

University of Michigan Policy on the Operation of Unmanned Aircraft Systems (UAS)

I. PURPOSE AND SCOPE

The University of Michigan (U-M) supports the safe use of unmanned aircraft systems and unmanned aerial vehicles (hereafter referred to as “UAS”) on or off U-M properties, in the course of research and educational activities and other endeavors in the pursuit of the University’s mission.

This policy applies to both the outdoor and indoor use of UAS operated by anyone for any purpose, from, on, or over the U-M Ann Arbor, Dearborn, or Flint campuses, and other U-M properties (e.g., Biological Station, Pellston, MI; Stinchfield Woods, Pinckney, MI; Camp Davis, Jackson, WY). This policy also applies to the use of UAS by U-M faculty, students, and staff *off* of U-M property for U-M sanctioned activities.

The U-M Institutional Autonomous Systems Committee (IASC) is charged with implementation of this policy, and thus will be responsible for administering the review and approval process for UAS activities subject to this policy.

II. DEFINITIONS

For the purposes of this policy, a UAS is an aerial vehicle or system, whether or not capable of carrying humans or cargo, that is operated remotely or that is capable of navigating autonomously.

The term “system” refers to the vehicle(s), payload(s), operating environment, and the personnel involved (e.g., Pilot in Command (PIC), Visual Observers (VO), Operating Site Property Owner and/or manager (OSPO), Principal Investigator (PI), Staff, Students).

III. USE OF UAS FROM, ON, OR OVER U-M ANN ARBOR CAMPUS PROPERTY

With regard to UAS activities from, on, or over the Ann Arbor campus, this policy implements Article XV of the Regents’ Ordinance (“Article XV”) and provides the mechanism for seeking a waiver of Article XV.

a. *Outdoor Use of UAS*

Outdoor use of UAS **by anyone** from, on, or over U-M Ann Arbor campus property is generally prohibited, unless permitted through a waiver of Article XV or otherwise exempted from that Article under Section 5. The process for obtaining a waiver is

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initiated through submission of an application to the IASC. After review of the application and any supplemental information provided or requested, the IASC will issue its recommendation to the Executive Vice President and Chief Financial Officer (EVP-CFO) (or designee(s)), who can either accept or reject the IASC's recommendation. If the EVP-CFO (or designee(s)) issues a waiver, it will be valid for a specific use and time period. If the EVP-CFO (or designee(s)) declines to issue a waiver, the use will be prohibited.

b. *Indoor Use of UAS*

Indoor use of UAS does not require an application to the IASC or a waiver from Article XV of the Regents' Ordinance **provided that**:

- 1) The operation will occur in a space or building that has established policies and procedures to permit the safe operation of UAS,
- 2) The operation is conducted in accordance with those policies and procedures,
- 3) The building manager has granted permission for the operation.

Building managers should refer to the [Indoor Operation of Unmanned Aircraft Systems Guideline](#) issued by the Department of Environment, Health & Safety for assistance in setting policies and procedures for their location.

The IASC reserves the right to review U-M building policies on UAS use for adequacy.

IV. **USE OF UAS ON U-M DEARBORN OR U-M FLINT CAMPUS PROPERTY**

a. *Outdoor Use of UAS*

Outdoor use of UAS **by anyone** from, on, or over U-M Dearborn and U-M Flint campus property is only permitted through written permission granted by the Chancellor of that campus or designee(s). The process for obtaining this permission is initiated through submission of an application to the IASC.

After review of the application and any supplemental information provided or requested, the IASC will issue its recommendation to the chancellor (or designee(s)), who can either accept or reject the IASC's recommendation. If the chancellor (or designee(s)) grants permission, it will be valid for a specific use and time period. If the chancellor (or designee(s)) declines to grant permission, the use will be prohibited.

b. *Indoor Use of UAS*

Indoor use of UAS does not require an application to the IASC or written permission from the Chancellor **provided that**:

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- 1) The operation occurs in a space or building that has established policies and procedures to permit the safe operation of UAS,
- 2) The operation is conducted in accordance with those policies and procedures,
- 3) The building manager has granted permission for the operation.

Building managers should refer to the [Indoor Operation of Unmanned Aircraft Systems Guideline](#) issued by the Department of Environment, Health & Safety for assistance in setting policies and procedures for their location.

The IASC reserves the right to review U-M building policies on UAS use for adequacy.

V. USE OF UAS FROM/ON/OVER OTHER U-M PROPERTIES

Operation of a UAS **by anyone** on other U-M properties, such as at the Biological Station in Pellston, MI; at Stinchfield Woods in Pinckney, MI; or at Camp Davis in Jackson, WY; is prohibited unless the use is approved by the IASC. The process for obtaining approval is initiated through submission of an application to the IASC, along with written permission from the Operating Site Property Manager. After review of the application and any supplemental information provided or requested, the IASC will either approve or deny the requested permission. If the IASC grants permission, it will be valid for a specific use and time period. If the IASC denies the request, the use will be prohibited.

VI. USE OF UAS OFF U-M PROPERTY

If the UAS is to be operated by U-M faculty, staff, or students *in connection with* a UM-sanctioned activity *off* U-M property, the use must be approved by the IASC. The process for obtaining approval is initiated through submission of an application to the IASC. For uses off U-M property, the committee will not consider an application until written permission from the Operating Site Property Owner and/or manager is obtained and submitted to the IASC. After review of the application and any supplemental information provided or requested, the IASC will either approve or deny the requested permission. If the IASC grants permission, it will be valid for a specific use and time period. If the IASC denies the request, the use will be prohibited.

The IASC does not have authority with respect to off-property uses by those unaffiliated with U-M, or by U-M community members for personal uses or other uses unconnected with any U-M activities.

VII. FAA AUTHORIZATIONS AND U-M FLIGHT OPERATIONS MANUAL

The IASC's review of applications for use of UAS will include the following considerations:

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a. FAA AUTHORIZATIONS

All University faculty, staff, students, and visitors who intend to operate UAS outdoors under this policy must, as a condition of approval under this policy, demonstrate compliance with at least one of the following: (1) **14 CFR Part 107 (Operation and Certification of Small Unmanned Aircraft Systems)**; (2) the University's (or other) **Grant of Exemption pursuant to Section 333 of the FAA Modernization and Reform Act of 2012**; or (3) **Section 336 of the FAA Modernization and Reform Act of 2012**, which covers educational or hobbyist use. All University faculty, staff, students, and visitors operating UAS must comply with all applicable Federal Aviation Administration regulations, as well as other federal, state and local laws.

b. U-M UNMANNED AIRCRAFT SYSTEMS OUTDOOR FLIGHT OPERATIONS MANUAL

All U-M faculty, staff, students, and visitors who intend to operate UAS outdoors under this policy must abide by the **University of Michigan Unmanned Aircraft Systems Outdoor Flight Operations Manual ("U-M Flight Manual")**, which addresses the qualification of personnel, training, validation and pre-flight procedures, situational awareness, as well as flight logs and reporting requirements. The UAS operator should also have access to and be familiar with the manufacturer's instructions (or Pilot's Operating Handbook) for the specific UAS model being used. In the event of a discrepancy between the U-M Flight Manual and the requirements of federal law (as discussed above), the requirements of federal law will take precedence and must be followed.

V. PENALTIES FOR UNSAFE OR UNAUTHORIZED USE OF UAS

Penalties for unsafe or unauthorized use of UAS by faculty, students, staff, or visitors to the U-M Ann Arbor campus may include the criminal and/or civil penalties described in Article XV of the Regents' Ordinance. Penalties for unsafe or unauthorized use of UAS on the U-M Dearborn or U-M Flint campuses, or on other U-M property, may include criminal and/or civil penalties under other applicable law. In addition, in either case, individuals may also be subject to discipline under other applicable institutional policies. Finally, the IASC can recommend loss of flying privileges under this policy for a year upon the first transgression, and a permanent loss of flying privileges upon a repeat transgression.

VII. REFERENCES

[Regents' Ordinance Article XV](#)

[U-M Grant of Exemption from FAA Section 333](#)

[Certificate of Authorization \(COA\)](#)

[FAA Section 336 covering educational or hobbyist use](#)

[14 CFR Part 107](#)

[U-M Unmanned Aircraft Systems \(UAS\) Outdoor Flight Operations Manual](#)

[U-M EHS Indoor Operation of Unmanned Aircraft Systems \(UAS\) Guideline](#)

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IASC Application for Use of Unmanned Aircraft Systems (download at <http://research.umich.edu/unmanned-aircraft-systems>)

IASC Approval Process Matrix (attached below)

[IASC UAS Flight Log Report Form](#)

VIII. HISTORY OF POLICY

Initial approval date: January 12, 2017

Technical edit (reference to EHS Indoor Guideline): July 27, 2017

Revision date: _____

IX. APPROVALS

This policy has been approved by the following Executive Officers who have authority over this area of compliance:

S. Jack Hu

Vice President for Research

Kevin P. Hegarty

Executive Vice President and Chief Financial Officer

Daniel E. Little

Chancellor, U-M Dearborn

Susan E. Borrego

Chancellor, U-M Flint