



WISCONSIN LEGISLATIVE COUNCIL INFORMATION MEMORANDUM

Drone Use in Wisconsin

Drone flight is becoming widespread in the national airspace. The Federal Aviation Administration (FAA) estimates that drone sales are expected to rise from 2.5 million in 2016 to 7 million in 2020.¹ As a result, the use of drones for commercial, recreational, and governmental purposes is likely to expand. For lawmakers considering drone legislation, it is important to understand the existing legal framework for drone use. This memorandum provides an overview of certain federal, state, and municipal regulations pertaining to drones. It also discusses preemption by federal and state law, as well as issues relating to drone use that may be the subject of future legislation. The legal framework surrounding drones continues to evolve, so it is important to check federal and state regulations for the most recent information.

BACKGROUND

The starting point for drone regulation is federal law, since Congress has vested the FAA with the authority to regulate the navigable airspace. [49 U.S.C. 40103.] A variety of federal legislation enacted over the past several years governs drone use. In addition to federal regulations, many states and local governments have laws governing drone use. One study estimates that 41 states have laws addressing drones, including Wisconsin.² Within Wisconsin, at least three local governments have ordinances that prohibit certain drone operations.³ Accordingly, an individual operating a drone in Wisconsin must adhere to a multitude of regulations. The following sections provide an overview of federal, state, and local laws relating to drones.

SOURCES OF DRONE REGULATIONS

FEDERAL LAW

A drone operator generally needs permission from the federal government to fly his or her drone, which requires the drone operator to register his or her drone and follow certain operating rules. Under the current framework, the FAA classifies drone regulations based on whether an

¹ This estimation combines hobbyist and commercial drone sales. *FAA Aerospace Forecast for Fiscal Years 2016-2036* at 31, available at: https://www.faa.gov/data_research/aviation/aerospace_forecasts/media/FY2016-36_FAA_Aerospace_Forecast.pdf.

² In addition, three states have adopted resolutions relating to drone use. See National Conference of State Legislatures, <http://www.ncsl.org/research/transportation/current-unmanned-aircraft-state-law-landscape.aspx>.

³ Local governments in Wisconsin with ordinances relating to drones include the Cities of Green Bay and Chetek, as well as Outagamie County.

individual is flying for work or business, recreation, or governmental use. The following section provides an overview of federal regulations that often govern these types of drone flights.

Flying for Work or Business

Many drone operators who use drones for work or business fly pursuant to the regulations in 14 C.F.R. Part 107 (“Part 107”). Effective August 2016, Part 107 applies to the operation of civil small unmanned aircraft systems (“small UAS”)⁴ within the United States. Part 107 contains pilot requirements, aircraft registration, and operating rules.

In general, under Part 107, the operator of a small UAS must hold a remote pilot certificate or be under the command of a person who holds such a certificate. An applicant for a pilot certificate must be at least 16 years old, must pass an initial aeronautical knowledge test, and must undergo a security screening by the Transportation Safety Administration (TSA).

Also under Part 107, a pilot must register his or her small UAS and follow certain operating regulations, including keeping the aircraft within his or her visual line-of-sight, not flying at an altitude greater than 400 feet above ground level, and only operating during daylight hours.⁵ [14 C.F.R. ss. 107.13 and 107.25-51.]

Flying for Recreation

Recreational drone operators may fly pursuant to Part 107, described above, or the Special Rule for Model Aircraft (“Model Aircraft Rule”). Under the Model Aircraft Rule, a “model aircraft” is generally defined to mean an unmanned aircraft that is capable of sustained flight in the atmosphere, flown within the visual line-of-sight of the operator, and flown for hobby or recreational use. Also under the Model Aircraft Rule, a recreational drone operator must register his or her model aircraft⁶ and follow certain requirements, including flying the model aircraft within visual line-of-sight, only flying a model aircraft under 55 lbs., and following a community-based set of safety guidelines. [P.L. 112-95, s. 336 (a) and (c).]

Governmental Drone Use

Governmental entities, such as law enforcement agencies, public universities, state governments, and local governments may engage in drone operations under certain circumstances. A governmental entity may request permission from the FAA to fly pursuant to Part 107, described above, or it may obtain a public Certificate of Waiver or Authorization (COA), among other options. In general, a COA is an authorization issued to a public operator for a specific unmanned aircraft activity, defining how and where the drone can be used.

⁴ A small UAS is generally defined to mean an unmanned aircraft weighing less than 55 lbs., including its associated elements.

⁵ The FAA may issue a waiver authorizing a deviation from certain regulations in Part 107. Very generally, a request for a waiver must contain a description of the proposed operation and must demonstrate that the operation can be conducted safely.

⁶ Whether the FAA may require registration of hobbyist aircraft has been an issue of debate. In *Taylor v. Huerta*, 856 F.3d 1089 (D.C. Cir. 2017), the court held that the FAA may not require registration of a hobbyist aircraft. However, the 2018 National Defense Authorization Act reinstated the FAA’s drone registration requirement.

WISCONSIN LAW

The Wisconsin statutes regulate drone use by prohibiting certain activities and limiting others. In general, Wisconsin statutes relating to drones can be divided into two categories: (1) those regulating all aircraft, including drones; and (2) those regulating drones only.

Chapter 114, Stats., governs air transportation and aircraft, which includes drones. The statutes provide that flight of an aircraft over the lands and waters of the state is generally **lawful** unless: (1) at such low altitude as to intentionally interfere with the then existing use to which the land or water, or space over the land or water, is put by the owner; or (2) unless so conducted as to be imminently dangerous or damaging to persons or property lawfully on the land or water beneath. However, the landing of an aircraft on the lands or waters of another, without the person's consent, is **unlawful**, except in the case of a forced landing. The statutes also prohibit operating an aircraft in the air or on the ground or water while under the influence of alcohol or drugs, or in a careless or reckless manner.⁷ [ss. 114.04, 114.05, and 114.09, Stats.]

In addition, certain statutory provisions relate specifically to drones and drone use. The statutes define the term "drone" to mean an aircraft operated without the possibility of direct human intervention from within or on the aircraft. [s. 114.105 (1) (a), Stats.] The Wisconsin statutes prohibit or limit the following uses of a drone:

- **Operation over correctional institutions.** No person may operate a drone over a correctional institution, including any grounds of the institution. [s. 114.045, Stats.]
- **Criminal investigations.** No Wisconsin law enforcement agency may use a drone to gather evidence or other information in a criminal investigation from a place where an individual has a reasonable expectation of privacy without first obtaining a search warrant. This prohibition does not apply to a law enforcement agency's use of a drone in a public place; in an active search and rescue operation; to locate an escaped prisoner; to surveil a place for the execution of an arrest warrant; or if a law enforcement officer has reasonable suspicion to believe that the use of a drone is necessary to prevent imminent danger to an individual or to prevent imminent destruction of evidence. [s. 175.55 (2), Stats.]
- **Photographing or videotaping in a private place.** Use of a drone with the intent to photograph, record, or otherwise observe another individual in a place where the individual has a reasonable expectation of privacy is a Class A misdemeanor. This provision does not apply to a law enforcement officer authorized to use a drone pursuant to a search warrant or an emergency exception, as discussed above. [s. 942.10, Stats.]

⁷ The statutes also address liability for damages caused by aircraft and generally provide that the liability of an aircraft owner for injury or damages to persons or property beneath are determined by the laws applicable to torts on land. [s. 114.05, Stats.]

- **Weaponized drones.** Operation of a weaponized drone is a Class H felony. This provision does not apply to a member of the U.S. armed forces or National Guard acting in his or her official capacity.⁸ [s. 941.292 (2), Stats.]
- **Interference with hunting and fishing.** No person may use a drone to interfere with hunting, fishing, or trapping. [s. 29.083 (2) (a) 8., Stats.]

MUNICIPAL LAW

A Wisconsin drone operator may also have to comply with local regulations relating to drones. A city, village, town, or county (political subdivision) may enact an ordinance regulating drones, but its authority to do so is limited by state law. Under current law, a political subdivision **may** adopt any ordinance that does any of the following:

- Limits the use of drones by the political subdivision.
- Strictly conforms with ch. 114, Stats., which includes provisions relating to flying and landing, reckless flying, and damages caused by an aircraft.⁹

However, a political subdivision **may not** adopt any ordinance that does any of the following:

- Conflicts or is inconsistent with state or federal law.
- Regulates the ownership or operation of a drone (other than limiting the use of drones by the political subdivision, as mentioned above).

[s. 114.105, Stats.]

PREEMPTION OF REGULATIONS

PREEMPTION BY FEDERAL LAW

The Supremacy Clause in Article VI of the U.S. Constitution declares that federal law supersedes any conflicting state law. Thus, if a state law conflicts with federal law, the state law may be preempted. State law is preempted under the Supremacy Clause when: (1) Congress has clearly expressed an intention to do so ('express preemption'); (2) Congress has clearly intended, by legislating comprehensively, to occupy an entire field of regulation ('field preemption'); or (3) a state law conflicts with federal law ('conflict preemption').¹⁰ Under the preemption framework developed by the courts, the constitutionality of a local ordinance is analyzed in the same manner as that of state laws.¹¹ Whether preemption occurs is ultimately a decision made by a court on a case-by-case basis, but case law provides guidance as to how a court may decide a preemption issue as it relates to drones.

⁸ In this prohibition only, a "drone" is defined to mean a powered, aerial vehicle that does not carry a human operator, uses aerodynamic forces to provide vehicle lift, can fly autonomously or be piloted remotely, and may be expendable or recoverable. [s. 941.292 (1), Stats.]

⁹ The penalty for violating such an ordinance may not provide for the suspension or revocation of pilot or aircraft licenses. [s. 114.105, Stats.]

¹⁰ *Med-Trans Corp v. Benton*, 581 Supp. 2d 721, 740 (E.D.N.C. 2008).

¹¹ *Hillsborough County v. Automated Medical Laboratories, Inc.*, 471 U.S. 707 (1985).

In 2017, one federal district court struck down multiple provisions of a local ordinance relating to drones under the doctrine of conflict preemption. In *Singer v. City of Newton*, a local ordinance in Newton, Massachusetts required drone pilots to register their aircraft with the city clerk's office, prohibited certain flight without permission of the property owner beneath, and prohibited flight beyond the visual line of sight of the operator, among other provisions. The court invalidated the challenged provisions of the local ordinance, since existing federal laws and regulations govern drone registration, flight paths, and operational restrictions. The court concluded that certain provisions of the ordinance thwarted the FAA's objectives in implementing rules relating to drones, and the intent of Congress for the FAA to integrate drones into the national airspace.¹²

In addition, under the doctrine of field preemption, federal courts have held aviation safety is exclusively occupied by the FAA. Courts have inferred that because the FAA has issued such pervasive regulations in the area of aviation safety, the FAA intends to displace all state law on the subject.¹³ Accordingly, courts have struck down state laws relating to aviation safety, such as pilot training and equipment requirements, because they are preempted.¹⁴

State and local laws relating to public health, safety, and welfare are generally **not** preempted by federal law, absent a clear statement of federal intent to do so.¹⁵ Examples of these state and local laws may include those relating to land use, zoning, privacy, trespass, and law enforcement operations. For example, a state law requiring police to obtain a search warrant prior to using a drone for surveillance or specifying that a drone may not be used for voyeurism are unlikely to be invalidated by a federal court.¹⁶

PREEMPTION BY STATE LAW

In Wisconsin, a local regulation is preempted by state law if any of the following situations apply: (1) the Legislature has expressly withdrawn the power of municipalities to act; (2) the ordinance logically conflicts with the state legislation; (3) the ordinance defeats the purpose of the state legislation; or (4) the ordinance goes against the spirit of the state legislation.¹⁷

As discussed above, the Wisconsin statutes permit a political subdivision to regulate drones under certain circumstances. It does not appear that Wisconsin courts have interpreted the statutes relating to local regulation of drones, but principles from the preemption analysis above

¹² *Singer v. City of Newton* (1:17-cv-10071), Massachusetts District Court, Filed Jan. 17, 2017.

¹³ *Montalvo v. Spirit Airlines*, 2007 U.S. App. LEXIS 23252, at *12 (9th Cir. Oct. 4, 2007).

¹⁴ See, *Med-Trans Corp v. Benton*, 581 Supp. 2d 721, 740 (E.D.N.C. 2008); *Abdullah v. American Airlines, Inc.*, 181 F.3d 363, 367 (3d Cir. 1999).

¹⁵ See, e.g., *Skysign International, Inc. v. City and County of Honolulu*, 276 F.3d 1109 (9th Cir. 2002); *Burbank v. Lockheed Air Terminal*, 411 U.S. 624 (1973).

¹⁶ *State and Local Regulation of Unmanned Aircraft Systems (UAS) Fact Sheet*, FAA Office of the Chief Counsel (December 17, 2015). Laws relating to state and local police power must still be measured against the FAA's exclusive authority over certain subsets of aviation. In *Burbank v. Lockheed Air Terminal*, the Supreme Court considered a city ordinance relating to aircraft noise. Although the Court found that control of noise is "deep-seated" in the police power of the state, the Court nonetheless struck down the city ordinance because the federal government has exclusive control over **aircraft** noise. [411 U.S. 624 (1973).]

¹⁷ *Anchor Savings & Loan Association. v. Equal Opportunities Commission*, 355 N.W.2d 234 (Wis. 1984).

provide insight as to how a court may rule on a challenged drone ordinance. The statutes expressly provide that a political subdivision may regulate drones if such a regulation strictly complies with state law, or limits the use of drones by the political subdivision. [s. 114.105 (2) and (3) Stats.] A local drone ordinance that does not comply with these requirements may be invalidated by a court if the ordinance conflicts with, defeats the purpose of, or goes against the spirit of state legislation.

In addition, the statutes explicitly prohibit a political subdivision from enacting an ordinance that conflicts or is inconsistent with state or federal law, or that regulates the ownership or operation of a drone. [s. 114.105 (4) (a) and (b), Stats.] A local ordinance that conflicts with either of these prohibitions may be invalidated under the theory that the Legislature has expressly withdrawn the power of the political subdivision to act.

Wisconsin courts have also found that a local regulation may be preempted when the local regulation is more restrictive than state law. In *Wisconsin Carry, Inc. v. City of Madison*, the Wisconsin Supreme Court invalidated a local city transit rule regulating the carrying of concealed weapons because it was more stringent than state statute. Accordingly, a local drone regulation that is more stringent than state law may also be invalidated under this theory.¹⁸

FUTURE REGULATION OF DRONES

FEDERAL

There are a number of federal actions relating to drones that may shape federal policy and regulations in the future. For example, on April 27, 2018, the House of Representatives approved the FAA Reauthorization Act of 2018 (393-13, H.R. 4). The bill would reauthorize FAA programs and taxes that fund FAA programs and operations for five years. The bill contains provisions relating to drones, including codifying a drone pilot program that may allow for states to regulate low altitude drone operations under certain conditions. At the time this Information Memorandum was published, the Senate had not voted on the bill.

In addition, on May 9, 2018, the U.S. Department of Transportation announced the selection of 10 state, local, and tribal governments as participants in the Unmanned Aircraft Systems Integration Pilot Program (IPP), a three-year drone pilot program.¹⁹ The IPP is an opportunity for state, local, and tribal governments to partner with the private sector to accelerate drone integration in the U.S. airspace. The goals of the IPP include identifying ways to balance local and national interests related to drone integration and accelerating the approval of operations that currently require special authorization from the FAA, such as flight beyond the pilot's line of sight.

¹⁸ *Wisconsin Carry, Inc. v. City of Madison*, 2018 WI 19.

¹⁹ The recipients are the Choctaw Nation of Oklahoma; Lee County Mosquito Control District in Florida; the University of Alaska at Fairbanks; the City of San Diego, California; the North Carolina Department of Transportation; the Memphis-Shelby County Airport Authority in Tennessee; the City of Reno, Nevada; the Innovation and Entrepreneurship Investment Authority in Virginia; the North Dakota Department of Transportation; and the Kansas Department of Transportation.

STATE

As governmental and private drone use becomes more pervasive, new legal issues may arise that state legislatures may decide to regulate. For example, the Legislature may choose to create statutory requirements relating to the collecting and storing of data gathered by the governmental drone use. Such legislation may address circumstances where a governmental agency uses a drone to surveil land for a lawful purpose, and unintentionally collects incriminating data in the process. The Legislature could also consider whether modifications to existing law are necessary to address tortious acts caused by a drone operator, such as trespass and nuisance. For example, the Legislature may choose to create statutory requirements setting forth when a drone operator unlawfully interferes with a landowner's use of his or her property. In addition, the Legislature could address issues such as mandatory drone insurance and criminal acts committed by a drone operator.

This memorandum is not a policy statement of the Joint Legislative Council or its staff.

This memorandum was prepared by Julia Norsetter, Staff Attorney, on June 8, 2018.

WISCONSIN LEGISLATIVE COUNCIL

One East Main Street, Suite 401 • Madison, WI 53703-3382

Telephone: (608) 266-1304 • Fax: (608) 266-3830

Email: leg.council@legis.wisconsin.gov

<http://www.legis.wisconsin.gov/lc>