H11080

NOAA FORM 76-35A

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

DESCRIPTIVE REPORT

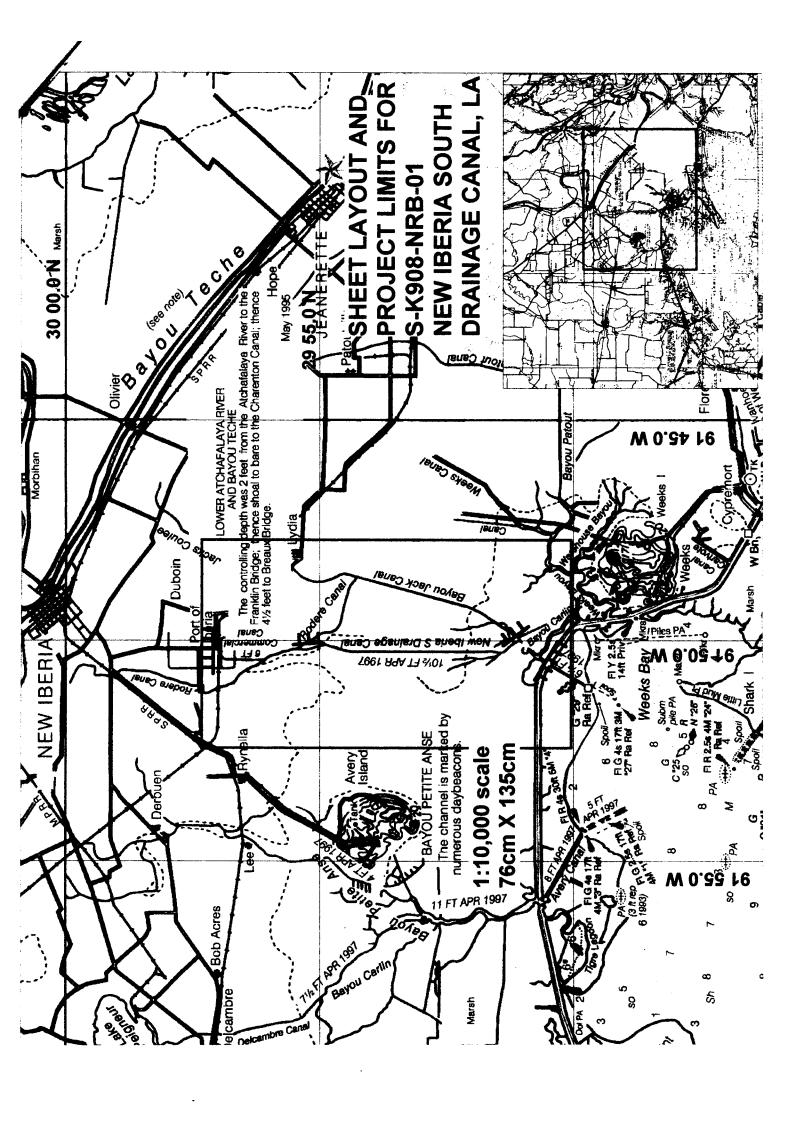
Type of Survey	Basic Hydrographic
Field No.	
Registry No.	H11080
	LOCALITY
State	Louisiana
General Locality	New Iberia
Locality	New Iberia Drainage Canal
	2001
Joh	CHIEF OF PARTY n W. Humphrey, NOAA

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DATE

November 21, 2001

NOAA FORM 77-28 (10/72)	U.S. DEPARTMENT OF COMMERC NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	
нү	DROGRAPHIC TITLE SHEET	OPR-S-K908
	The Hydrographic Sheet should be accompanied by this pletely as possible, when the sheet is forwarded to the f i c e .	
State Louisiana		
	beria Drainage Canal	
Locality New I beria		
Scale 1:10,000	survey	8-23-01
dated 8-15	No.	
Vessel Navigation Re	esponse Team 2 NOAA Launch 1210	
Chief of party CDR. J	W. John Humphries HUMPHREY	
Surveyed by David B.	Elliott, Mark J. McMann, Robrt W. Ramsey	
pole		
by	DBE, MJM, RWR	
by		
by	by	
Verification by		
Soundings in meter	rs feet at MLLW MLLW	
REMARKS	ANDWRITTEN NOTES INT	1. Derrichin Penat
	made during office Pia	
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FIELD EXAMINATION REPORT

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FIELD EXAMINATION REPORT

to Accompany
Hydrographic Survey H11080
OPR-S-K908-NRB
1:10,000 - 2001

NAVIGATION SERVICES DIVISION
Navigation Response Team 2 -- Launch 1210
Capt. John Wilder, Chief - NOAA

This examination was conducted according to Port Instructions OPR-S-K908-NRB, New Iberia South Drainage Canal, Louisiana dated August 13, 2001.

The purpose of this project is to obtain hydrography in the New Iberia South Drainage Canal, Louisiana, in support of a new 1:40,000 scale inset to National Ocean Service nautical chart 11350. The new chart coverage responds to a request by the Port of New Iberia for an inset of the port and access via the New Iberia Drainage Canal.

A. AREA SURVEYED

There was no sheet letter designated for this project.

The approximate survey area limits are:

29°56′58.7"N 091°51′26.4"W 54′00″ 29°50′13.9"N ∞" 091°49′05.6"W 46′00″

This survey was conducted from: August 23, 2001 (DN:235).

B. DATA ACQUISITION AND PROCESSING - See also Evaluation Report

B1. Equipment

An Innerspace model 448 depth sounder, S/Ns 188 was used to collect all echo soundings on this survey. A standard lead line calibrated in meters, S/N 1210, was used during this survey for comparison with the echo sounder. No problems were encountered with any of the sounding equipment.

A Starlink DGPS Beacon Receiver (S/N 795) and antenna (S/N 4132) was used as the primary navigation station on launch 1210.

The instrument used for determining corrections for the speed of sound through the water column was a Seabird-Seacat Velocity Profiler, model 19-03, S/N 198671-1477.

NOAA launch 1210, a 27-foot SeaArk with a draft of 0.5 meters, was used to collect all survey data. There were no unusual vessel configurations or problems encountered with the vessel.

B2. Quality Control

The integrity of the survey data for H11080 has been insured by following the Field Procedures Manual and the NOS Hydrographic Surveys Specifications and Deliverables Manual, June 2000. Due to the nature of this survey as Chart Evaluation, percentages of crosslines were not calculated or specific to mainscheme hydrography.

The lead line for launch 1210 was calibrated using a steel tape on April 12, 2001 (DN:102). No corrections were necessary. A static draft of 0.5 meters was applied to the sounding plots by the HPS REAPPLY program. The draft was measured by subtracting the difference from a punch mark on the side of launch 1210, 0.6 meter above the transducer, to the water surface.

Settlement and squat measurements for launch 1210 were taken on Apr. 12, 2001 (DN: 102). These measurements were conducted in New Orleans, LA using the level method. Settlement and squat correctors were applied to the sounding plots using the HPS REAPPLY program.

Differential GPS (DGPS) was used for all hydrographic data acquired on this survey. DGPS performance checks were conducted in accordance with FPM 3.4.4 by comparing the DGPS position of the vessel to a high accuracy calibration point.

B3. Corrections to Echo Soundings

There are no deviations to be discussed in this section. Refer to Section "C" Correction to Echo Soundings of the Data Acquisition and Processing Report.

C. VERTICAL AND HORIZONTAL CONTROL - Sevalor Evaluation Report

The instrument used for determining corrections for the speed of sound through the water column was a Seabird-Seacat Velocity Profiler. The manufacturer calibrated this unit on December 28, 2000. Data quality assurance tests were performed after each cast. Program VELOCITY was used for computing the correctors. Corrections were applied to the sounding plot using the HPS REAPPLY program.

Field reductions of soundings were downloaded from the Internet at Sabine Pass North, TX Gage No. 877-0570. Unverified actual tides were applied in post processing. A copy of the smooth tide package request for this survey is included.

All elevations and soundings on survey H11080 are based on MLLW unless otherwise specified.

The horizontal control datum for this project is the North American Datum (NAD) of 1983 in UTM. The control reference station used for this survey was the USCG DGPS English Turn, LA (Station ID #814), located at 29°52.73743'N, 089°56.50329'W.

D. RESULTS AND RECOMMENDATIONS - See also Evaluation Report

D1. Chart Comparison

The following is a list of Charts compared during H11080:

Chart Number	Edition	Edition Date
11345	30th	March 10, 2001
11350	50th	August 28, 1999

There were no soundings available for comparison to H11080.

D2. Additional Results

In addition to the three lines in the Commercial Channel and Rodere Channel, centerlines were run in the major slips connecting to the navigable channels.

With unverified tides from Sabine Pass North (877-0570), the controlling depth on the centerline of the New Iberia Drainage Canal was found to be 12 feet at MLLW at 29°52'52.7"N, 091°50'20.3"W, survey position no. 315.

E. APPROVAL SHEET

Attached next page.

APPROVAL SHEET OPR-S-K908-NRB Field Examination – H11080 New Iberia, LA NRT-2 Launch 1210 2001

This Basic Survey consisting of three primary channel lines and centerlines on slips for the New Iberia South Drainage Canal is complete and adequate for it's intended purpose. The Port of New Iberia requested the contemporary soundings for a new NOAA chart inset. The survey includes a Field Examination Report (ie. Descriptive Report), digital data and all accompanying records.

The following reports are included with this submission:

Field Examination Report (DR)	August 2001	+ Total
Data Acquisition and Processing Report	August 2001	Data Filed w/original Field records
Vertical and Horizontal Control Report	August 2001	held records
Tides and Water Level Package	August 2001	

Approved by: David B. Elliott – Team Leader

NOAA-Navigation Response Team 2

TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE: November 2, 2001

HYDROGRAPHIC BRANCH: Atlantic

HYDROGRAPHIC PROJECT: OPR-K908-NRT2-2001

HYDROGRAPHIC SHEET: H11080

LOCALITY: New Iberia Drainage Canal, LA

TIME PERIOD: August 23, 2001

TIDE STATION USED: 876-5148 Weeks Bay, LA

Lat. 29° 50.2′N Lon. 91° 50.3′W

PLANE OF REFERENCE (MEAN LOWER LOW WATER): 0.000 meters
HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 0.468 meters

TIDE STATION USED: 876-5171 New Iberia Drainage Canal, AK

Lat. 29° 56.7′N Lon. 91° 50.2′W

PLANE OF REFERENCE (MEAN LOWER LOW WATER): 0.000 meters
HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 0.556 meters

REMARKS: RECOMMENDED ZONING

Use zone(s) identified as: WLA1, WLA2, WLA3, WLA4 & WLA5

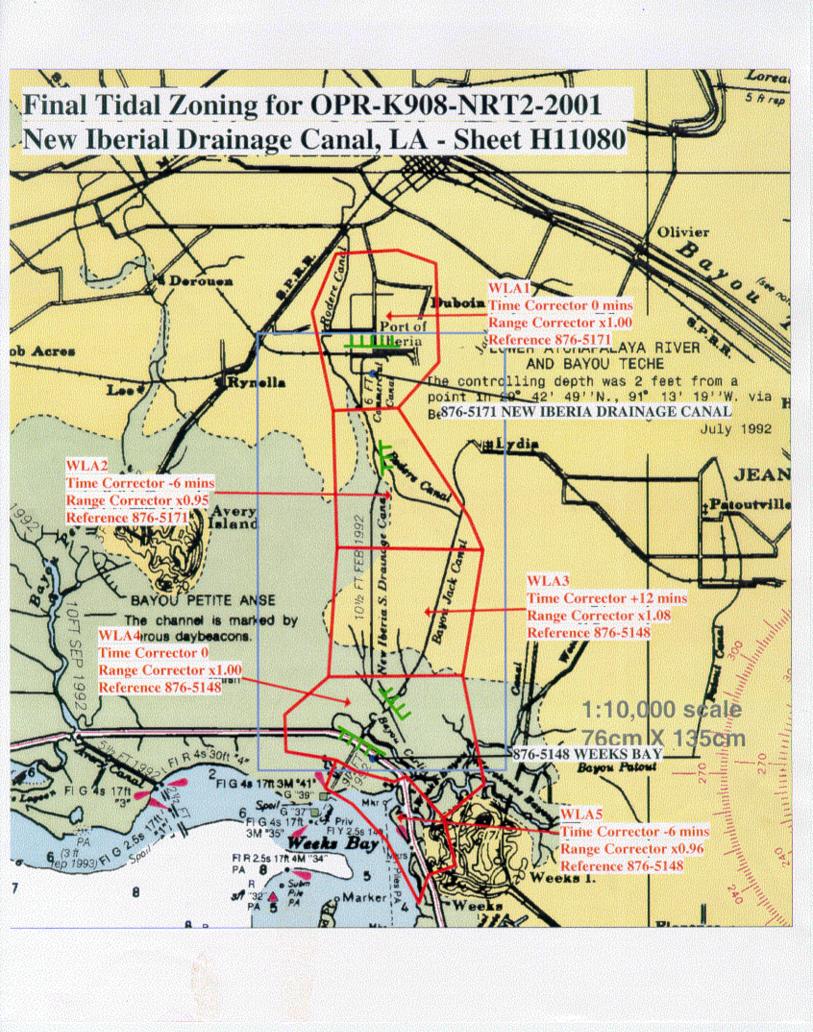
Refer to attachments for zoning information.

Note 1: Provided time series data are tabulated in metric units (meters), relative to MLLW and on Greenwich Mean Time.









Final tide zone node point locations for **OPR-K908-NRT2-2001**, **Sheet H11080**.

Format:

Tide Station (in recommended order of use)

Average Time Correction (in minutes)

Range Correction

Longitude in decimal degrees (negative value denotes

Longitude West),

Latitude in decimal degrees

	Tide Station Order	AVG Time Correction	Range Correction
Zone WLA1 -91.84997 29.933835 -91.856579 29.96124	876-5171	0	1.00
-91.84895 29.977333 -91.829174 29.978398 -91.817094 29.974671 -91.816168 29.947271			
-91.84997 29.933835			
Zone WLA2	876-5171	-6	0.95
-91.802263 29.895114 -91.806604 29.904007			
-91.829175 29.934545			
-91.84997 29.933835			
-91.848746 29.895824			
-91.802263 29.895114			
WLA3	876-5148	+12	1.08
-91.808786 29.860287			
-91.802263 29.895114			
-91.848746 29.895824			
-91.851599 29.859931		J	,
-91.808786 29.860287			*
Zone WLA4	876-5148	0	1.00
-91.814931 29.820649			
-91.801976 29.830064		*	
-91.808786 29.860287		n.	
-91.851599 29.859931			
-91.865522 29.849428			

-91.865213 29.839208			
-91.849153 29.836825			
-91.842629 29.833625			
-91.830804 29.830781			
-91.826727 29.832204			
-91.814931 29.820649			
Zone WLA5	876-5148	-6	0.96
-91.814931 29.820649			
-91.81123 29.807469			
-91.819868 29.804778			
-91.822853 29.796999			
-91.833047 29.814247			
-91.844056 29.824559			
-91.850545 29.827887			
-91.85269 29.828928			
-91.849153 29.836825			
-91.842629 29.833625			
-91.830804 29.830781			
-91.826727 29.832204			

-91.814931 29.820649

NOAA FORM 61-29 (12-71)			REFERENCE NO. N/CS33-63-01
LETTER	TRANSMITTING DATA		DATA AS LISTED BELOW WERE FORWARDED TO YOU BY (Check)
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TO:			REGISTERED MAIL X EXPRESS
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STATION 6815, SSMC3			11/20/2001
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SILVER SPRING, MARY	LAND 20910-3282	.	NUMBER OF PACKAGES 1
include an executed copy of the trans	is to be used for each type of data, as t nittal letter in each package. In additi . This form should not be used for co	on the original and one cor	nagnetism, etc. State the number of packages and by of the letter should be sent under separate cover. ag accounting documents.
	•	H11080	
LOUISIANA,	NEW IBERIA, NEW IBERIA DE	RAINAGE CANAL	·
ONE TUBE CONTAINING TH	E FOLLOWING:		
1 SMOOTH SHEET FOR SUR 1 ORIGINAL DESCRIPTIVE R	VEY H11080 EPORT FOR SURVEY H1108		
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	APHIC BRANCH N/CS33		
439 WEST YORK STF NORFOLK, VA. 23510			
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HYDROGRAPHIC SURVEY STATISTICS REGISTRY NUMBER: H11080

NUMBER OF CONTROL STATIONS		0
NUMBER OF POSITIONS		0
NUMBER OF SOUNDINGS		0
	TIME-HOURS	DATE COMPLETED
PREPROCESSING EXAMINATION	8.5	11/05/2001
VERIFICATION OF FIELD DATA	12.5	11/08/2001
QUALITY CONTROL CHECKS	0.0	
EVALUATION AND ANALYSIS	5.5	
FINAL INSPECTION	2.0	11/19/2001
COMPILATION	0.0	/ /
TOTAL TIME	28.5	
ATLANTIC HYDROGRAPHIC BRANCH A	11/20/2001	

ATLANTIC HYDROGRAPHIC BRANCH EVALUATION REPORT FOR H11080 (2001)

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.

B. AUTOMATED DATA ACQUISITION AND PROCESSING

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

Hydrographic Processing System (HPS) NADCON, version 2.10 MicroStation 95, version 5.05

The smooth sheet was plotted using an Hewlett-Packard DesignJet 2500CP plotter.

C. <u>CONTROL STATIONS</u>

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

To place this survey on the NAD 27 datum move the projection lines 0.741 seconds (22.810 meters or 2.28 mm at the scale of the survey) north in latitude, and 0.426 seconds (11.442 meters or 1.14 mm at the scale of the survey) west in longitude.

All geographic positions listed in this report are on NAD 83 datum unless otherwise specified.

D. <u>RESULTS AND RECOMMENDATIONS</u>

1. <u>COMPARISON WITH CHART</u> 11345 (30th Edition, Mar 10/01) 11350 (23rd Edition, Aug 28/99)

No brown shoreline is shown because the survey scale is 1:10,000 and the chart scale is 1:175,000.

S. MISCELLANEOUS

No Chart compilation will be done by Atlantic Hydrographic Branch personnel in Norfolk, Virginia.

Douglas V. Mason
Cartographic Technician
Verification of Field Data

APPROVAL SHEET H11080

<u>Initial Approvals:</u>

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 digital data for this survey. The survey records and digital data comply with NOS requirements except where noted in the Evaluation Report.

Deborah A. Bland Cartographer, Atlantic Hydrographic Branch	Date: <u>20 No√ 0</u> /
I have reviewed the smooth sheet, accreports. This survey and accompanying digexceed NOS requirements and standards for of nautical charting except where noted in Report.	gital data meet or products in support
James S. Verlaque Lieutenant Commander, NOAA Chief, Atlantic Hydrographic Branch	Date: 20 NoV 0
*************	*******
Final Approval:	
Approved: Samuel P. De Bow, Jr. Captain, NOAA Chief, Hydrographic Survey	Date: 21Novoj