

BIDS AND AWARDS COMMITTEE

BID BULLETIN No. 1

JULY 15, 2022

- 1. Supply and Delivery of Drone Seeder (Multi-Purpose: Spray & Spread) for use of drone seeding under RICE Program 2022.
- 2. Supply, Delivery and Installment of Furnitures & Fixture of Crop Research Building/Rice R&D Center

This Bid Bulletin is issued to clarify, modify or amend items in the Bidding Documents. Accordingly, this shall form an integral part of the said Documents.

 Supply and Delivery of Drone Seeder (Multi-Purpose: Spray & Spread) for use of drone seeding under RICE Program 2022.

Particulars

Specifications:

- *Spraying Payload: 30L / Spreader System: 40kg, 50% higher flow
- *Efficiency: 16 hectares/hour
- *9-meter spraying width 8L per minute flow rate, speed of 6.5m/s, droplet density -20/cm3, and dosage of 1L
- *Radar: Spherical Omnidirectional, all weather, all environment, smart obstacle avoidance
- *'Dual FPV with searchlights/ Top view radar with IP67 Protection
- *Remote Control Planning Accuracy: GNSS/RTK
- *26.4kg total weight without batteries/76.5kg max takeoff weight

*Smart Controller 3.0 specs:

- -5km Stable image transmission with 67% greater communication range
 - -Ultra long battery life
 - -Standard RTK Positioning Module
 - 5.5" 1920x1080 screen with Android OS
- -4GB LPDRR4 32GB ROM and up to 128GB expandable storage
- -5000mAH internal + 4920mAH external battery with smart charger

Clarifications/Additional Specifications

Additional Specifications:

* IPAD

Specifications:

Compatible with the Drone

Battery type: Li-Po 4490 mAh, non-removable

(16.7 Wh)

Internal: 8GB RAM, 512GB storage

*PHANTOM4 PRO

Specifications:

- -Compatible with Drone Seeder
- -Aircraft:
 - Weight (Battery & Propeller Included) 1375g
 - Diagonal Size (propellers Excluded) 350 mm
 - Max Service Ceiling Above Sea Level 19685 ft (6000m)
 - Max Wind Speed Resistance: 10m/s
 - Max Flight Time: Approx. 30 min.
 - Satellite Positioning System: GPS/GLONASS

-GIMBAL

- Stabilization: 3 axis (pitch,roll,yaw)
- Max Controllable Angular Speed: Pitch: 90°/s
- Controllable Range: Pitch: 90° to +30°
- Angular Vibration Range: ±0.02°

-VISION SYSTEM

 Velocity Range: ≤31 mph (50 kph) at 6.6 ft (2 m) above ground



*Intelligent Flight Battery x2 specs:

- -Ultra long Service life of 1,000 cycles
- -29,000mAH 51.8V, 11.5C discharge rate
- -IP54 with board-level potting protection

*'Smart charging manager specs:

- -100-264 VAC input/50-60V DC output
- -7,200W, 120A charging current, 9-12 minutes charging time
- -Over-temperature, over-voltage, under-voltage, short-circuit, and fan stall protection
- -AC wire, power wire, and charge connector protection
- -CAAP Drone registration and professional training for 4 staff.
- *Provided with Reflectorized DA Logo

Processing Equipments

One unit Desktop

Operating System: Windows 11 Home, 64bit

Processor: Core i7

Maximum Memory: 16GB

Memory Technology: DDR4SDRAM

Display: Latest NVIDIA GE FORCE GRTX 1650Ti, with

24" Monitor

Memory: 1 TB

Screen Mode: Full HD

Interfaces/Ports: HDMI

Number of USB 3.2 Gen 2 type-A Ports: 4

With keyboard and Mouse

With Camera

With UPS

- Altitude Range: 0-33 ft (0-10 m)
- Operating Range: 0-33 ft (0-10 m)
- Obstacle Sensory Range: 2-98 ft (0.7-30 m)
- Operating Environment: Surface with clear pattern and adequate lighting (lux>15)

-INFRARED SENSING SYSTEM

- Obstacle Sensory Range: 0.6-23 feet (0.2-7 m)
- FOV: 70° (Horizontal), ±10° (Vertical)
- Measuring Frequency: 10Hz
- Operating Environment: Surface with diffuse reflection material, and reflectivity
 8% (such as wall, trees, humans, etc.)

-CAMERA

- Sensor: 1-inch CMOS, Effective pixels: 20M
- Lens : FOV 84° 8.8 mm/24mm (35mm format equivalent) f/2.8-f/11 auto focus at 1m-∞
- Supported File Systems: FAT32(≤32GB); exFAT(>32GB)
- Supported SD Cards: MicroSD, Max Capacity: 128GB

-REMOTE CONTROLLER:

- Operating Frequency: 2.400-2.483 GHz and 5.725-5.850 GHz
- Battery: 6000 mAh LiPo 2S
- Video Output Port: GL300K: HDMI, GL300L: USB
- Mobile Device Holder: GL300K: Built-in display device (5.5-inch screen, 1920×1080, 1000 cd/m², Android system, 4 GB RAM+16 GB ROM), GL300L: Tablets and smart phones

-CHARGER

- Voltage 17.4V
- Rated Power: 100W

-INTELLIGENT FLIGHT BATTERY:

- Capacity 5870mAh, Voltage: 15.2 V
- Battery Type: LiPo 4S

-APP LIVE VIEW

- Mobile App
- Live View Working Frequency: 2.4 GHz ISM, 5.8 GHz ISM
- Live View Quality:
 720P @ 30fps, 1080P @ 30fps



2. Supply, Delivery and Installment of Furnitures & Fixture of Crop Research Building/Rice R&D Center

Particulars	Clarifications/Additional Specifications
	 Clarifications: Mobile pedestal in workstation for 6 pax and 2 pax is not included in the budget. The thickness indicated in plan was 45mm, 60mm offered by the supplier is better if the budget will not short. The cabinets for executive table are made of melamine wood as per plan. The office will provide floor plan. Workstation – L Shape panel thickness is as is to 4.68 cm Clarifications on the Office Cubicle/Work Station for 6 pax: Specifications: Partition Aluminum Trims in 45mm thick customized powder coated finish Partition panel in 2 tone fabric finish in (3) 1200mm L x 1200mm Ht) Partition Panel in Fabric + 300mm Ht froested strip glass finish in (8) 600mm L x 1200mmHt
II. CONFERENCE HALL 24 sets – Executive Table	II. CONFERENCE HALL 24 sets – Executive Chair

For guidance and information of all concerned.

ENGR. TEODORO C. ELEDA

Engineer IV BAC Vice Chairperson

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