



NAVIGABLE AIRSPACE: WHERE PRIVATE PROPERTY RIGHTS END AND NAVIGABLE AIRSPACE BEGINS

BY MARK J. CONNOT, ESQ. AND JASON J. ZUMMO, ESQ.

As the popularity of drone use continues to increase, it directly impacts the privacy and safety of those at the ground level. In fact, complaints about drones—often equipped with high-tech cameras—hovering above private land have also risen. In a recent case, *Boggs v. Merideth*, a drone operator sued his neighbor for shooting down his drone.¹ As a result, several issues pertaining to the boundaries of navigable airspace and how that airspace interacts with the state property rights of landowners may be clarified in the near future.



The federal government has exclusive sovereignty over U.S. airspace. Congress delegated to the FAA the ability to define navigable airspace and the authority to regulate navigable airspace of aircraft by regulation or order. (49 U.S.C. § 40103(b)(1)). While it is clear that navigable airspace falls under the purview of the FAA, the boundaries of that airspace remain unclear.

According to Federal Aviation Regulations, navigable airspace is defined as “airspace at and above the minimum flight altitudes prescribed by or under this chapter, including airspace needed for safe takeoff and landing.” (14 C.F.R. § 1.1). The

First, landowners have “exclusive control of the immediate reaches of the enveloping atmosphere.” Second, landowners own at least as much of the space above the ground as they can “occupy or use in connection with the land.”

minimum flight altitude for aircraft flying over congested areas of a city or town, or over open air assemblies of persons, is 1,000 feet above the highest obstacle within a horizontal radius of 2,000 feet of the aircraft. (14 C.F.R. § 91.119(b)).

Over uncongested areas, aircraft can operate at an altitude of 500 feet above the surface.² Aircraft can also operate even lower when over “open water or sparsely populated areas.” When flying over those areas, aircraft may not operate closer than 500 feet from any person, vehicle or structure, provided that if the aircraft’s engines fail, an emergency landing will not create an undue hazard to persons or property on the surface. (14 C.F.R. § 91.119(a) and (c)). Two exceptions exist for when a person may operate an aircraft below these altitudes:

1. When necessary for takeoff or landing; or
2. In an in-flight emergency requiring immediate action. (14 C.F.R. § 91.119(a); 14 C.F.R. § 91.3(b)).

U.S. Supreme Court Case Law on Navigable Airspace

The U.S. Supreme Court has provided guidance on the issue of where private property rights of airspace end and navigable airspace begins. In *United States v. Causby*, a 1946 case involving airspace takings, the Supreme Court recognized that landowners have an interest in at least some of the airspace above their land.³

In *Causby*, a farmer lived adjacent to a military airport where aircraft flew as low as 83 feet over the farmer’s property. As a result, the noise from the aircraft startled the farmer’s chickens, causing them to fly into walls, resulting in their deaths.

As part of its analysis, the court first determined that navigable airspace,

which Congress had placed in the public domain, is airspace above what is deemed the minimum safe altitudes. Therefore, airspace above the minimum safe altitudes is immune from suits against the government for takings violations. For airspace below the minimum safe altitudes, the *Causby* court put forth two key principles. First, landowners have “exclusive control of the immediate reaches of the enveloping atmosphere.” Second, landowners own at least as much of the space above the ground as they can “occupy or use in connection with the land.” Occupying the space in a physical sense—by the erection of buildings and the like—is not material. That said, the court, cautious about granting too broad a set of private rights in airspace, did not state that all airspace below the minimum safe altitudes is vested in the owner of the subjacent land.

The court ruled in favor of the farmer, but several questions linger, including the exact boundaries of where the “immediate reaches of the enveloping atmosphere” of the farmer’s land meets the public airspace above it, and how high state governments’ rights extend. In other words, would the court in *Causby* have ruled in favor of the farmer if the aircraft at issue had operated above 90 feet or perhaps 150 feet? The *Causby* decision does not clarify what happens between 83 feet and 500 feet. Moreover, it is unclear if the court would have found a taking if the property had been vacant and the aircraft had not caused damage to the farmer or his property.

While it appears that the lowest navigable airspace is just over the *Causby* limits described above, the circumstances of the case may limit its applicability. *Causby* took place during World War II. It involved large military aircraft flying 83 feet above the farmer’s property. The unsettling noise resulted in the destruction of the use of the property as a commercial chicken farm

and caused the farmer’s family severe anxiety due to lack of sleep. By contrast, drones are typically not noisy and often fly well below 83 feet. Furthermore, drone technology did not exist when *Causby* was decided 70 years ago.⁴

Nevada Supreme Court Case Law on Navigable Airspace

In the 2006 case *McCarran International Airport v. Sisolak*, the Nevada Supreme Court weighed in on whether or not landowners have a valid property interest in the airspace above their properties and to what extent.⁵ Steve Sisolak owned land near McCarran Airport. He brought an inverse condemnation action against Clark County alleging that the height restrictions in two county ordinances constituted a per se regulatory taking of the airspace above his land, in violation of the U.S. and Nevada Constitutions. The Nevada Supreme Court agreed.

The court began by reviewing the reasoning and principles of *Causby*. The court then engaged in its own analysis of the Nevada Constitution and statutes, holding that Nevadans hold a valid property right in the useable airspace above their property up to 500 feet. That right, however, is subject to intrusion by lawful air flight—i.e. aircraft may fly over Nevadans’ properties below 500 feet as long as they do not interfere with the current or future use of the property. In the end, the court ruled in Sisolak’s favor.

Sisolak differs from *Causby* in two key respects. First, under *Sisolak*, Nevadans hold a property right in the useable airspace above their properties up to 500 feet; *Causby* did not put forth a bright-line rule. Instead, the court in *Causby* preferred an abstract and permissive standard.⁶ Second, under

continued on page 22

NAVIGABLE AIRSPACE: WHERE PRIVATE PROPERTY RIGHTS END AND NAVIGABLE AIRSPACE BEGINS

Sisolak, the ownership of the airspace below the minimum safe altitudes established in Federal Aviation Regulations is vested in the owner of the subjacent land. *Causby* did not hold that all airspace below the minimum safe altitudes is subject to private ownership by subjacent landowners.

The linchpin of the *Sisolak* holding—that Nevadans have a vested property interest in the airspace overlying their land up to 500 feet—is likely limited when applied in other contexts. *Sisolak* is an airspace takings case involving county ordinances that impacted vacant land adjacent to an airport. How *Sisolak* would apply in a case involving land not proximate to an airport, or in a trespass or invasion of privacy action, is unclear. Additionally, the basis for the 500-foot figure the court uses overlooks the numerous scenarios under 14 C.F.R. § 91.119, in which aircraft can operate below 500 feet for reasons other than for just takeoff or landing. Whether *Sisolak* applies in the context of drones flying over private land remains an open issue.

FAA Authority to Regulate Airspace Below 500 Feet

The FAA has divided airspace into different categories based on altitude. Class G airspace is defined from the *Causby* limits as 500 feet and is considered uncontrolled airspace. This begs the question: does navigable airspace include class G airspace? If not, does the FAA have the authority to regulate the airspace below? The FAA argues that it “has authority to regulate aircraft in U.S. Airspace” at any altitude, because federal law states that the FAA “shall develop plans and policy for the use of the navigable airspace and assign by regulation or order the use of the airspace necessary to ensure the safety of aircraft and the efficient use of airspace.” (49 U.S.C. § 40103(b)(1).)

Further, it could be argued that the FAA can regulate airspace below 500 feet, despite jurisdictional limitations, because another federal law gives the FAA the authority to prescribe “regulations and minimum standards for other practices, methods and procedure the [FAA] finds necessary for safety in air commerce and national security.” (49 U.S.C. § 44701(a).) Under this section, the FAA regulates amateur rockets, motorized paragliders and other vehicles that operate below 500 feet.

Even if navigable airspace does not extend to the surface, the FAA has argued that it may regulate below navigable airspace, because it can prescribe regulations “on the flight of



aircraft for navigating, protecting, and identifying aircraft” and “protecting individuals and property on the ground.” (49 U.S.C. § 40103(b)(2).)

With the advent of drone technology and increased drone use, it could be that navigable airspace extends to the surface. At the moment, the area lying below navigable airspace is a gray jurisdictional area for the FAA to attempt to regulate, and states continue to argue that they should be able to regulate flight below 500 feet through their traditional policing powers. *Boggs v. Merideth* may provide answers to whether or not a drone flying below 500 feet is operating in navigable airspace. **NL**

1. See *Boggs v. Merideth*, case number 3:16-cv-00006, United States District Court, Western District of Kentucky, Louisville Division.
2. Minimum safe altitudes for helicopters differ from other aircraft. Specifically, “If the operation is conducted without hazard to persons or property on the surface . . . A helicopter may be operated at less than the minimums prescribed...provided each person operating the helicopter complies with any routes or altitudes specifically prescribed for helicopters by the FAA.” 14 C.F.R. § 91.119(d)(1).
3. See *United States v. Causby*, 328 U.S. 256, 66 S. Ct. 1062, 90 L. Ed. 1206 (1946).
4. But see David Preznuk, *The Drone Age: A primer for Individuals and the Enterprise* 9-10 (John E. Button, 1st ed. 2016)
5. See *McCarran Int'l Airport v. Sisolak*, 122 Nev. 645, 137 P.3d 1110 (2006), cert. denied, 549 U.S. 1206, 127 S. Ct. 1260, 167 L. Ed. 2d 76 (2007).
6. See Michael Coenen, “Rules Against Rulification,” 124 Yale L.J. 644 (2014).

MARK J. CONNOT (mconnot@foxrothschild.com) is Office Managing Partner for the Las Vegas office of Fox Rothschild, LLP, and he also chairs the firm's UAS practice group.



JASON J. ZUMMO (jzummo@foxrothschild.com) is an associate in Fox Rothschild's Las Vegas office, and he is a member of the firm's Litigation and UAS practice groups.

