

TO: Senator Ralph Ostmeyer, State of Kansas, Senate Federal and State Affairs Committee
FROM: LeEtta Felter, 14220 S Copper Creek Drive, Olathe, Kansas 66062
DATE: 3 March 2016
SUBJECT: Testimony in support of SB 462

Thank you for the opportunity to testify in support of SB 462, which addresses personal property rights and privacy rights specifically relating to the use of UAVs (Unmanned Aerial Vehicles). I am very grateful for Senator Olson and his willingness to seek solutions for situations where technology has outpaced current policy. This bill is being presented to you for your consideration at my urging.

THE PROBLEM

About a year and a half ago, our family began to experience first hand what happens when technology gets ahead of laws when our neighbor purchased a drone and began flying around the neighborhood as a hobby. At first his hobby seemed benign, albeit annoying as far as the noise level and the constant distraction of having a drone flying around when we were outside. Soon the neighbor's drone hobby became disruptive to our routines as he piloted the drone so that it hovered over us when we were outside playing with the kids, swimming or gardening. We wanted to keep harmony in the neighborhood and so we said nothing and secretly hoped that he would soon tire of his hobby. It became very clear that we had a real issue on our hands when my husband and I came home one day to a very upset 16-year-old daughter who had been home alone when she looked outside the kitchen window to find the drone hovering outside "watching" her. My husband immediately walked over and told him that he had scared our daughter and told him to knock it off and asked him if he was recording video. The neighbor stated that he wasn't shooting video or photos (but we really have no way of knowing if this is the truth), and began quoting laws to my husband stating that he was well within his rights to fly over our property and us any time he wished. He called the police on my husband (after my husband threatened to shoot the drone down if he continued to stalk our daughter) and the police came over to speak with my husband and they shared that the neighbor was operating within the law.

Since that day the neighbor has escalated his drone usage to the level of bullying. He now has two drones that he routinely flies over our heads, over our home, and near our windows. When we are swimming, gardening, watering the yard, throwing a football with our son, sunbathing with our girls, cleaning cars, having parties.... you name it...he will be there with us just over our heads taunting us and disrupting our lives with the drone. Is he recording video or taking photos? I believe he is, but how can I prove it? Essentially he is a high tech Peeping Tom who can legally stalk us and disrupt the peace. He is impacting the quality of our lives, impacting our property value, placing our personal property, and the lives of the humans and animals that go outside, at risk. We have sought a legal resolution to the problem under current laws and it has become clear that we need laws in Kansas that allow *reasonable* usage of drones while protecting privacy rights and property rights.

THE FAA – Privacy/Property Rights A State Issue

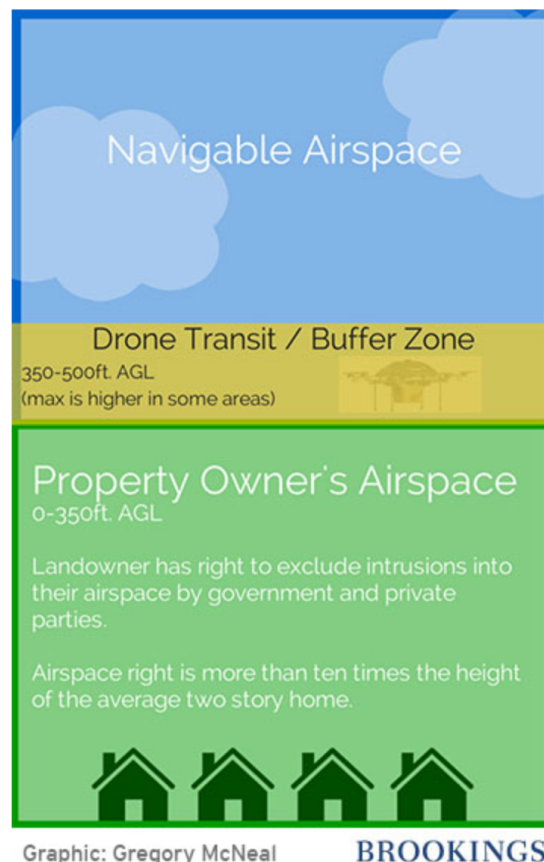
With the vast array of possibilities presented by the evolving UAV technology, it is obvious that drones are here to stay. The Federal Aviation Administration has estimated that by 2030, there will be more than 30,000 private unmanned vehicles competing for U.S. airspace. Under the FAA Modernization and Reform Act of 2012, the agency is required to issue regulations for private drone use. The rules, now expected later this year, will likely

be generous to both commercial operators and hobbyists. But the FAA's proposed regulations deal with such matters as the qualifications for operators and the precise systems for keeping track of the unmanned vehicles in flight. Although the agency "notes that privacy concerns have been raised about unmanned aircraft operation," the FAA states that the privacy question is beyond the scope of the rulemaking and suggests that the privacy question should be determined under state law.

The Sensible Solution*

There are many solutions proposed throughout these United States, but I believe the most sensible and least damaging to the UAV technology potential is one recommended by the legal scholar Gregory McNeal, in a 2014 paper issued by the Brookings Institution.* McNeal proposes that property owners be granted control of the airspace up to 350 feet. This would mean that citizens of Kansas would be entitled to exclude any drones from passing over their property below that altitude. "The problem is not the technology," he writes. "The problem is the ability of landowners to exclude aerial observations from certain vantage points."

How does McNeal come up with the number 350? Current law generally defines navigable airspace as beginning at 500 feet. The FAA requires model aircraft, including drones, to remain below 400 feet, to create a 100-foot buffer. McNeal argues that the rest of us deserve a buffer, too, for privacy purposes.



*AGL=above ground level

According to McNeal, legislators should follow a property rights approach to aerial access. This approach provides landowners with the right to exclude aircraft, persons, and other objects from a column of airspace extending from the surface of their land up 350 feet above ground level (AGL).

HISTORICAL PERSPECTIVE

From the late 16th century, the common law took the position that property ownership extended infinitely into the heavens (the *ad coelum* doctrine). The era of aviation put an end to that tenet.

In the 1946 case *United States v. Causby*, the Supreme Court analyzed the airspace rights of landowners. The *Causby* case involved chicken farmers whose farm was adjacent to a small municipal airport that the U.S. military began using during World War II. The military flights were so low (**83 feet above the land** and 67 feet above the Causby's home) that the Causby's chickens would be frightened by each overflight, fly into the wall of their chicken coop, and die. The Causby's sued the federal government claiming that the government's flights constituted a Fifth Amendment taking. The Causby's sued the federal government claiming that the government's flights constituted a Fifth Amendment taking (The 5th Amendment provides that no person shall be deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation).

McNeal shares some legal history in his paper: "The Supreme Court's opinion began by analyzing the *ad coelum* doctrine. That doctrine had its roots in common law jurisprudence dating back centuries to Cino da Pistoia's declaration "*Cujus est solum, ejus est usque ad coelum*" which translated means "[to] whomsoever the soil belongs, he owns also to the sky." The doctrine "assigned airspace rights based on ownership of the surface land situated immediately below the space...airspace held by landowners...theoretically extended indefinitely to the outer reaches of the heavens." Justice Douglas, analyzing the *ad coelum* doctrine quickly dispensed with it, stating that it had "no place in the modern world." Rather, Douglas said that a landowner owned "at least as much of the space above the ground as he can occupy or use in connection with the land." If the government or any other party intrudes into that space, such intrusions should be treated "in the same category as invasions of the surface." Such invasions could, in the right circumstances, be treated as a trespass and on the facts presented by *Causby* the flights could be considered a compensable taking. The facts of *Causby* importantly involved flights that were "so low and so frequent as to be a direct and immediate interference with the enjoyment and use of the land." **The *Causby* opinion thus created two types of airspace, the public navigable airspace, a "public highway" in which the landowner could not exclude aircraft from flying, and the airspace below that which extends downward to the surface, in which landowners held some right to exclude aircraft.**

The *Causby* ruling brings into focus the possibility that a landowner may exclude others from entering the low altitude airspace above their property, and as such may exclude drones from entering that airspace. But, if such rights in fact exist, at what altitude are such property rights triggered? Unfortunately there is very little clarity on this point. The Supreme Court referred to this airspace as the "immediate reaches" above the land, into which intrusions would "subtract from the owner's full enjoyment of the property." *Causby* established the immediate reach to be at least 83 feet above ground level.

THE SOLUTION

According to McNeal: "Property law is almost exclusively governed by state and local laws. State and local governments that act to craft laws clarifying property rights in low altitude airspace could do so by arguing that they are merely codifying long standing property law doctrine. "

Arizona State law professor Troy Rule—one of the first scholars to analyze property rights in the context of drones—notes, "[u]nlike the murky set of legal rules governing low

altitude airspace, the laws delineating property rights in the surface land could hardly be clearer.” The land, Professor Rule explains, is owned and those owners have rights to exclude trespassers and other intruders. However, “[t]he commons regime that governs high-altitude airspace is in many ways the antithesis of the private property regime that applies to surface land: no one owns high-altitude space, and everyone is welcome to use it if they follow certain rules.” In between the land and high altitude airspace is an area that is murky, and largely undefined. State and local governments can act to clarify the rights of landowners in the zone between the land and high altitude airspace.” (Troy A. Rule, *Airspace In An Age Of Drones*, 29.)

McNeal suggests the following: “What might such a statute look like? To preserve privacy, the landowner’s right must extend high enough to make the exclusion effective. However to preserve a right of transit for an Amazon or Google delivery drone, a mapping and real estate drone, or model aircraft, the right of exclusion cannot extend all the way up to the navigable airspace line (500 feet in most locations, 1,000 feet in congested areas). An appropriate statute would thus state that landowners own the airspace above their property up to 350 feet above ground level. In most locations that will provide the landowner with airspace rights that extend to more than ten times the height of the average two story home. By virtue of owning this column of land up to 350 feet, the landowner will have a right to exclude the general public from flying above their property in a way that will interfere with their enjoyment of the land. This proposal draws the line at 350 feet because while navigable airspace is generally understood as existing at a minimum altitude of 500 feet, the FAA has promulgated regulations and guidance which allow for the use of model aircraft (which includes drones) at altitudes up to a maximum of 400 feet (thus leaving a 100 foot buffer space between model aircraft operations and navigable airspace). Setting the landowner’s airspace at 350 feet provides a 50 foot buffer space between the ceiling of the property owner’s airspace and the ceiling of model aircraft airspace, allowing for a small transit zone for model aircraft. Such a transit zone may allow model aircraft operators to traverse the airspace above private property without fear of violating the landowner’s property rights, while simultaneously avoiding violating FAA regulations.”¹

CONCLUSION

I argue that low-flying drones over private property are trespassers. A telephone wire strung across my property without consent violates my property rights. Why not an aircraft? Can my neighbor get on his dirt bike and ride it all over my front lawn? That’s absurd! Of course he can’t, without my permission. Then, why is he legally allowed to fly directly over my property? Could my neighbor carry his ladder over and lean it up against my wall to climb up the ladder and video record through my window? He can’t...that would be a violation of my privacy rights and my property rights. However, under current law he can hover outside my window and record our activities with a drone. How can this be? It is because technology has outpaced current law.

According to the Association for Unmanned Vehicle Systems International (AUVSI), an industry-supported group, at least six states—Florida, Minnesota, Nevada, North Dakota, Oregon and Virginia—have passed legislation restricting the commercial use of drones. Another eight have restrictive legislation pending. More broadly, 45 states considered at least 156 bills relating to drones this year, according to the National Conference of State Legislatures. Nineteen of those states passed legislation targeting the use of commercial drones as well as the use of devices flown privately or by law enforcement; another four adopted resolutions. Last August, the University of Arkansas banned drone flights over its campus without approval, and the skies will have to be clear during high school football games in Broward County, Florida.

Kansas cannot afford to delay in creating solid, sensible policy to address the privacy and property issues that the UAV technology has brought to the forefront. Should the state legislators resist creating sensible policy, local municipalities will need to pick up the slack to keep the peace within their communities. The end result would be somewhat like a patchwork quilt of local policies. I believe a patchwork quilt approach to dealing with this issue will greatly harm the potential of the UAV technology. The best solution should be created at the state level to meet the needs of the citizens of Kansas.

I love Kansas. I love raising my children in our great state. I've spent a lot of money on my home. My home is not just an investment...it is the place that my children are being raised, and a refuge from the world. This refuge is no longer a place that my family feels safe and secure. My several hundred thousand dollar investment (our residence) has been undermined and harmed by a man with a \$500 toy, a neighbor who refuses to honor our wishes to refrain from flying his drone over our heads and near our windows.

I ask you... where do my rights start and his rights stop? It's up to you to clearly define these rights for the citizens of Kansas. I believe I've presented you with a very sensible and legally solid solution. I ask that you pass SB 462, and provide some sensible state level governance of the use of UAVs over private property.

¹ See, Interpretation of the Special Rule For Model Aircraft, available at: <http://www.regulations.gov/#!documentDetail;D=FAA-2014-0396-0001>, See also, FAA Fact Sheet- Unmanned Aircraft Systems, http://www.faa.gov/news/fact_sheets/news_story.cfm?newsId=14153 (stating "Recreational use of airspace by model aircraft is covered by FAA Advisory

*My proposed solution and the case studies included in this testimony are taken directly from the "Drones and Aerial Surveillance paper written by Gregory McNeal, 2014, Pepperdine School of Law for the Brookings Institute. The paper can be downloaded here: <http://www.brookings.edu/research/reports2/2014/11/drones-and-aerial-surveillance>