

April 12, 2017

To: Susan Cochran
Chair, UCLA Academic Senate

From: Ertugrul Taciroglu
Chair, Undergraduate Council

Re: Draft Presidential Unmanned Aircraft System (UAS) Policy—Systemwide Review

At its April 7, 2017 meeting, the Undergraduate Council discussed the Draft Presidential Unmanned Aircraft System Policy. At this time, the Undergraduate Council has some specific concerns regarding the suggested language and oversight structure proposed in the draft that prevent us from fully endorsing the policy as it is currently articulated.

The Council agreed that it makes sense to regulate the use of UAS at UC campuses. However, it is not supportive of the proposed regulations for activities that occur off campus. Indeed, it seems prudent to have different policies and systems in place that regulate campus-based activities and field-based activities. As with many types of emergent types of technologies that are used in research, the use of UAS has outpaced their regulation. However, we hesitate to hastily create too many levels of bureaucracy that might hamper research productivity without ample reason or justification.

The use of UAS is becoming increasingly common in field research. As with any other instrument, it is often not clear if there will be a need to use UAS until researchers arrive on site and assess the situation. While researchers should, of course, comply with all local regulations, to be forced to apply for permissions before ever venturing into the field seems overly burdensome and taxing for researchers.

The Council agreed that, before it could support an oversight structure that would govern the use of UAS (both in and out of the classroom), a clearer system of approval needs to be articulated. The Council also believes that any such policy should have separate oversight structures and approval processes that govern campus use and field use. We also solicited feedback from the Department of Earth, Planetary, and Space Sciences (EPSS), which is included as an enclosure.

If you have any questions or need additional information, please do not hesitate to contact me or Eric Wells, the Undergraduate Council Analyst (ewells@senate.ucla.edu; x51194).

Enclosure: EPSS Staff Response

cc: Eric Wells, Committee Analyst, Academic Senate

Thanks for giving us a chance to weigh in. I am already on the UC UAS drone listserv so have seen these proposed regulations already and agree with them 100%, they bring accountability to the FAA regulations for UC recreational vs. commercial use, and also personal/property protection via UC insurance policies. It basically makes clear that ANY drone operations on UC property, or for UC-related business (coursework, fieldwork, promotional video etc.) must be registered with both the FAA and the UC UAS center, and that every flight must be scheduled and approved by the latter in advance.

However... The ***most*** significant piece they didn't really cover at all is **the gray area for faculty/students/staff operating UAS inside and outside of a class**, which is already stated in this FAA memo, but must be explicitly stated in big bold text in the UC policy:

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

Coursework that requires students to operate drones is considered "hobby or recreational use" and does not require FAA certification under part 107, and this includes only minimal use/assistance by the instructor as required for basic flight instruction. ALL other use for research outside of a specific course, whether by faculty, staff, or students, is considered non-hobby or recreational use because it is related to the compensated interests of the faculty/PI and thus falls under commercial drone use. This is why I got my FAA Part 107 license to build, test and operate Vassilis' magnetometer drone last summer. Students flying it eventually in EPSS 136C or as part of 199 student research would not need licensing. Any other use for research or testing would either require the faculty/staff/student get an FAA UAS license to fly, or be supervised by an FAA licensed drone pilot under Part 107 as "Remote Pilot-in-Command," who must be present during all flights and is ultimately the responsible party in an emergency or accident. This FAA training is absolutely necessary for safety reasons such as proper airspace use and aircraft collision avoidance, weather hazards, awareness of distance regulations concerning people/vehicles, equipment maintenance and recordkeeping, and contingency/emergency response. Not a job to be taken lightly or dumped on an unsuspecting student! Thus, to comply with federal rules, any EPSS drone fieldwork would need supervision by an FAA licensed drone pilot (e.g. me) or we have to start having faculty and grads/undergrads get licensed as soon as possible.

Since this is the legal boundary EPSS will be operating around, the UC draft drone policy must explain this licensing distinction clearly otherwise it leaves a can of worms for people to be cited by the FAA if they are caught flying outside of coursework, or lack liability coverage if someone gets hurt. Now, if the UC drone policy supersedes this FAA educational rule and covers all UC research drone use without need for FAA certification that needs to be spelled out clearly, but I don't think that is the case.

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