Integration of Drones into Domestic Airspace: Selected Legal Issues

Alissa M. Dolan
Legislative Attorney

Richard M. Thompson II
Legislative Attorney

January 30, 2013

Congressional Research Service
7-5700
www.crs.gov
R42940

CRS Report for Congress
Prepared for Members and Committees of Congress

Summary

Under the FAA Modernization and Reform Act of 2012, P.L. 112-95, Congress has tasked the Federal Aviation Administration (FAA) with integrating unmanned aircraft systems (UASs), sometimes referred to as unmanned aerial vehicles (UAVs) or drones, into the national airspace system by September 2015. Although the text of this act places safety as a predominant concern, it fails to establish how the FAA should resolve significant, and up to this point, largely unanswered legal questions.

For instance, several legal interests are implicated by drone flight over or near private property. Might such a flight constitute a trespass? A nuisance? If conducted by the government, a constitutional taking? In the past, the Latin maxim *cujus est solum ejus est usque ad coelum* (for whoever owns the soil owns to the heavens) was sufficient to resolve many of these types of questions, but the proliferation of air flight in the 20th century has made this proposition untenable. Instead, modern jurisprudence concerning air travel is significantly more nuanced, and often more confusing. Some courts have relied on the federal definition of "navigable airspace" to determine which flights could constitute a trespass. Others employ a nuisance theory to ask whether an overhead flight causes a substantial impairment of the use and enjoyment of one's property. Additionally, courts have struggled to determine when an overhead flight constitutes a government taking under the Fifth and Fourteenth Amendments.

With the ability to house surveillance sensors such as high-powered cameras and thermal-imaging devices, some argue that drone surveillance poses a significant threat to the privacy of American citizens. Because the Fourth Amendment's prohibition against unreasonable searches and seizures applies only to acts by government officials, surveillance by private actors such as the paparazzi, a commercial enterprise, or one's neighbor is instead regulated, if at all, by state and federal statutes and judicial decisions. Yet, however strong this interest in privacy may be, there are instances where the public's First Amendment rights to *gather* and *receive* news might outweigh an individual's interest in being let alone.

Additionally, there are a host of related legal issues that may arise with this introduction of drones in U.S. skies. These include whether a property owner may protect his property from a trespassing drone; how stalking, harassment, and other criminal laws should be applied to acts committed with the use of drones; and to what extent federal aviation law could preempt future state law.

Because drone use will occur largely in federal airspace, Congress has the authority or can permit various federal agencies to set federal policy on drone use in American skies. This may include the appropriate level of individual privacy protection, the balancing of property interests with the economic needs of private entities, and the appropriate safety standards required.

Contents

Contacts

Introduction

The integration of drones into U.S. skies is expected by many to yield significant commercial and societal benefits.[1] Drones could be employed to inspect pipelines, survey crops, and monitor weather.[2] One newspaper has already used a drone to survey storm damage, [3] and real estate agents have used them to survey property.[4] In short, the extent of their potential domestic application is bound only by human ingenuity.

In an effort to accelerate this introduction, in the FAA Modernization and Reform Act of 2012, Congress tasked the Federal Aviation Administration (FAA) with safely integrating drones into the national airspace system by September 2015.[5] Likewise, sensing the opportunities that unmanned flight portend, lobbying groups and drone manufacturers have joined the chorus of those seeking a more rapid expansion of drones in the domestic market.[6]

Yet, the full-scale introduction of drones into U.S. skies will inevitably generate a host of legal issues. This report will explore some of those issues. To begin, this report will describe the regulatory framework for permitting the use of unmanned vehicles and the potential rulemaking that will occur over the next few years. Next, it will discuss theories of takings and property torts as they relate to drone flights over or near private property. It will then discuss the privacy interests implicated by drone surveillance conducted by private actors and the potential countervailing First Amendment rights to gather and receive news. Finally, this report will explore possible congressional responses to these privacy concerns and identify additional potential legal issues.

Development of Aviation Law and Regulations

The predominant theory of airspace rights applied before the advent of aviation derived from the Roman Law maxim *cujus est solum ejus est usque ad coelum*, meaning whoever owns the land

[1] A "drone" is simply an aircraft that can fly without a human operator. They are sometimes referred to as unmanned aerial vehicles (UAV), and the whole system—including the aircraft, the operator on the ground, and the digital network required to fly the aircraft—is referred to as an unmanned aircraft system (UAS). *See generally* CRS Report R42718, *Pilotless Drones: Background and Considerations for Congress Regarding Unmanned Aircraft Operations in the National Airspace System*, by Bart Elias.

[2] *See* GOV'T ACCOUNTABILITY OFFICE, UNMANNED AIRCRAFT SYSTEMS: MEASURING PROGRESS AND ADDRESSING POTENTIAL PRIVACY CONCERNS WOULD FACILITATE INTEGRATION INTO THE NATIONAL AIRSPACE SYSTEM (2012).

[3] It is reported that News Corp. has used a small drone to monitor storm damage in Alabama and flooding in North Dakota. Kashmir Hill, *FAA Looks Into News Corp's Daily Drone, Raising Questions About Who Gets to Fly Drones in the U.S.*, FORBES, (Aug. 2, 2011 3:52 P.M.), http://www.forbes.com/sites/kashmirhill/2011/08/02/faa-looks-into-news-corps-daily-drone-raising-questions-about-who-gets-to-fly-drones-in-the-u-s/.

[4] Nick Wingfield & Somini Sengupta, *Drones Set Sights on U.S. Skies*, N.Y. TIMES (Feb. 17, 2012), *available at* http://www.nytimes.com/2012/02/18/technology/drones-with-an-eye-on-the-public-cleared-to-fly.html?pagewanted=all&_r=0.

[5] FAA Modernization and Reform Act of 2012, P.L. 112-95, 126 Stat. 11.

[6] Groups such as the Association for Unmanned Vehicle Systems International, which boasts 7,200 members, including defense contractors, educational institutions, and government agencies, have been formed to advance the interests of the UAV community. Association for Unmanned Vehicle Systems International, http://www.auvsi.org/Home (last visited Jan. 7, 2012).

possesses all the space above the land extending upwards into the heavens.[7] This maxim was adopted into English common law and eventually made its way into American common law.[8] At the advent of commercial aviation, Congress enacted the Air Commerce Act of 1926[9] and later the 1938 Civil Aeronautics Act.[10] These laws included provisions stating that "to the exclusion of all foreign nations, [the United States has] complete sovereignty of the airspace" over the country.[11] Additionally, Congress declared a "public right of freedom of transit in air commerce through the navigable airspace of the United States."[12] This right to travel in navigable airspace came into conflict with the common law idea that each landowner also owned the airspace above the surface in perpetuity. If the common law idea was followed faithfully, there could be no right to travel in navigable airspace without constantly trespassing in private property owners' airspace. This conflict was directly addressed by the Supreme Court in *United States v. Causby*, discussed extensively below.

With the passage of the Federal Aviation Act in 1958,[13] the administrator of the FAA was given "full responsibility and authority for the advancement and promulgation of civil aeronautics generally.... "[14] This centralization of responsibility and creation of a uniform set of rules recognized that "aviation is unique among transportation industries in its relation to the federal government—it is the only one whose operations are conducted almost wholly within federal jurisdiction.... "[15] The FAA continues to set uniform rules for the operation of aircraft in the national airspace. In the FAA Modernization and Reform Act of 2012, Congress instructed the FAA to "develop a comprehensive plan to safely accelerate the integration of civil unmanned aircraft systems into the national airspace system."[16] These regulations must provide for this integration "as soon as practicable, but not later than September 30, 2015."[17]

Current FAA Regulations of Navigable Airspace

Fixed-Wing Aircraft

FAA regulations define the minimum safe operating altitudes for different kinds of aircraft. Generally, outside of takeoff and landing fixed-wing aircraft must be operated at an altitude that allows the aircraft to conduct an emergency landing "without undue hazard to persons or property on the surface."[18] In a congested area, the aircraft must operate at least "1,000 feet above the highest obstacle within a horizontal radius of 2,000 feet of the aircraft."[19] The minimum safe

[7] Colin Cahoon, *Low Altitude Airspace: A Property Rights No-Man's Land*, 56 J. AIR L. & COM. 157, 161 (1990).

[8] *Id*; *see also* R. WRIGHT, THE LAW OF AIRSPACE 11-65 (1968).

[9] Air Commerce Act of 1926, P.L. 69-254, 44 Stat. 568, 572.

[10] Civil Aeronautics Act of 1938, P.L. 75-706, 52 Stat. 973.

[11] Codified as amended at 49 U.S.C. § 40103 (2012).

[12] Codified as amended at 49 U.S.C. § 40101 (2012).

[13] P.L. 85-726; 72 Stat. 737 (1958).

[14] H.Rept. 2360, 85th Cong., 2d Sess. (1958).

[15] S. Rept. 1811, 85th Cong., 2d Sess. (1958).

[16] P.L. 112-95, § 332(a)(1).

[17] *Id*. at § 332(a)(3).

[18] 14 C.F.R. § 91.119(a).

[19] *Id*. at § 91.119(b).

operating altitude over non-congested areas is "500 feet above the surface."[20] Over open water or sparsely populated areas, aircraft "may not be operated closer than 500 feet to any person, vessel, vehicle, or structure."[21] Navigable airspace is defined in statute as the airspace above the minimum safe operating altitudes, including airspace needed for safe takeoff and landing.[22]

Helicopters

While fixed-wing aircraft are subject to specific minimum safe operating altitudes based on where it is flying, regulation of helicopter minimum altitudes is less rigid. According to FAA regulations, a helicopter may fly below the minimum safe altitudes prescribed for fixed-wing aircraft if it is operated "without hazard to person or property on the surface."[23] Therefore, arguably a helicopter may be lawfully operated outside the zone defined in statute as navigable airspace.[24]

Current FAA Regulation of Drones

Public and Commercial Operators

Drones operated by federal, state, or local agencies must obtain a certificate of authorization or waiver (COA) from the FAA. After receiving COA applications, the FAA conducts a comprehensive operational and technical review of the drone and can place limits on its operation in order to ensure its safe use in airspace.[25] In response to a directive in the FAA Modernization and Reform Act of 2012, the FAA recently streamlined the process for obtaining COAs, making it easier to apply on their website.[26] It also employs expedited procedures allowing grants for temporary COAs if needed for time-sensitive mission.[27]

Private commercial operators must receive a special airworthiness certificate in the experimental category in order to operate.[28] These certificates have been issued on a limited basis for flight tests, demonstrations, and training. Presently, there is no other method of obtaining FAA approval to fly drones for commercial purposes. It appears these restrictions will be loosened in the coming

[20] *Id*. at § 91.119(c).

[21] *Id*.

[22] 49 U.S.C. § 40102(32).

[23] 14 C.F.R. § 91.119(d).

[24] *See* People v. Sabo, 185 Cal. App. 3d 845, 852 (1986) ("While helicopters may be operated at less than minimum altitudes so long as no hazard results, it does not follow that such operation is conducted within navigable airspace. The plain meaning of the statutes defining navigable airspace as that airspace above specified altitudes compels the conclusion that helicopters operated below the minimum are not in navigable airspace. The helicopter hovering above the surface of the land in such fashion as not to constitute a hazard to persons or property is, however, lawfully operated.").

[25] *See generally* FAA "Unmanned Aircraft Systems," *available at* http://www.faa.gov/about/initiatives/uas/cert/.

[26] *See* P.L. 112-95, § 334(a) (instructing the issuance of "guidance regarding the operation of public unmanned aircraft systems to ... expedite the issuance of a certificate of authorization process ... "); *see also* "Certificates of Authorization or Waiver (COA)," *available at* http://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/systemops/aaim/organizations/uas/coa/.

[27] "FAA makes progress with UAS integration," *available at* http://www.faa.gov/news/updates/?newsId=68004.

[28] *See* 14 C.F.R. §§ 21.191, 21.193 (experimental certificates generally); 14 C.F.R. § 91.319 (operating limitations on experimental certificate aircraft).

years, since the FAA has been instructed to issue a rulemaking that will lead to the phased-in integration of civilian unmanned aircraft into national airspace.[29]

Recreational Users

The FAA encourages recreational users of model aircraft, which certain types of drones could fall under, to follow a 1981 advisory circular. Under the circular, users are instructed to fly a sufficient distance from populated areas and away from noise-sensitive areas like parks, schools, hospitals, or churches. Additionally, users should avoid flying in the vicinity of full-scale aircraft and not fly more than 400 feet above the surface. When flying within three miles of an airport, users should notify the air traffic control tower, airport operator, or flight service station. Compliance with these guidelines is voluntary. In the FAA Modernization and Reform Act of 2012, the FAA was prohibited from promulgating rules regarding certain kinds of model aircraft flown for hobby or recreational use. This prohibition applies if the model aircraft is less than 55 pounds, does not interfere with any manned aircraft, and is flown in accordance with a community-based set of safety guidelines. If flown within five miles of an airport, the operator of the model aircraft must notify both the airport operator and air traffic control tower.[30]

Safe Minimum Flying Altitude

The FAA does not currently regulate safe minimum operating altitudes for drones as it does for other kinds of aircraft. This may be one way that the FAA responds to Congress's instruction to write rules allowing for civil operation of small unmanned aircraft systems in the national airspace.[31] One possibility is for the FAA to create different classes of drones based on their size and capabilities. Larger drones that physically resemble fixed-wing aircraft could be subject to similar safe minimum operating altitude requirements whereas smaller drones could be regulated similar to helicopters.

Airspace and Property Rights

Since the popularization of aviation, courts have had to balance the need for unobstructed air travel and commerce with the rights of private property owners. The foundational case in explaining airspace ownership rights is *United States v. Causby*.[32]

United States v. Causby

In *United States v. Causby*, the Supreme Court directly confronted the question of who owns the airspace above private property.[33] The plaintiffs filed suit against the U.S. government arguing a violation of the Fifth Amendment Takings Clause, which states that private property shall not "be taken for public use, without just compensation." Generally, takings suits can only be filed

[29] P.L. 112-95, § 332(2).

[30] P.L. 112-95 § 336.

[31] *See id*. at § 332(b).

[32] United States v. Causby, 328 U.S. 256 (1946).

[33] *Id.*

against the government when a government actor, as opposed to a private part, causes the alleged harm.[34]

Causby owned a chicken farm outside of Greensboro, North Carolina that was located near an airport regularly used by the military. The proximity of the airport and the configuration of the farm's structures led the military planes to pass over the property at 83 feet above the surface, which was only 67 feet above the house, 63 feet above the barn, and 18 feet above the tallest tree.[35] While this take-off and landing pattern was conducted according to the Civil Aeronautics Authority guidelines, the planes caused "startling" noises and bright glare at night.

As the Court explained, "as a result of the noise, respondents had to give up their chicken business. As many as six to ten of their chickens were killed in one day by flying into the walls from fright. The total chickens lost in this manner was about 150.... The result was the destruction of the use of the property as a commercial chicken farm."[36] The Court had to determine whether this loss of property constituted a taking without just compensation.

At the outset, the Court directly rejected the common law conception of airspace ownership: "It is ancient doctrine that at common law ownership of the land extended to the periphery of the universe—*Cujus solum ejus est usque ad coelum.* But that doctrine has no place in the modern world."[37] The Court noted that Congress had previously declared a public right of transit in air commerce in navigable airspace and national sovereignty in the airspace.[38] These statutes could not be reconciled with the common law doctrine without subjecting aircraft operators to countless trespass suits. In the Court's words, "common sense revolts at the idea."[39]

Even though it rejected the idea that the Causbys held complete ownership of the air up to the heavens, the Court still had to determine if they owned any portion of the space in which the planes flew such that a takings could occur. The government argued that flights within navigable airspace that do not physically invade the surface cannot lead to a taking. It also argued that the landowner does not own any airspace adjacent to the surface "which he has not subjected to possession by the erection of structures or other occupancy."[40]

The Court did not adopt this reasoning, finding instead that "the landowner owns at least as much space above the ground as he can occupy or use in connection with the land. The fact that he does not occupy it in a physical sense—by the erection of building and the like—is not material."[41] Therefore, it found that the landowner owns the airspace in the immediate reaches of the surface necessary to use and enjoy the land and invasions of this space "are in the same category as invasions of the surface."[42] Above these immediate reaches, the airspace is part of the public

[34] Takings claims filed against state government actors would not be filed under the Fifth Amendment. Rather, they would arise as state constitutional claims. For more information on takings, *see* CRS Report RS20741, *The Constitutional Law of Property Rights "Takings": An Introduction*, by Robert Meltz.

[35] *Id.* at 258.

[36] *Id*. at 259.

[37] *Id.* at 260-61.

[38] *Id*. at 260 (citing statutes then codified at 49 U.S.C. §§ 176(a), 403).

[39] *Id*.

[40] *Id*.

[41] *Id*. at 264 (citing Hinman v. Pacific Air Transport, 84 F.2d 755 (1936)).

[42] *Id*. at 265.

domain, but the Court declined to draw a clear line. The Court also noted that the government's argument regarding the impossibility of a taking based on flights in navigable airspace was inapplicable in this case because the flights over Causby's land were not within navigable airspace.[43] At the time, federal law defined navigable airspace as space above the minimum safe flying altitudes for specific areas, but did not include the space needed to take off and land. Even though these flights were not within navigable airspace, the Court seemed to suggest that if they were, the inquiry would not immediately end. Instead, the Court would then have to determine when the regulation itself, defining the navigable airspace, was valid.[44]

Ultimately, in the context of a taking claim, the Court concluded that "flights over private land are not a taking, unless they are so low and so frequent to be a direct and immediate interference with the enjoyment and use of the land."[45] With regard to the Causbys' chicken farm, the Court concluded that the military flights had imposed a servitude upon the land, similar to an easement, based on the interference with the use and enjoyment of their property. Although the land did not lose all its economic value, the lower court's finding clearly established the flights led directly to a diminution in the value of the property, since it could no longer be used for its primary purpose as a chicken farm.

Post-*Causby* Theories of Airspace Ownership

Causby clearly abandoned the ancient idea that private landowners each owned their vertical slice of the airspace above the surface in perpetuity as incompatible with modern life. The case set up three factors to examine in a taking claim that courts still utilize today: (1) whether the planes flew directly over the plaintiff's land; (2) the altitude and frequency of the flights; and (3) whether the flights directly and immediately interfered with the plaintiff's use and enjoyment of the surface land.[46]

However, it left many questions unanswered. Where is the dividing line between the "immediate reaches" of the surface and public domain airspace? Can navigable airspace intersect with the "immediate reaches" belonging to the private property? Can aircraft flying wholly within navigable airspace, as defined by federal law, ever lead to a successful takings claim? How does one assess claims based on lawfully operated aircraft, such as helicopters, flying below navigable airspace?

Subsequent cases have been brought using many different legal claims, including trespass and nuisance, as discussed below, and various ways of describing the resulting injury. Claims could include an "inverse condemnation," another way of describing a taking, or the establishment of an avigation, air, or flying easement. While these legal claims may have different names, it appears that courts use *Causby* as the starting point for analyzing all property-based challenges to

[43] *Id.* at 264.

[44] *Id*. at 263.

[45] *Id*. at 266.

[46] *See e.g.*, Andrews v. United States, 2012 U.S. Claims LEXIS 1644, *10 (explaining that the "The United States Court of Appeals for the Federal Circuit (Federal Circuit) has derived from Causby three factors for consideration 'in determining whether noise and other effects from overflights ... constitute a taking.... '"). *But see* Argent v. United States, 124 F.3d 1277, 1284 (1997) (finding a taking claim may be based on "a peculiarly burdensome pattern of activity, including both intrusive and non-intrusive flights").

intrusions upon airspace. Several different interpretations of *Causby* have emerged in the attempt to articulate an airspace ownership standard, a few of which are described here.

Following *Causby*, several lower courts employed a fixed-height theory and interpreted the decision as creating two distinct categories of airspace. On the one hand, the stratum of airspace that was defined in federal law as "navigable airspace" was always a part of the public domain. Therefore, flights in this navigable airspace could not lead to a successful property-right based action like a takings or trespass claim because the property owner never owned the airspace in the public domain. On the other hand, the airspace below what is defined as navigable airspace could be "owned" by the surface owner and, therefore, intrusions upon it could lead to a successful takings or property tort claim. Since this fixed-height theory of airspace ownership relies heavily on the definition of navigable airspace, the expansion of the federal definition of "navigable airspace" to include the airspace needed to take-off and land[47] greatly impacts what airspace a property owner could claim.

This strict separation between navigable airspace and the airspace a landowner can claim seems to have been disavowed by the Supreme Court. First, in dicta in *Braniff Airways v. Nebraska State Bd. of Equalization & Assessment*,[48] a case primarily dealing with the question of federal preemption of state airline regulations, the Court left open the possibility of a taking based on flights occurring in navigable airspace. It summarized *Causby* as holding "that the owner of land might recover for a taking by national use of navigable air space resulting in destruction in whole or in part of the usefulness of the land property."[49] Next, in *Griggs v. Allegheny County* the Supreme Court found that the low flight of planes over the plaintiff's property, taking off from and landing at a nearby airport's newly constructed runway, constituted a taking that had to be compensated under the Fifth Amendment.[50] The noise and fear of a plane crash caused by the low overhead flights made the property "'undesirable and unbearable'" for residential use, making it impossible for people in the house to converse or sleep.[51] The Court reached this conclusion that a taking occurred based on this injury, despite the fact that the flights were operated properly under federal regulations and never flew outside of navigable airspace.[52] Despite this holding, some lower courts have continued to lend credence to a fixed-height ownership theory as a reasonable interpretation of *Causby*.[53]

Another interpretation of *Causby* essentially creates a presumption of a non-taking when overhead flights occur in navigable airspace. This presumption would recognize the importance of unimpeded travel of air commerce and that Congress placed navigable airspace in the public domain. However, the presumption could be rebutted by evidence that the flights, while in navigable airspace, interfered with the owner's use and enjoyment of the surface enough to justify compensation. As one court reasoned, "as the height of the overflight increases... the Government's interest in maintaining sovereignty becomes weightier while the landowner's

[47] 49 U.S.C. § 40102(32) (2012).

[48] 347 U.S. 590 (1954).

[49] *Id*. at 596.

[50] Griggs v. Allegheny County, 369 U.S. 84, 90 (1962).

[51] *Id*. at 87.

[52] *Id*. at 86-89.

[53] *See, e.g.*, Aaron v. United States, 311 F.2d 798 (Ct. Cl. 1963); Powell v. United States, 1 Cl. Ct. 669 (1983).

interest diminishes, so that the damage showing required increases in a continuum toward showing absolute destruction of all uses of the property."[54]

Finally, some courts have concluded that the altitude of the overhead flight has no determinative impact on whether a taking has occurred. One federal court noted that the government's liability for a taking is not impacted "merely because the flights of Government aircraft are in what Congress has declared to be navigable airspace and subject to its regulation."[55] Under this approach, "although the navigable airspace has been declared to be in the public domain, 'regardless of any congressional limitations, the land owner, as an incident to his ownership, has a claim to the superjacent airspace to the extent that a reasonable use of his land involves such space.'"[56] Under this theory, the court would only need to examine the effect of the overhead flights on the use and enjoyment of the land, and would not need to determine if the flight occurred in navigable airspace.

While the definition of navigable airspace impacts each theory differently, it is clear that under the current interpretation a showing of interference with the use and enjoyment of property is required. Cases have clearly established that overhead flights leading to impairment of the owner's livelihood or cause physical damage qualify as an interference with use and enjoyment of property.[57] Additionally, flights that cause the surface to become impractical for its intended use by the current owner also satisfy the use and enjoyment requirement.[58] For example, in *Griggs*, the noise, vibration, and fear of damage caused by overhead flights made it impossible for the plaintiffs to converse with others or sleep within their house, leading to their retreat from the property, which had become "undesirable and unbearable for their residential use."[59] Some courts have recognized a reduction in the potential resale value of the property as an interference with its use and enjoyment, even if the property continues to be suitable for the purposes for which it is currently used.[60] One court explained: "Enjoyment of property at common law contemplated the entire bundle of rights and privileges that attached to the ownership of land ... Owners of fee simple estates ... clearly enjoy not only the right to put their land to a particular present use, but also to hold the land for investment and appreciation.... "[61] However, other courts have rejected the idea that restrictions on uses by future inhabitants, without showing loss of property value, are relevant to a determination of the owner's own use and enjoyment of the property.[62]

Trespass and Nuisance Claims Against Private Actors

Although *Causby* arose from a Fifth Amendment takings claim, its articulation of airspace ownership standards is also often used in determining state law tort claims such as trespass and nuisance. These state law tort claims could be used to establish liability for overhead flights

[54] Stephens v. United States, 11 Cl. Ct. 352, 362 (1986).

[55] Branning v. United States, 654 F.2d 88, 99 (1981).

[56] *Id*. at 98-99 (citing Palisades Citizens Association, Inc. v. C.A.B, 420 F.2d 188, 192 (D.C. Cir. 1969)).

[57] *See, e.g.*, *Causby*, 328 U.S. 256.

[58] *See, e.g., Griggs*, 369 U.S. 84; Pueblo of Sandia v. Smith, 497 F.2d 1043 (10th Cir. 1974) ("appellant failed to show interference with actual, as distinguished from potential, use of its land.").

[59] *Griggs*, 369 U.S. at 87.

[60] *See, e.g.*, Brown v. United States, 73 F.3d 1100 (1996); *Branning*, 654 F.2d 88.

[61] *Brown*, 73 F.3d 1100.

[62] Stephens v. United States, 11 Cl. Ct. 352 (1986).

operated by private actors, where a lack of government involvement precludes a takings claim. Generally, trespass is any physical intrusion upon property owned by another. However, unlike with surface trespass claims, simply proving that an object or person was physically present in the airspace vertically above the landowner's property is generally not enough to establish a trespass in airspace. Since *Causby* struck down the common law idea of *ad coelum*, landowners generally do not have an absolute possessory right to the airspace above the surface into perpetuity. Instead, airspace trespass claims are often assessed using the same requirements laid out in the *Causby* takings claim. Arguably, these standards are used in property tort claims because there can be no trespass in airspace unless the property owner has some possessory right to the airspace, which was the same question at issue in *Causby*.

To allege an actionable trespass to airspace, the property owner must not only prove that the interference occurred within the immediate reaches of the land, or the airspace that the owner can possess under *Causby*, but also that its presence interferes with the actual use of his land. As one court explained, "a property owner owns only as much air space above his property as he can practicable use. And to constitute an actionable trespass, an intrusion has to be such as to subtract from the owner's use of the property."[63] This standard for airspace trespass was also adopted by the Restatement (Second) of Torts.[64]

Nuisance is a state law tort claim that is not based on possessory rights to property, like trespass, but is rooted in the right to use and enjoy land.[65] Trespass and nuisance claims arising from airspace use are quite similar, since trespass to airspace claims generally require a showing that the object in airspace interfered with use and enjoyment of land. However, unlike trespass, nuisance claims do not require a showing that the interference actually occupied the owner's airspace. Instead, a nuisance claim can succeed even if the interference flew over adjoining lands and never directly over the plaintiff's land, as long as the flight constitutes a substantial and unreasonable interference with the use and enjoyment of the land.

Potential Liability Arising from Civilian Drone Use

The integration of drones into domestic airspace will raise novel questions of how to apply existing airspace ownership law to this new technology. How courts may apply the various interpretations of *Causby*, discussed above, to drones will likely be greatly impacted by the FAA's definition of navigable airspace for drones.

The potential for successful takings, trespass, or nuisance claims from drone use will also be impacted by the physical characteristics of the drone, especially given that current case law heavily emphasizes the impact of the flight on use and enjoyment of the surface property. Several characteristics of drones may make their operation in airspace less likely to lead to liability for drone operators than for aircraft operators. First, the noise attributed to drone use may be significantly less than noise created by helicopters or planes powered by jet engines. Second, drones commonly used for civilian purposes could be much smaller than common aircraft used today. This decreased size is likely to lead to fewer physical impacts upon surface land such as

[63] Geller v. Brownstone Condominium, 82 Ill. App. 3d 334, 336-37 (1980).

[64] RESTATEMENT (SECOND) OF TORTS § 159(2) (1965) (stating that "Flights by aircraft in the airspace above the land of another is a trespass if, but only if, (a) it enters into the immediate reaches of the airspace next to the land, and (b) it interferes substantially with the other's use and enjoyment of the land.").

[65] RESTATEMENT (SECOND) OF TORTS § 821D (1979); 2 DAN B DOBBS, ET AL. THE LAW OF TORTS § 398 (2d ed. 2011).

vibration and dust, which are common complaints arising from overhead aircraft and helicopter flights. Finally, it is unknown at this time how most drones will be deployed into flight. Will drone "airports" be used to launch the aircraft or will they take off and land primarily from individual property? If drone use remains decentralized and is not organized around an "airport," then drones are less likely to repeatedly fly over the same piece of property, creating fewer potential takings, trespass, or nuisance claims. Additionally, the majority of drones are more likely to operate like helicopters, taking off and landing vertically, than like traditional fixed-wing aircraft. This method of takeoff reduces the amount of surface the aircraft would have to fly over before reaching its desired flying altitude, minimizing the potential number of property owners alleging physical invasion of the immediate reaches of their surface property.

Alternatively, the potential ability for drones to fly safely at much lower altitudes than fixed-wing aircraft or helicopters could lead to a larger number of property-based claims. Low-flying drones are more likely to invade the immediate reaches of the surface property, thus satisfying part of the requirement for a takings or trespass claim.

Privacy

Perhaps the most contentious issue concerning the introduction of drones into U.S. airspace is the threat that this technology will be used to spy on American citizens. With the ability to house high-powered cameras, infrared sensors, facial recognition technology, and license plate readers, some argue that drones present a substantial privacy risk.[66] Undoubtedly, the government's use of drones for domestic surveillance operations implicates the Fourth Amendment and other applicable laws.[67] In like manner, privacy advocates have warned that private actors might use drones in a way that could infringe upon fundamental privacy rights.[68] This section will focus on the privacy issues associated with the use of drones by private, non-governmental actors. It will provide a general history of privacy law in the United States and survey the various privacy torts, including intrusion upon seclusion, the privacy tort most applicable to drone surveillance. It will then explore the First Amendment right to gather news. Application of these theories to drone surveillance will be discussed in the section titled "Congressional Response."

---

[66] *See* Jennifer Lynch, *Are Drones Watching You?*, ELECTRONIC FRONTIER FOUNDATION (Jan. 10, 2012), https://www.eff.org/deeplinks/2012/01/drones-are-watching-you; M. Ryan Calo, *The Drone as Privacy Catalyst*, 64 STAN. L. REV. ONLINE 29 (Dec. 12, 2011), http://www.stanfordlawreview.org/sites/default/files/online/articles/64-SLRO-29_1.pdf.

[67] For an analysis of the Fourth Amendment implications of government drone surveillance, see CRS Report R42701, *Drones in Domestic Surveillance Operations: Fourth Amendment Implications and Legislative Responses*, by Richard M. Thompson II.

[68] *See* Press Release, Rep. Ed Markey, Markey Releases Discussion Draft of Drone Privacy and Transparency Legislation (Aug. 1, 2012), *available at* http://markey.house.gov/press-release/markey-releases-discussion-draft-drone-privacy-and-transparency-legislation.

> Drones are already flying in U.S. airspace – with thousands more to come – but with no privacy protections or transparency measures in place. We are entering a brave new world, and just because a company soon will be able to register a drone license shouldn't mean that company can turn it into a cash register by selling consumer information. Currently, there are no privacy protections or guidelines and no way for the public to know who is flying drones, where, and why. The time to implement privacy protections is now.

Id.

Early Privacy Jurisprudence

Although early Anglo-Saxon law lacked express privacy protections, property law and trespass theories served as proxy for the protection of individual privacy. Lord Coke pronounced in 1605 that "the house of everyone is to him as his castle and fortress, as well for his defence against injury and violence, as for his respose[.]"[69] This proposition that individuals are entitled to privacy while in their homes crossed the Atlantic with the colonists and appeared prominently in early revolutionary thinking.[70] In one early American common law decision, the court noted that "[t]he law is clearly settled, that an officer cannot justify the breaking open an outward door or window, in order to execute process in a civil suit; if he doth, he is a trespasser."[71] In cases lacking physical trespass, prosecutors relied on an eavesdropping theory, which protected the privacy of individuals' conversations while in their home.[72]

These century-old theories of trespass and eavesdropping, however, failed to keep up with a rapidly changing society fueled by advancing technologies. As with today's celebrity-obsessed society, late-19th century society experienced the birth and spread of "yellow journalism," a new media aimed at emphasizing the "curious, dramatic, and unusual, providing readers a 'palliative of sin, sex, and violence.'"[73] Faster presses and instantaneous photography enabled journalists to exploit and spread gossip.[74] Louis D. Brandeis (then a private attorney) and Samuel Warren were bothered with the press's constant intrusions into the private affairs of prominent Bostonians.[75] In 1890, they published a seminal law review article formulating a new legal theory—the right to be let alone.[76] Brandeis and Warren understood that existing tort doctrines such as trespass and libel were insufficient to protect privacy rights, as "only a part of the pain, pleasure, and profit of life lay in physical things."[77] They noted that this new right to privacy derived not from "the principle of private property, but that of an inviolate personality."[78] The authors observed that "instantaneous photographs and newspaper enterprise have invaded the sacred precincts of private and domestic life; and numerous mechanical devices threaten to make good the prediction that 'what is whispered in the closet shall be proclaimed from the house-tops.'"[79] Although this new theory had its detractors,[80] it found its way into the common law of several states.[81]

---

[69] Semayne's Case, 5 Co. Rep. 91 (K. B. 1604).

[70] In contesting the use of general warrants by officials of the British Crown, known then as writs of assistance, James Otis argued that "one of the most essential branches of English liberty, is the freedom of one's house. A man's house is his castle; and while he is quiet, he is as well guarded as a prince in his castle." II LEGAL PAPERS OF JOHN ADAMS 142.

[71] *See* State v. Armfield, 9 N.C. 246, 247 (1822).

[72] Note, *The Right to Privacy in Nineteenth Century America*, 94 HARV. L. REV. 1892, 1896 (1981). In an early case from Pennsylvania, in recognizing eavesdropping as an indictable offense, the court noted: "Every man's home is his castle, where no man has a right to intrude for any purpose whatever. No man has a right to pry into your secrecy in your own house." Commonwealth v. Lovett, 4 Pa. L.J. Rpts. (Clark) 226, 226 (Pa. 1831); *see also* State v. Williams, 2 Tenn. 108, 108 (1808) (recognizing eavesdropping as an indictable offense).

[73] Ken Gromley, *One Hundred Years of Privacy*, 1992 WIS. L. REV. 1335, 1351 (1992) (quoting EDWIN EMERY & MICHAEL C. EMERY, THE PRESS AND AMERICA: AN INTERPRETATIVE HISTORY OF THE MASS MEDIA 349-50 (3d ed. 1972).

[74] *Id.* at 1350-51.

[75] William M. Prosser, *Privacy*, 48 Cal. L. Rev. 383, 383 (1960).

[76] Louis D. Brandeis & Samuel D. Warren, *The Right to Privacy*, 4 HARV. L. REV. 193, 205 (1890).

[77] *Id.* at 195.

[78] *Id.* at 205.

[79] *Id.* at 195.

[80] Herbert Spencer Hadley, *Right to Privacy*, 3 N.W. L. REV. 1, 3-4 (1894) ("The writer believes that the right to (continued...)

Privacy Torts

In 1939, the First Restatement of Torts (a set of model rules intended for adoption by the states) created a general tort for invasion of privacy.[82] By 1940, a minority of states had adopted some right of privacy either by statute or judicial decision, and six states had expressly refused to adopt such a right.[83] Twenty years later, Dean William Prosser surveyed the case law surrounding this right and concluded that the right to privacy entailed four distinct (yet, sometimes overlapping) rights: (1) intrusion upon seclusion; (2) public disclosure of private facts; (3) publicity which puts the target in a false light; and (4) appropriation of one's likeness.[84] These four categories were incorporated into the Restatement (Second) of Torts.[85]

Section 652B of the Restatement (Second) of Torts creates a cause of action for intrusion upon seclusion,[86] the privacy tort most likely to apply to drone surveillance.[87] It has been adopted either by common law or statute in an overwhelming majority of the states.[88] Section 652B provides: "One who intentionally intrudes, physically or otherwise, upon the solitude or seclusion of another or his private affairs or concerns, is subject to liability to the other for invasion of his privacy, if the intrusion would be highly offensive to a reasonable person."[89] Courts have developed a set of rules for applying § 652B. First, it requires an objective person standard, testing whether a person of "ordinary sensibilities" would be offended by the alleged invasion.[90] Thus, someone with an idiosyncratic sensitivity—say, an aversion to cameras—could not satisfy this standard by simply having his photograph taken. Likewise, the intrusion must not only be offensive, but "*highly* offensive,"[91] or as one court put it, "outrageously unreasonable conduct."[92] Generally, a single incident will not suffice; instead, the intrusion must be "repeated with such persistence and frequency as to amount to a course of hounding" and "becomes a burden to his existence.... "[93] However, in a few cases a single intrusion was adequate.[94] The invasion of

(...continued)

privacy does not exist; that the arguments in its favor are based on a mistaken understanding of the authorities cited in its support[.]").

[81] *Compare* Roberson v. Rochester Folding Box Co., 171 N.E. 538, 542 (N.Y. 1902) (declining to adopt right of privacy), *with* Pavesich v. New England Life Ins. Co., 50 S.E. 68 (Ga. 1905) (recognizing a right to privacy).

[82] RESTATEMENT (FIRST) OF TORTS § 867 (1939).

[83] *See* Louis Nizer, *Right of Privacy – A Half Century's Development*, 39 MICH. L. REV. 526, 529-30 (1940).

[84] Prosser, *supra* note 75, at 385.

[85] RESTATEMENT (SECOND) OF TORTS §§ 652B (intrusion upon seclusion), 652C (appropriation of name or likeness), 652D (publicity given to private fact), 652E (publicity placing person in false light).

[86] *Id*. at § 652B.

[87] Because the use of drones for surveillance primarily concerns the collection, and not necessarily the dissemination, of information, this section will focus on the tort of intrusion upon seclusion, which has no publication requirement for recovery. *Id.* cmt. a.

[88] North Dakota and Wyoming are the only states not to adopt the privacy tort of intrusion upon seclusion. *See* Tigran Palyan, *Common Law Privacy in a Not So Common World: Prospects for the Tort of Intrusion Upon Seclusion in Virtual Worlds*, 38 SW. L. REV. 167, 180 n.106 (2008).

[89] *Id.*

[90] Shorter v. Retail Credit Co., 251 F. Supp. 329, 322 (D.S.C. 1966).

[91] RESTATEMENT (SECOND) OF TORTS § 652B (emphasis added).

[92] N.O.C., Inc. v. Schaefer, 484 A.2d 729, 733 (N.J. Super. Ct. Law Div. 1984).

[93] RESTATEMENT (SECOND) OF TORTS § 652B cmt. d.

[94] *See, e.g.*, Miller v. National Broadcasting Co., 187 Cal. App. 3d 1463 (Cal. Ct. App. 1986) (videotaping man in his (continued...)

privacy must been intentional, meaning the defendant must desire that the intrusion would occur, or as with other torts, [95] knew with a substantial certainty that such an invasion would result from his actions.[96] An accidental intrusion is not actionable. Finally, in some states, the intrusion must cause mental suffering, shame, or humiliation to permit recovery.[97]

A review of the case law demonstrates that the location of the target of the surveillance is, in many cases, determinative of whether someone has a viable claim for intrusion upon seclusion. For the most part, conducting surveillance of a person while within the confines of his home will constitute an intrusion upon seclusion.[98] The illustrations to § 652B offer an example of a private detective who photographs an individual while in his home with a telescopic camera as a viable claim.[99] Likewise, as one court observed, "when a picture is taken of a plaintiff while he is in the privacy of his home, ... the taking of the picture may be considered an intrusion into the plaintiff's privacy just as eavesdropping or looking into his upstairs windows with binoculars are considered an invasion of his privacy."[100]

The likelihood of a successful claim is diminished if the surveillance is conducted in a public place. The comments to § 652B explain that there is generally no liability for photographing or observing a person while in public "since he is not then in seclusion, and his appearance is public and open to the public eye."[101] Likewise, Prosser observed:

> On the public street, or in any other public place, the plaintiff has no right to be alone, and it is no invasion of his privacy to do no more than follow him about. Neither is it such an invasion to take a photograph in such a place, since this amounts to nothing more than making a record, not differing essentially from a full written description, of a public sight which anyone present would be free to see.[102]

The case law also supports this proposition. The Alabama Supreme Court dismissed a claim of wrongful intrusion against operators of a race track who photographed the plaintiffs while they were in the "winner's circle" at the track.[103] Similarly, a federal district court dismissed a claim by a husband and wife who had been photographed by Forbes Magazine while waiting in line at the Miami International Airport as it was taken in "a place open to the general public."[104] Likewise, a Vietnam veteran lost a claim for invasion of privacy based on photographs that depicted him and

(...continued)

home while being resuscitated after having suffered a heart seizure); Nader v. General Motors Corp., 25 N.Y.2d 560, 570 (1970) (surveilling plaintiff in bank in an "overzealous" manner).

[95] RESTATEMENT (SECOND) OF TORTS § 652B.

[96] *See* DOBBS ET AL., *supra* note 65, at § 29.

[97] DeAngelo v. Fortney, 515 A.2d 594, 596 (Pa. Sup. 1986); Burns v. Masterbrand Cabinets, Inc., 369 Ill. App. 3d 1006, 1012 (Ill. App. Ct. 2007).

[98] *See, e.g.,* Wolfson v. Lewis, 924 F. Supp. 1413 (E.D. Penn. 1996).

[99] RESTATEMENT (SECOND) OF TORTS § 652B cmt. b, illus. 2.

[100] Lovgren v. Citizens First Nat. Bank of Princeton, 534 N.E.2d 987 (Ill. 1989); *see also* Souder v. Pendleton Detectives, 88 So.2d 716, 718 (La. Ct. App. 1956) (peeping into plaintiff's widows); Egan v. Schmock, 93 F. Supp. 2d 1090, 1094-95 (N.D. Cal. 2000) (filming plaintiff and family while in their home).

[101] RESTATEMENT (SECOND) OF TORTS § 652B cmt. c.

[102] Prosser, *supra* note 75, at 392.

[103] Schifano v. Green County, 624 So. 2d 178 (Ala. 1993).

[104] Fogel v. Forbes, 500 F. Supp. 1081, 1084, 1087 (E.D. Pa. 1980).

other soldiers during a combat mission in Vietnam—again, a public setting.[105] Other examples include the recording of license plate numbers of cars parked in a public parking lot[106] and photographing a person while walking on a public sidewalk.[107]

Indeed, even plaintiffs who were videotaped or photographed while on their own property have generally been unsuccessful in their privacy claims so long as they could be viewed from a public vantage point. Rejecting one plaintiff's claim for intrusion upon seclusion, the Supreme Court of Oregon held that even though the investigators trespassed on the plaintiff's property to film him, the investigation did not "constitute an unreasonable surveillance 'highly offensive to a reasonable man[,]'"[108] as the plaintiff could have been viewed from the road by his neighbors or passersby.[109] In another case, the wife of a prominent Puerto Rican politician sought damages from a newspaper for invasion of privacy allegedly committed when an agent of the newspaper photographed her house as part of a news story about her husband.[110] The court dismissed her claim as the photographers were not "unreasonably intrusive," and the photographs depicted only the outside of the home and no persons were photographed. [111] Similarly, in one case a couple sued a cell phone company for intrusion upon seclusion when the company's workers looked onto their property each time they serviced a nearby cell tower.[112] The court rejected their claim, holding that '[t]he mere fact that maintenance workers come to an adjoining property as part of their work and look over into the adjoining yard is legally insufficient evidence of highly offensive conduct."[113] There are many other examples.[114]

However, there have been some successful claims for intrusion upon seclusion involving surveillance conducted in public.[115] The comments to § 652B explain: "Even in a public place, however, there may be some matters about the plaintiff, such as his underwear or lack of it, that are not exhibited to the public gaze, and there may still be invasion of privacy when there is intrusion upon these matters."[116] One of the most famous cases concerning this "public gaze" theory involved a suit for invasion of privacy against a newspaper when it published a picture of

[105] Tellado v. Time-Life, 643 F. Supp. 904, 907 (D.N.J. 1986).

[106] *See* International Union v. Garner, 601 F. Supp. 187, 191-92 (M.D. 1985); Tedeschi v. Reardon v. 5 F. Supp. 2d 40, 46 (D. Mass. 1998).

[107] Jackson v. Playboy Enterprises, Inc., 574 F. Supp. 10, 13 (S.D. Ohio 1983).

[108] McClain v. Boise Cascade Corp., 271 OR 549, 556 (1975). It should be noted that the court also relied on previous case law which held that one who seeks damages for alleged injuries "waives his right to privacy to the extent of a reasonable investigation." *Id.* at 554-555.

[109] *Id.* at 556.

[110] Mojica Escobar v. Roca, 926 F. Supp. 30, 32-33 (D.P.R. 1996).

[111] *Id.* at 35 (citing Dopp v. Fairfax Consultants, Ltd., 771 F. Supp. 494, 497 (D.P.R. 1990)).

[112] GTE Mobilnet of South Texas, LTD. Partnership v. Pascouet, 61 S.W. 3d 599, 605 (Tex. App. 2001).

[113] *Id.* at 618.

[114] *See, e.g.*, Aisenson v. American Broadcasting Co, 220 Cal. App. 3d 146, 162-63 (1990) (holding that broadcast of plaintiff while in his driveway and car was not an intrusion upon seclusion); Wehling v. Columbia Broadcasting System, 721 F.2d 506, 509 (5th Cir. 1983) (holding that broadcast of the outside of plaintiff's home taken from public street was not an invasion of privacy); Munson v. Milwaukee Bd. of School Directors, 969 F.2d 266, 271 (7th Cir. 1992) (same).

[115] *See* Kramer v. Downey, 684 S.W. 2d 524, 525 (Tex. Ct. App. 1984) ("[W]e now hold that the right to privacy is broad enough to include the right to be free of those willful intrusions into one's personal life at home and at work which occurred in this case.").

[116] RESTATEMENT (SECOND) OF TORTS § 652B cmt. c.

the plaintiff with her dress blown up as she was leaving a fun house at a county fair.[117] In upholding the plaintiff's claim, the court observed: "To hold that one who is involuntarily and instantaneously enmeshed in an embarrassing pose forfeits her right of privacy merely because she happened at the moment to be part of a public scene would be illogical, wrong, and unjust."[118] In *Huskey v. National Broadcasting Co. Inc.*, a prisoner sued NBC, a television broadcasting company, alleging that by filming him without consent while he was working out in the exercise yard at the prison, NBC invaded his privacy.[119] NBC countered that depictions of persons in a "publicly visible area" could not support the claim for invasion of seclusion.[120] Ultimately, the court permitted the prisoner's claim to go forward, observing that "[o]f course [the prisoner] could be seen by guards, prison personnel and inmates, and obviously he was in fact seen by NBC's camera operator. But the mere fact a person can be seen by others does not mean that person cannot legally be 'secluded.'"[121] Although relief is available for certain cases of public surveillance, recovery seems to be the exception rather than the norm.[122]

First Amendment and Newsgathering Activities

Based on the foregoing discussion, safeguarding privacy from intrusive drone surveillance is clearly an important societal interest. However, this interest must be weighed against the public's countervailing concern in securing the free flow of information that inevitably feeds the "free trade of ideas."[123] Unmanned aircraft can improve the press and the public's ability to gather news: they can operate in dangerous areas without putting a human operator at risk of danger; can carry sophisticated surveillance technology; can fly in areas not currently accessible by traditional aircraft; and can stay in flight for long durations. However, challenges arise in attempting to find an appropriate balance between this interest in newsgathering and the competing privacy interests at stake.

The First Amendment to the United States Constitution provides that "Congress shall make no law ... abridging the freedom of speech, or of the press.... "[124] The Court has construed this phrase to cover not only traditional forms of speech, such as political speeches or polemical articles, but also conduct that is "necessary for, or integrally tied to, acts of expression,"[125] such as distribution of political literature[126] or door-to-door solicitation.[127] Additionally, the Court has pulled within

[117] Daily Times Democrat v. Graham, 276 Ala. 380, 381 (1964).

[118] *Id.* at 383.

[119] Huskey v. National Broadcasting Co., Inc., 632 F. Supp. 1282, 1285 (1986).

[120] *Id.* at 1286.

[121] *Id.* at 1287-88 (emphasis in original).

[122] Jennifer R. Scharf, *Shooting for the Stars: A Call for Federal Legislation to Protect Celebrities' Privacy Rights*, 3 BUFF. INTELL. PROP. L.J. 164, 183 (2006) ("Modifying intrusion to apply in public places would be necessary in order to provide any relief.").

[123] Abrams v. United States, 250 U.S. 616, 630 (1919) (Holmes, J., dissenting). Justice Stevens described this as a "conflict between interests of the highest order—on the one hand, the interest in the full and free dissemination of information concerning public issues, and, on the other hand, the interest in individual privacy and, more specifically, in fostering private speech." Bartnicki v. Vopper, 532 U.S. 514, 518 (2001).

[124] U.S. CONST. amend. I.

[125] Barry P. McDonald, *The First Amendment and the Free Flow of Information: Towards a Realistic Right to Gather Information in the Information Age*, 65 OHIO ST. L. J. 249, 260 (2004).

[126] Lovell v. City of Griffin, 3030 U.S. 444, 452 (1938).

[127] Watchtower Bible and Tract Soc'y of New York , Inc. v. Vill. of Stratton 536 U.S. 150, 168-69 (2002).

the First Amendment's protection other conduct that is not expressive in itself, but is "necessary to accord full meaning and substance to those guarantees."[128] For example, the Court has said that the public is entitled to a "right to receive news" as a correlative of the right to free expression.[129]

Like this right to receive news, the Court has intimated in a series of cases beginning in the 1960s that the public and the press may be entitled to *a right to gather news* under the First Amendment. Initially, in *Zemel v. Rusk*, the Court observed that the right "to speak and publish does not carry with it the unrestrained right to gather information."[130] The Court's reluctance to extend this right may have signaled its concern that an unconditional newsgathering right could subsume almost any government regulation that places a slight restriction on the ability to gather news.[131] However, several years later the Court indicated in *Branzburg v. Hayes* that although laws of general applicability apply equally to the press as to the general public, that "[n]ews gathering is not without its First Amendment protections,"[132] and that "without some protection for seeking out the news, freedom of the press could be eviscerated."[133] The Court, however, failed to clearly delineate the parameters of such a protection. In the Court's most recent case, *Cohen v. Cowles Media Co.*, the Court adhered to the "well-established line of decisions holding that generally applicable laws do not offend the First Amendment simply because their enforcement against the press has incidental effects on its ability to gather and report the news."[134] The Court noted that it is "beyond dispute 'that the publisher of a newspaper has no special immunity from the application of general laws. He has no special privilege to invade the rights of others.'"[135]

The lower federal courts have explored this right to gather news in the context of photographing or video recording. In *Dietemann v. Time, Inc.* the Ninth Circuit Court of Appeals explored the extent to which reporters could use surreptitious means to carry out their newsgathering.[136] There, defendants Time Life sent undercover reporters to a man's house where he claimed to use minerals and other materials to heal the sick. The reporters used a hidden camera to take pictures of the man, and a hidden microphone to transmit the conversation to other operatives. The defendants claimed that the First Amendment's right to freedom of the press shielded its newsgathering activities. In rejecting this claim, the court observed that although an individual accepts the risk when inviting a person into his home that the visitor may repeat the conversation to a third party, "he does not and should not be required to take the risk that what is heard and seen will be transmitted by photograph or recording, or in our modern world, in full living color and hi-fi to the public at large or to any segment of it that the visitor may select."[137] The court held that "hidden mechanical contrivances" are not indispensable tools of investigative reporting, and that the "First Amendment has never been construed to accord newsman immunity from torts

[128] McDonald, *supra* note 68, at 260.

[129] Kleindienst v. Mandel, 408 U.S. 753, 762–63 (1972).

[130] Zemel v. Rusk, 381 U.S. 1, 17 (1965).

[131] *Id.* at 16-17 ("There are few restrictions on action which could not be clothed by ingenious argument in the garb of decreased data flow. For example, the prohibition of unauthorized entry into the White House diminishes the citizen's opportunities to gather information he might find relevant to his opinion of the way the country is being run, but that does not make entry into the White House a First Amendment right.").

[132] Branzburg v. Hayes, 408 U.S. 665, 707 (1972).

[133] *Id.* at 681.

[134] *Id.* at 669.

[135] Cohen v. Cowles Media Co., 501 U.S. 663, 666 (1991).

[136] Dietemann v. Time, Inc., 449 F.2d 245 (9th Cir. 1971).

[137] *Id.* at 249.

or crimes committed during the course of newsgathering."[138] In *Galella v. Onassis*, Galella, a self-proclaimed "paparazzo," constantly followed around, harassed, and photographed Jacqueline Kennedy Onassis and her children.[139] As part of an ongoing lawsuit, Onassis sued Galella for, *inter alia*, invasion of her and her family's privacy. Galella argued that he was entitled to the absolute "wall of immunity" that protects newsmen under the First Amendment. The Second Circuit Court of Appeals quickly rejected this absolutist position: "There is no such scope to the First Amendment right. Crimes and torts committed in news gathering are not protected. There is no threat to a free press in requiring its agents to act within the law."[140] By contrast, the Seventh Circuit in *Desnick v. American Broadcast Companies, Inc.* held that surreptitious recording was not a privacy invasion because the target of the surveillance was a party to the conversation, thereby vitiating any claim to privacy in those conversations.[141]

Congressional Response

If Congress chooses to act, it could create privacy protections to protect individuals from intrusive drone surveillance conducted by private actors. Such proposals would be considered in the context of the First Amendment rights to gather and receive news. Several bills were introduced in the 112th Congress that would regulate the private use of drones. Additionally, there are other measures Congress could adopt.

In the 112th Congress, Representative Ed Markey introduced the Drone Aircraft Privacy and Transparency Act of 2012 (H.R. 6676).[142] This bill would amend the FAA Modernization and Reform Act of 2012 to create a comprehensive scheme to regulate the private use of drones, including data collection requirements and enforcement mechanisms. First, this bill would require the Secretary of Transportation, with input from the Secretary of Commerce, the Chairman of the Federal Trade Commission, and the Chief Privacy Officer of the Department of Homeland Security, to study any potential threats to privacy protections posed by the introduction of drones in the national airspace. Next, the bill would prohibit the FAA from issuing a license to operate a drone unless the application for such use included a "data collection statement." This statement would require the following items: a list of individuals who would have the authority to operate the drone; the location in which the drone will be used; the maximum period it will be used; and whether the drone would be collecting information about individuals. If the drone will be used to collect personal information, the statement must include the circumstances in which such information will be used; the kinds of information collected and the conclusions drawn from it; the type of data minimization procedures to be employed; whether the information will be sold, and if so, under what circumstances; how long the information would be stored; and procedures for destroying irrelevant data. The statement must also include information about the possible impact on privacy protections posed by the operation under that license and steps to be taken to mitigate this impact. Additionally, the statement must include the contact information of the drone operator; a process for determining what information has been collected about an individual; and a process for challenging the accuracy of such data. Finally, the FAA would be required to post the data collection statement on the Internet.

---

[138] *Id.*

[139] Galella v. Onassis, 487 F.2d 986, 991-92 (2d Cir. 1973).

[140] *Id.* at 996-97 (internal citations omitted).

[141] Desnick v. American Broadcast Corporation, 44 F.3d 1345, 1353 (7th Cir. 1995).

[142] H.R. 6676, 112th Cong. 2d Sess. (2012).

H.R. 6676 includes several enforcement mechanisms. First, the FAA may revoke any license of a user that does not comply with these requirements. The Federal Trade Commission would have the primary authority to enforce the data collection requirements just stated. Additionally, the Attorney General of each state, or an official or agency of a state, is empowered to file a civil suit if there is reason to believe that the privacy interests of residents of that state have been threatened or adversely affected. H.R. 6676 would also create a private right of action for a person injured by a violation of this legislation.

Representative Ted Poe introduced the Preserving American Privacy Act of 2012 (H.R. 6199).[143] This bill would prevent any private actor from using a drone to conduct surveillance on any other private person without the consent of that other person. This ban on the private use of drones to record other private persons could present First Amendment concerns. First, a reviewing court would, in all likelihood, test whether this ban constituted a rule of general applicability under the *Cohen* and *Branzburg* line of cases.[144] In *Bartnicki v. Vopper*, the Supreme Court held that the wiretapping laws in question were of general applicability.[145] The Court observed that the statutes were designed to protect privacy and did not distinguish based on the content of the intercepted conversation. Instead, the communications were "singled out by virtue of the fact that they were illegally intercepted—by virtue of the source, rather than the subject matter."[146] This same argument could shield H.R. 6199 from a First Amendment challenge. Its purpose is to protect privacy,[147] and it does not distinguish between the subject matter of the drone surveillance, but instead bans any instance of private surveillance when the target has not consented to such monitoring. Additionally, this bill does not curtail the freedom to *publish* information,[148] but instead restricts the methods of collection. The public or media would have other avenues for obtaining the information sought. On the other hand, this measure could hinder the free flow of information, including coverage of newsworthy events, in contradiction to public's right to receive news and the Supreme Court's dicta in *Branzburg* that "[n]ews gathering is not without its First Amendment protections,"[149] and that "without some protection for seeking out the news, freedom of the press could be eviscerated."[150]

Additionally, Congress could create a cause of action for surveillance conducted by drones similar to the intrusion upon seclusion tort provided under Restatement § 652B.[151] How would a

[143] H.R. 6199, 112th Cong. 2d Sess. (2012).

[144] *See* "First Amendment and Newsgathering Activities," *supra*.

[145] Bartnicki v. Hopper, 532 U.S. 514, 526 (2001).

[146] *Id.*

[147] *See* Poe: Congress must Preserve American Privacy, http://poe.house.gov/index.php?option=com_content&view=article&id=8758:poe-congress-must-preserve-american-privacy-&catid=104:press-releases ("The bill seeks to ensure the privacy of American citizens by establishing specific guidelines about when and for what purposes law enforcement agencies and private individuals can use drones.")

[148] *See* Associated Press v. National Labor Relations Board, 301 U.S. 103, 133 (1937) (applying the National Labor Relations Act to the Associated press, the Court noted that the regulation in no way "circumscribes the full freedom and liberty of the [A.P.] to publish the news as it desires it published").

[149] Branzburg v. Hayes, 408 U.S. 665, 707 (1972).

[150] *See id*. at 707.

[151] As with the enactment of any federal statute, Congress must act within one of its constitutionally delegated powers when creating a federal privacy tort or a crime based on intrusion of privacy. It would appear that Congress could regulate this area under its Commerce Clause power, U.S. Const. art. I, § 8, cl. 3, which it acts under when regulating similar federal airspace issues. *See* Braniff Airways v. Nebraska Bd. of Equalization and Assessment, 347 U.S. 590 (1954); United States v. Helsley, 615 F.2d 784 (9th Cir. 1979).

court assess whether drone surveillance violated this type of tort? First, generally speaking, the location of the search would be determinative of whether a person is entitled to an expectation of privacy. Although courts have posited that the common law, like the Fourth Amendment, is intended to "protect people, not places[,]"[152] the *location* of an alleged intrusion factors heavily in a privacy analysis. The greatest chance for liability occurs when a person photographs or videotapes another while in the seclusion of his home. While technology has increasingly shrunk other spheres of privacy in the digital age, the home is still accorded significant legal protection. Using a drone to peer inside the home of another—whether looking through a window or utilizing extra-sensory technology such as thermal imaging—would likely constitute an intrusion upon seclusion. Moving from the home to a public space, or even a space on private property where one can be seen from a public vantage point, significantly reduces the chance of tort liability. However, certain instances of highly offensive surveillance in public may be actionable.

This leads to the second factor that will inform a reviewing court's analysis: the degree of offensiveness of the surveillance. The Ninth Circuit Court of Appeals, applying California law, observed that, in determining offensiveness, "common law courts consider, among other things: 'the degree of intrusion, the context, conduct and circumstances surrounding the intrusion as well as the intruder's motives and objectives, the setting into which he intrudes, and the expectations of those whose privacy is invaded.'" Several of these factors—especially, the context of the intrusion and the motive of the intruder—are fact intensive and require application in a particular case to fully understand. However, some generalizations can be made. The cases discussed above that did find an intrusion upon seclusion in a public place required highly offensive activity, such as closely following another person for an extended period or photographing another in a highly embarrassing shot. Likewise, a court might recognize liability if one were to use a drone to follow another for an extended period of time, particularly at a close distance. It is not clear, however, whether knowledge of being surveilled makes the monitoring more or less offensive. For example, one court seemed to rely on the fact that the defendant was unaware that her house was being photographed to hold that she did not have a viable privacy claim.[153] A drone flying at several thousand feet may not significantly disturb the target of the surveillance and could fall within this rationale. Nevertheless, filming someone in a compromising or embarrassing situation without his knowledge can be equally offensive. Here, the facts of the particular case would determine liability.

Congress could also create a privacy statute tailored to drone use similar to the anti-voyeurism statutes, or "Peeping Tom" laws, enacted in many states.[154] These laws prohibit persons from surreptitiously filming others in various circumstances and places.[155] Some states prohibit surreptitious surveillance of a person while on private property, usually a private residence.[156]

---

[152] Pearson v. Dodd, 410 F.2d 701, 704 (D.C. Cir. 1969) (quoting Katz v. United States, 389 U.S. 347, 351 (1967)).

[153] Mojica Escobar v. Roca, 926 F. Supp. 30, 35 (D.P.R. 1996).

[154] Federal law does prohibit certain acts of voyeurism on federal property. Section 1801, Title 18 provides: "Whoever, in the special maritime and territorial jurisdiction of the United States, has the intent to capture an image of a private area of an individual without their consent, and knowingly does so under circumstances in which the individual has a reasonable expectation of privacy, shall be fined under this title or imprisoned not more than one year, or both." 18 U.S.C. § 1801(a). As discussed in note 151, *supra*, it appears Congress would have the authority to extend this section to voyeurism committed not only on federal property but that committed from federal airspace.

[155] Timothy J. Hortstmann, *Protecting Traditional Privacy Rights in Brave New Digital World: The Threat Posed by Cellular Phone-Cameras and What States Should Do to Stop It*, 111 PENN. ST. L. REV. 739, 742 (2007).

[156] *See, e.g*, GA. CODE ANN. § 16-11-61; MONT. CODE ANN. § 45-5-223.

Nevada employs this model, prohibiting a person from entering the property of another with the intent to peep through a window of the building.[157] Likewise, New Jersey prohibits a person from peering into the window of the dwelling of another "under circumstances in which a reasonable person in the dwelling would not expect to be observed."[158] Other states require a prurient intent when conducting the surveillance. Under Washington State's statute, a person commits the crime of voyeurism if, for the purpose of arousing or gratifying his sexual desire, he films or photographs (1) a person in a place where he or she would expect privacy; or (2) the intimate areas of another person, whether he or she is in a public or private place.[159]

Similarly, Congress could adopt an "anti-paparazzi" statute, like that enacted in California, to prevent intrusive drone surveillance.[160] In fact, Congress considered a similar measure in the 105th Congress. The Privacy Protection Act of 1998 and the Personal Intrusion Act of 1998 would have made it unlawful to persistently follow or chase another person for the purpose of obtaining a visual image of that person if the plaintiff met the following elements: (1) the image was transferred in interstate commerce or the person taking the photograph traveled in interstate commerce; (2) the person had a reasonable expectation of privacy from such intrusion; (3) the person feared death or bodily injury from being chased; and (4) the taking of the image was for commercial purposes.[161] Also, these bills would have created a civil remedy for an individual whose privacy was intruded upon. Congress could use this model to make it unlawful to persistently monitor another person using drone surveillance.

Related Legal Issues

In addition to the legal issues described above, there are a host of other issues that may arise when introducing drones into United States national airspace system.

Right to Protect Property from Trespassing Drones. There may be instances where a landowner is entitled to protect his property from intrusion by a drone. Under Restatement (Second) of Torts § 260, "one is privileged to commit an act which would otherwise be a trespass to a chattel or a conversion if the act is, or is reasonably believed to be, necessary to protect the actor's land or chattels or his possession of them, and the harm inflicted is not unreasonable as compared with the harm threatened."[162] What this means is, in certain instances, a landowner would not be liable to the owner of a drone for damage necessarily or accidentally resulting from removing it from his property. However, there appear to be no cases where a landowner was

[157] NEV. REV. STAT. § 200.603.

[158] N.J. STAT. ANN. § 2C:18-3c.

[159] WASH. REV. CODE § 9A.44.115; *see also* CAL. PENAL CODE § 647; R.I. GEN. LAWS § 11-64-2.

[160] California Civil Code § 1708.8 provides:

> A person is liable for constructive invasion of privacy when the defendant attempts to capture, in a manner that is offensive to a reasonable person, any type of visual image, sound recording, or other physical impression of the plaintiff engaging in a personal or familial activity under circumstances in which the plaintiff had a reasonable expectation of privacy, through the use of a visual or auditory enhancing device, regardless of whether there is a physical trespass, if this image, sound recording, or other physical impression could not have been achieved without a trespass unless the visual or auditory enhancing device was used.

[161] H.R. 3224, H.R. 2448, 105th Cong., 2d sess. (1998).

[162] RESTATEMENT (SECOND) OF TORTS § 260.

permitted to use force to prevent or remove an aircraft from his property. Additionally, as discussed above, determining whether a drone in flight is trespassing upon one's property may be unusually challenging.

Stalking, Harassment, and Other Crimes. Traditional crimes such as stalking, harassment, voyeurism, and wiretapping may all be committed through the operation of a drone. As drones are further introduced into the national airspace, courts will have to work this new form of technology into their jurisprudence, and legislatures might amend these various statutes to expressly include crimes committed with a drone.

Wiretap Laws. Under the federal wiretap statute, it is unlawful to intentionally intercept an "oral communication"[163] by a person "exhibiting an expectation that such communication is not subject to interception under circumstances justifying such expectation.... "[164] Currently, commercial microphones can record sounds upwards of 300 feet.[165] Use of such a microphone on a drone to record private conversations could implicate the federal wiretap statute.

Preemption of State Aviation Regulations. The increased presence of drones in domestic airspace raises the question of which aspects of drone use states may be able to individually regulate. The Supreme Court has stated that federal preemption of state laws and regulations occurs where "the pervasiveness of the federal regulation precludes supplementation by the States, where the federal interest in the field is sufficiently dominant, or where the object sought to be obtained by the federal law and the character of obligations imposed by it reveal the same purpose."[166] Congress vested sole responsibility for the aviation industry and domestic airspace with the federal government in the Federal Aviation Act of 1958.[167] According to the legislative history, the FAA was to have "full responsibility and authority for the advancement and promulgation of civil aeronautics generally, including promulgation and enforcement of safety regulations."[168]

Generally, state regulations of aviation safety, airspace management, and aviation noise are preempted by federal laws and regulations.[169] In *City of Burbank v. Lockheed Air Terminal, Inc.*, the Supreme Court struck down a local city ordinance that prohibited planes from taking off during certain hours of the day as preempted by the federal regulatory scheme.[170] Expressing its fear regarding local control of airspace, the Court stated, "If we were to uphold the Burbank ordinance and a significant number of municipalities followed suit, it is obvious that fractionalized control of the timing of takeoffs and landings would severely limit the flexibility of

[163] 18 U.S.C. § 2511(1)(a).

[164] 18 U.S.C. § 2510(2).

[165] *See, e.g.*, Electromax International, Inc., http://www.electromax.com/penmics.html (last visited Jan. 22, 2013).

[166] Schneidewind v. ANR Pipeline Co., 485 U.S. 293, 300 (1988).

[167] P.L. 85-726; 72 Stat. 737 (1958).

[168] H.R. Rept. No. 2360, 85th Cong. (1958).

[169] *See, e.g.*, City of Burbank v. Lockheed Air Terminal, Inc., 411 U.S. 624 (1973); Abdullah v. American Airlines, Inc., 181 F.3d 363 (3d Cir. 1999); San Diego Unified Port Dist. v. Gianturco, 651 F.2d 1306, 1316 (9th Cir. 1981); Price v. Charter Township, 909 F. Supp. 498 (E.D. Mich. 1995).

[170] *City of Burbank*, 411 U.S. at 639.

the FAA in controlling air traffic flow."[171] The Supreme Court has, however, upheld state regulations imposing taxes on aircraft equipment located within the state.[172]

Conclusion

The legal issues discussed in this report will likely remain unresolved until the civilian use of drones becomes more widespread. To that end, the FAA has been tasked with developing "a comprehensive plan to safely accelerate the integration" of drones into the national airspace, which focuses on the safety of the drone technology and operator certification. While the deadline for development of the plan has already elapsed, the FAA has until the end of FY2015 to implement such a plan.[173] Additionally, the FAA must identify six test ranges where it will integrate drones into the national airspace. This deadline, 180 days after enactment of the act, has also elapsed without FAA compliance. Once these regulations are tested and promulgated, the unique legal challenges that could arise based on the operational differences between drones and already ubiquitous fixed-wing aircraft and helicopters may come into sharper focus.

Author Contact Information

Alissa M. Dolan
Legislative Attorney
adolan@crs.loc.gov, 7-8433

Richard M. Thompson II
Legislative Attorney
rthompson@crs.loc.gov, 7-8449

[171] *Id.*

[172] Braniff Airways v. Nebraska Board, 347 U.S. 590 (1954). Additionally, several courts have determined that state law tort claims based on injuries caused by aircraft are not federally preempted. *See, e.g.*, Bieneman v. City of Chicago, 864 F.2d 463 (7th Cir. 1988) (overturning Luedtke v. County of Milwaukee, 521 F.2d 387 (7th Cir. 1975), which ruled that *City of Burbank* preempted application of state tort laws, such as negligence and nuisance, to flights that complied with federal laws and regulations); Greater Westchester Homeowners Association v. City of Los Angeles, 603 P.2d 1329 (Sup. Ct. Cali. 1979).

[173] *See* P.L. 112-95, § 332(a) (requiring development of a plan within 270 days of enactment of the act, falling in November 2012).