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## Thou Shalt Not Drone Thy Neighbor

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## COMMENT

### THOU SHALT NOT DRONE THY NEIGHBOR

*Jonathan Sami Shbeeb*<sup>†</sup>

#### ABSTRACT

In response to a new era of drone usage across the world, many new legal issues will arise. This Comment addresses the use of commercial drone deliveries in the common interest community setting. The importance of this issue falls heavily on the homeowners' associations that intend to restrict or avoid restricting the use of commercial drone deliveries. This Comment analyzes how statutes and case-law will likely not prohibit the use of drones under trespass or nuisance theories of law.

The principles outlined in *United States v. Causby* regarding the trespass of aircraft over the land of another show that even the Supreme Court is hesitant to prohibit flights over the property of an individual. Additionally, *Burgess v. Omahawks Radio Control Organization* is an example of how courts will also be hesitant to use nuisance law to prohibit the use of unmanned aircraft. Both airspace trespass and airspace nuisance law take into account the interests of the individual and of society.

Further, restrictions that prohibit the use of commercial drone deliveries altogether will likely be considered unreasonable. In *Nahrstedt v. Lakeside Village Condominium Association* the California Supreme Court determined that a declaration restriction could be struck down if it is found to be unreasonable.

Thus, the solution is to insert reasonable restrictions that take into account the interests of the community in protecting its members from injury and the value of their homes, while also considering the interests of those that wish

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<sup>†</sup> *Editor-in-Chief*, LIBERTY UNIVERSITY LAW REVIEW, Volume 13. J.D. Candidate, Liberty University School of Law (2019); B.A. International Relations: Strategic Intelligence, Liberty University, 2014. Inspiration for this article came from watching my brother use drones in his films. I have always had a fascination with flight, and after speaking with Professor Tory L. Lucas, my property law professor and friend, I was convinced that I had to write an article focused on the interplay between drones and property law. I want to thank Professor Lucas for inspiring me. I also want to thank my wonderful wife, Marisa, and the rest of my family for being supportive throughout law school. Unless otherwise indicated, the opinions and arguments expressed herein are my own and do not necessarily reflect the opinions of anyone else I have mentioned.

to use drone delivery services. This Comment offers an example of a reasonable restriction.

## I. INTRODUCTION

The mass use of unmanned aircraft systems (“drones”) is coming. The use of drones to make deliveries is more economic, and with the advancement of technology, the need for trucks and drivers will soon be obsolete.<sup>1</sup> Jeff Bezos, Amazon’s CEO, and several other large corporations have already announced that they will be delivering by drone in the near future. Further, drones have been used to save lives with deliveries of medication in rural places like Lesotho, Africa.<sup>2</sup>

The law surrounding the use of drones is ever-changing.<sup>3</sup> Every day, other countries are moving forward to regulate and allow drone deliveries.<sup>4</sup> In the UK, Amazon successfully made a delivery using drones.<sup>5</sup> Jeff Bezos even tweeted the success as a 13-minute delivery.<sup>6</sup> Since the use of commercial drones to make deliveries is on the horizon, the legislature and the courts should be ready to deal with the legal issues that will arise. The issues that arise from drone use cover a broad spectrum. The three main issues that will likely arise are privacy, trespass, and nuisance. This Comment will not discuss privacy issues that arise in the drone context, because those issues have been discussed at length in other articles.<sup>7</sup>

Where drones fly overhead with large packages, at high speeds and at high decibels, those below will find that they have an interest in restricting the types of use that can be made. Where drones fly over the land of another, it will directly lead to claims for trespass. While an individual on the ground may believe they have a claim for trespass or nuisance, it is unlikely to be valid

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1. Dan Wang, *The Economics of Drone Delivery*, FLEXPOR T BLOG, <https://www.flexport.com/blog/drone-delivery-economics> (last visited Oct. 14, 2017).

2. *Id.*

3. David Camarotto & Frank Aba-Onu, *They’re Coming!*, 73-JAN BENCH & B. MINN. 28 (2016).

4. Lily Kuo, *Kenya has Approved the Commercial Use of Drones*, QUARTZ AFRICA (Feb 14, 2017), <https://qz.com/africa/910113/kenya-has-approved-the-commercial-use-of-drones/>.

5. Matt McFarland, *Amazon Makes Its First Drone Delivery in the U.K.*, CNN: TECH (Dec. 14, 2016, 12:02 PM), <http://money.cnn.com/2016/12/14/technology/amazon-drone-delivery/index.html>.

6. *Id.* (quoting Jeff Bezos).

7. Benjamin Kapnik, *Unmanned But Accelerating: Navigating the Regulatory and Privacy Challenges of Introducing Unmanned Aircraft into the National Airspace System*, 77 J. AIRL. & COM. 439 (2012).

based upon the current laws. These interests are not the only ones. As discussed, *supra*, there are those that also have an interest in receiving quick and cheap deliveries.

How can the opposing interests of the homeowner who wants drone deliveries, and the one that does not, be reconciled? Are there any protections that a homeowner can invoke? The best protection for both interests arises in the common interest community setting. The interests that can be protected by a common interest community agreement include: (1) the investment of those that purchased a lot or unit, (2) freedom from nuisance, (3) safety in the face of falling drones, (4) quick deliveries and cheap deliveries, and (5) the right to use his or her property as desired. This Comment will reconcile the above-mentioned concerns through a model common interest community declaration.

Since these communities are governed both by the public sector and the private sector, more issues will arise in this setting. Part II of this Comment gives a background on the structures of both the public and private law that will govern drone usage. Part III of this Comment discusses how trespass, nuisance, and common interest community law will govern the usage of drones. Finally, Part IV proposes a solution that will serve the interests of the common interest community and the individual owners.

## II. BACKGROUND OF TRESPASS, NUISANCE, AND COMMON INTEREST COMMUNITY LAW

The advent of new technology brings economic advantages and new legal issues. This section outlines rights afforded to a private property owner and briefly discusses the pertinent legal concepts helpful to understand why the common interest community (speaking specifically about home owners' associations) is the best forum to protect homeowners.

### A. *The Basis of Trespass and Nuisance Law.*

The protection of property rights involves a balancing of interests. These interests include the private owner's ability to use his land balanced with the rest of society's interest in enjoying the use of its property without unreasonable interference.<sup>8</sup> This balancing structure operates as a protection for the individual property owner first.<sup>9</sup>

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8. See *Nahrstedt v. Lakeside Vill. Condo. Ass'n*, 878 P.2d 1275 (Cal. 1994).

9. *Jacque v. Steenberg Homes, Inc.*, 563 N.W.2d 154, 166 (Wis. 1997) (holding that "when nominal damages are awarded for an intentional trespass to land, punitive damages may . . . be awarded.").

The rights possessed by owners and possessors of property are generally categorized as the bundle of sticks. This bundle of sticks can include the right of ownership, use, and possession. These sticks are protected by law and equity. Generally, two legal structures govern the use and enjoyment of land: the first is trespass law and the second is nuisance law.<sup>10</sup> Both provide protections to private land owners but in different ways. This section provides a brief overview of the aspects of trespass and nuisance law.

1. The Foundation of a Trespass Claim Comes from the Right to Exclude.

In *Jacque*, the defendant hauled a mobile home across the plaintiff's land without consent.<sup>11</sup> While the defendant used a "bobcat" to cut a path across the land, the land was never actually damaged.<sup>12</sup> The question before the court was whether the mere intentional trespass on the land of another, without proof of compensatory damages, warranted punitive damages.<sup>13</sup> The Supreme Court of Wisconsin held that punitive damages were warranted for the mere trespassory invasions of another's property, because of the value our society places on the right of one to exclude all others from their property.<sup>14</sup>

The concept of protecting private property owners' rights is not without limit. While the traditional view allowed a surface owner to claim ownership protection for all of the land above his surface to the outermost limits of the universe, that view has been circumscribed.<sup>15</sup> Thus, one "stick" held by private property owners is the right to exclude all others from the use, possession, or enjoyment of his or her land. Conversely, nuisance is a restriction on a private owner's otherwise legal use of his or her own property.

2. The Foundation for a Nuisance Claim Comes from the Right Against Unreasonable Interferences With an Owner's Right to Use and Enjoyment of His Own Land.

Nuisance law is another legal forum that affects the use of drones. An example of how courts apply nuisance law is in *Pestey v. Cushman*. In *Pestey v. Cushman*, the Supreme Court of Connecticut recognized that where the injured party can show that an actor's "conduct was the proximate cause of

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10. Both trespass and nuisance will be discussed in detail regarding the use of commercial drones for deliveries in Parts III and IV of this Comment.

11. *Jacque*, 563 N.W.2d at 157.

12. *Id.* at 157-58.

13. *Id.* at 158.

14. *Id.* at 160-61, 165.

15. *United States v. Causby*, 328 U.S. 256, 260-61 (1946).

an unreasonable interference with the plaintiff's use and enjoyment of his or her property," then the party has a claim for nuisance.<sup>16</sup>

The court followed the Restatement (Second) of Torts in deciding that determination of an unreasonable interference is based on the balancing of interests.<sup>17</sup> The court stated that "the fact finder must take into consideration all relevant factors."<sup>18</sup> These factors include:

the nature of both the interfering use and the use and enjoyment invaded, the nature, extent and duration of the interference, the suitability for the locality of both the interfering conduct and the particular use and enjoyment invaded, whether the defendant is taking all feasible precautions to avoid any unnecessary interference with the plaintiff's use and enjoyment of his or her property, and any other factors that the fact finder deems relevant to the question of whether the interference is unreasonable. No one factor should dominate this balancing of interests; all relevant factors must be considered in determining whether the interference is unreasonable.<sup>19</sup>

This court stated that "the question of reasonableness is [dependent upon] whether the interference is beyond that which the plaintiff should bear . . . without being compensated."<sup>20</sup> The court upheld a jury verdict for a property owner where odor emanating from the defendant's farm use on its own property effectively destroyed the use and enjoyment of the plaintiff's property.<sup>21</sup>

*Pestey* stands for another legal theory that protects private property owners from others; however, this theory also limits the private owner in how it may make use of its property. In final preparation for a discussion on drone use in the common interest community setting, it is helpful to discuss the basic aspects of the common interest community structure.

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16. *Pestey v. Cushman*, 788 A.2d 496, 507 (Conn. 2002) (The court intentionally restricted its opinion to the elements of private nuisance. Similarly, this Comment will not engage in discussions of public nuisance but shall focus on private nuisances caused by commercial drone delivery use in the common interest community setting.).

17. *Id.*

18. *Id.*

19. *Id.* at 507-08.

20. *Id.* at 508.

21. *Id.* at 499-500, 515.

## B. *The Common Interest Community*

While the structure of common interest communities is a tool for homeowners to “create their own world,” this tool has its limitations. Some of these limitations come in the form of reasonableness limitations on the application of declaration restrictions. However, these limitations do not affect a private homeowner’s ability to use nuisance claims outside of the declaration.<sup>22</sup> This section discusses the structure of common interest communities and the balancing of interests conducted by courts in addressing common interest community issues.

### 1. The Common Interest Community Structure

The common interest community (CIC) structure is governed by covenants, conditions, and restrictions (CCRs), which are laid out in a declaration.<sup>23</sup> These covenants can include pet restrictions,<sup>24</sup> landscaping restrictions, house color restrictions, and even signage restrictions.<sup>25</sup> A CIC is burdened by these restrictions, but can still be a tool to protect the buyer’s investment.<sup>26</sup> These CICs are governed by community associations,<sup>27</sup> and can take several forms including condominiums and cooperatives. This Comment focuses on the CIC, and the applicable community association, pertaining to homeowner CICs.

The homeowners’ association is “[a]n organization created to manage the property and affairs of a common-interest community, such as a housing tract or condominium project.”<sup>28</sup> The role of homeowners’ associations is to “help[] protect the CIC homeowners’ investment and expectations” of what the homeowner gets when she buys a home governed by the CIC.<sup>29</sup> Enforcement options can include a range of action from fines all the way to

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22. Trespass and nuisance issues regarding the common interest community will be discussed in Parts III and IV.

23. Paula A. Franzese, *Privatization and Its Discontents: Common Interest Communities and the Rise of Government for “the Nice,”* 37 URB. LAW 335, 336 (2005).

24. *Id.*

25. *Id.* at 336-37 (indicating that restrictions can even include restrictions on landscaping, house color, and posting signs).

26. Grant J. Levine, *This is My Castle: On Balance, the Freedom of Contract Outweighs Classifying the Acts of Homeowners’ Associations as State Action,* 36 NOVA L. REV. 555, 559-60 (2012).

27. *Id.* at 557.

28. *Association*, BLACK’S LAW DICTIONARY (10th ed. 2014).

29. Levine, *supra* note 26, at 559-60.

foreclosure on the private owner's property in order to obtain payment of the fines.<sup>30</sup>

In sum, the structure of the CIC and its homeowners' association is in the form of an agreement between homeowners. They agree to be bound by restrictions in order to protect their investment in the property. These restrictions are generally upheld because there is a strong public policy allowing freedom to contract.<sup>31</sup> While CIC's provide for a good method of restricting a member's uses of the CIC, the CIC does not have unlimited discretion in creating and applying its restrictions.

## 2. *Limitations on the Ability of Homeowners' Associations to Restrict the CIC*

The restrictions of a CIC's declaration are presumed to be valid unless unreasonable.<sup>32</sup> In *Nahrstedt*, a member of a CIC challenged a pet restriction that was imposed on the use of her property.<sup>33</sup> This pet restriction effectively prevented the unit's possessor from exercising the free use and enjoyment of her property, but was still deemed reasonable and was upheld by the Supreme Court of California.<sup>34</sup>

The court reasoned that the restriction in *Nahrstedt* was sufficiently reasonable.<sup>35</sup> The court recognized that although the private homeowner did not sign the declaration, the property was subject to an equitable servitude.<sup>36</sup> The court emphasized that the complaining owner had access to, and thus notice of, the pet restriction, because it was publicly recorded in the CIC's declaration.<sup>37</sup> Therefore, she was subject to the declaration because the restriction ran with the land in equity. The court reasoned that "the pet restriction may have been an important inducement" in deciding whether to buy a unit.<sup>38</sup> Additionally, the court stated that "the homeowners collectively

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30. *Does the HOA Really Have Any Power over my Property?*, REALESTATELAWYERS, <https://www.realestatelawyers.com/resources/real-estate/residential-real-estate/does-hoa-really-have-any-power-over-my-property> (last visited Nov. 1, 2017).

31. See Levine, *supra* at note 26, 556-70.

32. See *Nahrstedt v. Lakeside Vill. Condo. Ass'n*, 878 P.2d 1275 (Cal. 1994).

33. *Id.* at 1278 (the restriction "provide[d] in relevant part: 'No animals (which shall mean dogs and cats), livestock, reptiles[,] or poultry shall be kept in any unit.'").

34. *Id.* at 1292.

35. *Id.*

36. *Id.* at 1285-87.

37. *Nahrstedt*, 878 P.2d at 1292 ("[T]he pet restriction was . . . recorded with the county recorder before any of the . . . units [were] sold.").

38. *Id.* at 1292.



have the power to repeal the pet restriction,” yet they had not.<sup>39</sup> Therefore, “its continued existence reflect[ed] their desire to retain it.”<sup>40</sup>

Although the court held for the homeowners’ association, the decision was not *solely* based on the concept of freedom to contract. The decision reflected judicial balancing of interests and a determination of whether the restriction was a reasonable one.<sup>41</sup> The court stated that “courts are generally disinclined to question the wisdom of agreed-to restrictions.”<sup>42</sup> The court nonetheless stated that a restriction will not be enforced if it “violates public policy; it bears no rational relationship to the protection, preservation, operation[,] or purpose of the affected land; or it otherwise imposes burdens on the affected land that are so disproportionate to the restriction’s beneficial effects that the restriction should not be enforced.”<sup>43</sup>

The take-away from *Nahrstedt* is that courts will generally enforce these restrictions if they are not unreasonable.<sup>44</sup> So, there are two layers of protection for homeowners that do not wish to encumber the use and enjoyment of their property. While there are methods of “change” that a homeowner could use, this Comment focuses on the protections afforded homeowners that do not have the option to amend or repeal restrictions.

First, homeowners may choose to exercise their freedom of contract and refuse to purchase residences in CICs. The limitation of freedom to contract is governed by the laws of the free-market economy. If a developer wishes to sell lots in the CIC, he or she must ensure that the restrictions imposed are desirable to potential buyers. Thus, homeowners may vote on the restrictions with their wallets and their feet.

Second, homeowners are protected, in equity, from restrictions that are “wholly arbitrary, [that] violate a fundamental public policy, or impose a burden on the use of affected land that far outweighs any benefit” to the CIC.<sup>45</sup> Thus, in order to obtain protection from a restriction, after it has been agreed to by the private homeowner, homeowners must appeal to the judiciary. The judiciary presumes that the restrictions are valid. The judiciary then engages in a balancing act, where the interests of the community, the individual, and even the state’s public policy will be balanced.

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39. *Id.*

40. *Id.*

41. *Id.* at 1285.

42. *Id.* at 1286.

43. *Nahrstedt*, 878 P.2d at 1287.

44. *Id.* (stating that restrictions are “enforceable equitable servitudes, unless unreasonable.”).

45. *Nahrstedt*, 878 P.2d at 1287.

Therefore, private homeowners have limited options in protecting themselves from the restrictions they agree to, but courts will still protect homeowners from bad contracts where restrictions impose unreasonable restrictions. With this general understanding of the private “laws” of the CIC and the way that courts generally approach enforcement, it is important to understand the limitations and protections offered in other areas of the law.

### III. DRONES AND THE LEGALITY OF COMMERCIAL DRONE DELIVERY USE

Society has raised several concerns in regard to increases in drone usage. As discussed previously, there are several established areas of law that could govern the issue. This section shows how, after the commercial use of drone deliveries is sanctioned in the United States under trespass and most nuisance law, the most effective limitation on the use of drones will come in the form of private land use arrangements.<sup>46</sup>

#### A. *Trespass Law is Insufficient to Ward off Drones in Navigable Air Space.*

Trespass law is based on the right to exclude all others.<sup>47</sup> This area of the law is governed by these common law principles as applied to airspace rights. However, the use of such areas is highly regulated by statute as well. The Federal Aviation Administration (“FAA”) and other federal and state statutes govern airspace. Before exploring the statutes that apply to drone usage, it is important to analyze the common law approach to airspace rights.

##### 1. Common Law Airspace Rights Outlined in *Causby*.

The common law approach to airspace has evolved from a narrow view to a more modern view. This modern view was highly affected by the advancement and increased efficiency of technology. The United States Supreme Court ventured into the airspace trespass debate in an eminent domain takings case.<sup>48</sup>

In *Causby*, the Court recognized that navigable airspace is a public highway, and that if it were not, “every transcontinental flight would subject the operator to countless trespass suits.”<sup>49</sup> The Court indicated that the rights of a private owner regarding the airspace above her property may be limited

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46. Although public land use arrangements will effectively limit the use of drones in certain zones, private land use arrangements, i.e., the CIC, have the most restrictive power on those that voluntarily enter the land use arrangement.

47. See *Jacque v. Steenberg Homes, Inc.*, 563 N.W.2d 154, 159 (Wis. 1997).

48. See *U.S. v. Causby*, 328 U.S. 256 (1946).

49. *Id.* at 261.

as society advances. After indicating that there are limits on ownership of navigable airways, the Court held that even though the United States conducted flights in the navigable airspace, the use of the airspace still constituted a Fifth Amendment taking because the low altitude at which the aircrafts flew continuously invaded the land to affect the use of the surface itself.<sup>50</sup>

*Causby* is important to this discussion for two reasons: first, it shows the balancing act that takes place in property right cases, and second, it shows that the Supreme Court recognized that the use of navigable airspace does not alone amount to a trespass. First, the balancing act focuses on the interests of the private property owner to exclude others from its property, while ensuring that society may still use parts of the land for specified legal reasons. Second, the Court also recognized that a trespass of the *navigable airspace* alone was insufficient, but it found that the manner in which the airspace was used constituted an intrusion on the owner's property rights.<sup>51</sup>

Private property owners have also sought to defend against physical intrusions by the use of self-help. Examples of self-help in traditional property law include situations where private property owners cut tree branches<sup>52</sup> and even when landlords use vehicles to physically block tenants from continued use of the property.<sup>53</sup> Tree branches that cut across the airspace of a private property owner may set a backdrop for how self-help will be used in the unmanned aircraft systems (drone) setting. William Meredith of Kentucky relied on self-help when he shot down his neighbor's drone.<sup>54</sup>

Meredith has been labeled "the drone slayer,"<sup>55</sup> and his case was dismissed for lack of subject matter jurisdiction.<sup>56</sup> Mr. Meredith said that he shot down the drone because it represented an invasion of privacy, and he even "dubb[ed] himself 'the droneslayer.'"<sup>57</sup> Although Meredith's reasoning was

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50. *Id.* at 265.

51. *Id.* at 260-61.

52. *Melnick v. C.S.X. Corp.*, 540 A.2d 1133, 1137-38 (Md. 1988) (holding that the private property owner's sole remedy for encroaching tree branches was the use of self-help, not a nuisance action).

53. *Greelish v. Wood*, 914 A.2d 1211, 1213, 1217 (N.H. 2006) (holding that the plaintiff's course of action constituted "conduct designed to force the defendant to leave" and that the landlord did not have the ability to use such self-help).

54. Miriam McNabb, *The Kentucky "Drone Slayer" Case Dismissed*, DRONE LIFE (Mar. 22, 2017), <https://dronelife.com/2017/03/22/kentucky-drone-slayer-case-dismissed/>.

55. *Id.*

56. *Id.*

57. *Id.* (Mr. Meredith even sold t-shirts indicating his status as "droneslayer.").

based on his concern about privacy, another private property owner in his position could have argued that it was a trespass, to which he was entitled to use self-help.<sup>58</sup> Drone-slaying is likely to increase as commercial drone use increases in the United States. The dangers of self-help, especially when it comes in the form of a shotgun-wielding-drone-slayer, will cause the legislature to move quickly on avenues of protection against trespass.

In sum, the common law reflects a basic protection for those who use the navigable airspace over the surface of a private individual, or a CIC's, property. *Causby* showed that there may be limits for the government in the context of the way that the airspace is used.<sup>59</sup> While the common law is fairly lenient on the use of airspace by those who have no right to the surface, federal airspace law and the FAA create a higher standard that drone fliers must observe.

## 2. FAA and Other Statutes Governing the Use of Drones

Use of navigable airspace is federally approved by Congress in 49 U.S.C. § 40103.<sup>60</sup> In pertinent part, the statute states that “[a] citizen of the United States has a public right of transit through the navigable airspace.”<sup>61</sup> Congress granted power to the FAA to establish the limits within the navigable airspace in order to “ensure the safety of aircraft and the efficient use of airspace.”<sup>62</sup>

In turn, the FAA created many regulations governing the use of the navigable airspace. The regulation relevant to this Comment is found in 14 C.F.R. § 107.<sup>63</sup> This regulation specifically applies to the use of unmanned aircraft systems (“UASs”) under fifty-five pounds upon takeoff.<sup>64</sup> Restrictions under § 107 include the licensure of pilots,<sup>65</sup> the types of material that may not be carried,<sup>66</sup> the categories of airspace that may be used,<sup>67</sup> and the operation of UASs above human beings.<sup>68</sup> The restriction regarding flight

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58. *Id.*

59. *See infra* Part III.B.

60. *See* 49 U.S.C. § 40103 (1994).

61. § 40103(a)(2).

62. § 40103(b)(1).

63. *See generally* 14 C.F.R. § 107 (2018).

64. § 107.3.

65. § 107.12(a) (stating that either a remote pilot certificate or supervision by one that holds such certificate is required before an individual can operate the controls of a UAS).

66. § 107.36 (forbidding the carriage of hazardous materials by UASs).

67. § 107.41 (restricting the UASs from the use of Class B, C, D, and usually E airspace without “prior authorization from Air Traffic Control”).

68. § 107.39.

over human beings prohibits the operator of a UAS to fly it “over a human being unless that human being is . . . [l]ocated under a covered structure or inside a stationary vehicle that can provide reasonable protection from a falling small unmanned aircraft.”<sup>69</sup>

Finally, the restrictions imposed by this regulation require that the use of UASs be restricted to flights that do not exceed a “groundspeed” of 100 miles per hour and flying no higher than “400 feet above ground level.”<sup>70</sup> The height restriction is loosened where the UAS flies “within a 400-foot radius of a structure[,] and . . . [d]oes not fly higher than 400 feet above the structure’s immediate uppermost limit.”<sup>71</sup> These restrictions are far too limiting to provide for efficient commercial drone delivery.

Interestingly, these drone laws are not here to stay. The efficiency of drone deliveries and the strong presence of Amazon in the marketplace is a prediction that drone regulations will need to adapt in the near future. Although less restrictive drone regulations are likely in the near future, the regulations in place now do not prohibit the use of commercial drone deliveries, they merely limit them. If pilots restrict their drone flights to the navigable airways, as prescribed by 49 U.S.C. § 40103 and 14 C.F.R. § 107, the company is protected by statute and by common law, as indicated by *Causby*. Thus, society’s interest in efficient delivery may be sufficient to overcome the interest of a property owner to some extent.

#### B. *Nuisance Law is Insufficient to Negate the Reasonable Use of Drones for Delivery*

Nuisance law is premised on the reasonable use of property, like the enforcement of CICs. Courts weigh the interests of the individual against those with which the individual is interfering using the factors outlined in *Pestey*.

##### 1. Nuisance and the Interests of the Individual

A person receiving a delivery from a drone has many interests at play. These interests include the desire to have less expensive and quicker deliveries. Those who have ordered packages from Amazon know that even with Amazon Prime,<sup>72</sup> receiving packages is going to take some time. If the

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69. § 107.39.

70. § 107.51(a)-(b).

71. § 107.51(b)(1)-(2).

72. Those who purchase an Amazon Prime membership have access to “free” two-day shipping for certified products. However, this can take even longer during holidays and when the package is located in distant regions.

homeowner needs his package immediately, there is no way to receive it without waiting the requisite two days, not including holidays or other “non-deliver” days.

Drone deliveries can be significantly faster than current methods of delivery. This is a major interest for the modern-day consumer. Further, these quicker deliveries are cost efficient for companies like Amazon.<sup>73</sup> These deliveries are estimated at costing Amazon approximately \$0.88 per delivery if Amazon were permitted to fly ten to twelve drones with one operator.<sup>74</sup> Not only will Amazon be able to make these deliveries cheaper by charging users only \$1.00 per delivery, but it will also make deliveries faster: the drones are estimated to have a thirty-minute delivery time.<sup>75</sup>

Granted, a drone cannot carry more than one package successfully, and drone regulations do not currently allow for a drone operator to operate more than one drone simultaneously. The current delivery price is the cost of Amazon Prime or the exorbitant one-day delivery charge, versus the \$1.00 thirty-minute delivery that would be available if the FAA loosened its drone regulations.

Thus, the consumer would benefit from getting a thirty-minute delivery, while spending less money. While the current state of technology and current regulations in place may look doubtful, the future looks bright. Currently, drones are being used in other countries and the United States should not fall behind. In Lesotho, a drone startup called “Matternet” has begun testing drone networks by delivering blood samples from remote villages where it is tested for HIV/AIDS.<sup>76</sup> These villages have had trouble with HIV, but through the use of drones Matternet was able to fly blood samples out for testing.<sup>77</sup> Matternet, and other drone startups, are showing the world that drones can be used in a very big way, trusting these drone networks to fly “valuable” and “time-sensitive” items over increasing distances.<sup>78</sup>

These benefits can all be recognized by the modern-day consumer. Further, the consumer can receive these deliveries immediately at a lower cost, saving them time and money. These savings allow people to either enjoy more luxury time with their friends and families or to become more

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73. Dan Wang, *The Economics of Drone Delivery*, FLEXPOR T BLOG, <https://www.flexport.com/blog/drone-delivery-economics> (last visited Oct. 14, 2017).

74. *Id.*

75. *Id.*

76. *Id.*

77. *Id.*

78. *Id.*

productive. While these uses are extremely beneficial to the individual, it is important to weigh the interests of the community as well.

## 2. Nuisance and the Interests of the Community

There are conflicting interests in any community. But because communities are made of people who are similar for one reason or another, there is middle ground to be found in the interests that they share. First, the interests of the individual homeowner and the rest of the community that conflict include harm from falling objects, invasion of privacy, and noise pollution. Implementing drones into every-day-life has caused concern about the damage that falling drones could cause. While these fears are not unreasonable, they may be overstated. A recent study released by the FAA and several universities indicates that being struck with a wooden block or steel shrapnel is more dangerous than being struck by a falling drone.<sup>79</sup> In fact, the study showed that being struck by a falling drone is “dramatically different” than being struck in the head by other materials due to the pliable nature of the drone’s materials.<sup>80</sup> In context of falling pieces of wood versus falling pliable pieces of a drone, it is more likely that a drone will not be considered unreasonably dangerous. Further, with the advent of new technology, drones will be safer and less likely to fall from the sky.

There is no doubt that increasing drone traffic could increase privacy issues in the CIC. Drone operators need a camera to see when flying drones and dropping off packages.<sup>81</sup> This raises questions about privacy, but they will likely be answered based on the technology and ability of the FAA to properly regulate information gathered on these drone cameras. As shown in the “drone-slayer” case, citizens are concerned about this. However, measures can be taken to protect privacy interests when drones make deliveries. Additionally, companies like Google and Bing take photos of earth and neighborhoods at much the same angle that a drone would.

Finally, the concerns regarding noise pollution may be the most effective tool in the community’s arsenal. In *Muehlman v. Keilman*, the Indiana Supreme Court held that the defendant’s conduct constituted a nuisance although it amounted to no more than fumes and noise.<sup>82</sup> The defendants “raced the diesel engines of their two semi-trailer trucks at all times during the day and night.”<sup>83</sup> The trucks were placed “immediately adjacent to [the

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79. Jonathan Vanian, *Here’s What Happens When a Drone Falls on Your Head*, FORTUNE (April 29, 2017), <http://fortune.com/2017/04/29/drone-faa-head-crash-study>.

80. *Id.*

81. Whether it be a human operator or a computer operator.

82. *Muehlman v. Keilman*, 272 N.E.2d 591, 593 (Ind. 1971).

83. *Id.*

plaintiffs] residence . . . and in close proximity to [their] bedroom.”<sup>84</sup> The court held that mere noise could cause a nuisance, depending on the circumstances.<sup>85</sup> This shows that courts are willing to grant noise nuisances to individuals that are personally harmed by them.

In the drone context, *Burgess v. Omahawks Radio Control Organization* lands a little closer to the mark.<sup>86</sup> In *Burgess*, the plaintiffs lived no more than four to six blocks from where the defendant leased property to fly model airplanes.<sup>87</sup> The defendant was a non-profit organization that leased property for the purpose of allowing its 150 members to fly model airplanes between 9:00 a.m. and “dark.”<sup>88</sup> Interestingly, the model airplanes were required to be evaluated and certified by a noise abatement committee.<sup>89</sup>

The Supreme Court of Nebraska determined that the loudest of the model airplanes put out approximately 104 decibels at 3 feet of distance, and 84 decibels at 36 feet of distance.<sup>90</sup> The court held that the model airplane flights, “although annoying to the plaintiffs, [did] not rise to a level of private noise nuisance.”<sup>91</sup> The court reasoned that based on the circumstances, the “character, volume, frequency, duration, time, and locality of the noise,” the flights of the model airplanes were not unreasonable interferences with the use and enjoyment of the plaintiff’s property.<sup>92</sup>

While *Burgess* did not involve flight over the homes of CIC members, it did involve noise from unmanned aircraft systems. The case also shows that courts will not prohibit drone deliveries based on the mere nature of the sound which emanates from similar vehicles. It is possible that homeowners in CICs will react to drone noise much the same. New technology is likely to ensure that drones travel at sounds far quieter than those of the model airplanes in *Burgess*. Finally, a court must consider all of the interests and factors that both the individual and community have in allowing or prohibiting commercial drone delivery use.

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84. *Id.*

85. *Id.*

86. *Burgess v. Omahawks Radio Control Org.*, 362 N.W.2d 27 (Neb. 1985).

87. *Id.* at 29.

88. *Id.* (noting that on Mondays fliers were required to land their cruisers at 6:00 p.m.).

89. *Id.* Apparently these rules are strictly enforced.

90. *Id.*

91. *Id.* at 30.

92. *Burgess*, 362 N.W.2d at 30.



### 3. A Balancing of the Interests Will Likely End in Favor of the Individual Seeking to Use Commercial Drone Delivery Companies

In balancing the interests of the individuals that desire drone deliveries with the interests of the community, a court will likely lean in favor of the free use of land of the individual seeking to use drone delivery services. This means that the interests of the community must truly outweigh the individual's interests in the free use of land. The factors used will likely be those used in other nuisance cases.

First, the “nature of both the interfering use and the use and enjoyment invaded” will be considered.<sup>93</sup> The nature of the interfering use is the flight of a drone and package over the surface of the land. The nature of the use and enjoyment of the land invaded is that of residential use. The protection of each community member's ability to use his or her land residentially is an important interest. But, if drone deliveries are deemed not to unreasonably interfere with the use of residential property by the courts, then the residential use will be outweighed.

Second, the “nature, extent and duration of the interference” will be considered.<sup>94</sup> The nature and extent of the interference is likely that of noise and the possibility of falling drone parts. The duration of the interference is likely to be made only during business hours. If companies like Amazon restrict their deliveries to times between 9:00 a.m. and 3:00 p.m., they may avoid the argument that the duration of the interference is unreasonable. If the deliveries take place during the hours most members of the community are not home, then fewer members of the community will be affected.

Third, “the suitability for the locality of both the interfering conduct and the particular use and enjoyment invaded” will be considered.<sup>95</sup> The suitability of drone deliveries to a residential community is not unreasonable. This is because there are many deliveries being made by ground vehicles; however, the suitability of flying objects over the homes is not within the normal context of a neighborhood.

Fourth, “whether the [delivery company and the individual receiving the delivery are] taking all feasible precautions to avoid any unnecessary interference with the [homeowners'] use and enjoyment of his or her property” will be considered.<sup>96</sup> This will come down to whether the delivery company has established procedures in place to ensure protection for those community members who wish not to be bothered by drones. Suggestions to

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93. *Pestey v. Cushman*, 788 A.2d 496, 507 (Conn. 2002).

94. *Id.*

95. *Id.*

96. *Id.*

ensure that the rights of use and enjoyment are not impeded include research into quieter flights, procedures for maintaining and replacing drones, procedures for collecting fallen drones, and even procedures for compensating individuals that are adversely affected by noise or falling drone pieces.

Finally, “any other factors that the fact finder deems relevant to the question of whether the interference is unreasonable” will be considered.<sup>97</sup> “No one factor should dominate this balancing of interests; all relevant factors must be considered in determining whether the interference is unreasonable.”<sup>98</sup>

In balancing these factors, it is likely that a community’s efforts to ban drone delivery through nuisance law will fail. Companies making drone deliveries can protect themselves from being an unreasonable interference by implementing some safety measures. Such a company can fly its drones at an altitude that would decrease noise pollution. They can make deliveries during hours that would be least likely to cause interference with homeowners. And finally, the companies can spend some money on research and development to successfully negate noise pollution.

Also, a drone company that ensures that its drones do not malfunction—by the use of regular and extensive maintenance and repairs—may avoid nuisance claims regarding the fear of falling objects. The company can ensure that its collection efforts for fallen drones is quick and does not further damage any property. This can be coupled with adequate compensation. Thus, nuisance law will likely not be enough to negate drone delivery usage in the common interest community.

### C. *The Application of CIC Law to Drone Deliveries Will Likely Not Permit a Complete Ban on the Use of Commercial Drone Delivery Companies*

In the context of common interest communities, the concerns examined in *Causby* require a careful hand. Common interest communities have restrictions on the use of land so that the goals of the community can be achieved. Issues arise where a minority of the community breaches the restriction in some way. The scenario in *Nahrstedt* differed from that in *Causby* in two ways. First, the conduct complained of in *Nahrstedt* was an action taken by the private owner,<sup>99</sup> whereas in *Causby* the complained of actions were taken by the outside actor.<sup>100</sup> This significantly shows that the

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97. *Id.* at 507-08.

98. *Id.*

99. See *Nahrstedt v. Lakeside Vill. Condo. Ass’n*, 878 P.2d 1275 (Cal. 1994).

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

restrictions on private property protection mentioned in *Causby* are not limited to the right to exclude. These restrictions include the use that one can make of his or her own land.

Second, Nahrstedt voluntarily chose the restriction on her use of the property when she bought into the common interest community,<sup>101</sup> whereas the plaintiff in *Causby* had the restriction on his right to exclude legally-imposed.<sup>102</sup> This is significant because the standard in *Nahrstedt* required the plaintiff to prove that the restriction was unreasonable after joining a community that agreed to the restriction.

Joining communities after restrictions are made means that limitations on the use of drone deliveries for those in CICs will likely be in the form of restrictions agreed to in the declaration. As illustrated by *Nahrstedt* though, there is a limit on such restrictions.<sup>103</sup> The value of restricting the commercial use of drones for deliveries is not minute. While there is great value in the use of such deliveries, drone deliveries create many new issues. Drones can cause injury to individuals who are not receiving deliveries. One such instance involved Georgine Benvenuto.<sup>104</sup> While the drone that struck Ms. Benvenuto was not making deliveries, it was flying around with mistletoe attached to it.<sup>105</sup> The purpose was to tease TGI Friday's patrons into kissing under the mistletoe.<sup>106</sup> The plan backfired when the drone struck Ms. Benvenuto, "clipping the end of her nose and cutting her chin."<sup>107</sup> Community members have an interest in ensuring that they, their children, and their property are not damaged by falling drones.

On the other side of the ledger is the interest of community members who desire cheaper and faster delivery. If a community member does not have a vehicle, needs a delivery of medicine quickly, or has limited mobility, the possibility of drone delivery could be quite appealing. For those reasons, balancing the interests at play regarding commercial drone deliveries is paramount. Thus, it is important to understand that land use arrangements that restrict the use of commercial drone deliveries could be considered

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101. See *Nahrstedt*, 878 P.2d at 1275.

102. See *Causby*, 328 U.S. at 258-60, 265.

103. See *Nahrstedt v. Lakeside Vill. Condo. Ass'n*, 878 P.2d 1275,1292 (Cal. 1994) (The limit being that the restrictions may be invalidated if they are proven to be unreasonable.).

104. Conner Forrest, *17 Drone Disasters That Show Why the FAA Hates Drones*, TECHREPUBLIC (June 13, 2018, 7:44 AM), <http://www.techrepublic.com/article/12-drone-disasters-that-show-why-the-faa-hates-drones/>.

105. *Id.*

106. *Id.*

107. *Id.*

unreasonable.<sup>108</sup> Homeowners' associations must ensure that they employ restrictions that, if challenged, will be upheld as reasonable.

As discussed, *supra*, the court in *Nahrstedt* viewed the restriction as reasonable largely because the complainant bought the property subject to the recorded restrictions.<sup>109</sup> Although this factor will be given great weight, the courts will also consider whether the benefits of the restrictions are outweighed by the burdens they impose on individuals in the community.

The burdens imposed by a drone delivery prohibition will likely cause individuals to be stuck with slower and more expensive truck delivery.<sup>110</sup> These slower forms of delivery not only burden the individual but also the community. The decrease in ground vehicular delivery will also decrease the likelihood of accidents and even death of children running around the neighborhood. If there was no need for the truck to make deliveries in the neighborhood, the chances of delivery truck related accidents would logically decrease. Thus, but-for the delivery, there would have been no accident.

Delivery trucks are so dangerous that law firms have made a practice out of suing on behalf of individuals injured by UPS drivers.<sup>111</sup> The law firm of Fried Rogers Goldberg LLC devoted an entire page of its website to UPS accidents. These statistics include that “[i]n the 24-month period prior to December 3, 2017, UPS drivers were reported to have been involved in 2,003 crashes, 689 involving injuries, including 49 deaths.”<sup>112</sup> Although 49 deaths may not seem like a lot, in light of the large number of car accidents that take place per year, it must be balanced against the possibility of injury caused by drone deliveries. However, there is no empirical data on deaths or injuries caused by commercial drone delivery per year, so the best comparison comes from the severity of injury.

The best comparison centers on the severity of injuries, and it is plain from the mild drone injuries recorded that they are far less severe than those caused by delivery trucks.<sup>113</sup> In fact, the injuries likely to occur from a drone malfunction are limited to the terminal velocity of the package and the drone.

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108. For examples of a land use arrangement see Patrick K. Hetrick, *Drafting Common Interest Community Documents: Minimalism in an Era of Micromanagement*, 30 CAMPBELL L. REV. 409, 410-11 (2008) (explaining that a declaration is a land use arrangement).

109. See *Nahrstedt v. Lakeside Vill. Condo. Ass'n*, 878 P.2d 1275, 1292 (Cal. 1994).

110. As discussed, *supra* note 77, the drone delivery time will be as low as thirty-minutes. In comparison to the expedited Amazon Prime time of two-day shipping, thirty-minute delivery is exponentially faster.

111. *UPS Truck Accident Statistics*, FRIED ROGERS GOLDBERG LLC, <https://www.frg-law.com/carriers/ups>.

112. *Id.*

113. See Vanian, *supra* note 79.

Additionally, the speed of a falling drone can be reduced by including a parachute or similar speed reducing mechanism. Thus, drone deliveries pose a much smaller risk to the health and safety of the community than truck deliveries do.

There are many other delivery companies in addition to UPS. Thus, the argument that increased drone delivery will cause more injuries than other delivery methods currently in place is not persuasive.<sup>114</sup> It is likely that increased traffic from drone deliveries will cause a higher percentage of drone related injuries, but the magnitude of the injury is likely to be miniscule in comparison to those caused by a truck accident. Thus, the burden imposed on the prohibition of drone delivery usage seems like a high price to pay especially when drone injuries will be far less severe.

The only argument left is the economic interest of the community. If the burden of prohibited drone delivery usage outweighs the economic benefits incurred from the prohibition, then it will likely be held unreasonable. The economic interest is in ensuring the stability of home values. To ensure stability and increase home value, homeowners' associations restrict how a homeowner can maintain his lawn, where he can park vehicles, and even the tiles that he can place on his roof.<sup>115</sup>

Those residents that want to protect their interest place these restrictions in service. Either the developer will make the restrictions before the plots are first sold, or the homeowners' association will add them. Either way, these restrictions are imposed with the alienability of the property in mind. In light of the modern world, however, homeowners' associations must consider additional factors beyond the context of reasonableness of the restriction.<sup>116</sup> Modern families rely on technology, so it may become difficult to sell a home that is prohibited from the use of commercial drone deliveries.

Although this technology makes life easier, there is an even stronger argument that CIC restrictions must confront. According to Forbes, "[there are] approximately 80 million Amazon Prime members," constituting the

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114. The burdens imposed must logically outweigh any benefit that is not truly a benefit at all. Thus, the "benefits" incurred by the prohibition are categorically not benefits. Therefore, any burden imposed outweighs a benefit that is equal to zero, or even a negative effect.

115. *Stergios v. Forest Place Homeowners' Ass'n*, 651 S.W.2d 396 (Tex. App. 1983), writ refused n.r.e. (Oct. 19, 1983).

116. While a court will likely not take into account the economic concerns of the community in the same manner as the homeowners' association, it will still consider whether the benefits incurred by the restrictions are outweighed by the burdens imposed.

sixty-four percent of U.S. households that use Amazon Prime.<sup>117</sup> The volume of Amazon Prime users is significant because it shows that limiting the services Amazon offers, such as drone delivery, will limit a homeowner's ability to sell its home.

If the drone delivery service is offered cheaper to Amazon Prime members, as is likely, that means homes where drone deliveries are restricted may be sixty-four percent less likely to sell.<sup>118</sup> With all the relevant facts in mind, it seems that any benefit incurred from prohibition on drones is outweighed. Homeowners' associations will face suits to strike down unreasonable restrictions and developers will find it difficult to sell a plot of land with such an encumbrance. However, this is not to say that there may be some communities that prohibit drone usage that individuals flock to, but that will be the minority with the advent of the Amazon era.<sup>119</sup> In response to the failed arguments above, a homeowners' association should act quickly to develop a drone restriction plan that ensures it will be considered reasonable.

#### IV. HOW A CIC CAN MAKE REASONABLE RESTRICTIONS ON THE USE OF DRONE DELIVERIES

For a restriction to be reasonable, the restriction must not be arbitrary, must not be against public policy, and the burdens imposed by the restrictions must not substantially outweigh the benefits inured by the community.<sup>120</sup> A reasonable restriction will include the interests of both the community and the individual desiring the delivery.

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117. Shep Hyken, *Sixty-Four Percent of U.S. Households Have Amazon Prime*, FORBES (June 17, 2017, 9:07 AM), <https://www.forbes.com/sites/shephyken/2017/06/17/sixty-four-percent-of-u-s-households-have-amazon-prime/#701b90f64586>.

118. With the volume of Amazon usership increasing, it is possible that this number increases as well.

119. This new era opened the door to many new and great industries, such as the drone industry. However, it has displaced many other industries. Someday the American populace may watch the "Amazon Day Parade," instead of its predecessor Macy's Day Parade. Kate Taylor, *Amazon is Killing These 7 Companies*, BUSINESS INSIDER NORDIC (Jul. 12, 2017, 6:37 PM), <https://nordic.businessinsider.com/amazon-is-killing-these-7-companies-2017-7>.

120. See *Nahrstedt*, 878 P.2d at 1287.

### A. *Constructing a Reasonable Restriction on the Use of Drone Delivery Companies*

It is difficult to understand what a reasonable restriction will be because these drone delivery services are not yet available in the United States.<sup>121</sup> According to HOA Leader's interview with a Florida attorney, "[d]rones are coming . . . . They can be regulated because it's a nuisance issue, an access issue, and a safety issue."<sup>122</sup> This attorney, along with many others,<sup>123</sup> believes that these regulations are possible due to the nature of drone delivery, but that it will be difficult.<sup>124</sup> Since these drone programs are not yet up-and-running, it will be better to draft restrictions that offer more freedom rather than less. This will ensure that the restriction is reasonable, and still give room to restrict if the future calls for it.

A reasonable restriction will require more than merely restricting certain aspects of drone delivery. A restriction must also consider the form and practicability of enforcement. Thus, determining the method of enforcement is just as important as determining the parameters of the restriction itself. Each restriction must be analyzed, along with the possible enforcement mechanisms.

#### 1. Reasonable Restrictions to Control the Noise of Potential Delivery Companies

Take, for example, the issue of noise. The level of noise emanating from a drone delivery service is a valid concern, as discussed *supra*, but it can be handled several ways. If a homeowners' association requires that the drones used to make deliveries stay within a certain decibel level, this will cause enforceability issues. In *Burgess*, the Supreme Court of Nebraska had to take time to determine the decibel level of the model airplanes.<sup>125</sup> While it is likely that the market will balance most issues, it will be difficult, if not impossible, for delivery companies to keep up with the different levels of noise requirements in each community. Another issue is that determining the sound emanating from a flying drone will be time-consuming and tedious work.

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121. *Drones at Your HOA: What You Need to Know*, HOALEADER.COM (May 2015), <https://www.hoaleader.com/public/Drones-at-Your-HOA-What-You-Need-Know.cfm>.

122. *Id.* (quoting Joshua Krut, a partner at Weiss Serota Helfman Cole Bierman & Popok).

123. *Id.* (The article indicates that several attorneys, from Florida to California, agree that drone regulation is a hot topic and is possible.).

124. *Id.* ("It's difficult to draft rules or regulations that are very specific right now because this is brand new to associations . . . ." (quoting Nancy Polomis, a partner at Hellmuth & Johnson PLLC)).

125. *Burgess v. Omahawks Radio Control Org.*, 362 N.W.2d 27, 29-30 (Neb. 1985).

Although difficult and tedious, it is possible to monitor the decibel output of drones flying above.<sup>126</sup> In Scott Rhoades' blog article,<sup>127</sup> he mentions the Academy of Model Aeronautics' ("AMA") PDF regarding how to measure the sound coming from model airplanes.<sup>128</sup> In the AMA PDF, it explains that a portable decibel measuring device can be purchased for around \$50, and is easily usable.<sup>129</sup> While it has been shown that measuring the decibels is not expensive, it does require a significant amount of time to be devoted to monitoring the flight of drones.

This is not the best use of time for any homeowners' association, so there are other means of abating harmful noise. The best option would be to preclude drone delivery during times that the community is generally quiet. In *Burgess*, the Supreme Court of Nebraska analyzed the time at which the model airplanes flew as a factor in determining a noise nuisance.<sup>130</sup>

The flights were restricted to the time between 9:00 a.m. and when it became dark outside.<sup>131</sup> Since nuisance law can be used where the noise emanating from a drone delivery service is well beyond the acceptable norm,<sup>132</sup> restricting the time of delivery receipt can effectively ensure that noise does not interfere with the majority of the community. Much like truck deliveries, it will likely be possible to make requests to delivery companies.<sup>133</sup> Since the issue of noise can be solved by restricting the timing of deliveries and by ensuring that noise is not over a certain level, the community can receive deliveries without worrying about noise complaints.

## 2. Reasonable Restrictions on Protecting the Safety of Those Below

While the timing issues can be solved by informing delivery companies about the approved time for deliveries, the reasonableness of a restriction can

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126. Scott Rhoades, *Model Aircraft Engine Noise. Is it an Important Issue?*, ALL RC FLIGHT: A BLOG ABOUT AEROMODELING, <http://allrcflight.com/model-aircraft-engine-noise> (last visited Sept. 29, 2018).

127. *Id.*

128. *Id.*

129. THE ACADEMY OF MODEL AERONAUTICS: AMA SOUND/NOISE ABATEMENT RECOMMENDATIONS (June 26, 2018 12:24 PM), <http://www.modelaircraft.org/files/927.pdf>.

130. *Burgess v. Omahawks Radio Control Org.*, 362 N.W.2d 27, 30 (Neb. 1985).

131. *Id.* at 29.

132. *See id.* at 29-30 (where the level of noise was actually measured by the Supreme Court of Nebraska).

133. Instead of requesting that the delivery company knock four times fast and ring the doorbell once, the member should request that delivery be made between the required hours. Further, it is likely that drones will only be used between the hours of work, because Amazon does not want to be sued for a nuisance either.



be bolstered by using delivery companies with high safety ratings. This means choosing companies that receive high ratings for safety. Currently, there are very few safety regulations on commercial drone usage,<sup>134</sup> but it is likely that drones will be regulated by a safety agency, such as the FAA.

Even where they are not regulated, a homeowners' association can restrict the companies that it allows to make deliveries. This will ensure that community members can receive deliveries, but ensure that only companies whose safety and noise of drone deliveries are acceptable are used. Finally, such a restriction should ensure that there is more than one option for delivery. Although some common interest communities limit services to the community,<sup>135</sup> limiting which companies can deliver to the community will be a little difficult. The homeowners' association should ensure that homeowners have at least a few options of delivery companies, so that competition is kept at a healthy level. This will keep delivery prices lower and community members happier.

Thus, the homeowners' association can restrict the use of delivery services to delivery companies that it knows have high safety ratings, both on sound and falling objects. This will keep enforceability time and costs to a minimum. Next, it is important to discuss how a restriction upon the weight or size of a package can be added.

Falling objects and drones are another concern that most members of the community would worry about. Although it would be difficult, if not impossible, to monitor all packages flown above the community, placing a restriction on hazardous or other dangerous products would ensure that liability was easily determined if accidents occurred. The homeowners' association should fine homeowners that breach restrictions on drone delivery—enforcement by deterrence.

What happens when a non-member of the community sends a package that is delivered by drone to a member of the community? Is the member-recipient responsible for the cost of the violation? Is the non-member-sender responsible for any penalties or injuries? This issue is perhaps the most difficult issue to solve.

### 3. CIC Declaration Provisions to Delegate Liability in Case of Accidents

It is easy to see how there is a potential legal issue of fault where a drone delivery does not comply with the restrictions, or where there is even a mistaken trespass. Take for example the situation of kind-hearted Grandma.

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134. Most of the commercial drone use regulations are contained in 14 CFR § 107.

135. Such as limiting the community to one or two internet services.

She decides to buy her granddaughter a desk-top computer, but Grandma lives several states away. So, she orders Amazon delivery of the computer at 5:00 a.m. to ensure that her granddaughter has time to set it up before class.<sup>136</sup> Unbeknownst to her, the package is in violation of both the time and weight restriction for drone deliveries. Who pays the violation fee? Is Grandma jointly and severally liable if the package falls and strikes a passing stranger? Can Grandma be expected to search through every legal document pertaining to her granddaughter's common interest community?

While a person is on constructive notice of documents filed publicly,<sup>137</sup> it is challenging to believe that Grandma will be saddled with the liability for failure to comply.<sup>138</sup> Joint and several liability may not be an issue, since potential plaintiffs know where the money is.<sup>139</sup> Amazon has breached the coveted \$1 trillion dollar market capitalization mark.<sup>140</sup> The real problem is how homeowners' associations are to deal with the penalty for violations.

The solution can be found in similar areas of law. In agency law, a principal can be liable for the tortious or contractual liabilities incurred by its agent.<sup>141</sup> Although an agency theory is not perfectly analogous to agency law, because Grandma is not her granddaughter's agent, it aids in determining how a court might assess liability for such penalty fees. Agency law permits a principal to be vicariously liable for the tortious conduct of her agents.<sup>142</sup> Additionally, a principal will be responsible for contract liability incurred by an agent, even where the agent does not act within his actual authority.<sup>143</sup>

This agency theory can be helpful because it shows that courts tend to avoid penalizing the least blameworthy party. In Grandma's situation, the

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136. This is an example of a thoughtful person who may not be knowledgeable on the limitations of drone deliveries to the desired recipient.

137. *Citizens for Covenant Compliance v. Anderson*, 906 P.2d 1314, 1329 (Cal. 1995) (The Supreme Court of California held that where a restriction was recorded in the CC&Rs of the declaration before the purchase of the residence, the purchaser was on constructive notice of the restrictions.).

138. This is because Grandma has no reason to be on notice, and it would stifle commerce should every purchaser have to first check every locality for documents prohibiting the delivery of drones.

139. Brad Tuttle, *Amazon Just Became the Second Company to Reach \$1 Trillion. Here's How Much Jeff Bezos Is Worth Now*, MONEY (Sept. 4, 2018), <http://time.com/money/5386380/amazon-1-trillion-jeff-bezos-net-worth/>.

140. *Id.*

141. See RESTATEMENT (THIRD) OF AGENCY §§ 7.03, 3.03 (AM. LAW INST. 2006).

142. RESTATEMENT (THIRD) OF AGENCY § 7.03 (AM. LAW INST. 2006).

143. RESTATEMENT (THIRD) OF AGENCY § 3.03 (AM. LAW INST. 2006) (where the agent acts with apparent authority. This means that the agent did not have authority, but because of the way it appeared to a third party, the agent still binds the principal to the contract).

parties with the most notice of the restriction are the most blameworthy. Grandma has no reason to look up restrictions. Thus, it is possible that responsibility will fall on the homeowner receiving packages to notify distributors using drones. However, disputes could be resolved in other ways as well. The court could determine that homeowners' associations are in the best position to inform drone delivery companies what restrictions exist and how to act accordingly. Basically, it would be easier for one entity to inform these companies of their responsibilities than hundreds or thousands of individual residents.

Amazon offers restriction of delivery services for viewing by any purchaser.<sup>144</sup> This service allows the user to state specific information, including restrictions on deliveries to prison or location-based restrictions.<sup>145</sup> It would behoove both Amazon and homeowners' associations to offer an option for homeowners' associations to declare their drone delivery restrictions.<sup>146</sup> This will solve every problem that would arise from third-party orders and even prohibit completely the inducement of delivery by members of the community.

It would be wise of a homeowners' association to also include a structure of tort liability regarding drone delivery restrictions. Thus, a reasonable restriction will include a component of intent and a requirement to give notice to those that may choose to make deliveries. This is a weak provision, but this issue will be difficult to resolve without a reporting system in place for homeowners' associations to inform to delivery companies of restrictions. The following represents a sample declaration restriction that would likely be held reasonable, protecting the individual's ability to receive drone deliveries and protecting the interests of the community.

*B. Sample Reasonable Restriction for CICs*

1. Commercial Unmanned Aircraft Vehicles: The use of unmanned aircraft vehicles ("drones"), or any other aerial device used to deliver; repair; replace; maintain; photograph; or perform any other purpose of a person, including any

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144. *Shipping and Delivery: Shipping Restrictions*, AMAZON, <https://www.amazon.com/gp/help/customer/display.html?nodeId=201118610> (last visited Jan. 14, 2018, 1:21 PM).

145. *Id.*

146. It is likely that companies like Amazon already have their teams drafting up services to offer to large areas. Amazon would greatly benefit from a system that corresponded with shipping to certain addresses. That way Amazon would not risk exposure to lawsuit. The service would also protect its customers, which protects its finances.

company authorized to conduct business within this state, offering goods or services shall be prohibited unless the use complies with this document.

- a. Noise: The level of noise emanating from any such drone, or other commercial aerial device, listed above shall not exceed dangerous decibel levels,<sup>147</sup> as defined by Occupational Health and Safety Administration (“OSHA”).<sup>148</sup> [This restriction can be monitored from time-to-time by the homeowners’ association, but will still require time.]<sup>149</sup>
  1. A member of the community that knowingly induces the flight of a drone that is in breach of the decibel level will bear the cost of any penalty assigned.
- b. Time: The time for commercial drone, or other commercial delivery device, use is permitted only between the hours of 10:00 a.m. [place the specified time zone here] and 4:00 p.m. [place the specified time zone here].
  1. A member of the community that induces the flight of a drone, or other commercial aerial device, in the community is responsible for ensuring that delivery is only made between the required hours.
- c. Commercial Drone, and Other Commercial Aerial Device, Companies: No commercial drone, or other commercial aerial device, company shall be used except those permitted by the following paragraph:
  1. Amazon Drone Services, UPS Drone Services, Etc.  
...
  2. Requests to add drone companies to the list of approved companies may be made to the homeowners’ association for a vote at the following meeting. A majority vote of the

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147. The homeowners’ association will not have to measure this, but where there is an interference with the life of the community, it will be easier to determine liability.

148. Rhoades, *supra* note 128, at 117 (OSHA has determined that noises that exceed 80 decibels (“dB”) are potentially dangerous.).

149. Thus, the best option will be the timing of delivery option. Requiring the dangerous decibel level, as determined by OSHA, will ensure that even during the hours of permitted operation, drones are used in a safe manner.

- permitted quorum shall authorize that new company to be added to the list.
- d. Prohibited Deliveries: No delivery shall be induced by a member of the community if the package weighs more than the weight permitted to be carried by the Federal Aviation Administration (“FAA”), or if the package contains substances that are hazardous by their nature.
    1. [list certain prohibited substances, and the maximum delivery weight desired].
    2. If a member induces the delivery of a package, as mentioned in the preceding sentence, he or she shall be jointly and severally liable with the delivery company, for any harm caused by the delivery.
      - i. The member shall also be liable for the penalty fees associated with breaching this agreement.
  - e. Third Party Violations: A member of the community is on notice, pursuant to this declaration, that they are responsible for informing those that may induce deliveries by drone to their residence.
    1. Where there is a violation caused by a third party inducing delivery, the receiving member will be liable for violations, but only if the member had knowledge, or should have had knowledge concerning the delivery; had reasonable time to give the third-party notice of the restrictions; and the member did not take reasonable steps to give the third-party notice.
  - f. Violations: All violations of the drone, and other commercial aerial device, restrictions shall cause a violation penalty fee of \$X to be paid on the first infraction, \$XX to be paid on the second infraction, and a third infraction will lead to legal action seeking injunctions against that member of the community for further use.

## V. CONCLUSION

The likelihood of using a nuisance or trespass theory to negate the use of drone deliveries will be futile if delivery companies keep their drones quiet and within the navigable airspace. A complete prohibition on drone

deliveries will probably be adjudicated as unreasonable, because the burdens imposed on the individual will likely far outweigh any benefit that is gained. It is in the financial interest of homeowners' associations to allow deliveries, since such a large number of potential buyers use Amazon Prime.

Finally, a reasonable restriction will allow deliveries. While the homeowners' association can make predictions about the future of drones, it is likely that the future holds innovations that will create more efficient technology. Thus, it would be wise, in drafting restrictions, to err on the side of the free use of property. The era of drones is fast-approaching. So, getting ahead of the curve will ensure a smooth, legal transition into this bright new world.