



PRIVACY PROTECTIONS IMPLICATED BY THE DOMESTIC USE OF UNMANNED AERIAL VEHICLES OR DRONES

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QUESTION

What is the state of the law protecting individual privacy interests from potential invasion by domestic use of Unmanned Aerial Vehicles or drones?

LEGAL FOUNDATION

Individual privacy protections implicated by UAV use are based on different areas of law depending on whether the operator is a private individual or government agent. Government agents' UAV use may be restricted by the Fourth Amendment. Private UAV operators are not subject to these constitutional restrictions but may be subject to tort liability in some circumstances. Some states also have specific statutory restrictions on UAVs.

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SUMMARY

Unmanned Aerial Vehicles (UAVs), commonly known as drones, are a class of aircraft that can fly without a human operator onboard. UAVs come in a variety of sizes, ranging from small aircraft to the size of conventional aircraft. UAVs are also referred to as unmanned aerial systems (UAS), a term that includes the aircraft and any ground-based pilots, computers, or equipment supporting the UAV. Some UAVs are remotely operated while others fly autonomously along predetermined paths. The domestic use of UAVs by the government and private individuals has significant privacy implications.

Compared to traditional surveillance techniques and technologies, UAVs are a much more adaptable and flexible technology. They are able to surreptitiously track and monitor individuals for long periods, fly into areas that are difficult or dangerous for a human pilot to reach, and can carry technology, such as thermal imaging cameras, that effectively allow the operator to “peer through walls.”

The domestic use of UAVs implicates the privacy interests of private citizens in distinct ways depending on the operator. Governmental use of UAVs is subject to federal Constitutional constraints under the Fourth Amendment’s prohibition on unreasonable search and seizure. It is difficult to know how the Fourth Amendment will apply to UAVs; however, several U.S. Supreme Court cases addressing warrantless aerial surveillance suggest the government may have wide latitude in conducting warrantless surveillance with UAVs.

For private UAV operators, in the absence of statutes setting out specific rights and remedies, privacy interests could be protected in certain circumstances using the tort of invasion of privacy through an unreasonable intrusion upon the seclusion of another. Prevailing on such a claim would entitle the plaintiff to money damages and potentially a court order prohibiting further violations.

The use of UAVs by government agents or private individuals may also be constrained by statute. Currently, there is no specific statutory restraint on UAV use in Connecticut. At least 16 states have adopted laws specifically addressing UAVs.

While the Federal Aviation Administration (FAA) is currently drafting regulations to govern the domestic use of UAVs, the agency has stated the regulations will not address privacy concerns. According to the agency, its obligation to regulate UAVs does not include developing or enforcing policies concerning privacy or civil liberties issues. However, in November 2013, the FAA released a [privacy policy](#) governing agency-approved UAV test sites. The policy includes requirements to: (1) have a written, publicly available privacy policy; (2) allow for public comment as part of an annual privacy policy review; (3) require all operators at the test site to have a written plan for use and retention of all data acquired by a UAV; and (4) comply with all applicable local, state, and federal laws concerning privacy and civil liberties.

In the past eight months, there have been several reported instances of UAV use in Connecticut demonstrating the potential privacy implications of UAVs. In January, the Branford Fire Department used a UAV owned by a volunteer firefighter to determine whether it was safe to send firefighters into an area where a fire was threatening to spread into an explosives storage area. Following this success, the

department acquired its own drone, which it later used to locate a missing puppy in a swamp. In February, Hartford police noticed a drone hovering over the scene of a fatal car accident. The UAV was owned and operated by an off-duty freelance journalist. The FAA is currently investigating this incident because current federal rules prohibit commercial use of UAVs domestically. In September, the *Stamford Advocate* reported real estate agents in Fairfield County are already using UAV-produced aerial photography to market high-end homes.

CONSTITUTIONAL LIMITATIONS ON GOVERNMENTAL OPERATORS

Individual privacy interests are primarily protected against government intrusion by the Fourth Amendment to the United States Constitution, which guarantees “the right of the people to be secure in their persons, houses, papers, and effects, against unreasonable search and seizure.” At its most basic level, this amendment requires the government to obtain a search warrant from a court before conducting a search. To obtain a search warrant, law enforcement officers must show there is probable cause to believe that sought-after evidence is present at the place to be searched. The warrant request must describe with particularity the place to be searched and the items sought. Searches that go beyond the place and items described in the warrant may be unconstitutional. But not all searches are subject to the Fourth Amendment protections.

For Fourth Amendment purposes, a search occurs when a governmental agent infringes a person’s reasonable expectation of privacy. This can include physical searches as well as surveillance. Among the many privacy interests protected by the Fourth Amendment, the strongest protection applies to a person’s home and, to a degree, certain areas around the home, known as the “curtilage.” To a lesser degree, the Fourth Amendment also protects the interests of individuals in maintaining privacy in their movements. But Fourth Amendment protections are not absolute. Courts have upheld warrantless surveillance of private property conducted from public areas with a view of the private property.

Because of the uncertainty of how UAVs will be used domestically and how they will interact with the Fourth Amendment, it is helpful to consider cases where searches were conducted from aircraft flying over private property and where police used technological aids to track suspects.

Flyover Searches

The U.S. Supreme Court has considered at least three cases that may be instructive on how courts will treat flyover searches conducted using UAVs. The Court was guided by the general proposition that government agents are not conducting a

Fourth Amendment search requiring a warrant when they view whatever may be seen from a public vantage point where the police have a right to be. In these cases, the Court found importance in the fact that police were making their aerial observations from altitudes permitted by FAA regulations and were making naked-eye observations or observations using common technology. However, the Court has made clear that while the altitude from which police make observations is an important factor, it is not determinative.

In *California v. Ciralolo*, 476 U.S. 207 (1986), police suspected marijuana was being grown in the backyard of a suburban home. The yard was not visible from the public streets, so police used a fixed-wing aircraft to fly over the home. Although the officers flew at a low altitude, they were within the altitude limits set by FAA regulations and could identify marijuana plants with the naked eye. The Court ruled this was not a search that required a warrant under the Fourth Amendment because the defendant had no reasonable expectation of privacy in his backyard being viewed from the regulated altitude, much the same way there is no reasonable expectation of privacy in a backyard viewable from a public street. Essentially, the backyard was within the public view for anyone flying over the subject property.

Similarly, in *Florida v. Riley*, 488 U.S. 445 (1989), police suspected marijuana was being grown in a greenhouse near the owner's mobile home, which was in an area considered to be curtilage. The officers, unable to see into the greenhouse from public streets, used a helicopter to hover over it. From an altitude of 400 feet, the officers could identify marijuana plants growing in the greenhouse through holes in the roof with naked-eye observations. The Court, finding this case to be controlled by *Ciralolo*, ruled this was not a search that required a warrant under the Fourth Amendment. Although the observation altitude was lower than the regulated altitude for fixed-wing aircraft, the FAA permits helicopters to fly below that limit and therefore the greenhouse would have been readily viewable to any member of the public flying over in a helicopter at that height. Moreover, the Court noted that such low-altitude helicopter flights are not unusual in the United States. The Court noted that not all warrantless aerial searches of the area around a home would be legal simply because the aircraft was flying within legal altitude restrictions. But the Court did not specify the conditions under which such aerial searches would be unconstitutional.

In the third case, *Dow Chemical v. United States*, 476 U.S. 227 (1986), the corporate owner of an industrial chemical plant denied the U.S. Environmental Protection Agency (EPA) permission to inspect the plant. EPA hired a commercial aerial photographer to fly over the plant taking photographs of the open areas

around the plant and between its buildings with a standard precision aerial mapping camera. The court held that the open areas of an industrial facility are not subject to the same Fourth Amendment protections as the curtilage around a home and, on the basis of *Ciralolo*, the government does not necessarily violate the Fourth Amendment by viewing private property from navigable public airspace. Unlike in *Ciralolo* and *Riley*, the government made its observations with technological aids rather than naked-eye observations. The use of a sensory device that was publically and commonly available to augment human observations did not render the aerial search impermissible.

Together, these cases suggest the police may be able to use UAVs to conduct warrantless aerial searches of areas surrounding homes and businesses that are readily viewable from navigable public airspace. *Riley* and *Dow Chemical* both indicate there may be limits to warrantless aerial searches that would be relevant to government use of UAVs. *Riley* stated that not all aerial searches would be legal simply because they are conducted from within the legally designated navigable airspace. In *Dow Chemical*, the court found it meaningful that the camera used in the aerial search was one that was publically and commonly available. This suggests the government could conduct warrantless aerial searches similar to the searches in these three cases so long as the UAV is not employing cameras or other devices that are unusual and not available to the general public. Depending on how common private UAV use becomes, it could be argued the use of a UAV itself is the use of an unusual technology that is not readily available to the public.

Despite these remaining ambiguities in the Supreme Court's aerial search cases, other Fourth Amendment cases suggest specific technology some UAVs are known to carry could transform an aerial search by UAV into an impermissible warrantless search. In *Kyllo v. United States*, 533 U.S. 27 (2001), police used a ground-based thermal imaging device to determine whether heat lamps were being used in a home to grow marijuana. The U.S. Supreme Court held the government could not, without a warrant, use technology that is not in general public use to gather information about the inside of a home where such information otherwise could not be obtained except by entering the home. Some UAVs are known to carry thermal imaging cameras and similar devices. Presumably *Kyllo* prohibits the government from using a UAV armed with such technology that is not in general public use to peer through the walls of a private home.

Tracking by UAV

UAVs are expected to be used by law enforcement to aid in tracking suspects. The ability of these devices to stay aloft for extended periods and surreptitiously monitor individuals from above would make them a powerful tool for such

purposes. Three U.S. Supreme Court cases suggest such UAV tracking in public places likely would not require a warrant for short periods, but may require a warrant for tracking over an extended time.

In *United States v. Knotts*, 460 U.S. 276 (1983), the Supreme Court held police could permissibly use a radio transmitter to track a suspect's movements on public streets without obtaining a warrant. Police planted a radio transmitter in a container of suspected illicit drug precursors that an informant then gave to the suspect. The signal was used to follow the suspect to a remote cabin where a drug lab was later discovered during a warranted search. The court reasoned that a person does not have a reasonable expectation of privacy in his or her movements on public streets and highways.

In *United States v. Karo*, 468 U.S. 705 (1984), Federal Drug Enforcement Officers placed a radio transmitter in a package of illicit drug precursors with the help of an informant that then gave the materials to the suspects. Officers followed the signal to the homes of various suspects and storage facilities and used the signal to track the movements and location of the materials within these buildings. The Court again stated the officers did not need a warrant to track the suspects' movements on public streets, but when the transmitter was used to track movements within private buildings, the tracking became a search subject to the Fourth Amendment.

In the final case, *United States v. Jones*, 132 S. Ct. 945 (2012), the Supreme Court held that the police had violated the Fourth Amendment when they attached a GPS tracking device to a suspect's car without a valid warrant and then used the device to track his movements for nearly a month. The Court's reasoning rested on the fact that attaching the GPS device to the suspect's car was a trespass, which meant it was also a search requiring a warrant under the Fourth Amendment. Importantly, two concurring opinions agreed that the duration of the tracking could be an independent ground for finding an unconstitutional search. These justices reasoned that even though an individual has a lower expectation of privacy in his or her movements on a public street, it is reasonable for the public to assume that no one could sustain constant surveillance of a person's movements on public streets for so long, and that a degree of reasonable privacy interest arises from this expectation.

These concurrences have implications for tracking with UAVs since presumably police could use a UAV to track a suspect almost indefinitely without ever trespassing.

Limits on Privacy May Shift with Technology

Two of the cases discussed above, *Kyllo* and *Dow Chemical*, suggest the limits on the types of technology the police could use to monitor suspects and their homes or businesses with UAVs may change with time. In both cases, the court found a meaningful distinction between technology in general public use and technology that was not. The search in *Dow Chemical* was upheld, in part, because the camera used, although sophisticated and relatively powerful, was a standard mapping camera. By contrast, the search in *Kyllo* was found to violate the Fourth Amendment, in part, because the thermal imaging device used was not in general public use. When a technology is in general public use, the public faces a greater exposure to it and has a lower expectation of privacy from such technology.

The exact limits of UAV technology use by the government to perform surveillance without warrants may be determined in the future by what becomes general public use.

POTENTIAL TORT LIABILITY FOR PRIVATE OPERATORS

Unlike governmental actors, private operators are generally not subject to the Fourth Amendment's prohibition against unreasonable searches and seizures. Restrictions on private use of UAVs would come from federal or state statutes and judicial decisions. While it is possible that UAV use could give rise to property-based legal claims of trespass and nuisance, it is more likely privacy interests could be protected by the tort of invasion of privacy.

Invasion of Privacy Tort

Invasion of privacy consists of four distinct types of legal wrongs for which a plaintiff can recover money damages. In the case of private UAV use, the type of invasion of privacy tort most likely implicated is the unreasonable intrusion upon the seclusion of another. While invasion of privacy is a recognized cause of action in Connecticut courts, the state Supreme Court has not yet had the occasion to set forth the necessary elements of a claim concerning unreasonable intrusion on the seclusion of another. However, when addressing other invasion of privacy claims, the state Supreme Court has generally adopted the reasoning found in the Restatement (Second) of Torts, which is a set of model rules summarizing the law

created by the American Law Institute. Lower courts in Connecticut have followed this example when ruling on an intrusion on seclusion claim. See, e.g., *Neron v. Cossette*, 2012 WL 1592174 (April 13, 2012).

According to the Restatement, an intrusion upon seclusion is committed when a person “intentionally intrudes, physically or otherwise, upon the solitude or seclusion of another or his private affairs or concerns if the intrusion would be highly offensive to a reasonable person” (Restatement (Second) of Torts § 652B)). The focus of the inquiry is generally the same regardless of whether information gleaned from the invasion has been publicized.

While this tort includes a physical invasion, it also covers situations more likely to be experienced with the use of UAVs. An invasion of seclusion may be committed by using mechanical means to oversee or overhear another person’s private affairs. It is likely a privacy claim arising from the use of a UAV would be considered within this framework. But because the state Supreme Court has not yet considered the specific privacy tort of intrusion upon seclusion, it is not possible to predict with certainty how the court would view this type of UAV claim.

Although not examining UAV use specifically, courts in other jurisdictions have decided invasion of privacy cases that provide helpful insight into how the standard might be reviewed by the Connecticut Supreme Court. The standard for measuring whether the intrusion was highly offensive is whether a person of ordinary sensibilities, rather than a person with an extreme aversion to cameras, would view the invasion as highly offensive. While a California case held that a single intrusion is sufficient to support a claim, the Restatement asserts a single intrusion is generally insufficient. Courts in Illinois and Pennsylvania have also required a person claiming an intrusion upon seclusion to show the intrusion caused mental suffering, shame, or humiliation.

Both the Restatement and cases in California, Illinois, and Louisiana suggest the location of the person whose privacy is invaded can be determinative. Generally, a person in a public place has a diminished, if not no, expectation of privacy. Similarly, a person may have a diminished expectation of privacy on private property when in a place that can be viewed from a public area.

For example, the Oregon Supreme Court has held a plaintiff who was videotaped by a film crew that trespassed on his property did not have a claim of intrusion on seclusion because the plaintiff was in an area readily viewable from the public street.

STATUTORY RESTRICTIONS

Currently, Connecticut does not have any specific statutory restrictions on UAV use. Depending on the circumstances, private UAV use in Connecticut could be subject to other laws (such as the voyeurism statutes).

A growing number of states have adopted or considered UAV legislation to protect privacy interests. According to the [National Conference of State Legislatures](#), 16 states have adopted UAV legislation as of April 2014. Most state UAV statutes address a combination of concerns arising from governmental and private use of UAVs as well as use of data gathered by UAVs in civil and criminal court proceedings. Another 31 states have considered UAV legislation or resolutions in 2014.

Some examples of legislation passed to date can be found in Illinois, Indiana, Oregon, Tennessee, and Texas. An Indiana law creates the misdemeanor of "Unlawful Photography and Surveillance on Private Property," which consists of a person knowingly and intentionally electronically surveying someone's private property without permission.

Legislation adopted in Tennessee and Illinois makes it a misdemeanor to use a UAV to conduct surveillance of people hunting or fishing without their consent.

An Oregon law generally requires law enforcement to obtain a warrant to use a drone. There are certain exceptions, such as for search and rescue operations, in exigent circumstances involving a crime, or for training purposes. It prohibits law enforcement from mounting weapons on UAVs. It also authorizes landowners to bring civil suit against a person flying a UAV lower than 400 feet over their property, under certain circumstances.

Legislation in Texas creates misdemeanor crimes involving the illegal use of a UAV to capture and possess or distribute information gathered from private property or an individual on private property. Protected information includes any sound wave, thermal, ultraviolet, visible light or other electromagnetic waves, odor, or other conditions existing on the property or an individual on private property.

In Connecticut, the Judiciary Committee held a public hearing this year on a UAV bill, [HB 5217](#), which addressed issues associated with public and private use of UAVs. The bill was not voted out of the committee. The bill would set standards for the use of UAVs by law enforcement agencies, including requiring a warrant except in an emergency. It would require regulations concerning the use of UAVs in state airspace that is not subject to federal regulation. It would also create two felony

crimes related to the use of UAVs for certain criminal purposes, including using UAVs equipped with a deadly weapon or to commit voyeurism or 1st- or 2nd-degree stalking.

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