



The FAA's New Small UAS Rule: What Airport Sponsors and Local Governments Need to Know

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On June 21, 2016, the Federal Aviation Administration (FAA) announced its long-anticipated Final Rule (14 C.F.R. Part 107) authorizing the civil use of small unmanned aircraft systems (UAS) in the National Airspace System. The Final Rule will be effective on August 27, 2016, 60 days after publication in the Federal Register, and establishes a framework for the routine, civil operation of UAS. Importantly, **Part 107 also permits the FAA to waive the majority of its requirements** on a case-by-case basis upon application with supporting documentation commensurate with the extent of the waiver request.

This white paper summarizes the Final Rule, with an emphasis on the following aspects that are likely to have the most significant impact on airport sponsors and local governments as Part 107 is implemented:

- The Rule creates a “fourth” regulatory framework, alongside the existing rules pertaining to model aircraft, public aircraft, and civil aircraft operating under Section 333 exemptions;
- The Rule allows small UAS to operate in the vicinity of uncontrolled airports without authorization from or notification to the airport, and in the vicinity of controlled airports with authorization from air traffic control;
- Small UAS operating under the Rule may fly at up to 400 feet AGL, or any higher altitude as long as they remain within 400 feet of a structure;
- Operations over non-participating persons are prohibited, but the FAA plans to undertake additional rulemaking to allow flight over people under certain circumstances;
- The Rule permits the intrastate carriage of property by small UAS;
- The FAA declined to include a provision addressing the extent of the Rule’s preemptive effect on State and local regulation of UAS;
- The Rule establishes a “remote pilot” certification; and
- The majority of small UAS operating limitations, including the requirement to maintain visual line of sight with the aircraft, may be waived by the FAA upon an individual application demonstrating the safety of the operation.

An Additional Regulatory Framework

Rather than consolidate or displace the various frameworks that have been in place with respect to the operation of UAS, Part 107 creates a fourth framework with which airport sponsors and other local governments must become familiar. Traditionally, model aircraft flown for hobby or recreational purposes have been subject only to the limitations of section 336 of the FAA Modernization and Reform Act of 2012, Pub. L. 112-95 (Feb. 14, 2012), while civil UAS flown for other than hobby or recreational purposes have required a section 333 exemption and compliance with the terms of a Certificate of Waiver or Authorization (COA). The FAA’s Final Rule codifies the limitations of section 336 in a new Subpart E to 14 C.F.R. Part 101, and creates a new framework under which UAS operations may be authorized, regardless of whether those operations are for hobby or recreational purposes, public aircraft, or commercial.

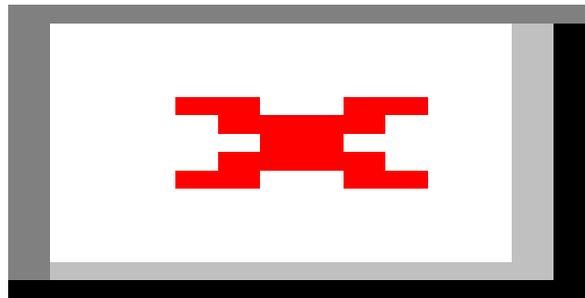
The FAA will continue to permit operators with a Section 333 exemption to operate under the terms of their exemption and applicable COAs, which in some cases may be less restrictive than proposed Part 107. The FAA will also continue to accept applications and renewals for Section 333 exemptions for those



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operations falling outside certain parameters of Part 107 (e.g. operations using UAS above 55 pounds). The rule does not regulate public aircraft operations; however public aircraft operators have the option of complying with Part 107 in lieu of obtaining a public COA for their UAS operations. Similarly, model aircraft operated for hobby or recreational purposes may continue to operate pursuant to the limitations of section 336, or they may voluntarily comply with the provisions of Part 107.

The following table summarizes the frameworks under which UAS may now operate:



UAS Operations in the Airport Environment

Operations authorized under Part 107 need only seek authorization from air traffic control in order to operate in the vicinity of an airport.¹ Specifically, the new rule prohibits the operation of a small UAS “in Class B, Class C, or Class D airspace or within the lateral boundaries of the surface area of Class E airspace designated for an airport unless that person has prior authorization from Air Traffic Control (ATC).” Procedures for requesting such authorization in writing or electronically will be posted to the FAA’s website prior to the Rule’s effective date this summer; however, authorization will not be granted through radio communications with ATC. The FAA does not commit to a specific timeframe in processing requests, but notes that the local ATC facility will consider “traffic density, controller workload, communications issues, or any other type of operational issues that could potentially impact the safe and efficient flow of air traffic,” and will “deny requests that pose an unacceptable risk to the NAS and cannot be mitigated.”

No prior authorization from ATC or the airport is required for UAS operations conducted pursuant to Part 107 on or in the vicinity of uncontrolled airports, heliports, or seaplane bases in Class G airspace. Rather, operators are prohibited by 14 C.F.R. § 107.43 from “operat[ing] a small unmanned aircraft in a manner that interferes with operations and traffic patterns at [such facilities].” The FAA *recommends* that UAS operators avoid operating in the traffic pattern or published approach corridors used by manned aircraft, but otherwise requires the pilot to “operate in such a way that the manned-aircraft pilot does not need to alter his or her flight path in the traffic pattern or on a published instrument approach in order to avoid a potential conflict.”

The FAA specifically declined to require notification to the airport under Part 107:

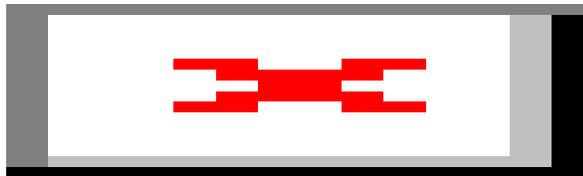
Under 49 U.S.C. 40103, the FAA has the sole authority to regulate airspace, including airspace overlying an airport. While airport operators have the ability to manage operations

on the surface of the airport, airport operators may not regulate the use of airspace above and near the airport. In an effort to safely integrate small unmanned aircraft and manned aircraft at an airport, airport operators may recommend certain areas where small UAS operate, in order to avoid conflicts with manned aircraft. The FAA does not consider the notification of airport operators to significantly enhance the safety of integration with existing operations. The requirement for notification creates a burden on the airport operator with little benefit to users of the airport, because the airport operator would have no requirement to disseminate knowledge of small UAS operations to other airport users.

Importantly, the regulatory preamble to the Final Rule also appears to make certain that the FAA will consider UAS operations to be aeronautical activities that must be accommodated at Federally-obligated airports under the grant assurances: “Like ballooning, skydiving, banner towing, and other non-traditional aeronautical activities, the FAA expects that remote pilots will work with airport operators to identify ways to safely integrate small UAS operations into the flow of other operations at the airport.”

Finally, the FAA also declined to require that a Notice to Airmen be issued when small UAS are authorized by ATC to operate in the airport environment under Part 107, stating that, because “UAS operations [are now] within the regulatory structure[,] [c]ivil, public, and military pilots are expected to be familiar with regulations affecting their flight, including the possibility of encountering UAS activity below 400 feet.”

The following table summarizes the notification and/or authorization requirements for various airports and classes of airspace:



Maximum Authorized Altitude

In contrast to the maximum authorized altitude of 500 feet above ground level (AGL) initially proposed by the FAA, Part 107 will limit operations to 400 feet AGL—aligning Part 107 with model aircraft limitations—*or within 400 feet of any structure*. Thus, a UAS operated under Part 107 for the inspection of a 1,000 foot tall tower may lawfully operate at up to 1,400 feet AGL, provided it remains within 400 feet of the tower horizontally.

Sporting Events and Public Gatherings

UAS operations under Part 107 will be required to observe restricted and prohibited flight areas, as well as flight restrictions that are designated by Notice to Airmen (NOTAM). See 14 C.F.R. §§ 91.137–145 and 99.7. In particular, UAS operations may be prohibited for major sporting events pursuant to the provisions of 14 C.F.R. § 91.145.

For now, the FAA will prohibit UAS operations over human beings who are not “directly participating” – specific personnel that the pilot in command of the UAS operation has deemed to be involved with the flight operation. Other persons may only be overflown if they are under a covered structure or in a



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stationary vehicle that provides “reasonable protection.” The FAA is evaluating the recommendations of the MicroUAS Advisory and Rulemaking Committee and plans to issue a separate Notice of Proposed Rulemaking soon to allow for flight over non-participating persons under certain circumstances.

Carriage of Property

Part 107 permits towing, the carriage of property, and other external load operations, provided that the total weight of the UAS and everything attached to it does not exceed fifty-five pounds. While this reflects a change from the FAA’s original proposal, there are several important limitations on the carriage of property:

- Notwithstanding the FAA’s ability to waive the majority of the limitations imposed by Part 107 on a case-by-case basis, the FAA will not grant waivers for either the requirement that operators maintain visual line of sight (VLOS) with the UAS, or that the UAS not be operated from a moving vehicle or aircraft, in order to permit the carriage of property of another for compensation or hire;
- Only operations that do not constitute “air transportation” under 49 U.S.C. § 40102 – generally, intrastate operations – will be permitted under Part 107;
- Operations under Part 107 may not carry hazardous materials, as defined by 49 C.F.R. § 171.8, or any “narcotic drugs, marihuana [sic], and depressant or stimulant drugs or substances as defined in Federal or State statutes”; and
- Nothing may be dropped from a UAS in a manner that creates an undue hazard to persons or property.

Preemption of Local Regulation

The FAA declined to include an express statement on preemption, despite requests by several commenters to do so. Instead, the FAA referred parties to its *Fact Sheet on State and Local Regulation of Unmanned Aircraft Systems*, published December 17, 2015, and reiterated its position that “[p]reemption issues involving small UAS necessitate a case-specific analysis that is not appropriate [for] a rule of general applicability.” Consistent with the Fact Sheet, the FAA indicated several areas where State and local regulation may be appropriate:

- “State law and other legal protections for individual privacy may provide recourse for a person whose privacy may be affected through another person’s use of a UAS.”
- “State and local laws, such as trespassing, may provide a remedy for companies whose small UAS operations are deliberately interfered with by people entering the area of operation without permission.”
- “State law and other legal protections may already provide recourse for a person whose individual privacy, data privacy, private property rights, or intellectual property rights may be impacted by a remote pilot’s civil or public use of a UAS.”
- “Property rights are beyond the scope of this rule. However, the FAA notes that, depending on the specific nature of the small UAS operation, the remote pilot in command may need to comply with State and local trespassing rules.”
- “[H]obbyists or other third parties who do not have the facility owner’s permission to operate UAS near or over the perimeter or interior of amusement parks and attractions may be violating State or local trespassing laws.”

The ultimate scope of Federal preemption, and thus permissible State and local regulation of UAS, remains uncertain and will be settled and tested through future legislation, regulations, and litigation.

Pilot Certification and Requirements

Part 107 requires the designation of a “remote pilot in command” who is directly responsible for the operation, and for ensuring that it results in no undue hazards to other people, other aircraft, or other



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property in the event of a loss of control. The remote pilot must pass an aeronautical knowledge test to obtain a remote pilot certificate with a small UAS rating, which will be made available prior to the effective date of the Rule. The individual manipulating the flight controls of a UAS operated under Part 107 need not hold a remote pilot certificate or any other qualification, provided that he or she is under the direct supervision of the remote pilot in command and the remote pilot in command has the ability of immediately assuming direct control of the aircraft.

In general, a remote pilot must:

- Be at least 16 years of age;
- Able to read, speak, write and understand English;
- Not know or have reason to know of a physical or mental condition that would interfere with the safe operation of a small UAS; and
- Pass an initial aeronautical knowledge test, as well as a recurrent test every 24 months.

While perhaps an oversight, Part 107 does not appear to require operations thereunder to submit to the inspection authority of local law enforcement. The remote pilot in command is required to produce his remote pilot certificate with a small UAS rating, as well as make him- or herself, the person manipulating the flight controls of the UAS, any visual observer, and the UAS available for testing and inspection, but *only* on the request of the Administrator. See 14 C.F.R. § 107.7. By contrast, any person holding an airman certificate or authorization issued under 14 C.F.R. Part 61 (which specifically excludes remote pilot certificates), must submit to the inspection thereof by any Federal, State, or local law enforcement officer, as well as the Transportation Security Administration or National Transportation Safety Board. 14 C.F.R. § 61.3(l). Under Part 107, the remote pilot in command, any person manipulating the flight controls, or a visual observer appear to need only submit to a testing for alcohol intoxication upon a local law enforcement officer's suspicion. See 14 C.F.R. §§ 170.27 and 91.17(c).

Operating Parameters

The operating parameters for UAS operations conducted pursuant to Part 107 are summarized in the list below. Importantly, however, ***the majority of these parameters may be waived by the FAA upon an individual application demonstrating that the operation can be safely conducted under the terms of the requested waiver.*** The FAA “expects that the amount of data and analysis required as part of the application will be proportional to the specific relief that is requested . . . [and] that the time required for it to make a determination . . . will vary based on the complexity of the request.” This process is expected to proceed in a similar manner to the FAA’s existing Section 333 exemption process. Thus, in addition to those parameters detailed above, the following requirements *generally* apply to the aircraft and its operation:

- Weigh less than 55lbs (25kg);
- Remain within visual line of sight (VLOS) of the remote pilot in command or the visual observer, provided the UAS remain close enough to the remote pilot in command for him or her to be capable of seeing the aircraft with vision unaided by any device other than corrective lenses;
- Operate only during daylight hours, or civil twilight with appropriate anti-collision lighting;
- Yield the right of way to other aircraft;
- Remain below the maximum authorized groundspeed (100mph);
- Remain below 400 AGL, or within 400 feet of structure;
- Maintain visibility of 3 miles from the control station;
- Perform a preflight inspection to ensure the aircraft is in safe condition for flight;
- Not be operated from a moving aircraft;
- Not be operated from a moving vehicle or watercraft unless in a sparsely populated area;
- Not be operated in a careless or reckless manner so as to endanger the life or property of another;



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- Report any serious injuries, loss of consciousness, or damage to property other than the UAS exceeding \$500.

FAA will consider requests for a Certificate of Waiver (CoW) of the following provisions of Part 107 if the Administrator finds that the operations can be safely conducted under the terms of the CoW:

- Section 107.29, Daylight operation;
- Section 107.33, Visual observers;
- Section 107.35, Operation of multiple small UAS;
- Section 107.37(a), Yielding the right of way to other aircraft;
- Section 107.39, Operation over people;
- Section 107.41, Operation in Class B, C, D, and E airspace;
- Section 107.51, Operating limitations for small UAS; and
- Sections 107.25, Operation from a moving vehicle or aircraft, and 107.31, Visual line of sight, unless to allow carriage of property of another by aircraft for compensation or hire.

¹ As noted above, the requirement to obtain ATC authorization, like most requirements, may be waived by the FAA upon application with appropriate supporting documentation establishing the safety of the operation.