

INVITATION FOR BIDS OFFICE OF PROCUREMENT & CONTRACTS

1. INSTRUCTIONS FOR BIDDERS

- a. Sealed bids will be received in the Office of Procurement & Contracts, Mississippi State University, for the purchase of the items listed herein.
- b. All bids must be received in the Office of Procurement & Contracts on or before the bid opening time and date listed herein. Delivery of bids must be during normal working hours, 8:00 a.m. to 5:00 p.m. CST, except on weekends and holidays when no delivery is possible.
- c. Bidders shall submit their bids either electronically, in Bully Buy, or in a sealed envelope. Bids CANNOT be emailed
 - a. Sealed bids should include the bid number on the face of the envelope as well as the bidders' name and address. Bids should be mailed to: 245 Barr Avenue, 610 McArthur Hall, Mississippi State, MS 39762.
- d. All questions regarding this bid should be directed to the Office of Procurement & Contracts at 662-325-2550.

2. TERMS AND CONDITIONS

- a. All bids should be bid "FOB Destination"
- c. Any contract resulting from this Invitation for Bid shall be in substantial compliance with Mississippi State University's Standard Contract Addendum: https://www.procurement.msstate.edu/contracts/standardaddendum.pdf

Bid Number: MSU2025025

Opening Date: September 11, 2025 at 2:00 p.m.

Description: Autonomous Drone Solution

Item	Quantity	Description	Unit Price	Total Price
1	6	Skydio X10 Starter Kit [1 Battery] (2.4/5 GHz, 5G/LTE Ready: T-Mobile, Visible Light) NA + VT300-Z DR4E1BS2VZG0000NA		
2	12	Skydio Battery (150W) for X10 DR4ACCBATR		
		TOTAL		

The Mississippi State University Alliance for Systems Safety of UAS through Research Excellence (ASSURE) requests bids for an autonomous drone solution. The solution must include obstacle avoidance, autonomous tracking, GPS-denied navigation, motion prediction capability and camera system. System must be assembled in the USA and be NDAA compliant. The system shall meet or exceed the following requirements:

sUAV Platform for aerial inspection and incident reconstructions. The platform should have the following specifications:

Must include, one (1) UAS vehicle, one (1) Controller, three (3) batteries, two (2) wall adapters, one (1) dual charger, one (1) set additional propellers, one (1) pro case. Vehicle must include (a) one (1) license to Skydio Autonomy Drone Software, (b) Software, (c) NDAA compliance, (d) Ground control, (e) two (2)

256 GB SD Cards (pre-installed), optical and thermal camera. Includes software maintenance and customer support and limited warranty.

AIRCRAFT

- Dimensions (unfolded, FLYING): 31.1" x 25.6" x 5.7" / 79.0 cm × 65.0 cm × 14.5 CM
- Dimensions (Folded, no battery): 13.8" x 6.5" x 4.7" / 35.05 cm x 16.51 cm x 11.94 cm
- Weight (with battery): 4.65 lbs / 2.11 kg
- Flight Time: 40 minutes
- Max Flight Speed (Sea Level, No Wind): 45mph / 20 m/s
- Max Wind Speed Resistance: At or under 28 mph / 12.8 m/s
- Max Service Ceiling (Above Sea Level): 15,000' / 4,572m density altitude
- Operational Temperature Range: -4°F to 113°F / -20°C to +45°C

CONTROLLER

- Dimensions: 10.5" x 5" x 3" / 26.67 cm × 12.70 cm × 7.62 cm
- Weight: 2.5 lbs / 1135 grams
- Applications: Wired Links:
- Operating Frequencies: Connect 5G: 600MHz-4400MHz
- Max Range: 7.5 miles / 12km
- Screen: 6.6" Dynamic AMOLED touchscreen, 2340 x 1080 pixel Resolution

PRIMARY CAMERA SYSTEM (Telephoto/Wide/ Narrow)

- Color Sensor Type: 0.5" 48MP CMOS / 1" 50.3MP CMOS
- Color Lens Focal Length: 35 mm (190 mm equivalent) / 8 mm (20 mm equivalent)
- Color Video Resolution: 3840 x 2880 / 3840 x 2880
- Color Photo Format: JPEG, RJPEG
- Color Still Resolution: 8000 x 6000 / 8192 x 6144 / 9248 x 6944
- Pitch Controllable Range: ±140° pitch, ±90° yaw, +75° to -230° roll

THERMAL CAMERA SYSTEM

- Thermal Imager: Flir Boson+ Uncooled VOx Microbolometer
- Focal Length: 13.6 mm (60 mm equivalent)
- Thermal Sensitivity: <30mK NEDT
- Video Resolution: 640 x 512
- Photo Size: 640 x 512
- Phot Format: JPEG, RJPEG
- Temperature Measurement Range: -40°F to 302°F / -40° C to 150° C
- Palette: White hot, black hot, ironbow, rainbow

VISION SYSTEMS/NAVIGATION CAMERAS

- Configuration: 6x cameras in trinocular configuration top and bottom
- Sensor: Samsung 1/2.8" 32MP color CMOS
- Diagonal View: 200°
- Obstacle Sensing Range: 65' 7.4" / 20 meters

• Environment Coverage: True 360°

SOFTWARE

- Main Processor: NVIDIA Jetson Orin SoC / Qualcomm QRB5165 SoC
- Camera Configuration: 6x cameras in trinocular configuration top and bottom
- Obstacle Avoidance Coverage: 65' 7.4" / 20 meters

SYSTEM SECURITY

- Wireless Encryption: AES-128
- Firmware: AES-256 encrypted, signed, & verified
- Controls: Ability to provision and deprovision device
- Infrastructure: Key provisioning burned in at time of manufacture

Hardware Support: Must include: (a) one-year Limited Warranty.