

D00235

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

DESCRIPTIVE REPORT

Type of Survey: Natural Disaster Response

Registry Number: D00235

LOCALITY

State(s): Florida

General Locality: Tampa Bay

Sub-locality: Tampa Bay

2017

CHIEF OF PARTY
LTJG Dylan Kosten

LIBRARY & ARCHIVES

Date:

HYDROGRAPHIC TITLE SHEET

D00235

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): **Florida**

General Locality: **Tampa Bay**

Sub-Locality: **Tampa Bay**

Scale: **10000**

Dates of Survey: **09/12/2017 to 09/15/2017**

Instructions Dated: **09/11/2017**

Project Number: **S-J918-NRT5-17**

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

Chief of Party: **LTJG Dylan Kosten**

Soundings by: **Kongsberg Maritime EM 3002 (MBES)**

Imagery by: **Kongsberg Maritime EM 3002 (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 17N, 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

May 16, 2019

MEMORANDUM FOR: Pacific Hydrographic Branch

FROM:

LTJG Dylan Kosten
Team Lead, Navigation Response Team 5

KOSTEN.DYLAN.AN
DREW.1504527405

Digitally signed by
KOSTEN.DYLAN.ANDREW.150452
7405
Date: 2020.06.04 12:39:26 -04'00'

SUBJECT: Submission of Survey D00235

The purpose of this survey was to respond to requests for hydrographic surveys to reopen the channels in Tampa Bay due to the effects of Hurricane Irma. In support to this response, NRT5 surveyed Mullet Key Channel, Cuts A and B, Port Manatee, and the Alafia River Channel.

XYZ files were created from 3-meter CUBE surfaces and sent to the United States Army Corps of Engineers (USACE).

All soundings were reduced to Mean Lower Low Water using VDatum. The horizontal datum for this project is North American Datum of 1983 (NAD 83). The projection used for this project is Universal Transverse Mercator (UTM) Zone 17.

Soundings were reduced to Mean Lower Low Water (MLLW) using verified tides from operating stations at Port Manatee, FL (8726384), St Petersburg, FL (8726520), Old Port Tampa, FL (8726607), McKay Bay Entrance, FL (8726667), and Clearwater Beach, FL (8726724) in conjunction with the Tidal Constituent And Residual Interpolation (TCARI) grid provided by CO-OPS.

Object detection multibeam coverage was obtained throughout the channel sections assigned to NRT5, with some exceptions for the sake of distributing data quickly to the interested parties. The majority of gaps in data coverage exist in Port Manatee where there were moored vessels which created acoustic shadows. In review of the data, no obstructions to navigation were found.

There were no DTONs created for this survey.

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. There are gaps in coverage

where vessels were moored, and where lines have been deleted due to data quality issues. Some vertical offsets were observed where it appeared the sonar was receiving multiple returns from the seafloor. Data was thoroughly cleaned to mitigate the effects of these artifacts and to remove fliers as best as possible.

APPROVAL PAGE

D00235

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