



## **OP 79.11: UNMANNED AIRCRAFT SYSTEMS/MODEL AIRCRAFT**

### **POLICY**

Mississippi State University (MSU) is one of the leading Unmanned Aircraft Systems (UAS) research universities in the nation. The purpose of this policy is to ensure that MSU and the MSU community acquire and operate UAS and Model Aircraft efficiently, safely, ethically, and consistent with applicable Federal Aviation Administration (FAA) law and University policies and procedures.

### **DEFINITIONS**

**UAS** – Unmanned Aircraft System. UAS are also referred to as Unmanned Aerial Vehicles (UAVs), Remotely Piloted Aircraft (RPAs) or drones. Pursuant FAA guidance, a UAS is an unmanned aircraft and all of the associated support equipment, control station, data links, telemetry, communications and navigation equipment necessary to operate the unmanned aircraft. This policy applies to UAS regardless of size or weight.

Where applicable, **UAS meeting certain criteria may be required to be registered with the FAA. Details on UAS registration may be found at <https://www.faa.gov/uas/registration/>.**

**Model Aircraft** – Aircraft that are operated by modelers purely for recreational or hobby purposes and that are regulated separately from UAS under Advisory Circular 91-57. **Details on Model Aircraft may be found at [https://www.faa.gov/uas/getting\\_started/fly\\_for\\_fun/](https://www.faa.gov/uas/getting_started/fly_for_fun/).**

**COA** – Certificate of Authorization or Waiver. A COA is an authorization issued by the FAA's Air Traffic Organization, and are the mechanism which authorizes UAS flights that are either conducted by public entities, or approved under Section 333 exemption.

**CFR 14 Part 107** – FAA mandated regulations for routine commercial use of small unmanned aircraft systems (defined as UAS with a gross takeoff weight (GTOW) of 55 pounds or less). CFR 14 Part 107 sets forth the requirements for unmanned pilot certification, aircraft registration, and operational limitations for commercial use of sUAS.

**333 Exemption** – An FAA exemption based on Section 333 of the FAA Modernization and Reform Act of 2012 (FMRA) which grants the Secretary of Transportation authority to determine whether an airworthiness certificate is required by UAS to operate safely in the National Airspace System. A 333 exemption allows civil (commercial) use of a UAS and exempts one or more UAS from the requirement to be type certified. The FAA has

discontinued the granting of 333 Exemptions in favor of 14 CFR Part 107. Existing 333 Exemptions will remain valid until their individual expiration date.

**UAS/Model Aircraft Safety Incident** – Any event which results in any injury to people, damage to MSU property, system failure or other malfunction that results in loss of control of the UAS, or damage to the UAS exceeding \$1,000.

## **APPLICATION**

This policy applies to the following:

- The operation of UAS (including Model Aircraft) by any person, including without limitation employees, students and third parties, in any location as part of a University program or activity.
- The operation of UAS (including Model Aircraft) by any person on or above MSU owned or controlled property.
- The purchase of UAS with MSU funds, including appropriated, self-generated or sponsored research funds, or funds from affiliated entities of the University.

The policy does not apply to UAS operations conducted under emergency circumstances by the MSU Police Department or other duly authorized law enforcement agencies.

## **MANAGEMENT AND OVERSIGHT OF UAS OPERATIONS AND ACQUISITIONS**

Operations of UAS at MSU are managed and supported at two levels, policy and operations. The Vice President of Research and Economic Development will be responsible for establishing the overall policy for UAS and Model Aircraft over MSU owned or controlled property. The UAS Steering Committee has been established to provide oversight, guidance and recommendations to the Vice President of Research and Economic Development regarding all aspects of UAS, including but not limited to FAA regulations, safety, operations, data, privacy, acquisitions, and business development and strategic opportunities. The UAS Steering Committee, is appointed by the Vice President of Research and Economic Development, is composed of at least one representative from the College of Engineering, the RASPET Flight Research Laboratory (RFRL), the Alliance for System Safety of UAS through Research Excellence (ASSURE), the Division of Agriculture, Forestry, and Veterinary Medicine, the Geosystems Research Institute, the MSU Police Department, and the RFRL UAS Safety Officer. The Director of RFRL will chair the committee.

RFRL is responsible for operational support for UAS for MSU owned or controlled property. Operational support is defined as providing UAS subject matter expertise to MSU researchers and scientists, facilitating safe and legal UAS operations for MSU stakeholders, partners, and external clients, and executing UAS missions with MSU aircraft, payloads, and pilots.

## **GENERALLY APPLICABLE UAS/MODEL AIRCRAFT POLICIES AND PROCEDURES**

- I. All individuals who operate a UAS as part of a University program or activity or operate a UAS or Model Aircraft on or over MSU owned or controlled property are responsible for complying with applicable FAA regulations and notices, state and federal laws, and MSU policy.
- II. Any MSU unit, employee or student who desires to operate a UAS as part of his/her MSU employment or as part of a University program or activity must adhere to the “Procedures Applicable to MSU-Operated UAS” set forth below. Additionally, RFRL must be provided copies of all relevant documentation prior to operation including, but not limited to, COAs, Airmen Certifications, and UAS Registrations.
- III. To ensure compliance with MSU safety, security and privacy restrictions, any individual, including without limitation vendors or other third parties, wishing to launch, operate, or recover a UAS for other than recreational purposes on or immediately over MSU owned or controlled property must first receive approval from the RFRL UAS Safety Officer. In addition, any third party must enter into a contract in which the third party agrees to hold the University harmless for the actions/inactions of the third party that cause harm or damage to individuals or property. The third party shall also provide insurance as required by the University.
- IV. UAS/Model Aircraft shall not be used to observe or record in areas where there is a reasonable expectation of privacy. This includes, without limitation, in or near restrooms, locker rooms, individual residential rooms, dressing rooms, and health treatment rooms. UAS/Model Aircraft shall not be used to monitor or record sensitive institutional or personal information which, for example, may be found on or in an individual’s workspace, computer or other electronic devices. This also includes activities that may be closed to the public (i.e. sports team practices). In operating a UAS/Model Aircraft for purposes of recording or transmitting visual images, all operators must take reasonable measures to avoid violating reasonable expectations of privacy.
- V. Flight over or near the MSU Drill Field, academic or administrative buildings, residence halls, and intercollegiate, intramural or club athletic facilities will not normally be approved.
- VI. Use of UAS/Model Aircraft on University owned or controlled property must comply with all other applicable University policies and procedures.
- VII. In the event of an UAS/Model Aircraft Safety incident, flight activities must be immediately terminated and the incident reported to the RFRL UAS Safety Officer at (662) 325-3274. The RFRL Chief of UAS Safety will determine if an accident/incident investigation is warranted and notify other agencies as appropriate.

## **PROCEDURES APPLICABLE TO MSU-OPERATED UAS**

### **I. Operations Approval**

Any MSU unit, employee or student that intends to fly UAS for any reason other than recreation must coordinate with RFRL prior to operation. RFRL will examine and record (1) condition of the UAS; (2) proposed flight operation details; and (3) operational documentation including, but not limited to, COAs, Airmen Certifications, and UAS Registrations. Only UAS operations which meet or exceed all applicable FAA and MSU standards will receive approval. A RFRL Certificate of Approval stating the exact terms and conditions of the approved operation(s) will be issued by the RFRL Chief of UAS Safety. A signed copy of this certificate must be available for inspection all times during UAS operations.

### **II. Letter of Agreement Approval**

A comprehensive letter of agreement (LOA) may be required when operational/procedural needs require the cooperation and concurrence of other persons/facilities/organizations outside the University. In this event, RFRL will issue a comprehensive LOA to be signed by all parties and returned to the RFRL Chief of UAS Safety prior to operation. A signed copy of the LOA must be available for inspection at all times during UAS operation.

### **III. Airmen Certification and Flight Safety**

Any MSU unit, employee or student acting as a Pilot-in-Command (PIC), Visual Observer (VO), or any UAS flight crew related role must achieve the required certification as designated by the FAA Airmen Certification Standards. FAA Airmen Certification documents must be presented at the request of the RFRL Chief of UAS Safety. Currency of the required certification must be maintained without lapse or interruption in order to perform UAS flight crew related duties.

Safety is absolutely paramount during MSU UAS operations. As FAA certified airmen, all UAS flight crew personnel will be held responsible for the safety of their UAS operations. UAS flight crew personnel are required to adhere to all FAA endorsed safety practices including, but not limited to, Crew Resource Management (CRM), pre-flight and post-flight checklists, and situational awareness regarding airspace, air-traffic, and flight conditions. FAA Safety information can be accessed at <https://www.faasafety.gov/>. Additionally, UAS flight crew personnel must conduct thorough safety and risk assessments immediately prior to all UAS operations.

## **PROCEDURES APPLICABLE TO ACOUISITION OF MSU UAS**

To avoid duplication of effort within the University and to ensure that systems are acquired that have broad applicability to the University's research and education functions, any UAS purchase, including kits to assemble a UAS, using University funds must be reviewed and approved by the RFRL Director or designated representative.

## **MODEL AIRCRAFT OPERATIONS FOR RECREATIONAL USE**

To ensure the safe and responsible enjoyment of Model Aircraft, and to protect the safety and privacy of others, **recreational use of Model Aircraft over MSU-owned property is exclusively restricted to the R.R. Foil Plant Science Research Center, otherwise known as “North Farm”**.

Guidelines and requirements for Model Aircraft Operations:

- Model Aircraft operators must receive approval from RFRL prior to operation at North Farm. Requests for Model Aircraft operations must be submitted to RFRL at least 24 hours in advance by phone or email.
- Model Aircraft operators must understand and comply with applicable FAA regulations and guidance. For a summary, visit the FAA’s “Know Before You Fly” website: <http://knowbeforeyoufly.org/for-recreational-users/>. Additional guidance for Model Aircraft operations can be found at [https://www.faa.gov/uas/getting\\_started/fly\\_for\\_fun/](https://www.faa.gov/uas/getting_started/fly_for_fun/).
- **Flight over or near people, roads, vehicles, buildings or other structures at North Farm is strictly prohibited.**
- Model aircraft operators must respect the safety, privacy and enjoyment of other users of the space.
- Questions regarding Model Aircraft use over MSU owned or controlled property may be directed to the RFRL UAS Safety Officer or the University Police Department at 622-325-2121.
- RFRL reserves the right to prohibit Model Aircraft operations if the proposed operation:
  - Interferes with any University activity or program;
  - Poses a safety, security or privacy risk to the university community or property;
  - Fails to comply with this policy or applicable laws and regulations; or
  - Interferes with the University’s mission.

## **SANCTION**

Any violation of this policy will be dealt with in accordance with applicable University policies and procedures, which may include disciplinary actions up to and including termination, suspension or expulsion from the university. Legal prohibitions regarding physical presence on campus/trespassing and other legal action may also be pursued against individuals that operate UAS or Model Aircraft in violation of this policy. Fines or damages incurred by individuals or units that do not comply with this policy will not be paid by MSU and will be the responsibility of the individual(s) or unit(s) involved.

## **REVIEW**

This policy will be reviewed every four years, or whenever circumstances require an earlier review, by the Vice President for Research and Economic Development, the Vice President for Agriculture, Forestry & Veterinary Medicine and the Provost & Executive Vice President.

**REVIEWED BY:**

/s/ David Shaw  
Vice President for Research and  
Economic Development

11/27/2017  
Date

/s/ Greg Bohach  
Vice President for Agriculture, Forestry and  
Veterinary Medicine

11/27/2017  
Date

/s/ Judy Bonner  
Provost and Executive Vice President

11/27/2017  
Date

/s/ Timothy N. Chamblee  
Assistant Vice President and Director  
Institutional Research and Effectiveness

12/01/2017  
Date

/s/ Joan Lucas  
General Counsel

11/29/2017  
Date

**APPROVED:**

/s/ Mark Keenum  
President

12/06/2017  
Date