



What You Need to Know to Legally Operate Your Drone Under New FAA Regulation

By Jeremiah Karpowicz

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Essential info for anyone looking to fly a UAV for commercial purposes under Part 107

ON AUGUST 29TH, 2016 the commercial drone industry changed forever. That's the day the new Small UAS Rule, aka Part 107, went into effect. Although the details around Part 107 were announced back in June, August 29th represents a critical moment for the industry as a whole since it's the first day people could legally operate under Part 107.

Of course, anyone who is unfamiliar with Part 107 or had been waiting specifically for this moment to investigate how drones could or would be a fit for their business might not know how this actually changes things. What exactly do people need to do in order to legally fly under Part 107? How difficult of a process is it? Does Part 107 cover everything?

Additionally, up until this point, the only way to legally operate a drone for commercial purposes was to file for and receive a Section 333 Exemption from the FAA. How does Part 107 impact anyone who already has a 333? Will you be able to do the same things under Part 107 that you were cleared for with a 333? What are the similarities and differences between Part 107 and Section 333?

Asking these questions about Part 107 is something that everyone who wants to fly a drone for commercial purposes needs to do. The answers for individuals and organizations as a whole will vary, but it's essential for operators of all types and sizes to understand the impact of Part 107.

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107 May or May Not Be All You Need

THE NEW RULES for non-hobbyist small unmanned aircraft (UAS) operations, aka Part 107, establish various stipulations for anyone who wants to operate a drone for commercial purposes. Those conditions have details associated with operating requirements, pilot certification, UAS certification, privacy and responsibilities as a pilot in command.

While there are critical stipulations for each set of requirements, what's important to note is how those details define what it means to legally fly a drone. Meeting these requirements will be all some people need to do to fly the way they want for their business. It's something Greg S. Walden, a senior counsel at Akin Gump Strauss Hauer & Feld in Washington, DC, noted.

“It really depends on where you sit,” said Walden. “If you happen to be a real estate professional and all you want to do is fly your drone above houses, then you can look at Part 107 and realize you can do everything. You don't need anything else.”

That distinction means that Part 107 doesn't inherently cover all of the things a user might want to do. Part 107 opens up the sky for the commercial operation of a drone in a powerful way, but it is still limited in scope and specifically prohibits certain types of operation. Additionally, the options for government agencies are somewhat more nuanced with Part 107 as a viable option.

Nonetheless, simply having Part 107 as a starting place is especially powerful for anyone taking a serious look at the technology. While Part 107 is not all-encompassing, many operators will find they can do everything they want and need simply by flying under and complying with the new rule.

Consider the Impact of Section 333s

AS ALREADY STATED, until Part 107 became official, filing for and receiving a [Section 333 Exemption](#) from the FAA had been the only way to legally operate a drone for commercial purposes in the United States. Well over 5,000 petitions for 333 Exemptions have been granted, so how does Part 107 change things for operators who either already have a 333 or had been focused on getting one?



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Those that already have 333 Exemptions have the option to continue operating under the terms of their exemption or move to Part 107. 333's were for the most part granted with a two-year time period, which means more and more current operators will likely shift to operating under 107 after they expire.

Anyone who doesn't have a 333 probably won't need to worry about getting one, because they'll be able to do everything they need and want under part 107. That's something Gene Robinson, a true innovator of drone technology for search and rescue professionals, has recognized as he helps his clients sort through the details.

"I'm already looking to get started on waivers for nighttime flying and BVLOS," said Robinson not long after the new rules were announced. "I'm going to do exigent circumstance waivers. I've already ditched a few of the 333s that I started for clients because 107 is going to be all they're going to need."

The waiver process that he mentioned allows operators to receive permission to do things like fly beyond visual line of sight and operate at night, although the details around how exactly that process is going to work remain to be seen. Nonetheless, operators have the ability to fly under Part 107 in the way that will work best for their commercial operation, even if they have to do a bit more to enable that permission.

Section 333 Exemptions are not going away, and there are reasons to get a 333 Exemption as opposed to going the Part 107 route. There are differences between flying under Part 107 and a 333 Exemption, not all of which have to do with their dissimilar approval processes. Whether those differences matter to an individual operator is something those operators will need to consider.






Understand the New Pilot Certification Requirements

ONE OF THE BIGGEST BARRIERS to entry cited by individuals and organizations who wanted to fly a drone for commercial purposes had to do with the pilot's license requirement. Needing a licensed pilot to operate the drone represented a very high barrier to entry for anyone who merely wanted to use or even experiment with the technology. To the relief of many, Part 107 eliminates that requirement.



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Part 107 defines a new set of requirements that need to be met for certification around UAV operation. The info below is pulled [directly from the FAA's site](#) to clarify those requirements in no uncertain terms.

Pilot Requirements:

- Must be at least 16 years old
- Must pass an initial aeronautical knowledge test at an FAA-approved knowledge testing center
- Must be vetted by the Transportation Safety Administration (TSA)

One important thing to note is that the process of certification for existing pilots are a bit less involved, as the pilots will need to pass a training course they can take online, rather than having to physically go into a testing center.

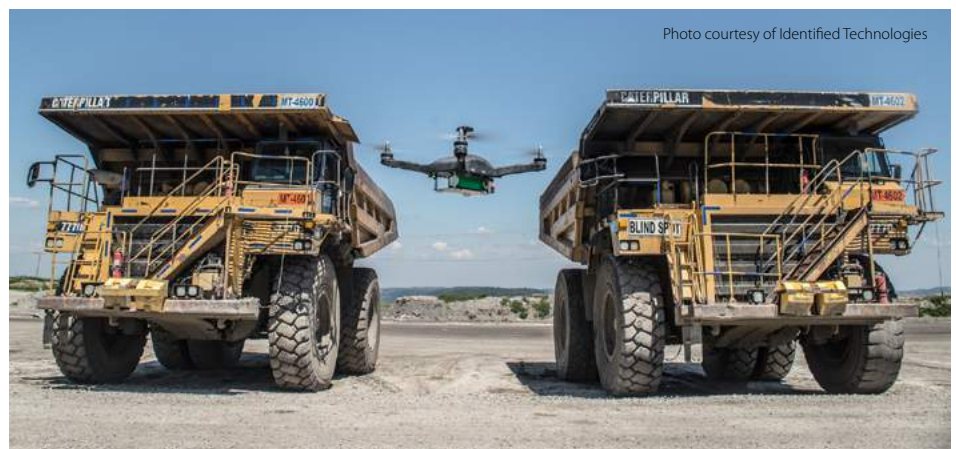
Applicants must schedule an appointment with a Knowledge Testing Center (KTC), which administers initial and recurrent FAA knowledge exams. After doing so, applicants will need to pass the initial aeronautical knowledge test. The initial knowledge test areas includes questions relating to UAV flight operation, weather impacts on UAVs, aeronautical decision-making, airport operations and plenty more.

Applicants will then need to complete the remote pilot certificate form as well as pass a TSA security background check. After all of that is done, a permanent remote pilot certificate will be sent via mail once all other FAA-internal processing is complete. The FAA has also published a [study guide](#) to help operators prepare for and pass this test.

This approach represents a far lower barrier to entry and also clarifies and standardizes the process to enable legal drone operation. While some will undoubtedly find it cumbersome and limiting, what's here provides the definition that many found lacking in and throughout the Section 333 Exemption process.

Operators Need to Establish Best Practices

ONE OF THE FIRST THINGS mentioned in the [Fact Sheet released by the FAA](#) that announced Part 107 was how drone operators needed to ensure they are never operating their drone in a careless or reckless manner. The rules specifically state that individuals are responsible for ensuring a drone is safe before flying, but don't define what exactly that means. Nonetheless, Part 107 makes it clear that the onus of safety is on the operator.



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There are plenty of specifics that the rule lays out though. Flying over anyone who is not directly participating in the operation is prohibited, while flying over land owned by someone else is now allowed. There are numerous permissions and limitations around how people can fly under Part 107, but sorting through how those things can and should be approached is an entirely different topic.

“Not needing to obtain permission from landowners when flying over their property is a big help logistically,” admitted Logan Campbell, CEO at independent drone consulting firm Aero-tas. “But we always recommend our clients get permission from landowners, even though the law doesn’t require it. While it’s legal to fly over someone else’s property without permission, notifying and asking for consent is still responsible business practice. There are definitely some people who do not want a UAV over their property, and we encourage survey drone operators to respect their wishes, even if it is not legally required.”

Part 107 enables and restricts a number of different operations, but just because operators are allowed to do something under 107 doesn’t necessarily mean that’s the approach they should take. Similarly, while 107 restricts certain operations, the waiver process creates a definitive approach to getting around that limitation. In either case, what’s essential is that Part 107 represents the beginning of the process to take to the sky, not the end of it.

Consider the Waiver Process

THE NEW RULE ALLOWS operators to file a waiver that will give them the ability to fly in a way that is not covered under Part 107. Things like nighttime flying and beyond visual line of sight (BVLOS) operation are restricted under Part 107, but those aren’t the only operational limitations. Operators can only fly one drone at a time and they cannot fly faster than 100 mph just to give more examples of those constraints.

Right now, the only advice the FAA has laid out in terms of receiving a waiver request is to file for one as soon as possible. What that process can and will look like is something that Michael Sievers, a lawyer at Hunton & Williams and co-chair of the group’s Unmanned Systems group, is watching very closely.

“The bigger question there is to what degree the FAA will grant waivers that allow people to operate BVLOS,” said Sievers. “They describe a waiver process in 107, but I think we’re unlikely to see wide-scale waiver of that restriction until certain technologies like UAS traffic management (UTM) systems are more developed.”

The 333 process was very technical and difficult at the beginning, but it wasn’t all that long before they were accepting far less detailed and sophisticated petitions. The 333 process got standardized very quickly, but that only happened once the process got



Photo courtesy of Identified Technologies

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moving forward. The same chronology might play out with the waiver process.

How the entire waiver procedure will work remains to be seen, but it represents a real solution for anyone who sees Part 107 as being too limited. Everyone will have a means to receive specific permission around how they want or need to fly their drone.

Being “Legal” Under 107 is Not the End of the Conversation

THE FAA WILL CONTINUE to regulate what a safe flight is, but states and municipalities have the authority to police what operators can actually do during an otherwise safe flight. That means you can do everything right according to the FAA, but a drone-based business can still be restricted. We’ve already seen a number of [states and municipalities](#) pass or try to pass laws which restrict how or where people can fly their UAVs, and those numbers will undoubtedly increase under Part 107.

Steve Hogan is a lawyer who has worked with commercial drone companies for years on their legal issues, and sorting through what could soon be a legal quagmire is one of his favorite topics to discuss.

“It’s always been our position that you’re going to have an interaction between federal and state law in this emerging industry, and how they were going to interact was unclear,” said Hogan. “So the federal regulations about what is a safe flight come into conflict with state law, which includes things like privacy issues and tort law. It already is and will continue to be the story of the next chapter of drone regulation in this country.”

Ensuring you’re set under Part 107 is just the beginning of what it will mean to safely and legally operate a drone. Once that’s settled there will be issues to sort out with state and local authorities, plus insurance considerations will undoubtedly take center stage at some point in the near future. Part 107 has enabled people to discern the countless opportunities that are being presented to them by multiple markets, but being able to actually take advantage of those opportunities means sorting through and complying with issues that go far beyond what Part 107 contains.



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You Have Questions...Experts Have Answers

IT WOULD BE IRRESPONSIBLE to pass off this article or any article as something that had everything you needed to know about legally operating a drone for commercial purposes. Every project is going to have different needs and circumstances associated with it. How you can and should consider things like insurance, safety and asset management are all things tied to and separate from legal considerations.

That said, legal issues remain a top priority, and there are various people, organizations and classes that can help you sort through such questions. However, there are some specific considerations anyone can work through as they figure out what sort of person or class can be most beneficial to them. Jonathan Rupprecht, an aviation attorney who focuses on drones, has some great insights on where and how to start that process for anyone searching for legitimate information and help.

“What is your goal?” asked Rupprecht. “To become legal and fly safely in the national airspace? Then I would pick only FAA certificated flight instructors. Are you wanting to learn how to get better shots and create more compelling videography? I would search around in the droner crowd for someone with a lot of experience in your specific industry like real estate, cinematography, wedding photography, etc. Are you trying to do some type of inspection? Go get certified in something in that field such as a thermography course certification if you are doing roof or solar inspections. You are going to need 2 levels of training here: (1) the Part 107 stuff and (2) training specific to your industry.”

Many experts, including the ones I’ve quoted in this article, are available and willing to help sort through the logistics of what it means to safety and legally operate a drone for commercial purposes. Under Part 107, it is certainly much easier to handle everything yourself, but are those the sort of things you’re going to be ready and able to fully explore?

Those answers will vary from person to person, from organization to organization and even from project to project. Whatever the best solution might be, few can argue that they’re easier to come up with under Part 107. ■

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Jeremiah Karpowicz is the Executive Editor for Commercial UAV News. He has created articles, videos, newsletters, ebooks and plenty more for various communities as a contributor and editor. He is also the author of a number of industry specific reports that feature exclusive insights and information around how drones are being used in various markets. You can read all of those reports [here](#).



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