RESOLVED, That the American Bar Association urges federal, state, local, territorial, and tribal governments, and their respective agencies and departments, to protect real property interests, including common law trespass and privacy rights, with respect to any statute, ordinance, regulation, administrative rule, order, or guidance pertaining to the development and usage of unmanned aircraft systems over private property.
I. PURPOSE OF THIS RESOLUTION AND REPORT

The popularity and usage of unmanned aircraft systems ("UAS"), commonly known as drones\(^1\), continues to rise among leisure and commercial users for a variety of uses including package deliveries, aerial photography, surveillance, and general recreation. By the end of 2018, more than 900,000 model owners\(^2\) had registered their model aircraft with the Federal Aviation Administration (the “FAA”) and another 277,000 non-model aircraft had been registered.\(^3\) While UAS offer a variety of beneficial real world applications, they also raise complicated questions about how to resolve the sometimes conflicting interests of UAS operations over private property with those of landowners and legal occupants (collectively including tenants and easement holders). Landowner and legal occupant property and privacy rights traditionally have been protected by the law of trespass.

The purpose of the Resolution and this report is to highlight the real property rights and interests that are being and will continue to be impacted by the emerging and increasing use of UAS and ensure that any legislation, regulation, rule, order, or guidance adequately addresses and protects those rights and interests. Such real property rights are designed to protect the privacy and physical safety of the real property owners, occupants, and users (and of their assets) and to provide clear guidance to drone operators as to operation of drones. A “one-size fits all” approach to rules governing the operation of drones over private property is not appropriate given the variety of concerns and considerations that each drone usage may raise. Emerging technologies such as UAS do not fit squarely within existing trespass and privacy rights laws; however, it is critical that creation of any statute, ordinance, regulation, administrative rule, order, or guidance pertaining to the development and usage of UAS utilize common law trespass and privacy rights concepts as the framework for such efforts to defend existing real property interests of real property owners and legal occupants since history and experience has shown those concepts to be successful and workable protections that are able to evolve over time.

Section II of this report provides a broad overview of the existing regulatory framework that governs UAS usage and the recent efforts to establish a uniform law framework for drone usage. Section III highlights and analyzes specific real property rights, interests, and expectations that should be protected and considered in any future efforts to

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\(^1\) “Unmanned aircraft systems” or “UAS” are the terms of art used to describe drones (both commercial and personal) in current federal legislative and regulatory schemes.

\(^2\) Model aircraft are those UAS used solely for recreation and hobby purposes. Non-model aircraft are those UAS used for commercial, government, or other non-hobby purposes.

\(^3\) Federal Aviation Administration, FAA Aerospace Forecast Fiscal Years 2019-2039, at 41 (2019), available at https://www.faa.gov/data_research/aviation/aerospace_forecasts/media/FY2019-39_FAACultiv_Aerospace_Forecast.pdf. The FAA notes that modelers (i.e. those flying drones for hobby or recreational uses only) are not required to register each individual drone such that the FAA estimates there are around 1.25 million drones identified as model aircraft.
implement and establish further rules governing UAS usage within the United States. The report concludes with Section IV.

II. OVERVIEW OF EXISTING REGULATORY FRAMEWORK FOR DRONES

UAS are defined as aircraft by Congress and therefore UAS regulation is handled by the FAA. The FAA’s general aviation regulations are applicable to all UAS. Such regulations include the prohibition against careless or reckless operation of an aircraft so as to endanger life or property. However, this general prohibition does not constitute a prohibition against flying over or near private property. To date, UAS are almost exclusively operated using line of sight operation (i.e. the UAS is operated within direct view of the operator). This line of sight operation acts as an initial layer of protection of private property rights because third parties can readily identify the UAS operator if police action or legal action is necessary to protect such private property rights. If UAS can be operated outside and beyond line of sight operations such that the UAS operator is no longer readily identifiable, then the legal framework of trespass and privacy rights is necessary to protect real property owners and legal occupants.

As with most emerging technologies, legal regulations have struggled to keep pace with the proliferation of UAS on the federal, state, local, territorial, and tribal levels. The FAA only recently published 14 C.F.R. Part 107 on June 28, 2016 to govern routine, civil small-UAS (“sUAS”) operations. The so-called sUAS rule generally allows recreational and commercial operation of UAS of less than 55 pounds within certain operational requirements and limitations. Such requirements include a mandate that operators must register their sUAS, have a remote pilot certificate, fly below 400 feet above ground level and be within unaided visual line-of-sight, avoid airports and other restricted areas as designated by the FAA, and generally avoid other aircraft. Most recently, the FAA has proposed additional rules to amend 14 C.F.R. Part 107 with respect to certain nighttime operations of UAS and other training requirements, but has specifically conceded that “proposed regulations to address privacy concerns are beyond the scope of the FAA’s mission.” Additionally, while the FAA “has consistently recognized the importance of stakeholder engagement regarding privacy implications associated with UAS integration and incorporated privacy considerations into the UAS Test Site Program and the UAS Integration Pilot Program….the FAA has never extended its administrative reach to regulate the use of cameras and other sensors extraneous to the airworthiness or safe operation of the aircraft in order to protect individual privacy” because the FAA is specifically focused on the safe and efficient operation of aircraft. The FAA recognizes the ongoing debate regarding privacy rights and UAS and is open to working with “other agencies with the mandate and expertise to identify, develop, and implement appropriate mitigation strategies to address such concerns.” To that end, the FAA has emphasized that state and local government involvement and integration and use of state and local

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4 14 C.F.R § 91.13.
6 84 F.R. 3856.
7 84 F.R. 3856, 3893.
8 84 F.R. 3865, 3893.
police law powers as part of the UAS Integration Pilot Program to regulate issues such as the “location of aircraft landing sites” will be critical to developing a comprehensive legislative framework for UAS, even though the FAA will retain exclusive authority to regulate aviation safety.

In addition to federal legislative and regulatory efforts, all states have at least considered laws to regulate UAS, and many states have enacted legislation governing UAS. However, reliance upon such state action to address and resolve the UAS operation vs. real property rights and interests interplay is less than ideal due to federal preemption concerns as the FAA has “exclusive authority to regulate aviation safety, the efficiency of navigable airspace, and air traffic control”. It is an open question as to whether the FAA’s authority extends to areas such as one foot above the ground. Thus, even though the FAA has clarified that traditional state police powers related to zoning, privacy, and law enforcement are not federally regulated, it is apparent that regulatory schemes for UAS will arise at federal, state, territorial, tribal, and possibly local county or municipal levels.

With the aforementioned legislative and regulatory framework as a backdrop, the Uniform Law Commission (the “ULC”) has recently undertaken efforts to attempt to produce a uniform law related to UAS. The proposed Uniform Tort Law Related to Drones Act (the “Act”) represents an attempt by the ULC to promulgate a uniform law addressing tort liability, defenses, and general real property rights related to the use of UAS. At its annual meeting in July 2019, the ULC was not able to complete its review of the Act and

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9 Including laws related to land use, zoning, privacy, and law enforcement operations, which are areas not subject to federal regulation.
10 84 F.R. 3865, 3893.
12 Press Release – FAA Statement – Federal vs. Local Drone Authority (July 20, 2018), available at https://www.faa.gov/news/press_releases/news_story.cfm?newsId=22938. The FAA continued, “State and local governments are not permitted to regulate any type of aircraft operations, such as flight paths or altitudes, or the navigable airspace.” It is less clear, however, whether FAA preemption authority extends to one (1) foot above the ground.
14 The ULC was formerly known as the National Conference of Commissioners on Uniform State Laws.
15 The current draft was provided for further comment on May 30, 2019 and is available at https://www.uniformlaws.org/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=a870dac3-db42-85cd-197d-abbf2d32e30d&forceDialog=0.
16 The various issues under consideration include “acquisition of private information of another by improper means, disclosure or use of private information obtained by improper means without consent, trespass by drone, nuisance by drone, self-help and defense of others, and tort action by any party, including a drone owner operator damaged by tortious behavior which includes the use of an unmanned vehicle.” See Statement of The Tort Law Relating to Drones Committee at https://www.uniformlaws.org/committees/community-home?communitykey=2cb85e0d-0a32-4182-adee-ee15c7e1eb20&tab=groupdetails.
postponed action on it. It is our belief that the ULC will delay any further action on the Act until the FAA has promulgated rules mandating remote identification on drones. We expect that mandate sometime in 2020.

III. REAL PROPERTY RIGHTS AND INTERESTS RELATED TO UAS USAGE

The tension between the expanding uses of UAS and landowner’s and legal occupant’s exclusive control over their land (including the airspace above the land), their expectations of privacy (including the expectation of privacy in land not visible from a public right of way), and their expectations of safety are rooted in historical trespass law and several basic, accepted, and long-standing concepts of property law.

In general, trespass law grants owners and legal occupants extensive and widespread control over their land and the near airspace above the land. Liability for trespass extends to any physical invasion of land without permission and does not depend on whether one’s actions cause economic harm or actual damage to the landowner or legal occupant. No bad intent or knowledge is required for a trespass violation and there is no de minimis exception for trespass. Simply being responsible for an object being on someone else’s land is enough to qualify as a trespass. Further, existing trespass law throughout the United States enables A to prevent C from crossing the surface of A’s land to deliver a package to A’s neighbor, B, without A’s prior consent. Trespass law is a basic, understandable concept that has evolved and worked consistently throughout its inception to protect landowners and legal occupants and provides guidance to third parties that interact with such landowners and legal occupants. Extending this example to the UAS context, it is reasonable for a landowner or legal occupant to expect that it could prevent UAS from using and crossing airspace over their land in some form or fashion. The degree to which a landowner or legal occupant can prevent UAS from using the airspace over their land is the key issue.

While trespass law is very categorical and context-insensitive, there are exceptions to the general strictness of trespass law that have developed over time to address emerging technologies or new developments. For example, the seminal case discussing the interplay of trespass law and airspace rights, United States v. Causby, 328 U.S. 256 (1946) specifically rejected the strict trespass common law principle of ad coelum. In Causby, the Court held that a landowner’s exclusive control over the surface of its land

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17 The ULC drafting committee submitted a Memorandum to the Uniform Law Commissioners dated July 8, 2019 setting forth why the drafting committee rejected using trespass and chose to use nuisance as the basis for the proposed uniform law. The position set forth in such Memorandum was rejected by a floor vote at the ULC annual meeting after which further action on the Act was postponed.

18 See, e.g. Jacque v. Steenburg Homes, Inc., 209 Wis.2d 605, 563 N.W.2d 154 (1997), where the court upheld an award of punitive damages against company that crossed a farmer’s land delivering a mobile home to a neighbor over said farmer’s objection, even though there was no physical damage or harm.

19 These include items such as common law defenses of necessity, and other exceptions imposed by legislation or regulation such as antidiscrimination laws governing public accommodations and right of entry afforded to certain service providers.

20 Ad coelum is short for cujus est solum, ejus est usque ad coelum et ad inferos (i.e. “one who owns the soil owns also to the sky and to the depths.”).
could not be extended to include all airspace above its land. However, the Court recognized and emphasized that a landowner, and by extension a legal occupant, has a legitimate expectation of exclusive control of low-elevation airspace. Specifically, the Court noted:

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. Otherwise buildings could not be erected, trees could not be planted, and even fences could not be run. The principle is recognized when the law gives a remedy in case overhanging structures are erected on adjoining land.

The landowner owns at least as much of the space above the ground as he can occupy or use in connection with the land. The fact that he does not occupy it in a physical sense—by the erection of buildings and the like—is not material. As we have said, 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. 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 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. The superadjacent airspace at this low altitude is so close to the land that continuous invasions of it affect the use of the surface of the land itself. We 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.\textsuperscript{21}

\textit{Causby}’s holding demonstrates that the \textit{ad coelum} principle could not be used to justify unqualified trespass liability upward without limits. However, and most importantly in the UAS context, the Court emphasized that the use of the airspace in the “immediate reach of the enveloping atmosphere” must be subject to the landowner’s exclusive control while the expectation of control a landowner has in the airspace over its land gradually decreases the higher into the airspace one goes. At a minimum, \textit{Causby} in the UAS context means that a landowner and legal occupant may reasonably expect that they can prevent UAS from operating at an altitude where UAS could come into contact with people or improvements on the land or otherwise invade the landowner’s or legal occupant’s property and interfere with their reasonable and historically rooted privacy expectations on their own land. Any exception(s) to traditional trespass principles to address and provide for UAS usage over private property must be specific and provide the same types of categorical certainty that have served landowners, legal occupants, and third parties alike so well throughout the development of and history of trespass law.

\textsuperscript{21} \textit{United States v. Causby}, 328 U.S. 256 (1947), 264-265.
Further, as *Causby* demonstrates, traditional trespass law is flexible and can evolve to successfully address and handle new, emerging technologies that impact landowner’s and legal occupant’s control over their land without having to struggle to create an entirely new regulatory and legal framework. The adaptability feature of trespass law is critical for any future legislation and regulation impacting UAS usage because ultimately the manner with which UAS are able to operate over private property without unreasonably interfering with a landowner’s or legal occupant’s expectation of control of its airspace will depend on the specific, factual circumstances. The concerns of a rural cattle farmer with respect to UAS usage over its land(s) are far different than those of an urban landowner or legal occupant of a small (say 5,000 square foot) tract of land inside a densely-populated municipality. The interests of a co-op and condominium or homeowner’s association related to UAS usage are different than those of a business park owner’s association. The concerns of a single-story building owner or legal occupant seeking to control UAS usage are different from those of the owner or legal occupant of an owner or occupant in a fifty (50) story high-rise. The interests of an owner of a single-family residence related to UAS usage are different from the concerns of an industrial warehouse owner or legal occupant. All of the permutations of varying interests and concerns are too numerous to list here and the foregoing comparisons are included to describe just some of the multitude of interests and concerns that any statute, ordinance, regulation, administrative rule, order, or guidance pertaining to the development and usage of unmanned aircraft systems over private property need to address, consider, and protect. The most effective manner to protect and address landowner and legal occupant interests and concerns related to UAS usage is to use and apply the existing common law trespass principles to protect private property rights with respect this new and emerging UAS technology. Such an approach will avoid the struggles of inventing a new legal framework while taking advantage of the adaptability of trespass law.

Two other property law principles are important to consider in the UAS context and demonstrate why trespass law concepts and principles are the best avenue to guide further legislative and regulatory efforts to govern UAS usage. The first principle is that property rights must be clearly delineated. Property rights are different from other privileges because property is *in rem* (i.e., property rights are valid against the world). Rights of landowners and legal occupants must be objectively clear so that others (e.g., UAS operators) can quickly and effectively understand those rights and make sure they are respecting the same. The common law in general has been very measured in creating any new property rights for this very reason.22 A failure to include the strict nature of trespass law (albeit with reasonable exceptions) in the UAS context would not meet the general public’s reasonable expectations with respect their real property rights and interests, especially as those rights have developed and been defined by trespass law. The second principle is that property rights are protected by “property rules” and not by “liability rules.”23 A liability rule approach allows a third party to take portions of ownership from another with such third party only being liable for money or other tort damages that


are available. In contrast, a property rule enables a landowner or legal occupant to obtain injunctive relief against harm (i.e., the landowner or legal occupant has the exclusive right to protect its property). Ultimately, a clear definition of property rights and an implementation of “property rules” are necessary components to any future UAS governing scheme to ensure that UAS usage considers and respects long-standing real property rights and interests of landowners and legal occupants.

IV. CONCLUSION

This resolution, if adopted, will ensure that existing real property rights and interests are considered and protected in any statute, ordinance, regulation, administrative rule, order, or guidance that seeks to govern and regulate the usage and operation of UAS over private property. Trespass law, through the use of clear, definable “property rules”, should be the framework for any UAS governance because this common law concept has evolved and worked consistently throughout its inception to protect landowners and legal occupants while providing guidance to third parties that interact with such landowners and legal occupants.

Respectfully Submitted,

Jo-Ann M. Marzullo
Chair, Section of Real Property, Trust and Estate Law
February 2020
1. **Summary of Resolution.**

The Resolution urges federal, state, local, territorial, and tribal governments to protect real property interests, particularly common law trespass and privacy rights, with respect to any statute, ordinance, regulation, administrative rule, order, or guidance pertaining to the development and usage of unmanned aircraft systems over private property.

2. **Approval by Submitting Entity.**

The Council of the Section of Real Property, Trust and Estate Law approved the filing of this Resolution and Report on November 16, 2019.

3. **Has this or a similar Resolution been submitted to the House or Board previously?**

There has not been a similar resolution filed.

4. **What existing Association policies are relevant to this Resolution and how would they be affected by its adoption?**

There are no known Association policies directly relevant to this Resolution.

5. **If this is a late Report, what urgency exists which requires action at this meeting of the House?**

Not applicable.

6. **Status of Legislation. (If applicable)**

Not applicable.

7. **Brief explanation regarding plans for implementation of the policy, if adopted by the House of Delegates.**

The sponsoring entity will work with the ABA Governmental Affairs Office to actively engage federal, state, territorial, tribal, and local legislative or regulatory activities, guidance or orders related to unmanned aircraft systems over private property. The
Section will publish the Resolution on its website and will actively work with federal, state, territorial, tribal, and local governments to address this issue.

8. **Cost to the Association.** (Both indirect and direct costs)

   There are no known costs to the Association.

9. **Disclosure of Interest.** (If applicable)

   There are no known conflicts of interest.

10. **Referrals.**

    By copy of this form, the Resolution will be referred to the following ABA entities:

    - ABA Governmental Affairs Office
    - All Sections, Divisions and Forums

11. **Contact Name and Address Information.** (Prior to the meeting. Please include name, address, telephone number and e-mail address. *Be aware that this information will be available to anyone who views the House of Delegates agenda online.*)

    Barry B. Nekritz
    Lawrence Kamin
    (312) 469-3202
    bnekritz@lawrencekaminlaw.com

12. **Contact Name and Address Information.** (Who will present the Resolution with Report to the House?) Please include best contact information to use when on-site at the meeting. *Be aware that this information will be available to anyone who views the House of Delegates agenda online.*

    Jo Ann Engelhardt, Delegate
    Section of Real Property, Trust and Estate Law
    Bessemer Trust
    (561)835-8300
    engelhardt@bessemer.com
EXECUTIVE SUMMARY

1. Summary of the Resolution.

The Resolution urges governmental protection of real property interests, particularly common law trespass and privacy rights, with respect to any legislation, statute, regulation, administrative rule, order, or guidance pertaining to the development and usage of unmanned aircraft systems over private property.

2. Summary of the issue that the Resolution addresses.

The popularity and usage of unmanned aircraft systems continues to grow exponentially among leisure and commercial users alike. These unmanned aircraft systems offer a variety of beneficial real world applications; however, they also raise complicated questions about how to resolve the sometimes-conflicting interests of unmanned aircraft systems operating over private property and private property occupants' common law trespass rights and privacy rights. Some form of legal or regulatory framework may be necessary to resolve such competing interests, to protect the privacy and physical safety of the real property owners and legal occupants, and to provide clear guidance to unmanned aircraft systems operators as to operation of such systems.

3. Please explain how the proposed policy position will address the issue.

The Resolution urges that any governmental action defend existing real property interests of real property owners and legal occupants. Specifically, the Resolution advocates that existing frameworks of common law trespass and privacy rights are considered, protected, and provide the framework of any legislative, regulatory, or other method of governing unmanned aircraft systems over private property.

4. Summary of any minority views or opposition internal and/or external to the ABA which have been identified.

No minority view or opposition have been identified within the ABA. Nuisance law instead of trespass law was considered by the Uniform Law Commission as the standard in a draft uniform law that was postponed from consideration.