Skidmore College Guidelines on UAS - Unmanned Aircraft Systems (drones)

For the purposes of these guidelines, we will refer to "drones" by the current Federal Aviation Administration title of UAS (Unmanned Aircraft Systems). What follows are the current Skidmore College guidelines concerning the use of all UAS on college-owned property.

What types of devices fall under the category of an Unmanned Aircraft System (UAS)?

Any contrivance invented, used, or designed to navigate or fly in the air is considered to be an Unmanned Aircraft System (UAS). The list of items includes, but is not limited to: drones; single, dual, and multi-rotor devices; model aircraft; rockets; projectiles; and even balloons and kites.

Can I legally use a UAS on any college-owned property?

Yes, but Skidmore has adopted a number of guidelines on the use of UAS at the college. On May 4, 2016, the FAA has issued an interpretation on the permissible use of UAS at educational institutions. However, the college has implemented much stricter guidelines on the use of UAS at Skidmore College that expand the restrictions put in place by the FAA.

If I meet all the current FAA criteria for flying a UAS, is it permissible to fly my UAS on college-owned property?

No, with one exception. Assuming someone meets all the current FAA criteria for being able to fly Unmanned Aircraft Systems (UAS), the use of these devices is prohibited on most college-owned property. The single exception to this guideline is the Skidmore College baseball field on Denton Road. Hobbyists may use Unmanned Aircraft Systems (UAS), on the Skidmore College baseball field, only if they have prior written permission (via email) from both the Skidmore head baseball coach and the Skidmore Director of Athletics. UAS must be flown at all times within the fenced-in confines of the baseball field.

If I get permission, are there any other restrictions on flying Unmanned Aircraft Systems at Denton baseball field?

Yes. Anyone who receives advance written permission (via email) to fly an Unmanned Aircraft Systems (UAS) at Denton Field must also abide by the following restrictions:

- Registration of the UAS is now required by law. You must register your UAS with the FAA before you operate it outdoors.
- To operate the controls of a small UAS under Part 107, you need a remote pilot certificate with a small UAS rating, or be under the direct supervision of a person who holds such a certificate.
- You must be at least 16 years old to qualify for a remote pilot certificate, and you can obtain it in one of two ways:

- You may pass an initial aeronautical knowledge test at an FAA-approved knowledge testing center.
- If you already have a Part 61 pilot certificate, you must have completed a flight review in the previous 24 months and you must take a small UAS online training course provided by the FAA.
- You are responsible for ensuring a drone is safe before flying. For example, you
 will have to perform a preflight inspection that includes checking the
 communications link between the control station and the UAS.
- Line of sight the person authorized to fly the Unmanned Aircraft Systems (UAS) must, at all times, maintain line-of-sight at all times. Line-of-sight is defined as:
 - 1. The aircraft must be visible at all times to the operator.
 - 2. The operator must use his or her own natural vision (which includes vision corrected by standard eyeglasses or contact lenses) to observe the aircraft.
 - 3. People other than the operator may not be used in lieu of the operator for maintaining visual line of sight.

Under the criteria above, visual line of sight would mean that the operator has an unobstructed view of the model aircraft. To ensure that the operator has the best view of the aircraft, the statutory requirement would preclude the use of vision-enhancing devices, such as binoculars, night vision goggles, powered vision magnifying devices, and goggles designed to provide a "first-person view" from the model. Such devices would limit the operator's field of view thereby reducing his or her ability to see-and-avoid other aircraft in the area."

- Notification of Campus Safety is required. Please call Campus Safety at 580-5567 to let them know the date and times you will be flying the UAS at Denton Field.
- Other restrictions in addition to line of sight, the hobbyist must adhere to the several guidelines while flying Unmanned Aircraft Systems (UAS) on collegeowned property. The UAS:
 - Must be flown strictly for hobby or recreational use, or within the limitations of section 336 provisions on use of UAS for educational institutions.
 - o Must display the name and contact information of the operator.
 - o Shall not be flown within 200 feet of any populated areas.
 - Shall not be flown over 400 feet above ground level (AGL).
 - Shall not create an undue hazard to unaffiliated persons or property.
 - o Shall not enter any other property, below 400 feet (AGL), without written permission from the landowner.

- Shall not fly in public until you are proven airworthy and capable of controlling the flight of the UAS.
- o Shall not weigh more than 5 pounds, fully loaded.
- Shall not carry any hazardous substance or any weapon.
- Should always be operated in accordance with a community-based set of safety guidelines and within the programming of a nationwide community-based organization.
- Respecting the privacy of all person's not directly involved in flying the UAS. Do not intentionally view or record anyone without their prior permission.

As with other activities on campus, any injury or property damage caused by the UAS should be promptly reported to Campus Safety.

- Additionally, the FAA also imposes the following restrictions on hobbyists, which may apply to areas designated by the college as permissible:
 - When flown within 5 miles of an airport, the operator of the UAS provides the airport operator and the airport air traffic control tower with prior notice of the operation. Note: The Skidmore College baseball field on Denton Road is 5.6 miles from the nearest airport, so this restriction does not apply).
 - Avoid flying near any full-scale aircraft.
 - Ask for assistance from flight controllers if needed.
 - The aircraft is operated in a manner that does not interfere with, and gives way to, any manned aircraft.

Any person operating a UAS and not following these guidelines should be immediately reported to Skidmore College Campus Safety (518-580-5567). Skidmore College reserves the right to deny any person or group from flying Unmanned Aircraft Systems (UAS) on Skidmore-owned property at any time. Skidmore College also reserves the right to modify these guidelines at any time as needed.

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Additional relevant information

Summary of recent FAA interpretations:

On May 4, 2016, the FAA modified Rule 336 to clarify its interpretation of the rule as it relates to the education use of UAS's. The FAA's new interpretation is as follows:

- 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 incidentally 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 (usually not applicable at Skidmore).
- 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.)."

In addition, Rule 336 has been modified as follows:

- Hobbyist Use of UAS to Conduct Demonstrations: The FAA now includes operation of UAS to conduct demonstrations at accredited educational institutions or at other community-sponsored events provided the aircraft is not being operated for compensation, in furtherance of a business or incidental to a business. Therefore, a model aircraft hobbyist or enthusiast lawfully may fly UAS at accredited educational institutions or other community-sponsored events to promote the safe use of UAS and encourage student interest in aviation as a hobby or for recreational purposes provided the hobbyist receives no compensation of any form (including honorarium or reimbursement of costs), or an such compensation neither directly nor indirectly furthers the hobbyist's business or operation of the UAS and he or she follows the provisions of section 336.
- Student Operation of Model Aircraft (UAS) for Educational Purposes: The FAA found "that the use of small unmanned aircraft by students at accredited educational institutions as a component of science, technology and aviation-related educational curricula or other coursework such as television and film production or the arts more closely reflects and embodies the purposes of "hobby or recreational" use of model aircraft and is consistent with the intent of section 336 of the FMRA. Accordingly, the FAA concludes that student use of UAS at accredited educational institutions as a component of their science, technology and aviation- related educational curricula, or other coursework

such as television and film production or the arts, is "hobby or recreational use" within the meaning of the FMRA. The student is, however, responsible for meeting and complying with all other elements required for lawful model aircraft operations pursuant to Section 336 of the FMRA, including the student not receiving any form of compensation (including reimbursement of costs, honorarium, etc.) directly or incidentally to his or her operation of the model aircraft."

- Faculty Use of Model Aircraft (UAS): "The FAA recognizes that faculty participation in the student's learning experience often is an integral component of the student's educational experience and that faculty should be able to participate in and contribute to the unmanned aircraft activities in which students can engage as hobbyists. However, a faculty member engaging in the operation of an unmanned aircraft, as part of professional duties for which he or she is paid, would not be engaging in a hobby or recreational activity. Rather, the faculty member is being compensated for his or her teaching or research activity, including any UAS operation arising from or related to the faculty member's teaching a course or conducting research.
- Likewise, a student operating UAS for research on behalf of a faculty member is associated with the faculty member's professional duties and compensation and, thus, is not hobby or recreational use by the student pursuant to section 336. Student operation of UAS for the professional research objectives of faculty renders the operation non-hobby or non-recreational. Accordingly, a faculty member conducting research may not rely on section 336's concept of "hobby or recreational use" to either operate a UAS or direct student UAS operations in connection with such research.
- Nevertheless, faculty teaching a course or curricula that uses unmanned aircraft as a component of that course may provide limited assistance to students operating unmanned aircraft as part of that course without changing the character of the student's operation as a hobby or recreational activity or requiring FAA authorization for the faculty member to operate. The FAA finds that de minimis limited instructor participation in student operation of UAS as part of coursework does not rise to the level of faculty conducting an operation outside of the hobby or recreation construct.
- This limited circumstance would apply to courses at accredited institutions where the operation of the unmanned aircraft is secondary to the design and construction of the aircraft, such that the primary purpose of the course is not operating an unmanned aircraft. For example, an instructor teaching an engineering course in which construction and operation of UAS are one part of the curriculum would be able to conduct limited UAS operations. In that case students would fly UAS to test the validity of design or construction methods to show mastery of the principles of the course. The faculty member's UAS

operation would be secondary to the purpose of instructing engineering courses. In contrast, this limited circumstance would not apply to a course related to UAS flight instruction. In that case, the student's primary purpose for taking the course is to learn to fly a UAS and flight would be expected to be demonstrated on a regular basis. In that case, the faculty member's UAS operation is closely tied to his or her purpose of instructing how to fly a UAS."

The complete text of the FAA's May 4, 2016 Memorandum on the subject of "Educational Use of Unmanned Aircraft Systems (UAS) is available at:

http://www.faa.gov/uas/resources/uas_regulations_policy/media/interpretation-educational-use-of-uas.pdf

What is the traditional "hobby and recreation" exclusion?

Under the existing laws, the FAA definition of "hobby" is strictly defined as a "pursuit outside one's regular occupation engaged in especially for relaxation." "Recreation", is also defined by the FAA as "refreshment of strength and spirits after work; a means of refreshment or diversion".

While it is legal for "hobbyists" to fly UAS for "hobby or recreational" purposes only, Skidmore College has set strict limits on where and when approved hobbyists may fly UAS on college-owned property (see below).

*Note: "Drones" are also commonly referred to as: UAV (Unmanned Aerial Vehicle); RCA (Radio Controlled Aircraft); ROA (Remotely Operated Aircraft); and SAO (Small Airborne Objects).