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 UNIVERSITY OF MICHIGAN PROPERTY

With regard to UAS activities from, on, or over University of Michigan property, this policy implements Article XVI of the Regents Ordinance ("Article XVI") and provides the mechanism for seeking a waiver of Article XVI.

a. Outdoor Use of UAS

Outdoor use of UAS **by anyone** from, on, or over the U-M Ann Arbor, Dearborn, or Flint campuses or other U-M property is generally prohibited, unless permitted through a waiver of Article XVI or otherwise exempted from that Article under Section 5. The

process for obtaining a waiver 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 Executive Vice President and Chief Financial Officer (EVP-CFO) or designee, or the respective Chancellor or designee, who can either accept or reject the IASC's recommendation. If the EVP-CFO, Chancellor, or designee issues a waiver, it will be valid for a specific use and time period. If the EVP-CFO, Chancellor, or designee declines to issue a waiver, the use will be prohibited.

b. Indoor Use of UAS

Indoor use of UAS <u>does not</u> require an application to the IASC or a waiver from Article XVI 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 <u>Indoor Operation of Unmanned Aircraft Systems</u> <u>Guideline</u> 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 <u>OFF</u> U-M PROPERTY

If the UAS is to be operated by U-M faculty, staff, or students *in connection with* a UMsanctioned 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.

V. FAA AUTHORIZATIONS AND U-M FLIGHT OPERATIONS MANUAL

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

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)**; or (2) a **Grant of Exemption pursuant to Section 333 of the FAA Modernization and Reform Act of 2012**. 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, Dearborn, or Flint campuses or on other U-M property may include criminal and/or civil penalties described in Article XVI of the Regents Ordinance and under other applicable law. In addition, individuals may 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 XVI 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 IASC Application for Use of Unmanned Aircraft Systems (download at <u>http://research.umich.edu/unmanned-aircraft-systems</u>) IASC Approval Process Matrix (attached below) IASC UAS Flight Log Report Form

VIII. HISTORY OF POLICY

Initial approval date: January 12, 2017 Technical edits: July 27, 2017; September 20, 2021 Revision date: _____

IX. APPROVALS

This policy has been approved by the Executive Officers who have authority over this area of compliance at University of Michigan: The Vice President for Research, the Executive Vice President and Chief Financial Officer, the Chancellor of U-M Dearborn, and the Chancellor of U-M Flint.

Unmanned Aircraft Systems (UAS) On and Off U-M Property: Paths for U-M approval based upon location of use

Where:	UM Ann Arbor, Dearborn, and Flint campus property and other UM-owned property in the State of Michigan ~ Subject to Regents Ordinance Article XVI ~ Outdoor Indoor		Off-UM Property
	Required: IASC Approval and Waiver of Regents Ordinance	Required: Building Manager Approval	Required: IASC Approval
U-M Faculty, Students, Staff, for U-M activities**	 Flights are prohibited by Article XVI of Regents Ordinance, <u>unless a waiver is</u> <u>granted by EVP-CFO or Chancellor after</u> <u>application to and a favorable review by</u> <u>the IASC</u>. 1) Application to IASC required. Written permission from UM building/site manager <u>may</u> be required. 2) Final approval (waiver of ordinance) issued by: a. EVP-CFO or designee for Ann Arbor campus/other UM property b. Chancellor or designee for Dearborn or Flint campuses 	 Flights allowed as an exception to the Regents Ordinance if building has policies and procedures for UAS, and permission of building manager received. IASC reserves the right to review building policies for adequacy. 1) No IASC application or waiver needed. 2) Final approval: Building Manager 	 Application to IASC required along with written permission from the property owner. Final approval: Outcome of review (approval or disapproval) will be issued from IASC directly; no waiver is needed.
Persons unaffiliated with U-M	Same as above. ** Purpose of proposed use will be considered.	Same as above. **Purpose of proposed use will be considered.	Not applicable if not for a U-M activity.

IASC = Institutional Autonomous Systems Committee

** The U-M Policy on the Operation of Unmanned Aircraft Systems states "The University of Michigan supports the safe use of unmanned aircraft systems and unmanned aerial vehicles 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." [Italics added.] 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.