W00605

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

DESCRIPTIVE REPORT

Type of Survey:	Support NMS
Registry Number:	W00605

LOCALITY

State(s):	Florida
General Locality:	Florida Keys to Tortugas
Sub-locality:	South of Marquesas Keys and East of Tortugas Bank

2016

CHIEF OF PARTY
N/A

LIBRARY & ARCHIVES

Date:

U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	REGISTRY NUMBER:
HYDROGRAPHIC TITLE SHEET	**W00605**

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 to Tortugas**
Sub-Locality:	**South of Marquesas Keys and East of Tortugas Bank**
Scale:	**10000**
Dates of Survey:	**08/10/2016 to 08/22/2016**
Instructions Dated:	**N/A**
Project Number:	**ESD-PHB-21**
Field Unit:	**NOAA Ship *Nancy Foster***
Chief of Party:	**N/A**
Soundings by:	**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 WGS84 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

August 18, 2022

MEMORANDUM FOR: Pacific Hydrographic Branch

FROM: Report prepared by PHB on behalf of field unit
N/A
Commanding Officer, NOAA Ship *Nancy Foster*

SUBJECT: Submission of Survey W00605

There is no documentation and very little metadata for this survey. The following are excerpts from the original OMAO Project Instructions:

The present 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.

For the 2016 FKNMS mission on NOAA Ship Nancy Foster, we will work in the waters of the Florida Keys, Marquesas, Dry Tortugas (RH, TER-S, TER-N) and Warsaw Hole. Two primary 'daytime' projects are proposed: (1) fish sampling, acoustic tagging, acoustic array receiver servicing in the Florida Keys, Dry Tortugas and Marquesas Keys., and (2) ROV and drop camera deployments on Warsaw Hole, Riley's Hump, TER-N, and Marquesas. One additional 'daytime' activity includes two deployments of a Wave Glider (a.) Warsaw Hole deployment/recovery, and (b.) Dry Tortugas deployment/recovery. Multibeam and fishery sonar surveys will be conducted primarily during nighttime hours, but will have occasional daytime requirements.

Multibeam operations will be conducted in selected areas throughout the Florida Keys archipelago. Multibeam operations will mostly occur during nighttime hours, with some daytime surveys around VR2 stations. The Reson 7125 Seabat or Kongsberg EM710 sonars will be used for multibeam operations. Ship's Survey Department will determine appropriate frequency for operations given the depth of the survey area. Underway CTD casts will be taken at the discretion of the survey technicians (e.g., Samantha Martin or Nick Mitchell) and as appropriate to ensure high data quality.

A total of 3 MBES grids (two 1-meter and one 8-meter) were provided to the Pacific Hydrographic Branch via the External Source Data Team.

All soundings were reduced to Mean Lower Low Water using Discrete Zoning. The horizontal datum for this project is World Geodetic System (WGS) 1984. The projection used for this project is Universal Transverse Mercator (UTM) Zone 17.

The ESD Team downloaded and applied verified tides from station 8724580 Key West, FL to the provided data. Three surfaces corresponding to full coverage requirements in the HSSD were then created from the tide corrected data.

All data were reviewed for DTONs and none were identified in this survey.

NOAA Ship Nancy Foster acquired the data outlined in this report. Additional documentation from the data provider may be attached to this report.

In general, the data shows good agreement with the latest ENCs. There are some depth discrepancies in coral areas likely due to prior survey data not having the density to adequately develop individual coral heads. Data from this survey is adequate to supersede charted data in the common area.

This survey does meet charting specifications and is adequate to supersede prior data. This ESD survey is of equal or higher quality and more recent than the currently charted data (CATZOCs B, C and D, 1879 - 2015). It is recommended that this survey supersede charted data in the common area and be designated as CATZOC B.