Come Fly With Me

Drone Laws and Regulations

Rusty Adams
March 22, 2023

Publication 2376

Radio-controlled airplanes have been around for decades, but modern unmanned aircraft—drones—are truly taking it to the next level. Drones are able to go where other technologies cannot, and without a pilot.

Their use is growing in aerial photography, agriculture, public safety, law enforcement, mapping, commercial deliveries, monitoring infrastructure, construction, and real estate. And of course, many people fly them just because it's fun. Yes, flying drones has really taken off, so to speak.

Real estate professionals and landowners who use drones need to understand the law surrounding this new and burgeoning technology and how it applies to them. In the law, drones are called unmanned aircraft, unmanned aircraft systems (UAS), or unmanned aerial vehicles (UAV). Drones are affected by federal law and regulations, as well as by state and local laws and regulations.

What Federal Law Says

Federal law gives regulatory power over UAS operation to the Federal Aviation Administration (FAA). The rules vary depending on where, what, and why an operator is flying.

Takeaway

Drones have numerous applications in the world of real estate. Drone users and those who hire them should be aware of and comply with the laws that govern drone use.

Drone regulations promulgated by the FAA are found in 14 CFR Pt. 107 (Part 107). Other federal aviation regulations dealing with larger and manned aircraft, but also applicable to drones, are found elsewhere. Which regulations apply depends on the reason for the use of the drone.

Generally, drone use is regulated by Part 107, also known as the FAA's Small UAS Rules. To fly a small drone (less than 55 pounds, including any payload) for work or business, a pilot must follow the guidelines of Part 107. This requires a Remote Pilot Certificate issued by the FAA. This certificate is available only to persons over 16 years of age, and it requires passage of a test,

satisfactory physical and mental condition, and the ability to read, speak, write, and understand English. A refresher course must be taken online every two years. The drone must be registered with the FAA and marked with its registration number. It must fly in Class G (uncontrolled) airspace and within a visual line-of-sight of the operator or observer. This means the operator must be able to see the drone unaided. The drone must avoid and yield to manned aircraft.

All airspace in the United States is regulated. Some airspace is "controlled" and some is "uncontrolled." Controlled airspace includes airspace around some airports and at altitudes where air traffic controllers are actively communicating with, directing, and separating air traffic. Controlled airspace is divided into several classes. Airspace where air traffic controllers are not directing air traffic is considered uncontrolled.

The Exception for Limited Recreational Operations of Unmanned Aircraft (49 U.S.C. § 44809) provides a statutory carve-out for recreational or hobby use. Recreational use means flying for enjoyment and not for work, business purposes, or for compensation or hire. Drone operators beware! An operator should not assume that his use is a recreational one, even in the absence of compensation. The FAA gives several examples of nonrecreational flights. These include taking photos to help sell a property or service (even if not otherwise compensated), roof inspections (even if for personal use, in lieu of hiring an inspector), and taking pictures of a high school football game for the school's website (even if not otherwise compensated). When in doubt, an operator should have a Part 107 certificate. When enlisting the services of a drone operator, one should make sure the operator has the certificate.

Recreational flyers fly pursuant to 49 U.S.C. § 44809 and are not required to be licensed. They must, however, pass The Recreational UAS Safety Test (TRUST), a knowledge and safety test that is available online from multiple providers. Proof of passage and proof of registration must be available to law enforcement on request. A drone that weighs more than 0.55 pounds (250 g) must be registered with the FAA. The operator must follow the safety guidelines of an FAA-recognized Community Based Organization (CBO). CBOs are organizations recognized by the FAA as meeting certain requirements, including a comprehensive set of safety guidelines. Recreational use must be in Class G airspace (uncontrolled airspace) no more than 400 feet above ground level (AGL). Prior authorization from air traffic control is required to fly in controlled airspace (Class B, C, D, or E). All recreational flight must be strictly for recreational purposes (i.e., personal enjoyment). Drones must be flown within the visual line of sight of the operator or a visual observer colocated and in direct communication with the operator. Drones must comply with all airspace restrictions and prohibitions and may not interfere with manned aircraft.

CBOs may also establish "fixed sites" and FAA-recognized identification areas ("FRIAs") where UASs may be operated. Unmanned aircraft weighing more than 55 pounds (25 kg) must comply with additional requirements and be operated from a fixed site established by a CBO and designated as such by the FAA. These fixed sites are generally maintained by model aircraft clubs. Recreational operators are also now required to comply with Part 89, which requires remote identification capability, unless operating within a FRIA and within visual line of sight.

Government employees such as police and fire personnel may operate under Part 107 or by obtaining a federal Certificate of Authorization (COA).

All drones generally may be flown in uncontrolled airspace up to 400 feet AGL and no faster than 100 miles per hour. Drones may not interfere with manned aircraft, emergency operations, or law enforcement. Drones may not weigh more than 55 pounds unless operated from a fixed site as mentioned above. A drone must be registered with the FAA and be marked with the registration number. The drone must be visible by the operator or observer at all times.

Because it is difficult for manned aircraft to see and avoid drones, all drone operators should avoid flying near airports. All drone operators must avoid interfering with manned aircraft. Drone operators are responsible for any safety hazards they create. Drone operators must be aware of FAA "No Drone Zones," where drone use is restricted or prohibited, such as areas near airports, stadiums, and other sensitive areas. This can be facilitated by using the FAA's safety app for mobile devices—B4UFLY.

Additional rules apply in special circumstances where drones are operated over people or at night. Some of these circumstances require special authorization from the FAA.

The FAA may enforce its rules against any person who endangers the safety of the National Airspace System,

including operators who are careless or reckless, or endanger persons or property.

What Texas Common Law Says

While there is a dearth of cases on unmanned aircraft, Texas common law provides some protection through the law of nuisance and trespass, as well as invasion of privacy.

"Trespass" means an unauthorized entry onto another's property without the owner's consent. "Entry" includes causing something to enter the property. The question then becomes whether the air above one's land is part of the property. Under the ancient *ad coelum* doctrine, the landowner owns not just the surface, but to the center of the earth and to the heavens. However, that doctrine has been modified somewhat over time. After all, every airplane in the sky is flying over someone's land.

While the doctrine still exists, courts have made it clear that there are situations where flights through private airspace may be low enough and frequent enough as to be impermissible. However, the courts have not made it clear how low or how frequent they have to be. Ultimately, it looks like the true test is whether the flights constitute a direct and immediate interference with the property rights of the landowner—a fact-specific investigation.

"Nuisance" means substantial interference with the owner's use and enjoyment of his property by causing unreasonable discomfort or annoyance to persons of ordinary sensibilities. Once again, this is a fact-specific question for which the law provides little guidance. A drone that kept owners awake in their homes, monitored the personal activities of family members, or disturbed pets or livestock would likely qualify.

Trespass and nuisance are similar. Legally, the distinction is that trespass is an interference with possession, whereas a nuisance is an interference with use and enjoyment.

"Invasion of Privacy" includes four different types: intrusion into seclusion or solitude, intrusion into private affairs, public disclosure of embarrassing private facts, and appropriation of name or likeness. The first could be met by an intrusion of the drone itself. The others would ultimately turn on what is done with any photographs or recordings made.

Texas case law in these areas, while well-developed, has not yet been applied to drones. The law will continue to develop, but, ultimately, the same principles will apply.

It is admittedly tempting for some landowners to consider shooting down a drone if they deem it a trespass, nuisance, or invasion of privacy. While in some cases their frustration might be understandable, landowners who shoot down a drone could be subjecting themselves to both civil and criminal liability.

Texas Statutes

The Texas Use of Unmanned Aircraft Act, passed in 2013 and later amended, was codified as Chapter 423 of the Texas Government Code. The statute did not address the actual physical presence of drones over the property of others. Rather, it limited the use of drones in two ways.

First, it made it a criminal offense to fly a drone over correctional facilities, critical infrastructure facilities (e.g., refineries, power plants, chemical plants, dams, feedlots), and sports venues.

Second, it created a criminal offense to use a drone for capturing images and making recordings, including sound recordings, "with the intent to conduct surveillance on the individual or property captured in the image." Exceptions were made for certain permissible uses, among them scholarly research, military use, satellite mapping, operating and maintaining utilities, pipelines, or telecommunications facilities, and certain law enforcement applications. Additionally, exceptions were made for surveyors, engineers, and real estate brokers. The statute was challenged by photojournalists, and a federal court found most of Chapter 423 unconstitutional as a violation of the First Amendment and as unconstitutionally vague [*Nat'l Press Photographers Ass'n v. McCraw*, 594 F.Supp.3d 789, 112 Fed. R. Serv. 3d 876 (W.D. Tex. March 28, 2022, appeal filed)].

Another part of the act grants authority to political subdivisions, such as counties and municipalities, to adopt ordinances about unmanned aircraft, but only in certain situations (Tex. Gov't Code § 423.009). Still another directs the Texas Department of Public Safety to adopt rules for law enforcement use and requires law enforcement agencies to report on their use of drones (Tex. Gov't Code §§ 423.007-423.008). These portions are not affected by the *McCraw* decision. All law enforcement use must comply with FAA requirements. For additional changes to the Texas statutes on unmanned aircraft, stay tuned to the federal courts and the Texas Legislature.

The collection of photographs or video recordings is, of course, governed by other laws regarding visual recording. Thus, Section 21.15 of the Texas Penal Code, which prohibits invasive visual recording without consent applies to drones just as it would to any other camera or device.

Texas Regulations

31 TAC Pt. 2, Ch. 65, Subchapter F, promulgated by the Texas Parks & Wildlife Department (TPWD), regulates the aerial management of wildlife and exotic species. Under Rule 65.152, a pilot operating under an aerial management permit (AMP) or AMP holder may use an unmanned aerial vehicle (UAV)—a drone—solely for the purpose of locating feral hogs. To do so, the management must take place only on land specified in a valid landowner's agreement as provided by TPWD. No person may kill or attempt to kill feral hogs from a UAV. Before using any aircraft for management of wildlife or exotic species, landowners and drone operators should consult Subchapter F to ensure compliance with TPWD rules.

UAVs may not be operated in or over the Capitol Complex in Austin unless specifically authorized by the State Preservation Board or the Capitol Complex area, as set forth in 37 TAC Pt. 1, Ch. 8, Subchapter B, Rules 8.21-8.22. Exceptions exist for law enforcement and certain governmental functions.

To reduce security vulnerabilities, Governor Greg Abbott recently prohibited the use of certain technologies on state-owned or issued devices. Additionally, personal devices enabled with prohibited technologies may not be used for state business.

The list of prohibited technologies includes several foreign manufacturers of drones. Drones manufactured by these manufacturers or equipped with prohibited technologies may not be used for state business, whether the drones are owned or issued by the state, or are personally owned. The following companies, including any of their subsidiaries or affiliates, are prohibited:

- Dahua Technology Company,
- Huawei Technologies Company,
- Hangzhou Hikvision Digital Technology Company,
- Hytera Communications Corporation,
- SZ DJI Technology Company, and
- ZTE Corporation.

Nothing in *TG* should be considered legal advice. For advice on a specific situation, consult an attorney.

Adams (r_adams@tamu.edu) is a member of the State Bar of Texas and a research attorney for the Texas Real Estate Research Center at Texas A&M University.