



Northwestern
University

Approving University Official(s): Executive Vice President;
Provost

Responsible Office: Office of Risk Management

Effective date: April 14, 2017

Next review date: November 2017

INTERIM POLICY ON UNMANNED AIRCRAFT SYSTEMS

Policy Statement

All operations of unmanned aircraft systems (UAS, commonly known as drones) either (i) on or above University property or (ii) in any location, when conducted on behalf of Northwestern, must follow the procedures and conditions set forth in this Policy. This Policy is adopted on an interim basis, and will be updated as needed to conform to changes in law or practice.

Purpose

UAS offer numerous benefits that promote University operations and support the University's mission of excellence and innovation in teaching and research. However, many of the advantages of UAS that make them valuable educational and research tools also raise safety and privacy concerns. In order to promote safe, responsible, and respectful UAS operations and provide guidance to the Northwestern community on UAS operations, this Policy establishes procedures and other conditions for the operation of UAS at Northwestern.

Audience

All Northwestern faculty, staff, students, or third parties operating UAS on or above University property. This Policy also applies to any Northwestern faculty, staff, student, or third party who operates UAS on behalf of the University in any location, including activities conducted off University property. UAS operations on the Northwestern University in Qatar (NU-Q) campus are subject to NU-Q's UAS guidelines.

Definitions

Federal Aviation Administration (FAA): the U.S. federal agency that regulates UAS operations. With [limited exceptions](#), any outdoor operation of UAS in the U.S. requires FAA authorization. Additionally,

any UAS that weighs over 0.55 lbs and is flown outdoors must be registered with the FAA and marked with a registration number.

Preapproved Location: a building on University property that the Office of Risk Management (ORM) has approved for recurring indoor UAS operations. Preapproved Locations include [The Garage](#) and individual laboratories using small drones for research purposes.

Outdoor Hobbyist UAS use: use of UAS above University property strictly for [hobby or recreational purposes](#). Hobbyist UAS use must be consistent with FAA safety and registration [requirements](#) for recreational UAS use.

University property: any buildings, grounds, or land that are owned or controlled by the University.

Unmanned Aircraft System (UAS): any remotely controlled or operated device that is used (or intended or designed to be used) to fly in the air. UAS include drones as well as model aircraft.

Policy Implementation

I. General requirements:

A. FAA requirements¹

1. Authorization: With the exception of Outdoor Hobbyist UAS use and indoor UAS operations (see Sections III and IV below), all UAS operations require advance FAA authorization, which among other things requires obtaining a remote pilot certificate and adhering to certain flight restrictions (or obtaining an FAA exemption from such restrictions). For additional information about FAA authorization, please see the FAA's [UAS help page](#).
2. Registration: Any UAS that weighs over 0.55 lbs and is flown outdoors must be registered with the FAA and marked with a registration number. The FAA's online registration page for small UAS (between 0.55 and 55 lbs) is available [here](#); information on registering UAS weighing over 55 lbs is available [here](#).
3. Safety: UAS must be piloted in a manner consistent with FAA safety requirements, including:
 - a. never operating aircraft in a careless or reckless manner;
 - b. flying under 400 feet above ground;
 - c. keeping aircraft within visual line-of-sight;
 - d. operating only during daytime hours;
 - e. maintaining speeds of less than 100 mph; and
 - f. yielding right of way to manned aircraft, vehicles, and marine operations.

If exceptions to these requirements are necessary for operational or research purposes, UAS operators must obtain (and provide ORM with documentation of) a waiver or

¹ UAS operations conducted outside of U.S. airspace may be subject to foreign law in addition to (or in lieu of) FAA requirements.

exemption from the FAA. The online request for an FAA waiver under the UAS Small Aircraft Rule (Part 107) is available [here](#).

- B. Approved areas: When operated outdoors, UAS may be piloted only in areas approved by ORM. UAS operators must avoid flying over stadiums, construction sites, and other public assembly areas, unless specifically approved by ORM. Outdoor UAS operations generally may not be conducted on the Chicago campus without express ORM approval.
- C. Privacy: UAS operators may not photograph, record, or monitor areas where other members of the University community or the general public would have a reasonable expectation of privacy. UAS operators are encouraged to follow the National Telecommunications and Information Administration (NTIA)'s [Voluntary Best Practices for UAS Privacy, Transparency, and Accountability](#).
- D. Export controls: UAS owners and operators must act in accordance with export control regulations, including the [Export Administration Regulations](#) and the [International Traffic in Arms Regulations](#). These regulations cover physical exports of UAS as well as transfer of UAS technology to foreign nationals, regardless of location. The [Export Controls Compliance](#) policy provides additional guidance.
- E. UAS operators are responsible for complying with all applicable laws, regulations, city ordinances, University policies, and (if operated off University property) any requirements imposed by owners of property where UAS are operated.

II. *Notification requirements:*

- A. Outdoor (non-hobbyist) use: At least 48 hours prior to operating a UAS, the user shall provide ORM with the following information, using ORM's [UAS flight request form](#):
 - 1. a flight plan, including date, time, and duration of flight;
 - 2. a map of the area where the UAS will be operated;
 - 3. documentation of any FAA waivers or exemptions obtained; and
 - 4. if the flight will occur off University property, any required permissions or other information relating to the coordination of UAS activity with local authorities and/or property owners.

Departments or units with regular outdoor flight needs may submit a general outline of proposed use and flight plans to ORM for approval in place of individual flight notice.

Operators are not required to provide advance notification of Outdoor Hobbyist UAS use to ORM.

- B. Indoor use: Any person operating a UAS indoors while on University property shall provide prior notice of such activity (see Section III.A.2). Regular indoor use may be reported on a blanket basis. ORM will assist in evaluating appropriate space for indoor use.
- C. Emergencies, accidents, or reckless UAS use:
 - 1. Any (i) UAS accident resulting in personal injury or property damage (other than damage solely to the UAS itself) or (ii) incident involving reckless or improper operation of UAS

should be promptly reported to University Police (phone: (847) 491-3456, email: universitypolice@northwestern.edu) and to Risk Management Services (email: risk@northwestern.edu).

2. Any emergency involving UAS operations should be promptly reported by dialing 911. University Police may be contacted by dialing 456 from any campus phone.

III. *Indoor UAS operations:*

- A. Indoor UAS operations are permitted on University property only under the following conditions:
 1. operation occurs only in University indoor spaces or buildings that have procedures in place for the safe operation of UAS;
 2. at least 48 hours' advance notice of such activity has been provided to ORM, the building manager, and any affected University departments or units (exceptions to this notice requirement will be allowed when UAS are operated in a Preapproved Location);
 3. operators are at least 18 years old, or operate under the supervision of Northwestern faculty or staff;
 4. operators adhere to the safety and privacy requirements in Section I and the notification requirements in Section II; and
 5. operators yield right of way to pedestrians and vehicles, and maintain clearance from building utilities (sprinkler heads, electrical panels, and alarm systems).
- B. UAS operations generally are not permitted in residence halls.
- C. Any third party engaged by the University to operate a UAS indoors must obtain prior approval for such activity from ORM, the building manager, and any affected University departments or units.

IV. *Outdoor Hobbyist UAS use:*

Outdoor Hobbyist UAS use is permissible where such use is:

- A. restricted to two approved areas on the Evanston campus, [Long Field](#) and the [Lakefill](#), and occurs only when these locations are not in use for University events;
- B. consistent with FAA safety and registration [requirements](#) for recreational UAS use; and
- C. consistent with the general requirements of Section I and the notification requirements of Section II.

UAS operations conducted as part of a student's work in a start-up (for example, as part of The Garage accelerator program) would not qualify as Outdoor Hobbyist UAS use. UAS operators in such case must follow the FAA requirements in Section I and the advance notification requirements in Section II. If operated indoors in a Preapproved Location, then the exception referenced in Section III.A.2 would apply.

V. *Third-party UAS operations:*

Any third party engaged by the University to operate UAS must:

- A. execute a contract holding the University harmless from any claims, harm to individuals, or property loss resulting from such UAS operations;
- B. provide proof of any insurance required by the University;
- C. if operated outdoors, provide proof of FAA authorization to operate such UAS;
- D. if operated indoors, obtain the approvals for indoor UAS operation required by Section III.C; and
- E. comply with the general requirements of Section I and provide the notifications required by Section II.

VI. *Purchasing and insurance:*

- A. Any unit, faculty, staff, or student using (i) University funds, (ii) sponsored project funds, or (iii) funds distributed through a University account to purchase a UAS (or the parts to assemble a UAS) must assess its ability to operate the UAS consistent with applicable law, regulations, city ordinances, this Policy, and (if operated off University property) any requirements imposed by owners of property where UAS are operated.
- B. University-owned UAS will be insured for any liability arising out of their operation only if such UAS are registered with ORM and operated in accordance with this Policy. The University will not insure unregistered UAS. Any physical damage to the UAS is the responsibility of the UAS owner. UAS can be registered by sending an email to risk@northwestern.edu with specific information on the UAS, its intended use, and pilots.

Consequences of Violating this Policy

Failure to comply with this Policy may result in disciplinary action, including suspension of UAS operations, termination of employment, or academic dismissal. The University reserves the right to suspend or prohibit UAS operations as it deems appropriate.

In addition, violations of laws, regulations, or city ordinances relating to UAS operation could lead to legal action or criminal proceedings.

Related Information

Forms

[UAS Flight Request Form](#)

Other information

[Export Administration Regulations](#)

[Export Controls Compliance Policy](#)

[FAA Aircraft Registration \(for large UAS\)](#)

[FAA Educational Use of UAS memorandum](#)

[FAA Fly for Fun requirements](#)

[FAA Small Unmanned Aircraft Operations \(Part 107\) fact sheet](#)

[FAA Small UAS Registration Service](#)

[FAA Small UAS Waiver Request](#)

[FAA UAS FAQ page](#)

[International Traffic in Arms Regulations](#)

[NTIA Voluntary Best Practices for UAS Privacy, Transparency, and Accountability](#)

Contacts

1. The following individual can address questions regarding this Policy:

Dave Perkins, Office of Risk Management, phone: (847) 467-6342, email: risk@northwestern.edu

2. Any flight plans, requests for preapproval of recurring indoor flight activity, or registration of University-owned UAS should be communicated to:

Risk Management Services, email: risk@northwestern.edu.

3. Any incidents of property damage or personal injury involving UAS use, or reports of reckless or improper UAS use, should be reported to:

University Police, phone: (847) 491-3456, email: universitypolice@northwestern.edu and Risk Management Services, email: risk@northwestern.edu.

4. Any questions regarding export compliance should be directed to:

Export Controls Compliance, email: exports@northwestern.edu.

5. Any questions regarding NU-Q's UAS guidelines or UAS use on the NU-Q campus should be directed to:

Director of Health, Safety, Security, Environment (HSSE), NU-Q, phone: +974 4454 5240, email: michael.mcdonough@northwestern.edu.

6. In the event of an emergency involving UAS, call 911 or contact University Police by dialing 456 from any campus phone.

History

New interim policy effective April 14, 2017.

Policy URL:

<http://policies.northwestern.edu/docs/interim-drones-policy-041417-final.pdf>