

BOARD OF REGENTS
EASTERN MICHIGAN UNIVERSITY

SECTION: B
DATE: April 20, 2018

RECOMMENDATION

**AGREEMENT TO APPROVE ADDITION OF POLICY REGARDING UNMANNED
AERIAL SYSTEMS**

ACTION REQUESTED

It is recommended that the Board of Regents of Eastern Michigan University approve the attached addition to Board Policies:

Section 9.6 Policy Regarding Unmanned Aerial Systems

STAFF SUMMARY

All University policies must be approved by The Board of Regents of Eastern Michigan University. A University policy is defined by all of the following: a) has broad application throughout the University; and b) helps to ensure compliance with applicable laws and regulations, promotes operational efficiencies, enhances the university's mission or reduces institutional risks.

In an ongoing effort to enhance the transparency of the actions of the University and to align University practice with Board policy, Board Policies are subject to ongoing review and updated as appropriate. All Board Policies are published.

The policy recommended for addition was created and streamlined by a cross-functional group of stakeholders throughout the University, and has been examined by the University's Faculty Senate. Although the regulation of Unmanned Aerial Systems is in flux at the state and federal level, it is recommended that the Board approve this policy, which complies with current applicable law.

FISCAL IMPLICATIONS

None.

ADMINISTRATIVE RECOMMENDATION

The proposed Board action has been reviewed and is recommended for Board approval.



University Executive Officer
Lauren M. London
Interim General Counsel

4/2/18

Date

Policies, Rules and Regulations

Chapter Name: Public Safety, Traffic and Parking

Chapter No.: 9.6

Issue: Interim Policy Regarding Unmanned Aerial Systems

Effective Date: 04-20-2018

UNIVERSITY POLICY STATEMENT

Unmanned Aerial Systems (UAS), or “drones,” have emerged as a technology of interest both for hobbyists, and more importantly for possible research, academic, and commercial uses at Eastern Michigan University. EMU uses unmanned aircraft systems and remote-controlled model aircraft, commonly referred to as drones, to support various administrative, research, instruction, and service functions where such use is permitted by federal, state or local law.

Laws, regulations, and best practices around UAS are evolving with this emerging technology. This policy seeks to ensure that any person using UAS on the University’s behalf, or for University business purposes, complies with those legal obligations. Other UAS use on campus is controlled by Michigan State statute and federal regulations. Users of UAS on campus must exercise extreme caution, due to the University’s proximity to Willow Run Airport and flights by Survival Flight at Saint Joseph Mercy Hospital Ann Arbor.

The term UAS, as opposed to “drone,” is used throughout this policy as that is the term used in state and federal laws and regulations. For purposes of this policy, UAS also include aircraft that meet the definition of model aircraft.

This Interim Policy shall remain in effect until replaced by a permanent policy or rescinded.

DEFINITIONS

Aircraft: Any contrivance used or designed for navigation of or flight in the air.

Airspace: The area above the ground in which aircraft travel.

Certificate of Authorization or Waiver (COA): An authorization issued by the Air Traffic Organization to a public operator for a specific activity using UAS.

Code of Federal Regulations (CFR) Title 14: The Federal Aviation Administration regulations that govern today’s aircraft. 14 CFR Part 107 lists regulations for Small Unmanned Aircraft Systems.

Federal Aviation Administration (FAA): The federal agency that regulates the National Airspace System, including drones and model aircraft.

Model aircraft: Aircraft that is mechanically driven or launched into flight and is flown solely for hobby or recreation purposes or by students in furtherance of their education. Model aircraft cannot be used for paid research, teaching, or other commercial purposes.

National Airspace System (NAS): The airspace, navigation facilities, and airports of the United States, including components shared jointly with the military.

Unmanned Aircraft Systems (UAS): Commonly known as drones, aircraft and accompanying systems that are operated without the possibility of human intervention from within or on the aircraft.

SCOPE

This policy applies to any on-campus use of UAS on behalf of the University, including, but not limited to, EMU faculty, staff, and students, and third-parties not affiliated with the University, who are engaged in the use on the University's behalf.

Other UAS use is controlled by Michigan state statute and federal regulations. Improper use of UAS may result in the violation of federal or state criminal laws and may also be a violation of University policy subject to student or employee discipline.

UNIVERSITY PRACTICE

This policy requires that all UAS operations are performed in a manner that mitigates risks to safety, security, and privacy, and ensures compliance with the Federal Aviation Administration (FAA) Modernization and Reform Act of 2012 (Public Law 112-95) as codified in 14 Code of Federal Regulations (CFR) Part 101 (for hobby or recreational purposes) and 14 CFR Part 107 (for commercial purposes) and all applicable laws.

Michigan Public Act 436 of 2016, 259.311, Section 11, requires "A person who is authorized by the FAA to operate unmanned aircraft systems for commercial purposes may operate an unmanned aircraft system in the State if the system is operated in a manner consistent with Federal law." Additionally, Section 13 states "A person may operate an unmanned aircraft system in the State for recreational purposes if the unmanned aircraft system is operated in a manner consistent with Federal law for the operation of a model aircraft."

1) FAA Policy

Unmanned Aerial Systems use on campus falls into one of three categories: (1) operation by a public entity for a public purpose; (2) operation by a civil/commercial entity for a civil/commercial purpose; and (3) operation of model aircraft by any user for a hobby or recreational purpose.

FAA rules differ depending on the entity (public/civil) flying the UAS as well as the operation (public/commercial) of the UAS. Note that EMU's operation of UAS may fall into the first or second category, depending upon the purpose for which the UAS is flown. Further, in certain limited circumstances, an EMU student's operation may qualify for the third category as a hobby or recreational purpose.

All faculty, staff, students and third-parties who intend to operate UAS outdoors as part of a University activity on campus must demonstrate compliance with at least one of the following:

- a) 14 CFR Part 107 (Operation and Certification of Small Unmanned Aircraft Systems)
- b) A Grant of Exemption pursuant to Section 333 of the FAA Modernization and Reform Act of 2012
- c) Section 336 of the FAA Modernization and Reform Act of 2012, which covers educational or hobbyist use.

PLEASE NOTE: Willow Run Airport is approximately 4.5 nautical miles from EMU's main campus. Because the airport is less than 5 miles from campus, if operating a UAS on campus, whether for Government use,

Civil/Commercial use, or Private/Hobbyist use, you must first contact the Willow Run airport control tower before flying.

a) 14 CFR Part 107 Operations – Commercial Purposes

In 2016 the FAA established a new regulatory framework to permit civil UAS operations, which is codified as 14 C.F.R. Part 107. In order to qualify as a Part 107 operation, the Remote Pilot in Command must have a Remote Pilot Certificate with a Small UAS Rating. **No COA is required for flights conducted under Part 107**, but the operator should be aware of the airspace restrictions set forth in the regulations or other state and local requirements that may prohibit a particular flight.

In order to use the FAA's Part 107 rules (14 CFR Part 107) the UAS operator must possess an FAA Part 107 license. See

https://www.faa.gov/uas/getting_started/fly_for_work_business/becoming_a_pilot/

For "commercial-off-the-shelf" (COTS) platforms that are "ready to fly", no airworthiness check or examination is required if the gross system take-off weight is 55 pounds or less. For all other UAS, an airworthiness inspection and sign-off are required.

UAS operators who want to fly outside the requirements of the Small UAS Rule (Part 107) may request a waiver and/or airspace authorization. Applicants requesting a Certificate of Waiver or Authorization may continue to utilize FAA Form 7711-2, "Application for Certificate of Waiver or Authorization" to submit a request for waiver or authorization.

The latest FAA information can be found at: <https://www.faa.gov/uas/>

b) Section 333 of the FAA Modernization and Reform Act of 2012

Exemptions: https://www.faa.gov/uas/beyond_the_basics/section_333/

Section 333 of Public Law 112-95, Special Rules for Certain Unmanned Aircraft Systems (UAS), provided the FAA authority to authorize certain UAS operations. This incremental step provided a pathway for safe and legal civil operations in the National Airspace System (NAS) and was considered a bridge mechanism until the implementation of Part 107. Until the implementation of Part 107, a Section 333 exemption was one of few options to fly with FAA authorization. Now that Part 107 is in place, the FAA will no longer issue exemptions for operations that can be routinely conducted under Part 107.

If you already have a Certificate of Waiver or Authorization under your Section 333 exemption – a "COA" – you can continue to fly under the COA limitations until it expires (two years after issuance).

**c) Section 336 of the FAA Modernization and Reform Act of 2012
Educational and Hobbyist Use**

A person may operate an unmanned aircraft for hobby or recreation in accordance with Section 336 of the FAA Modernization and Reform Act of 2012 (FMRA) at educational institutions and community-sponsored events provided that person is:

- 1) not compensated, or;

- 2) any compensation received is neither directly nor indirectly related to that person's operation of the aircraft at such events.

A student may conduct model aircraft operations in accordance with section 336 of the FMRA in furtherance of his or her aviation-related education at an accredited educational institution.

Faculty teaching aviation-related courses at accredited educational institutions may assist students who are operating a model aircraft under Section 336 and in connection with a course that requires such operations, provided the student maintains operational control of the model aircraft such that the faculty member's manipulation of the model aircraft's controls is incidental and secondary to the student's (e.g., the faculty member steps-in to regain control in the event the student begins to lose control, to terminate the flight, etc.)

Any flight that is made for business, commercial, or professional purposes does not qualify as a model aircraft operation and must meet the requirements for civil or public aircraft operations. In particular, University faculty, staff, and employees who fly UAS as part of their job duties or in furtherance of their professional activities do not qualify as model aircraft operators.

However, students who are flying a UAS in furtherance of their education do qualify as model aircraft operators. Students are permitted to operate a UAS as a model aircraft operation only in furtherance of their education as described in the FAA's May 4, 2016 [Interpretation of the Educational Use of Unmanned Aircraft Systems](#). Anyone seeking to fly a model aircraft should read and be familiar with the FAA's [Interpretation of the Special Rule for Model Aircraft](#), which explains what parts of the Federal Aviation Regulations apply to these flights.

Section 336 of Public Law 112-95 established the following criteria for model aircraft operations:

- the aircraft must be flown strictly for hobby or recreational purposes;
- the aircraft must be operated in accordance with a community-based set of safety guidelines and within the programming of a nationwide community-based organization;
- the aircraft is limited to not more than 55 pounds unless otherwise certified through a design, construction, inspection, flight test, and operational safety program administered by a community-based organization;
- the aircraft must be operated in a manner that does not interfere with and gives way to any manned aircraft; and
- when flown within 5 miles of an airport or helipad, the operator of the aircraft must provide the airport operator and the airport air traffic control tower (when an air traffic facility is located at the airport) with prior notice of the operation. Model aircraft operators flying from a permanent location within 5 miles of an airport should establish a mutually-agreed upon operating procedure with the airport operator and the airport air traffic control tower (when an air traffic facility is located at the airport).

Model aircraft must be operated within the visual line of sight of the operator using only eyeglasses or contact lenses as aids. A model aircraft operator cannot use vision-enhancing devices (binoculars, night vision goggles, powered vision magnifying devices, and goggles

that provide a first-person view from the aircraft) since these devices do not allow the model aircraft operator to maintain visual line of sight.

2) Indoor Use

General operation of an UAS in University buildings is not permitted, with the exception of operations inside an enclosed classroom or research lab as part of a course of instruction. [See 5) *Use in Research and Teaching*,” infra.]

3) Privacy

A UAS may not be used to monitor or record areas where there is a reasonable expectation of privacy in accordance with accepted social norms. These areas include but are not limited to restrooms, locker rooms, individual residential rooms, changing or dressing rooms, and health treatment rooms.

Additionally, UAS may not be used to monitor or record residential hallways, residential lounges, or the insides of campus daycare facilities. Also, UAS may not be used to monitor or record sensitive institutional or personal information which may be found, for example, on an individual's workspaces, on computer or other electronic displays

4) Use on Non-University Property

University departments or employees wishing to fly UAS for University-related purposes off University property must have appropriate permits and property owner permission for the location of the flight. They must also comply with any federal, state, and local laws and regulations of the jurisdiction where the UAS flight is conducted. If the flight is for commercial use, civil and criminal penalties may apply for failure to register a UAS. Those penalties are on a sliding scale based on the circumstances of the situation and may include a formal warning to monetary fines and/or prosecution.

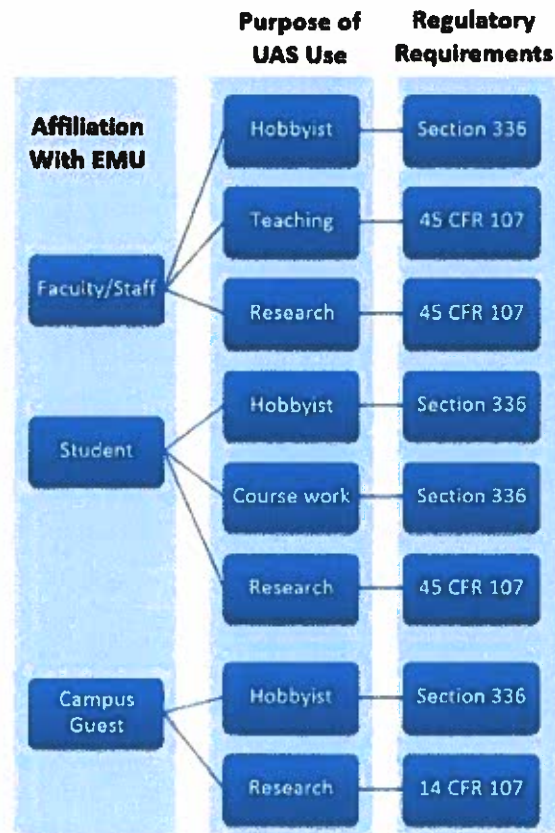
5) Use in Research and Teaching

All UAS use for research and teaching must be compliant with federal and state laws.

- a) Indoors: UAS may be used indoors at locations and times when the use will not interfere with other activities. The FAA does not regulate the indoor use of UAS; however, students, researchers, and staff must comply with EMU laboratory safety procedures.
- b) Outdoors: See the flowchart below for regulatory compliance requirements for outdoor use. Section 336 in the flowchart refers to Section 336 of the FAA Modernization and Reform Act of 2012, and 14 CFR 107 refers to FAA regulation regarding Operation and Certification of Small Unmanned Aircraft Systems. A Remote Pilot Certification is required for all uses governed by 14 CFR 107.

Chart of Unmanned Aircraft Systems (UAS) Regulations & Policies

Reference: https://www.faa.gov/uas/resources/uas_regulations_policy/



Export Control regulations also apply to UAS use. Export Control regulations may apply if:

- a) you plan to ship a UAS outside of the United States; or
- b) foreign nationals (i.e., non-US persons)
 - 1) will have access to UAS, through use, design, development, engineering, manufacture, production, assembly, testing, repair, maintenance, modification, operation, demilitarization, destruction, or processing of UAS, or
 - 2) will have information required for such activities.

If Export Control regulations apply, the Office of Research Compliance must be contacted prior to any activities using UAS.

6) Approval for all UAS Operations on EMU Property

All UAS use on the University campus is governed by Michigan statutes and by federal law.

Authority for Creation or Revision:

Minutes of the Board of Regents, April 20, 2018.