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*Managing fish and wildlife  
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MyFWC.com

DATE: MARCH 4, 2019

ADDENDUM NO.: 1

BID NO.: FWC 18/19-77

BID TITLE: MANATEE DISTRIBUTION SURVEYS – AERIAL SERVICES

UPDATE: QUESTIONS & ANSWERS

The enclosed addendum has been issued for consideration in the preparation of your response to the Florida Fish and Wildlife Conservation Commission's (FWC) Solicitation No. FWC 18/19-77, "MANATEE DISTRIBUTION SURVEYS – AERIAL SERVICES".

**All responses to the subject solicitation must be received no later than 1:30 PM (EST) on Thursday, March 7, 2019.**

A response received after the exact time specified will not be considered. Failure to file a protest within the time prescribed in Section 120.57(3), Florida Statutes (F.S.), or failure to post the bond or other security required by law within the time allowed for filing a bond shall constitute a waiver of proceedings under Chapter 120, Florida Statutes. Written notices, formal requests and proceedings must conform with the requirements set forth in Chapter 28-110, Florida Administrative Code (F.A.C.). Protests must be filed with the Purchasing Office, Fish and Wildlife Conservation Commission, 2590 Executive Center Circle, Suite 100, Tallahassee, Florida 32301 within the time prescribed in Section 120.57(3), F.S. and Chapter 28-110, F.A.C.

Sincerely,

FWC Procurement Manager

## **BEGIN ADDENDUM**

### **QUESTION #1**

I see that this bid is specific to the aircraft type (Cessna 172/180) and we feel this is unfairly restrictive and disadvantages FWC.

We have an aircraft designed specifically for aerial observation with vastly superior crew visibility. We operate at a lower hourly cost than the C-172. We feel this combination is perfect for the task and we could be very competitive and a superior solution for FWC.

Our Sky Arrow 650 TCNS has twin camera bays and can carry wide area video surveillance equipment and still image nadir camera photography equipment simultaneously. This will allow post flight analysis of the geo referenced imagery to aide in the Manatee count. Our bid would include this equipment.

Finally, we have removable rear windows and a seating position in front of the wing allowing geo-referenced hand-held photography from an unimpeded view point for the surveyors. This would be using a supplied Nikon D850 with stabilized lens able to capture incredible images of Manatee groups for age and heath data. We have been conducting similar aerial surveys with local groups and FAU researchers and during our Manta ray surveys we were able to identify individual animals from markings.

Our chief pilot is a highly experienced aerial observer, operating in military environments for the last 32 years.

### **ANSWER #1**

Thank you for contacting the Florida Fish and Wildlife Conservation Commission regarding the open FWC 18/19-77 - MANATEE DISTRIBUTION SURVEYS – AERIAL SERVICES Invitation to Bid.

FWC has conducted systematic manatee distribution surveys since the 1980's. Our researchers have followed specific protocol and survey techniques for each survey to ensure consistency in our data that allows for analysis between data sets. In conducting our aerial surveys, we strive for consistency. Our surveys are designed to cover a given area of interest in a single day over a maximum of about six hours of search time. Flights are conducted in one day to ensure that manatees are not double counted (if they move along the survey route). In addition, we choose to have two observers, in addition to the pilot, to collect manatee locations, behaviors, and to provide a greater confidence level in our statistical analysis. Our observers are trained to accurately identify individual manatees as well as work with the pilot to modify the survey route if needed. Cessna aircraft models 172 and 182 have been used for the majority of FWC manatee distribution surveys with great success.

We appreciate your interest in our program, however, we do not feel that using the Sky Arrow 650 TCNS will meet the requirements for our manatee distribution surveys.

### **QUESTION #2**

I wanted to talk to you about using Drones for the survey instead of using aircrafts. We have a drone that can fly for 7 hours too. Let me know your thoughts.

## **ANSWER #2**

FWC has conducted systematic manatee distribution surveys since the 1980's. Our researchers have followed specific protocol and survey techniques for each survey to ensure consistency in our data that allows for analysis between data sets. In conducting our aerial surveys, we strive for consistency. Our surveys are designed to cover a given area of interest in a single day over a maximum of about six hours of search time. Flights are conducted in one day to ensure that manatees are not double counted (if they move along the survey route). In addition, we choose to have two observers, in addition to the pilot, to collect manatee locations, behaviors, and to provide a greater confidence level in our statistical analysis. Our observers are trained to accurately identify individual manatees as well as work with the pilot to modify the survey route if needed. Cessna aircraft models 172 and 182 have been used for the majority of FWC manatee distribution surveys with great success.

We appreciate your interest in our program, however, we do not feel that using drones will meet the requirements for our manatee distribution surveys.

## **QUESTION #3**

Although APEM is not planning to respond directly to the RFP in its current form, I did wonder whether you were aware of APEM's digital aerial survey services using aerial photography? APEM is the global leader in surveying aquatic wildlife using aerial digital imagery, and I wondered if it was worth us putting forward a non-compliant bid, or to setting up a call or webinar to discuss APEM's approach and methods in more detail?

## **ANSWER #3**

We appreciate your interest in our program, however, we do not feel that using aerial photography will meet the requirements for our manatee distribution surveys.

**END ADDENDUM**