MEMORANDUM

TO: Uniform Law Commission

FROM: Paul Kurtz, Chair
Gregory S. McNeal, Reporter

DATE: June 14, 2018

RE: **Tort Law for Drones Act, First Reading**

The Tort Law for Drones Act will be read for the first time at the 2018 Annual Meeting. This memorandum summarizes the rationale for the Act, which is more fully set out in the Prefatory Note and Comments to the draft. The memorandum also includes the flagging of several policy questions, some of which have been tentatively resolved in this draft and others of which have not been considered on the merits by the Drafting Committee. Of course, we welcome the input of the Committee of the Whole on both sets of issues.

I. *Rationale for the Tort Law for Drones Act*

Drones, technically referred to as unmanned aircraft, are a rapidly advancing and beneficial technology that often provide their greatest value in close proximity to people and property. Existing tort laws regarding aircraft were created when aircraft were rarely operating close to the ground, people, and structures. The Tort Law for Drones Act is premised upon a conclusion that laws crafted specifically for manned aircraft do not adequately provide clarity or uniformity in an era in which drones already number in the millions and operate closer to the ground and closer to people than manned aircraft have traditionally operated.

The Act fills a gap in tort law as it relates to unmanned aircraft. Drones are an amazingly useful technology, but their usefulness also allows them to cause harms that existing law may struggle to address in a uniform manner. The Drafting Committee recognizes that existing tort law is adequate in many ways, and the Act makes minimal changes to areas of law that do not require substantive changes.

However, generally-accepted current tort law requires changes to address two specific facts about drones: 1) the ability of drones to enter low altitude airspace adjacent to property; and 2) the ability of drones to surreptitiously gather information in a manner that may be offensive to a reasonable person. Thus, the Act addresses each of these attributes of drones in Sections 301 and 302, respectively.

II. *Section 301 Regarding Aerial Trespass*

In 1946, the Supreme Court stated in *U.S. v. Causby*, "We have said that the airspace is a public highway. Yet it is obvious that if the landowner is to have full enjoyment of the land, he

must have exclusive control of the immediate reaches of the enveloping atmosphere… **The landowner owns at least as much of the space above the ground as he can occupy or use in connection with the land**." (*U.S. v. Causby*, 328 U.S. 256, 264 (1946) (emphasis added)). The Court continued, establishing that "the 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." (*Id.*), and "**[w]e think that the landowner, as an incident to his ownership, has a claim to it and that invasions of it are in the same category as invasions of the surface.**" (*Id.* at 265) (emphasis added).

Causby spawned a doctrine which has become known as the aerial trespass doctrine, but a key element of that doctrine was left largely unresolved, specifically, was an overflight an actionable trespass or an actionable nuisance when it substantially interferes with the use and enjoyment of land?

> "The Causby decision left several principal issues unresolved.…. [The Court] never squarely identified the genesis of the plaintiffs' right to compensation. It was not clear whether the Court ordered compensation based on a trespass theory—because the overflights penetrated the Causbys' airspace—or based on a nuisance theory—because the flights substantially interfered with the Causbys' use and enjoyment of their land. (James C. Smith, NEIGHBORING PROPERTY OWNERS § 5:3).

The core principles left unresolved in *Causby* have not posed a significant problem over the past decades because Federal manned aviation regulations have kept manned aircraft hundreds, and sometimes thousands, of feet above people and property and laterally from people and property. In other words, the law governing where manned aircraft could fly has largely prevented them from engaging in aerial trespasses, and the states have not needed to frequently adjudicate aerial trespasses.

Despite over 100 years of aviation history, the number of manned aircraft operating in the very low altitude airspace and in close proximity to people and property has remained relatively steady and minimal as compared to the proximity of unmanned aircraft to people and property. As an example, while helicopters are exempt from rules regarding minimum safe altitudes, and can fly closer to the ground than other manned aircraft, there are presently only 10,577 active general aviation helicopters registered in this country. Additionally, fixed-wing manned aircraft, while numbering approximately 200,000, must remain 500 ft-2,000 ft away from people and structures. Compare these relatively low numbers of manned aircraft, operated at great distances from people and property, to unmanned aircraft for which there are over 878,000 registered hobbyists (who may have multiple drones) and over 122,000 commercial drones.

The ease of access to unmanned aircraft technology, the scale at which drones are already operating, and the low altitude airspace in which these aircraft must operate, all suggest that a Uniform Law for aerial trespass by drones is necessary to resolve the ambiguities and inconsistencies in existing aerial trespass law.

The Restatement (Second) of Torts defines an aerial trespass as follows:

> "*Flight by an 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."* (Restatement (Second) of Torts § 159(2)).

Notably, unlike the *per se* right of action in trespass to land (and a similar *per se* rule for kites, balloons, and projectiles), aerial trespass as presently understood does not afford an automatic exclusionary right against non-consensual entries. "[The aerial trespass rule] superimposes a requirement of actual harm, thus conflating the normal strict-liability rule of trespass with the rule of nuisance." (A. Michael Froomkin & P. Zak Colangelo, *Self-Defense Against Robots and Drones*, 48 CONN. L. REV. 1, 28 (2015).).

The existing aerial trespass doctrine, by conflating the rule of trespass with the rule of nuisance will likely lead to many low altitude drone flights that are not excludable and not actionable. As Professor A. Michael Froomkin and P. Zak Colangelo note (internal citations omitted):

> *By importing requirements from a nuisance claim, this departure from the trespass rule effectively swallows the aerial trespass action. The courts' detour into aerial nuisance may be based on a misreading of the U.S. Supreme Court's decision in United States v. Causby…*
> *Courts have read Causby to require actual interference with the owner's use or enjoyment of her land for the overflight to be an actionable trespass. This reading seems anomalous: in Causby, the Supreme Court held that for there to be a taking under the Fifth Amendment-that is, for the government to have appropriated private property under circumstances which require payment of just compensation-there must be substantial interference with the owner's use or enjoyment of their property. There is no obvious reason why the interference requirement should be as strict in a trespass claim. If aerial trespass genuinely is to be treated like terrestrial trespass, then all that should be required is entrance into that part of the airspace that remains fully private. Causby expressly holds that a landowner's nonuse of airspace does not affect ownership…Properly understood, then, Causby makes actual interference with use relevant only as a matter of substantive constitutional Takings law, not as a matter of property law on ownership of airspace*

In an era of drones, the Drafting Committee has decided that maintaining the existing aerial trespass doctrine will likely result in a substantial increase in litigation as "[c]ourts applying this

rule cannot simply focus on determining whether the defendant truly and intentionally flew an aircraft within some well-defined column of airspace. Instead, they must engage in costly, *ad hoc*, fact-specific inquiries into what constitutes the 'immediate reaches' of the airspace above the plaintiff's parcel and whether the defendant's flight 'interfere[d]' substantially with the plaintiff's 'use and enjoyment' of its land." (Troy A. Rule, *Airspace in an Age of Drones*, 95 B.U. L. REV. 155, 184 (2015)).

On the first question of what constitutes the "immediate reaches" even *Causby* itself was unclear, with the Supreme Court recognizing a right to redress at 83 feet (on the facts of that case), then remanding for further fact finding where a right to redress was found for overflights up to 365 feet. Thus, in *Causby*, the immediate reaches was defined as anywhere from 83 feet to 365 feet. Other cases have come out differently.

However, that doesn't resolve matters in all jurisdictions as most also require proof of "substantial interference." The habit of state courts to conflate takings law with aerial trespass law has made aerial trespass claims more difficult to prove, and it has done so in a way that was likely not intended by *Causby* which noted with regard to invasions of airspace that substantiality was a factor for answering the question of whether there was a taking (*Causby* at 266), stating "it is the character of the invasion, not the amount of damage resulting from it, so long as the damage is substantial, that determines the question whether it is a taking," citing, *United States v. Cress*, 243 U.S. 316, 328).

Regardless of the debate over the origins of the misapplication of the *Causby* rule in instances of aerial trespass, continuing to apply it to unmanned aircraft makes little sense, is impractical, and will have unintended consequences. As it presently exists, the doctrine looks for interference of a type that when applied to unmanned aircraft will likely not allow for a right of exclusion of unmanned aircraft at nearly any altitude, thereby swallowing property rights and engendering public backlash against drone operators.

Applying existing doctrine to unmanned aircraft will raise entirely new questions that will need to be answered by a patchwork of different judicial decisions in the states. Questions that will need to be resolved include whether it will be acceptable for drones to fly at low altitudes in close proximity to homes so long as the unmanned aircraft is very quiet or the residents are not home. Questions also may arise about whether an unmanned aircraft take-off and landing facility may be built adjacent to uninhabited land, using the airspace above that land at any altitude until such time as the landowner chooses to make use of the land. Indeed a major question arises as to whether small, quiet and surreptitious drones may persistently operate over land at very low altitudes, extremely close to people and structures so long as they are not interfering with the ambiguously defined use or enjoyment of property.

This is a substantial departure from trespass to land and while it arguably may have been appropriate for the occasional low altitude manned aircraft flight, it will certainly run afoul of public expectations regarding their right to exclude drones from property. While a trespasser walking upon land is liable for trespass "irrespective of whether he thereby causes harm to any legally protected interest of the other." (Restatement (Second) of Torts § 158 (1965)) an aerial trespass by a drone under traditional aerial trespass law would trigger no such liability absent

proof of harm (despite proof that the aerial intrusion was within the immediate reaches). In this respect, aerial trespass operates more like a nuisance suit than a right to exclude, and it is one that will be difficult to prove when it comes to unmanned aircraft.

Requiring proof of both invasion of the "immediate reaches" and substantial interference in the context of unmanned aircraft would result in the inability of landowners to exclude most unmanned aircraft flights from even very low altitudes adjacent to land and buildings. It would also force plaintiffs and defendants to enter litigation to determine whether flights actually interfered with a landowner's use and enjoyment of their land. Stated simply, unlike the *per se* right that exists in trespass to land, which establishes an easily understandable bright line rule prohibiting certain intrusions, there is no existing right to exclude aircraft from flying above one's land without proof of two very fact-specific concepts: invasion of the immediate reaches and substantial interference with the use and enjoyment of the land.

The existing aerial trespass laws fail to adequately protect both landowners/lessees and unmanned aircraft pilots. Without changes, the inadequacy of the law is likely to engender significant public backlash against unmanned aircraft technology because most landowners and lessees understand their right to exclude traditional trespassers and likely assume the rules in the very low altitude airspace similarly allow them to exclude unmanned aircraft without any need to litigate the substantiality of interference with their use and enjoyment of land.

Similarly, unmanned aircraft pilots will likely believe themselves to be protected by the fact-specific inquiry of the traditional aerial trespass doctrine and may find themselves the subject of a lawsuit in which they must mount a defense that will rely on ambiguous definitions of immediate reaches and substantial interference.

A. Why the 200-foot Line in Section 301?

The Drafting Committee spent a substantial amount of time discussing what the appropriate altitude was for triggering a cause of action against operators of aircraft who operate in the low altitude airspace. The Committee, at the suggestion of the Reporter, discussed whether an altitude of 100 feet was appropriate and, if not, whether the altitude should be higher or lower or should vary based on factors like those reflected in the existing aerial trespass doctrine. An approach that would vary based on proof of factors akin to those in the existing aerial trespass doctrine was deemed unworkable and lacking in clarity. The Committee decided a bright line approach was necessary because it would minimize litigation by creating clear rules for the benefit of both unmanned aircraft operators and landowners/lessees.

In making its judgment regarding at what altitude a low altitude flight would trigger a trespass, the Committee sought input from Advisors and Observers, including Observers with deep expertise in the use and planned use of unmanned aircraft. The discussions focused upon balancing the rights of landowners and lessees and the rights of unmanned aircraft operators. The discussions took note of the number and nature of unmanned aircraft operations today, and the projections for increased numbers, varied sizes, and different operations in the future. The Committee heard from Observers regarding the typical and anticipated usage of unmanned aircraft, the size of the aircraft (ranging from 55-pound aircraft down to extremely small aircraft

weighing 250 grams or less), the take-off and landing patterns of drones, and future plans regarding the use of unmanned aircraft for activities such as package delivery, inspections, fleets and swarms of aircraft that could be used to gather information, as well as the wide range of aircraft that are presently permitted to fly at low altitudes and may fly at low altitudes in the future.

The Committee and Observers discussed the ease of accessibility of unmanned aircraft technology and the fact that these aircraft, which now number in the millions, operate in places where manned aircraft have rarely, if ever, flown, and operate in airspace where manned aircraft may be physically incapable of accessing or are precluded by regulations from accessing. The Committee and Observers discussed present FAA regulations regarding unmanned aircraft which allow those aircraft to operate at any distance horizontally or vertically from structures and people, whereas manned aircraft regulations (with exceptions for helicopters and take-off and landing) have traditionally ensured that manned aircraft remained 500-2000 feet away from the ground, people, and structures.

After a thorough discussion the Committee decided that the altitude line should be set at 200 feet, not the 100 feet suggested in the original draft. The decision was based upon future anticipated uses of unmanned aircraft, the volume of unmanned aircraft expected to operate over private property in the future, existing FAA regulations, an executive order, pending legislation, equitable division of the low altitude airspace between landowners/lessees and unmanned aircraft operators, and some existing state legislation.

B. The Drafting Committee is Still Discussing Whether a Right of Privileged Entry May Be Necessary

Subsection (b)(7) of Section 301, creates an exception for privileged entry if one exists in the state under the law of trespass to land. Given the unique nature of unmanned aircraft, and the likelihood that these aircraft may crash land, or otherwise be found upon private property, the Committee has tentatively decided that a right to retrieve such an aircraft should exist if it already exists in the state, and that the right should be modeled upon existing privileged entry doctrine.

This exception, in its most common form, appears in the Restatement (Second) of Torts § 198 (1965):

> (1) One is privileged to enter land in the possession of another, at a reasonable time and in a reasonable manner, for the purpose of removing a chattel to the immediate possession of which the actor is entitled, and which has come upon the land otherwise than with the actor's consent or by his tortious conduct or contributory negligence.
>
> (2) The actor is subject to liability for any harm done in the exercise of the privilege stated in Subsection (1) to any legally protected interest of the possessor in the land or connected with it, except where the chattel is on the land through the tortious conduct or contributory negligence of the possessor. (§ 198 (1965)).

Typically, this exception is limited by a requirement that an owner seeking to recover a chattel (which in this case would be the drone) first seek permission to enter from the landowner/lessee, and only if the situation is such that this permission cannot be obtained may the property owner enter under the privileged-entry exception

III. *Section 302 Regarding Tortious Acquisition of Images, Recordings Or Electronic Impressions Using An Unmanned Aircraft*

Section 302 protects against intentional non-trespassory privacy invasions from adjacent airspace (for example an observation into a private area from airspace above a public street or above neighboring private property) and trespassory privacy invasions. Thus, it provides in Subsection (b):

"a visual image, sound recording, or other physical or electronic impression using an unmanned aircraft is subject to a rebuttable presumption that it is "depicting private facts" if that visual image, sound recording, or other physical or electronic impression would not be capable of being acquired from ground level or from structures where an observer has a legal right to be."

This language presumes that the acquired information depicts "private facts" where the acquisition of information could not otherwise be accomplished from the ground. It is modeled on an approach followed by Fla. Stat. §934.50(3)(b) which defines a reasonable expectation of privacy by reference to what could be observed from the ground. The subsection is intended to allow individuals to protect their privacy by taking measures to protect their privacy against ground observations and observations from structures built upon the ground. By creating a form of legal protection from aerial observations, it ensures that individuals need not go to extreme measures to shield their activity from aerial observations. These provisions protect not only persons, but also trade secrets which are not presently protected from overflight in some jurisdictions. This Act remedies this gap in the law as it relates to aerial observations.

A. *The Drafting Committee has Begun, but Not Concluded Its Discussion Concerning Whether a Safe Harbor Defense is Needed to Section 302's Action for Tortious Acquisition of Images*

The Committee is still discussing whether a safe harbor provision is necessary in cases involving tortious acquisition of images, recordings, or other physical or electronic impressions using an unmanned aircraft. The goal of such a safe harbor would be to incentivize individuals who become aware of the collection of material (which may, for example, have happened in an automated manner) to take measures to prevent the image, recording, or electronic impression from being further used, viewed, or disseminated).

As presently drafted, Section 308 provides "it shall be a defense to a cause of action that upon discovering the acquisition of information protected by [Section 302 that] the acquiring person immediately deleted [and rendered inaccessible to all persons] the images, recordings, or electronic impressions and any copies of the same.]"

This safe harbor provision is similar to safe harbors seen in laws involving cybersecurity, data breach and other contexts.

IV. ***Section 309(B)(5)***

The Drafting Committee calls your attention to this provision in the draft, dealing with equitable remedies for violation of Section 302, along with the relevant Comment. There has been some hesitancy within the Committee about the appropriateness and the content of such a provision. It is also possible that equitable relief might be provided for violation of Section 301. Input on these issues would be appreciated.

V. ***Two further issues upon which the Committee invites input***

After the Drafting Committee had completed its work on this Draft, two issues were raised upon which there has been no discussion. These issues will be on the Committee's agenda for its next meeting in the fall. While the Drafting Committee would prefer to confine the discussion before the Committee of the Whole to the issues which have been resolved at least tentatively in this Draft, any input on these issues would be welcome:

1) Should the Act contain a Statute of Limitations provision? While a provision deferring to existing law of the state might seem to be the obvious choice here, there may be reasons that uniformity would be more appropriate, especially in light of the fact that the action created in Section 302 may be seen as a wholly new tort without clear analogies in existing state law.

2) Should an Article IV be added with the usual ULC boilerplate provisions? More specifically, is the standard Section 403 on repeals and conforming amendments appropriate?