

Ready for the microdrone races?

Perritt: Drones need not be regulated as aircraft
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Excitement is building over the potential of microdrones. Almost every list of examples includes news gathering. A growing number of news directors, producers, field reporters and ENG photographers are salivating over getting access to one to try it out. Most of us have seen TV stories containing footage that sure looks like it was shot from a drone, despite the FAA's position that commercial flight of drones is illegal. The television industry has always embraced new technologies for newsgathering, although sometimes it does it slowly. Television itself was, after all, a supremely disruptive technology only 60 years ago.

A battle is brewing. While drones are useful aids to effective collection and presentation of news, they also can be dangerous. While the FAA ponders, more and more amateurs are defying the ban and flying these vehicles however they want, often claiming to be hobbyists and therefore outside the ban, or being blatantly commercial and defying the FAA to come after them.

The legal environment is very confused right now, as the FAA struggles to satisfy its Congressionally imposed duty to issue a general rule for integrating small Unmanned Aircraft Systems ("sUAS" or "microdrones") into the National Airspace System, while it is losing more enforcement cases than it is winning. An administrative law judge at the NTSB, in the *Pirker* case, held that the FAA cannot impose penalties for violating rules that do not exist. There is no rule that prohibits commercial microdrone flight, only an FAA *position*.

We've argued in other articles and in a petition for rulemaking filed with the FAA that the agency is thinking about the problem in the wrong way. Microdrones cannot be regulated as manned aircraft have traditionally been regulated; they must be regulated like the consumer products they are—like lawnmowers—by prohibiting their sale unless they have built in safety features that cannot be overridden by the DRone OPerator ("DROP"). In other words, they must be law abiding right out of the box.

Adapting the details of the existing thousands of pages of Federal Aviation Regulations, will never work. Even the FAA acknowledges privately that airworthiness certification of microdrone vehicles is infeasible. The FAA will never have enough inspectors to catch everyone who flies a microdrone over his own property, and most people who buy them and fly them have no connection to the traditional aviation community and its knowledge of and respect for FAA rules.

Regardless of the relative merits of different regulatory philosophies, though, certain realities are in play: anyone can buy a microdrone with stunning video capabilities for around a thousand bucks from Amazon and get it the next day. Little training is necessary to fly them. They can be flown so as to gather news without any significant danger to other aircraft or to persons or property on the ground.

So why must a TV station be a crook for capturing overhead imagery of the next fire, truck rollover, or flood?

Apparently the FAA wants to relieve some of the dammed up pressure for action through a case-by-case exemption process. It just approved eight Hollywood petitions for microdrone moviemaking.

That is encouraging, but the ENG industry should not break out the champagne yet. Limitations that the FAA emphasized in its decision granting the petitions are not ones suitable for the ENG industry. Drone flight only within the very confined area of a movie shooting location in Hollywood is unworkable in the ENG context. No one can predict where news will break, and B-roll or beauty shots can only be captured on the spur of the moment, based on how pretty the clouds are and the color of a sunrise or sunset.

Hollywood's self-imposed limitation that its microdrones will be flown only by licensed pilots

is irrational and unworkable for the news industry. A private or commercial pilot's demonstrated skill in flying manned aircraft so as to minimize danger to passengers is irrelevant to ENG microdrone flight. Few field reporters and ENG photographers are pilots.

There are, however, limitations that both ensure safety and are compatible with effective news gathering. Examples are included in the petition for exemption recently filed by coauthor Perritt in his individual capacity as a lawyer and a member of the bar on behalf of Colin Hinkle, a Chicago area news photographer:

- No flight more than 400 feet above the ground
- No flight beyond line of sight from the DROP and range of the wireless control link;
- No flight near airports; and
- No flight at times and places where large numbers of people congregate

Here's what makes sense in the short run with existing technology: each TV station would have a few microdrones--ideally, one would be assigned to each ENG photographer/field reporter team. They would have discretion to launch their microdrone when its imagery would add to ground-level coverage of an event.

The microdrone would be flown below 400 feet above the ground, within the line of sight of the photographer, who would operate it. It would be capable of streaming live coverage by the imagery back to the station, where traditional news judgment would determine how it should be intercut with imagery from other sources and with words.

Microdrones would not replace ENG helicopter coverage, when it is available. A drone isn't capable of flying from one part of a metropolitan area to another part within a few minutes.

Good ideas, maybe, but what is a TV-station decisionmaker to do, given the uncertain legality?

Bold stations can take advantage of the current legal cloudiness. They have available to them a variety of legal theories that support what they want to do to distinguish them from other stations in their markets. They would go ahead and fly microdrones for newsgathering, or at least buy newsworthy imagery already collected by somebody else. This is not a risk-free approach, but it can be useful in crystallizing the legal framework, if a station is willing to make itself available as a test case.

A more cautious station can file a petition for an exemption, seeking to build on the Hollywood success. They might propose limitations similar to those proposed in the *Hinkle* petition or they might come up with their own.

In any event, each news outlet should get ready to fly its first ENG drone on the first day that FAA rules allowing commercial use become effective. There will be a reasonably

comprehensive framework for legal microdrone ENG flight within the next few years. The pressure to establish a coherent regulatory framework is simply too strong, and the mushrooming noncompliance with the FAA's ban is changing the political dynamics and adding the voices of drone opponents to those of drone proponent urging the FAA to act soon.

Equipment selection, decisions about whether to contract for microdrone support or do it inhouse, strategies for deployment and use, development of downlinks for aerial imagery, training of field reporters and ENG photographers, development of legal theories all can be done now.

If you're good, you'll be ready.

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