

D00254

U.S. Department of Commerce
National Oceanic and Atmospheric Administration
National Ocean Service

DESCRIPTIVE REPORT

Type of Survey: Natural Disaster Response

Registry Number: D00254

LOCALITY

State(s): North Carolina

General Locality: Morehead City

Sub-locality: Morehead City and Beaufort

2018

CHIEF OF PARTY
LTJG Dylan Kosten

LIBRARY & ARCHIVES

Date:

HYDROGRAPHIC TITLE SHEET

D00254

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(s): **North Carolina**

General Locality: **Morehead City**

Sub-Locality: **Morehead City and Beaufort**

Scale: **10000**

Dates of Survey: **09/17/2018 to 09/18/2018**

Instructions Dated: **N/A**

Project Number: **S-F942-NRT5-18**

Field Unit: **NOAA Navigation Response Team 5**

Chief of Party: **LTJG Dylan Kosten**

Soundings by: **Kongsberg Maritime EM 2040C (MBES)**

Imagery by: **Kongsberg Maritime EM 2040C (MBES Backscatter)**

Verification by: **Pacific Hydrographic Branch**

Soundings Acquired in: **meters at Mean Lower Low Water**

Remarks:

Any revisions to the Descriptive Report (DR) applied during office processing are shown in red italic text. The DR is maintained as a field unit product, therefore all information and recommendations within this report are considered preliminary unless otherwise noted. The final disposition of survey data is represented in the NOAA nautical chart products. All pertinent records for this survey are archived at the National Centers for Environmental Information (NCEI) and can be retrieved via <https://www.ncei.noaa.gov/>. Products created during office processing were generated in NAD83 UTM 18N, MLLW. All references to other horizontal or vertical datums in this report are applicable to the processed hydrographic data provided by the field unit.

DESCRIPTIVE REPORT MEMO

April 24, 2019

MEMORANDUM FOR: Pacific Hydrographic Branch

FROM: LTJG Dylan Kosten
Team Lead, Navigation Response Team 5

Dylan Kosten

Digitally signed by
KOSTEN.DYLAN.ANDREW.15045
27405
Date: 2019.04.24 14:40:39 -04'00'

SUBJECT: Submission of Survey D00254

The purpose of this survey is to respond to a USCG request for hydrographic survey to reopen the channels in Morehead City and Beaufort, due to the effects of Hurricane Florence.

Surveyed depths were gridded at 50cm and exported to a shaol biased 2m bin XYZ which was delivered to USACE.

Soundings were reduced to Mean Lower Low Water (MLLW) using VDatum.

All survey systems and methods utilized during this survey were as described in 2018_DAPR_D00254.

There were no DTONs created for this survey.

All data were acquired by a NOAA or NOAA Contractor field unit

No navigational hazards were found to exist in the survey area. Survey data was adequate for the re-opening of the harbor, however it does not meet all of the standard survey requirements.

The survey is partially adequate to supersede previous data. A finalized 50cm grid was analyzed using Grid QA within the QC Tools suite, and was found to meet uncertainty and data density specifications. However, the grid does not meet the object detection requirements as per the project instructions due to time constraints related to the emergency response. The most prominent gaps in coverage are in the long stretch of data acquired within the Intracoastal Waterway. There are also sound velocity artifacts present in the data set that were challenging to control given the geographic extents and water bodies of the survey area. Data was thoroughly cleaned to mitigate the effects of these artifacts and to remove fliers as best as possible.

Metadata for Survey D00254	
Project	S-F942-NRT5-18
Survey	D00254
State	North Carolina
Locality	Morehead City
Sub-Locality	Morehead City and Beaufort
Scale of Survey	1:10000
Sonars Used	Kongsberg Maritime EM 2040C (MBES)
Horizontal Datum	North American Datum 1983
Vertical Datum	Mean Lower Low Water
Vertical Datum Correction	VDatum
Projection	Projected UTM 18N
Field Unit	Navigation Response Team 5
Survey Dates	09/17/2018 - 09/18/2018
Chief of Party	LTJG Dylan Kosten
Submission Date	04/24/2019

APPROVAL PAGE

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Data meet or exceed current specifications as certified by the OCS survey acceptance review process. Descriptive Report and survey data except where noted are adequate to supersede prior surveys and nautical charts in the common area.

The following products will be sent to NCEI for archive

- Descriptive Report
- Collection of Bathymetric Attributed Grids (BAGs)
- Collection of backscatter mosaics
- Processed survey data and records
- GeoPDF of survey products

The survey evaluation and verification has been conducted according current OCS Specifications, and the survey has been approved for dissemination and usage of updating NOAA's suite of nautical charts.

Approved: _____

Commander Olivia Hauser, NOAA
Chief, Pacific Hydrographic Branch