

2015

All Your Air Right Are Belong to Us

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Recommended Citation

Chad J. Pomeroy, *All Your Air Right Are Belong to Us*, 13 NW. J. TECH. & INTELL. PROP. 277 (2015).
<https://scholarlycommons.law.northwestern.edu/njtip/vol13/iss3/1>

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N O R T H W E S T E R N
JOURNAL OF TECHNOLOGY
AND
INTELLECTUAL PROPERTY

All Your Air Right Are Belong to Us

Chad J. Pomeroy



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By Chad J. Pomeroy*

ABSTRACT

Privacy and property rights are tricky subjects for a variety of reasons. One reason is that they have a unique relationship with each other, and this Article focuses on one of those areas of intersection – that of air rights and invasion of privacy. This is a timely topic due the advent of drones, and this Article will argue that drone surveillance constitutes common law trespass and that any statute or regulation that permits such activity is in derogation of common law and so should be subject to particularly careful thought and consideration.

This is not as straightforward a thesis as one might perhaps think because both property and privacy rights have a murky past and have gone through iterative formulations as society has sought to achieve the right balance between the public and private spheres. Privacy has historically focused on expectations of privacy, and property rights have traditionally provided such expectations, but the legally recognized nature of each has not changed over time to keep pace with technological innovation. This has led to a situation where the kinds of rights and causes of action that have traditionally protected individuals no longer suffice in a variety of circumstances.

In particular, the use of drone technology to engage in sophisticated surveillance presents significant challenges our existing legal framework. Part I of this Article examines the history of privacy law in some detail, and Part II does the same with respect to the common law of airspace property rights. When these two areas of the law are examined in tandem, it becomes apparent that drone surveillance violates rights that society generally wants to protect and that society has historically protected. That protection, however, is now lacking. There is some reason for the failure of the law to keep up with this type of new technology, and Part III examines the historical “aircraft exception” that many may now believe justifies the law’s acquiescence in the face of drone surveillance. Ultimately, though, this Article concludes that this common law exception is not applicable to drones and that, as such, the law should adapt to protect the public from drone surveillance. Part IV concludes this analysis by making a number of recommendations that state and federal legislatures and various administrative agencies would do well to consider when passing laws and promulgating rules regarding drone technology.

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INTRODUCTION

¶1 Privacy and property rights have a unique relationship with each other. The two subjects do not overlap in many contexts, but they intersect in some very important ways. This Article focuses on one of those areas of intersection, that of air rights and invasion of privacy. This is a timely topic due the advent of drones, and this Article argues that drone surveillance constitutes trespass and that any statute or regulation that permits (or even tacitly condones) such activity is in derogation of common law and should be subject to particularly careful thought and consideration.

¶2 This is not as straightforward a thesis as one might perhaps think. Both property rights and privacy have a murky past and have gone through iterative formulations as society has sought to achieve the proper balance between the public and private spheres. Privacy historically focused on expectations, many of which were defined by traditional concepts of property rights, but the legally recognized nature and interaction of each has not changed over time to keep pace with technological innovation. This has led to a situation where the kinds of rights and causes of action that traditionally protected individuals no longer suffice.

¶3 In particular, the use of drone technology to engage in surveillance presents significant challenges within our existing legal framework. Part I of this Article examines the history of privacy law in some detail, and Part II does the same with respect to the common law of airspace property rights. When these two areas of the law are examined in tandem, it becomes apparent that drone surveillance violates rights that society generally wants to protect and that society has historically protected. That protection, however, is now lacking because the law has failed to keep up with new technology. Part III examines the historical “aircraft exception” that superficially appears to justify the law’s current acquiescence of drone surveillance, though this Article ultimately argues that this common law exception is not applicable to drone surveillance and that, as such, the law should protect the public from this new technology. Part IV concludes this analysis by suggesting that state and federal legislatures and relevant administrative agencies would do well to be mindful of the applicable historical rights analyzed herein when passing laws and promulgating rules regarding drone technology.

I. THE COMMON LAW OF PRIVACY RIGHTS

¶4 In thinking about how the law should approach drone surveillance, it is useful to think about the protections the legal system provides to protect privacy. This process is more difficult than it initially seems because the American judiciary has historically struggled to define “privacy” and to specify what “right to privacy” each individual possesses. It is certainly true that, “[t]hroughout history, human beings have always recognized a concept of privacy,”¹ but just what that means has not always been clear.²

¹ Lance E. Rothenberg, Re-thinking Privacy: Peeping Toms, Video Voyeurs, and the Failure of Criminal Law to Recognize a Reasonable Expectation of Privacy in the Public Space, 49 AM. U. L. REV. 1127, 1132 (2000) (citing DECKLE MCLEAN, PRIVACY AND ITS INVASION 3, 9 (1995)).

² For many years, the “right to be let alone” seemed to vaguely encapsulate the concept. *See id.* at 1133; *see also* COOLEY, A TREATISE ON THE LAW OF TORTS 29 (2nd ed. 1888) (contextualizing the “right to be let alone” in terms of tort law). *See also* Peter P. Swire, *Peeping*, 24 BERKELEY TECH. L. REV. 1167, 1176 n.49 (2009) (setting forth numerous sources discussing the protections afforded to privacy rights under the

Some clarity was provided in 1890 “when Samuel Warren and Louis Brandeis drafted the blueprints for a new tort.”³ This newly articulated tort, recognizing a legal right to privacy and protecting against an invasion of this privacy, went beyond trust, contract, and property theories and instead stood alone, stemming from “an individual’s ‘inviolable personality.’”⁴

Of course, this tort did not arise *sua sponte*. The very concept of privacy is relative, and the definition of privacy (and the concomitant prohibitions arising from violations thereof) must be reasonable to society,⁵ so some parameters must be established.

There are a number of ways to do this. “Seventy years [after Warren and Brandeis’ article], this concept of invasion of privacy was broken down into four separate torts by Dean William L. Prosser These four areas consist of the following: (1) Intrusion upon one’s seclusion, (2) public disclosure of private facts, (3) publicity placing a person in false light, and (4) misappropriation of a person’s name or likeness.”⁶ Of these four, the one that is relevant here relates to observing people under conditions where they expect not to be observed.⁷ Put simply, looking at people when they wish to remain unseen is a kind of “peeping” not generally permitted under the law, and “[t]he simplest form of peeping is merely to look.”⁸ “Just looking” is a deceptively innocuous action that has long had significant legal and cultural implications.⁹ From a legal perspective, impermissibly observing others has long found its way into the law in a variety of ways.¹⁰ The tort of

English common law).

³ Rothenberg, *supra* note 1, at 1133 (citing Samuel D. Warren & Louis D. Brandeis, *The Right to Privacy*, 4 HARV. L. REV. 193 (1890), which set forth the first iteration of the tort of invasion of privacy). Prior to this, “Peeping Tom crimes were unknown” under the common law. Lisa F. Wu, *Peeping Tom Crimes*, 28 PAC. L.J. 691, 705 (1997). The article by Warren and Brandeis marked the American beginning of legal protection from various types of intrusion on a person’s seclusion. *Id.* (citing William L. Prosser, *Privacy*, 48 CAL. L. REV. 383, 389-90 (1960)). Interestingly, their interest in a tort for invasion of privacy allegedly stemmed from embarrassing press coverage of the wedding party of one of Warren’s daughters. See William L. Prosser, *Privacy*, 48 CAL. L. REV. 383, 383-84 (1960).

⁴ Rothenberg, *supra* note 1, at 113 (quoting Samuel D. Warren & Louis D. Brandeis, *The Right to Privacy*, 4 HARV. L. REV. 193, 211 (1890), which set forth the first iteration of the tort of invasion of privacy). This ideal of an “inviolable personality” has been described “as a condition and right that is essentially tied to human dignity, the principle of equal respect for persons, and the notion of personhood itself.” Richard Turkington, *Legacy of the Warren and Brandeis Article: The Emerging Unencumbered Constitutional Right to Informational Privacy*, 10 N. ILL. U. L. REV. 479, 484-85 (1990). *But see* Ken Gormley, *One Hundred Years of Privacy*, 1992 WIS. L. REV. 1335, 1343 (1992) (indicating that the “basic kernels of privacy” relate back to the common law crimes of trespass, assault, and battery).

⁵ “Since the latter part of the twentieth century, the critical determinant of whether a person has a right to privacy is whether that person has a reasonable expectation of privacy in the situation at hand.” Robert Sprague, *Orwell Was an Optimist: The Evolution of Privacy in the United States and Its De-Evolution for American Employees*, 42 J. MARSHALL L. REV. 83, 133 (2008).

⁶ Wu, *supra* note 3, at 707 (citations omitted).

⁷ Looking at people when they neither know nor expect it – “peeping” – falls within the first area. See, e.g., DAVID J. SEIPP, *THE RIGHT TO PRIVACY IN AMERICAN HISTORY* 2-4 (1978) (quoting Judge Blackstone) (“Eaves-droppers, or such as listen under walls or windows . . . are a common nuisance, and presentable at the court-leet, or are indictable at the sessions, and punishable by fine and finding sureties for their good behavior.”). This invasion of privacy is important here, as this Article focuses on drone surveillance, a sort of “ultra peeping,” which potentially involves an object that is thousands of feet over your property that permits people that are thousands of miles away to observe you in great detail.

⁸ See Swire, *supra* note 2, at 1174.

⁹ See *id.* at 1174-75 (tracing prohibitions on “looking” to “mythology, Judeo-Christian teachings, and English common law” and setting forth myths and literary references to demonstrate how deeply embedded these ideas are in our culture).

¹⁰ This includes the criminalization of peeping and other invasions of privacy. “[T]he act of window peeping . . . historically was prosecuted under the crimes of disorderly conduct or breach of the peace.”

intrusion, resulting from peeping, is the most relevant here.¹¹ This tort is comprised of three basic elements: first, there is an intrusion; second, that intrusion must be offensive to a reasonable person; and, third, the plaintiff must have had a reasonable expectation of privacy.¹² This probably seems fairly intuitive to most of us: most of us probably think that the law should protect us against unreasonable, impermissible observation. And several early examples seem to confirm this intuition. These examples include “an instance where one looked into windows through elevated railways, and also one in which a detective spied into windows.”¹³ Most of us would expect privacy while in our own homes, and that is what these cases protect.

Of course, as technology changes, so do society’s requirements. This is especially true in the context of privacy. Almost immediately upon their invention and widespread adoption, videotaping and photographing became a means to intrude upon privacy.¹⁴ Courts adapted quickly, and, though they have been reluctant to rule that videotaping and

Rothenberg, *supra* note 1 at 1141. As society’s comfort and familiarity with the concept of “invasion of privacy” grew, however, so did the attendant criminal statutes. *See* Wu, *supra* note 3, at 705 (citing CAL. PENAL CODE § 647(k); GA. CODE ANN. § 16-11-61(a) (1996); TEX. PENAL CODE ANN. § 42.01(a)(7) (West 1994 & Supp. 1997) as examples of “peeping tom” criminal offenses). *See also, e.g.*, ARIZ. REV. STAT. ANN. § 13-504 (1989) (effective July 20, 2011) (“A person commits criminal trespass in the first degree by knowingly . . . [e]ntering any residential yard and, without lawful authority, looking into the residential structure thereon in reckless disregard or infringing on the inhabitant’s right of privacy.”); DEL. CODE ANN. tit. 11, § 820 (1995 & Supp. 1998) (“A person is guilty of trespassing with intent to peer or peep into a window or door of another when the person knowingly enters upon the occupied property . . . of another utilized as a dwelling, with intent to peer or peep into the window or door of such property or premises and who, while on such property or premises, otherwise acts in a manner commonly referred to as “Peeping Tom.”); N.C. GEN. STAT. § 14-202 (2012) (“Any person who shall peep secretly into any room occupied by another person shall be guilty of a Class 1 misdemeanor.”); S.D. CODIFIED LAWS § 22-21-3 (2014) (“No person may enter the private property of another and peek in the door or window of any inhabited building or structure located thereon, without having lawful purpose with the owner or occupant thereof.”). This also includes the provision of private causes of action for the victims thereof. “Peeping and eavesdropping have been punished under a variety of causes of action, including trespass, window peeping, secret peeping, eavesdropping, indecent viewing or photography, violation of privacy, voyeurism, and unlawful photographing.” Swire, *supra* note 2, at 1176. Notably, Swire classifies peeping into the subcategories of “the gaze,” “the gossip,” and “the grab.” *See, generally id.* For additional detail, *see* Rothenberg, *supra* note 1, at 1144, which presents cases exemplary of each of these crimes or torts.

¹¹ Notably, the protections of privacy addressed herein are addressed to private party violations and are conceptually distinct from the area of the law that focuses on *governmental* intrusions into privacy. This Article is primarily concerned with “privacy intrusions committed by non-state actors.” Rothenberg, *supra* note 1, at 1139. For an example of a case grappling with governmental intrusions, *see, e.g.*, *People v. Mayoff*, 729 P.2d 166, (Cal. 1986). In that case, the court struggled with a “random surveillance and eradication program” but also made it clear that “unless a warrant is obtained, our state Constitution forbids intensive aerial inspection of an individual enclosed backyard based on prior suspicions” *Id.* at 168. This is perhaps contrary to federal law, to some extent. *See, e.g.*, *Florida v. Riley*, 488 U.S. 445, 456 (1989) (“Because there is reason to believe that there is considerable public use of airspace at altitudes of 400 feet and above, and because Riley introduced no evidence to the contrary before the Florida courts, I conclude that Riley’s expectation that his cartilage was protected from naked-eye aerial observation from that altitude was not a reasonable one. However, public use of altitudes lower than that – particularly public observations from helicopters circling over the cartilage of a home – may be sufficiently rare that police surveillance from such altitudes would violate reasonable expectations of privacy, despite compliance with FAA air safety regulations.”). Though interesting and tangentially related to this Article, these issues are ultimately outside the scope of this discussion because they address *governmental* action. *See, e.g., infra* note 31. This Article squarely focuses on private surveillance utilizing drone technology.

¹² *See* Wu, *supra* note 3, at 707 (citing Prosser and case law).

¹³ *See id.* at 708 (citing *Moore v. New York Elevated R.R. Co.*, 29 N.E. 997 (N.Y. 1892); *Souder v. Pendleton Detectives*, 88 So. 2d 716 (La. Ct. App. 1956)).

¹⁴ *See id.*

photographing constitute intrusions of privacy when they occur in a public place,¹⁵ they have not hesitated to do so when such observation occurs where the person has a reasonable expectation of privacy.¹⁶

¶8 Many cases have so held, and a few examples quickly make the point. Consider *Miller v. NBC*.¹⁷ In that case, a TV news crew filmed a man in his home as he was having a heart attack.¹⁸ The court found liability, based upon intrusion.¹⁹ In another case, several under-aged fashion models who were secretly videotaped in their dressing area by security guards later recovered against the guards' employer under a cause of action for invasion of privacy.²⁰ Finally, in *Miller v. Willis*, a woman who had been taped while using a tanning bed ultimately recovered punitive damages.²¹ In this context, then, the courts have not had any difficulty understanding the advancements in surveillance made available due to video technology and how those advancements affect historical concepts of privacy. But the judicial system is not perfect; and there is reason to fear, given the rapid advance of drone technology and the manner in which aircraft has been excepted from traditional legal theories (discussed below), that it will not protect privacy rights as forcefully when it comes to drones and their incredible ability to "peep" and thereby violate our privacy.

¶9 This is topical, as drones are frequently in the news. But it is not merely sensational. The ability of drones to conduct surveillance on normal people in their homes and on their property is startling. Before continuing on with our substantive discussion of property and privacy, let us take a moment to consider a couple of illustrations of how drones function, how much their capabilities exceed prior technology, and how easy peeping has become.

¶10 Let us start with an example from Ciudad Juárez, Mexico. There, as relayed by the Washington Post, the authorities were able to use a drone to minutely map out the activities of a criminal gang throughout a night of lawlessness.²² The drone diagrammed, second by second, the gang gathering, its activities in tracking down a shooting target, and the eventual flight of the shooter.²³ This technology, commercialized by a company called Persistent Surveillance Systems, consists of cameras attached to drones, which are continuously flown over a particular location to map out, in a virtually real-time environment, what is occurring on the ground.²⁴ Also, "[i]n addition to normal cameras,

¹⁵ See Andrew J. McClurg, *Bringing Privacy Law Out of the Closet: A Tort Theory of Liability for Intrusions in Public Places*, 73 N.C. L. REV. 989, 991-92 (1995) (noting that courts have generally indicated that one does not have a reasonable expectation of privacy in public places); *but see* Daily Times Democrat v. Graham, 162 So.2d 474, 477-78 (Ala. 1964) (acknowledging that one may sometimes have an expectation of privacy in public).

¹⁶ See Wu, *supra* note 3, at 708 ("[W]hen the person has a reasonable expectation of privacy, courts will hold that an intrusion has occurred [regardless of the technological format of observation].").

¹⁷ 232 Cal. Rptr. 668, 679 (Ct. App. 1986).

¹⁸ Wu, *supra* note 3, at 708 (citing *Miller v. NBC*, 232 Cal. Rptr. 668, 679 (Ct. App. 1986)).

¹⁹ See *id.*

²⁰ *Id.* (citing *In re Doe*, 945 F.2d 1422 (8th Cir. 1991)).

²¹ *Id.* (citing *Miller v. Willis*, No. 92AP-1410, 1993 WL 76303, at *1 (Ohio Ct. App., Feb. 16, 1993)).

²² Craig Timberg, *New Surveillance Technology Can Track Everyone in an Area for Several Hours at a Time*, WASH. POST (Feb. 5, 2014), www.washingtonpost.com/business/technology/new-surveillance-technology-can-track-everyone-in-an-area-for-several-hours-at-a-time/2014/02/05/82f1556e-876f-11e3-a5bd-844629433ba3_story.html. Again, this Article is not focused on governmental intrusions on privacy via drone surveillance. Nevertheless, these examples aptly demonstrate the modern power of drone technology.

²³ *Id.*

²⁴ See *id.* ("As Americans have grown increasingly comfortable with traditional surveillance cameras, a

the planes can carry infrared sensors that permit analysts to track people, vehicles or wildlife at night – even through foliage and into some structures, such as tents.”²⁵ The obvious effect is to permit the operator of the drone to know what a particular person is doing, even when that person is not aware he or she is being monitored.²⁶

¶11 Or consider the PD-100 Black Hornet Personal Reconnaissance System, a “nano-size” drone that weighs .56 ounces and can be carried in your pocket.²⁷ The device operates silently, is invisible at more than 30 feet, and is designed to provide stealth surveillance in the form of both video and still images.²⁸ It can do all of this at a distance of more than half a mile.²⁹ The device is currently being marketed for military purposes,³⁰ but it is easy to see how this could permit the observation of non-combatants.

¶12 Indeed, it is not difficult to perceive an enormous possibility here for invasion of privacy in many different ways. This new technology – the ability to monitor individual people from the sky, from very far away, without the target ever knowing of the surveillance – permits the observation of people (i.e., the invasion of people’s privacy) in ways never before imagined. Years ago, the courts grappled with how the advent of video capability would affect an individual’s right not to be viewed while in private, but the question now is how drone technology will affect that right.

¶13 Of course, this is a difficult issue. Most everyone acknowledges that drones are new and different and that their surveillance capabilities are potentially frightful, and many people have begun to struggle with this in the context of law enforcement and constitutional protections.³¹ That struggle is tangentially relevant to this Article in that it is concerned with advanced issues of surveillance, but it is not ultimately the focus hereof.³² Rather, this Article focuses on the extent to which privately owned and operated surveillance drones constitutes common law trespass. This is part of the larger privacy discussion: what

new, far more powerful generation is being quietly deployed that can track every vehicle and person across an area the size of a small city, for several hours at a time.”)

²⁵ *Id.*

²⁶ *See id.* When interviewed about the potential uses of such technology, Richard Biehl, the Police Chief of Dayton, Ohio, seemed to agree with this formulation, stating that, “I want them to be worried that we’re watching. I want them to be worried that they never know when we’re overhead.”

²⁷ Erik Schechter, *Palm-Size Drones Buzz over Battlefield*, LIVESCIENCE (Nov. 3, 2013), <http://news.yahoo.com/palm-size-drones-buzz-over-battlefield-173334014.html>.

²⁸ *Id.*

²⁹ *Id.*

³⁰ *Id.*

³¹ *See, e.g.,* Saby Ghoshray, *Domestic Surveillance Via Drones: Looking Through the Lens of the Fourth Amendment*, 33 N. ILL. U. L. REV. 579, 582 (2013) (examining “how the current Fourth Amendment jurisprudence can still be a viable bulwark against an all-pervasive imposition of a drone culture”); Robert Molko, *The Drones Are Coming! Will the Fourth Amendment Stop the Threat to Our Privacy*, 78 BROOK. L. REV. 1279, 1280-81 (2012) (“[T]he [Katz ‘reasonable expectation of privacy’] test still survives, and as this article will demonstrate, it will continue to survive as the applicable test of constitutionality under the Fourth Amendment in drone surveillance cases.”); William Funk, *Deadly Drones, Due Process, and the Fourth Amendment*, 22 WM. & MARY BILL RTS. J. 311, 324 (2013) (“[A]bsent an intent to punish, drone strikes may well be viewed as simply not subject to due process concerns but rather are appropriately viewed as seizures, the constitutional protection for which arises from the Fourth Amendment rather than the Due Process Clause of the Fifth Amendment.”); David Gray & Danielle Citron, *The Right to Quantitative Privacy*, 98 MINN. L. REV. 62, 70 (2013) (“Granting law enforcement unfettered access to twenty-first century surveillance technologies like aerial drones, DAS, and sweeping data collection efforts, implicates . . . Fourth Amendment interests.”).

³² *See supra* note 10.

is “private” depends on what one expects,³³ and the concepts of justifiable expectations and property rights are inextricably intertwined.³⁴ But it is a unique part of that discussion and deserves its own consideration, focusing on the interaction between privacy considerations and property rights in this context. In particular, what is “private” depends, to some extent, on what you “own.” As such, property rights associated with drone surveillance must be discussed next.

II. THE COMMON LAW OF TRESPASS AND AIRSPACE RIGHTS

¶14 At its most basic, trespass is entering onto another’s land without permission.³⁵ For purposes of this Article, focusing as it does on the surreptitious overhead flight of surveillance drones, the interesting question is what is “another’s land”? And, upon first review, the answer to this question is fairly clear. “Land has an indefinite extent, upwards as well as downwards, so as to include everything terrestrial, under or over it.”³⁶ This maxim, known in short as *ad coelum*, is hornbook law.

¶15 “The inevitable corollary of this theory . . . is that ‘any invasion of the close of another, whether above, below, or on the surface of the ground, constitutes a trespass.’”³⁷ Historically, this was rather simple to conceptualize: things did not get very far above the ground,³⁸ so the idea that your property rights extended “forever” did not seem extreme. Indeed, in the United States, at least, one did not even need to demonstrate damages – any encroachment was the commission of a trespass, so any violation of air rights would suffice.³⁹

³³ See generally Wu, *supra* note 3 and accompanying text.

³⁴ See, e.g., Harold Demsetz, *Toward a Theory of Property Rights*, 57 AM. ECON. REV. 347, 347 (1967) (“Property rights are an instrument of society and derive their significance from the fact that they help a man form those expectations which he can reasonably hold in his dealings with others.”).

³⁵ “One is subject to liability to another for trespass, irrespective of whether he thereby causes harm to any legally protected interest of the other, if he intentionally (a) enters land in the possession of another, or causes a thing or third person to do so, or (b) remains on the land, or (c) fails to remove from the land a thing which he is under a duty to remove.” RESTATEMENT (SECOND) OF TORTS § 158 (1965). Interestingly, note how similar this is to the “common law” tort of invasion of privacy. “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.” RESTATEMENT (SECOND) OF TORTS § 652B (1977); see *supra* Part I for a discussion of rights.

³⁶ 1 COKE ON LITTLETON *4a; 2 WILLIAM BLACKSTONE, COMMENTARIES *18; 3 JAMES KENT, COMMENTARIES *401; 2 TIFFANY REAL PROPERTY §585 (3d ed. 1939).

³⁷ See Annotation, *Trespass by Acts Above Surface*, 42 A.L.R. 945, 946 (1926) (quoting 26 R. C. L. 939).

³⁸ Blackstone articulated the rule as “[c]ujus est solum, ejus est usque ad coelum,” which means “upwards, therefore no man may erect any building or the like, to overhang another’s land.” 2 WILLIAM BLACKSTONE, COMMENTARIES *18; see also Cooper, *Roman Law and the Maxim Cujus Est Solum in International Air Law*, 1 MCGILL L.J. 23, 27-8 (1952) (tracing the history of this Roman Law maxim). The simplicity of the time is reflected in the phrase “any building or the like.” 2 WILLIAM BLACKSTONE, COMMENTARIES *18. There were no airplanes or flying machines at the time this law was formulated, so the only conceivable conflicts to one’s air rights were essentially ground-based, such as “buildings and the like.” Note, however, that this concept has been criticized. “It has been referred to as ‘the production of some black letter lawyer,’ ‘a glittering generality,’ and . . . characterized as ‘another fanciful phrase.’” See Annotation, *supra* note 37, at 949 (quoting *Wandsworth Bd. of Works v. United Teleph. Co.*, (1884) 13 Q.B.D. 904 (U.K.)).

³⁹ See Notes, *Trespass by Airplane*, 32 HARV. L. REV. 569, 569-70 (1919) (“That the encroaching landowner is liable also for all foreseeable damage is settled; but whether there is a cause of action for the

¶16 Consider a few historical examples.⁴⁰ In *Herrin v. Sutherland*, the Montana Supreme Court ruled on the question of whether the defendant, though standing on an adjacent parcel of land, “interfered with ‘the quiet, undisturbed, peaceful enjoyment’ of the plaintiff, and thus committed a technical trespass” by firing a shotgun over the plaintiff’s property.⁴¹ Citing Blackstone, the court held that this was, in fact, a trespass.⁴² “Land . . . in its legal signification has an indefinite extent, upwards as well as downwards; whoever owns the land possesses all the space upwards to an indefinite extent; such is the maxim of the law.”⁴³ Similarly, in *Ellis v. Loftus Iron Co.*, the court held that the act of a horse, in reaching its head over a dividing fence, constituted trespass and exposed its owner to liability for any proximate damages.⁴⁴ Therein the Chief Judge stated, “It seems to me sufficiently clear that some portion of the defendant’s horse’s body must have been over the boundary. That may be a very small trespass, but it is a trespass in the law.”⁴⁵

¶17 Many of these cases seem primarily addressed to “quarrelsome” neighbors and petty grievances, but the concept was important, even prior to the advent of flight. In *Butler v. Frontier Teleph. Co.*, the court prohibited a telephone company from stringing a telephone wire across a piece of property at a height of 30 feet, stating that “[t]he law regards the empty space as if it were a solid, inseparable from the soil, and protects it from hostile occupation accordingly.”⁴⁶ In the same fashion, tall buildings were also not permitted to extend over neighboring property. In *Smith v. Smith*, the erection of a barn with eaves that crossed a boundary line and extended over a neighbor’s parcel constituted trespass.⁴⁷ And the rule holds, even for relatively minor trespasses. In *Puortó v. Chieppa*, for instance, the

mere entry into the air space resulting in no real injury is not so clear. In England there are, in addition to conflicting dicta on the exact case of a balloon, irreconcilable statements concerning the encroachment cases. In this country, however, actual damage from the encroachment does not seem to be requisite for a cause of action. The air space, at least near the ground, is almost as inviolable as the soil itself.” (footnotes and citations omitted). The comment’s averment regarding American law and the lack of a damages requirement appears well-founded. *See id.* at 570 n.7 (citing *Puortó v. Chieppa*, 62 Atl. 664 (Conn. 1905); *Ackerman v. Ellis*, 79 Atl. 883 (N.J. 1911); *Smith v. Smith*, 110 Mass. 302 (1872); *Harrington v. McCarthy*, 48 N. E. 278 (Mass. 1897); *McCourt v. Eckstein*, 22 Wis. 153, 159 (1867); *Beck v. Ashland Cigar and Tobacco Co.*, 130 N.W. 464 (Wis. 1911); *Hannabalson v. Sessions*, 90 N.W. 93 (Iowa 1902); *Butler v. Frontier Telephone Co.*, 186 N.Y. 486, 491, 79 N. E. 716 (1906). The Comment’s hedge regarding rights “near the ground” also appears well-founded, for the reasons discussed at length in Part III, *infra*.

⁴⁰ These examples are primarily drawn from 42 A.L.R. 945 (1926).

⁴¹ 241 P. 328, 331 (Mont. 1925).

⁴² *Id.* at 332.

⁴³ *Id.* (quoting 2 WILLIAM BLACKSTONE, COMMENTARIES *18; 3 JAMES KENT, COMMENTARIES *401. *See also* *Clifton v. Bury*, (1887) 4 T.L.R. 8 (U.K.) (finding that shots fired across adjoining land at a trajectory of 75 feet did not constitute a technical trespass but was nevertheless actionable when dangerous to the use and enjoyment of the land).

⁴⁴ (1874) L. R. 10 C. P. 10 (U.K.).

⁴⁵ *Id.* *See also* *Hannabalson v. Sessions*, 90 N.W. 93, 95 (Iowa 1902) (“The mere fact that plaintiff did not step across the boundary line does not make her any less a trespasser if she reached her arm across the line, as she admits she did. It is one of the oldest rules of property known to the law that the title of the owner of the soil extends, not only downward, to the center of the earth, but upward *usque ad coelum*, although it is, perhaps, doubtful whether owners as quarrelsome as the parties in this case will ever enjoy the usufruct of their property in the latter direction.”).

⁴⁶ 79 N.E. 716, 718 (N.Y. 1906).

⁴⁷ 110 Mass. 302, 304 (1872) (“Projecting his eaves over the plaintiff’s land is a wrongful act on the part of the defendant which, if continued for twenty years, might give him title to the land by adverse occupation. It is a wrongful occupation of the plaintiff’s land for which he may maintain an action of trespass.”).

Connecticut court held that a structural addition that extended a single inch over the property line “was a trespass upon the plaintiffs’ land, which entitled them to a favorable judgment . . . as well as to a judgment for a nominal sum for the damage which the legal injury, arising from the trespass, necessarily imports”⁴⁸ Thus, the historical idea that a property owner owned all air rights, all the way “to the heavens” was well established,⁴⁹ and the common law had no difficulty conceiving of violations thereof as common law trespass.⁵⁰

¶18 This is a significant extension of property rights because trespass historically exposed the trespassing party to a spectrum of significant liability, including both equitable and legal relief.⁵¹ This means that there is the potential for real and concrete remedies due to “overhead trespass.” It has never been a simple, nominal claim, which people need not worry about such that, historically, people could not move over other people’s property without risking real liability. That worked fine for many, many years. Eventually, however, the world changed.

III. THE AIRCRAFT EXCEPTION

¶19 Wilbur Wright was born on April 16, 1867, and Orville Wright was born on August 19, 1871.⁵² Neither received high school diplomas, and both bounced from job to job, eventually opening a bicycle shop in 1896.⁵³ In connection with their shop, they began to think of themselves as inventors and soon became obsessed with flying.⁵⁴ Studying the construction of bird wings, they began trying out and studying various types of gliding

⁴⁸ 62 A. 664, 665 (Conn. 1905).

⁴⁹ Perhaps one interesting thing to consider here is the geometry involved. The earth is a spheroid. As such, lines extending perpendicular from its surface into space will spread apart the further one moves from the surface of the earth. This means that, the farther you go from the earth, the more “overhead” airspace there is.

⁵⁰ *But see* Meyer v. Metzler, 51 Cal. 142 (1875); Kafka v. Bozio, 218 P. 753 (Cal. 1923); Barnes v. Berendes, 69 P. 491 (Cal. 1903); Fay v. Prentice, (1895) 1 C. B. 828 (U.K.). These cases generally regarded “encroachments above the surface as a nuisance” and did “not enter into the question of trespass.” Annotation, *supra* note 37, at 949.

⁵¹ It is true that liability for trespass often results in nominal damages. *See, e.g.*, Indiana Pipe Line Co. v. Christensen, 123 N.E. 789, 792 (Ind. 1919) (indicating that, in trespass cases where an owner cannot prove actual damages, courts can presume nominal damages); Keirn v. Warfield, 60 Miss. 799, 808 (1883) (same). RESTATEMENT (SECOND) OF TORTS § 163 (1965) adopted this view, stating that “[o]ne who intentionally enters land in the possession of another is subject to liability to the possessor for a trespass, although his presence on the land causes no harm” This position is still persuasive today. *Cf.* Coastal Oil & Gas Corp. v. Garza Energy Trust, 268 S.W.3d 1, 12 n.36 (Tex. 2008) (citing the Restatement with approval); Purkey v. Roberts, 285 P.3d 1242, 1247–48 (Utah Ct. App. 2012) (same). However, trespass can also have significantly stiffer penalties. *See, e.g.*, Rose Nulman Park Found. v. Four Twenty Corp., 93 A.3d 25, 29 (R.I. 2014) (indicating that injunctive relief is the appropriate remedy for some types of trespass). *See also, e.g.*, Int’l Bhd. of Elec. Workers v. Monsees, 335 S.W.3d 105, 108–09 (Mo. Ct. App. 2011) (indicating that punitive damages are permitted under a common law trespass theory); Coinmach Corp. v. Aspenwood Apartment Corp., 417 S.W.3d 909, 922 (Tex. 2013) (indicating that trespass liability can include damages for mental anguish or inconvenience).

⁵² *See Wright Brothers*, ENCYCLOPEDIA BRITANNICA ONLINE, <http://www.britannica.com/EBchecked/topic/1071950/Wright-brothers> (last visited Aug. 20, 2014).

⁵³ *Id.*

⁵⁴ *Id.*

machines.⁵⁵ In the year 1900, the brothers went to Kitty Hawk, North Carolina, and began manned flight experiments.⁵⁶ The rest, of course, is history.

¶20 On December 17, 1903, Orville took the brothers' latest invention for a 12 second flight.⁵⁷ This was the first successful piloted flight in history.⁵⁸ Three more flights occurred that day, with Wilbur ultimately piloting a flight that lasted 59 seconds and traveling approximately 852 feet.⁵⁹ These flights changed the course of history, and air travel has grown exponentially since that time.⁶⁰

¶21 A consequence of this incredible growth is that billions of people now fly over others' property.⁶¹ The trespass regime discussed above, which would hold those people liable would clearly be unworkable, so the law had to change.

A. *The Common Law of the Aircraft Exception*

¶22 And change it did. Widespread flight instantly rendered the common law outdated, so the courts and other responsible authorities crafted an "exception" to address air navigation. Generically speaking, this exception moved air travel outside the traditional ambit of trespass, though the authorities were not consistent regarding their analyses. The reasoning and bases for the exception broadly fell into one of four camps.⁶²

¶23 The first camp "limits the landowner's rights in the airspace above his land to that part thereof of which he has effective possession."⁶³ This is "the more generally accepted"

⁵⁵ *Id.*

⁵⁶ *Id.*

⁵⁷ *Id.*

⁵⁸ *Id.*

⁵⁹ *Id.* The brothers continued to experiment. By late 1904, they had extended their flight time to over five minutes. See *Wright 1904 Flyer*, NAT'L AERONAUTICS AND SPACE ADMIN., <http://wright.nasa.gov/airplane/air1904.html> (last visited Aug. 20, 2014). They subsequently moved their testing to Dayton, Ohio, and eventually were able to stay in the air for up to half an hour, to fly figure eights, and to take passengers aloft. See *Wright Brothers*, *supra* note 52.

⁶⁰ For example, it is estimated by the International Air Transport Association that 3.91 billion passengers will take flight in 2017, which is itself an increase of nearly a billion passengers from 2012. See *Airlines Expect 31% Rise in Passenger Demand by 2017*, INT'L AIR TRANSP. ASS'N (Dec. 10, 2013), <http://www.iata.org/pressroom/pr/pages/2013-12-10-01.aspx>. The numbers are enormous, but so is the rate of change. See, e.g., *The History of Flight from Around the World*, AM. INST. OF AERONAUTICS AND ASTRONAUTICS, <https://www.aiaa.org/SecondaryTwoColumn.aspx?id=5828> (last visited Aug. 27, 2014) (indicating that 1958 was the first year that more passengers flew across the Atlantic than sailed on steamship).

⁶¹ Consider, for example, the last time you flew on an airplane. One can only guess how many others' parcels you passed over, "trespassing" each and every time, under the common law.

⁶² See *Rights Above the Surface – As Affected by Air Navigation*, 2 TIFFANY REAL PROPERTY §585 (2nd ed. 1920). This is an arbitrary conceptual division, chosen due to the well-recognized authority of Herbert Thorn Dike Tiffany. Others have acknowledged additional theories. See, e.g., R. WRIGHT, *THE LAW OF AIRSPACE*, 145 (1968) (recognizing at least six theories on airspace rights). Still others define the spectrum differently. See *id.* Another common approach, referred to as "Rhyne's division," utilizes five categories. See CHARLES S. RHYNE, *AIRPORTS AND THE COURTS*, 154-62 (1944).

⁶³ See *Rights Above the Surface – As Affected by Air Navigation*, *supra* note 62 (citing Antonik v. Chamberlain, 78 N.E.2d 752 (Ohio 1947)). There is some difference in opinion regarding the ownership of air rights, and even of what the different tests are. See Colin Cahoon, Comment, *Low Altitude Airspace: A Property Rights No-Man's Land*, 56 J. AIR L. & COM. 157, 191-92 (1990) ("More than eighty years after Kitty Hawk and more than forty years after Causby, courts have yet to adopt a uniform theory of airspace property ownership."). The Comment goes on to identify a number of purported approaches. See *id.* Suffice it to say that there are divisions and a variety of potential avenues that various courts have pursued. Ultimately, this is not directly relevant to the thesis of this Article, though it is helpful to walk through

theory⁶⁴ and arises from a combination of federal statutes and regulations and Supreme Court precedent. Indeed, Congress has clearly stated that “[t]he United States Government has exclusive sovereignty of airspace of the United States” and that “citizen[s] of the United States [have] a public right of transit through the navigable airspace.”⁶⁵ The Supreme Court has similarly spoken.⁶⁶ “It is ancient doctrine that at common law ownership of the land extended to the periphery of the universe—Cujus est solum ejus est usque ad coelum. But that doctrine has no place in the modern world. The air is a public highway, as Congress has declared.”⁶⁷ This is perhaps not quite as strong a statement as it initially seems,⁶⁸ but it is obviously an explicit answer to the question of air rights and air navigation.⁶⁹

¶24

The reason why that is important in the context of this Article is clear: the thesis here is that the common law of air rights should inform our law, going forward, regarding drone technology.⁷⁰ This thesis seems obviated if the common law has changed so clearly and so drastically. However, it is again important to remember how quickly air navigation

some of the different approaches to establish the evolution of the law, as is done in the balance of this Part.

⁶⁴ Cahoon, *supra* note 63, at 191-92.

⁶⁵ 49 U.S.C. § 40103(a)(1)-(2) (2012).

⁶⁶ *See* Cahoon, *supra* note 63, at 160-61 (citations omitted) (“[T]he following discussion focuses on ‘low altitude’ airspace property rights. The reason for this narrow focus, as opposed to a discussion of airspace property rights in general, is practical in nature. That a landowner has no right to airspace at 30,000 feet above his property not only makes common sense, but has clearly been determined by the United States Supreme Court as well.”). This is clearly true. *See also* Laird v. Nelms, 406 U.S. 797 (1972); United States v. Causby, 328 U.S. 256 (1946). *Causby* is a classic case with very strong language:

Were that not true, every transcontinental flight would subject the operator to countless trespass suits. Common sense revolts at the idea. To recognize such private claims to the airspace would clog these highways, seriously interfere with their control and development in the public interest, and transfer into private ownership that to which only the public has a just claim.

328 U.S. at 261. *Causby* was a good test case for navigation rights. The U.S. military repeatedly flew heavy bombers, fighters, and other heavy aircraft over the home of the plaintiff at low altitudes. *See id.* at 259. Some of plaintiff’s chickens died as a result and the rest experienced a significant fall in egg production. *See id.* This clearly set up the contest between the needs of aviation and the needs of property owners.

⁶⁷ *Causby*, 328 U.S. at 260-61.

⁶⁸ *See* Gardner v. Allegheny Cnty., 114 A.2d 491, 497 (Penn. 1955) (“[The Civil Aeronautics Act of 1938], which preempted a national navigable airspace and defined it as the airspace above the minimum safe altitudes of flight which they authorized the Civil Aeronautics Authority and later the Civil Aeronautics Board to prescribe, was based not upon the Federal Government’s ownership of all airspace or even all navigable airspace, but was founded and based upon the interstate commerce power of Congress.”) (emphases omitted)

⁶⁹ *See, e.g.*, RESTATEMENT (SECOND) OF TORTS § 159(2) (1965) (“Flight by aircraft in the air space above the land of another is a trespass if, but only if, (a) it enters into the immediate reaches of the air space next to the land, and (b) it interferes substantially with the other’s use and enjoyment of his land.”). This eliminates the unlimited air rights acknowledged at common law and is more consistent with the federal statute and Supreme Court precedent discussed above. *See supra* note 68. This is arguably consistent with a different sub-theory of air rights, but that is not directly relevant here. What is relevant and interesting to note is how this differs from the common law and what this change indicates regarding judicial thinking regarding air rights and navigation. *See* Cahoon, *supra* note 63, at 182 (indicating that the Restatement (Second) of Torts reflects changes wrought by *Causby*). *But see* RESTATEMENT (FIRST) OF TORTS § 194 (1934) (acknowledging flight and the necessity of permitting it and stating, in comment c, that “[t]he privilege stated in this Section is analogous to the privilege of a traveler to make use of a public highway or a navigable stream . . .”).

⁷⁰ *See infra* Part IV.

came into being and how substantially it changed the world in so little time. This is the current status of the law, true, but it was reached *very* quickly in response to a *very* specific issue – that of air navigation.

¶25 The term “navigation” has a very specific meaning. It is defined, in relevant part, as “the act, activity, or process of finding the way to get to a place when you are traveling in a ship, airplane, car, etc.”⁷¹ That act, activity, or process can, in modern times, be accomplished in a variety of ways; however at the time that this law was developed, only a person could do the act, activity, or process.⁷² Navigation could not be done remotely or by computer; it required a real, live human to be in the airplane and to physically guide it to its destination. Moreover, and of significant importance to the thesis of this Article, navigation very clearly contemplates transporting people (or at least cargo) to a destination. This means that the law deprives people of their historically unlimited air rights in the context of permitting manned air navigation and transport.

¶26 And, of course, this makes sense. *United States v. Causby*⁷³ solidified the government’s sovereignty over the country’s collective airspace to enable a specific type of use by the public.⁷⁴ The relevant statutes “grant any citizen of the United States ‘a public right of freedom of transit in air commerce through the navigable air space of the United States.’”⁷⁵ The focus, then, is on moving *people* from place to place (or, at the least, on permitting people to move cargo from place to place).

¶27 It is that need, the need to move people and their things (performed, at the time, solely by manned aircraft), which cried out for reform of the common law. Without such a change, flight – this new technology that so miraculously opened up the vast inner spaces of America⁷⁶ – would largely go to waste, buried under an unimaginable number of

⁷¹ See *Navigation*, MERRIAM-WEBSTER, <http://www.merriam-webster.com/dictionary/navigation> (last visited June 25, 2014).

⁷² See *Navigation Programs – History*, FED. AVIATION ADMIN., https://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/techops/navservices/history/ (last visited Aug. 20, 2014).

⁷³ *United States v. Causby*, 328 U.S. 256 (1946).

⁷⁴ See *id.* at 260 (confirming that Congress intended the United States to have “‘complete and exclusive national sovereignty in the air space’ over this country” (quoting 49 U.S.C. § 176(a); 49 U.S.C.A. § 176(a))). Eight years later, the Supreme Court again recognized this “exclusive national sovereignty” over air space. *Braniff Airways v. Neb. State Bd. of Equalization and Assessment*, 347 U.S. 590, 596 (1954).

⁷⁵ See *Causby*, 328 U.S. at 260 (citation omitted) (quoting 49 U.S.C. § 176(a); 49 U.S.C.A. § 176(a)).

⁷⁶ In 2013, over 730 million people boarded commercial planes. See *Enplanements at All Commercial Service Airports (by Rank)*, FED. AVIATION ADMIN. (Jan. 26, 2015), http://www.faa.gov/airports/planning_capacity/passenger_allcargo_stats/passenger/media/cy13-commercial-service-enplanements.pdf. In 2012, hundreds of billions of pounds of cargo were transported by airplane. See *Qualifying Cargo Airports, Rank Order, and Percent Change from 2012*, FED. AVIATION ADMIN. (Sept. 29, 2014), http://www.faa.gov/airports/planning_capacity/passenger_allcargo_stats/passenger/media/cy13-cargo-airports.pdf.

lawsuits. That is what *Causby* was struggling with as it redefined the common law⁷⁷ and ultimately obviated the common law.⁷⁸

¶28

As mentioned above, there were other legal responses to the advent of aircraft. One such response “limit[ed] the landowner’s rights to so much of the airspace as he actually uses, taking no count of possible future use.”⁷⁹ A representative case is *Hinman v. Pacific Air Transport*,⁸⁰ which rejected the *ad coelum* doctrine⁸¹ and held that titleholders “own so much of the space above the ground as [they] can occupy or make use of.”⁸² At its base, the court held that “[t]itle to the airspace unconnected with the use of land is

⁷⁷ And it was a struggle for the *Causby* court. The court had little difficulty leaving behind *ad coelum*, but it was not ready to strip property owners of all of their air rights. See *Causby*, 328 U.S. at 262 (“The fact that the planes never touched the surface would be as irrelevant as the absence in this day of the feudal livery of seisin on the transfer of real estate. The owner’s right to possess and exploit the land—that is to say, his beneficial ownership of it—would be destroyed. It would not be a case of incidental damages arising from a legalized nuisance.”). Instead, it chose a middle ground, limiting air rights to those that are within “the immediate reaches of the enveloping atmosphere.” *Id.* at 264. Without such a right, the court acknowledged that “buildings could not be erected, trees could not be planted, and even fences could not be run.” *Id.* Ultimately, then, the Supreme Court protected the “superadjacent airspace,” an undefined distance described as that space that “is so close to the land that continuous invasions of it affect the use of the surface of the land itself.” *Id.* at 265. With respect to these air rights, “the landowner, as an incident to his ownership, has a claim to it and . . . invasions of it are in the same category as invasions of the surface.” *Id.* (citations omitted).

⁷⁸ Importantly, the Supreme Court did definitively establish that airspace – to some extent – is “property.” See R. WRIGHT, *supra* note 62, at 154. And it did so on a national level, despite the fact that “property” is usually defined “by reference to local law.” *Causby*, 328 U.S. at 266. Many courts have interpreted this rather strictly, and “later decisions continue to cite *Causby* for the proposition that aircraft within navigable airspace, as defined by the minimum safe altitude set by the Federal Aviation Administration, do not infringe on any property right of the underlying landowners.” Cahoon, *supra* note 63 at 171-72 (citing *Lacy v. United States*, 595 F.2d 614, 615 (Cl. Ct. 1979); *Hero Lands Co. v. United States*, 554 F.Supp. 1262, 1264-65 (Cl. Ct. 1983); *Matson v. United States*, 171 F.Supp. 283, 285-86 (Cl. Ct. 1959); *Stephens v. United States*, 11 Cl. Ct. 352, 358-59 (1986); *Drybread v. City of St. Louis*, 634 S.W.2d 519, 520 (Mo. Ct. App. 1962)). This is despite the fact, though, that the contours of *Causby* are not perfectly clear. See Cahoon, *supra* note 63, at 179-80 (discussing *Causby*, later cases, and the confusion regarding the “fixed height” theory and the import of the definition of “navigable airspace”). In particular, *Causby* would ultimately be read to involve interlocking air travel rules and regulations issued by governmental entities, and the precise scope of air rights was not clearly addressed. See *Causby*, 328 U.S. at 263-64 (discussing minimum safety standard set by the Civil Aeronautics Authority); *Neiswonger v. Goodyear Tire & Rubber Co.*, 35 F.2d 761, 761 (N.D. Ohio 1929) (addressing an allegation that a dirigible flew below a limit established by commission action); *Gardner v. Cnty. of Allegheny*, 114 A.2d 491, 501-03 (Pa. 1955) (discussing the effect of Congressional statutes on air rights and flight privileges); see also, e.g., 14 C.F.R. § 91.119(b) (2015) (“Except when necessary for takeoff or landing, no person may operate an aircraft below the following altitudes: . . . Over any congested area of a city, town or settlement, or over any open air assembly of persons, an altitude of 1,000 feet above the highest obstacle within a horizontal radius of 2,000 feet of the aircraft.”); *Id.* § 91.119 (limiting flight based on location and altitude). Additionally, some states passed their own rules and regulations that also affected these issues. See, e.g., *Allegheny*, 114 A.2d at 499 (quoting Pennsylvania law stating that “[f]light in aircraft over the lands and waters of this Commonwealth is lawful, unless at such low altitude as to interfere with the then existing use to which the land or water, or the space over the land or water, is put by the owner, or unless so conducted as to be dangerous or damaging to persons or property lawfully on the land or water beneath.”) (emphasis omitted).

⁷⁹ *Rights Above the Surface – As Affected by Air Navigation*, *supra* note 62, § 584.

⁸⁰ 84 F.2d 755 (9th Cir. 1936).

⁸¹ *Hinman* actually went further than that: “If we could accept and literally construe the *ad coelum* doctrine, it would simplify the solution of this case; however, we reject that doctrine. We think it is not the law, and that it never was the law.” *Id.* at 757.

⁸² *Id.*

inconceivable.”⁸³ Nobody has the right to use air or space above another’s property in a way that injures the landowner,⁸⁴ but any claim beyond that is not sustainable. As such, this doctrine ultimately permits the same sort of air *navigation* as the first camp discussed above, though in a different way.⁸⁵

¶29 The next camp, or theory, on air rights “denies to the landowner any ownership or possessory right in the airspace above his land.”⁸⁶ This is the most extreme, and the most clear, of the views, and it most effectively accommodates the need for the modern era of flight. There does not seem to be significant authority to support this view, as it goes even beyond *Hinman* and *Causby*, discussed above.⁸⁷

¶30 The final of the four views referenced above, “which has found expression in statutes and texts, admits the landowner’s ownership of the airspace, but grants to aircraft the right of navigation therein, subject to certain restrictions.”⁸⁸ A number of cases seem to utilize this approach. One example is *Brandes v. Mitterling*,⁸⁹ which held that the invasion of property owners’ air rights by the aircraft utilizing a neighboring airport was permitted but *only* if such invasion did not “worketh hurt, inconvenience, or damage to the owner of the soil over which he is flying.”⁹⁰ If the invasion did so – i.e., if it “interfere[d] with the then existing use to which the land [was] put” – then it was “an unprivileged intrusion in the space above the land, [constituting] a trespass.”⁹¹ Like the first two theories, this view of air rights walks a fine line between the common law rule of unlimited rights and the third view, discussed immediately above, which grants no rights.⁹²

¶31 So, ultimately, there are many different potential views of air rights that courts could adopt and have been adopting in place of the common law, as modern flight has taken hold.⁹³ The Tiffany treatise cited herein favors the second theory, claiming that “the second would seem to express more nearly the relative rights of the landowner and the public as

⁸³ *Id.* at 758. “This right is not fixed. It varies with our varying needs” *Id.* Importantly, the right can change over time. “The owner of the land owns as much of the space above him as he uses, *but only so long as he uses it*. All that lies beyond belongs to the world.” *Id.* (emphasis added).

⁸⁴ Such a use “would be a trespass for which [the landowner] would have remedy.” *Id.*

⁸⁵ See generally *id.* (acknowledging that some flight will be permitted, depending on the circumstances).

⁸⁶ *Rights Above the Surface – As Affected by Air Navigation*, *supra* note 62. This treatise relies entirely on a citation to the case of *Pickering v. Rudd*, (1815) 4 Camp. 219 (U.K.). Therein, Lord Ellenborough held that an overhanging board was not a trespass.

⁸⁷ See, e.g., JAMES C. SMITH, NEIGHBORING PROPERTY OWNERS § 5:1 (2014) (“This last theory totally rejects the *ad coelum* doctrine, as well as the idea that to own land is to own space.”); see also, e.g., *Edwards v. Sims*, 24 S.W.2d 619, 622 (Ky. 1929) (Logan, J., dissenting) (“Man had no dominion over the air until recently, and, prior to his conquering the air, no one had any occasion to question the claim of the surface owner that the air above him was subject to his dominion. Naturally the air above him should be subject to his dominion in so far as the use of the space is necessary for his proper enjoyment of the surface, but further than that he has no right in it separate from that of the public at large.”).

⁸⁸ *Rights Above the Surface – As Affected by Air Navigation*, *supra* note 62, § 584.

⁸⁹ 196 P.2d 464 (Ariz. 1948).

⁹⁰ *Id.* at 468 (internal quotation marks omitted).

⁹¹ *Id.* *Brandes* cites RESTATEMENT (FIRST) OF TORTS § 159 (1934) even though its ultimate ruling is consistent with the Second Restatement, which was discussed above. See *supra* note 69 (discussing the Second Restatement’s permitting overhead flight so long as certain conditions are met).

⁹² As with all of the views discussed herein, this theory has been criticized on multiple grounds. See, e.g., *Rights Above the Surface – As Affected by Air Navigation*, *supra* note 62, § 584, n.20. For other cases supporting this view, however, see also *Amphitheaters, Inc. v. Portland Meadows*, 198 P.2d 847 (Ore. 1948); *Macht v. Dep’t of Assessments*, 296 A.2d 162 (Md. 1972).

⁹³ See, e.g., *Hinman v. Pacific Air Transport*, 84 F.2d 755, 757 (9th Cir. 1936). (“This formula ‘from the center of the earth to the sky’ was invented at some remote time in the past”).

to the air space and to meet adequately modern economic and social needs.”⁹⁴ It also claims that this second theory “accords with the trend of the decisions.”⁹⁵ However, regardless of what theory is adopted, and regardless of the underlying policy, it is clear that the law has changed to accommodate “aircraft.”⁹⁶ In the end, what is relevant here is the broadly accepted termination of *ad coelum* in this particular context. The question, then, is not whether the common law applies to aircraft – the question, instead, is whether surveillance drones are “aircraft.”

B. Surveillance Drones are not “Aircraft”

¶32 Drones are not “aircraft” of the type contemplated by the authorities that created the “aircraft exception” to trespass law. The authority discussed in the prior section clearly (though somewhat inconsistently) carves flying machines out of the *ad coelum*, common law approach because aircraft transfer people and goods in an extremely efficient manner. Each of the different theories above approaches the issue a little differently, but each ultimately focuses on the same thing – on the transfer of people and goods in manned flight. Of course, these older authorities do not speak in these terms because it was, at the time these cases were decided and statutes and regulations passed, unthinkable that aircraft could travel *without* people or for any reason other than transport.

¶33 The very language of the relevant cases makes this clear. In *Causby*, for example, the Supreme Court indicated that property owners still had rights when the balance between the utility of flight and the importance of property ownership tips in the direction of property ownership. It explained that the needs and rights of aircraft are not unlimited:

[T]he flight of airplanes, which skim the surface but do not touch it, is as much an appropriation of the use of the land as a more conventional entry upon it. We would not doubt that if the United States erected an elevated railway over respondents' land at the precise altitude where its planes now fly, there would be a partial taking, even though none of the supports of the

⁹⁴ *Rights Above the Surface – As Affected by Air Navigation*, *supra* note 62, § 584 (“The landowner should have the exclusive right to so much of the space as is actually occupied or used by him and necessarily incident to such occupation and use, and one passing through such space without such owner’s consent should be held a trespasser; as to the air space above that, the owner should have power to prevent, on the theory of nuisance, any use by another which unreasonably interferes with his complete enjoyment of the surface and of the space above it which he occupies.”).

⁹⁵ *Id.* See also RESTATEMENT (SECOND) OF TORTS § 159 cmt. g. (1965) (“The advent of aviation has meant that [the doctrine of *ad coelum*] can no longer be regarded as law”); 2A C.J.S. Aeronautics & Aerospace § 8 (2015) (“A citizen of the United States has a public right of transit through the navigable airspace. The air or navigable airspace constitutes a public highway. An aircraft flying in navigable airspace is privileged to be where it is. The policy of encouraging aviation will not be given effect to the extent of overriding the civil rights of other persons. The assumption underlying the terms of statutes and regulations concerning navigation of the air is that such navigation requires regulation in the interest of the public welfare.”) (citations omitted).

⁹⁶ And a number of the relevant decisions could arguably fall within a variety of the camps. See, e.g., *Griggs v. Cnty. of Allegheny*, 369 U.S. 84, 93-94 (1962) (holding that bothersome noise from aircraft landings and departures constituted a taking of an air easement over property); *Branning v. United States*, 654 F.2d 88, 97 (Ct. Cl. 1981) (similar). However categorized, this decision, and others like it, obviously moves beyond *ad coelum* in the context of aircraft. *Brandes v. Mitterling*, 196 P.2d 464, 467 (1948), put it well: “We find that the maxim [of *ad coelum*] has not been generally applied in cases which establish rights in airspace occupied by aviators in the operation of aircraft.”

structure rested on the land. The reason is that there would be an intrusion so immediate and direct as to subtract from the owner's full enjoyment of the property and to limit his exploitation of it. While the owner does not in any physical manner occupy that stratum of airspace or make use of it in the conventional sense, he does use it in somewhat the same sense that space left between buildings for the purpose of light and air is used.⁹⁷

In other words, flight that intrudes so significantly into the property owner's rights that it "subtract[s] from the owner's full enjoyment . . . and [that it limits] his exploitation of it" goes too far because the benefits do not exceed the costs⁹⁸

¶34 And this is precisely what happens in the context of surveillance drones. These flying machines, not carrying passengers or freight, do not benefit society by moving people or goods. All they do is permit private individuals to spy on other private individuals.⁹⁹ There may be some social value in this, but that value does not equal the value associated with moving people and goods, and there is no indication that whatever value might exist equals or exceeds the historical value all property owners derive from their air rights.

¶35 Indeed, even the cases that more forcefully rejected the common law in composing the modern aircraft exception do not precipitate against this view of drones and trespass. Take, for example, *Hinman*.¹⁰⁰ Recall that *Hinman* explicitly and strongly discarded *ad coelum*,¹⁰¹ going so far as to say that the classical concept of air rights ownership is not possible because "[t]he air, like the sea, is by its nature incapable of private ownership, except in so far as one may actually use it."¹⁰² This is strong language, but, in truth, it is merely recasting what we know of the aircraft exception: the common law is not workable because the kinds of aircraft that transport people and goods "need" those air rights more – or "use" those air rights in a more real and tangible sense.¹⁰³ In the context of surveillance drones, however, there is no such imbalance. Drones that spy do so at the very real cost of those being spied upon – that is, the victims of surveillance have very much lost a property right (privacy) that they previously enjoyed. One could just as easily state that owners "use" their air rights when they enjoy their property without surreptitious observation; that is, they "need" those air rights more than those who would like to use them for surveillance or sport.¹⁰⁴

⁹⁷ United States v. Causby, 328 U.S. 256 (1946).

⁹⁸ *Id.* at 265.

⁹⁹ This is only true of surveillance drones, of course. There are many types of drones that perform other tasks. This statement, and this article, generally, is addressed to the drones conducting surveillance.

¹⁰⁰ *Hinman v. Pacific Air Transport*, 84 F.2d 755, 757 (9th Cir. 1936).

¹⁰¹ *Id.*

¹⁰² *Id.* at 758.

¹⁰³ This is a sort of economic analysis of the law. Of course, it is possible that some technology may eventually be able to surveil individuals from great distances, such as from space (if, indeed, that is not already a possibility). Whether the common law would inform a reasonable analysis of such a situation is perhaps another matter and is ultimately beyond the scope of this Article, which focuses on near-earth rights, given the historical language and confines of the common law and of the current status of drone technology.

¹⁰⁴ Indeed, it is quite easy to utilize the necessarily imprecise language of the "aircraft exception" cases to reach such a result. Take *Hinman*, again. At one point, the Ninth Circuit states that "[a]ny use of such air or space by others which is injurious to his land, or which constitutes an actual interference with his possession or his beneficial use thereof, would be a trespass for which he would have a remedy." *Hinman*, 84 F.2d at 758. Well, an aircraft that is flying travelers from New York to California at 35,000 feet

¶36 Accordingly, the “aircraft exception” was created in response to a very specific issue – manned air flight. Reading the cases carefully reveals as much: it is not the concept of anything going over a property owner’s land that is difficult and that requires the creation of an exception; it is the concept of something useful (i.e., manned flight transporting people or goods), which does not harm the property owner, going over a property owner’s land that is difficult. That was the purpose of the exception, and drones do not meet this definitional concept.

¶37 This is not, of course, an obvious statement, and the danger of lumping surveillance drones in with traditional aircraft is perhaps even more subtle than it initially appears because it may superficially appear that some of the theories regarding the “aircraft exception” are wide enough to encompass all types of drones.¹⁰⁵ In particular, a number of the cases that adopt one or another of the theories discussed above speak of property owners’ air rights in terms of whether an overhead aircraft disturbs the property owners.¹⁰⁶ These cases, upon first consideration, perhaps seem sufficient to protect property rights. After all, they acknowledge the necessity of the aircraft exception but state that no aircraft (even when such term is defined broadly enough to encompass drones) will be permitted to fly over property if it negatively affects property rights. The difficulty, however, is that there is far too much ambiguity in determining whether something “negatively” affects one’s property rights.¹⁰⁷

¶38 Of course, this ambiguity is understandable, in terms of the aircraft exception, because this functions as a legitimate attempt to create an effective and equitable balance between property owners’ property rights and the needs of the public.¹⁰⁸ By design, this analysis curbs property rights – it moves away from a relatively concrete question regarding property rights¹⁰⁹ and toward a more difficult question regarding relative burdens. In other words, asking whether one’s rights are “too negatively affected” serves as a moderating proxy. And it is not the only such “moderating proxy” at play in this area

presents no such difficulty to a farmer in Nebraska who just happens to own property underneath the flight plan. On the other hand, a small drone that spies on that same farmer is “injurious” and does interfere with his possession and beneficial use thereof. Using the very same language, then, we could say that that property owners do have air rights when it comes to surveillance drones, under the “aircraft exception.” What this Article suggests is that we merely discard the intermediate application of the “aircraft exception” to any drone technology and honestly analyze the issues in accord with our pre-existing common law.

¹⁰⁵ See *supra* Part III.A.

¹⁰⁶ See, e.g., *Griggs v. Allegheny Cnty.*, 369 U.S. 84 (1962) (holding that, though a flight over another’s land may be within statutorily defined navigable airspace, a landowner’s property interest may nevertheless have been infringed upon due to a substantial interference with his use and enjoyment of the land itself); *United States v. Causby*, 328 U.S. 256 (1946) (examining overhead flight in terms of whether it negatively affected the landowner’s ability to use and enjoy the property).

¹⁰⁷ See, e.g., *Alevizos v. Metro. Airports Comm’n of Minneapolis & St. Paul*, 216 N.W.2d 651 (Minn. 1974).

¹⁰⁸ See *supra* Part II.

¹⁰⁹ See generally Chad J. Pomeroy, *The Shape of Property*, 44 SETON HALL L. REV. 797, 804 (2014) (discussing the nature of property rights). Property rights exist in the context of a concrete thing that is subject to one’s ownership or possession, and that “thing” communicates information about itself and about its owner’s rights “to the world.” Thomas W. Merrill & Henry E. Smith, *What Happened to Property in Law and Economics?*, 111 YALE L.J. 357, 359 (2001). This process works, and property rights function efficiently, when the property rules are clear and consistent. See Carol M. Rose, *Crystals and Mud in Property Law*, 40 STAN. L. REV. 577, 577 (1988) (indicating that property rules function well when these rules “signal to all of us, in a clear and distinct language, precisely what our obligations are and how we may take care of our interests”). The very concept of property, then, usually involves clear and easily understood rules and distinctions.

of the law. Some cases, in attempting to strike the right sort of “aircraft exception” have turned to nuisance. The case of *Atkinson v. Bernard, Inc.*, is an excellent example of both this approach and of its lack of purity.¹¹⁰ There, the court stated that,

If the prime method for ascertaining the limits of the ownership-trespass zone in airspace is by determining whether the landowner's use and enjoyment of the surface have been subjected to unreasonable interference, it is apparent that the concept of nuisance is equally available with trespass as an analytical tool. In fact, some decisions range freely over both the trespass and the nuisance rationales—the airspace zone in which intrusion by aircraft would be a nuisance apparently being considered in certain opinions as coterminous with that in which it would constitute a trespass . . . while others which rely upon nuisance as the ground of decision might easily be interpreted in trespass terms 111

The court saw no problem with this analysis, as it was not viewing the common law as a realistic starting point. However, in the context of this Article, utilizing nuisance instead of the “cleaner” common law trespass cause of action is difficult because, “[a]t the point where ‘reasonableness’ enters the judicial process[,] we take leave of trespass and steer into the *discretionary* byways of nuisance. Each case then must be decided on its own peculiar facts, *balancing the interests* before the court.”¹¹² And that is precisely what the “aircraft exception” was intended to do.¹¹³ However, there is no reason to mimic that approach in the case of surveillance drones because such a proxy is not necessary here. Notwithstanding its appearance of reasonableness, there is no reason to rob property owners of their rights (by moving from a direct examination of those rights toward a moderated analysis of burdens) because, as stated above, *surveillance drones are not aircraft*. Treating them as such is a mistake and unnecessarily harms owners’ property rights by essentially ignoring the immediate nature of property owners’ interests and instead balancing the utility and harm of competing interests.¹¹⁴

In short, “[u]narmed aircraft are inherently different from manned aircraft.”¹¹⁵ They are, by definition, unmanned, and though they accomplish many different tasks, no

¹¹⁰ 355 P.2d 229, 232 (Ore. 1960).

¹¹¹ *Id.* (citing William B. Harvey, *Landowners' Rights in the Air Age: The Airport Dilemma*, 56 MICH. L. REV. 1313, 1315 (1958)).

¹¹² *Atkinson v. Bernard, Inc.*, 355 P.2d 229, 232 (Or. 1960) (emphasis added).

¹¹³ *Atkinson* ultimately approved of this approach, stating that “whenever the aid of equity is sought to enjoin all or part of the operations of a private airport, including flights over the land of the plaintiff, the suit is for the abatement of a nuisance . . .” *Id.* at 233. And, in such an instance, “reasonableness . . . is primarily a question for the trial judge to determine from all the facts . . .” and “whether a particular annoyance or inconvenience is sufficient to constitute a nuisance depends upon its effect upon an ordinarily reasonable man, that is, a normal person of ordinary habits and sensibilities . . .” *Id.* (quoting *Ampitheaters, Inc. v. Portland Meadows*, 198 P.2d 847 (Or. 1948)).

¹¹⁴ *See, e.g., Pub. Serv. Co. of Colorado v. Van Wyk*, 27 P.3d 377, 393 (Colo. 2001) (“[A]n allegation of unreasonableness is central to a nuisance claim,” and the utility of the conduct must be compared to the harm thereof). This case is typical of a nuisance analysis, which effectively robs property owners of *some* part of their ownership interest by permitting its infringement if “reasonable.”

¹¹⁵ Keith Laing, *FAA Chief: Drones ‘Inherently Different,’* THE HILL (Nov. 7, 2013), <http://thehill.com/policy/transportation/189587-faa-chief-drones-%E2%80%98inherently-different%E2%80%99-from-airplanes> (quoting Federal Aviation Administration chief Michael Huerta, in a

surveillance drone does anything relating to the critical, and primary, task of transporting human beings or goods.¹¹⁶ As such, drones are not “aircraft,” as we have traditionally conceptualized that term.¹¹⁷ Arguing that they are is unnecessary, not faithful to the underlying purpose of the exception, and is probably only an issue because the term “aircraft exception” is so broadly worded.

¶40 In the end, then, the aircraft exception is like so much of the law. It utilizes words and concepts with which we are familiar to reach a very particular policy goal. The law can say that property owners only own “subjacent airspace” or so much of their rights as they might use or actually use, or it can state that aircraft have supervening rights to “navigable airspace.” These are all reasonable concepts. Ultimately, though, these are merely constructs that drive at the same, underlying issue: it is more important to us that people and goods be moved via flight than that people have unfettered ownership of the air rights. But that issue is not at stake in the context of surveillance drones. Accordingly, we should not permit the phrases and terminology that the courts have created to address a particular issue (manned transport) intrude into a conceptually separate issue (surveillance drones) merely because both revolve around flight. Surveillance drones are not aircraft, and the authorities should strike their own course when it comes to this modern drone technology.

IV. RECOMMENDATION

¶41 The primary course of action that authorities can take is to accurately assess and respond to the legal landscape. The public’s privacy rights are eroding under the pressure of new technology because new technology has been fundamentally misunderstood in the context of our common law traditions.¹¹⁸ We have become entirely accustomed to ceding

speech to the Aerospace Industries Association (the “AIA”).

¹¹⁶ See *id.* (Unmanned aircraft “run a very wide range, with a number of different physical and operational characteristics. Some are the size of a fist, and fly at low altitudes. Others have glider-like bodies with the wing span of a 737 and can fly above 60,000 feet. Many can fly longer and hover longer than manned aircraft. They are also lighter and slower than traditional aircraft and have more lift and not as much drag. What unites them all is that the pilot is on the ground and not on board the aircraft.”). See also *Unmanned Aircraft Systems: Perceptions & Potential*, AEROSPACE INDUSTRIES ASS’N (May 10, 2013), http://www.aia-aerospace.org/assets/AIA_UAS_Report_small.pdf (discussing the many different uses and functions of drones).

¹¹⁷ Indeed, numerous states have noticed as much and have begun to issue statutes that address just drones (i.e., unmanned aircraft). See *Current Unmanned Aircraft State Law Landscape*, *infra* note 116.

¹¹⁸ See, e.g., OR. REV. STAT. § 837.380 (2013) (providing that real property owners can bring “an action against any person or public body that operates a drone that is flown at a height of less than 400 feet over the property if: (a) The operator of the drone has flown the drone over the property at a height of less than 400 feet on at least one previous occasion; and (b) The person notified the owner or operator of the drone that the person did not want the drone flown over the property at a height of less than 400 feet”). This section later provides an exception for drones that are “lawfully in the flight path for landing at an airport, airfield or runway” and that are “in the process of taking off or landing.” *Id.* This is considered a progressive statute, but it is riddled with exceptions that lessen the impact of the common law. A number of other states are considering their own laws. See *Current Unmanned Aircraft State Law Landscape*, NAT’L CONF. OF ST. LEGIS. (Dec. 29, 2014), <http://www.ncsl.org/research/civil-and-criminal-justice/current-uas-state-law-landscape.aspx> (indicating that forty percent of states have enacted or are attempting to enact some sort of legislation to regulate drone use). It is notable that none of the existing statutes return to the status quo of the common law. For instance, some states do not outright prohibit drone overflight but do punish flight accompanied by malicious intent. See, e.g., TEX. GOV’T CODE ANN. §§ 423.002-.003 (West 2013) (indicating that the use of a drone is illegal if there is “intent to conduct

our property rights to flying machines because of the aircraft exception. That inoculation to trespass makes eminent good sense for true “aircraft,” but surveillance drones are not “aircraft.” Accordingly, society should not fall into the trap of giving surveillance drones a “pass” to trespass and thereby cede its reasonable expectations.

¶42 The prospect of falling into this trap is what leads to the title of this Article. “All Your Air Right Are Belong to Us” is a play on a famous phrase that derives from a 1991 Sega Mega Drive game called *Zero Wing*.¹¹⁹ Set in the year 2101, the game focused on the fight against a villain who attacked a battle cruiser, announcing to its captain that “All your base are belong to us.”¹²⁰ A similar theft is occurring here. All real property owners have substantial air rights, sticks in the bundle of property rights that universally belong to the owners of real property rights.¹²¹ And those rights are in danger of disappearing entirely because our conception of them has been swallowed by the aircraft exception, an unfortunate situation that has been brought into sharp focus by the advent of drone technology.

¶43 But this oncoming mistake is not inevitable. State and federal legislatures and the various responsible administrative agencies can prevent this simply by standing by the common law. It is true that the common law has substantially broken down in the face of manned flight,¹²² but the exception need not extend further than that. Our governing bodies should not assume, as a background element of the law, that all machines, regardless of their purpose or design, have a prima facie right to fly over private property. Instead, they should hew to the common law presumption that there is no such right and that others cannot cross private property without committing trespass or creating a nuisance.¹²³

¶44 Though conceiving of the citizenry’s legal rights in this way – that is, presuming a property right instead of presuming no such right – may seem like a small thing, it is not. There is a substantial body of research regarding what is known as “decision architecture.” This area of study focuses on how choices are presented and the ramifications of that presentation.¹²⁴ An in-depth examination of this area is far beyond the scope of this Article,

surveillance” but providing for 38 different exceptions); WIS. STAT. ANN. § 942.10 (West 2014) (requiring a showing of “intent to photograph, record, or otherwise observe another” where there is a “reasonable expectation of privacy”); IDAHO CODE ANN. § 21-213 (West 2013) (indicating that observation requires a warrant or consent from the owner).

¹¹⁹ See Chris Taylor, *All Your Base are Belong to Us*, TIME (Feb. 25, 2001), <http://content.time.com/time/magazine/article/0,9171,100525,00.html>

¹²⁰ The subtitles of this game have become historically notable for their awfulness. See *All Your Base Are Belong To Us*, H2G2 (Jan. 14, 2007) <http://h2g2.com/entry/A18901532>. (“The scene is the interior of the command deck of some form of battle cruiser, in which a captain [stands] watching an explosion rip around the ship. The captain enquires[,] ‘What happen?’[] to which the ship’s mechanic replies[,] ‘Someone set up us the bomb.’ Next, the ship’s operator states[,] ‘We get signal’ and ‘Main screen turn on[,]’ revealing to the captain that the perpetrator is none other than the dastardly, borg-like CATS[] . . . asks[,] ‘How are you gentlemen!’ and then tells the captain of his impending downfall – ‘All your base are belong to us. You are on the way to destruction.’ Finding it hard to take this news, the captain replies ‘What you say!’[] but CATS simply replies[,] ‘You have no chance to survive make your time[,]’ following which he laughs rather maniacally and then disappears. Resolving to win despite the odds, the captain orders the operator to ‘Take off every Zig[.]’ The captain instructs the Zig pilots, ‘You know what you doing[,]’, then . . . states that he fights ‘For great justice[.]’”).

¹²¹ See *supra* Part II.

¹²² See *supra* Part III.

¹²³ Such a course of action would require an accompanying regulatory framework. An examination of any such potential framework is beyond the scope of this Article.

¹²⁴ See, e.g., JAMES J. CHOI ET AL., *For Better or For Worse: Default Effects and 401(k) Savings*

but it is helpful, here, to summarize one of its basic conclusions. In short, it strongly appears that people are highly unlikely to change status quo.¹²⁵ The example most often given involves contributions into retirement accounts: if employers automatically enroll employees in a contribution program, then those employees tend to stay enrolled, and, if employers do not automatically enroll their employees, then many of those employees never enroll.¹²⁶ This means that the default choice (i.e., the background state of affairs presented to someone) has a significant impact on human behavior.¹²⁷

¶45

The applicable lesson is that the default state of affairs matters. If our legislatures and rule-makers (properly) conceive of privacy as the status quo, then they will be less likely to change that status quo.¹²⁸ Whether this manifests itself by failing to permit surveillance drones, by permitting them under very limited circumstances, or by positively prohibiting them (or by some combination of the three) is not relevant. Indeed, many times, this may involve doing nothing¹²⁹ and permitting property owners to protect themselves through the judicial system.¹³⁰ What is important is that properly viewing air rights as an existing property right should rightly result in an increased level of protection in the future.¹³¹

Behavior, PERSPECTIVES IN THE ECONOMICS OF AGING 81-121 (David A. Wise ed., 2004) (finding that automatic enrollment in 401(k) savings plans by employers significantly increases the number of people enrolled, notwithstanding the fact that all employees enrolled by default are permitted to withdraw without penalty). This concept has been famously discussed in RICHARD H. THALER AND CASS R. SUNSTEIN, NUDGE: IMPROVING DECISIONS ABOUT HEALTH, WEALTH, AND HAPPINESS (2008). Therein, the authors examine how default choices affect behavior with respect to, among other things, retirement plans, H.I.V. testing, and organ donation. See also Steve Lohr, *The Default Choice, So Hard to Resist*, N.Y. TIMES (Oct. 15, 2011), <http://www.nytimes.com/2011/10/16/technology/default-choices-are-hard-to-resist-online-or-not.html> (providing a general background on “decision architecture”).

¹²⁵ See *id.*

¹²⁶ See, e.g., JAMES J. CHOI ET AL., *supra* note 124, at 81-121.

¹²⁷ See, e.g., RICHARD H. THALER AND CASS R. SUNSTEIN, *supra* note 124.

¹²⁸ This is not to suggest that the concepts discussed immediately above are perfectly applicable here. We are talking about groups of people (i.e., legislatures) instead of individuals, and we are also talking about issues that are presumably being debated anyway (i.e., whether to pass a law regarding drones instead of to simply not take a particular course of action, like opting out of a retirement contribution plan). Nevertheless, I believe the psychological impulse favoring the status quo is a relevant point to make and is likely to affect the kinds of rules and laws ultimately passed.

¹²⁹ This calls to mind a quote from Calvin Coolidge: “When you see ten troubles rolling down the road, if you don’t do anything, nine of them will roll into a ditch before they get to you.” As is so often the case, the legislature can be helpful by not trying to help.

¹³⁰ Of course, this may be something of a pyrrhic victory for many property owners, as the kind of surveillance at issue is, by its very nature, surreptitious and therefore extremely difficult to recognize or address.

¹³¹ This argument is supported, to some extent, by the rule favoring the common law over contradictory statutory schema. See, e.g., *United States v. Texas*, 507 U.S. 529, 534 (1993) (“In order to abrogate a common-law principle, the statute must ‘speak directly’ to the question addressed by the common law.”); *Green v. Bock Laundry Mach. Co.*, 490 U.S. 504, 521 (1989) (“A party contending that legislative action changed settled law has the burden of showing that the legislature intended such a change.”). “[T]his rule of statutory interpretation is particularly apt . . . when prior law reflected significant policy considerations of longevity and importance.” *Collinsgru v. Palmyra Bd. of Educ.*, 161 F.3d 225, 232 (3d Cir. 1998), *abrogated by* *Winkelman ex rel. Winkelman v. Parma City Sch. Dist.*, 550 U.S. 516 (2007). There is no question that the common law can be changed, but the law leans against it, requiring specificity and clarity to do so. In essence, that is all I am recommending here: that the law not be changed (or be allowed to change) without forethought, discussion, and specificity.

CONCLUSION

¶46 Air rights are property rights. It has always been thus. It is true that the history of air rights and air usage differs significantly from the present, but the authority is there: property owners have a right to their airspace. And we (through our legislators) should not give that up, particularly not to surveillance drones. Of course, it may be tempting to do so, particularly if the aircraft exception is permitted to complicate the issue. Aircraft have long been permitted to cross over property, thus trespassing on common law rights. This was for good reason, but that good reason exists only in a limited context: that of manned transport. That is the historical and logical basis for that limited infringement, and it should not extend to surveillance drones without careful thought and deliberation.

¶47 Recognizing this, legislatures should take a defensive posture with respect to surveillance drones and air rights. Specifically, they should acknowledge that property owners own their air rights and should be loath to take those rights away. They should, in short, permit property owners to keep what is already theirs and ensure that it does not become the case that “all of our air right belong to someone else.”

