July 1, 2019

Ms. Anita Ramasastry
Mr. Paul Kurtz
Mr. Mark Glaser
c/o Uniform Law Commission
111 N. Wabash Avenue, Suite 1010
Chicago, IL 60602

Dear Ms. Ramasastry, Mr. Kurz, and Mr. Glaser,

We write in response to the June 20, 2019, Comments provided by Prof. Henry Smith ("Smith Letter"), the June 5, 2019, Letter from the Joint Editorial Board for Uniform Real Property Acts ("JEBURPA Letter"), and the June 25 Letter from Real Property, Trust and Estate Law Section of the American Bar Association ("RPTE Letter"), which all express conceptually similar concerns with the approach adopted by the Tort Law Relating to Drones Act Drafting Committee in its final Draft Act. The issues have been discussed at length during the Committee's deliberations, and none of the letters raise points that the Committee has not already considered. Nevertheless, for the benefit of the record it is worth responding to each letter in turn.

The Smith Letter offers a general, sweeping critique of the final Draft Act, but refrains from proposing any specific changes. Among other things, the Smith Letter accuses the Committee of adopting a "root and branch replacement" for existing property law that replaces "owner's rights with an unprecedented watered-down regime that provides little guidance," and goes so far as to suggest that adopting the Act will not only "scare off plaintiffs" but "more generally threaten to destabilize the law of property in other areas."

Fundamentally, the Smith Letter itself proceeds from an erroneous proposition: that "the broad swath of presumptive control over land" that forms the core of trespass law provides easy answers for how much control a landowner has—or should have—over the airspace above her land. As the Committee knows, if trespass law provided easy, readily understandable answers, there would be no need for the Drafting Committee in the first place. And, of course, the hard and difficult work that the Committee has done during countless hours of debate over the past two years shows that, once these questions are explored, the answers for what the law should be are far from easy or straightforward.

The Smith Letter appears to assume that "trespass" presumptively provides or should provide control over airspace as well. But as the Smith Letter concedes, this is not actually the way that the law has developed in the past when confronted with the difficulties of new technologies. Over 100 years ago, this very same debate played out when manned aircraft first took to the skies. Then, as now, many commentators argued that landowners had the right to exclude these new flying machines from the column of air above their land. But it rapidly became clear that, with respect to aircraft, the airspace over land was simply not the same as the land below, and that whatever property rights existed in the land they did *not* extend to barring aircraft overflights. Instead, as Congress and the Supreme Court went on to recognize, the "navigable airspace" above property was a common good, subject to the sovereign control of the federal government. American citizens had a right to transit that airspace, and property owners could not leverage their ownership of land into ownership of the sky above.

From this realization evolved the "aerial trespass" doctrine, which has long applied to manned aviation. The Smith Letter acknowledges that "aerial trespass" is, in some ways, neither fish nor fowl—it combines elements of trespass and nuisance in a way that is distinct from either. But this hybrid approach is dictated, in part, by the manifest and obvious difference between traditional trespass, which involves direct physical contact with the land, and the types of potential threats to property owners posed by aircraft overflights. Aircraft, after all, do not touch the ground when overflying or transiting a parcel of land, but in extreme enough circumstances their passage over the land can disrupt the use of the land in real and meaningful ways.

Over the past two years, this Committee has struggled with how to adapt existing law to the new technologies that have caused the recent proliferation of drone usage. These unmanned aircraft can be much smaller than manned aircraft; their advanced control software allows them to hover and maneuver in new ways, and to perform missions that would be impossible or unreasonably dangerous if performed by a manned aircraft. Their low cost also allows them to be used in contexts where aerial exploration had been cost prohibitive. These applications have clear and obvious benefits to the safety of life and the preservation of property, everything from inspecting rooftops and aerial infrastructure (thereby reducing the risk to humans in these hazardous roles) to tracking wildfires, to inspecting levees, railroads, and power and gas lines, to performing search and rescue after disasters. Drones enable a radical rethink of what is possible in terms of keeping people safe.

But the same technologies and attributes that make it possible to use drones in these new ways *also* make it possible for the careless, clueless, or the criminal to misuse drones. Drones thus may interfere with the use of the land in ways that manned aircraft either have not or simply cannot.

The work of the Committee over the past two years has been focused on how to address that central, fundamental challenge: How do we recognize and protect against the new ways in which drones may interfere with property rights, while still honoring the fundamental truth that the airspace is different than the land below? The enumerated factors contained in the Committee's final Draft Act are the product of thoughtful, reasoned consideration and compromise on this question.

Contrary to the claims presented by the Smith Letter, these factors are not an attempt to "water down" property rights, nor are they designed to reduce the existence of property into a multifactorial exercise. Rather, the Committee's final Draft Act starts from the proposition that landowners *do* have a property right and that this right should be acknowledged and protected from threats posed by irresponsible or reckless overflight.[1] The non-exclusive factors provided by the Draft Act are an attempt to give courts guidance in how to understand when substantial interference with that right has occurred, in the context of new and novel technology. Far from "watering down" property rights, the Draft Act seeks to enshrine and protect them.

It is telling that the Smith Letter offers no concrete solution or suggestion for how to differently conduct the task that the Committee has performed. The Smith Letter expressly "does not presume to prescribe the particular solution to the problem of drones," noting only that there are an unnamed "number of solutions" that are consistent with its considerations. The Drafting Committee, though, has carefully

[1] Of course, the Committee's Draft also starts from the proposition that "aerial trespass" and traditional trespass are different—but that is an acknowledgement of the way the law currently is and has been for decades, not the radical shift that the Smith Letter suggests.

considered a wide range of potential solutions, from the problematic "line in the sky" approach that it began with to other ideas that gave varying weights to the different policy and legal considerations that surround this issue. After examining the positives and negatives of each of these approaches—and considering, *inter alia*, arguments identical to those advanced in the Smith Letter—the Committee ultimately decided the final Draft Act offers the best compromise, in that it gives courts flexibility to address potential issues posed by new technology while also offering substantive guidance on what "substantial interference" means in this new context.

The JEBURPA and RPTE Letters proceed from a starting point similar to the Smith Letter—the idea that "existing trespass law in all American states" provides a neat, clean set of principles that can be easily applied to the challenge of low-altitude, powered-and-controlled unmanned aviation. The JEBURPA Letter asserts that because existing trespass law would bar a delivery person from traversing property on foot, "[m]ost American landowners" would unequivocally apply that same rule to drones operating at 15 feet. As noted above, though, there is a categorical difference between overflight and physical trespass, a categorical difference that led to the development of "aerial trespass"—and it is this difference that has been the focus of much of the Committee's work for the past two years. The facile assertion in the JEBURPA Letter that 15 feet should be treated the same as physical trespass ignores this critical distinction entirely, and does nothing to move the discussion forward. The analogies to tree branches and permanent overhangs in the JEBURPA Letter are also among the many that the Committee considered. Both, of course, bear little resemblance to powered, transient air navigation, and also offer little in the way of help in understanding how the law *should* treat aircraft with these new capabilities.

The JEBURPA Letter also draws attention to *dicta* in the well-known Supreme Court decision in *Causby* to suggest that it is settled law that the "immediate reaches" of airspace above a parcel of property are subject to a landowner's control in the same way that her land itself is. This is also a point that the Committee discussed extensively during its sessions. While the JEBURPA Letter accurately quotes from the Supreme Court's decision, the Letter elides that the actual *holding* of *Causby* had nothing to do with intrusion into "immediate reaches" of the property owners' land. In fact, the Supreme Court's conclusion in *Causby* was that the military aircraft traversing the property had worked a taking not because they were too close to the ground or because they intruded into a column of air over which the land owner maintained control, but rather because they had caused economic injury to the farmer by destroying his chickens. As the *Causby* court concluded:

> Flights over private land are not a taking, unless they are so low and so frequent as to be a direct and immediate interference with the enjoyment and use of the land. We need not speculate on that phase of the present case. For the findings of the Court of Claims plainly establish that there was a diminution in value of the property, and that the frequent, low-level flights were the direct and immediate cause. We agree with the Court of Claims that a servitude has been imposed upon the land.

United States v. Causby, 328 U.S. 256, 267-8 (1946). Indeed, it is from this holding in *Causby* that the doctrine of "aerial trespass," discussed above, evolved.

The Committee properly concluded during its lengthy deliberations about *Causby* that the Supreme Court's resolution of a takings claim in the 1940s involving heavy bombers, fighters, and transports provides only limited assistance in understanding how low-altitude flight by much smaller unmanned vehicles should relate to the rights of property owners below. As the Smith Letter notes, in its

discussion of how manned aviation eclipsed the ancient doctrine of *ad coelum*, *Causby* also stands for the proposition that technological change can force the reexamination of long-held assumptions about the edge-cases of the law. In the 1940s, the question of how to deal with low-altitude flight by small unmanned aircraft did not demand an answer. It has been the job of the Committee to conduct the analysis that the *Causby* court did not need to perform, and to create a set of principles for courts to follow in deciding when drones pose a substantial interference with the use of land.

The JEBURPA Letter, unlike the Smith Letter, does propose concrete changes to the final Draft Act. It urges that there should either be a *per se* line in the sky below which trespass occurs, or a presumption that at an altitude below the height of the tallest structure on a given piece of property there is substantial interference. The first of these suggestions would represent a return to an approach that the Committee abandoned last year after realizing that this kind of subdivision of the airspace is unworkable in practice, inconsistent with the way in which aviation has been regulated for decades, and preempted by federal law. The second suggestion was rejected by the Committee at its May meeting, because it too improperly divides the sky and creates even larger practical problems than the *per se* rule (how, for example, would a drone operator know the height of a building on any given piece of property?).[2] Adopting either approach would turn back the clock and undo months of careful work on the part of the Committee.

The JEBURPA Letter also argues that there should be no presumption that First Amendment protected activity does not "substantially interfere" with the use and enjoyment of land. This, too, was a question that received careful consideration by the Committee, and there was a great deal of substantive debate that led to the inclusion of this presumption. In its separate comments, the National Press Photographers Association has emphasized the importance of including this presumption.[3] This is another issue where wholesale revision of the balance struck by the Committee at this late date would simply not be appropriate.

The RPTE Letter largely echoes the issues raised by the Smith Letter and the JEBURPA Letter, and suffers from the same conceptual infirmities. But the RPTE Letter also has a number of additional flaws. First, it asserts that the final Draft is problematic because it does not address "violation[s] of the natural privacy that land owners possess by topography, fencing, landscaping or conducting activities or locating structures beyond what the natural eye can see." The question of how to address privacy issues was also something that the Drafting Committee carefully thought through. In the end, rather than attempt to adopt a separate, distinct approach to privacy that would apply *only* to unmanned aircraft, the Drafting Committee decided that the better approach would be to recognize that unmanned aircraft can

[2] In a footnote, the JEBURPA Letter attempts to grapple with one of the obvious practical problems created by its "presumption of trespass below building height" proposal. To deal with the situation of, for example, a grain silo on a farm, the JEBURPA Letter suggests a lateral separation requirement could also be written into the rebuttable presumption. This footnote—which begins to recognize the complexity of the issues that the Committee has been dealing with for two years—is a vivid illustration of why a last-minute proposal to fundamentally rework the approach taken by the Committee is so problematic. It also underlines the wisdom in the Committee's approach, which was to provide guideposts for courts but to avoid *per se* rules in order to give the courts the flexibility to deal with complex fact patterns.

[3] *See* Letter from M. Osterreicher on behalf of the National Press Photographers' Association to Anita Ramasastry, et al. (June 21, 2019).

be instrumentalities for violating existing privacy rights. This technology-neutral approach recognizes that different states have different approaches to privacy, and that an attempt to adopt a uniform rule that applied only to drones would have significant negative effects on enactability. Second, the RPTE Letter objects that a landowner "will have no reasonable means" to identify a drone operator, and asserts that there needs to be "a means to identify" a particular drone operator. As a practical matter, the FAA and the drone industry are working on a solution to remote drone identification or "Remote ID," which would address this concern—a rulemaking on this issue is expected this year. But more importantly, the question of Remote ID is well outside the scope of the Drafting Committee, and it is neither necessary nor appropriate for the final Draft Act to address this question. Third, the RPTE Letter's enclosed comment from Prof. Steven Eagle objects to the final Draft's not having a "provision for property owners fending off unmanned aircraft that menace their families, animals, and structures with imminent harm." As with Remote ID, this is an issue outside the scope of the Committee—federal law generally prohibits interference with or shooting down aircraft, whether manned or unmanned, and for good reason. Among other things, active measures taken against unmanned aircraft pose a potentially grave danger to other users of the national airspace. The Committee rightly concluded that it was neither necessary nor appropriate to attempt to authorize counter drone measures in the final Draft Act.

The nuances, compromises, and policy decisions in the Draft Act are a product of the lengthy consideration that the Committee has undertaken. They are not flaws, but features. The Commission should not allow the JEBURPA, Smith, or RPTE Letters' last-minute rehash of arguments that the Committee has already considered and incorporated (and in some cases rejected) to derail adoption of the Draft Act.

We reiterate our support for the final Draft Act because it represents a thoughtful, reasoned set of compromises related to low-altitude drone operations. It is our view that the Committee's approach will provide guidance to courts, after passage of the proposal by the States, about protecting landowners' enjoyment and use of their property while enabling the safe integration of drones into the national airspace system.

Sincerely,