

FAA Releases Long-Awaited Rule for Commercial Operations of Small Unmanned Aircraft Systems

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A key milestone in regulating the commercial use of small unmanned aircraft systems (sUAS), the Federal Aviation Administration's (FAA) final rule overhauls the current case-by-case exemption regime, establishes an operational framework, and creates a new certification process for commercial sUAS pilots. The new rule creates significant opportunities for a wide range of industries, particularly through its waiver provisions that allow for the approval of commercial sUAS operations outside of Part 107—including nighttime and beyond-visual-line-of-sight (BVLOS) operations. The new rule will take effect in late August.

The FAA's [final rule](#), to be codified in 14 C.F.R. Part 107, represents a milestone in regulating the commercial use of sUAS for an enormous and ever-growing list of beneficial applications, with key flexibility built in. Part 107 applies to all sUAS commercial operations in the U.S. National Airspace System (NAS) weighing 55 lbs or less and addresses a number of key issues stakeholders raised during the comment period, including a broad waiver mechanism to permit commercial operations outside of the operating restrictions in Part 107 as long as the operations are demonstrated to be safe.

While previously, companies had to apply for Section 333 exemptions, when the new rule goes into effect, special exemptions will no longer be required. While the rule provides the industry with greater flexibility in operating sUAS in a variety of applications, and develops standards for certification of an sUAS remote pilot-in-command (RPIC), the rule also reflects areas in which additional legislation or regulation may be required, such as privacy, integration of micro-UAS and large UAS, greater autonomous UAS operations, and greater flexibility in package delivery services.

Current Section 333 Exemption Holders: Choice Between Exemption or Part 107

Current Section 333 exemption holders have the option to operate under Part 107 or under their current exemptions (or both, if applicable requirements are met). Upon expiration of a Section 333 exemption, the FAA will determine whether renewal of the exemption is necessary. For current exemptions that are outside of the scope of the rule parameters (e.g. nighttime operations), we expect that exemption holders would seek renewals of Section 333 exemptions, or otherwise seek a waiver under Part 107. The FAA has indicated they will continue to review pending Section 333 applications and will be issuing a communication regarding the process to transition from Section 333 to Part 107 if an operator so chooses. In the meantime, Section 333 exemption holders who wish to transition to Part 107 should begin the process to comply with Part 107 [pilot certification requirements](#).

New sUAS Pilot Certification: RPIC

Part 107 creates a new pilot certificate category—an sUAS RPIC. To obtain a remote pilot certificate, the applicant must be at least 16 years of age, pass a Transportation Security Administration (TSA) risk-assessment, pass an aeronautical knowledge test at an FAA-approved training center, and be English-language proficient. Unlike other pilot certifications, RPIC applicants do not need to demonstrate flight proficiency or aeronautical experience, possess an airman medical certificate, or receive any type of formal training. Pilots that already hold a Part 61 pilot certificate are exempt from the additional TSA vetting and may take a short online training course rather than the RPIC test.

The initial aeronautical knowledge test can be taken at any one of over 700 FAA-approved locations across the country and covers a broad range of topics, including: sUAS regulations, airspace classifications, operating requirements, flight restrictions, sUAS loading and performance, drug and alcohol effects, radio communication, airport operations, and emergency procedures. Part 107 requires RPIC certificate holders to re-take the knowledge test every two years to keep up with any changes in the regulations.

Part 107's Operating Rules: Low-Risk Operations Allowed with Some Surprises

Part 107 allows for commercial sUAS operations that the FAA has determined pose the least amount of risk if they comply with certain operating conditions. For example, the operations must be conducted in visual-line-of-sight (VLOS), during daytime or civil twilight hours (with anti-collision lighting), under certain weather and visibility conditions, and cannot operate over non-participants. The FAA has relaxed certain proposed operational rules such as the maximum altitude and the allowance of external load and dropping of objects, and has opened the door for additional operations through a Part 107 waiver process, which is in line with the FAA's incremental approach to UAS integration.

Notable permitted operations under Part 107 include:

- Persons without an RPIC certificate may operate sUAS as long as a certificated RPIC is capable of immediate intervention;
- Operations above 400 feet so long as the sUAS is within 400 feet of a structure (manned aircraft are required to stay at least 500 feet away from structures);
- Operations from moving vehicles (land or water) in sparsely populated areas;
- External load and towing operations if the total weight, including the load, is less than 55 lbs;

- Dropping objects if no undue hazard is created to persons or property; and
- Limited transportation for compensation or hire (discussed further below).

Although the FAA's proposed rule called for comments on potential operating restrictions related to micro-UAS (under 4.4 lbs), the FAA reserved it for a future notice-and-comment rulemaking.

Operations Beyond the Scope of Part 107: Can Be Approved Via Broad Waiver Mechanism

Perhaps the most significant addition to Part 107 is the broad waiver mechanism that allows the FAA to approve certain non-Part 107 operations. To receive a waiver, applicants must demonstrate that the proposed operation is at an equivalent level of safety—a process that will substantially facilitate the integration of new and emerging technologies. Some waivable Part 107 operating restrictions include VLOS, daytime operations, speed and altitude limitations, and operations above non-participants. The FAA may impose additional conditions on the operations conducted under the waivers. Additionally, the FAA will be creating an online portal for operators to file a waiver request.

Exceptions to the waiver mechanism include the weight limitation, which is a congressional mandate, and BVLOS package delivery. In addition, an operator may not waive the requirement that the RPIC be able to take immediate direct command of the flight to ensure compliance (i.e. yield right-of-way), removing the potential for wholly autonomous pre-programmed sUAS operations in the near future.

The waivers offer insight into the direction the FAA may take to safely integrate UAS into the NAS and a way for the industry to test which operations can be safely integrated through a waiver versus those that may require a different process or a protracted rulemaking. Most importantly, commercial operators can begin to think creatively about the potential types of operations that may now be possible through a Part 107 waiver (e.g., inspections/surveys from a moving vehicle or videography/photography over persons for news gathering/events), while also understanding the types of operations that will likely not be available in the near future (e.g., BVLOS operations for transportation for compensation/hire or wholly autonomous sUAS operations).

sUAS Transportation of Property: A Step Forward, but Lacking

Part 107 permits transportation of property for compensation and the dropping of objects from sUAS, within certain parameters. However, the regulations do not go as far as some industries hoped.

Transportation for compensation or hire is permitted, provided that the aircraft: (1) is under 55 lbs with all components/cargo combined; (2) is in VLOS and not being operated from a moving vehicle/aircraft; (3) is intrastate only (e.g. no interstate transportation); (4) does not involve hazardous materials; and (5) the pilot has a commercial or airline transport pilot certificate. The regulation also permits dropping objects if no undue hazard is created to persons or property.

While these rules signal progress towards sUAS package delivery—a goal of retailers and other industries alike—they do not go far enough. Notably, the VLOS requirement is non-waivable for these operations, which will severely limit the distance a package can be delivered under Part 107. Additionally, an operator would need to procure a waiver before a delivery drone could be permitted to operate over non-participants. Due to these restrictions, supporters of a broad package delivery will need to work with Congress and the FAA for less restrictive laws and regulations.

Part 107: Additional Miscellaneous Provisions

Registration and Marking

Any person operating a civil sUAS for purposes of flight must comply with the existing UAS registration requirements of § 91.203(a)(2), which requires a person operating an sUAS to have an effective U.S. registration certificate readily available.

Oversight, Compliance and Accident Reporting

Under Part 107, the FAA can inspect and test any sUAS, review any related document, question any individual participating in the operation of an sUAS (RPIC, visual observer and person manipulating flight controls of sUAS), or undertake destructive testing if necessary to determine compliance with Part 107. Part 107 also requires reporting of accidents that result in serious injury/loss of consciousness or damage to any property, other than the sUAS, unless the cost of repair/replacement of the property is less than \$500. Accident reports must be submitted within 10 days of the accident, and may be submitted electronically.

National Security

In response to commenter concerns of possible terrorist/criminal use of sUAS, the FAA has stated that the VLOS requirement provides an effective detection tool for hacking activities because the RPIC will be able to quickly notice whether someone else has taken control of their sUAS and alert the appropriate authorities. Regarding concerns about surveillance of airports, energy infrastructure, and agricultural intellectual property, the FAA noted that the security risk is minimal compared to threats posed by manned aircraft and that the prohibition on nighttime operations and the VLOS requirement limit possible nefarious surveillance efforts.

Privacy

Unlike in the Section 333 exemption context where the FAA required sUAS operators to obtain consent to access private property before operating over it, Part 107 contains no such requirement. Also, despite many commenters' privacy concerns related to sUAS operations, the FAA did not address privacy issues in the final rule. The FAA's approach is consistent with its past statements in the proposed rule that privacy concerns were beyond the scope of this rulemaking, that it has never extended its administrative reach to regulate safety to protect privacy, and that it will continue to address privacy concerns through engagement and collaboration with the public, stakeholders, and other agencies with authority and subject matter expertise in privacy law and policy. At most, the RPIC must assess "local airspace and any flight restrictions." As the FAA has stated in other guidance to law enforcement agencies, the agency's position is that states and local authorities retain police powers over certain actions that may impact a person's use of airspace (i.e., criminal trespass), discussed further on our blog post [here](#).

Environmental

Commenters raised concerns about wildlife conservation and monitoring efforts, remarking that sUAS traveling at 100 mph might endanger migratory birds. The FAA responded that remote pilots of sUAS will remain subject to all environmental and wildlife laws.

International Operations and Foreign-Owned Aircraft

The FAA will address operations in international and foreign airspace in a future rulemaking as the International Civil Aviation Organization continues to develop an international UAS framework. Foreign civil sUAS that are either registered in a foreign nation or a U.S.-registered sUAS owned by non-citizens/permanent residents are governed by the same restrictions as other aircraft operators. Operators

must apply for permission from the DOT and the operation will only be authorized if recognized under international agreements or through reciprocity findings.

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For questions about Part 107 and how it could impact your current or future UAS operations, and for assistance in filing waivers, please contact [Kenneth Quinn](#) or [Jennifer Trock](#), heads of Pillsbury's [Unmanned Aircraft Systems \(UAS\) Team](#).

If you have any questions about the content of this Alert, please contact the Pillsbury attorney with whom you regularly work, or the authors below.

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