIS ITEMS

SOURCE: HFP-1

INVESTIGATION DATE: TIME: VESSEL: 1257

OIC: LTJG DAVID W. MOELLER

REFERENCE: OPR-J217-HFP, HFP-20-1-86, H-10226

POSITION #: VOLUME: PAGE:

CORRECTORS APPLIED:
VELOCITY
TRA CORRECTOR
PREDICTED OR
ACTUAL TIDE CORRECTORS

GEODETIC POSITION:

CHARTED:

OBSERVED:

POSITION DETERMINED BY: MINI-RANGER

METHOD OF ITEM INVESTIGATION:
SURVEY LINES

CHARTING RECOMMENDATION:

NO DEVELOPMENT OF THESE ITEMS WAS CONDUCTED. SURVEY LINES
REVEALED NO EVIDENCE OF ITEMS, HOWEVER, SEARCH IS
INSUFFICIENT TO DISPROVE. REMAIN AS CHARTED.

For sections 3 and 7 of the Evaluation Report for further
discussion on the above AWOIS Items.
Compilation use only

CHART

APPLIED AS

112
DIVE INVESTIGATION REPORT
PROJECT NUMBER OPR-1217-HFP
SURVEY HFP-20-1-86
FIELD NUMBER H-10226

DIVE NUMBER 1
DIVE DATE 24 June 1987

I. AREA OF INVESTIGATION

A. State/Country Alabama
   Sub-Locality South of Mobile Point

B. Position: Latitude 30° 05' 33"
   Longitude 088° 07' 24"
   (Dive site or center of search area)

C. Method of Positioning Loran-C

II. PURPOSE OF INVESTIGATION

A. AWOIS item number: Uncharted

B. Source of item being investigated (if other than AWOIS listing):
   Pleasure Island Dive Center

C. Contacts (e.g. USCG, C of E, Harbor Masters, Owners, etc.):

D. Names, Addresses and Phone Numbers etc. of contacts:

III. SURVEY PROCEDURES

A. Determination of dive site (e.g. wire drag, side scan,
   development): Fathometer Search

B. Search Procedure (e.g. following a groundwire, circle search,
   sweep along known feature, etc.)
   Visual

C. Known reference to features nearby:

D. Area and depths covered:

100 foot circle. 65 -70 foot depths
IV. DIVE DATA

A. Divers: LTJC Moeller, Bob Ramsey

B. Time of Dive (in UTC) -
   Real 1400 - 1420
   Elapsed 20

C. General Bottom Depths (units and method of determination):
   65-70 feet - dive gage

D. Current and conditions: fair amount of current.

E. Visibility (number of feet - horizontally and vertically):
   50 feet all directions

F. Bottom type (mud, sand, rocks, etc.): sand

IV. RESULTS

A. Detached Positions Number(s): 5186

Time of D.P.'s (UTC): Describe if other time zone: 1410

Least Depth and Fix Numbers (raw dept): 65.6 (5186)

Method of determining depth (The raw sounding should be recorded. The reduced least depth should be plotted on the field sheet.) Diver held lead line

B. Description of findings:
   Obstruction consisting of concrete bridge rubble rising approx. five feet above bottom.

C. Dimensions of item or feature (attach sketch if appropriate):
   Approx. 20' X 20'

D. Unusual Conditions:
   None

VI. CHARTING RECOMMENDATIONS

Position Lat. 30°05'33.0"N  Long. 088°07'23.7"W

Reduced Depth 63.8 feet (corrected for predicted tides)

Type of Feature (Reference Chart No.1) Obstruction, Not Dangerous to Surface Navigation
DIVE INVESTIGATION REPORT
PROJECT NUMBER OPER-1217-HFP
SURVEY HFP-20-1-86
FIELD NUMBER H-10226

DIVE NUMBER 2 DIVE DATE 24 June 1987

I. AREA OF INVESTIGATION

A. State/Country Alabama Sub-Locality Approaches to Mobile Bay

B. Position: Latitude 30° 04' 10.35" Longitude 088° 06' 23.32"
   (Dive site or center of search area)

C. Method of Positioning Mini-Ranger

II. PURPOSE OF INVESTIGATION

A. AWOIS item number: Uncharted

B. Source of item being investigated (if other than AWOIS listing): Pleasure Island Dive Shop

C. Contacts (e.g. USCG, C of E, Harbor Masters, Owners, etc.):

D. Names, Addresses and Phone Numbers etc. of contacts:

III. SURVEY PROCEDURES

A. Determination of dive site (e.g. wire drag, side scan, development): Fathometer Search

B. Search Procedure (e.g. following a groundwire, circle search, sweep along known feature, etc.) Visual search

C. Known reference to features nearby:

D. Area and depths covered: 100 meter radius 60-70 feet
IV. DIVE DATA

A. Divers: LT.G. Moeller, R. W. Ramsey

B. Time of Dive (in UTC) - Real 1600 - 1620
   Elapsed 20 minutes

C. General Bottom Depths (units and method of determination):
   60 - 70 feet from depth gage

D. Current and conditions: approx 0.5 knots at surface in a
   southeast direction

E. Visibility (number of feet - horizontally and vertically):
   Visibility approximately 30 feet in all directions

F. Bottom type (mud, sand, rocks, etc.): sand

IV. RESULTS

A. Detached Positions Number(s): 5189
   Time of D.P.'s (UTC): Describe if other time zone: 1610
   Least Depth and Fix Numbers (raw depth): 63' (5189)
   Method of determining depth (The raw sounding should be
   recorded. The reduced least depth should be plotted on the
   field sheet.) Diver held lead line

B. Description of findings:
   Obstruction consisting of a single large rectangular
   section of reenforced concrete

C. Dimensions of item or feature (attach sketch if appropriate):
   35' x 10'

D. Unusual Conditions:
   None

VI. CHARTING RECOMMENDATIONS

Position Lat. 30°04'10.9" N    Long. 088°06'23.42" W
Reduced Depth 61 0 (corrected for predicted tides)
Type of Feature (Reference Chart No.1) Obstruction
U.S. Department of Commerce  
NOS - Marine Charting Division  
Attn: Al Lundberg  
Code: N/CG 2221  
6001 Executive Blvd.  
Rockville, MD 20852

Dear Mr. Lundberg:

As discussed in the telephone conversation between Kevin Shaw of your staff and Lieutenant Commander Frederick Newman of my staff on 15 April 1987, a background history of the obstructions and shoaling in the approaches to Mobile, Alabama, highlighted in enclosure (1), is requested. Although a research of all existing obstructions and shoaling in this area is desired, of particular interest is the obstruction marked: "Obstr rep ED".

I have included the Federal Register notice of a Port Access Route study that describes the reason for the Coast Guard’s interest in this area. We must look at all factors which may affect the decision to modify a fairway.

Since the study is nearly completed, your prompt attention will be greatly appreciated. Please contact Lieutenant Commander Newman at (504) 589-6901 or FTS 682-6901 if you have any questions.

Sincerely,

R. A. SUTHERLAND  
Captain, U.S. Coast Guard  
Chief, Marine Safety Division  
By direction of the Commander  
Eighth Coast Guard District

Encl: (1) Chartlet of the approaches to Mobile, Alabama from chart number 11376  
(2) Pages 6923-6924, Federal Register of 2 Feb 1986
CHIEF GORDON

Point Baker
529-3311

Group Corpus Christi
529-3162
3193

MONDAY

CDR Jon Young 682-6228
Port routeing needs in the Mobile approach area were previously studied in 1980; and the results were published in the Federal Register on October 19, 1984 (FR 49:46888). On the basis of that study no change to the existing shipping safety fairway system in the approaches to Mobile was recommended.

The Coast Guard is initiating a study of the junction of safety fairways in the vicinity of the Mobile Ship Channel entrance in response to a request from Texaco, Inc., incorporated to modify the existing Mobile Safety Fairway to open the area presently within the fairway to exploration and production drilling. Specifically, the requested modification would reduce the width of the fairway by moving the western boundary of the existing Mobile Ship Channel Safety Fairway. This boundary would follow a line drawn through the following geographic positions:

<table>
<thead>
<tr>
<th>Latitude</th>
<th>Longitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>30°07'15&quot; N</td>
<td>88°05'54&quot; W</td>
</tr>
<tr>
<td>30°02'15&quot; N</td>
<td>88°04'40&quot; W</td>
</tr>
<tr>
<td>30°01'33&quot; N</td>
<td>88°03'33&quot; W</td>
</tr>
</tbody>
</table>

Relocation of the western edge of the Mobile Safety Fairway, as proposed, would affect the following State and Federal lease blocks: State of Alabama lease blocks 113, 131, and 332; and Mobile Area Federal lease blocks 668 and 669. These blocks would then no longer be subject to the fairway restrictions on fixed structures.

Although the above specific alternative will be examined during this study, comments and recommendations or other information need not be limited to this alternative.

Vessel operators are invited to comment on any positive or negative impacts which may result from modifying the fairways within the study area. Likewise potential leaseholders and offshore developers are encouraged to identify and support any foreseeable costs or benefits from possible modification of the fairways in the study area.

Particular issues to be examined during the study, and on which information and public comments are invited, are as follows:

1. The existing and potential vessel traffic (i.e., types of vessels, traffic patterns, number of vessels, variations in the traffic density, etc.).
2. The need for a fairway adjustment (i.e., identification of the conflicting uses of the area which cannot be reasonably accommodated without an adjustment, and whether those needs can be accommodated without an adverse impact on navigation safety).
Commerce, and Army, and the Governors of the affected states during the study. In order to be most useful, any relevant information should be made available to the district office by the end of the comment period.

Procedural Requirements

In conducting this study, the Coast Guard will be governed by certain procedural requirements which are emphasized here to assist those who wish to submit comments. These requirements are based on mandates of the PWISA. The Coast Guard will also apply its experience in the areas of vessel traffic management, navigation, shiphandling, the effects of weather, and prior analysis of the traffic density in certain regions.

The PWISA directs that "in order to provide safe access routes for the movement of vessel traffic proceeding to or from ports . . . the Secretary shall designate necessary fairways and traffic separation schemes" in which the "paramount right of navigation over all other users" shall be recognized. Before a designation can be made, the Coast Guard is required to "undertake a study of the potential traffic density and the need for safe access routes." In accordance with 33 U.S.C. 1223, the Coast Guard will "to the extent practicable, reconcile the need for safe access routes with the needs of all other reasonable uses of the area involved."

During the study, the Coast Guard is directed to consult with federal and state agencies and to "consider the views of representatives of the maritime community, port and harbor authorities or associations, environmental groups, and other parties who may be affected by the proposed action."

In accordance with the PWISA, the Secretary has the discretion to modify the location or limits of designated safety fairways, where an adjustment is necessary to accommodate the needs of other uses which cannot be reasonably accommodated otherwise. However, the PWISA also stipulates that such an adjustment should not, in the judgment of the Secretary, "unacceptably adversely affect the purpose for which the existing designation was made and the need for which continues."

The results of this study will be published in the Federal Register. If the Coast Guard determines that new or modified routing measure designations are needed, a Notice of Proposed Rulemaking will be published.

It is anticipated that the study will be concluded by July 1988.


T.J. Wojnar,
Rear Admiral, U.S. Coast Guard, Chief Office of Navigation.

[FR Doc. 86-4229 Filed 2-26-86; 8:45 am]

BILLING CODE 4310-14-M

INTERSTATE COMMERCE COMMISSION

49 CFR Part 1244

[Ex Parte No. 385; Sub-2]

Procedures on Release of Data From the ICC Waybill Sample

AGENCY: Interstate Commerce Commission.

ACTION: Extension of time to file comments.

SUMMARY: The notice of proposed rulemaking in this proceeding was served on January 8, 1986 and published in the Federal Register, at 51 FR 757, January 8, 1986. February 24, 1986, was given as the due date for comments. This is to give notice that the time for filing comments has been extended for an additional 45 days.

DATE: Comments must be received on or before April 10, 1986.

Comments: An original and 15 copies of any comments referring to Ex Parte No. 385 (Sub-No. 2) should be sent to: Office of the Secretary, Case Control Branch, Interstate Commerce Commission, Washington, DC 20423.

FOR FURTHER INFORMATION CONTACT:
James A. Nash, Tel. (202) 275-8644
or

SUPPLEMENTARY INFORMATION: The Interstate Commerce Commission has received a petition from the Association of American Railroads (AAR) requesting a 45-day extension for filing comments in this proceeding. AAR states that the extension will enable the railroad industry to determine whether and to what extent an industry position can be developed. Also, they note that an industry position will expedite the administrative process by eliminating the filing of unnecessary duplicative material and by enabling more precise identification of key issues.

We agree that the 45-day extension is warranted. It will provide the railroads with adequate time to formulate their joint as well as individual positions. Also, this extension will not unduly burden any affected parties because the proposed rules essentially adopt the Commission's Office of Transportation Analysis' current policy for handling waybill requests.


By the Commission. Heather J. Gradison, Chairman.

James H. Bayne,
Secretary.

[FR Doc. 86-4229 Filed 2-26-86; 8:45 am]

BILLING CODE 7035-01-M
REPORT OF DANGER TO NAVIGATION

Hydrographic Survey Registry Number:  H-10226 (1986-88)
State:  Alabama
General Locality:  Gulf of Mexico
Sublocality:  Approaches to Mobile Bay
Project Number:  OPR-J217, Hydrographic Field Party #1

The following items were discovered during office processing:

An uncharted obstruction with a least depth of 6-feet at MLLW.

An uncharted obstruction with a least depth of 41-feet at MLLW.

Affected Nautical Charts:

<table>
<thead>
<tr>
<th>CHART NUMBER</th>
<th>EDITION NO.</th>
<th>DATE</th>
<th>SURVEYED DEPTH</th>
<th>CHARTED HORIZ. DATUM</th>
<th>GEOGRAPHIC POSITION</th>
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<tr>
<td>11378</td>
<td>22</td>
<td>Nov 21/87</td>
<td>6 ft</td>
<td>NAD 27 30°13'52.74&quot; 88°03'44.95&quot;</td>
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<td>11378</td>
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<td>Nov 21/87</td>
<td>41 ft</td>
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<td>May 30/87</td>
<td>6 ft</td>
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<td>41 ft</td>
<td>NAD 27 30°09'31.26&quot; 88°07'15.39&quot;</td>
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<tr>
<td>11360</td>
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Questions concerning this report should be directed to the Atlantic Marine Center, Hydrographic Surveys Branch at telephone (804) 441-6746 or FTS 827-6746.

Attachment

cc: N/CG221
The portions of the U. S. Coast Pilot 5, 19th edition, August 1986, pertaining to Survey H-10226 were reviewed. No previously unsubmitted changes are necessary.

Respectfully submitted,

David W. Moeller
LTJG, NOAA
OIC, HFP-1
The hydrographic records transmitted with this survey are complete and adequate for charting purposes. No additional field work is recommended.

No direct supervision was given by me during the field work.

Approved and forwarded,

David A. Waltz, LCDR NOAA
Chief, Hydrographic Field Parties Section
TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE: March 11, 1988
MARINE CENTER: Atlantic
OPR: J217
HYDROGRAPHIC SHEET: H-10226
LOCALITY: Alabama, Gulf of Mexico

TIME PERIOD: September 17, 1986 - January 7, 1988
TIDE STATION(S) USED: 873-5180 Dauphin Island, AL

PLANE OF REFERENCE (MEAN LOWER LOW WATER): 2.68 ft.

HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 1.3 ft.

REMARKS: RECOMMENDED ZONING

1. Apply a -0hr 15 minute time correction to all heights.

CHIEF, TIDAL DATUM QUALITY ASSURANCE SECTION

[Signature]
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<th>B</th>
<th>C</th>
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Approved:

Chief Geographer

SEP 27 1988
02/06/89

HYDROGRAPHIC SURVEY STATISTICS
REGISTRY NUMBER: H-10226

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<tr>
<th>Description</th>
<th>Time-Hours</th>
<th>Date Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUMBER OF CONTROL STATIONS</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>NUMBER OF POSITIONS</td>
<td>3890</td>
<td></td>
</tr>
<tr>
<td>NUMBER OF SOUNDINGS</td>
<td>24691</td>
<td></td>
</tr>
<tr>
<td>TIME-HOURS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>* PREPROCESSING EXAMINATION</td>
<td>126</td>
<td>04/19/88</td>
</tr>
<tr>
<td>VERIFICATION OF FIELD DATA</td>
<td>284</td>
<td>09/21/88</td>
</tr>
<tr>
<td>QUALITY CONTROL CHECKS</td>
<td>111</td>
<td></td>
</tr>
<tr>
<td>EVALUATION AND ANALYSIS</td>
<td>171</td>
<td>02/02/89</td>
</tr>
<tr>
<td>FINAL INSPECTION</td>
<td>11</td>
<td>01/12/89</td>
</tr>
<tr>
<td>TOTAL TIME</td>
<td>577</td>
<td></td>
</tr>
<tr>
<td>MARINE CENTER APPROVAL</td>
<td></td>
<td>02/03/89</td>
</tr>
</tbody>
</table>

* Preverification time is not considered as part of total survey time.
LETTER TRANSMITTING DATA

TO:

Chief, Data Control Branch, N/CG243
Room 151, WSC-1
Hydrographic Surveys Branch
Rockville, MD 20852

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-10226
Alabama, Gulf of Mexico, Approaches to Mobile Bay

Pkg #1 (Tube) containing:
1 Original Smooth Sheet for H-10226
1 Original smooth position overlay
2 Original excess overlays
5 Smooth field sheets
1 Original Descriptive Report for H-10226

Pkg #2 (Box) containing:
1 Envelope containing supplemental data removed from printouts
1 Envelope containing miscellaneous data removed from the original Descriptive Report
1 Cahier with final sounding printout
1 Cahier with final position printout and control listing

(page 1 of 2)

FROM: (Signature) Richard H. Whitfield

RECEIVED THE ABOVE
(Name, Division, Date)

Return receipted copy to:

Chief, Hydrographic Surveys Branch,
N/MOA23
Atlantic Marine Center
439 W. York Street
Norfolk, VA 23510-1114
LETTER TRANSMITTING DATA

TO:

Chief, Data Control Branch, N/CG243
Room 151, WSC-1
Hydrographic Surveys Branch
Rockville, MD 20852

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.

Pkg #3 (box) continued:
2 Accordian files with fathograms, master tape printouts, and
corrector printouts for:
VESNO 1257 JD's for 1986: 279, 282, 303, 323, and 328
1987: 099, 100, 106, 107, 111,
113 (barcheck only), 114, 125, 128,
132, 139, 162, 167, 175, 190, 194,
and 259
1988: 007
VESNO 0518 JD's for 1986: 260, 265, 266, 267, 268, 269, 276,
281, 295, 300, 301, and 302
1987: 222, 231, 233, 237, 238, 240, 243,
246, 257, 258, 289, 292, 293, and
302

Richard H. Whitfield

Return receipted copy to:

Chief, Hydrographic Surveys Branch,
N/MA23
Atlantic Marine Center
439 W. York Street
Norfolk, VA 23510-1114
1. INTRODUCTION

a. No unusual problems were encountered during office processing.

b. Notes in the Descriptive Report were made in red during office processing.

2. CONTROL AND SHORELINE


b. Shoreline originates with 1:20,000 scale, final reviewed, Class III, Photogrammetric Manuscript TP-00930 of 1981-82. Shoreline revisions from the field data are shown in red on the smooth sheet.

c. Horizontal control used for this survey during data acquisition is based upon the North American Datum of 1927. 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 NAD83. To place this survey on the NAD83 datum, move the projection lines 0.726 seconds (22.4 meters or 1.12 mm at the scale of the survey) south in latitude, and 0.003 seconds (0.1 meters or 0.005 mm at the scale of the survey) west in longitude.

3. HYDROGRAPHY

a. Soundings at crossings are in good agreement and comply with the criteria found in sections 4.6.1. and 6.3.4.3. of the HYDROGRAPHIC MANUAL, and section 6.6. of the Project Instructions.

b. The standard twelve (12), eighteen (18), thirty (30), and sixty (60) foot depth curves could be defined in their entirety. The standard zero (0), six (6), and charted supplemental three (3) foot depth curves were not defined in their entirety due to vessel safety. Dashed curves were added to better show bottom topography.

c. The development of the bottom configuration and determination of least depths is considered adequate except for the following:

Numerous spikes throughout the survey were noted on the fathograms as fish by the hydrographer. None of these spikes were investigated. Further development should have been conducted to verify or disprove these spikes before regarding these items as fish. This could eliminate the charting of nonexistent shoal soundings or obstructions. One (1) spike rising five (5) feet from the bottom and considered fish by the hydrographer is questionable, and is shown on the present survey as an obstruction. See section 7.a.5) of this report for a complete discussion and charting recommendation.

4. CONDITION OF SURVEY

The smooth sheet and accompanying overlays, hydrographic records and reports adequately conform to applicable requirements of the HYDROGRAPHIC MANUAL.

5. JUNCTIONS

H-10179 (1985-87) 1:20,000 to the east
H-10247 (1987) 1:20,000 to the west
H-10206 (1985) 1:40,000 to the south

The smooth sheets for surveys H-10179 (1985-87) and H-10206 (1985) are archived at National Ocean Service (NOS) headquarters, Rockville, Maryland and a standard junction could not be made. In this case, the note "ADJOINS" has been shown on the present survey smooth sheet. The surveys are in substantial agreement with the present survey. Depths
generally agree to within one (1) foot. Any adjustments to
the depth curves in the junctional areas will have to be made
at headquarters on the chart during compilation.

An excellent junction was effected between the present

There is no contemporary survey to the northeast of the
present survey. Charted hydrography and the present survey
soundings are in general harmony.

6. COMPARISON WITH PRIOR SURVEYS

a. Hydrographic

<table>
<thead>
<tr>
<th>Survey</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>H-4023</td>
<td>1:40,000</td>
</tr>
<tr>
<td>H-4121</td>
<td>1:80,000</td>
</tr>
<tr>
<td>H-8526</td>
<td>1:10,000</td>
</tr>
<tr>
<td>H-9109</td>
<td>1:20,000</td>
</tr>
</tbody>
</table>

The prior surveys listed above cover the present
survey area in its entirety.

Prior surveys H-4023 (1917-18) and H-4121 (1920) are
adequately discussed in section K. of the Descriptive Report
and need no further discussion.

Prior survey H-8526 (1920) is adequately discussed in
section K. of the Descriptive Report. The prior survey
covers only a small area offshore as prior survey H-9109
(1970) supersedes the majority of the prior survey. The
following should be noted:

On chart 11378, middle panel of side B, what appears
to be charted groins on the south shore of Dauphin Island
from longitude 88°05'12"W to longitude 88°06'00"W, are one
(1) foot soundings originating with the prior survey, and
should be deleted from the chart.

Prior survey H-9109 (1970) covers the area of the
Main Ship Channel from the approximate thirty (30) foot depth
curve to the shoreline. This area is very dynamic. The most
noticeable change is that Sand Island has shifted to the
northwest. Present survey depths compare favorably with
present survey soundings and show a general trend of being
plus or minus (+/-) one (1) to three (3) feet. Present
survey depths are also deeper along the east side of the
Mobile Ship Channel.

The following should be noted:

1) Bottom samples were not taken on the present
survey by the hydrographer in a major portion of the area
covered by H-9109 (1930). Bottom characteristics were
brought forward from the prior survey to supplement the present survey.

2) AWOIS Item #0449 is presently charted as a dangerous sunken wreck in Latitude 30°12'48.87"N, Longitude 88°02'08.56"W, and originates with Local Notice to Mariners 37/45 as the U.S Coast Guard Cutter "MAGNOLIA" that sunk in Latitude 30°12'39"N, Longitude 88°02'09"W. The wreck is shown on the prior survey as a wreck (masts) and signal 18. The wreck was neither verified nor disproved by the hydrographer. The wreck (masts) was brought forward from the prior survey as a dangerous sunken wreck to supplement the present survey. It is recommended that the dangerous sunken wreck be retained as charted.

3) AWOIS Item #3634 is presently charted as a dangerous sunken wreck in Latitude 30°11'55.70"N, Longitude 88°04'00.13"W, and originates with the prior survey as a visible wreck, signal 19, with masts baring 17 feet at MHW. Mainscheme hydrography shows no evidence of the wreck however, further investigations to disprove the wreck were not conducted by the hydrographer. The visible wreck (masts) was brought forward from the prior survey as a dangerous sunken wreck to supplement the present survey. It is recommended that the dangerous sunken wreck be retained as charted.

4) AWOIS Item #3636 is a charted obstruction with a least depth of 12-feet in Latitude 30°11'10.2"N, Longitude 88°02'58.8"W, originating with prior survey H-6686 (1941) and shown on H-9109. The obstruction is considered neither verified nor disproved by the present survey, and was brought forward from the prior survey to supplement the present survey. It is recommended that the obstruction with a depth of 12-feet (12 obstr) be retained as charted.

5) The following charted soundings originate with the prior survey, and are considered neither verified nor disproved by the present survey. The soundings were brought forward from the prior survey to supplement the present survey:

<table>
<thead>
<tr>
<th>Sounding</th>
<th>Latitude N</th>
<th>Longitude W</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-feet</td>
<td>30°11'17.5&quot;</td>
<td>88°03'03.0&quot;</td>
</tr>
<tr>
<td>11-feet</td>
<td>30°11'12.5&quot;</td>
<td>88°03'05.3&quot;</td>
</tr>
<tr>
<td>11-feet</td>
<td>30°11'00.0&quot;</td>
<td>88°03'11.5&quot;</td>
</tr>
</tbody>
</table>

It is recommended that these soundings be retained as charted.

Except as noted above the present survey is adequate to supersede the above prior surveys within the common area.
b. Wire Drag

H-9374WD (1973) 1:40,000

The comparison with the prior wire drag survey and the present survey revealed five (5) groundings and two (2) hangs that fall within the present survey area. These items are discussed as follows:

1) A 58-foot grounding in Latitude 30°06'27.0"N, Longitude 88°02'24.0"W, is charted as a 57-foot wire drag clearance depth, and originates with the prior wire drag survey. This grounding has been designated as AWOIS item #3625. A fathometer search with reduced line spacing was conducted in the area with no indication of shoaling. Present survey depths in the area are sixty-five (65) to sixty-six (66) feet. It is recommended that the charted 57-foot wire drag clearance depth be deleted from the chart.

2) A hang on an anchor extending two (2) feet off the bottom in Latitude 30°08'16.20"N, Longitude 88°05'10.2"W is charted as an obstruction with a 34-foot wire drag clearance depth, and originates with the prior wire drag survey. This hang has been designated as AWOIS item #3642. An accurate depth was not determined at the time of the hang. A fathometer search with reduced line spacing was conducted in the area with no indication of the obstruction. Present survey depths in the area are forty-two (42) to forty-five (45) feet, and are in agreement with the depths at the time of the hang. The obstruction is considered neither verified nor disproved by the present survey and was brought forward from the prior wire drag survey to supplement the present survey. It is recommended that the charted obstruction with a 34-foot wire drag clearance depth be retained.

3) AWOIS item #3644 is a charted obstruction ED, Shoaling to 28 feet reported 1973 in Latitude 30°08'00.0"N, Longitude 88°05'15.0"W originating with Local Notice to Mariners 10 of 1973. The charted position of the obstruction was effectively cleared by forty-one (41) feet on prior wire drag survey H-9374WD (1974). A fifty (50) meter fathometer search was performed by the present survey with no indication of shoaling to 28 feet. Present survey depths in the area range from forty-five (45) to fifty (50) feet. It is recommended the charted obstruction ED and shoaling to 28 feet reported 1973 be deleted from the chart, and a 41-foot wire drag clearance depth with the label obstruction be charted in Latitude 30°08'00.0"N, Longitude 88°05'24.0"W.

4) A hang at fifty-four (54) feet on an anchor in Latitude 30°07'36.0"N, Longitude 88°04'07.0"W is charted as an obstruction with a 50-foot wire drag clearance depth and originates with the prior wire drag survey. This hang has been designated as AWOIS item #3647. This item was not
investigated by the hydrographer and was brought forward from the prior wire drag survey to supplement the present survey. It is recommended that the obstruction with a 50-foot wire drag clearance depth be retained as charted.

5) A 58-foot grounding in Latitude 30°07'25.0"N, Longitude 88°03'11.0"W is charted as a shoal with a 55-foot wire drag clearance depth, and originates with the prior wire drag survey. This grounding has been designated as AWOIS item #3648. A fathometer search with reduced line spacing was conducted in the area with no indication of shoaling. Present survey depths in the area are sixty-one (61) to sixty-two (62) feet. It is recommended that the charted shoal with a 55-foot wire drag clearance depth be deleted from the chart. Do not concur; development inadequate, retain as charted. SBB

6) The following groundings originate with the prior wire drag survey, and were not discussed by the hydrographer:

<table>
<thead>
<tr>
<th>Grounding</th>
<th>Latitude (N)</th>
<th>Longitude (W)</th>
<th>Cleared Survey Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>61-foot</td>
<td>30°06'46.0&quot;</td>
<td>88°02'37.0&quot;</td>
<td>52-feet</td>
</tr>
<tr>
<td>56-foot</td>
<td>30°07'15.0&quot;</td>
<td>88°02'20.0&quot;</td>
<td>Not Cleared</td>
</tr>
<tr>
<td>52-foot</td>
<td>30°07'33.0&quot;</td>
<td>88°01'42.0&quot;</td>
<td>58-feet not cleared</td>
</tr>
<tr>
<td>60-foot</td>
<td>30°07'39.0&quot;</td>
<td>88°01'41.0&quot;</td>
<td>61-feet</td>
</tr>
</tbody>
</table>

Examination of the present survey field records show no indication of any shoaling in the area of the charted depths listed. It is recommended that these groundings be removed from the chart. Do not concur; retain as charted. SBB

7) In the following vicinities the wire drag effective depths on the prior wire drag survey and the present survey soundings are in conflict. The wire drag effective depths are one (1) foot deeper that present survey depths:

<table>
<thead>
<tr>
<th>Effective Depth (ft)</th>
<th>Latitude (N)</th>
<th>Longitude (W)</th>
<th>Present Depths (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>63</td>
<td>30°06'09.4&quot;</td>
<td>88°04'19.2&quot;</td>
<td>62-64</td>
</tr>
<tr>
<td>63</td>
<td>30°05'56.9&quot;</td>
<td>88°06'23.0&quot;</td>
<td>62-65</td>
</tr>
<tr>
<td>50</td>
<td>30°07'38.2&quot;</td>
<td>88°05'52.6&quot;</td>
<td>49-51</td>
</tr>
</tbody>
</table>

These differences may be attributed to subsequent change in the bottom configuration and/or the greater accuracy of the present survey in establishing survey depths. It is recommended that these conflicts be disregarded.

Except as noted above the present survey is adequate to supersede the above prior wire drag survey within the common area.

11378 (22nd Ed., Nov. 21, 1987)
a. Hydrography

The charted hydrography originates with the previously discussed prior surveys and requires no further consideration. Specific items discussed in section L., pages 10 and 11 of the Descriptive Report have charting recommendations that require no additional comments except as noted in that report. In addition, the following should be noted:

1) AWOIS item #3627 is a charted obstruction, fish haven along the charted sixty-foot curve in approximate latitude 30°07'18"N from Longitude 88°04'30"W to longitude 88°11'20"W, originating with U. S. Army Corps of Engineers chart letter 921 of 1959 (CL921/59). The present survey shows the sixty-foot curve has migrated 400 to 1600 meters further south than charted. The present survey shows no indication of any obstructions within the charted limits of the fish haven. It is recommended the chart compiler further research information concerning the fish haven and its charting disposition.

Additionally, the privately maintained white and orange buoy charted in Latitude 30°07'00"N, Longitude 88°08'00"W marking the charted obstruction, fish haven was neither discussed nor located by the hydrographer. It is recommended that the charting action be deferred to the chart compiler.

2) Charted soundings in the dump site located in the vicinity of Latitude 30°09'00"N, Longitude 88°06'00"W should be revised to reflect the present survey depths.

3) As discussed in section L., page 11 of the Descriptive Report, the following AWOIS items are considered neither verified nor disproved by the present survey:

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Latitude</th>
<th>Longitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>3631</td>
<td>Dangerous sunken wreck PD</td>
<td>30°14'24&quot;N</td>
<td>88°09'24&quot;W</td>
</tr>
<tr>
<td>3633</td>
<td>Dangerous obstruction PA</td>
<td>30°12'35&quot;N</td>
<td>88°04'06&quot;W</td>
</tr>
<tr>
<td>3637</td>
<td>Dangerous sunken wreck</td>
<td>30°10'54&quot;N</td>
<td>88°03'26&quot;W</td>
</tr>
<tr>
<td></td>
<td>(12 feet reported)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3640</td>
<td>Dangerous sunken wreck PA</td>
<td>30°10'18&quot;N</td>
<td>88°02'12&quot;W</td>
</tr>
</tbody>
</table>

It is recommended that these AWOIS items be retained as charted.

4) An uncharted obstruction was located by the hydrographer in Latitude 30°13'52.74"N, Longitude 88°03'44.95"W with a depth of six (6) feet. No further investigation was conducted. It is recommended that an
obstruction with a depth of six (6) feet at MLLW (6 obstr) be charted as shown on the present survey.

5) An uncharted obstruction was located by the hydrographer in Latitude 30°09'31.26"N, Longitude 88°07'15.39"W with a depth of forty-one (41) feet. No further investigation was conducted. It is recommended that an obstruction with a depth of forty-one (41) feet at MLLW (41 obstr) be charted as shown on the present survey. The obstruction falls within the limits of a charted dump site and is not considered a danger to navigation.

6) An uncharted NOAA lighted weather buoy #42015 was located by the hydrographer in Latitude 30°09'05.31"N, Longitude 88°09'56.08"W. It is recommended that the buoy be charted as shown on the present survey.

7) The limits of a dump site (dredge material) shown on the hydrographer's smooth field sheet in the vicinity of Latitude 30°11'12"N, Longitude 88°04'08"W are recommended for charting by the hydrographer. The dump site was not discussed in the Descriptive Report. A telephone conversation with Ms. Cheryl Burk of the U.S. Army Corps of Engineers, Vicksburg, Mississippi, Tel: (601) 634-4029, confirmed that the area is an experimental "Feeder Berm", and has been discontinued. The limits of this area as shown on the hydrographer's smooth field sheet should not be charted.

8) A charted pipe PA in Latitude 30°12'08.0"N, Longitude 88°02'06.0"W originating with an unknown source, was not investigated by the hydrographer. A discussion with LTJG D. W. Moeller, during office processing confirmed that the pipe was not visible. It is recommended that the charted pipe PA be revised and charted as a submerged pipe PA.

9) The charted dangerous sunken wreck in Latitude 30°12'08.44"N, Longitude 88°04'06.41"W was investigated to the extent that mainscheme hydrography showed no evidence of the wreck. It is not considered disproved by the present survey. It is recommended that the dangerous sunken wreck be retained as charted and the notation position approximate (PA) be added as the charted position is a conversion of Loran-C rates.

The Operations Section, Hydrographic Surveys Branch, NOS headquarters, should take note of the possibility that the sunken wreck and the charted obstruction PA, 818 meters to the north (AWOIS Item 3633), are the same. The obstruction PA (AWOIS Item 3633) is described as an obstruction 12 feet by 30 feet two (2) feet below the surface, and the sunken wreck is described as a barge with a reported least depth of three (3) feet below the surface. It is recommended that any subsequent charting information be
examined to determine if the above items are the same feature or two separate features.

Except as noted above the present survey is adequate to supersede the charted hydrography in the common area.

b. Aids to Navigation

The hydrographer located sixteen (16) floating and four (4) fixed aids to navigation in the survey area. These aids appear adequate to serve their intended purpose.

The following should be noted:

1) A charted yellow can buoy "BB" in Latitude 30°10'47.0"N, Longitude 88°04'40.0"W was not located by the present survey. The buoy is shown only on chart 11378 (22nd Ed., Nov. 21/87). It is believed that the buoy marks the experimental "Feeder Berm" discussed in section 4.b. of this report. It is recommended that the yellow can buoy "BB" be deleted from the chart unless other charting information indicates otherwise.

2) A charted buoy (flashing yellow "BB") within the limits of a charted dump site in Latitude 30°09'54"N, Longitude 88°07'00"W was not located by the present survey. The buoy is shown only on chart 11376 (39th Ed., May 30/87). It is recommended that the buoy (flashing yellow "BB") be retained as charted unless subsequent information authorizes its removal from the chart.

c. Controlling Depths

There are no conflicts with the charted channel controlling depths in the Entrance Channel of the Main Ship Channel except in the right outside quarter of the channel in the vicinity of Latitude 30°10'07"N, Longitude 88°03'00"W where depths of forty (40) and forty-one (41) feet were obtained by the present survey. A forty-one (41) foot depth is also shown in the approximate right outside quarter in Latitude 30°12'39"N, Longitude 88°02'18"W. Reports of shoaling in these areas are presently shown on the charts. It is recommended that the chart compiler ascertain whether the channel has been dredged and use any after dredging surveys to make any necessary notations.

d. Dangers to Navigation

Two dangers to navigation were discovered during office processing, and a letter to the Commander, Eighth Coast Guard District, New Orleans, Louisiana, and N/CG221, Chart Information Section has been submitted. A copy of the letter is appended. See also section 7.a.4) and 5) of this report.
8. **COMPLIANCE WITH INSTRUCTIONS**

This survey adequately complies with the Project Instructions except for the following:

The hydrographer did not meet the requirements for bottom samples as found in section 8.1. of the Project Instructions.

9. **ADDITIONAL FIELD WORK**

This is an adequate basic survey. Additional work at an opportune time is requested for items discussed in sections 3., 6., and 7. of this report.

---

Reginald L. Keene  
Cartographic Technician  
Verification of Field Data

Richard H. Whitfield  
Cartographer  
Evaluation and Analysis

Robert R. Hill  
Senior Cartographic Technician  
Verification Check
INSPECTION REPORT
H-10226

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 complies with National Ocean Service requirements except as noted in the Evaluation Report. The survey records comply with NOS requirements except where noted in the Evaluation Report.

Inspected

[Signature]
Robert G. Roberson
Chief, Evaluation and Analysis
Group
Hydrographic Surveys Branch

[Signature]
William A. Wert, LCDR, NOAA
Chief Hydrographic Surveys Branch

Approved: 3 February 1989

[Signature]
Ray E. Moses, RADM, NOAA
Director, Atlantic Marine Center
OVERLAY TO ACCOMPANY H-10226
ALABAMA
GULF OF MEXICO
APPROACHES TO MOBILE BAY
17 SEP 1986 TO 07 JAN 1988
SCALE 1:20,000
SOUNDINGS IN FEET AT MLLW
HORIZONTAL DATUM: NAD 1927

wellhead (lighted)
"SFIC MO 114 1"

88°02'00"
NAD 83 30°04'00"
DAB 6/30/88
### INSTRUCTIONS
A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.
1. Letter all information.
2. In “Remarks” column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under “Comparison with Charts” in the Review.

<table>
<thead>
<tr>
<th>CHART</th>
<th>DATE</th>
<th>CARTOGRAPHER</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>11378</td>
<td>9/18/89</td>
<td>Alindaen</td>
<td>Full Part Before After Marine Center Approval Signed Via Full application of Drawings No. soundings from SS.</td>
</tr>
<tr>
<td>11376</td>
<td>10/6/89</td>
<td>Alindaen</td>
<td>Full Part Before After Marine Center Approval Signed Via Full application of Drawings No. soundings from SS &amp; in agreement with 11378.</td>
</tr>
<tr>
<td>11374</td>
<td>10/6/89</td>
<td>Alindaen</td>
<td>Full Part Before After Marine Center Approval Signed Via Full application of soundings from SS &amp; in agreement with 11378.</td>
</tr>
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<td>11377</td>
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SUPERSEDES C&GS FORM 832 WHICH MAY BE USED.