Sean McGowan: Good morning, everyone, and welcome back to Thompson Coburn LLP's "Three Lawyers and a Drone" podcast coming to you from Washington, DC. My name is Sean McGowan and I'm a partner in the Federal Regulatory Practice Group and Co-Chair of the firm's UAS Practice Group. As always, joining me today are associates Tyler Black and Mike Deutsch. Mike?

Mike Deutsch: Thanks, Sean. And thanks to everyone who listened to our last podcast regarding the basics of what new drone owners need to know before flying drones for fun. Today, we thought we would go over the basics of what is required if you intend to use your drone for business purposes under the Small UAS Regulations located at 14 CFR Part 107. We'll take a look at piloting requirements, operating rules, some waivers that you may need, and provide some best practices at the end.

So, Tyler, tell us what's required to be a Part 107 pilot.

Tyler Black: Sure. In order to fly commercially or for other business purposes the FAA requires is first for you obtain a Remote Pilot Certificate, and that comes with a little rider called a Small UAS Rating that goes along with your certificate. The exam that is related to obtaining the certificate is an aeronautical knowledge test. It has 60 questions on it and you have two hours to complete it. You'll need a passing score of 70% for that test.

Sean McGowan: So, what are some of the topics on that exam, how do you prepare for it and where do you take it?

Tyler Black: The topics for the exam test come from the Part 107 regulations itself. It's a test of your knowledge of those regulations. Of general airspace classifications so that you know where you're flying. Operations and flight

restrictions that are specific to drones; sources of weather and the effect weather has on drone performance generally; loading and other performance issues; preflight procedures; emergency procedures; maintenance and inspections procedures; along with a few other areas.

There are test preparation materials available online. And it's not something like getting a PhD to study for. You look at the test topics, you look at the practice questions, and you study them.

When it comes time to take test yourself, you'll need to schedule an appointment to take the exam at one of several FAA-approved Knowledge Testing Centers able to be located on the FAA's website. If you pass, you'll apply for the certificate online through the FAA's Integrated Airman Certification and Rating Application system. It's much the same as a manned flight certificate. It's the same process, it's just a slightly different test.

You'll get a temporary certificate via e-mail after you pass the test and the TSA screening/background component. After you get that certificate you can fly. You'll receive a permanent certificate via regular mail after the FAA finalizes the processing. That certificate is good for two years

Mike Deutsch: Tyler, you're a private pilot. I'm curious, as a private pilot, do you need to go through all that, too?

Tyler Black: Good question. I do not – and private pilots to do not need to go through all of the same requirements. If they want to fly UAS for business purposes, they would need to have their current license, be up to date and have had a flight review in the last 24 months pursuant to the regulations. Once that's in place, they would just need to complete the SUAS training course provided by the FAA online. So it's a bit of a shortcut.

Sean McGowan: Are there any other specific pilot requirements?

Tyler Black: The basics are you need to be at least 16 years old. You must be able to read, write, speak and understand English. You must be of sound physical and

mental wellbeing. And, as discussed above, you must also undergo that TSA background check.

Mike Deutsch: Okay, now that we know what certification you need to fly for business, are there any aircraft or operational requirements that you need to adhere to when flying for business purposes?

Sean McGowan: I'll take that one, Mike. As we all know, the FAA's goal is to safely integrate UAS into the National Airspace System. When we're talking about businesses, or business flight, rather, we're going to be talking about a little more detailed requirements of flying your UAS for commercial purposes.

Looking at the aircraft itself, looking under Part 107, the aircraft still must be less than 55 pounds to be considered a small UAS. And like we talked about last week in our last podcast, the aircraft must be registered and the aircraft must be labeled with its registration number.

In terms of the actual operation of the UAS, the main point as always it to remember you can't operate in careless or reckless manner so as to endanger the public or property. That's what the FAA's main consideration is. You cant't fly over 100 miles per hour. You can't operate over 400 feet. You must keep aircraft in visual line of sight. You can't operate from a moving aircraft. A remote pilot can't operate multiple aircraft/UAS at the same time. You can't operate at night. You can't operate over people.

You know all those things I just discussed, many of them you're able to seek a waiver for operation. In fact, those last two, operating at night and over people, are the subject to a current Notice of Proposed Rule Making titled "Operation of Small Unmanned Aircraft Systems Over People." That proposed rule would allow you, without a waiver, to conduct night operations when certain conditions are met. And those conditions currently they're talking about in the NPRM are when a pilot has certain nighttime qualification training and the aircraft has anti-collision lighting that's visible from three

miles away. And as far as flights over people, the FAA is looking into what would be permissible based on a level of risk to people on the ground.

So those are some of the aircraft and operational aspects that we're talking about. And obviously Tyler talked about the piloting.

So Mike, are there any additional best practices that you suggest before actually operating your business UAS?

Mike Deutsch: Yes, Sean, definitely. Here are a few things to consider before you fly for business purposes. First you, should document the company's UAS policy, all applicable procedures, and draft pre- and post- flight checklists – now if you don't have them, make sure you do before your first flight. Be sure to review state and local rules or ordinances before flying. You should also document every flight and specifically indicate that you are operating under Part 107. You should document whether a Part 107 waiver is required and if you obtain one – keep it with you when you fly.

You should also be sure to consult B4U Fly and take screen shot for documentation purposes. And finally, if you're using a third-party provider to conduct the drone operations, make sure you that have a contract with that provider outlining who is in control of the flight and a clear indication of the insurance, liability and indemnification provisions.

Tyler Black: Great – those are all good pointers, including the idea to take a screenshot for documentation purpose of the BFU fly app. It's really important to do that before you fly, as opposed to trying to reconstruct what was going on afterwards. Thanks, Mike.

And thanks to everyone for listening. If you have any questions, feel free to contact us. And as always, feel free to submit questions or topics you would like to hear discussed on this podcast, either through contacting us by our Thompson Coburn LLP webpage or direct messaging the TC drone twitter page @TCdronelaw. Thanks, everyone!

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