



# Safety Brief: UAVs & Higher Education

**The rising popularity of Unmanned Aerial Vehicles (UAVs) has institutions evaluating usage. What are the liability challenges?**

UAVs are also known as small Unmanned Aerial Systems (sUASs) and colloquially as drones. They comprise miniature flying machines of the consumer variety seen hovering above backyards and parks as well as larger and more complex devices used by law enforcement agencies and universities. Universities operate some of the largest UAVs in the United States. Higher education usage varies – from aviation design research to filming promotional videos of a campus – and the regulatory and liability landscape is evolving. The Federal Aviation Administration (FAA), which governs unmanned aircraft, instituted requirements in 2015 that call for all UAVs between 0.55 and 55 pounds used for recreational purposes to be registered.<sup>1</sup> Under a May 2016 memorandum, the FAA clarified that certain academic uses by students fall within the definition of recreation whereas other academic usage, by faculty in particular, is considered commercial. Until recently, institutions had to petition for a Section 333 exemption from the FAA permitting “commercial” UAV use at their school. But petition approvals were slow. Some public institutions can get a certificate of authorization (COA), but these have limited utility for educational purposes. In June 2016, the FAA finalized regulation for commercial use of UAVs opening up the skies to increased UAV activity.<sup>2</sup> Is your institution prepared?

## Current Regulatory Landscape

UAV treatment is contingent upon your institution’s status as public or private, and whether usage is considered recreational, commercial or public. Recreational is just that – operation for hobby and leisure that falls under the model aircraft category. According to the FAA, taking photos with a UAV for personal use is recreational. In contrast, capturing images or video for compensation and/or to support your business is not recreational. Under Section 336 of the FAA Modernization and Reform Act, a UAV:

- Must be within sight of the user and below 400 feet;
- Is no more than 55 pounds;
- Does not interfere with and gives way to manned aircraft;
- Does not fly near people or stadiums;
- Does not fly within five miles of an airport or otherwise provides notice to and communicates with the airport.<sup>3</sup>





Utilization of a UAV is considered commercial if the owner/operator earns money or advances business interests; for instance, if the user provides contract services by inspecting property and gathering data or sells UAV images as wedding or real estate photography. Even certain academic pursuits, particularly research projects where faculty controls UAV operations, fall under the commercial umbrella. Until the new FAA rules governing commercial use go into effect August 29, 2016, commercial use requires a Special Airworthiness Certificate or, more commonly, a Section 333 exemption (of which 5,500+ have been granted).<sup>4</sup> Schools have found it difficult though not impossible to acquire exemptions.<sup>5</sup> And because of some limitations in the new rules, some institutions may still wish to get exceptions for broader UAV use.

Certain public colleges and universities may find the COA route more useful. However, according to the 2014 FAA memorandum, education is not an official “governmental function” and thus some academic training via UAV is not included. The memo’s definition of governmental refers to such functions as defense, firefighting, search and rescue, and law enforcement.<sup>6</sup> Public institutions could procure a COA for limited circumstances like aeronautical research or biological resource management. A school may also prove their work is for the integration of UAVs into the national airspace or another function valuable to the government and/or public.

The most recent FAA rules, which take effect on August 29, 2016, put general commercial use under the same restrictions as recreational use.<sup>7</sup> Among the key operational limitations:

- The UAV must weigh less than 55 lbs (including any payload);
- The operator must maintain visual line-of-sight (a visual observer can’t be the only one in the line-of-sight);
- The UAV can only fly under 400 feet (with the exception of when it is above 400 feet but within 400 feet of a structure) with a maximum groundspeed of 100mph; during daylight and, if outfitted with appropriate lights, twilight hours; and not over people;
- The operator must either hold a remote pilot airman certificate with a UAS rating or be under the direct supervision of a person holding such certificate;
- To qualify for a certificate, the operator must be 16-years-old; be vetted by the Transportation Security Administration, and demonstrate aeronautical knowledge through either an existing part 61 pilot certificate or by passing a knowledge test;
- All UAVs must be registered with the FAA.

Overall, the new rules for commercial flight open up the skies to a large range of uses; additionally, operators can still apply for waivers of certain restrictions (See Appendix).

### Distinctions for Certain Educational Uses

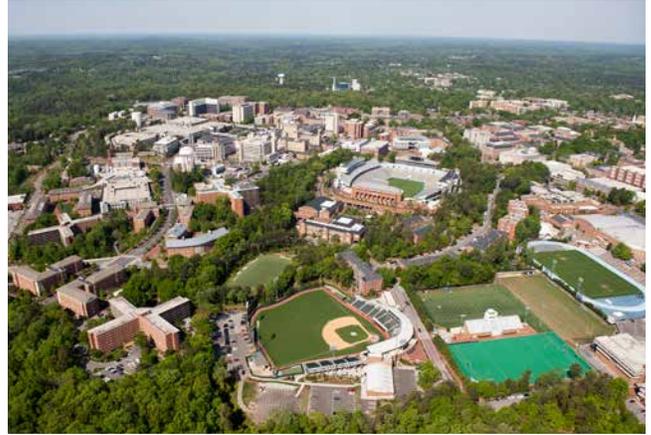
In May 2016, the FAA issued an interpretation memorandum<sup>8</sup> regarding educational use. A student may operate a UAV under the recreational framework if flight is part of their aviation-related curriculum at an accredited institution. Acceptable coursework comprises not only STEM but also television and film production and the arts. A student may not operate a UAV with commercial intent or for financial gain to qualify for recreational educational use.

The FAA was not as generous with faculty. While recognizing that faculty is integral to the learning process, the FAA stipulated that academic personnel are paid therefore are categorized as commercial. The same applies to a student operating a UAV strictly at the direction of faculty for a research project. However, the FAA allows limited instructor

participation in student operation. For instance, faculty may intervene in the event a student loses control of a UAV. Under this interpretation memorandum, instructors will need to walk a fine line – especially if they lack a remote pilot certificate pursuant to the FAA rules for commercial use.

### What's Coming?

As noted, the FAA has already begun blanket registration for recreational UAVs and issued clarification as to educational use. More UAVs will take to the air around institutions once the new rules governing commercial use take effect at the end of August 2016. Many of the limitations around educational use will disappear or at least the need to go through a lengthy waiting period for a Section 333 exemption. For those institutions and operators that find the flight restrictions too limiting, the FAA rule expressly states that several of the restrictions are waivable. The operator will have to apply for a certificate of waiver demonstrating the ability to operate the UAV safely beyond the given parameters.



### What Can You Do Now?

From a liability and risk management standpoint, three particular areas warrant focus: (1) best practices for UAVs controlled directly; (2) best practices for contracting with third-parties who control UAVs; and (3) best practices regarding UAVs not controlled by you, your institution, or a contracted third-party operator.

1. Whether or not your institution has the requisite Section 333 exemption or has registered UAVs for commercial use, UAVs are likely being used on campus and part of academic curriculum. There are a number of safeguards you can take:
  - If your institution has an exemption, work within the exemption as much as possible. Assess how your situation with or without an exemption fits within the FAA's May 2016 memorandum on educational UAV usage as well as compliance with the new rules regarding commercial use.
  - Understand your institution's environment from the air. Where is the nearest airport? Are there heliports for health care or other purposes nearby, or even on your own campus? Are there neighbors who may take offense to UAVs coming near their property? Understanding the environment from a flight pattern and privacy perspective can help shape policies to govern academic use of UAVs.<sup>9</sup>
  - Keep careful track of UAVs being used for academic purposes. Just as the federal government requires registration of UAVs, your school should keep track of the model, serial number and UAV operator. This will strengthen liability protection and asset management.
  - Ensure faculty using UAVs have been trained in operation (preferably holding the appropriate FAA certificate) and informed of privacy implications and airspace concerns.
  - Faculty should monitor and track student usage. The last thing your institution needs is a student crashing a UAV into a crowded area due lack of guidance by a faculty member.
2. Enlisting a third-party to perform academic or commercial work for your institution also poses liability concerns. There are a number of best practices you can follow:
  - Ensure proper indemnification language is included in the contract and the third-party has proper liability insurance coverage to honor that indemnification requirement. They should have adequate insurance limits and name your institution as an additional insured.



- Find out if the third-party understands and complies with the new FAA rules for commercial use. Do its operators hold the requisite pilot or remote pilot certificates? Do they have a COA, Section 333 exemption, or a waiver from certain new commercial restrictions if their operation takes UAVs beyond what the FAA allows?
- Establish operational guidelines such as maintaining visual line-of-sight, remaining below 400 feet, and operating outside five miles of an airport. Also consider discussing their safety procedures, and establishing notice requirements for those on the proposed flight paths both within and outside campus.

- Ask about flight history, business history, previous flight experience or UAV training, and the third-party's policy for collection and retention of information gathered during operation..

### 3. Regarding UAVs you do not control:

- Determine if your school wants to institute a campus-wide ban on student UAV usage. If so, the ban should be clearly communicated through faculty and residence hall advisors to all students including those incoming via freshman orientation.
- If your institution believes a ban would be impractical, determine if mandating registration of student-owned UAVs is the proper course of action. Registration could be coupled with a mandatory training session to cover safety and privacy concerns.
- Prepare signage and an education campaign for all visitors regarding your UAV policy, particularly if it is one of disallowing UAV usage outside of your institution's own ranks. This is important for public events including athletics.
- Identify any parties – e.g., contractors, film crews, and event organizers – who may seek to bring UAVs on site and ensure your management procedures actively address the potential deployment of UAVs.

Before developing a UAV policy, discuss logistics with campus security and local law enforcement as well as internal or external legal counsel.

For more information on AIG's unmanned aircraft solutions, please visit: [www.aig.com/uas](http://www.aig.com/uas)

For more information on how AIG's risk experts can protect your institution from emerging hazards, please contact: [RiskConsulting@AIG.com](mailto:RiskConsulting@AIG.com)

## References

1. As of Dec. 21, 2015, the Federal Aviation Administration requires all owners of small unmanned aircraft, or drones, weighing between 0.55 and 55 pounds to register online before taking to the skies. [www.knowbeforeyoufly.org](http://www.knowbeforeyoufly.org); [http://www.faa.gov/news/press\\_releases/news\\_story.cfm?newsId=19856](http://www.faa.gov/news/press_releases/news_story.cfm?newsId=19856)
2. The FAA announced finalized rules on June 21, 2016. These will go into effect on August 29, 2016. See <http://www.faa.gov/uas/>; [http://www.faa.gov/news/press\\_releases/news\\_story.cfm?newsId=20515](http://www.faa.gov/news/press_releases/news_story.cfm?newsId=20515)
3. FAA's general safety guidelines: [http://www.faa.gov/uas/model\\_aircraft/](http://www.faa.gov/uas/model_aircraft/); §336 of FAA Modernization and Reform Act of 2012: [http://www.faa.gov/uas/media/Sec\\_331\\_336\\_UAS.pdf](http://www.faa.gov/uas/media/Sec_331_336_UAS.pdf)
4. [https://www.faa.gov/uas/legislative\\_programs/section\\_333/](https://www.faa.gov/uas/legislative_programs/section_333/)
5. Drones Go To College: Northwest Universities Add Programs in Unmanned Aerial Systems, NW News Network, Tom Banse (Nov. 5, 2015), available at <http://nwnewsnetwork.org/post/drones-go-college-northwest-universities-add-programs-unmanned-aerial-systems>
6. FAA Memorandum, July 3, 2014, Operation of UAS as Public Aircraft for Educational Purposes, at [https://www.faa.gov/about/office\\_org/headquarters\\_offices/agc/pol\\_adjudication/agc200/interpretations/data/interps/2014/williams-afs-80%20education%20-%20\(2014\)%20legal%20interpretation.pdf](https://www.faa.gov/about/office_org/headquarters_offices/agc/pol_adjudication/agc200/interpretations/data/interps/2014/williams-afs-80%20education%20-%20(2014)%20legal%20interpretation.pdf)
7. See reference 2
8. FAA Memorandum, May 4, 2016, Educational Use of Unmanned Aircraft Systems (UAS), [http://www.faa.gov/uas/regulations\\_policies/media/Interpretation-Educational-Use-of-UAS.pdf](http://www.faa.gov/uas/regulations_policies/media/Interpretation-Educational-Use-of-UAS.pdf)
9. Id. Please also see a report published by the National Telecommunications and Information Administration in May 2016, "Voluntary Best Practices for UAS Privacy, Transparency, and Accountability": [https://www.ntia.doc.gov/files/ntia/publications/uas\\_privacy\\_best\\_practices\\_6-21-16.pdf](https://www.ntia.doc.gov/files/ntia/publications/uas_privacy_best_practices_6-21-16.pdf)

## Appendix

Part 107: What regulations can be waived?

Specific sections of Part 107 that may be waived for individual operators:

- 107.25 – Operation from a moving vehicle, boat, or aircraft
- 107.29 – Daylight only operations
- 107.31 – Visual line of sight aircraft operation
- 107.33 – Visual observer
- 107.35 – Operation of multiple small unmanned aircraft systems
- 107.37(a) – Yielding the right of way
- 107.39 – Operation over people
- 107.41 – Operation in certain airspace
- 107.51 – Operating limitations for small unmanned aircraft

There is no waiver available for operations carrying property of another on the UAV for compensation or hire from a moving vehicle, boat or aircraft, or for ops beyond visual line of sight. Separately, there are no waivers available under Part 107 for aircraft over 55 lbs., aircraft carrying HAZMAT, or for fully autonomous operations.



Bring on tomorrow®

The material contained herein is for general informational purposes only. It does not constitute legal advice or create an attorney-client relationship with the reader. Consult with a lawyer before taking action. This paper discusses risk issues from a U.S. vantage point. For regulatory issues outside the U.S., contact a local expert.

American International Group, Inc. (AIG) is a leading international insurance organization serving customers in more than 100 countries and jurisdictions. AIG companies serve commercial, institutional, and individual customers through one of the most extensive worldwide property-casualty networks of any insurer. In addition, AIG companies are leading providers of life insurance and retirement services in the United States. AIG common stock is listed on the New York Stock Exchange and the Tokyo Stock Exchange.

Additional information about AIG can be found at [www.aig.com](http://www.aig.com) | YouTube: [www.youtube.com/aig](http://www.youtube.com/aig) | Twitter: @AIGinsurance | LinkedIn: [www.linkedin.com/company/aig](http://www.linkedin.com/company/aig).

AIG is the marketing name for the worldwide property-casualty, life and retirement, and general insurance operations of American International Group, Inc. For additional information, please visit our website at [www.aig.com](http://www.aig.com). All products and services are written or provided by subsidiaries or affiliates of American International Group, Inc. Products or services may not be available in all countries, and coverage is subject to actual policy language. Non-insurance products and services may be provided by independent third parties. Certain property-casualty coverages may be provided by a surplus lines insurer. Surplus lines insurers do not generally participate in state guaranty funds, and insureds are therefore not protected by such funds.