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## STATE DRONE LAWS: A LEGITIMATE ANSWER TO STATE CONCERNS OR A VIOLATION OF FEDERAL SOVEREIGNTY

Ray Carver\*

### INTRODUCTION

In 2012, in an effort to embrace new technology and to develop the infrastructure for the use of next-generation technology,<sup>1</sup> Congress passed the Federal Aviation Administration (FAA) Modernization and Reform Act of 2012 (the Act).<sup>2</sup> While it intended to prepare the aviation industry for advances in the field, the Act underscored a tension that had been building domestically regarding the proper domestic use of “drones” or, more accurately, unmanned aircraft systems (UAS).<sup>3</sup>

Among other initiatives, the new law instructed the FAA to develop a plan to “accelerate the integration of civil unmanned aircraft systems into the national airspace systems.”<sup>4</sup> Its passage

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\* J.D. Candidate 2015, Georgia State University College of Law. I would like to thank my wife Anna for her continued love and support through this process. Having such a great partner has made law school a much more gratifying experience. I would also like to thank the members of the *Georgia State University Law Review* and the College of Law faculty for their guidance in this endeavor.

1. 158 CONG. REC. S333-02 (daily ed. Feb. 6, 2012) (statements of Sen. Rockefeller, acknowledging that the “bill takes concrete steps to modernize our air traffic control system,” and Sen. Hutchison, stating that the bill will modernize the “antiquated air traffic control system”); 158 CONG. REC. H445-04 (daily ed. Feb. 3, 2012) (statement of Rep. Petri, noting that the bill allows for the safe integration of UASs as well as investments in airport improvements).

2. Federal Aviation Administration Modernization and Reform Act of 2012, Pub. L. No. 112-95, 126 Stat 11.

3. See Geoffrey Christopher Rapp, *Unmanned Aerial Exposure: Civil Liability Concerns Arising From Domestic Law Enforcement Employment of Unmanned Aerial Systems*, 85 N.D. L. REV. 623, 627, 641–42 (2009) (noting the privacy concerns and safety issues caused by the many UAS crashes due to pilot error and aircraft malfunction); Pete Yost, *Justice Department Spent Nearly \$5M on Drones*, ASSOCIATED PRESS (Sept. 27, 2013), <http://bigstory.ap.org/article/justice-dept-ig-fbi-spent-over-3m-drones> (noting the privacy issues arising from UASs with the “unique capability” to quietly watch and track citizens); Michael S. Rosenwald, *A Drone of Your Very Own*, WASH. POST, Aug. 18, 2013, at A1 (discussing some of the negative and positive aspects of drone use). Although many opponents of the use of UASs refer to them pejoratively as drones, this note will use the term UASs because it is the most common legal term used and was the term used in the Act. Wendie L. Kellington, *Unmanned Air Systems and Regulating Navigable Airspace*, SV003 A.L.I.-A.B.A. 613, 615 (2013) (stating that unmanned aerial vehicles are often referred to pejoratively as “drones”).

4. FAA Modernization and Reform Act, § 332(a)(1). The Act calls for the integration and the development of six test ranges for unmanned aircraft systems research and development throughout the

coincided with several other privacy and security debates, including the use of weaponized UASs on the battlefield and the revelation that the National Security Administration (NSA) was gathering data on U.S. citizens.<sup>5</sup> These controversies have only heightened the apprehension among state and local officials about the use of UASs in domestic airspace.<sup>6</sup>

In response, many states and municipalities have passed laws regulating the use of UASs and, in some cases, have banned their flight completely.<sup>7</sup> Most of the laws directly address the fear that UASs will be used by law enforcement for warrantless surveillance or will be weaponized for more lethal purposes against U.S. citizens.<sup>8</sup> However, other lawmakers have taken less nuanced approaches and have proposed banning them from flying over towns or even giving citizens licenses to shoot them out of the sky.<sup>9</sup>

While addressing their constituents' concerns, lawmakers may encroach on the sovereignty of the federal government.<sup>10</sup> Congress

U.S. to be accomplished by September 30, 2015. *Id.* § 332(c)(1).

5. See Karen DeYoung & Peter Finn, *4 Americans Killed in Drone Strikes Since '09*, WASH. POST, May 23, 2013, at A1 (describing incidents involving the death of four Americans due to counterterrorism strikes by UASs); see also Peter Finn & Ellen Nakashima, *Obama Defends NSA Collection of Citizens' Data*, WASH. POST, June 8, 2013, at A1 (describing the controversy over the NSA's policy of collecting data on the phone records of citizens).

6. See Margot E. Kaminski, *Drone Federalism: Civilian Drones and the Things They Carry*, 4 CALIF. L. REV. 57, 57–58 (2013) (stating that states fear “dragnet surveillance” due to the “wide array of privacy-invading technologies” like cameras that can detect heat and odors); Rapp, *supra* note 3, at 641–42 (noting the privacy concerns as well as safety issues due to the many UAS crashes due to pilot error and aircraft malfunction).

7. OR. REV. STAT. § 837.310 (2013) (prohibiting any law enforcement agency from operating a UAS); TEX. GOV'T CODE ANN. § 423.003 (West 2013) (making it illegal for any person to use “an unmanned aircraft to capture an image of an individual . . . with the intent to conduct surveillance”); 2013 Va. Acts 755 (imposing a two-year moratorium on the use of unmanned aircraft systems).

8. IDAHO CODE ANN. § 21-213 (2013) (prohibiting the use of a UAS for the purpose of conducting surveillance or evidence gathering); OR. REV. STAT. § 837.310 (prohibiting any law enforcement agency from operating a UAS); TEX. GOV'T CODE ANN. § 423.003; see also Allie Bohm, *Drone Legislation: What's Being Proposed in the States?*, ACLU FREE FUTURE BLOG (Mar. 6, 2013, 3:15 PM), <https://www.aclu.org/blog/technology-and-liberty-national-security/drone-legislation-whats-being-proposed-states>.

9. Matt Pierce, *Colorado Town Shoots Down Drone-Hunting Ordinance*, L.A. TIMES (Apr. 2, 2014), <http://www.latimes.com/nation/nationnow/la-na-nn-drone-hunting-law-rejected-colorado-20140402-story.html>. Deer Trail, Colorado, proposed an ordinance that would allow citizens to buy drone hunting licenses that would let them shoot down any UASs flying over the town. Residents of the town voted down the ordinance. *Id.*

10. See 49 U.S.C. § 40103(a)(1) (2012).

maintains supremacy over state laws when it expresses its intent to preempt or its intent is implied either through conflict or when the “field” has been taken up by the enactment of federal laws and regulations.<sup>11</sup> Congress has expressly asserted “exclusive sovereignty” over the regulation of airspace.<sup>12</sup> Although the statutory language seems to demonstrate Congress’s intent to preempt all state laws, the U.S. Supreme Court has determined that rather than asserting a general preemption, any determination will be based on the pervasiveness of the regulations on a case-by-case basis.<sup>13</sup> When evaluating pervasiveness, courts consistently note the extent and intensity of federal regulation in the aviation field but reiterate that there is often room for state laws as well.<sup>14</sup>

Therefore, the answer as to whether any room remains for states to regulate UASs hinges on which subfield within aviation that state laws are regulating and the pervasiveness of the federal regulations.<sup>15</sup> If the laws are deemed to regulate airspace or safety, the voluminous regulations currently in place preempt the state law from enforcement.<sup>16</sup> However, if the law regulates a traditional state arena

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11. *Lockheed Air Terminal, Inc. v. City of Burbank*, 318 F. Supp. 914, 925 (1970) (holding that an ordinance which restricted nighttime flights due to concerns over noise was preempted because Congress intended to “centralize full and dominant control of the navigable air space in the Federal Government”); *Rice v. Santa Fe Elevator Corp.*, 331 U.S. 218, 230 (1947) (“The scheme of federal regulation may be so pervasive as to make reasonable the inference that Congress left no room for the States to supplement it.”). *But see Hillsborough Cnty. v. Automated Med. Labs, Inc.*, 471 U.S. 707, 714 (1985) (stating that the local law governing the collection of blood plasma was not preempted because the FDA’s intention was not to preempt the state law).

12. 49 U.S.C. § 40103(a)(1) (“The United States Government has exclusive sovereignty of airspace of the United States.”); *Braniff Airways, Inc. v. Neb. State Bd. of Equalization & Assessment*, 347 U.S. 590, 760 (1954) (quoting an earlier version of the statute, which stated that the United States is “declared to possess and exercise complete and exclusive national sovereignty in the air space above the United States” (quoting 49 U.S.C. § 176(a) (1938))).

13. *Braniff Airways*, 347 U.S. at 595. The Court also stated that while the language in the Air Commerce Act of 1926 was “an assertion of exclusive national sovereignty” over navigable airspace, [it] “did not expressly exclude the sovereign powers of the states.” *Id.*

14. *Nw. Airlines v. Minnesota*, 322 U.S. 292, 303 (1944) (noting that although the regulation of air travel is voluminous, there are still areas on which the state may still legislate, including tax).

15. *See Schneidewind v. ANR Pipeline Co.*, 485 U.S. 293, 300 (1988) (“[I]ntent to occupy a given field . . . may be inferred where the pervasiveness of the federal regulation precludes supplementation by the States . . .”).

16. *Abdullah v. Am. Airlines, Inc.*, 181 F.3d 363, 371 (3d Cir. 1999) (“Because the legislative history of the FAA and its judicial interpretation indicate that Congress’s intent was to federally regulate aviation safety, we find that *any* state or territorial standards of care relating to aviation safety are federally preempted.” (emphasis in original)).

or an area that the FAA has not addressed, the local laws may survive.<sup>17</sup>

In Part I, this Note surveys current federal laws and proposed state and local statutes regarding UAS use to determine the extent that the federal government has asserted its control.<sup>18</sup> In Part II, this Note examines whether the current federal laws contain any possible express preemptions.<sup>19</sup> After analyzing the current case law regarding conflict and field preemption in aviation cases, Part III addresses what states may do to avoid subjecting their laws to a federal preemption.<sup>20</sup>

## I. BACKGROUND

Although there have been major developments in technology over the last decade, the development of UASs has been slow, in part, because of a lack of guidance from Congress and the FAA.<sup>21</sup> Nevertheless, in the last several years the Department of Defense has used UASs for surveillance and even strikes on enemy combatants in other countries.<sup>22</sup> The civil use of UASs over domestic airspace has not been as extensive; however, the FAA anticipates as many as 30,000 UASs will be in use by 2030.<sup>23</sup> This expected increase is

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17. N.Y. State Conference of Blue Cross & Blue Shield Plans v. Travelers Ins. Co., 514 U.S. 645, 654 (1995) (“[W]e have never assumed lightly that Congress has derogated state regulation, but instead have addressed claims of pre-emption with the starting presumption that Congress does not intend to supplant state law.”); John C. Nettels, Jr. & Jerrick L. Irby, *Standard of Care Preemption in Aviation Litigation: Halting Steps to a Coherent Analysis*, 76 J. AIR L. & COM. 327, 333 (2011).

18. See discussion *infra* Part I.

19. See discussion *infra* Part II.

20. See discussion *infra* Part III.

21. Mark Edward Peterson, *The UAV and the Current and Future Regulatory Construct for Integration Into the National Airspace System*, 71 J. AIR L. & COM. 521, 525 (2006) (“[T]he full scale application of civilian UAVs has been stymied by . . . safety concerns surrounding integration and the lack of a regulatory regime to facilitate safe integration.”).

22. Unmanned Aircraft Operations in the National Airspace System, 72 Fed. Reg. 6689 (Feb. 13, 2007) (codified at 14 C.F.R. pt. 91) (noting that the most common public use of UASs occurs in the Defense Department and includes surveillance and weapons delivery); Peterson, *supra* note 21, at 545 (discussing the history of UASs and the Department of Defense’s use of UASs for surveillance and strike capabilities).

23. FED. AVIATION ADMIN., FAA AEROSPACE FORECAST: FISCAL YEARS 2011–2031, at 49 (2011), available at [http://www.faa.gov/about/office\\_org/headquarters\\_offices/apl/aviation\\_forecasts/aerospace\\_forecasts/2011-2031/media/2011%20Forecast%20Doc.pdf](http://www.faa.gov/about/office_org/headquarters_offices/apl/aviation_forecasts/aerospace_forecasts/2011-2031/media/2011%20Forecast%20Doc.pdf) (noting that the agency expects

attributable to new technological developments combined with the various possible uses in law enforcement and civil and commercial arenas.<sup>24</sup> Realizing the United States was not ready for the increase due to a lack of infrastructure and regulation, Congress passed the Act not only to develop technology for UASs, but also to develop an infrastructure to usher in a new era of aviation.<sup>25</sup>

The law's passage coincides with rising concern over the limits of the U.S. government's power, as reflected in the political debates regarding the authority of the military to use UASs to strike U.S. citizens as well as the ability of the NSA to collect large amounts of data on citizens.<sup>26</sup> In March 2013, Senator Rand Paul's twelve-hour filibuster during hearings for nomination of the CIA director reflected public apprehension.<sup>27</sup> In his speech, Senator Paul expressed concern about the power of the federal government and its ability to spy on and even strike its own citizens.<sup>28</sup> His sentiment

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there to be 10,000 UASs by 2016, 25,000 by 2021, and 30,000 by 2030).

24. *Id.* (stating that the increases are expected in military, civil government, and commercial applications because all three have an interest in the versatility and low cost of UASs); John Villasenor, *Privacy, Security, and Human Dignity in the Digital Age: Observations from Above: Unmanned Aircraft Systems and Privacy*, 36 HARV. J.L. & PUB. POL'Y 457, 459 (2013) (stating that drones could be used for surveying, crop spraying, and traffic congestion monitoring); Peterson, *supra* note 21, at 548–52 (noting the possible uses in border security, traffic monitoring, natural disaster responses, and mail delivery).

25. 158 CONG. REC. S333-02 (daily ed. Feb. 6, 2012) (statement of Sen. Rockefeller acknowledging that the “bill takes concrete steps to modernize our air traffic control system,” and Sen. Hutchison stating that the bill will modernize the “antiquated air traffic control system”); 158 CONG. REC. H445-04 (daily ed. Feb. 3, 2012) (statements of Rep. Petri noting that the bill allows for the safe integration of UASs as well as investments in airport improvements). The bill will develop new satellite-based airspace management and digital communications that will allow for the more efficient and safe use of airspace. 158 CONG. REC. S333-02 (daily ed. Feb. 6, 2012) (statement of Sen. Hutchison stating that the bill will “fundamentally transform air traffic control from a ground-based radar system to a satellite-based system”); FED. AVIATION ADMIN., NEXTGEN IMPLEMENTATION PLAN 5 (2013), available at [http://www.faa.gov/nextgen/implementation/media/NextGen\\_Implementation\\_Plan\\_2013.pdf](http://www.faa.gov/nextgen/implementation/media/NextGen_Implementation_Plan_2013.pdf).

26. See generally Michael Epstein, Note, *The Curious Case of Anwar Al-Aulaqi: Is Targeting a Terrorist for Execution by Drone Strike a Due Process Violation when the Terrorist is a United States Citizen?*, 19 MICH. ST. J. INT'L L. 723 (2011); see also DeYoung & Finn, *supra* note 5 (describing an incident involving the death of four Americans due to counterterrorism strikes by UASs); see also Finn & Nakashima, *supra* note 5 (describing the controversy over the National Security Agency's policy of collecting data on the phone records of citizens); *Time to Rein in the Surveillance State*, ACLU, <https://www.aclu.org/node/43023> (last visited Oct. 6, 2014) (stating that the government is using the Patriot Act to “track all of the calls of millions of ordinary Americans”).

27. 159 CONG. REC. S1150 (2013).

28. *Id.* Senator Paul filibustered John Brennan's nomination for CIA director due to statements made by Brennan and President Obama indicating the government does not plan to strike U.S. citizens on

engrossed the nation and spurred the trend of legislation limiting the use of UASs over domestic soil.<sup>29</sup> By the end of 2013, forty-two states had introduced legislation addressing UASs, and thirteen states had enacted laws that regulate either public or civil UAS flight.<sup>30</sup>

In 2013, Texas and Virginia were among the first states to pass anti-UAS legislation.<sup>31</sup> Soon afterward, several states and municipalities rushed to pass their own statutes.<sup>32</sup> Anti-UAS laws take many forms, but generally fall into one of three types: 1) they ban law enforcement's use of UASs for surveillance;<sup>33</sup> 2) they ban UASs equipped with weapons;<sup>34</sup> or 3) they ban UAS use altogether.<sup>35</sup>

### A. Preemption

The issue of preemption is rooted in the Supremacy Clause of the Constitution, which states that the “laws of the United States . . . shall be the supreme law of the land.”<sup>36</sup> Therefore, when a court finds a federal law to have preempted state law, the court will declare the

American soil, but stopped short of assuring that it would not happen. *Id.*

29. See Bohm, *supra* note 8 (outlining the various anti-UAS bills introduced in state legislatures); see also RICHARD M. THOMPSON II, CONG. RESEARCH SERV., R42701, DRONES IN DOMESTIC SURVEILLANCE OPERATIONS: FOURTH AMENDMENT IMPLICATIONS AND LEGISLATIVE RESPONSES 12 (2013) (discussing some of the concerns over domestic UAS use for the purpose of surveillance).

30. 2013 *Unmanned Aircraft Systems (UAS) Legislation*, NCSL, <http://www.ncsl.org/research/civil-and-criminal-justice/unmanned-aerial-vehicles.aspx> (last visited Oct. 12, 2014).

31. TEX. GOV'T CODE ANN. § 423.003 (West 2013); 2013 Va. Acts 755.

32. See Bohm, *supra* note 8.

33. IDAHO CODE ANN. § 21-213 (2013) (prohibiting the use of a UAS for the purpose of conducting surveillance or gathering of evidence); OR. REV. STAT. § 837.310 (2013) (prohibiting any law enforcement agency from operating a UAS); TEX. GOV'T CODE ANN. § 423.003 (prohibiting any person from using “an unmanned aircraft to capture an image of an individual . . . with the intent to conduct surveillance”).

34. S.B. 1587, 98th Gen. Assemb., Reg. Sess. (Ill. 2013) (stating that the bill “provides that a law enforcement agency may not own or use a drone that is equipped with any kind of lethal or non-lethal weapon.”).

35. 2013 Va. Acts. 755 (declaring a two-year moratorium on the use of unmanned aircraft systems); BILL OF RIGHTS DEF. COMM., MODEL DRONE LEGISLATION: NO DRONES, *available at* <http://www.constitutioncampaign.org/campaigns/resources/DronesAnnotated.pdf> (last visited Oct. 12, 2014) (calling for a “drone-free zone” that would carry a fine of up to \$1,000).

36. U.S. CONST. art. VI, cl. 2. The courts have also found that federal supremacy applies equally to issues involving agency regulations as well as federal statutes. *Hillsborough Cnty. v. Automated Med. Lab., Inc.*, 471 U.S. 707, 715–16 (1985); *Montalvo v. Spirit Airlines*, 508 F.3d 464, 471 (9th Cir. 2007) (“[W]hen an agency administrator promulgates pervasive regulations pursuant to his Congressional authority, we may infer a preemptive intent unless it appears . . . that Congress would not have sanctioned the preemption.”).

state law void.<sup>37</sup> The courts will only find the federal law preempts the state law when there is evidence that Congress intended to preempt the state law.<sup>38</sup> In straightforward cases, Congress expresses its intent to preempt in the form of a preemption clause.<sup>39</sup> In the absence of a preemption clause, courts must determine whether Congress has implicitly preempted a state law.<sup>40</sup> The courts may infer such intent from Congressional action either through a conflict between two laws or by finding that Congress has taken up the “field.”<sup>41</sup>

### 1. Conflict Preemption

Conflict preemption exists where state and federal law directly conflict, giving rise to an inference that Congress intended federal law to preempt state law.<sup>42</sup> Therefore, in cases where the court finds that a state statute conflicts with a federal law, the federal law supersedes the state’s statute.<sup>43</sup>

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37. Michael J. Holland, *Federalism in the Twenty-First Century: Preemption in the Field of Air*, 78 DEF. COUNS. J. 11, 11 (2011) (stating that any law conflicting with a federal law is “without effect” (quoting *Maryland v. Louisiana*, 451 U.S. 725, 740 (1981))).

38. *Wardair Can., Inc. v. Fla. Dep’t of Revenue*, 477 U.S. 1, 6 (1986) (stating “the first and fundamental inquiry in any pre-emption analysis is whether Congress intended to displace state law”).

39. *Am. Airlines, Inc. v. Wolens*, 513 U.S. 219, 222–23, 228 (1995) (holding that the Illinois Consumer Fraud Act was preempted by the Airline Deregulation Act, which prohibited states from passing laws which relate to “rates, routes, or services” because the state law meant to “police the marketing practices of the airlines”). The express preemption must also clearly state the preemptive intentions of Congress. *See Elssaad v. Independence Air, Inc.*, 613 F.3d 119, 126 (3d Cir. 2010) (“Express preemption requires that Congress’s intent to preempt be “explicitly stated in the statute’s language or implicitly contained in its structure and purpose.”” (quoting *Cipollone v. Liggett Grp., Inc.*, 505 U.S. 504, 516 (1992))).

40. *See Nettels & Irby*, *supra* note 17, at 333 (stating that “court decisions have focused much attention on the interplay between the types of federal preemption”).

41. *Abdullah v. Am. Airlines, Inc.*, 181 F.3d 363, 367 (3d Cir. 1999) (“[I]mplied federal preemption may be found where federal regulation of a field is pervasive . . . or where state regulation of the field would interfere with congressional objectives.” (citations omitted)). Although the distinction between the types of preemption appears to be academic, the categories are frequently discussed by the courts. *Nettels & Irby*, *supra* note 17, at 333 (“[C]ourt decisions have focused much attention on the interplay between the types of federal preemption.”).

42. *Gade v. Nat’l Solid Wastes Mgmt. Ass’n*, 505 U.S. 88, 98 (1992) (describing conflict preemption as a type of implied preemption where it is physically impossible to comply with both laws or the state law stands as an obstacle to the federal purpose); *Nettels & Irby*, *supra* note 17, at 331 (stating that conflict preemption is one type of implied preemption).

43. 3 WILLIAM J. RICH, *MODERN CONSTITUTIONAL LAW* § 34:20 (3d ed. 2013) (“A state statute or local regulation is invalid when it conflicts with a federal statute or with an administrative

State law can conflict with federal law by making compliance with both either a “physical impossibility”<sup>44</sup> or by standing as an obstacle to fulfilling the “purpose and objectives” of the federal law.<sup>45</sup> If the state law frustrates the federal government’s purpose in passing the law or makes the enforcement of that law more difficult, the federal law or regulation will preempt it.<sup>46</sup>

## 2. Field Preemption

When laws do not directly conflict and Congress has not expressed its intent, it leaves only the possibility of a field preemption.<sup>47</sup> Here, courts will infer intent when the federal laws and regulations are “so pervasive as to make reasonable the inference that Congress left no room for the States to supplement it.”<sup>48</sup>

Courts first determine which level of the government traditionally asserts control over the area.<sup>49</sup> When the field is one “the States have

regulation . . .”); *Nettels & Irby*, *supra* note 17, at 329, 331 (stating that the Constitution gives Congress the ability to enact law that preempts state law if the intent is shown by one of many ways, including conflict).

44. *Gade*, 505 U.S. at 98–99 (holding the state regulation of occupational safety and health issues was preempted because it was in “conflict with the full purposes and objectives of the OSH Act”); *McDermott v. Wisconsin*, 228 U.S. 115, 134 (1913) (ruling a state law was preempted when it required labeling of containers that would require the destruction of labels required by Congress); *Holland*, *supra* note 37, at 11 (“[A]ny state law conflicting with a valid state law is ‘without effect’ . . .”); *Nettels & Irby*, *supra* note 17, at 331 (“[Conflict preemption] is found where a private party’s efforts to comply with competing federal and state law or regulation is physically impossible.”).

45. *Williamson v. Mazda Motor*, 131 S. Ct. 1131, 1132 (2011) (quoting *Hines v. Davidowitz*, 312 U.S. 52, 67 (1941)). *See also* *Nettels & Irby*, *supra* note 17, at 331–32 (“The other variety of implied conflict preemption is found where state law is an obstacle to compliance with what Congress intended to be in the enacted federal law.”).

46. *Hillsborough Cnty. v. Automated Med. Lab., Inc.*, 471 U.S. 707, 713 (1985) (stating that there will be conflict preemption where “state law ‘stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress’” (quoting *Hines v. Davidowitz*, 312 U.S. 52, 67 (1941))); *Nettels & Irby*, *supra* note 17, at 332–33. The Supreme Court also ruled that even if the laws “share a common goal,” the state law will be preempted if it “interferes with the methods by which a federal statute was intended to reach that goal.” *Gade*, 505 U.S. at 103 (holding that the Act did not prevent a state from making laws but did restrict the means of making those laws).

47. *See* *Holland*, *supra* note 37, at 13.

48. *City of Burbank v. Lockheed Air Terminal Inc.*, 411 U.S. 624, 632–33 (1973) (quoting *Rice v. Santa Fe Elevator Corp.*, 331 U.S. 218, 230 (1947)) (finding a local ordinance restricting flights preempted because Congress has taken up the field of regulations in aviation and noise restrictions); *Nettels & Irby*, *supra* note 17, at 331 (stating that intent is inferred because the state is acting in a field that the federal government intended to “occupy exclusively”).

49. *See* *Rice*, 331 U.S. at 230 (stating that since the federal law at issue was regulating a field in which the states traditionally occupied, the court begins with an assumption that the state law is not

traditionally occupied,” there is an assumption that the state law is not preempted.<sup>50</sup> However, the reach of the federal regulation may overcome this assumption.<sup>51</sup>

Next, courts analyze the scope and pervasiveness of the federal law or agency regulation.<sup>52</sup> If Congress has regulated the entire field, courts find that the federal government intends to preempt even though, traditionally, the state may have controlled the arena.<sup>53</sup> Therefore, if states have traditionally controlled the arena, it will not be preempted, unless the federal government has either expressed a desire to preempt state actions or has enacted so many regulations on the topic that no room remains for states to regulate.<sup>54</sup> Although the amount and scope of aviation regulations appear to be vast,<sup>55</sup> the

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preempted).

50. Nettels & Irby, *supra* note 17, at 333 (“[T]he Supreme Court established a presumption that law traditionally left to the states is not to be preempted.”); *Cipollone v. Liggett Grp., Inc.*, 505 U.S. 504, 516 (1992) (“Consideration of issues arising under the Supremacy Clause ‘starts with the assumption that the historic police powers of the States [are] not to be superseded by . . . Federal Act unless that [is] the clear and manifest purpose of Congress.’” (quoting *Rice*, 331 U.S. at 230)). Although the court has been clear that they start with a presumption that the state law is not preempted, there is some indication this assumption is not as strong as the courts assert. Mary J. Davis, *Unmasking the Presumption in Favor of Preemption*, 53 S.C.L. REV. 967, 968 (2002).

51. *Burbank*, 411 U.S. at 642–44 (finding the state law regulating noise preempted even though there was a presumption in favor of upholding the state law); *Skysign Int’l, Inc. v. City of Honolulu*, 276 F.3d 1109, 1116 (2002) (stating that the state law did not benefit from a presumption because it was regulating an area—navigable airspace—that had a “history of significant federal presence” (quoting *United States v. Locke*, 529 U.S. 89, 108 (2000))). The Supreme Court has stated that for there to be preemption there must be a “clear and manifest purpose of Congress.” *Automated Med.*, 471 U.S. at 715–16 (quoting *Jones v. Rath Packing Co.*, 430 U.S. 519) (finding that the scope of the regulations did not show sufficient intent to overcome the presumption in favor of the states).

52. *Automated Med.*, 471 U.S. at 716 (stating that the party must present evidence “that is strong enough to overcome the presumption that state and local regulation . . . can constitutionally coexist with federal regulation.”).

53. *Skysign*, 276 F.3d at 1116 (stating that a field preemption requires a finding that “Congress has so completely occupied the field that federal silence is itself a policy choice rather than a mere passive deferral to local authority.”).

54. See *Automated Med.*, 471 U.S. at 713. However, the court also held that a statement by the agency declaring that it did not intend to “usurp the powers of the state to regulate” the issue is dispositive as to intent of the agency. *Id.* at 714.

55. The Supreme Court noted the extensiveness of the federal regulations when it stated:  
Federal control is intensive and exclusive. Planes do not wander about in the sky like vagrant clouds. They move only by federal permission, subject to federal inspection, in the hands of federally certified personnel and under an intricate system of federal commands. The moment a ship taxis onto a runway it is caught up in an elaborate and detailed system of controls. . . . Its privileges, rights, and protection . . . it owes to the Federal Government alone and not to any state government.

*Nw. Airlines v. Minnesota*, 322 U.S. 292, 303 (1944) (Jackson, J., concurring).

courts have determined that there remains room for state laws depending on the pervasiveness of the regulations in that particular area within aviation.<sup>56</sup>

### B. Preemption as Applied to Aviation Cases

Congress has expressly asserted “exclusive sovereignty of airspace of the United States.”<sup>57</sup> Even though Congress clearly expressed its purpose in asserting control over airspace, courts emphasize that there is no general express preemption in the broader field of aviation.<sup>58</sup> Other than “sovereignty of airspace,” only one express preemption exists, and it involves the price, route, or service of an air carrier.<sup>59</sup> Accordingly, any preemption regarding UAS usage will likely rely on a field or conflict preemption, unless it is deemed a regulation of airspace or the operation of an air carrier.<sup>60</sup>

In addition, federal statutes include a savings clause that purports to leave issues involving torts and contracts to the states.<sup>61</sup> Revised and shortened in 1994 with the reorganization of Title 49,<sup>62</sup> the new

56. *Schneidewind v. ANR Pipeline Co.*, 485 U.S. 293, 300 (1988) (“[I]ntent to occupy a given field . . . may be inferred where the persuasiveness of the federal regulation precludes supplementation by the States.”); *Automated Med.*, 471 U.S. at 715–16 (stating that pre-emption will be inferred when “the federal interest is so dominant that the federal system will be assumed to preclude enforcement of state laws . . . .” (quoting *Hines v. Davidowitz*, 312 U.S. 52 (1941))).

57. 49 U.S.C.A. § 40103(a)(1) (West 2014).

58. *Braniff Airways, Inc. v. Nebraska State Bd. Of Equalization & Assessment*, 347 U.S. 590, 595 (1954) (“[This clause] was an assertion of exclusive national sovereignty . . . . The Act, however, did not expressly exclude the sovereign powers of the states.”).

59. 49 U.S.C.A. § 41713(b)(1) (West 1997) (“States may not enact or enforce a law, regulation, or other provision having the force and effect of law related to a price, route, or service of an air carrier that may provide air transportation under this subpart.”); *Gustafson v. City of Lake Angelus*, 76 F.3d 778, 784 (6th Cir. 1996) (holding that “the plain language of 41713(b)(1) expressly prohibits States from regulating aviation rates, routes, or services . . . .”).

60. 49 U.S.C. § 40103(a) (2011); 49 U.S.C. § 41713(b)(1) (2011); *Skysign Int’l, Inc. v. City of Honolulu*, 276 F.3d 1109, 1117 (9th Cir. 2002) (upholding a statute because it did not “reach into the forbidden, exclusively federal areas, such as flight paths, hours, or altitudes”).

61. 49 U.S.C. § 40120(c) (2011) (“A remedy under this part is in addition to any other remedies provided by law.”); *Kaminski*, *supra* note 6, at 73 (stating that the savings clause preserved the common law remedies such as state tort law claims).

62. *Cleveland v. Piper Aircraft Corp.* 985 F.2d 1438, 1442 (10th Cir. 1993) (“Nothing contained in this Act shall in any way abridge or alter the remedies now existing at common law . . . .”); Ann K. Wooster, *Construction and Application of § 105 Airline Deregulation Act (49 U.S.C.A. § 41713), Pertaining to Preemption of Authority over Prices, Routes, and Services*, 149 A.L.R. FED. 299 (2009) (indicating that the change in language essentially left the clause “untouched” because it provided for “common law and statutory remedies”).

language now simply states that “[a] remedy under this part is in addition to any other remedies provided by law.”<sup>63</sup> Notwithstanding the language, appellate courts have been split on the issue of preemption in tort and contract claims.<sup>64</sup> Most recently, the Supreme Court held that a state-law claim for breach of an implied covenant is preempted if it seeks to enlarge the contractual obligations of the parties.<sup>65</sup> Even if the savings clause purports to leave room for state intervention, the Court has stated that the existence of a savings clause will not preclude a finding of federal field preemption.<sup>66</sup>

On specific issues of noise control and safety, courts have held that states’ attempts to regulate aviation are preempted.<sup>67</sup> The Noise Control Act of 1972 and the Federal Aviation Act pervade the arena and speak directly to these issues.<sup>68</sup> In addition, because the federal

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63. 49 U.S.C. § 40120(c) (2011). Rather than a change in substance, this language was seen as a simplification of the language by eliminating unnecessary words. Thomas N. Tarnay, *Aircraft Designs Subjected to FAA Special Certification Review*, 62 J. AIR L. & COM. 591, 624 n.180 (1996); Wooster, *supra* note 63, at § 2[a] (stating that the Act left untouched a “savings clause . . . providing viable common law and statutory remedies for airline negligence.”).

64. See *Abdullah v. Am. Airlines, Inc.*, 181 F.3d 363, 376 (3d Cir. 1999) (finding that federal law preempts in the area of standards of care; however, state remedies are still available for violations of those standards); *Hodges v. Delta Airlines, Inc.*, 44 F.3d 334, 339 (5th Cir. 1995) (en banc) (holding that claims for physical injury resulting from the negligent operation of an aircraft are not related to rates, routes, or services under the ADA); *West v. Nw. Airlines, Inc.*, 995 F.2d 148, 150 (9th Cir. 1993) (holding that the Aviation Deregulation Act (“ADA”) preempted West’s punitive damages claim, but “did not preempt his claim for compensatory damages under Montana law”).

65. *Nw. Airlines, Inc. v. Ginsberg*, 134 S. Ct. 1422, 1433 (2014). Although the Court decided the case unanimously, it did not give a definitive answer as to which state laws are subject to federal preemption. *Id.*

66. *Geier v. Am. Honda Motor Co.*, 529 U.S. 861, 869 (2000) (“[T]he saving clause . . . does not bar the ordinary working of conflict pre-emption principles.”); *Choate v. Champion Home Builders Co.*, 222 F.3d 788, 794 (10th Cir. 2000) (“The presence of an express preemption provision . . . does not, by itself, foreclose an implied preemption analysis.”).

67. *City of Burbank v. Lockheed Air Terminal, Inc.*, 411 U.S. 624, 628 (1973) (finding a state law regulating noise omissions from planes preempted because the “aircraft and its noise are indivisible” (quoting *Am. Airlines v. Hempstead, D.C.*, 272 F. Supp. 226, 230 (E.D.N.Y. 1967), *aff’d*, 398 F.2d 369 (2d Cir. 1968))); *Blue Sky Entm’t, Inc. v. Town of Gardiner*, 711 F. Supp. 678, 694 (N.D.N.Y. 1989). The legislative history of the Federal Aviation Act of 1958 provides the FAA with “full responsibility and authority” over the “promulgation and enforcement of safety regulations.” H.R. REP. NO. 85–2360, at 2 (1958). *But see Ward v. State*, 374 A.2d 1118, 1125 (Md. 1977) (finding that a state criminal law addressing reckless operation of an aircraft was not subject to a preemption because it did not purport to effect the pilot’s license and actually assisted in the congressional purpose).

68. Noise Control Act of 1972, 42 U.S.C. § 4911 (2012); Federal Aviation Act of 1958, Pub. L. No. 85-726, § 307(a), 72 Stat. 731, 749 (giving the FAA authority to regulate to ensure the safety of civil aviation and the efficient use of such airspace).

government has asserted the exclusive right to control airspace,<sup>69</sup> any state regulation that impedes that right will be preempted.<sup>70</sup> Therefore, in addition to noise and safety, municipalities cannot regulate airports in any manner that directly interferes with aircraft operations.<sup>71</sup>

In an interesting set of cases, several courts discussed the issue of aerial advertising towed behind airplanes.<sup>72</sup> The Colorado Supreme Court struck a state law regulating advertising messages towed by aircraft due to the FAA's issuance of safety regulations and permits for operators of such aerial advertising.<sup>73</sup> The court reasoned that the city only enforced the advertising law against airplane operators; therefore, the local ordinance was regulating the aircraft rather than the advertisement itself.<sup>74</sup> The Ninth Circuit reiterated this sentiment in *Skysign v. City of Honolulu* when it stated that the ordinance was not entitled to a presumption of non-preemption because, rather than regulating advertising in general, it was targeting the use of airspace.<sup>75</sup> These cases provide insight into the possible action of courts on the issue of UAS regulations and suggest that regulations

69. 49 U.S.C. § 40103(a) (2011); *Nw. Airlines, Inc. v. Minnesota*, 322 U.S. 292, 303 (1944) (Jackson, J., concurring) (“Air as an element in which to navigate is even more inevitably federalized by the commerce clause than is navigable water.”).

70. *City of Burbank*, 411 U.S. at 627–28 (1973) (finding that a state law regulating noise “would cause a serious loss of efficiency in the use of the navigable airspace”); *Burbank-Glendale-Pasadena Airport Auth. v. City of L.A.*, 979 F.2d 1338, 1340 (9th Cir. 1992).

71. *Burbank-Glendale-Pasadena Airport Auth.*, 979 F.2d at 1340 (“It is settled law that non-proprietor municipalities are preempted from regulating airports in any manner that directly interferes with aircraft operations.”).

72. *Skysign Int'l, Inc. v. City of Honolulu*, 276 F.3d 1109, 1118 (9th Cir. 2002) (holding that a state law which prevented the aerial sign was preempted because the aircraft was operating under a certificate issued by the FAA); *Banner Adver., Inc. v. City of Boulder*, 868 P.2d 1077, 1082 (Colo. 1994) (stating that a state law prohibiting the towing of advertisements by aircraft was preempted because the “federal government also exercises pervasive control over the specific act of banner towing by an airplane.”).

73. *Banner Adver.*, 868 P.2d at 1082.

74. *Id.* at 1082 (“The City has not enforced the ordinance against advertisers, only against airplane operators. Thus, it appears that it is not the advertising message that the City is regulating, but rather the conduct of the aircraft operators.”).

75. *Skysign*, 276 F.3d at 1116 (holding that the ordinance was targeting navigable airspace for regulation). However, the court upheld another ordinance restricting advertising that was generally applicable rather than targeted at the operation of the aircraft. *Id.* In upholding the statute, the court reasoned that the general ordinance was a regulation of advertising, not the use of airspace. *Id.*

directed toward the flight of UASs will be preempted, while regulations directed at other UAS usage effects may survive.<sup>76</sup>

## II. ANALYSIS

Because the overall goal of the FAA Modernization and Reform Act was to help modernize the use of the United States' airspace, any state laws that conflict with its language, stated purpose, or implied intent are superseded by the Act and therefore are preempted.<sup>77</sup> Because there is no general preemption in the field of aviation,<sup>78</sup> answering questions of preemption will require an analysis of the existing structure and language of federal laws in light of the doctrines of express preemption, conflict preemption, and field preemption.

### A. *Express Preemption*

Express preemption occurs only when Congress has expressly stated that state laws will be preempted by the enactment of a federal law or regulation.<sup>79</sup> Title 49, which covers the regulation of transportation, states that the “United States Government has exclusive sovereignty of airspace of the United States.”<sup>80</sup> Under Title 49, Congress placed “exclusive authority for regulating the airspace above the United States with the [FAA].”<sup>81</sup> Although this clause

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76. *Id.* at 1117 (finding that the general advertising regulation “does not actually reach into the forbidden, exclusively federal areas, such as flight paths, hours, or altitudes.”).

77. Nettels & Irby, *supra* note 17, at 330 (stating that preemption issues are dependent on congressional intent expressed either through express language or through the law's structure and purpose).

78. See *Braniff Airways, Inc. v. Neb. State Bd. of Equalization & Assessment*, 347 U.S. 590, 595–96 (1954) (stating that although the federal statutes declare sovereignty, preemption will be determined by looking at the particular area within aviation which is being regulated).

79. *Elassaad v. Independence Air, Inc.*, 613 F.3d 119, 126 (3d Cir. 2010) (“Express preemption requires that Congress's intent to preempt be explicitly stated in the statute's language or implicitly contained in its structure and purpose. (quoting *Cipollone v. Liggett Grp., Inc.*, 505 U.S. 504, 516 (1992)) (internal quotations omitted); Nettels & Irby, *supra* note 17, at 330 (stating that an express preemption is indicated by “including a preemption clause or other similar provision within the enacted law.”).

80. 49 U.S.C. § 40103(a) (2011).

81. *Riggs v. Burson*, 941 S.W.2d 44, 49 (Tenn. 1997) (holding that the state law which prohibited use of a heliport was not subject to an express preemption by the federal statute).

asserts the sovereignty of the federal government, courts do not view it as a clause that expressly preempts all state regulations.<sup>82</sup>

The United States Code has only one clause that expressly preempts state action in the field of aviation.<sup>83</sup> The Airline Deregulation Act of 1978 contains a clause stating that “[s]tates may not enact or enforce a law, regulation, or other provision . . . related to a price, route, or service of an air carrier that may provide air transportation.”<sup>84</sup> This language applies to “state enforcement actions” having a connection with or reference to airline “rates, routes, or services.”<sup>85</sup> Therefore, even if a statute does purport to directly regulate rates, routes, or services, action that has a significant impact on these areas will be preempted.<sup>86</sup>

The preemption clause only affects persons operating as an “air carrier.”<sup>87</sup> The code defines air carrier as “a citizen of the United States undertaking by any means, directly or indirectly, to provide air

82. *Martin ex rel. Heckman v. Midwest Exp. Holdings, Inc.*, 555 F.3d 806, 808 (9th Cir. 2009) (“The Federal Aviation Act has no express preemption clause.”); *Holland*, *supra* note 37, at \*13 (noting that the Act did not contain an express preemption unlike the ADA which expressly preempted in areas of rate, route or service); 8A AM. JUR. 2D *Aviation* § 27 (2013) (stating the Federal Aviation Act “provides no general express preemption”).

83. *Holland*, *supra* note 37, at \*12 (stating that while the FAA enabling act did not contain a preemption clause, the Airline Deregulation Act later inserted a preemption clause into the code).

84. 49 U.S.C. § 41713(b) (2011); *Am. Airlines, Inc. v. Wolens*, 513 U.S. 219, 232 (1995) (stating that the ADA’s preemption clause and the Federal Aviation Act’s savings clause “stop[] States from imposing their own substantive standards with respect to rates, routes, or services”); *Wooster*, *supra* note 63 (“[T]he ADA included a federal preemption provision to prevent the states from regulating the newly deregulated airline industry in the areas of prices, routes, and services.”).

85. *Morales v. Trans World Airlines, Inc.*, 504 U.S. 374, 383–84, 386–90 (1992) (using a broad construction of the phrase “relating to” and defining it as having some relation to or a connection with routes, rates, or services); *Witty v. Delta Air Lines, Inc.*, 366 F.3d 380, 383 (5th Cir. 2004) (stating that the preemption clause “not only preempts the direct regulation of prices by states, but also preempts indirect regulation ‘relating to’ prices that have ‘the forbidden significant effect’ on such prices.” (quoting *Morales*, 504 U.S. at 385, 388 (1992))).

86. *Morales*, 504 U.S. at 388 (holding that a state law governing deceptive fare advertisements was preempted because they not only reference fares but have a “forbidden significant effect upon fares.”); *Witty*, 366 F.3d at 383 (holding that even though a plaintiff’s negligence claim asserting that the airline should provide more leg room does not reference rates, it would have a significant economic impact and is therefore preempted).

87. 49 U.S.C. § 41713(b)(1) (2011) (“States may not enact or enforce a law . . . related to a price, route, or service of an *air carrier*”) (emphasis added); *Holland*, *supra* note 37, at \*12 (stating it has “now been well established that personal injury claims are not preempted as relating to rates, routes[,] or services, while cases alleging unfair collection of taxes, deceptive advertising, or state laws creating passengers’ bills of rights are preempted.”).

transportation.”<sup>88</sup> The definition of interstate air transportation also limits the preemption clause to flights that transport passengers, property, or mail between states.<sup>89</sup>

This provision will likely not impact state laws that completely ban the use of UASs, weaponization of UASs, or laws that limit UAS use for surveillance by law enforcement. UASs do not fit into this category of air carrier because they are not currently used for the transportation of passengers. Since the definition of unmanned aircraft simply refers to the presence of a pilot and not passengers,<sup>90</sup> a UAS could possibly be used for air transportation while still qualifying as a UAS, making the preemption clause applicable.

In addition, if a UAS were developed for the purpose of delivering mail or packages, it would fall under the preemption clause, and state laws having a significant impact on the services or routes of these aircraft would be preempted.<sup>91</sup>

### B. Conflict Preemption

Conflict preemption occurs when there is either a physical impossibility or the state law stands as an obstacle to the federal purpose.<sup>92</sup>

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88. 49 U.S.C. § 40102(a)(2) (2011); *see also* 49 U.S.C. § 40102(a)(5) (2011) (defining air transportation as “foreign air transportation, interstate air transportation, or the transportation of mail by aircraft.”); 14 C.F.R. § 1.1 (2012) (“Air carrier means a person who undertakes directly by lease, or other arrangement, to engage in air transportation.”).

89. 49 U.S.C. § 40102(a)(25) (2011) (defining “interstate air transportation” as “the transportation of passengers or property by aircraft as a common carrier for compensation, or the transportation of mail by aircraft”).

90. *See* Federal Aviation Administration Modernization and Reform Act of 2012, Pub. L. No 112-95, § 331(8–9), 126 Stat. 11 (“The term ‘unmanned aircraft’ means an aircraft that is operated without the possibility of direct human intervention from within or on the aircraft.”).

91. 49 U.S.C. § 41713 (2011) (“States may not enact or enforce a law, regulation, or other provision . . . related to a price, route, or service of an air carrier that may provide air transportation . . . .”); Kellington, *supra* note 3, at 634 (stating that multiple companies are investigating the use of UASs for transporting goods or mail); Peterson, *supra* note 21, at 525 (stating that, among the many uses, UASs have the capability of delivering mail or packages); *see* Am. Airlines, Inc. v. Wolens, 513 U.S. 219, 232 (1995) (stating that the ADA’s preemption clause and the Federal Aviation Act’s savings clause “stop[] States from imposing their own substantive standards with respect to rates, routes, or services”).

92. RICH, *supra* note 43.

### 1. *Physical Impossibility*

Preemption by physical impossibility requires that an actor not be able to comply with both the federal and the state statutes at the same time.<sup>93</sup> If the state law is more stringent than the federal law or requires similar action but the actor can still comply with both, it does not necessarily result in preemption.<sup>94</sup> Courts often find that there are ways in which citizens may comply with both laws, leading some to note that physical impossibility is “often mentioned but rarely applied.”<sup>95</sup>

Similar to previous cases heard by the courts, a state statute barring UASs from flying in certain areas, carrying weapons, or conducting surveillance does not directly conflict with the federal laws or regulations. Compliance with the state statute would not make compliance with the federal laws impossible because federal law is simply permissive in allowing the UAS flight.

### 2. *Frustration of Purpose*

Even though the state statutes do not make it physically impossible to comply with the FAA Modernization and Reform Act, they may still “stand[] as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress.”<sup>96</sup> Since the stated

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93. *Nettels & Irby*, *supra* note 17, at 332 (“[Conflict preemption] is found where a private party’s efforts to comply with competing federal and state law or regulation is physically impossible.”).

94. *Fla. Lime & Avocado Growers, Inc. v. Paul*, 373 U.S. 132, 143 (1963) (upholding a California law requiring avocados to contain less than eight percent of oil while the federal law had no such requirement because there was “[n]o such impossibility of dual compliance”); *Cloyd v. State*, 943 So. 2d 149, 160 (Fla. Dist. Ct. App. 2006) (holding that a state law which punished pilots for operating aircraft while intoxicated did not conflict with the federal law because “a pilot could comply with both the Florida law and the federal law and regulations”).

95. *See Davis*, *supra* note 50, at 984, n.96; *see, e.g., Gustafson v. Lake Angelus*, 76 F.3d 778, 786 (6th Cir. 1996) (upholding a state law that prohibits the landing of sea planes on Lake Angelus because it “does not make compliance with federal aviation law impossible”).

96. *Hines v. Davidowitz*, 312 U.S. 52, 66–67 (1941) (holding that a state law requiring alien registration stands as an obstacle to the accomplishment of the federal immigration law); *see also Geier v. Am. Honda Motor Co., Inc.*, 529 U.S. 861, 863 (2000) (finding a state common law action that required an automaker to install airbags conflicted with a federal law allowing various passive restraints and reasoning that it “would have presented an obstacle to the variety and mix of devices that the federal regulation sought”); *U.S. v. Berkeley*, 735 F. Supp. 937, 940 (E.D. Mo. 1990) (finding preempted state building codes that prevented the construction of an Airport Radar and reasoning that it stood “as an obstacle to the accomplishment of the statutory objective: the establishment and improvement of air

purpose of the Act is to incorporate UASs into the airspace,<sup>97</sup> any state law obstructing this goal could be preempted.

Laws that forbid law enforcement from using UASs could obstruct the Act's purpose because a large portion of UAS use comes from the public sector.<sup>98</sup> By preventing the use of such a large investor class, the states would slow down the FAA's integration efforts.<sup>99</sup> In addition, laws banning the use of UASs entirely, including both civil and public use, could be subject to preemption for similar reasons.<sup>100</sup> Since the Act calls for the selection of six test sites throughout the U.S. in various climates to test the integration capabilities, bans would slow the integration process by limiting the geographic locations available and the effectiveness of the research.<sup>101</sup>

Conflict preemption would likely not affect state statutes that simply ban the use of UASs for surveillance or the weaponization of the vehicles.<sup>102</sup> Because they do not ban the flight of UASs, they likely would not impede the fulfillment of the federal goals. The states are permitted to place some restrictions in areas that impact aviation as long as they do not prevent the Act from accomplishing its purpose.<sup>103</sup> Private and public entities would still be permitted to

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navigation facilities for the safety of the public.”).

97. Federal Aviation Administration Modernization and Reform Act of 2012, Pub. L. No 112-95, § 332(a)(1), 126 Stat. 11 (directing the Secretary of Transportation to develop a plan to “safely accelerate the integration of civil unmanned aircraft systems into the national airspace system.”); Ajoke Oyegunle, *Drones in the Homeland: A Potential Privacy Obstruction Under the Fourth Amendment and the Common Law Trespass Doctrine*, 21 COMMLAW CONSPPECTUS 365, 367 (2013) (stating that the intent was to provide funding to “revamp the nation’s air traffic control system.”).

98. *Fact Sheet-Unmanned Aircraft Systems*, FAA (Jan. 6, 2014), [http://www.faa.gov/news/fact\\_sheets/news\\_story.cfm?newsID=14153](http://www.faa.gov/news/fact_sheets/news_story.cfm?newsID=14153). The FAA has recently made it easier for governmental agencies to obtain waivers for the flight of UASs, which will likely lead to more uses and investment by those agencies. ALISSA M. DOLAN, CONG. RESEARCH SERV., R42940, INTEGRATION OF DRONES INTO DOMESTIC AIRSPACE: SELECTED LEGAL ISSUES 4 (2013).

99. See DOLAN, *supra* note 98, at 28, 30 (2013) (explaining that many states currently have legislative proposals pending while the FAA has been tasked with developing a comprehensive plan to accelerate the integration of drones into the national airspace).

100. See generally *Fact Sheet-Unmanned Aircraft Systems*, *supra* note 98 (indicating civil use means use by private citizens, and public use means use by public entities and governmental agencies).

101. Federal Aviation Administration Modernization and Reform Act of 2012, Pub. L. No 112-95, § 332(c)(3)(a), 126 Stat. 11 (stating that test ranges will take into account geographic and climatic diversity when determining the location of the test ranges).

102. DOLAN, *supra* note 98, at 27–28 (2013).

103. RICH, *supra* note 43 (“[S]tate law will not be allowed which ‘stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress.’”).

operate UASs in navigable airspace as long as they were not doing so for the purposes of surveillance or weaponization.

Various exceptions found in specific laws mitigate the threat of conflict preemption.<sup>104</sup> The Texas statute allows for the use of UASs for “professional or scholarly research,” surveillance with a valid search warrant, emergencies, or use in airspace “designated as a test site or range authorized by the Federal Aviation Administration.”<sup>105</sup> These types of exceptions allow integration of UASs into the airspace while addressing the concerns of unlawful surveillance.<sup>106</sup> Private and public actors are still permitted to participate in the research of UAS integration and can take advantage of the non-surveillance uses.<sup>107</sup>

### C. Field Preemption

State UAS laws will be subject to an implied field preemption if they aim to regulate a subfield within aviation that has been taken up by federal law or regulations.<sup>108</sup> Although there is a presumption against preemption when the aim of the statute involves the traditional police powers of the states, the Supreme Court has noted that it is more willing to find a preemptive intent in certain areas within aviation that have a “history of significant federal presence,” including safety and navigable airspace.<sup>109</sup> Therefore, if states are perceived as attempting to regulate concerns such as safety, noise, or

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104. See, e.g., Tex. Gov’t Code Ann. § 423.002(a)(1) (West 2013) (providing exception to state regulations for use of unmanned aircrafts for professional or scholarly research purposes).

105. *Id.* § 423.002(a).

106. See *id.* § 423.003(a)–(b) (stating it is a crime to use unmanned aircraft to conduct surveillance on individuals or private property).

107. *Id.* § 423.002(a)(1), (13), (17) (West 2013) (stating that it is lawful to use unmanned aircraft to capture images for scholarly research for institutions of higher education and their contractors, as well as real estate brokers and oil and gas businesses).

108. Edward Boula, *Taking Flight or Landing: Implied Field Preemption Under the Federal Aviation Act of 1958 and Wyeth v. Levine*, 24 DCBA Brief 34, 36 (2012) (“Field preemption arises when Congress occupies an entire field of a substantive area of law, which precludes any type or [sic] state interference within that field.”).

109. *Skysign Int’l, Inc. v. City of Honolulu*, 276 F.3d 1109, 1116 (9th Cir. 2002) (finding that there was no presumption against preemption because regulation of navigable airspace was “an area where there has been a history of significant federal presence” (quoting *United States v. Locke*, 529 U.S. 89, 108 (2000))); *Montalvo v. Spirit Airlines*, 508 F.3d 464, 471 (9th Cir. 2007) (finding no presumption against preemption because the area of aviation safety “has long been dominated by federal interests.”).

navigable airspace through their UAS laws, they will not have the benefit of a strong presumption against preemption.<sup>110</sup>

### 1. *Laws Attempting to Address Safety Concerns*

Many commentators have discussed safety issues surrounding UASs, including the threat of signal interruption and malfunctions.<sup>111</sup> Although UASs are used extensively overseas, some commentators fear that, if used in a populous area, hackers might hijack UASs or their signals might become corrupted, resulting in crashes.<sup>112</sup> Although minor failures in rural or uninhabited areas are a concern, the same malfunctions arising over populous areas could be devastating.<sup>113</sup> Regardless of how rational the concern, the courts have been clear the federal government has jurisdiction over aviation safety issues.<sup>114</sup>

The FAA's enabling act gave the Administrator the responsibility to "assign by regulation or order the use of the airspace necessary to ensure the safety of aircraft and the efficient use of airspace."<sup>115</sup> The Ninth Circuit in *Montalvo v. Spirit Airlines* stated that the voluminous regulations in place and the mandate by 49 U.S.C. § 40103(b) "sufficiently demonstrate an intent to occupy exclusively the entire field of aviation safety."<sup>116</sup> Courts have found preempted

110. See *Montalvo*, 508 F.3d at 471 (finding no presumption against preemption in the area of aviation safety); *Skysign*, 276 F.3d at 1116 (stating that there was no presumption against preemption because the state law was attempting to regulate navigable airspace).

111. See, e.g., Rapp, *supra* note 3, at 627, 630 (stating that when tested in a large city, communications between the controller and the aircraft could be interrupted and result in collisions with other aircraft or with the ground).

112. Oyegunle, *supra* note 97, at 367 (stating that UASs could be susceptible to hijackings by terrorists); Anya Kamenetz, *Zombie Drones! Hacker Finds a Way to Hijack UAVs*, FAST COMPANY (Dec. 4, 2013, 1:41 PM), <http://www.fastcompany.com/3022930/fast-feed/zombie-drones-hacker-finds-a-way-to-hijack-uavs?partner=rss> (discussing the ability to hijack and control UASs).

113. Simon Moya-Smith, *'They're Trying to Figure Out What Happened': Malfunctioning Drone Hits Navy Ship*, NBC News (Nov. 17, 2013) [http://usnews.nbcnews.com/\\_news/2013/11/17/21504769-theyre-trying-to-figure-out-what-happened-malfunctioning-drone-hits-navy-ship?lite&ocid=msnhp&pos=1](http://usnews.nbcnews.com/_news/2013/11/17/21504769-theyre-trying-to-figure-out-what-happened-malfunctioning-drone-hits-navy-ship?lite&ocid=msnhp&pos=1) (discussing two incidents involving the crashing of department of defense drones).

114. Boula, *supra* note 108, at 34 (stating that the federal circuit courts are in agreement that "the entire field of 'air safety' is preempted").

115. 49 U.S.C. § 40103(b)(1) (2011).

116. *Montalvo v. Spirit Airlines*, 508 F.3d 464, 471 (9th Cir. 2007) (finding a state law claim of failure to warn was preempted by federal law because "Congress has indicated its intent to occupy the

state laws involving safe use of navigable airspace, pilot training, and pilot regulation; however, they have left to the states matters involving product liability and failure to warn.<sup>117</sup>

State laws that foreclose the possibility of any flight or flights with weapons on board are susceptible to a field preemption in the area of aviation safety if the statute's purpose or legislative history indicate a concern for the safety of citizens and property.<sup>118</sup> Because the FAA Administrator has the sole responsibility to regulate navigable airspace to ensure its safe use,<sup>119</sup> if states attempt to restrict flights or limit their proximity to populated areas due to safety concerns, their laws would likely not survive a challenge.<sup>120</sup>

## 2. State Laws Addressing Privacy Concerns

Many proposed and enacted statutes focus directly on surveillance and privacy and make no mention of safety concerns.<sup>121</sup> If state laws regulate only privacy, which affects the rights of the public on the ground,<sup>122</sup> there would likely not be a preemption concern because it

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field of aviation safety"). *But see* O.S. v. Hageland Aviation Servs., Inc., 609 F. Supp. 2d 889, 891–92 (D. Ala. 2008) (remanding the aviation tort claim to state court after it was removed to the district court, reasoning that the court lacked federal question jurisdiction and stating that the Federal Aviation Act does not preempt all state court actions concerning aviation safety). The legislative history behind the Federal Aviation Act further indicates that Congress intended to give the FAA preemptive powers. H.R. REP. NO. 85-2360, at 3761 (1958) (Conf. Rep.) ("It is essential that one agency of government, and one agency alone, be responsible for issuing safety regulations if we are to have timely and effective guidelines for safety in aviation.").

117. Holland, *supra* note 37, at 11. While matters involving the standard of care of pilots are subject to an implied preemption, victims may still pursue state remedies for violation of those federal safety standards. *Id.* at 17; *see also* U.S. Airways, Inc. v. O'Donnell, 627 F.3d 1318, 1326 (10th Cir. 2010) (reasoning that while Congress has the "exclusive right to regulate safety in a given field," it has allowed the states to "maintain tort remedies covering much the same territory.").

118. *See, e.g.*, 158 CONG. REC. S333-02 (daily ed. Feb. 6, 2012) ("This bill is going to make the air transportation system safer than ever before . . .").

119. 49 U.S.C. § 40103(b)(1) (2011) ("The administrator of the [FAA] shall develop plans and policy . . . to ensure the safety of aircraft and the efficient use of airspace.").

120. *See* 49 U.S.C. § 40103(b)(2) (2011) ("The Administrator shall prescribe air traffic regulations on the flight of aircraft . . .").

121. *E.g.*, IDAHO CODE ANN. § 21-213 (2013) (prohibiting the use of a UAS for the purpose of conducting surveillance or gathering of evidence); *see also* OR. REV. STAT. § 837.310 (2013) (prohibiting any law enforcement agency from operating a drone); TEX. GOV'T CODE ANN. § 423.003 (West 2013) (making it illegal for any person to use "an unmanned aircraft to capture an image of an individual . . . with the intent to conduct surveillance").

122. Skysign Int'l, Inc. v. City of Honolulu, 276 F.3d 1109, 1117 (2002) (holding a state law was not preempted because it did not reach into the "forbidden, exclusively federal areas, such as flight paths,

would not be seen as regulating the flight of the UAS.<sup>123</sup> Further, the FAA recently noted that it does not have the authority to regulate privacy; therefore, state privacy regulations would not be preempted.<sup>124</sup> There is some indication, however, that the courts could characterize an attempt to regulate UAS use due to privacy concerns as a regulation of navigable airspace, an area with a history of a strong federal presence, and therefore subject to preemption.<sup>125</sup>

The Supreme Court has upheld the ability of law enforcement to use aircraft for surveillance on several occasions despite Fourth Amendment concerns.<sup>126</sup> This has included the ability of law enforcement to use fixed-wing aircraft and helicopters to observe and to take detailed pictures of private property from navigable airspace.<sup>127</sup>

Although some states are addressing the privacy concerns of their citizens through UAS laws, they do not address the use of manned aircraft for surveillance.<sup>128</sup> These laws focus specifically on the use of UASs, although they serve similar purposes as manned aircraft.

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hours, or altitudes.”).

123. See Unmanned Aircraft System Test Site Program, 78 Fed. Reg. 68360, 68361 (Nov. 14, 2013).

124. *Id.* (“The FAA’s mission is to provide the safest, most efficient aerospace system in the world and does not include regulating privacy.”). However, the FAA has introduced regulations that would regulate privacy within the test areas; these regulations would strengthen the inference that Congress intended to preempt the state law. *See id.*

125. See *Montalvo v. Spirit Airlines*, 508 F.3d 464, 471 (9th Cir. 2007) (finding no presumption against preemption because the area of aviation safety “has long been dominated by federal interests.”); *Skysign*, 276 F.3d at 1116 (finding that there was no presumption against preemption because there was a “history of significant federal presence” in the area of navigable airspace).

126. See, e.g., *Florida v. Riley*, 488 U.S. 445, 448, 451 (1989) (denying a motion to suppress evidence when law enforcement used a helicopter to look with his naked-eye through openings in the roof of the suspect’s greenhouse); *California v. Ciraolo*, 476 U.S. 207, 209, 213, 215 (1986) (declining to rule it a violation of the suspect’s Fourth Amendment rights when law enforcement used a private plane flown at 1,000 feet to investigate, with a naked eye, the presence of marijuana in the suspect’s yard); *Dow Chem. Co. v. United States*, 476 U.S. 227, 230 (1986) (upholding EPA’s aerial photographing of a plant from a maximum of 12,000 feet with a mounted camera and reasoning that while it allows the viewer more detail than the naked eye, it does not permit viewing inside the walls of the plant).

127. See *Riley*, 488 U.S. at 448, 451 (allowing the use of a helicopter to look through the opening of a suspect’s roof); see also *Dow Chemical*, 476 U.S. at 230 (finding no Fourth Amendment violations when the EPA used cameras to take detailed photographs).

128. The laws passed thus far strictly limit their applications to UASs and make no mention of attempts to regulate manned aircraft. See, e.g., IDAHO CODE ANN. § 21-213(2)(a) (2013) (prohibiting the use of a UAS for the purpose of conducting surveillance or gathering of evidence); OR. REV. STAT. § 837.310(1) (2013) (prohibiting any law enforcement agency from operating a UAS); TEX. GOV’T CODE ANN. § 423.003 (West 2013).

This is similar to the discrepancies noted in cases involving aerial advertising. For instance, in *Banner Advertising v. City of Boulder*, the Colorado supreme court held that a state law purporting to regulate aerial advertisements was preempted by federal regulations.<sup>129</sup> The court noted that the law did not address advertisers in general; it only impacted airplane operators towing advertisements.<sup>130</sup> Therefore, rather than regulating advertising, they were actually regulating aircraft.<sup>131</sup>

Likewise, state laws restricting surveillance by UASs also do not address surveillance conducted from manned aircraft. Aerial surveillance permitted by the Supreme Court will be subject to restriction by state laws based solely on whether a pilot is present in the cockpit. Because these laws only regulate the type of aircraft used while conducting surveillance rather than the surveillance itself, if a court applied reasoning similar to that in *Skysign*, it might find that such laws regulate the use of navigable airspace and are subject to federal preemption.

### III. PROPOSAL

The large increase in UAS technology in recent years has caused the UAS industry to grow rapidly.<sup>132</sup> This growth has the potential to

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129. *Banner Adver., Inc. v. City of Boulder*, 868 P.2d 1077, 1082 (Colo. 1994) (stating that the state law banning advertising was preempted even though there was a presumption against preemption because the government “exercises pervasive control” over aerial advertising). *But see Skysign*, 276 F.3d at 1118 (upholding a law banning aerial advertising even though it found there was no presumption against preemption because the state was attempting to regulate navigable airspace). The court in *Skysign* distinguished its case from *Banner Advertising* because the Certificate of Waiver received by the operators in *Skysign* contained a provision that required compliance with state and local laws. *Id.* at 1118 n.6.

130. *Banner*, 868 P.2d at 1082; *see also Skysign*, 276 F.3d at 1116 (stating that no presumption applied because the ordinance “rather than addressing advertising generally specifically targets for regulation ‘an area where there has been a history of significant federal presence,’ *i.e.*, navigable airspace.” (quoting *United States v. Locke*, 529 U.S. 89, 108 (2000))).

131. *Banner*, 868 P.2d at 1082 (noting that the regulation was one of aircraft operators); *Skysign*, 276 F.3d at 1116 (stating that the regulation was targeted at navigable airspace).

132. *See* FED. AVIATION ADMIN., FAA AEROSPACE FORECAST: FISCAL YEARS 2011–2031, at 49 (2011), available at [http://www.faa.gov/about/office\\_org/headquarters\\_offices/apl/aviation\\_forecasts/aerospace\\_forecasts/2011-2031/media/2011%20Forecast%20Doc.pdf](http://www.faa.gov/about/office_org/headquarters_offices/apl/aviation_forecasts/aerospace_forecasts/2011-2031/media/2011%20Forecast%20Doc.pdf) (noting that while the industry is still in its “infancy,” the agency expects a large increase in the coming decades).

bring added commerce and jobs to states that welcome the new industry.<sup>133</sup> Legislators should not be quick to alienate such a growing industry by passing reactionary legislation that will prevent new businesses and jobs from being created in their state.<sup>134</sup>

State and local legislatures must address their citizens' concerns through the careful passage of UAS laws. While states may pass laws furthering the ideals of their citizens, they cannot proceed in areas preempted by federal law.<sup>135</sup> State laws limiting the use of UASs must be drafted cautiously so as to avoid regulating preempted subfields within aviation<sup>136</sup> because the courts will look not only at the text of the statutes involved but also the concerns addressed by the state statute.<sup>137</sup>

#### A. *Outright Ban on Flights*

Legislators must be clear about the intended purpose of statutes attempting to completely ban the flight of UASs over a particular area. If bans do not directly address privacy concerns, the court will likely characterize the law as a regulation of safety or airspace.<sup>138</sup> Courts have been clear that the sub-field of aviation safety has been completely taken up by federal statutes and regulations;<sup>139</sup> therefore, drafters must avoid this inference and clearly state their purpose to protect citizen privacy.

Legislatures should include an express purpose for their UAS laws to avoid any inference that their laws regulate aviation safety. Bills addressing concerns historically controlled by the states (e.g., nuisance, privacy, and property) will be presumptively valid and thus

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133. Dave Kolpack, *Aviation Schools Prepare for Boom in Drone Jobs*, ASSOCIATED PRESS (Dec. 19, 2013), <http://bigstory.ap.org/article/aviation-schools-prepare-boom-drone-jobs> (stating that a well-known university now offers unmanned aircraft degree programs and they are expecting more than 70,000 jobs will develop in the first three years after drones are permitted in the airspace).

134. Villasenor, *supra* note 24, at 466 (stating that the industry is growing rapidly and one group predicts that global UAS spending will rise to as much as \$11 billion in the next decade).

135. See discussion *supra* note 37 and Part I.

136. See discussion *supra* Part II.

137. See discussion *supra* Part II.

138. See discussion *supra* Part II.C.

139. *Montalvo v. Spirit Airlines*, 508 F.3d 464, 470 (9th Cir. 2007) (“Congress has indicated its intent to occupy the field of aviation safety.”).

will not be preempted.<sup>140</sup> However, the court will still look at the overall effect and purpose of state statutes to determine if it is, in fact, a veiled attempt to address their constituents' safety concerns.

States must also avoid frustrating the purpose of the federal law by undermining the Act's overall research and integration purposes.<sup>141</sup> For example, Texas included an exception limiting the negative effects its law has on the fulfillment of the Act's purpose.<sup>142</sup> It permits the use of UASs in federally designated "test ranges," allowing the research and testing of UASs that the FAA needs to accomplish the Act's goal of integration in specified areas.<sup>143</sup> In 2014, Texas became one of six states to host a federal UAS test site and established its own research site at Texas A&M University.<sup>144</sup> Texas's approach permits states to limit UAS use over unauthorized areas such as cities and populous districts while helping to develop the technology for future use.

### B. *Banning Surveillance*

Laws that ban only surveillance using UASs have the best chance of survival. These laws not only address a real concern of constituents, but they also benefit from a presumption of non-preemption.<sup>145</sup> However, states must be cautious not to frustrate the purpose of the Act or draft the bill in such a way as to appear to regulate the use of airspace.<sup>146</sup>

To further limit the law, legislators could also prohibit the use of images for law enforcement investigations.<sup>147</sup> Permitting civil entities

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140. See discussion *supra* Part II.C; see also Villasenor, *supra* note 24.

141. See *supra* note 43.

142. TEX. GOV'T CODE ANN. § 423.002(a)(2) (West 2013) (stating that the law is not applicable for uses within the "airspace designated as a test site or range authorized by the Federal Aviation Administration for the purpose of integrating unmanned aircraft systems into the national airspace").

143. *Id.*

144. Press Release, FAA Announces Texas UAS Test Site Now Operational (June 20, 2014), available at [http://www.faa.gov/news/press\\_releases/news\\_story.cfm?newsid=16454](http://www.faa.gov/news/press_releases/news_story.cfm?newsid=16454).

145. See discussion *supra* Part II.C.

146. See discussion *supra* Part II.C.

147. See OR. REV. STAT. § 837.310 (2013) (limiting its prohibition to uses by law enforcement agencies); S.B. 1587, 98th Gen. Assemb., Reg. Sess. (Ill. 2013) ("[A] law enforcement agency may not use a drone to gather information."); 2013 Va. Acts 755 (mentioning only the law enforcement use of UASs).

and private citizens to use UAS technology allows investment in this new and growing field of aviation while limiting the negative effects on privacy rights. Although there would still be normal limits on the intrusion into privacy, the public could continue to use the technology in various ways such as filming movies, cartography, and recreation, while protecting citizens from the admission of images obtained by UASs as evidence in judicial proceedings.

Restricting civilian use of UASs for information gathering and photography could raise concerns over First Amendment protections.<sup>148</sup> If civil use is allowed, the use of the images of persons captured by the UAS could require the permission of the subject in the photo.<sup>149</sup> Such an approach would protect the public while still allowing UAS use.

Yet another concern is that courts may find that the ban on surveillance applies to the use of UASs themselves because they do not address the same actions when performed by manned aircraft.<sup>150</sup> This could be overcome by either differentiating the potential issues involved in UAS surveillance rather than manned aircraft surveillance or by simply including manned flights in the bill. Some of the concerns with UAS surveillance arise from their ability to remain in flight for long periods and their use of high-powered surveillance equipment.<sup>151</sup> States could reiterate the added risk to privacy and the possible Fourth Amendment violations that UASs pose to demonstrate the need for regulating their use while permitting the continued use of manned surveillance.<sup>152</sup>

Since the drafters of UAS bills are concerned with the overreach of law enforcement agencies, inclusion of manned flights in a ban is an effective solution. A limit on the aerial surveillance of a person or

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148. Kaminski, *supra* note 6, at 61 (stating that courts have not resolved whether “privacy or speech triumphs in this conflict”).

149. *See* OR. REV. STAT. § 837.330 (West 2013) (permitting law enforcement to use UASs to “acquir[e] information about an individual . . . if the individual has given written consent to the use of a drone for those purposes.”).

150. *See* discussion *supra* Part II.C.

151. Kellington, *supra* note 3, at 658–59 (noting the quality and the quantity for information that can be collected by UAS use); Oyegunle, *supra* note 98, at 378 (stating that “[d]rones are “vastly superior to traditional aerial technology” and they can view from greater heights for “days at a time”).

152. *See* Oyegunle, *supra* note 97.

property by law enforcement would avoid privacy problems. By limiting the amount of time spent doing surveillance and even the technology permitted for use, legislators could address many of these concerns without making the use of a UAS the focus of the law. Historically, courts have allowed the use of surveillance by law enforcement from greater distances and with increasing technologies.<sup>153</sup> A limit on the distance of the surveillance and the equipment available for use not only alleviates concerns over UAS surveillance but also places limits on all aerial intrusions into the privacy of private citizens by law enforcement.

Another approach that would limit or prevent law enforcement use would be a law banning the use of state funds for UASs.<sup>154</sup> This approach avoids the appearance of regulating drone flight while still limiting drone use for law enforcement surveillance and allowing research and development by private individuals and entities.<sup>155</sup>

### C. *Rate, Route, and Service*

Regardless of the type of law passed, states must avoid interfering with the function of air carriers. Due to the express preemption clause found in the Airline Deregulation Act, a state UAS law regulating rate, route, or service of an air carrier will be expressly preempted.<sup>156</sup> Although the transportation of persons via UAS is wrought with difficulties, a UAS will likely conform to the definition of air carrier

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153. See *Florida v. Riley*, 488 U.S. 445, 448, 451 (1989) (denying a motion to suppress evidence when a law enforcement officer used a helicopter to look with his naked eye through openings in the roof of the suspect's greenhouse); *California v. Ciraolo*, 476 U.S. 207, 215 (1986) (declining to rule it a violation of the suspect's Fourth Amendment rights when law enforcement used a private plane flown at 1,000 feet to investigate, with a naked eye, the presence of marijuana in the suspect's yard); *Dow Chem. Co. v. U.S.*, 476 U.S. 227, 238 (1986) (upholding the aerial photographing of a plant by the EPA from a maximum of 12,000 feet with a mounted camera and reasoning that although it allows the viewer more detail than the naked eye, it does not permit viewing inside the walls of the plant).

154. Villasenor, *supra* note 24, at 514.

155. *Id.*

156. 49 U.S.C. § 41713 (“[S]tates may not enact or enforce a law, regulation, or other provision . . . related to a price, route, or service of an air carrier that may provide air transportation”); *Am. Airlines, Inc. v. Wolens*, 513 U.S. 219, 232 (1995) (stating that the ADA's preemption clause and the Federal Aviation Act's savings clause “stop[] States from imposing their own substantive standards with respect to rates, routes, or services”).

if it delivers mail or packages.<sup>157</sup> Innovative companies plan to develop these vehicles for the delivery of packages to homes with shorter delivery times.<sup>158</sup> A state prohibition preventing the delivery of mail regulates the service of the air carrier and therefore is subject to an express preemption.<sup>159</sup> However, this is easily remedied by including a provision that permits UASs to deliver mail or packages, allowing private corporations to continue UAS development while leaving the remainder of the statute intact. If the purpose of the ban is simply to limit intrusion into the privacy of citizens, this exception does not harm the purpose of the statute.

#### CONCLUSION

Congress's stated purpose in passing the FAA Modernization and Reform Act of 2012 is to update the nation's airspace and to develop a plan to incorporate the use of new technologies to make air travel safer and more efficient.<sup>160</sup> Congress included in its modernization efforts the integration of unmanned aerial systems into the domestic airspace.<sup>161</sup> When it did so, state legislators worried that allowing the use of technologically advanced vehicles might endanger the rights of citizens, leading some to introduce and pass laws prohibiting the flight, weaponization, and surveillance use of UASs.<sup>162</sup>

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157. Although there are currently no plans for the transportation of individuals, there are companies that are looking into uses in mail and package delivery. While these vehicles may be used for transporting passengers in the future, there are not currently any plans to do so. Kellington, *supra* note 3, at 634 (noting that several companies are currently researching the use of large UASs for the transportation of goods).

158. Timothy B. Lee, *Amazon Envisions Eventually Delivering Packages in 30 Minutes Via Drones*, WASH. POST (Dec. 1, 2013, 9:15 PM), [http://www.washingtonpost.com/blogs/the-switch/wp/2013/12/01/amazon-wants-to-deliver-packages-in-30-minutes-with-drones/?tid=pm\\_business\\_pop](http://www.washingtonpost.com/blogs/the-switch/wp/2013/12/01/amazon-wants-to-deliver-packages-in-30-minutes-with-drones/?tid=pm_business_pop) (discussing Amazon's chief executive's plans of using small UASs to deliver small packages to consumers in order to shorten the delivery times).

159. See discussion *supra* Part II.A.

160. See discussion *supra* note 25.

161. FAA Modernization and Reform Act, Pub. L. No. 112-95, 126 Stat. 11, § 332(a)(1) (requiring the FAA to "accelerate the integration of civil unmanned aircraft systems into the national airspace system.").

162. See discussion *supra* Part I.

The express preemption of prices, routes, and services of air carriers<sup>163</sup> and navigable airspace<sup>164</sup> will prevent the application of laws banning UAS flights over populous areas or those attempting to control the altitudes of flights, despite the validity of the concerns addressed.<sup>165</sup> Further, courts have held that there is a strong preemption in the area of aviation safety.<sup>166</sup> If a state law is silent or unclear as to its purpose, it could be characterized as addressing safety concerns and thus be preempted.<sup>167</sup>

State UAS laws also run the risk of conflicting with either the express provisions or the fulfillment of the Act's purpose.<sup>168</sup> States must avoid frustrating the law by permitting flights in the federally designated "test ranges," allowing officials to develop the technology needed for integration.<sup>169</sup>

Carefully drafted laws banning the use of UASs for surveillance will not be subject to a federal preemption.<sup>170</sup> The concern with laws banning UAS surveillance is the possible characterization that they are regulating navigable airspace rather than surveillance because they do not address manned flights conducting the same surveillance with the same equipment.<sup>171</sup> Since manned flights using the same technology pose the same threats to privacy that prompted lawmakers to introduce UAS laws, addressing the threat from both sources would be an appropriate solution.<sup>172</sup>

While these lawmakers are addressing valid concerns of their citizens, they need to carefully draft their measures. Detailed laws that take a nuanced approach, rather than allowing the hunting of UASs or banning their use altogether, have a much better chance at survival. Drafters focusing on privacy concerns and avoiding areas of

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163. 49 U.S.C. § 41713.

164. See discussion *supra* note 104.

165. Skysign Int'l, Inc. v. City of Honolulu, 276 F.3d 1109, 1117 (2002) (describing the forbidden areas of regulation for states as flight paths, hours, or altitudes).

166. Boula, *supra* note 108.

167. See discussion *supra* Part III.B.

168. See discussion *supra* note 93.

169. See discussion *supra* note 135.

170. See discussion *supra* Part III.

171. See discussion *supra* note 120.

172. See discussion *supra* Part III.C.

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safety, navigable airspace, and the service of air carriers will find their laws not only benefit from a presumption of non-preemption, but also will likely not be preempted.

