

THIS IS NOT AN ORDER

**Date**: July 26, 2019

Bid No. 19-07

# REQUEST FOR BIDS/PROPOSALS COVERSHEET THE UNIVERSITY OF SOUTHERN MISSISSIPPI

Procurement and Contract Services
118 College Drive #5003, Hattiesburg, Mississippi 39406-0001

					ISSISSIPPI 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:			
TFRMS - Ridder	should state terms of	sale. Our terms are 2% ten days, net 45 days.		2:00 p.m. CS	<u> </u>	
These terms will	apply per Mississippi			August 15, 2019  Buyer: Deidre Edwards		
		l accept cash discounts when earned.	Buyer <u>:</u>			
		note on the exact material shown, please indicernate. If additional space is required, use a			nd complete	
ITEM	QUANTITY			UNIT PRICE	TOTAL NET PRICE	
		RFx #3160003045				
		DESCRIPTION				
		Bid 20-04 1000m Ocean	Glider			
		PROPOSAL MUST BE RETURNED TO THE UNITACCORDANCE WITH THE SPECIFICATIONS. FOR DATE OF BID OPENING MUST BE SHOWN ON THE ENVELOPE IF USING THAT METHOD.	RFP NUMBER AND			
		O.B. The University of Southern Mississippi.	Shipment can be m	ade in	days from receipt of	
order. DA Return aud		TERMS ement Services at above address.				

# THE UNIVERSITY OF SOUTHERN MISSISSIPPI

# PROCUREMENT SERVICES 118 COLLEGE DRIVE #5003 HATTIESBURG, MS 39406-0001

#### 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 4<sup>th</sup> 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

acceptance.

- 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.
- 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 # 20-04 1000m OCEAN GLIDER

#### I. Background

The University of Southern Mississippi (USM) has received funding to develop the glider specific portion of the second tier of the Unmanned Maritime Systems (UMS) course, currently being taught at USM. For this reason, USM is seeking to purchase a 1000m ocean glider to use for training purposes, in addition to assist in ongoing research projects in the Gulf of Mexico.

#### II. Purpose

A key goal is the purchase of a 1000-meter capable ocean glider equipped with scientific sensors. The glider will be used as a hands-on teaching aid in the UMS course. Furthermore, the glider will be used to characterize oceanographic features in the Gulf of Mexico.

## **III. General Performance Specification**

The glider shall perform oceanographic profiling in water depths from 100-1000 meters and in water temperature ranging from 0° C to 35° C. The glider shall have the capability of data transmission in near real-time to a land-based server. In addition, the glider should be able to receive waypoint commands from remote server. The glider should be 1-2 man deployable/recoverable off a small vessel. The glider should have customizable payload capabilities for future oceanographic sensor additions.

#### **IV. Required Specification**

The following specifications are to ensure that the glider 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 glider characteristics and required specifications. The following sections provide more detailed requirements.

Vehicle Characteristics	Specification		
Maximum Depth	1000m meters		
Vehicle power	Lithium Ion or Lithium Polymer Batteries capable		
	of powering the system for 3-6+ months, user		
	(with proper training) changeable. External		
	power capabilities for in lab testing.		
Propulsion	Buoyancy engine with typical speeds of 20-35		
	cm/s		
Endurance	Sample to max depth range for 4-6 month		
	continuous, while sampling sensors and		
	transmitting data		
Communications	Iridium RUDICS satellite communications		
Operational Salinity Range	0-40 ppt (via ballast adjusting), with 5+ sigma		
	change of dynamic buoyancy		
Operational Temperature Range	-0°C to +35°C		
Transportation Temperature	-10°C to +45°C		
Range			
CTD Sensor	Seabird Conductivity with range 0 to 90mS/cm		
	and Temperature sensor with range of -5 to 42°C		
Optical Sensor	Optical scattering and fluorescence sensor with		
	user defined wavelength, up to 3 parameters		
Weight	1-2 man portable (50-65kg), with typical payload		
	and batteries		
Length	2m or less in length		

Table 1

#### A. Basic Glider

- 1. Operating Depth shall be 100-1000 meters with all sensors having the same depth range.
- 2. The glider shall use a buoyancy engine for propulsion through the water to allow to maximum endurance. This buoyancy engine should be able to compensate for a density change in the water column of at least 5 sigma, dynamically. Buoyancy engine should be capable of achieving speeds of 20-35cm/s.
- Endurance: The glider shall be capable to autonomously collect data and operate for at least 4-6 months under normal operating conditions on a single battery pack.
- 4. Glider should be equipment with scientific sensors capable of measuring Conductivity, Temperature, Depth, Fluorescence and Scattering parameters. The sample rate and depths for these sensors should be configurable remotely during the mission.
- 5. The glider should be 1-2 man portable (50-65kg) and not exceed 2m in length with standard configuration.

- 6. The glider shall have data storage capability for complete mission, with data transmission capabilities over satellite communications.
- 7. Powering the glider on and off shall be done without opening the glider. The glider shall have a connection in the hull to allow external power and communications to be connected for data downloading and lab testing. This connection should allow for external power when testing in the lab to conserve batteries.

### **B.** Navigation

The glider should use a 3-axis compass and pressure sensor for dead reckoning navigation. Glider should be equipped with an altimeter for bottom avoidance during navigation.

#### C. Communications

- 1. The glider shall have an Iridium satellite communications system for control and location during mission.
- 2. The glider shall have capabilities for lab communications outside satellite communication, via either cable or line of sight communications.

#### D. Sensors

The following sensors must be included on the glider and must be time synchronized and spatially referenced with data from other sensors and the positioning/navigational data. The glider should allow for future sensors to be added.

- 1. Seabird CTD should be a GPCTD (pumped) to allow for capture of thin surface lens, when glider may not be at speed for proper flow rate through a non-pumped.
- Optical Scattering and fluorescence sensor with three channels (wavelengths) to be defined by USM at finalization of bid, based on sensor combination list provided by the vendor.

#### E. Safety Features

- The glider shall have a means of self-aborting the mission while it is in the
  water due to abnormal readings or set points from key systems monitored
  within the glider that will result in immediate surfacing of the glider. Abnormal
  readings, which lead to a self-abort of the mission, will include but are not
  limited to water intrusion, low battery, pressure abnormalities, and other
  obviously erroneous sensor readings.
- 2. The glider shall have the ability to receive mission commands during the mission while on the surface via the satellite communications. Vehicle commands required, but not limited to, are to end mission, navigational corrections, ability to turn sensors on or off, etc.

#### V. Software

- A. The vendor shall provide a 1-year support of mission planning and management software through a secure online cloud server with a web based GUI interface. The web interface should be able to be accessed by multiple logins from USM.
- B. The vendor will provide a means of reviewing glider performance during the mission. Software must be provided for displaying and assessing glider performance, or the glider logs must be accessible in a documented format such that in-house analysis may be performed.

#### VII. AUV Deployment and Recovery

The ability to recover and deploy the AUV from a large variety of vessel sizes is a big requirement. A cradle or cart for safe recovery and transportation is also required.

#### **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.

#### X. Training

The vendor shall provide training on the operation, software, maintenance (battery replacement) and troubleshooting of the glider for a minimum of 2-4 persons at the vendor's location or some other agreed upon site. This must include at least one actual deployment & recovery of the system as well as mission planning and basic mission data analysis.

#### XI. Proof of Performance

The vendor shall provide a proven record of the glider's performance with documentation of multiple successful missions in offshore waters. The vendor must demonstrate that all integrated sensors operate in accordance of above requirements.

#### XII. 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.

#### XIII. Mandatory Legal Provisions

- Any provisions disclaiming implied warranties <u>shall</u> be null and void.
   See Mississippi Code Annotated Sections 11-7-18 and 75-2-719(4). The Vendor <u>shall</u> not disclaim the implied warranties of merchantability and fitness for a particular purpose.
- The Vendor <u>shall</u> 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 (other than in connection with lease purchase contracts not exceeding five years) are deleted.
- 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 <u>shall</u> 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 the cost of legal action to or for the Vendor.

#### XIV. Payment

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

State law requires that the University receive an <u>original invoice</u> 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.

#### XV. 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."

#### **XVI. 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 <a href="https://www.usm.edu/procurement-contract-services/usm-terms-and-conditions">https://www.usm.edu/procurement-contract-services/usm-terms-and-conditions</a>.

#### **XVII. Delivery**

Quote the lead time required for delivery of the quoted equipment. Quoted prices should be F.O.B. Destination Freight Allowed.