Drones: FAA Issues Long-Awaited Final Rule for Small Unmanned Aircraft Systems

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06/23/2016


Client Alert

On Tuesday, June 21, the Federal Aviation Administration issued Part 107, the Final Rule for Operation and Certification of Small Unmanned Aircraft Systems (UAS). The Rule comes sixteen months after the FAA issued its Notice of Proposed Rulemaking (NPRM) for small UAS, and is the first step in the FAA’s plan to incrementally incorporate UAS into the national airspace. The FAA stated that the UAS industry estimates that “the rule could generate more than $82 billion for the U.S. economy and create more than 100,000 new jobs over the next 10 years.”[1] The rule will take effect in late August 2016.

What’s Included in Part 107?

The new Part 107 largely tracks the limitations and requirements that accompanied Section 333 exemptions. Generally, a small UAS:

- Must weigh less than 55 lbs (25 kg), including its payload;
- May only be operated within the visual line of sight of the operator;
- May not be operated during nighttime hours;
- May not exceed 100 mph (87 knots);
- May not fly higher than 400 feet above the ground (except if it is being operated near a structure that exceeds 400 feet above the ground);
- May operate commercially if the entire flight occurs wholly within the bounds of the state of departure.[2]

Despite these rules, the FAA has been clear that most of the restrictions can be waived if the applicant can demonstrate the operations are safe. Put another way, Part 107 allows the FAA—and industry—to continue to experiment in an effort to expand the authorized uses of small UAS through an exemption process similar to Section 333. This approach is consistent with the approach being taken at the United Nations by the International Civil Aviation Organization (ICAO): a demonstrated commitment to pursuing a risk-based approach to integrating UAS into the airspace system.

Notably, Part 107 is exclusive, meaning that small UAS operators will be able to lawfully operate entirely under a single Part of the Federal Aviation Regulations (FARs), without the need to have a broader understanding of the FARs that traditionally govern manned aviation.[3] This may help facilitate (and encourage) the new class of airmen—Remote Pilots—to comply and cooperate with the FAA’s attempt to balance the need to safely integrate UAS without threatening the safety of the national airspace.

What’s Not Included in Part 107?
Despite representing a fundamental shift in aviation regulation, not everything that the industry hoped for is included in Part 107. For example, the FAA did not discuss preemption—the notion that the federal government has sole authority to regulate a particular area of the law—despite the requests of industry, and notwithstanding that there are several pending UAS-related lawsuits that implicate preemption issues. [4] This leaves industry waiting for guidance from the federal government or federal court system regarding the scope and limits of state and local governments’ regulation of UAS. And, without an affirmative statement from the FAA that it considers all small-UAS matters to be preempted, we likely will continue to see state and local governments legislate to address drone issues, creating the potential for a “crazy quilt” of regulation.

Moreover, Part 107 does not include an affirmative duty on the part of an operator to obtain liability insurance. The FAA states that it “lacks jurisdiction to mandate the purchase of liability insurance.” [5] Be that as it may, the FAA is encouraging the states to create a patchwork network of liability insurance schemes despite small UAS arguably being outside the scope of state and local involvement. This too will require industry to take a “wait-and-see” approach.

Part 107 also has an oft-cited reference to the ability of operators to obtain “waivers” to deviate from the general provisions of the Rule. This flexible approach likely will be the conduit for continued experimentation and improvement for the small UAS industry. For example, to operate in Class B, C, and D airspace, Part 107 simply adopts the rules set forth in the NPRM, but gives operators “the option to request a waiver from the provisions for operating in Class B through E airspace.” [6] However, it is unclear what an operator must do to obtain a waiver, what the process will involve and how long it will take, and how likely it will be for an operator to successfully operate under a waiver.

How’s the Final Rule Different?

Part 107 differs from the NPRM in a few significant ways. First, any operator complying with Part 107 may carry property for hire, assuming the operation stays within the visual line of the sight of the operator. For example, a telecommunication company can now inspect its infrastructure without seeking an exemption from the FAA, and a realtor can now utilize small UAS to assist it with its listings. This is a more relaxed, industry-friendly approach to realizing the benefits of small UAS. Small UAS are already important tools for those who work in agriculture, infrastructure inspection, cinematography, and search and rescue, to name only a few of the myriad use cases. This approach to utilizing a small UAS for commercial purposes will allow this nascent industry to continue to develop.

Second, the FAA has embraced a flexible approach in Part 107, which is largely premised on the ability of an operator to obtain waivers if the operator can prove that an equivalent level of safety can be maintained when deviating from the Rule. This waiver provision can apply to the line of sight and daytime operations restrictions. The FAA expressly looked to MoFo’s pro bono partner, The Nature Conservancy, when deciding that such operations were both safe and appropriate: “The Nature Conservancy asked for less restrictive daytime-operations and visual-line-of-sight requirements … The FAA agrees […] that there could be benefits to allowing certain small UAS operations at night … As such, the nighttime-operation prohibition in this rule will be waivable.” The FAA continued that it “will consider waiving [the visual line of sight] restriction if an applicant seeking extended operational flexibility can demonstrate that his or her operation will have at least the same level of safety as an operation conducted within visual line of sight.” The waiver provision will greatly benefit The Nature Conservancy’s conservation efforts, and will have lasting benefits for unmanned aviation in general.

Also waivable are the weather and visibility minimums, the yielding the right of way requirement (the notion that small UAS must always yield to other aircraft), and the per se ban on operating a small UAS from an aircraft or moving vehicle. In
short, nearly every aspect of Part 107 can be waived by the FAA in the appropriate circumstances, a marked change from the relatively more strict aspects of the NPRM.

The certification process for a remote pilot’s certificate was also relaxed. Now, an operator needs to be just 16 years old (previously, operators needed to be at least 17 years old), there is no citizenship requirement, and a UAS-specific knowledge demonstration can be completed online. The all-in cost of a remote pilot’s certificate is expected to be approximately $150, which covers the cost of the knowledge exam and the time needed for a Certified Flight Instructor (or other authorized individual) to authorize issuance of the certificate.

What About My Section 333 Exemption?

Before Part 107, commercial small UAS operations were governed on an ad hoc basis through Section 333 exemptions. [7] Current Section 333 exemption holders may continue to operate under their exemption’s terms until the stated date of expiration. However, an operator must choose to operate under the Section 333 exemption (each exemption has its own limitations specific to the applicant) or Part 107. The FAA is steadfast that operators cannot “mix and match” the conditions and limitations in a Section 333 exemption with the Part 107 rule operating requirements, meaning that each operation must be completed within the parameters of either Part 107 or the Section 333 exemption.

Once a Section 333 exemption expires, the FAA has stated that any operator that can conduct operations under Part 107—a broad statement given the availability of waivers—will likely not be able to renew his or her Section 333 exemption. Thus, looking toward the future, Part 107 appears to be the exclusive way to operate a small UAS for commercial purposes, if the operations fall within the parameters of the Rule.

What’s Next?

We anticipate the FAA’s issuing guidance for MicroDrones in the near future. It is too early to tell exactly how such rules will differ from Part 107, but it should be expected that such operations will be subject to less onerous regulations. We also expect the FAA to consider allowing non-certificated individuals, including individuals under the age of 16, to operate MicroDrones.

More broadly, we anticipate the FAA will start looking into rules that would apply beyond visual line of sight operations, operations at nighttime, and operations for UAS that are heavier than 55 lbs (25 kg). To assist in making this a reality, NASA, in a private partnership with several stakeholders, has been pioneering the UTM: a new air traffic management system for small UAS. [8] We expect the UTM to be vital to a full-scale deployment of small UAS operating beyond visual line of sight, at night, and in heavily populated areas. Allowing these operations, which are currently prohibited in the absence of a waiver, will be integral to fully realizing the benefits of UAS, and the FAA’s stated incremental approach to a full-scale integration must encompass these activities and aircraft.
specific to UAS, and the inconsistencies of regulating both manned and unmanned aircraft under the same regulations (which were present under the NPRM) will likely be avoided.


[7] Section 333 applicants who have not yet received a ruling from the FAA will be contacted in the coming weeks regarding the status of their Section 333 exemption. See [http://www.faa.gov/uas/faqs/](http://www.faa.gov/uas/faqs/).