REQUEST FOR BIDS/PROPOSALS COVERSHEET
THE UNIVERSITY OF SOUTHERN MISSISSIPPI
Procurement and Contract Services
118 College Drive #5003, Hattiesburg, Mississippi  39406-0001

Date: March 14, 2019

Bid No. 19-28

THE UNIVERSITY OF SOUTHERN MISSISSIPPI is considering the purchase of the following item(s). We ask that you submit your bid and retain one copy for your files. Right is reserved to accept or reject any part of your bid. Your quotation will be given consideration if received in Bond Hall, Room 214 on or before:

2:00 p.m. CDT

April 3, 2019

Buyer: Jessica Whitten

NOTE: If you cannot quote on the exact material shown, please indicate any exception giving brand name and complete specifications of any alternate. If additional space is required, use a separate sheet or letter of transmittal.

<table>
<thead>
<tr>
<th>ITEM</th>
<th>QUANTITY</th>
<th>UNIT PRICE</th>
<th>TOTAL NET PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>RFx #3160002813</td>
<td>DESCRIPTION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bid 19-28 Directional Wave Buoy</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PROPOSAL MUST BE RETURNED TO THE UNIVERSITY IN ACCORDANCE WITH THE SPECIFICATIONS. RFN NUMBER AND DATE OF BID OPENING MUST BE SHOWN ON THE OUTSIDE OF THE ENVELOPE IF USING THAT METHOD.

We quote you as above-F.O.B. The University of Southern Mississippi. Shipment can be made in ________ days from receipt of order. DATE ______________ TERMS ______________

Return quotation to Procurement Services at above address.

Signature Required
GENERAL TERMS, CONDITIONS AND INSTRUCTIONS FOR BIDS/PROPOSALS

1.) Failure to examine any drawings, specifications, and instructions will be at bidder’s risk.

2.) Samples of items when called for must be furnished free of expense and if not destroyed in testing, will, upon request, be returned at the bidder’s expense. Request for the return of samples must be made within ten (10) days following opening bids. Each individual sample must be labeled with bidder’s name and manufacturer’s brand name and number.

3.) Bids must be signed and sealed with bidder’s name and address on the outside of the envelope, and the time and date of the bid opening and the bid file number shown in the lower-left corner of the packages; envelopes, express mailing labels, boxes, etc.

4.) In order for your bid to be considered, it must be received and time stamped in our office by 2:00 P.M. of the bid opening date. It is the responsibility of the vendor to ensure their bid is received within the appointed time. If your bid package is not received in Bond Hall, Room 214, by 2:00 P.M. of the bid opening date, it will not be considered.

If you are delivering your bid, you need to hand carry the bid package to:

The University of Southern Mississippi
Procurement Services
Bond Hall, Room 214
Hattiesburg, Mississippi

If you are mailing your bid package via U.S. Postal Service, mail to:

The University of Southern Mississippi
Procurement Services
118 College Drive #5003
Hattiesburg, MS 39406-0001

If you are express mailing your bid package via Federal Express or UPS, or any other delivery service which requires the use of a physical address, deliver to:

The University of Southern Mississippi
Receiving Department
2609 West 4th Street
Hattiesburg, MS 39401
5.) Bids or proposals shall not be modified, corrected, altered, or amended after the specified closing time and the opening of such bids, unless otherwise noted in the request for bids or proposals.

6.) The University of Southern Mississippi reserves the right to reject any and all bids, to waive any informality in bids, and unless otherwise specified by the bidders, to accept any items on the bid. If the bidder fails to state the time within which bids must be accepted, it is understood and agreed that The University of Southern Mississippi shall have 60 days to accept. The University of Southern Mississippi reserves the right to make an award to this bid on an all or none basis, or on a line by line basis, whichever serves the best interest of The University of Southern Mississippi.

7.) Contracts and purchases will be made or entered into with the lowest, responsible bidder meeting specifications.

8.) A written purchase order or contract award mailed or otherwise furnished to the successful bidder within the time of acceptance specified in the Invitation for Bid results in a binding contract without further action by either party. The contract shall not be assignable by the vendor in whole or in part without the written consent of The University of Southern Mississippi.

9.) Bid files may be examined during normal working hours by bid participants. Non-participants will be prohibited from obtaining any information relative to the bid until the official award has been made.

10.) If purchase orders or contracts are canceled because of the awarded vendor’s failure to perform or request for price increase, that vendor shall be removed from our bidders’ list for a period of 24 months.

11.) No addendum will be issued within a period of two (2) working days prior to the time and date set for the bid opening. Should it become necessary to issue an addendum within the two-day period prior to the bid opening, the bid date will be reset giving bidders ample time to answer the addendum.

12.) Alternate bids, unless specifically requested or allowed, will not be considered.

13.) Bid openings will be conducted open to the public. However, they will serve only to open the bids. No discussion will be entered into with any vendor as to the quality or provisions of the specifications, and no award will be made either stated or implied at the bid opening. After the close of the bid opening meeting, the bids will be considered to be in the evaluation process and will not be available for review by bidders. Proposal openings are not required to be open to the public; however, the resulting award is open for public inspection.

14.) Prices quoted shall be firm for the term of the contract or for the stated time of
15.) The bidder understands that The University of Southern Mississippi is an equal opportunity employer and, therefore, maintains a policy which prohibits unlawful discrimination based on race, color, creed, sex, age, national origin, physical handicap, disability, or any other such discrimination; and the bidder, by signing this bid, agrees during the term of agreement that the bidder will strictly adhere to this policy in its employment practices and provision of products or services.

16.) Bidders must upon request of The University of Southern Mississippi furnish satisfactory evidence of their ability to furnish products or services in accordance with the terms and conditions of these specifications. The University of Southern Mississippi reserves the right to make the final determination as to the bidder’s ability.

17.) Questions or problems arising from bid procedures should be directed to the Buyer listed on the solicitation at:

The University of Southern Mississippi
118 College Drive #5003
Hattiesburg, MS 39406-0001
Phone: (601) 266-4131

18.) All items must equal or exceed the specifications listed. The absence of detail specifications or the omission of detail description shall be recognized as meaning that only the best commercial practices are to prevail and that only first quality materials and workmanship are to be used.

19.) It is the intent of the specifications to obtain a product that will adequately meet the needs of the user while promoting the greatest extent of competition that is practicable. It is the responsibility of the prospective bidder to review the entire Invitation to Bid packet and to notify The University of Southern Mississippi if the Specifications, Instructions, General, or Special Conditions are formulated in a manner which would unnecessarily restrict competition.

20.) It shall be incumbent upon the bidders to understand the specifications. Any requests for clarifications shall be in writing and shall be submitted to our Procurement Services office at least five (5) days prior to the time and date set for the bid opening, unless otherwise noted in the bid or proposal specifications.

21.) The minimum specifications are used to set a standard and in no case are used with the intention to discriminate against any manufacturer. Bidders should note the name and the manufacturer and model number of the product they propose to furnish and submit descriptive literature.

22.) Trade names, brand names, and/or manufacturer’s information used in these specifications are for the purpose of establishing quality, unless otherwise noted. Bids on
products of other qualified manufacturers are acceptable, provided they are demonstrated as equal to those specified in construction, design and suitability. Each bidder shall submit with his bid a complete brochure with pictures on each item and shall point out specifically any deviations from the specified items. Failure to do so may disqualify any bid. Please bid as specified or an approved equal.

23.) A copy of the manufacturer’s standard guarantee/warranty shall accompany and become a part of this bid.

24.) There are no federal or state laws that prohibit bidders from submitting a bid lower than a price or bid given to the U.S. Government. Bidders may bid lower than U.S. Government contract price without any liability as The University of Southern Mississippi is exempt from the provisions of the Robinson-Patman Act and other related laws. In addition, the U.S. Government has no provisions in any of its purchasing arrangements with bidders whereby a lower price to The University of Southern Mississippi must automatically be given to the U.S. Government.

25.) All invoices, unless noted otherwise, are to be billed to:

The University of Southern Mississippi  
Accounts Payable  
118 College Drive #5104  
Hattiesburg, MS 39406-0001

26.) All equipment bid shall be of current production and of the latest design and construction.

27.) Where all, or part(s), of the bid is requested on a unit price basis, both the unit prices and the extension of the unit prices constitute a basis of determining the lowest responsible and responsive bidder. In cases of error in the extension of price, the unit price will govern.

28.) Should the University of Southern Mississippi close due to inclement weather conditions, or any other unforeseen events on the bid opening date, sealed bids will open the following business day at the same time and location.

29.) As an alternative to traditional sealed bids in envelopes, the University of Southern Mississippi is capable of receiving electronic bid responses. While this option is available, it is not required and we ask that all potential respondents keep in mind that with any electronic system there could be delays or glitches with the submission process; therefore the University highly encourages traditional sealed bids which are either mailed or submitted in person. Should a vendor choose to submit their response electronically, please follow the instructions below using the following website: https://www.ms.gov/dfa/contract_bid_search/Home/Sell. On this site you will find helpful links to procurement opportunities, as well as a link to supplier registration. If not already registered in this system, potential bidders will first need to click on ‘Supplier
Registration’ and follow the steps outlined (a one-time process). Once registered, they can return to the original website and click on ‘Procurement Opportunities’ where they can either search by keyword for the bid they desire to respond to or leave the search box blank and click ‘Search’ for a listing of all current bids and proposals for the various State of Mississippi offices.

With regard to construction bids, there is one additional step required during the bid submission process. Along with the bid response and other attachments, contractors will also need to attach their Certificate of Responsibility (COR), or a statement that the bid enclosed does not exceed Fifty Thousand Dollars ($ 50,000.00). If their COR or such statement is not attached, the bid will be invalid and not considered.

AA/EOE/ADAI
The University of Southern Mississippi
Request for Bid # 19-28
SPECIFICATION FOR DIRECTIONAL WAVE BUOY

I. Background

The University of Southern Mississippi (USM) has received funding to develop capabilities for the characterization of the coastal waters using buoy systems. USM is seeking to purchase a directional wave buoy capable of operating in coastal waters of less than 100m, while collecting directional wave data and disseminating them in real time.

II. Purpose

A key goal is the purchase of a small directional wave buoy of less than 1m in diameter. Weighing less than 200kg. The buoy will be used to characterize the wave regime coastal waters of less than 100m water depth.

III. General Performance Specification

The BUOY shall measure directional wave data surveys in coastal waters in depths ranging from 1 to 100 meters and in water temperature ranging from 0º C to 35º C. The buoy shall be capable to measure currents in addition to the directional wave spectrum.

The buoy size and weight shall enable launch and retrieval from small vessels. The buoy shall be sufficiently robust to be operated and maintained in the field with minimal technical support. The buoy shall have a modular and open design as to be programmed by USM. Customization will include hardware as well as communication protocols.

IV. Required Specification

The following specifications are to ensure that the buoy will perform the tasks necessary to satisfy the project’s objectives. Any deviation from the following specifications must be explained and justified. Table 1 provides a summary of basic buoy characteristics and required specifications. The following sections provide more detailed requirements.
Table 1

<table>
<thead>
<tr>
<th>Buoy Characteristics</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Depth</td>
<td>100 meters or less</td>
</tr>
</tbody>
</table>

**Waves**

<table>
<thead>
<tr>
<th>Wave Characteristic</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heave</td>
<td>± 20m</td>
</tr>
<tr>
<td>Accuracy</td>
<td>&lt;0.5%, at variable resolution</td>
</tr>
<tr>
<td>StdDev</td>
<td>1-3 cm/s</td>
</tr>
<tr>
<td>Direction</td>
<td>0-360°, resolution minimum of 0.1° Magnetic north reference</td>
</tr>
<tr>
<td>Accuracy</td>
<td>0.4° - 2° (depending on latitude) typical 0.5°</td>
</tr>
<tr>
<td>Period</td>
<td>1.0 s – 20 s (moored)</td>
</tr>
</tbody>
</table>

**Currents**

<table>
<thead>
<tr>
<th>Current Characteristic</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed</td>
<td>minimum of 0-3 m/s at 1 mm/s resolution</td>
</tr>
<tr>
<td>Accuracy</td>
<td>Minimum 1% of measured value or ± 2 cm/s</td>
</tr>
<tr>
<td>Direction</td>
<td>0-360°</td>
</tr>
<tr>
<td>Accuracy</td>
<td>Minimum 0.4 to 2.0° accuracy</td>
</tr>
</tbody>
</table>

**Other Capabilities**

<table>
<thead>
<tr>
<th>Capability</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Temp</td>
<td>0 – 50 °C at 0.1 °C resolution</td>
</tr>
<tr>
<td>Sensor accuracy</td>
<td>minimum of 0.1 °C</td>
</tr>
<tr>
<td>Measurement accuracy</td>
<td>minimum of 0.2 °C</td>
</tr>
<tr>
<td>Data Storage</td>
<td>Data storage capacity shall provide the capability to store all data from all sensors and equipment listed in this bid specification while operating for 6 months of continuous operation. Data files need to be closed and secured upon loss of power or opening of power switch.</td>
</tr>
<tr>
<td>Communication</td>
<td>Minimum: Iridium-SBD, Iridium-internet, GSM-internet</td>
</tr>
<tr>
<td>Operational Temperature Range</td>
<td>-0 °C to +35 °C</td>
</tr>
<tr>
<td>Marker Light</td>
<td>Beacon capable of flashing a yellow (590 nm) light at 5 flashes every 20 seconds.</td>
</tr>
<tr>
<td>GPS position</td>
<td>50 channel, minimum update rate every 10 minutes, precision &lt; 5m</td>
</tr>
<tr>
<td>Hull Diameter</td>
<td>&lt; 1m</td>
</tr>
<tr>
<td>Weight</td>
<td>&lt; 220 kg</td>
</tr>
<tr>
<td>Deployment Duration</td>
<td>Minimum of 6 months data storage</td>
</tr>
<tr>
<td>Power</td>
<td>Minimum of 6 months of battery power, augmented by solar power array.</td>
</tr>
</tbody>
</table>
A. Basic System
1. Endurance: The buoy shall be capable to autonomously collect and store data for a minimum of a continuous 6-month period at the minimum data requirements in Table 1.

2. The system shall be able to autonomously transmit the data near real time to a shore based receiving station. Software for transmission and shore-based retrieval of near real time data shall be part of the deliverables.

3. The buoy shall have data storage capability for 6 months of continuous run time with all sensors operating. This includes all required and optional equipment described in this specification.

4. The buoy shall have sufficient power to collect and transmit data for a minimum of 6 months preferable for >12 months with solar power available to augment the onboard batteries.

5. Mooring hardware as needed for optimal system performance in 20-100 m of water, excluding anchor, to be supplied by the vendor.

B. Control
1. Programming of buoy and data retrieval shall be done by software provided by the manufacturer of the buoy.

2. All sensor data shall be time stamped and be exportable into a format that is directly importable into a scientific computing/spreadsheet software such as Matlab/Excel. Stored data need to be made available in tabular and graphical format.

D. Safety Features
1. The buoy shall have a strobe light that flashes 5 individual flashes every 20 seconds under low light conditions.

E. Communications
1. The Buoy shall have a GSM cell modem installed with a backup Iridium satellite communications system for long-range real time data transmission and locating. Options of data communication protocols shall be listed with monthly and annual operational costs.

F. Sensors
The following sensors must be included on the vehicle and must be time synchronized. For specific sensor requirements see Table 1.

1. Wave Sensor

2. Acoustic Doppler Current Profiler

2. Water Temperature Sensor

V. Software
A. The vendor shall provide a software package that is capable of communicating with the buoy remotely and via direct link. This software must allow the user to plan the
buoy deployment, upload operational parameters to the buoy and retrieve stored data in tabular and graphical format in near real time.

VI. Transportation of Equipment

The buoy will be transported to various sites where it will be mobilized or returned to the vendor for repairs, and as such needs to be easily transportable. Ground and air transportation will require that the buoy will be disassembled into components that will fit into padded shipping cases provided by the vendor.

VII. Buoy Deployment and Recovery

The ability to recover and deploy the Buoy from a large variety of vessel sizes is a key capability of the intended buoy. The buoy will need to be small and vessel deployable without the need for specialized launch and recovery equipment from small vessels with the exception of using only a small over-the-side crane.

VIII. Warranty Services

At a minimum, the Contractor shall provide Software/Hardware Warranty support for one year from acceptance. Longer warranty periods are preferred.

The Vendor shall agree to repair, adjust, and/or replace (as determined by the University to be in its best interest) any defective materials at the Vendor and/or manufacturers’ sole cost. The University will incur no costs for service or replacement of materials during the warranty period.

The Vendor will be the sole point of contact for warranty issues.

IX. Documentation

The Contractor shall provide Operations and Maintenance manuals to USM. Documentation provided shall include, but not be limited to the following:

A. Theory of operation
B. Operating procedures
C. Interfacing instructions with connector pin outs
D. Complete wiring schematics to the component level
E. Troubleshooting and maintenance procedures
F. Parts lists with manufacturer's original part numbers
G. Drawing of boards showing component placement
H. IPB (Isometric Parts Breakout) drawings showing how all parts, especially mechanical parts, relate to one another.
I. Documentation of the various software packages
X. Other

The vendor shall provide a “field repair kit” containing a set of parts, which can be expected to need periodic replacement while operating the buoy in the field. Included in the kit will be all tools to accomplish this task. A field case to transport the kit must be supplied by the vendor.

The vendor shall supply lists and pricing for spare parts necessary to repair and maintain the buoy for a period of at least two (2) years. USM reserves the right to purchase some or all items within the first year of operation of the vehicle after acceptance. The list shall include, but not be limited to:

A. Electronics parts to the component level
B. Spare circuit boards including digital and analog subassemblies
C. Sensors and electronic parts associated with them.
D. Power components
E. Mechanical parts to the component level, such as casing, cages for electronics, mechanical connections, etc.

XI. Training

The vendor shall provide training on the operation, software, maintenance and troubleshooting of the buoy for a minimum of 2 persons at the customer’s location. This must include deployment planning, maintenance, data retrieval and basic data analyses.

XII. Proof of Performance

The vendor shall provide a proven record of the buoy’s performance. The vendor must demonstrate that the directional wave sensor, the ADCP, and communication equipment on the buoy meets the operational minimum requirements set forth in Table 1. This means, with the proposal, the seller will provide representative sample performance data for the directional wave and current data accuracy of the buoy. Furthermore, the seller needs to provide references of at least 3 customers who have purchased and operated a buoy in a substantially similar configuration as specified above within the last 5 years. The above requested information will assist USM in determining the bidder’s capability of meeting these requirements.

XIII. Copies

At least one (1) signed original and two (2) signed copies of the bid response MUST be provided. The University requires a portable electronic virus/malware free copy (CD, thumb drive) of the bid response from the responding Vendor to be included in the bid response package. If an electronic copy is not included, the University reserves the right to request an electronic copy of the exact bid response prior to review of the bid.
XIV. Mandatory Legal Provisions

- Any provisions disclaiming implied warranties shall be null and void. See Mississippi Code Annotated Sections 11-7-18 and 75-2-719(4). The Vendor shall not disclaim the implied warranties of merchantability and fitness for a particular purpose.
- The Vendor shall have no limitation on liability for claims related to the following items:
  - Infringement issues;
  - Bodily injury;
  - Death;
  - Physical damage to tangible personal and/or real property; and/or
  - The intentional and willful misconduct or negligent acts of the Vendor and/or Vendor’s employees or subcontractors.
- All requirements that the University pay interest are deleted, except for those in conjunction with USM’s standard payment terms of Net 45 days. Payments made beyond 45 days are subject to late fees and interest.
- Should any of the terms and conditions in the purchase contract be in conflict with the laws of the State of Mississippi, the laws of the State of Mississippi shall supersede and govern. A revision of the terms and conditions will be required to ensure compliance with Mississippi state law.
- The University shall not pay any attorney's fees, prejudgment interest or costs associated with any legal action to or for the Vendor, except that which are ordered by a court of competent jurisdiction.

XV. Payment

The currency used for payment of costs will be in United States dollars.

State law requires that the University receive an original invoice from the Vendor and that payment of the invoice is processed within 45 days of receipt (Miss Code 31-7-305). The invoice should be on the Vendor’s letterhead and/or include an original Vendor representative signature.

XVI. Pre-Payments with Pro-Rata Refund

State law (Section 31-7-305 of the Mississippi Code Ann.) authorizes the issuance of payment after receipt of the invoice and receipt, inspection, and approval of the goods and/or services. The intent is that goods and services must be received, inspected, and accepted prior to payment. Pursuant to this requirement, where pre-payment has been authorized, all pre-payment contracts will require the following statement in the Termination section: “Upon termination of this Agreement by Licensee or by Licensor, Licensor shall issue Licensee a refund of
a proportionate share (based on the number of days in the term year before and after the termination) of the Annual Fees paid with respect to that term year.”

XVII. USM Terms and Conditions

Unless written exception is provided in the RFP response, the winning Vendor agrees to be bound by the USM Terms and Conditions, which are incorporated herein, and may be found at https://www.usm.edu/procurement-contract-services/usm-terms-and-conditions.