

UNMANNED AIRCRAFT SYSTEMS (UAS)



SMALL UNMANNED AIRCRAFT SYSTEMS

Small, unmanned aircraft systems (UAS), also known as drones, encompass the family of remote-operated aircraft and rotorcraft



Source: space.com

weighing less than 55 pounds (including payload).

Only UAS used for UW-approved activities are allowed on property that is controlled, owned or leased by the UW. The operation of UAS is regulated by the [Federal Aviation Administration \(FAA\)](https://www.faa.gov).

OPERATOR STEPS

- 1. Get UW approval:** Operators are required to have approval from their supervisor and/or UW sponsor to use a UAS on UW property.
- 2. Register the UAS with the FAA:** Operators are required to [register](https://www.faa.gov) and their UAS in accordance with FAA requirements.
- 3. Label the UAS:** When operators register their UAS, operators will receive a registration number that is required to be put on the drone.
- 4. Obtain a Remote Pilot Certificate:** To operate the controls, operators are required to be at least 16 years of age and have a [Remote Pilot Certificate](https://www.faa.gov) (or be under the direct supervision of a person who holds such a certificate) in compliance with FAA's Small UAS Rule [Part 107](https://www.faa.gov).
- 5. Follow the Safety and Operating Requirements** (listed below).

FAA SAFETY AND OPERATING REQUIREMENTS

- Conduct and document a **pre-flight inspection** prior to flight to ensure the UAS is in a safe condition. If it's not in a safe condition, take the UAS out of service.
- Always **avoid manned aircraft**.
- **Keep UAS within sight.** If operator uses First-Person View (FPV) or similar technology, the operator must always have a visual observer to keep their UAS within unaided sight.
- **Fly during daylight hours only** (from 30 minutes before sunrise to 30 minutes after sunset).
- The **minimal weather visibility is at least three (3) miles** from the operator's control station.
- The **maximum allowable altitude is 400 feet** above the ground, higher if the drone remains within 400 feet of a structure.
- The **maximum speed is 100 miles per hour** or 87 knots.
- UAS' are permitted to carry an external load if:
 - It is within the 55-pound weight limit; **and**
 - It is securely attached; **and**
 - It does *not* adversely affect the flight characteristics or controllability of the aircraft.

FAA PROHIBITIONS

- **Do not fly a UAS over people** unless they are directly participating in the operation.
- Do not operate in a careless or reckless manner.
- **Do not drop any object** from a UAS that could injure someone, cause a hazardous situation, or damage property.
- Operators cannot be a pilot or visual observer for more than one UAS operation at a time.
- **Do not operate a UAS:**
 - From a moving aircraft;
 - From a moving vehicle unless operator is flying the UAS over a sparsely populated area, and it does *not* involve the transportation of property for compensation or hire;
 - To monitor or record activities of people where there is a reasonable expectation of privacy (i.e. residence halls, private residence, healthcare centers, dressing rooms, or similar locations);
 - In and around stadiums starting one hour before and ending one hour after the scheduled time of the event;
 - Near airports and controlled airspaces without receiving an airspace authorization prior to operation;
 - Over designated national security sensitive facilities such as military bases, national landmarks, and critical infrastructure sites; or
 - Indoors, unless the operator has received approval by the manager of the building.

OTHER SAFETY REQUIREMENTS

- UAS are required to be designed to *not* contain rotating parts that will lacerate human skin upon contact.
- UAS are required to be designed to have a readily accessible physical means to safely disconnect and de-energize the power source when performing maintenance or repair.
- UAS powered by lithium battery systems are required be stored in accordance with the [UW Lithium Battery Safety guidance](#).
- Provide a portable fire extinguisher when operating a UAS in the field.

FLYING OVER THE UNIVERSITY

Visit the UW Brand [Photo and Video Guide](#) for additional information, requirements, and restrictions for flying a drone on UW property, including near UW hospitals, the UW Medicine helipad, and Husky Stadium.

REPORT INCIDENTS

Call 9-1-1 for any UAS-related emergencies.

Report UAS-related injuries and incidents to Environmental Health & Safety via the [Online Accident Reporting System](#) within 24 hours.

REFERENCES

- Federal Aviation Administration (FAA) – [Small Unmanned Aircraft Systems \(UAS\) Regulations \(Part 107\)](#).
- Federal Aviation Administration (FAA) – [Where Can I Fly?](#)
- Washington State Department of Transportation (DOT) – [Drones & Unmanned Aircraft Systems \(UAS\)](#).
- University of Washington Tacoma (UW Tacoma) – [Use of Unmanned Aircraft Systems \(UAS\) On University Tacoma Campus and Property](#)

Contact Environmental Health & Safety at 206.543.7262 or ehsdept@uw.edu for more information.