

W00656

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

DESCRIPTIVE REPORT

Type of Survey: Basic Hydrographic Survey

Registry Number: W00656

LOCALITY

State(s): Florida

General Locality: Florida Keys

Sub-locality: Dry Tortugas to Key Largo

2017

CHIEF OF PARTY
Michael Buchman

LIBRARY & ARCHIVES

Date:

HYDROGRAPHIC TITLE SHEET

W00656

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: **Florida Keys**

Sub-Locality: **Dry Tortugas to Key Largo**

Scale: **40000**

Dates of Survey: **07/22/2017 to 08/05/2017**

Instructions Dated: **07/06/2017**

Project Number: **ESD-PHB-22**

Field Unit: **NOAA Ship *Nancy Foster***

Chief of Party: **Michael Buchman**

Soundings by: **Teledyne RESON SeaBat 7125 SV2 (MBES)
Kongsberg Maritime EM 710 (MBES)**

Imagery by: **N/A**

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

October 26, 2022

MEMORANDUM FOR: Pacific Hydrographic Branch

FROM: Report prepared by PHB on behalf of field unit
Michael Buchman
Chief Scientist, NOAA Ship *Nancy Foster*

SUBJECT: Submission of Survey W00656

This project builds on past research and monitoring in Florida Keys National Marine Sanctuary (FKNMS) with the Florida Fish and Wildlife Conservation Commission (FWC) and the National Centers for Coastal Ocean Science (NCCOS) and focuses on connectivity between the network of marine reserves in the Dry Tortugas region, including the connections between populations of fish in the waters of the Florida Keys, Marquesas, Dry Tortugas National Park (DRTO), the Tortugas Ecological Reserve North (TER-N) and spawning habitat at Riley's Hump (RH), located within the Tortugas Ecological Reserve South (TER-S), and surrounding reef habitats including areas such as Warsaw Hole. The purposes of the cruise are to (1) collect video images using a remotely Operated Vehicle (ROV) along transects of bottom features of interest identified from past multibeam seafloor surveys; (2) collect multibeam bathymetry in map areas, partly to aid in location features of interest for subsequent ROV work; and, (3) conduct observations and maintenance of an acoustic array in and near the study areas.

This survey created image products for benthic habitat classification, using an ROV, a drop camera, dive operation, a stereo camera, and VR2 receivers. Bathymetric products were created using multibeam sonars.

The vertical datum for this project is Mean Lower Low Water. 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.

The HDCS processing logs indicate SBETs were not applied and all navigation data was contained within the original survey line files. This means the navigation data was most likely derived from GPS antennae. There is no indication whether differential GPS was used for positioning. Vertical positioning was acquired using a single tide gauge correctors.

Two Dangers to Navigation were identified and submitted to Marine Chart Division during review.

NOAA Ship Nancy Foster acquired the data outlined in this report. Data are available at https://www.ngdc.noaa.gov/ships/nancy_foster/NF1707_mb.html. Additional documentation from the data provider may be attached to this report.

This survey does meet charting specifications and is adequate to supersede prior data.