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CLIENT ALERT

A Parting of the Clouds for Drones in Academia? New FAA Legal Interpretations Affecting Course Offerings and Research

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Educational institutions looking to launch, expand, or even sustain their unmanned aircraft system (UAS *aka* drones) research and training programs may have some homework to do. As if developing and implementing such programs weren't challenging enough, schools must now contend with a recent string of legal interpretations issued by the Federal Aviation Administration (FAA) that have had a chilling effect on UAS-related academic course offerings and research activities.

Fortunately, there may be a break in the clouds. FAA has recently expressed a growing interest in exercising authority under Section 333 of the FAA Modernization and Reform Act of 2012 (FMRA) to allow certain safe, low-risk UAS operations prior to completion of the small UAS (sUAS) rulemaking set to begin in late 2014. This so-called Section 333 process could provide a viable mechanism for innovative colleges and universities to capitalize on UAS research and training opportunities that would otherwise be prohibited under FAA policy.

The Problem

On June 13, 2014, FAA sent shockwaves through the public university research community when it published an interpretation declaring that the UAS Certificates of Waiver or Authorization (COAs) it issues to public universities can be used only for the limited purpose of conducting "aeronautical research" (*i.e.,* a research project that has at its core the development of the *aircraft* and its various systems and uses) and not for other purposes such as agricultural or environmental studies. However, it remains unclear how FAA can square such a narrow construction of UAS COA authority with certain FAA-approved research projects already in motion that focus not only on the aircraft, but also on the thing being observed or monitored using that aircraft. Indeed, mere months ago, FAA issued a press release boasting that it had granted the University of Alaska Fairbanks a COA authorizing sUAS for animal surveys, stating that the main purpose of the operation is to "show how a UAS can accurately locate, identify and count wild animals, such as caribou, reindeer, musk ox and bear for survey operations requested by the state of Alaska." FAA subsequently issued a "clarification" memo on July 3, 2014 hedging on the June interpretation, stating that the agency "did not mean to imply…that no other research may be conducted using UAS as a public aircraft." The effect of these interpretations has been to call into question whether particular research activities are authorized under UAS COAs.

FAA also issued another interpretation on July 3, 2014, this time considering whether a university may use a COA to train students to fly UAS. The memorandum concludes that education is not a valid governmental function that supports public aircraft operations, so a university may not use its COA to operate what amounts to a UAS flight school. Because of this policy, dozens of colleges and universities with UAS flight training programs have no choice but to teach student-pilots to fly UAS without actually flying them; instead, such courses are forced to rely on simulators, textbooks, and other end-run solutions (such as tethered flying) as makeshift substitutes.

The bottom line is that these FAA interpretations stifle the ability of public universities to use UAS as part of broader research initiatives or to train the next generation of UAS pilots. The situation is worse for private colleges and universities, which cannot even obtain COAs since they are not public entities.

The Potential Solution

Section 333 of the FMRA provides a means to authorize civil UAS operations today. Earlier this year, FAA pledged to use its Section 333 authority to authorize by exemption limited, low-risk civil UAS operations on a case-by-case basis prior to the completion of the sUAS rulemaking. Since the final sUAS rule may not be issued for another 18 to 24 months, Section 333 will likely serve for years as an interim bridge for expedited operational authorizations.

To obtain an exemption, an applicant must show that its UAS operations will not adversely affect safety (or provide at least an equal level of safety to the rules from which they seek exemption) and why granting the exemption would be in the public interest. With the proper procedures and risk mitigation measures in place, certain academic UAS course offerings and research activities – at both private and public institutions – should be ripe for the relief that FAA is poised to provide under Section 333.

Since May 2014, at least 28 applicants interested in flying UAS have filed so-called Section 333 exemption petitions, seeking to operate sUAS of varying sizes and capabilities in contexts ranging from chemical plant inspections to aerial mapping, and from film production to real estate.

For more information, please contact the professional(s) listed below, or your regular Crowell & Moring contact.

Laurel Pyke Malson
Partner – Washington, D.C.
Phone: +1.202.624.2576
Email: lmalson@crowell.com

Peter Eyre
Partner – Washington, D.C.
Phone: +1.202.624.2807
Email: peyre@crowell.com