

# Drones At Home

## Drone Incidents: A Survey of Legal Cases

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As drones become more common in U.S. skies, so too do incidents in which drone operators find themselves, either intentionally or unintentionally, running up against the law. This is not unique to unmanned aircraft technology. When the automobile proliferated, traffic accidents and violations became more common. Even with today's well-established and strictly enforced traffic laws, violations and incidents still happen on the country's roads. This report serves as a short survey of 30 incidents involving drone use in the U.S. that resulted in some form of legal or disciplinary action by a local authority, in addition to a small number of incidents handled by the National Park Service and the Department of Justice. Our study demonstrates some of the challenges of effectively and consistently enforcing the rules governing drone use in the country.

### Background

It is by now well established that local law enforcement organizations are the most likely to address violations of the law involving drones, even though in the U.S. the use of all aircraft in the airspace system, including unmanned aircraft, is subject to the federal regulations and guidelines established by the Federal Aviation Administration. These rules apply equally everywhere in the country. Drones, however, present a particular challenge from an enforcement perspective, because the technology has proliferated quickly and informally, making it difficult for the federal government to engage in the same level of oversight of drone operations that it applies to commercial and general manned aviation, which is strictly formalized and closely monitored. Unlike a manned aircraft, which is expensive to obtain and



The DJI Phantom drone that crashed on the White House lawn in 2015. Credit: U.S. Secret Service

maintain, and requires a pilot's license to operate, drones are inexpensive and easy to fly, and need only be registered online. Furthermore, unlike most manned aircraft, which are required to operate from aviation facilities and are monitored by air traffic controllers, drones can be operated anywhere "under the radar."

For these reasons, the FAA has asserted that while it maintains authority over airspace use, it must rely on local law enforcement agencies to actually enforce rules governing drone use. The FAA has outlined its reliance on local law enforcement and its guidelines for how agencies can enforce drone rules in its fact sheet, "[Law Enforcement Guidance for Suspected Unauthorized UAS Operations](#)." The FAA asserts that it relies on a cooperative partnership with local law enforcement to enforce its rules.

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Furthermore, drone use is also subject to rules that are not mandated by the FAA. For example, though the FAA's rules for drone use do not address privacy, many states and localities have strict Peeping Tom regulations that might apply if a drone is used to look through windows of private residences. Additionally, according to our recent study, at least 130 localities in the U.S. have their own local drone rules, which in many cases extend beyond the rules implemented by the FAA. Therefore, when drone users are subject to local enforcement actions, these actions may stem from a range of different statutes, depending on where the incident took place.

## Findings

We have split the incidents covered by this study into six categories: invasion of privacy, drone use, smuggling, close encounters with manned aircraft, crashes, and shoot downs. So far, we have observed that similar drone infractions often appear to yield a wide variety of legal outcomes. In a small number of cases, drone operators have been charged using recently adopted drone-specific state and local statutes, but in a majority of cases, general charges—such as reckless endangerment and unlawful surveillance—have been applied. There appears to be little consistency in how, and by whom, infractions involving drones are prosecuted.

Few cases involving drones have resulted in hard convictions, and only two cases have led to jail time for the operators (a drone crash case in Washington State and a drone smuggling case in Maryland), though a number of cases stemming from serious incidents remain ongoing. We have also found that in a number of cases, particularly privacy related cases and close encounter cases, law enforcement agencies have been unable to identify and charge the operators. Since drones can be operated remotely, the most significant challenge to law enforcement may simply be finding the operators who are involved in incidents.

This document is intended to serve as a broad guide to the types of incidents that drones have so far been involved in, and the ways in which these

incidents have been handled by law enforcement, the courts, and other enforcement organizations thus far. We are still in the early years of the integration curve for unmanned aircraft in U.S. airspace. As a result, there have not yet been enough incidents and enforcement cases to draw broad generalized conclusions about how drone use is enforced in this country, and how it is likely to be enforced in the coming years. It is hard to tell whether the patterns we have observed are a function of the country being at an early stage of the integration process or whether they stem from the intrinsic nature of drone use. Nevertheless, we hope that this resource will spur further research to guide the development of policies that could enable law enforcement at both the federal and local levels to more effectively and fairly ensure that U.S. skies remain safe.



The drone that police in Orem, Utah say was used to spy on a neighbor. Credit: Orem Police Department

## Privacy

Privacy has been one of the primary concerns discussed by the public with respect to the emergence and domestic use of drone technology. Many worry that small camera-equipped unmanned aircraft could enable users to fly over or near private property and record data that would not have been accessible by other means. Since 2012, when Congress directed the FAA to develop a plan to integrate drone use into the U.S. airspace system, [both Democrat and Republican lawmakers](#) have aired these concerns. Current federal U.S law does not specifically address the use of unmanned aircraft with respect to privacy, and the FAA's drone regulations do not govern privacy. All drone users are encouraged to follow the National Telecommunications and Information Administration's

[voluntary best practices](#) for protecting privacy while using drones, but these are not laws. As a result, invasion of privacy cases involving drones are exclusively prosecuted using state and local statutes, including statutes that specifically address the use of drones with regards to privacy. There may be a wide variance in how privacy cases are enforced depending on where they take place.

There have been a number of legal cases in which drone users have been accused, and in some cases convicted, of invading privacy. Given that no nation-wide drone-specific privacy laws exist, prosecutors have used a variety of charges to address privacy-related drone incidents, including local drone ordinances. In July 2014, a man was [arrested for attempted unlawful surveillance](#) in Ulster, New York after flying a DJI Phantom drone next to a hospital. The hospital staff, who called the police following the incident, had been concerned that the footage, which the operator offered to them shortly after the flight, captured a number of patients in examination rooms. In 2015, the defendant, who pleaded not guilty, was acquitted by a local jury, which did not deem that the operation constituted a willful violation of the hospital patients' privacy.

In September 2015, a police officer in Valdosta, Georgia was found to be privately operating a drone over his neighbors' properties on several occasions. The officer was [charged with felony eavesdropping](#) and was fired from the local police force. In an ongoing case, a couple in Orem, Utah have [been charged with one count](#) of voyeurism using concealed or disguised electronic equipment. According to an affidavit provided by the local police, a memory card found on the couple's drone contained a number of videos of people inside their homes.

In October 2015, a man was [found guilty of disorderly conduct](#) and violating a local drone-related ordinance in DeForest, Wisconsin after numerous incidents in which he reportedly flew a drone over private properties. The DeForest court determined that the defendant had violated a recently adopted town ordinance that prohibits the use of drones for surveillance in locations where

there is a reasonable expectation of privacy. The incident is the only known case of a drone user being prosecuted under a local drone ordinance for a privacy violation. He was ordered to pay a \$3,455 fine.

In October 2016, a man was charged with stalking after flying a drone over security officers at the Dakota Access Pipeline protests. The security officers believed that the drone was being used to record images of their activities and their vehicles. According to [The Grand Forks Herald](#), the defendant's attorneys will argue that his use of the drone was legal, and is protected by the First Amendment.

## Crashes

There have been several cases involving drone crashes, some of which have resulted in injuries to individuals at the scene. We observed five incidents that resulted in either reckless endangerment or negligence charges. A drone crash in Seattle that is currently on appeal resulted [in the only known jail sentence](#) (30 days) for a drone crash, and one of the few convictions in a drone case in any category. The crash occurred when the drone, after striking the side of a building, fell and injured two people at the 2015 Pride Parade. In a motion to dismiss the case, the defense argued that the City could not definitively prove that the defendant was the individual who was operating the drone at the time of the crash. The prosecution, meanwhile, argued that there was indeed enough evidence to prove that the drone belonged to the defendant.

We observed two other crashes that reportedly resulted in injuries. In September 2016, a woman [sued a fraternity at the](#) University of Southern California and an event-planning company, alleging that she suffered head injuries as a result of a drone crash at an October 2015 party hosted by the defendants. Meanwhile, guests at an August 2016 wedding in New Hampshire [sued the groom and the event-planning company](#) for negligence after they claimed to have suffered head injuries, allegedly caused by a drone flown by the groom. Both cases appear to be unresolved.

We observed four drone crash cases in New York City that appear to have resulted in charges. In one case in 2015, an individual in New York City [crashed a drone into the stands](#) during the U.S. Open. The charges resulted in community service for the pilot. In March 2016, a New York City man was [charged with disorderly conduct](#) after he accidentally crashed a drone into the Empire State Building. The individual, who pleaded guilty, was given community service and a \$200 fine. In a similar case in October 2016, a [drone crashed in Midtown Manhattan](#) and the 22-year-old operator was charged with reckless endangerment and unlawful operation of a drone. In January 2017, a 24-year-old man [was arrested and charged with criminal mischief](#) after crashing a drone through a window on the 27th floor of a residential building on the East River, also in Manhattan.

## Close Encounters with Manned Aircraft

Close encounters occur when drones fly near manned aircraft traffic. The risk of a close encounter is higher around airports and active crime scenes or firefighting operations, where the presence of low-altitude manned aviation traffic is likelier, though incidents have also been reported at high altitudes. As [we noted in our 2015 study](#), in the vast majority of reported drone close encounters law enforcement authorities were unable to locate the operator of the rogue drone. As a result, there have been few legal cases arising from close encounter incidents. Most of the close encounter legal cases that we have observed have involved drones and manned first responder aircraft. In each of these cases, the charges have either been reckless endangerment or obstructing police business, or both. In 2014, a Columbus, Ohio man [was charged with disorderly conduct](#) and misconduct when, according to police, he refused to land his drone at the scene of an accident. The charges were dropped when the man agreed to pay a \$500 fine and attend a class about drone regulations. Meanwhile, in New York City, two men were arrested in 2014 following claims that they flew too close to a police helicopter. [Prosecutors dismissed the charges](#), reportedly because it was too difficult to prove the charges beyond a reasonable doubt. In California, a

man was charged in 2015 with obstructing a police officer after flying too close to a police helicopter in Los Angeles. The [man pleaded no contest to](#) the charges and was required to forfeit the drone and perform 30 days of community service.

We were not able to identify any cases in which a charge has yet been successfully prosecuted following a not guilty plea, although we have observed four ongoing close encounter cases. Two cases have resulted in charges under recently passed state laws relating to drone operations. [One ongoing case in North Carolina](#), for example, involves an incident in which the drone operator allegedly flew so close to a police helicopter that the pilots had to take evasive action to avoid a collision. The individual was charged under [North Carolina's statute 14-280.3](#), which, as of 2014, criminalizes the use of unmanned aircraft to interfere with manned aircraft. In California, a drone operator was charged after a January 2017 incident in which the individual allegedly obstructed the flight path of a first responder helicopter that was trying to rescue a man on a cliff. The drone [operator was charged under](#) California Penal Code statute 402(a) that makes it a misdemeanor to impede first responders at the scene of an emergency. The statute was amended in 2016, following the [passage of Assembly Bill 1602](#), to include individuals who fly drones.

**§ 14-280.3. Interference with manned aircraft by unmanned aircraft systems.**  
**(a) Any person who willfully damages, disrupts the operation of, or otherwise interferes with a manned aircraft through use of an unmanned aircraft system, while the manned aircraft is taking off, landing, in flight, or otherwise in motion, is guilty of a Class H felony.**

North Carolina Statute 14-280.3

## Shoot Downs

Some individuals have decided to shoot down drones that they claim were flying over their property. In at least three cases, these incidents have led to legal challenges. Each of these cases raises questions about the nature of an aerial trespass and of the aerial dimensions of an individual's property. Although the circumstances of these cases are somewhat similar, there are differences in how each of these cases turned out. An early incident occurred in New Jersey in 2014 when a man was charged with a weapons offense and criminal mischief [after shooting down a drone](#) that he claimed was flying over his house. The drone operator was in fact flying over an adjacent property as a favor for a friend. The man who shot down the drone pled guilty to the charges and, in 2016, received probation. Meanwhile, in a 2015 case in California, a man filed damages charges against his neighbor for shooting down his drone and then refusing to compensate the drone owner for the downed drone. A small claims court judge [ruled in favor of the drone owner](#), requiring the neighbor to pay for the full cost of the drone.

The most well known legal case involving a drone shoot down occurred as a result of an August 2015 incident in Kentucky. The shooter, who claimed the drone was invading his privacy, was initially charged with wanton endangerment. In October 2015, [a county judge dismissed the charge](#), finding that the drone flight did constitute a trespass. Following the ruling, the owner of the drone [brought charges against the](#) shooter for damages. In



Credit: Pentagon Force Protection Agency

the lawsuit, the owner of the drone asked the court to declare that the drone was operating legally in navigable airspace, which would have made the shutdown illegal under a federal law prohibiting interference with aircraft. In a March 2017 ruling, the [U.S. District Court in Louisville found](#) that it lacked “subject matter jurisdiction” to rule one way or the other. In other words, it refused to define the boundary of what constituted navigable airspace.

## Drone Use

A number of cases have arisen from drone use in restricted areas, including national parks, prisons, and dense urban areas. These cases have been handled by a variety of different government and law enforcement authorities, depending on the nature of the infraction. All of these authorities use different mechanisms to prosecute infractions, so there appears to be little consistency in how similar incidents may be addressed.

Over a dozen localities across the U.S. require drone operators to obtain a permit to operate unmanned aircraft. In one of the only reported cases in which these ordinances have been enforced with charges to date, in September 2016, the town of South Elgin in Illinois [fined a local man \\$50](#) for violating a city ordinance that requires drone operators to obtain a local permit from the city to operate drones in parks. The man has stated that he intends to fight the fine, as he contended that his drone operations were entirely legal under FAA regulations.

The National Park Service, which prohibited all drone use in 2014, has seen various incidents in recent years, and has demonstrated a relative degree of consistency in the enforcement of the ban. In that first year of the ban, three men were fined for drone use in three separate incidents at Yellowstone National Park. One man, a Dutch national, was fined \$1,000 by the park authority and ordered to pay \$2,200 in restitution after crashing his drone into the Grand Prismatic Spring. The following month, a German national [was fined \\$1,600 for](#) crashing a drone into Yellowstone Lake. The third incident at Yellowstone, in which an Oregon man was found to be operating a drone in the park,

including at a location near a herd of bison, resulted in a \$1,000 fine.

In January 2017, [three Canadian nationals pleaded guilty](#) to numerous infractions in several U.S. national parks, including the use of a drone in Mesa Verde National Park. In February 2017, a D.C. resident [was given a \\$280 ticket for](#) flying a drone over a herd of 1,500 elk at the National Elk Refuge in Jackson, Wyoming. The drone flight caused the elk to stampede for about half a mile.

## Smuggling

The use of drones to smuggle goods into correctional facilities is becoming increasingly common around the world. Even cheap consumer drone models are capable of carrying a small payload over prison walls, and the operators can be hard to catch. The FAA does not expressly forbid the use of drones over correctional institutions, so the enforcement in drone smuggling cases must rely on other criminal statutes related to smuggling generally. Louisiana and Wisconsin [both expressly forbid](#) the use of drones over any correctional facility. In the U.S. we observed only one major court case in which drone operators have been sentenced solely for a drone smuggling charge. Other cases remain ongoing, or are focused on a broader set of infractions that include drone smuggling. In one of the earliest cases, [four individuals were arrested](#) for attempting to smuggle tobacco into a Georgia prison. In September 2015, two Maryland men [were sentenced to 13 years in prison](#) for smuggling goods into the Western Correctional Institution, a maximum-security facility. The two men had completed a number of successful contraband drops with the drone prior to being apprehended, each time securing an estimated \$6,000 in profits. In September 2016, the U.S. Attorney’s Office, Southern District of Georgia [indicted 16 defendants on drug](#) and firearm trafficking offenses. According to the indictment, the defendants used drones to smuggle cellphones into a Georgia prison. These cellphones were then used to coordinate the trafficking activities. As of March 2017, the case is ongoing.

## Table of Incidents

Location	Category	Year	Status*	Source
Pennsylvania	Close Encounter	2016	Ongoing	<a href="#">Link</a>
California	Close Encounter	2017	Ongoing	<a href="#">Link</a>
Ohio	Close Encounter	2014	Dismissed	<a href="#">Link</a>
North Dakota	Close Encounter	2016	Ongoing	<a href="#">Link</a>
California	Close Encounter	2015	Guilty Plea	<a href="#">Link</a>
California	Close Encounter	2016	Dismissed	<a href="#">Link</a>
North Carolina	Close Encounter	2016	Ongoing	<a href="#">Link</a>
New York	Close Encounter	2014	Dismissed	<a href="#">Link</a>
Wyoming	Drone Use	2014	Conviction	<a href="#">Link</a>
North Dakota	Drone Use	2016	Ongoing	<a href="#">Link</a>
Illinois	Drone Use	2016	Settled	<a href="#">Link</a>
Wyoming	Drone Use	2017	Settled	<a href="#">Link</a>
Massachusetts	Injury/Crash	2016	Ongoing	<a href="#">Link</a>
California	Injury/Crash	2015	N/A	<a href="#">Link</a>
Washington	Injury/Crash	2015	Conviction	<a href="#">Link</a>
New York	Injury/Crash	2015	N/A	<a href="#">Link</a>
New York	Injury/Crash	2015	Dismissed	<a href="#">Link</a>
New York	Injury/Crash	2016	Guilty Plea	<a href="#">Link</a>
New York	Injury/Crash	2016	N/A	<a href="#">Link</a>
New York	Injury/Crash	2017	Ongoing	<a href="#">Link</a>
New York	Privacy	2015	Not Guilty	<a href="#">Link</a>
Wisconsin	Privacy	2015	Conviction	<a href="#">Link</a>
Utah	Privacy	2015	Ongoing	<a href="#">Link</a>
Georgia	Privacy	2015	N/A	<a href="#">Link</a>
New Jersey	Shoot Down	2014	Guilty Plea	<a href="#">Link</a>
Kentucky	Shoot Down	2015	Dismissed	<a href="#">Link</a>
California	Shoot Down	2014	Settled	<a href="#">Link</a>
Maryland	Smuggling	2015	Conviction	<a href="#">Link</a>
Georgia	Smuggling	2013	N/A	<a href="#">Link</a>
Georgia	Smuggling	2016	Ongoing	<a href="#">Link</a>

Status as of April 2017 and based on available information.

