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

# **DESCRIPTIVE REPORT**

| Type of Survey:   | Basic Hydrographic Survey | Basic Hydrographic Survey |  |  |
|-------------------|---------------------------|---------------------------|--|--|
| Registry Number:  | Area 1A                   |                           |  |  |
|                   | LOCALITY                  |                           |  |  |
| State(s):         | Florida<br>Georgia        |                           |  |  |
| General Locality: | Vicinity of Blake Plateau |                           |  |  |
| Sub-locality:     | Blake Plateau Area 1A     |                           |  |  |
|                   | 2019                      |                           |  |  |
|                   | CHIEF OF PARTY            |                           |  |  |
|                   | Gilberto Luna Fernandez   |                           |  |  |
|                   | LIBRARY & ARCHIVES        |                           |  |  |
| Date:             |                           |                           |  |  |
|                   |                           |                           |  |  |

| NATIO                  | U.S. DEPARTMENT OF COMMERCE ONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION                     | REGISTRY NUMBER:                           |
|------------------------|---|--|
| HYDROG                 | RAPHIC TITLE SHEET  | Area 1A                                    |
| 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 Georgia   |  |
| General Locality:      | Vicinity of Blake Plateau   |  |
| Sub-Locality:          | Blake Plateau Area 1A   |  |
| Scale:                 | N/A   |  |
| Dates of Survey:       | 10/28/2019 to 11/12/2019  |  |
| Instructions Dated:    | 08/01/2019  |  |
| Project Number:        | KR-OER-19-01  |  |
| Field Unit:            | Fugro USA Marine  |  |
| Chief of Party:        | Gilberto Luna Fernandez   |  |
| Soundings by:          | Kongsberg Maritime EM 302 (MBES   | )  |
| Imagery by:            | Kongsberg Maritime EM 302 (MBAB<br>Kongsberg Maritime SBP 300-6 (SBP                        |  |
| Verification by:       |   |  |
| Soundings Acquired in: | meters  |  |
| Remarks:               |   |  |

## **DESCRIPTIVE REPORT SUMMARY**

### A. Area Surveyed

This hydrographic survey was acquired in accordance with the requirements defined in the Statement of Work provided and the relevant sections of the Hydrographic Surveys Specifications and Deliverables (HSSD) 2019.

Data were acquired within the following survey limits:

| Northwest Limit  | Southeast Limit  |  |  |  |
|------------------|------------------|--|--|--|
| 29° 34' 57.39" N | 28° 22' 9.63" N  |  |  |  |
| 77° 49' 7.36" W  | 76° 42' 12.22" W |  |  |  |

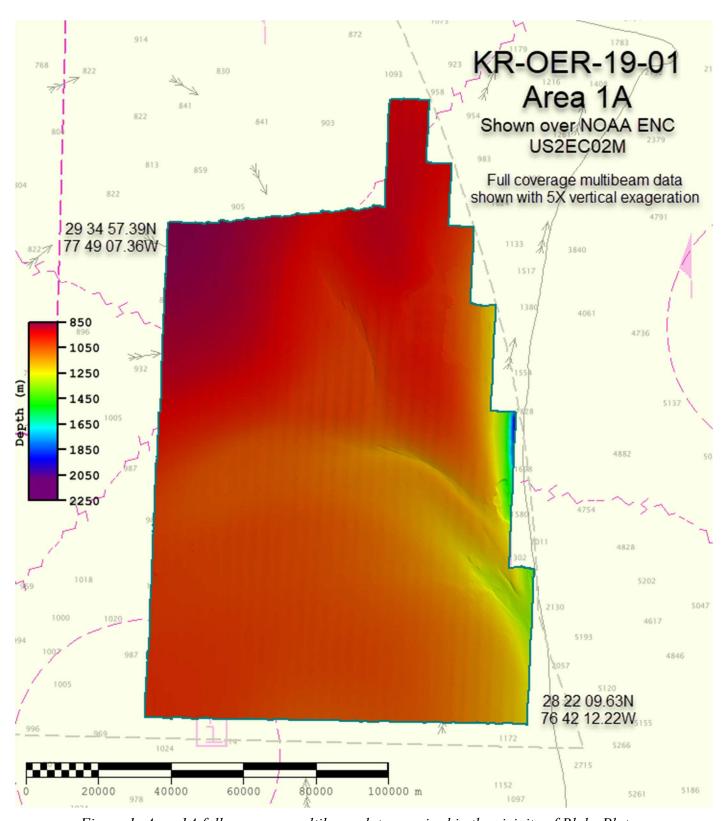


Figure 1: Area 1A full coverage multibeam data acquired in the vicinity of Blake Plateau

#### **B.** Survey Purpose

The purpose of this survey is to provide NOAA with modern and accurate hydrographic survey data, to include both multibeam echo sounder and sub-bottom profiler, in the region of the Blake Plateau. These data will be used to update nautical charts in this area as well as provide mapping coverage in the region in support of the NOAA-wide goal of mapping the US EEZ by the year 2030.

The Blake Plateau remains one of the only regions along the US East Coast that does not have comprehensive bathymetric coverage data. This survey will significantly improve coverage offshore of Georgia and Florida, providing coverage from approximately 150-200 NM offshore.

#### C. Intended Use of Survey

The entire survey is adequate to supersede previous data.

The coverage acquired within the survey limits of Area 1A (Table 1 and Figure 1) meet the coverage requirements as set forth in the statement of work and as stated in section 5.2.2 of the HSSD 2019 (Figure 2).

A total of 2166.86 linear nautical miles of multibeam echosounder data with concurrent sub-bottom profiler data comprise the mainscheme coverage of Area 1A.

One 60.8 linear nautical mile-long crossline was run along the southern boundary of Area 1A to ensure quality control (Figure 3). Uncertainty associated with sound velocity is responsible for data outliers; of the 1,068,935 nodes compared between the crossline and mainscheme multibeam data 1,022,889, or 95.7%, agree within 5m.

# **Data Density**

Grid source: OER\_KR\_19\_01\_Area1A\_r32m\_20191112\_Final 99.5+% pass (13,554,317 of 13,564,589 nodes), min=1.0, mode=22, max=244.0

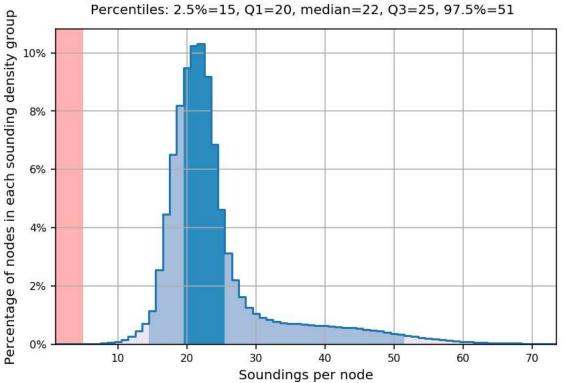


Figure 2: Area 1A full coverage bathymetric grid density

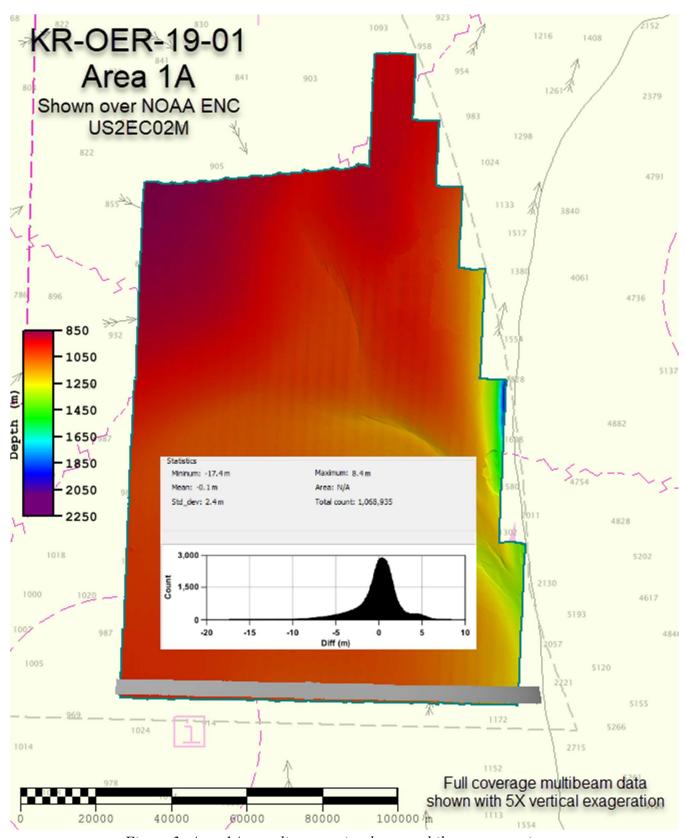


Figure 3: Area 1A crossline to mainscheme multibeam comparison

#### D. Data Acquisition and Processing

No Data Acquisition and Processing Report will be submitted in association with KR-OER-19-01. For further details of data acquisition and processing systems, survey vessels, quality control procedures and data processing methods, please refer to the vessel mobilization and calibrations reports submitted by this field unit within the DAPR folder.

#### E. Uncertainty

No uncertainty values were designated for project KR-OER-19-01.

#### F. Results and Recommendations

The following are the largest scale ENCs, which cover the survey area:

| ENC      | Scale     | Edition | Update<br>Application<br>Date | Issue Date | Preliminary? |
|----------|-----------|---------|-------------------------------|------------|--------------|
| US2EC02M | 1:1200000 | 27      | 09/13/2019                    | 09/13/2019 | NO           |

The following surfaces and/or BAGs were submitted to the Processing Branch:

| Surface Name  | Surface Type                      | Resolution | Depth Range             | Surface<br>Parameter | Purpose          |
|---|-----------------------------------|------------|-------------------------|----------------------|------------------|
| OER_KR_19_01_Area1A_r32m_20191112                     | CARIS Raster Surface (CUBE)       | 32 m       | 844.47 m -<br>2127.08 m | CMC_32m              | Complete<br>MBES |
| OER_KR_19_01_Area1A_r32m_20191112_Final               | CARIS Raster<br>Surface<br>(CUBE) | 32 m       | 844.47 m -<br>2127.08 m | CMC_32m              | Complete<br>MBES |
| KROER1901_Area1A_<br>MBAB_8m_FugroBrasilis_30kHz_1of1 | MB<br>Backscatter<br>Mosaic       | 8 m        | N/A -<br>N/A            | N/A                  | Complete<br>MBES |

OER-KR-19-01 does not require a chart comparison; however, one obstruction assigned for investigation was not found in the most recent survey data. Refer to the FFF submitted with this report for further detail. Bottom samples, maritime boundaries, dangers to navigation, aids to navigation, and shoreline were neither assigned nor investigated within the assigned limits of Area 1A.

#### G. Vertical and Horizontal Control

Per the Statement of Work for KR-OER-19-01, there is no Vertical Control requirement for this project.

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 18.

Per the Statement of Work for KR-OER-19-01, there is no Horizontal Control requirement for this project.

#### H. Additional Results

There are no additional results for this survey.

#### I. Approval

As Chief of Party, field operations for this hydrographic survey were conducted under my direct supervision, with frequent personal checks of progress and adequacy. I have reviewed the attached survey data and reports.

All field sheets, this Survey Summary Report, and all accompanying records and data are approved. All records are forwarded for final review and processing to the Processing Branch.

The survey data meets or exceeds requirements as set forth in the NOS Hydrographic Surveys Specifications and Deliverables, Field Procedures Manual, Standing and Letter Instructions, and all HSD Technical Directives. These data are adequate to supersede charted data in their common areas. This survey is complete, and no additional work is required with the exception of deficiencies noted in the Survey Summary Report.

| Approver Name           | Title                | Date       | Signature   |
|-------------------------|----------------------|------------|---|
| Gilberto Luna Fernandez | Lead Project Manager | 02/20/2020 | A The same of the |