



Risk Management Guidelines

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Subject: UNMANNED AIRCRAFT SYSTEM USE IN EDUCATIONAL SETTINGS

BACKGROUND

The purpose of this guideline is to make CRMA Districts aware of the regulatory requirements associated with use of unmanned aircraft systems (UAS), also known as drones, in educational settings. The UAS includes the unmanned aircraft (UA) and all the associated support equipment including; the remote control, batteries, data links, communications, and navigation equipment necessary to operate the unmanned aircraft.

In general, if the UA weighs less than 0.55 pounds, then it is **not** subject to Federal Aviation Administration (FAA) registration or regulations. If the UA weighs more than .55 pounds it is subject to FAA registration and regulations. The type of regulations placed on the operator depends on whether the operator is considered a commercial operator or a hobbyist.

There was much confusion regarding whether students and faculty were considered hobbyists or commercial operators. So, the FAA issued a memorandum on May 4, 2016 explaining its interpretations and how they apply to educators and students. A copy of this memorandum is attached and summarized below.

REQUIREMENTS FOR STUDENTS

The memo states that students would be considered “hobbyists” since they do not receive any compensation related to their operation of a UAS. Thus, the students may fly UASs without Remote Pilot’s Certification (RPC) or a Certificate of Authorization (COA) from the FAA. The UAS being used by the student still needs to be registered and operated in accordance with standards listed in the Section 336 of the 2012 FAA Modernization and Reform Act. A summary of this provision is listed below.

Standards include:

- 1) Operator must be 13 years of age or older and must be a U.S. citizen or legal permanent resident
- 2) If UA is over .55 pounds and less than 55 pounds, it must be registered with FAA, and registration number must be visible on UAS.
- 3) Operator must adhere to community-based safety guidelines such as the one set forth by Academy of Model Aeronautics (AMA). See Know Before You Fly website (<http://knowbeforeyoufly.org/>) for more information. Common standards found on this website are:
 - a. UAS must undergo pre-flight check to ensure it is in condition for safe operation
 - b. Fly no higher than 400 feet
 - c. UAS must be kept within eyesight at all times

- d. Never fly near other aircraft, especially near airports (may not fly within 5 miles of any airport or helipad)
- e. Never fly over groups of people
- f. Never fly over stadiums or sports events
- g. Never fly near emergency response efforts such as fires
- h. Ensure the operating environment is safe and that the operator is competent and proficient in the operation of the UAS.
- i. Do not fly near or over sensitive infrastructure or property such as power stations, water treatment facilities, correctional facilities, heavily traveled roadways, government facilities, etc.
- j. Check and follow all local laws and ordinances before flying over private property.
- k. Do not conduct surveillance or photograph persons in areas where there is an expectation of privacy without the individual's permission

REQUIREMENTS FOR FACULTY

The FAA's memorandum provides clarification on when faculty would be considered a hobbyist UA operator under the Section 336 of the 2012 FAA Modernization and Reform Act and when they would be considered a commercial UA operator subject to FAA Part 107 requiring a RPC or a COA.

The FAA recognizes that faculty participation in the student's learning experience is often an integral part of the student's educational experience. Thus, faculty should be able to participate in the UA activities which students engage in. However, in general, a faculty member engaging in the operation of an UA as a part of his or her professional duties for which they are paid for would not be engaging in a hobby. Rather the faculty member is being compensated for his or her teaching or activity, including the UA operation related to the faculty's members course or job, and therefore be considered a commercial operator subject to FAA Part 107 which requires a RPC or COA.

The memo goes on to clarify this interpretation. It states that faculty members teaching a course which uses UASs as a component of that course may provide limited assistance to student's operating UASs as a part of that course without an RPC or COA. The FAA considers this type of UAS operation by the instructor to be "de minimis" and does not rise to the level of faculty conducting an operation outside of a hobby.

This "de minimis" circumstance would only apply to faculty teaching courses where the operation of the UA 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 the primary curriculum is centered around design and construction of a UAS would be able to conduct limited UAS operations. In that case students would fly UASs on a limited basis but only to test the validity of design or construction methods. A teacher's potential limited operation of a UAS in this situation would be minimal and not the primary purpose of the course. Even though UA operation in these types of situations is not subject to FAA Part 107 regulations, operation of the UA is still subject to Section 336 of the 2012 FAA Modernization and Reform Act. (Summary of this act was included on page 1.)

In contrast, the "de minimis" circumstance would not apply to courses related to UAS flight instruction. In those cases, the student's primary purpose for taking the course is to learn to fly a UAS and flight

demonstrated by the teacher would be expected to occur on a regular basis. In that case, the faculty member's UAS operation is closely tied to his or her employment, thus the instructor would need a RPC or a COA.

FREQUENTLY ASKED QUESTIONS

1. How do I register a UAS?

Go to FAA's website. The link is <https://registermyuas.faa.gov/> . Cost of drone registration is \$5.

2. Should the UAS be registered to the student or District?

Depends on ownership of the UAS. If student owns the UAS then it would be registered to that student. If District owns the UAS then they would be registered owner. In addition to registering the UAS with FAA, the District must make sure it is included on their inventory with CRMA. Student owned drones do not need to be inventoried with CRMA.

3. Should students take a safety test prior to operating their UAS?

Yes. It is recommended that before their first flight students complete a UAS safety training course and show mastery of that training by passing a test. Test results should be kept by instructor.

4. Is there a good resource to find UAS safety information?

Yes. Please visit the Know Before You Fly website.

5. Should I get a Remote Pilot's Certificate (RPC) or a Certification of Authorization (COA)?

That is up to the operator and the District. If teaching UAS flight to students is a primary component of a course and there will be several flights conducted we recommend that these teachers obtain a Remote Pilot's Certificate.

6. What is the difference between an RPC and a COA?

If considered a commercial operator then you must abide by rules set forth by Part 107 which would include an RPC. The FAA makes certain exceptions to governmental agencies so long as the UAS is being used to perform a governmental function. If the District is looking for an exception it may apply for a COA which allows flights at or below 400 feet in Class G airspace nationwide and self-certification of the UAS operator.

The FAA thoroughly evaluates each COA application to determine the safety of the proposal. COAs are issued for a specific period of time, usually two years, and include special provisions unique to each proposal, such as a defined block of airspace and time of day UAS can be used.

7. How do I apply for a Remote Pilot's Certificate?

To qualify for a Remote Pilot's Certificate a person must:

- A) Demonstrate aeronautical knowledge by either:
 - a. Passing an UAS Aeronautical Knowledge Test. Cost of test is \$150 and is taken at an FAA approved site. Test sites can be found on www.faa.gov. Test is 60 multiple choice questions, topics include UAS regulations, airspace classification requirements, privacy issues, weather, communications, emergency procedures, UAS performance and operations, or
 - b. Hold a Part 61 pilot certificate (other than student pilot), complete a flight review within the previous 24 months and complete a Small UAS online training course provided by the FAA
- B) Be vetted by the Transportation Security Authority
- C) Be at least 16 years old

Once the three qualifications have been met you may apply for a Remote Pilot's Certificate either online or by mail with the FAA.

For more information please visit:

https://www.faa.gov/uas/getting_started/fly_for_work_business/becoming_a_pilot/

8. How can I apply for a COA?

You may apply online at www.faa.gov . The average COA processing time is less than 60 days.