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Cover Page Footnote

J.D. and Master's Degree in International Politics, May 2014, The Catholic University of America, Columbus School of Law; B.A. 2008, Haverford College. The author wishes to thank Professor Mary Leary for her guidance in Fourth Amendment jurisprudence; John Laufer, for his research assistance; and the staff of the Catholic University Law Review for their editorial work and feedback. The author also wishes to thank Celine Tobal for years of inspiration and editorial support, as well as his family, particularly Wandy, Andy, and Patricia, for their love and life-long encouragement.

STATE V. BROSSART: ADAPTING THE FOURTH AMENDMENT FOR A FUTURE WITH DRONES

By: Thomas A. Bryan⁺

Imagine a situation in which law enforcement officials unexpectedly confront a father and son.¹ The confrontation quickly escalates into an armed struggle leading to the father's arrest and the detainment of his adult son.² After the father's arrest, police go to the family's home and request admittance to the defendant's properties.³ The three adult sons present in the home deny the request.⁴ Without consent and unbeknownst to the family inside, the authorities then launch an unmanned aerial vehicle (UAV) to survey the father's properties in an effort to gather information.⁵ The intelligence gathered by this drone is later used to arrest and prosecute five family members.⁶

The facts above do not refer to an anti-terrorism-related arrest in Afghanistan, Pakistan or Yemen.⁷ Rather, they refer to events that took place in rural North

⁺ J.D. and Master's Degree in International Politics, May 2014, The Catholic University of America, Columbus School of Law; B.A. 2008, Haverford College. The author wishes to thank Professor Mary Leary for her guidance in Fourth Amendment jurisprudence; John Laufer, for his research assistance; and the staff of the Catholic University Law Review for their editorial work and feedback. The author also wishes to thank Celine Tobal for years of inspiration and editorial support, as well as his family, particularly Wandy, Andy, and Patricia, for their love and life-long encouragement.

1. State v. Brossart, No. 32-2011-CR-0049, Slip Op. at 3 (Dist. Ct. N.D. July 31, 2012) (discussing the initial confrontation between Rodney Brossart and the police that led to the suit).

2. *Id.* at 4.

3. *Id.* at 5.

4. *Id.*

5. *Id.* at 6.

6. *Id.* at 1–2; Jason Koebler, *Court Upholds Domestic Drone Use in Arrest of American Citizen*, U.S. NEWS & WORLD REP. (Aug. 2, 2012), <http://www.usnews.com/news/articles/2012/08/02/court-upholds-domestic-drone-use-in-arrest-of-american-citizen>.

7. Drones have gained public notoriety for their controversial role in the United States' War on Terror. See *Death From Afar: Unmanned Aerial Vehicles*, ECONOMIST, Nov. 3–9, 2012, at 61, 61 (reporting that U.S. drones have been used for targeted killings in Afghanistan, Pakistan, Yemen, and Somalia as part of the war on terrorism). The U.S. Department of Defense defines the War on Terror as military operations to combat terrorism launched following the September 11, 2001 terrorist attacks. See INSPECTOR GEN. OF THE U.S. DEP'T OF DEF., REPORT NO. D-2009-073, DoD COMPONENTS' USE OF GLOBAL WAR ON TERROR SUPPLEMENTAL FUNDING PROVIDED FOR PROCUREMENT AND RESEARCH, DEVELOPMENT, TEST AND EVALUATION 1 (2009), available at <http://www.dodig.mil/audit/reports/fy09/09-073.pdf>. In addition to the War on Terror, the United States has also used UAVs in a number of military conflicts and humanitarian efforts, such as those in Kosovo, Iraq, Haiti, and Libya. See JEREMIAH GERTLER, CONG. RESEARCH SERV., R42136, U.S. UNMANNED AERIAL VEHICLES, at Summary (2012), available at <http://www.fas.org/sgp/crs/natsec/R42136.pdf>; Greg Miller, *CIA Rushed to Rescue Envoys in Libya Siege*, WASH. POST, Nov. 2, 2012, at A1.

Dakota and form the basis for the prosecution of Rodney Brossart and his four children in *State v. Brossart*.⁸ As one of the first cases involving the use of a UAV, or drone,⁹ to monitor civilians in the United States, the *Brossart* case has received wide media attention and has led to much speculation as to its Fourth Amendment implications.¹⁰

Tracing its roots to the Founding Fathers' desire "that our society should be one in which citizens 'dwell in reasonable security and freedom from surveillance,'"¹¹ Fourth Amendment search jurisprudence has developed in a complicated, and sometimes conflicting, manner.¹² Initially, Fourth Amendment search analysis was almost exclusively concerned with the government's violation of a person's property interests.¹³ However, in the 1960s this method of analysis transformed in response to technological changes enabling the government to obtain information about the interior of a home without physically entering it.¹⁴ The contours of search analysis were redefined again in 2012 in response to the emergence of GPS technology, which enables law enforcement the ability to conduct long-term surveillance of a person.¹⁵

8. *Brossart*, No. 32-2011-CR-00049 at 3–6.

9. An UAV, commonly known as a drone, is any aircraft capable of sustained flight that is guided "without an onboard crew." *Introduction of the Unmanned Aerial Vehicles (UAVs)*, DEP'T OF DEF., <http://www.defense.gov/specials/uav2002/> (last visited Nov. 5, 2013); see also *The UAV-The Future of the Sky*, THEUAV.COM, <http://www.theuav.com> (last visited Nov. 5, 2013) (equating drones with UAVS).

10. See, e.g., Koebler, *supra* note 6; Jason Koebler, *First Man Arrested with Drone Evidence Vows to Fight Case*, U.S. NEWS & WORLD REP. (Apr. 9, 2012), <http://www.usnews.com/news/articles/2012/04/09/first-man-arrested-with-drone-evidence-vows-to-fight-case>; *Domestic drone justice: US court greenlights Police UAV use*, RUSSIA TODAY (Aug. 3, 2012, 4:51 AM), <http://rt.com/usa/domestic-drone-court-ruling-743>.

11. *California v. Ciraolo*, 476 U.S. 207, 217 (1986) (Powell, J., dissenting) (quoting *Johnson v. United States*, 333 U.S. 10, 14 (1948)).

12. According to many scholars, Fourth Amendment jurisprudence is among the most confusing areas of U.S. law. See AKHIL REED AMAR, *THE CONSTITUTION AND CRIMINAL PROCEDURE: FIRST PRINCIPLES* 1 (1997) (arguing that Supreme Court decisions related to the Fourth Amendment are embarrassing, have been contradictory, and result in odd rules); Ronald J. Allen & Ross M. Rosenberg, *The Fourth Amendment and the Limits of Theory: Local Versus General Theoretical Knowledge*, 72 ST. JOHN'S L. REV. 1149, 1149 (1998) (noting that Fourth Amendment decisions by the Supreme Court "lack[] coherence and predictability"); Craig M. Bradley, *Two Models of the Fourth Amendment*, 83 MICH. L. REV. 1468, 1468 (1985); Orin S. Kerr, *An Equilibrium-Adjustment Theory of the Fourth Amendment*, 125 HARV. L. REV. 476, 479 (2011) (explaining how "judicial decisions interpreting the Fourth Amendment are infamous for their byzantine patchwork of protections").

13. See JOSHUA DRESSLER & ALAN C. MICHAELS, *UNDERSTANDING CRIMINAL PROCEDURE VOLUME 1: INVESTIGATION*, § 6.02, at 68–70 (5th ed. 2010) (laying out the pre-*Katz* trespass doctrine).

14. See *id.* § 6.03, at 71.

15. See *United States v. Jones*, 132 S. Ct. 945, 949 (2012) (holding that the installation of a GPS tracking device on a defendant's vehicle and the subsequent monitoring of the defendant's movements violated the Fourth Amendment) *mandamus denied sub nom. In re Jones*, 670 F.3d 265 (D.C. Cir. 2012).

Even though the Court has issued some seemingly contradictory decisions interpreting the Fourth Amendment, it has consistently sought to maintain that “the right of a man to retreat into his own home and there be free from unreasonable government intrusion” embodies the “very core” of the Fourth Amendment.¹⁶

The imminent introduction of UAV technology into everyday civilian life in the United States will change citizen interaction with law enforcement and potentially lead to further development in Fourth Amendment search jurisprudence.¹⁷ Rodney Brossart’s challenge to the local sheriff’s use of UAV technology in North Dakota has become a symbol to those who fear an erosion of Fourth Amendment protections.¹⁸ This fear has become particularly heightened after the trial court denied Brossart’s motion to dismiss the criminal charges or suppress the drone-acquired evidence in his case.¹⁹

This Comment analyzes the Fourth Amendment jurisprudence that guided the court’s decision in *State v. Brossart*. Part I analyzes the Supreme Court’s development of Fourth Amendment jurisprudence and introduces how the imminent rise in the domestic use of drones challenges this jurisprudence.²⁰ This Part begins by tracing the Supreme Court’s Fourth Amendment search jurisprudence from the trespass doctrine to the reasonable expectation of privacy test set forth in *Katz v. United States*.²¹ Part I then considers changes the Supreme Court brought about in Fourth Amendment analysis through *United States v. Jones*.²² Part I concludes by highlighting the emergence of the use of UAVs in the United States and presenting the facts of the *Brossart* case as a test

16. *Silverman v. United States*, 365 U.S. 505, 511 (1961).

17. See Larry Abramson, *Drones: From War Weapon To Homemade Toy*, NPR (Aug. 2, 2012, 4:24 AM), <http://www.npr.org/2012/08/02/157441681/drones-from-war-weapon-to-home-made-toy> (speculating that drones will become widespread in the next several years); Jason Koebler, *The Coming Drone Revolution: What You Should Know*, U.S. NEWS & WORLD REP. (Apr. 5, 2012) <http://www.usnews.com/news/articles/2012/04/05/the-coming-drone-revolution-what-you-should-know> (highlighting the privacy concerns that the widespread use of drones will incite).

18. See S.H. Blannelberry, *Drone-Aided Arrest Raises Questions About 4th Amendment*, GUNS.COM (June 9, 2012), <http://www.guns.com/2012/06/09/drone-aided-arrest-4th-amendment> (discussing how the *Brossart* case has brought UAV use by police to the public’s attention).

19. *State v. Brossart*, No. 32-2011-CR-00049, Slip Op. at 12 (Dist. Ct. N.D. July 31, 2012) (denying the defendants’ motion to dismiss based on the use of a UAV); Joe Wolverton, II, *The Fourth Amendment and the Drones: How Will It Apply?*, NEW AM. (Aug. 15, 2012, 5:30 PM), <http://thenewamerican.com/usnews/constitution/item/12486-the-fourth-amendment-and-drones-how-will-it-apply> (questioning how UAV use by law enforcement will be constitutionally interpreted, particularly after the *Brossart* case).

20. See *infra* Part I.

21. *Katz v. United States*, 389 U.S. 347, 353 (1967) (supplanting the “trespass” doctrine with the reasonable expectation of privacy test in Fourth Amendment analysis).

22. *United States v. Jones*, 132 S. Ct. 945, 949 (2012) (reviving the trespass doctrine and holding that the installation of a GPS device on a vehicle to monitor a suspect’s movements is a search under the Fourth Amendment because it constitutes a physical trespass by the government) *mandamus denied sub nom. In re Jones*, 670 F.3d 265 (D.C. Cir. 2012).

case illustrating a scenario that will likely become more common as the use of UAVs increases domestically. Part II applies existing Fourth Amendment jurisprudence to the *Brossart* facts and demonstrates that the court correctly concluded that law enforcement's use of a UAV in this case did not constitute a Fourth Amendment search. Part III argues that Fourth Amendment search jurisprudence must be strengthened through Congressional action in order to sufficiently protect privacy in a new age where widespread domestic UAV use is common.

I. SETTING THE SCENE: DRONES PRESENT A CHALLENGE TO CURRENT FOURTH AMENDMENT SEARCH JURISPRUDENCE.

A. *From Boyd to Jones: The Development of Fourth Amendment Search Jurisprudence*

1. *A Historical Look at the Fourth Amendment*

The Fourth Amendment states:

The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.²³

The meaning of, and intent behind, those fifty-four words have been debated by both practicing attorneys and scholars for decades, leading to a plethora of interpretations from the Supreme Court and lower courts alike.²⁴ More than two centuries since its adoption, the Amendment's very purpose continues to be debated.²⁵ Yet, most scholars agree that the Framers of the Constitution

23. U.S. CONST. amend. IV.

24. DRESSLER & MICHAELS, *supra* note 13, § 4.01, at 49–50.

25. See, e.g., THOMAS K. CLANCY, *THE FOURTH AMENDMENT: ITS HISTORY AND INTERPRETATION* 16–17 (2008) [hereinafter CLANCY, *THE FOURTH AMENDMENT*] (discussing the “‘neverending’ debate” over the meaning of the Fourth Amendment); Thomas Clancy, *What Is a “Search” Within the Meaning of the Fourth Amendment?*, 70 ALB. L. REV. 1, 4 (2006) [hereinafter Clancy, *What is a “Search”?*] (explaining that the adoption of the Fourth Amendment in the Eighteenth Century was a reaction against colonial abuses); Sherry F. Colb, *Innocence, Privacy, and Targeting in Fourth Amendment Jurisprudence*, 96 COLUM. L. REV. 1456, 1525 (1996) (concluding that “[t]he Fourth Amendment includes not only the right of the innocent to be secure in their persons, houses, papers and effects, but the right of all people to be treated fairly and hence to be searched and perhaps punished because the government knows (to some set level of certainty) that they deserve to be searched and punished”); Thomas Y. Davies, *Recovering the Original Fourth Amendment*, 98 MICH. L. REV. 547, 590 (1999) (stating that “the Framers adopted constitutional search and seizure provisions with the precise aim of ensuring the protection of person and house by prohibiting legislative approval of general warrants.”); Scott E. Sundby, *“Everyman”’s Fourth Amendment: Privacy or Mutual Trust Between Government and Citizen?*, 94 COLUM. L. REV. 1751, 1777 (1994) (defining the “constitutional value underlying the Fourth Amendment as that of ‘trust’ between the government and the citizenry”).

included the Fourth Amendment to protect against the extreme and unpredictable invasions of property that were common in colonial America.²⁶

Until 1967, the Supreme Court based its Fourth Amendment search analyses on property and trespass theories.²⁷ The 1886 decision in *Boyd v. United States* introduced property-rights concepts into the Fourth Amendment analysis.²⁸ In *Boyd*, the prosecution sought to show that the defendants committed customs fraud by forcing them to present receipts showing that they had paid import duties for only 29 of the 35 cases of plate glass that they brought in to the country.²⁹ The Court concluded that the government could not require the defendants to produce the receipts, reasoning that the defendants had a property interest in the receipts that could not be superceded without a warrant.³⁰ Relying on its *Boyd* decision, the Supreme Court consistently declined to find a violation of the Fourth Amendment absent a physical trespass.³¹ After the *Boyd* test was

26. Clancy, *What is a "Search"?*, *supra* note 25, at 4; *see also* DRESSLER & MICHAELS, *supra* note 13, § 4.03 at 52 (noting that the Fourth Amendment came about as a result of the colonists experience with writs of assistance and general warrants, which allowed agents to search a colonists home at will); Davies, *supra* note 25, at 561–67 (tracing the Framers' motivation for drafting the Fourth Amendment to three events leading up to the American Revolution where the British used extreme search and seizure practices).

27. *See* CLANCY, THE FOURTH AMENDMENT, *supra* note 25, § 3.1.1, at 46 (explaining that, prior to the *Katz* decision, the Court considered Fourth Amendment questions in light of the property rights at stake and only allowed government intrusion without a warrant where the government had a superior property right); DRESSLER & MICHAELS, *supra* note 13, § 6.02, at 68–69 (discussing the Court's decisions prior to *Katz v. United States* in 1967, where the Fourth Amendment was analyzed using a property rights/trespass approach).

28. *Boyd v. United States*, 116 U.S. 616, 617–18 (1886); *see also* DRESSLER & MICHAELS, *supra* note 13, § 6.02, at 69 (identifying *Boyd* as the case that "laid the seeds of the property-right interpretation" in Fourth Amendment cases); Clancy, *What is a "Search"?*, *supra* note 25, at 13 (noting that *Boyd* was the first case in which the Supreme Court thoroughly analyzed the Fourth Amendment).

29. *Boyd*, 116 U.S. at 617–18.

30. *Id.* at 634–35. The Court also asserted that the Fourth Amendment seeks to prevent "the invasion of a [man's] indefeasible right of personal security, personal liberty, and private property." *Id.* at 630.

31. DRESSLER & MICHAELS, *supra* note 13, § 6.02, at 69 (quoting *Lanza v. New York*, 370 U.S. 139, 142 (1962)). While Dressler and Michaels identify *Boyd* as the "seed" of the historical property rights test of the Fourth Amendment, most scholars point to *Olmstead v. United States* as the best example of the Fourth Amendment analysis under this test. *See id.*; Ric Simmons, *From Katz to Kyllo: A Blueprint for Adapting the Fourth Amendment to Twenty-First Century Technologies*, 53 HASTINGS L.J. 1303, 1308–09 (2002) (discussing the importance of *Olmstead* in Fourth Amendment jurisprudence and its application of the trespass doctrine). In *Olmstead*, the government sought to prosecute the principal conspirator in a liquor smuggling operation during prohibition. *Olmstead v. United States*, 277 U.S. 438, 455–56 (1928). During the investigation, government agents wiretapped the phone lines that connected the residences of the various co-conspirators with their main office. *Id.* at 456–57. Information garnered through the wiretaps over a period of several months led to the indictment and subsequent conviction for violations of the National Prohibition Act. *Id.* at 455, 457. The defendant challenged the admission of evidence obtained from the wiretaps as a violating of the Fourth Amendment. *Id.* at 455. The Supreme Court held that, because the agents had not overheard the conversations from inside either parties'

established, the Supreme Court enunciated the consequences for violating the Fourth Amendment, thus promulgating the exclusionary rule in *Weeks v. United States*.³² In basic terms, the exclusionary rule requires that evidence derivative of an illegal search or seizure may not be used against a criminal defendant at trial.³³

2. *Katz's Reasonable Expectation of Privacy: The Modern Fourth Amendment Test*

The 1967 decision in *Katz v. United States* laid out the modern test for analyzing searches under the Fourth Amendment.³⁴ In *Katz*, the defendant challenged his conviction for sending gambling information over the telephone on the grounds that the evidence used against him had been obtained during an unconstitutional search.³⁵ The evidence had been gathered without a warrant by FBI agents who used an electronic recording device attached to the outside of the public telephone booth to intercept the defendant's calls.³⁶ Rejecting the trespass doctrine, the Supreme Court explained that the "Fourth Amendment protects people, not places," and therefore, penetration of the physical space was not necessary for a violation to occur.³⁷ The Court thus concluded that the government's monitoring of the telephone booth constituted an unreasonable search under the Fourth Amendment.³⁸ The *Katz* decision created an upheaval in

home, there was no "actual physical invasion of his house 'or curtilage' for the purpose of making a seizure," and the Fourth Amendment did not protect the defendant. *Id.* at 466; *see also* DRESSLER & MICHAELS, *supra* note 13, § 6.02, at 69 (explaining that the Court held there was no Fourth Amendment violation because there was no physical invasion of the defendant's property); CLANCY, THE FOURTH AMENDMENT, *supra* note 25, § 3.2.2, at 53–54 (interpreting the *Olmstead* decision as reasoning that conversations generally are not protected under the Fourth Amendment because they were not included in the enumerated list of protected items in the Amendment's language and are not tangible).

32. *See Weeks v. United States*, 232 U.S. 383, 398 (1914) (holding that items seized in violation of the Fourth Amendment should not have been used at trial and should be returned to the defendant); CLANCY, THE FOURTH AMENDMENT, *supra* note 25, at 613. In *Weeks*, the police, without a warrant, arrested the defendant, entered his home, seized a number of documents, and used those seized documents against him at trial, despite repeated requests by the Defendant for their return. *Weeks*, 232 U.S. at 386–88. Addressing the defendant's challenge to the use of the evidence, the Supreme Court determined that the seizure of the defendant's documents violated the Fourth Amendment and, as such, prohibited their use by the prosecution at trial. *Id.* at 397–98. The Supreme Court applied the exclusionary rule only to federal cases until the Court's decision in *Mapp v. Ohio*, which extended the exclusionary rule to the states through the due process clause of the Fourteenth Amendment. *See Mapp v. Ohio*, 367 U.S. 643, 660 (1961).

33. DRESSLER & MICHAELS, *supra* note 13, § 4.04[B], at 56.

34. DRESSLER & MICHAELS, *supra* note 13, § 6.03[A], at 70.

35. *Katz v. United States*, 389 U.S. 347, 348–50 (1967).

36. *Id.* at 348. At the time of *Katz's* conviction, federal statute forbade the transmission of bets or wagers through wire communication devices. *Id.* The defendant placed calls to Miami and Boston from Los Angeles. *Id.*

37. *Id.* at 351–53.

38. *Id.* at 359.

Fourth Amendment jurisprudence by effectively nullifying the property-interest-based test as the controlling factor defining a search.³⁹ Some scholars have proffered that the introduction of modern technology in the 1960s, enabling the government to intercept calls remotely, was the key factor that moved the Court to abandon the trespass doctrine.⁴⁰ In its place, the Court used a two-prong test articulated in Justice Harlan's concurring opinion.⁴¹ The test is composed of a subjective prong that requires that the person "exhibited an actual . . . expectation of privacy" and an objective prong, which requires that this "expectation be one that society is prepared to recognize as 'reasonable.'"⁴² Defendants must satisfy both prongs to prove the existence of an unreasonable search in violation of the Fourth Amendment.⁴³ The *Katz* Court replaced the trespass doctrine with the view that a search occurs when a person has an expectation of privacy in an item or place that society is willing to recognize as objectively reasonable.⁴⁴

3. *Oliver: Distinguishing Between the Home, Curtilage, and an Open Field*

While the *Katz* test has been the foremost Fourth Amendment search test for the last four decades, Fourth Amendment analysis also takes into account the location where the search occurred.⁴⁵ The Supreme Court's decision in *Oliver v. United States* helps to define what is a protected area under the Fourth Amendment.⁴⁶

Oliver was a consolidation of two cases from Kentucky and Maine in which police officers searched the defendants' lands without warrants after receiving

39. Simmons, *supra* note 31, at 1307.

40. DRESSLER & MICHAELS, *supra* note 13, § 6.03[A], at 71. Dressler and Michaels note that, in light of the changes in technology, Justice Harlan believed that the trespass analysis now "constituted 'bad physics as well as bad law.'" *Id.* (quoting *Katz*, 389 U.S. at 362 (Harlan, J., concurring)).

41. See *Katz*, 389 U.S. at 361 (Harlan, J., concurring); CLANCY, THE FOURTH AMENDMENT, *supra* note 25, at 47, 59–60 (explaining that Justice Harlan's opinion contains the language of the modern test and that the test is composed of two-prongs, one is objective and the other is subjective).

42. *Katz*, 389 U.S. at 361 (Harlan, J., concurring).

43. See DRESSLER & MICHAELS, *supra* note 13 § 6.03[C], at 72 (stating that there is no search if either prong of the test is lacking).

44. See *Katz*, 389 U.S. at 360 (Harlan, J., concurring).

45. See *Katz*, 389 U.S. at 361 (Harlan, J., concurring) (finding that, while the Fourth Amendment protects people, the decision of exactly how much protection the Fourth Amendment provides to a person must be decided with "reference to a 'place'"); see also Simmons, *supra* note 31, at 1311–12 (noting that "Harlan's standard-setting concurrence implies that *Katz* was not really about rejecting the 'place-based' analysis" but takes into account the location of information sought to be protected).

46. See DRESSLER & MICHAELS, *supra* note 13, at 84–86 (discussing *Oliver* at the "open fields" doctrine).

anonymous tips that marijuana was being grown there.⁴⁷ Both defendants moved to suppress the evidence taken from these forays onto their properties by law enforcement and argued that the warrantless searches were unreasonable and conducted in violation of the Fourth Amendment.⁴⁸

The Supreme Court held that the entries onto the defendants' properties did not constitute Fourth Amendment searches.⁴⁹ The Court reasoned that no search occurred because, although the Fourth Amendment provides special protection to the home, such protection does not extend to activities conducted in open fields unless they are in the immediate adjacency of the home.⁵⁰ *Oliver* identified three categories of places for Fourth Amendment purposes: (1) the home, where Fourth Amendment protections are at their maximum; (2) the curtilage, or "land immediately surrounding and associated with the home,"⁵¹ which receives limited protection; and (3) open fields, which do not receive any Fourth Amendment protection.⁵² In light of *Oliver*, the analysis of

47. *Oliver v. United States*, 466 U.S. 170, 173–75 (1984). In the first of the two consolidated cases, two plain-clothed police officers entered the defendant's 200 acre farm in rural Kentucky through a private road that was marked with various "No Trespassing" signs while driving an unmarked police vehicle. *United States v. Oliver*, 686 F.2d 356, 361–62 (6th Cir. 1982) (Keith, J., dissenting), *aff'd*, 466 U.S. 170 (1984). Once inside the defendant's property, the officers drove past the defendant's home and drove a significant distance onto the property before encountering a locked gate and "No Trespassing" signs on the fences on either side of the gate. *Id.* at 362. The officers parked their vehicle and followed a path through a gap in the fence that led them to a camper that was used as a "home" and a barn. *Id.* The officers then encountered an unknown person who warned them that hunting was not allowed on the property, but they continued on until they found an isolated marijuana field more than one and four-tenths of a mile from the defendant's home but still on his property, "bounded on all sides by woods, fences and embankments," and virtually invisible from all publicly accessible land. *Id.* at 362–63. In the second case, two police officers entered the defendant's property, which was completely surrounded by various fences and "No Trespassing" signs. *State v. Thornton*, 453 A.2d 489, 491 (Me. 1982) *rev'd sub nom. Oliver*, 466 U.S. 170. The officers followed a path across the defendant's property through a wooded area until reaching two clearings where marijuana was being grown, both of which were nearly impossible to see unless one was purposely looking for them. *Id.*

48. *Oliver*, 466 U.S. at 173–75.

49. *Id.* at 181.

50. *Id.* at 178. The Court specifically explained that there is no legitimate expectation of privacy for outdoor activities taking place in fields unless other criteria are met, i.e., proximity to the home. *Id.*

51. *Id.* at 180. In *United States v. Dunn*, the Supreme Court identified four factors for determining whether an area is curtilage: "the proximity of the area claimed to be curtilage to the home, whether the area is included within an enclosure surrounding the home, the nature of the uses to which the area is put, and the steps taken by the resident to protect the area from observation." *United States v. Dunn*, 180 U.S. 294, 300-01 (1987); *see also* Joseph J. Vacek, *Big Brother Will Soon be Watching—Or Will He? Constitutional, Regulatory and Operational Issues Surrounding the Use of Unmanned Aerial Vehicles in Law Enforcement*, 85 N.D. L. REV. 673, 680 (2009) (noting that "curtilage is a legal 'penumbra'").

52. DRESSLER & MICHAELS, *supra* note 13, § 6.06[B], at 85–86. The open fields doctrine did not originate in *Oliver*, but rather in *Hester v. United States*. CLANCY, THE FOURTH AMENDMENT, *supra* note 25, § 4.4.1.1, at 123. The Court's decision in *Katz* called into question the continued validity of the "open fields" doctrine with its focus on the privacy interest of the

whether aerial surveillance conducted by UAV constitutes a Fourth Amendment search thus requires attention to the location observed.⁵³

4. *Knotts, Karo and Kyllo: Balancing The Fourth Amendment's Strong Protections of the Home with New Technologies*

The emergence of technology enabling the government to obtain information about an enclosed area without physically entering the area prompted the Supreme Court to abandon its Fourth Amendment property-rights analysis and adopt the *Katz* test.⁵⁴ However, this test has not fully resolved the optimal balance between the Fourth Amendment protections of the home and the government's use of ever-evolving technologies.⁵⁵ The following cases illustrate the Court's struggle with applying the Fourth Amendment in the face of technological innovation.

In *United States v. Knotts*, three individuals were arrested for producing methamphetamine in a clandestine laboratory, which police discovered by installing a radio transmitter in a container of chloroform and tracking the container's movements from the chloroform manufacturing plant to a cabin in rural Wisconsin.⁵⁶ At trial, one of the defendants moved to suppress the evidence of the methamphetamine laboratory, arguing that the use of a transmitter to track the car was an unreasonable search.⁵⁷ The Supreme Court rejected the argument, explaining that use of the technology was not unconstitutional because police officers could have visually tracked the vehicle containing the chloroform container without using the disputed technology, and

individual, as opposed to the place. *Id.* § 4.4.1.1, at 124. By reaffirming the open fields doctrine in *Oliver*, the Court confirmed this doctrine's continued validity post-*Katz*. *See id.* In *Hester*, federal revenue officers, acting on a tip and without a warrant, observed the defendant give a passer-by a bottle of illegally-distilled moonshine whiskey from a distance of fifty to one hundred yards away. *Hester v. United States*, 265 U.S. 57, 58 (1924). After pursuing the defendant, the officers entered his father's property, seized evidence of the illicit whiskey, and observed other cars approach the defendant's home. *Id.* The defendant was convicted of concealing distilled spirits based on the officer's observations, but challenged the evidence as being the product of an impermissible Fourth Amendment search. *Id.* at 57–58. The Court held that because the defendant's movements uncovered the whiskey, the agents observations did not constitute a Fourth Amendment search as Fourth Amendment protections are “not extended to the open fields.” *Id.* at 58–59.

53. *See Vacek, supra* note 51, at 680 (noting that there will be a question of whether the area observed is an open field or curtilage when UAVs are used for surveillance, leading to the potential for Fourth Amendment implications).

54. *DRESSLER & MICHAELS, supra* note 13, § 6.03, at 71.

55. *See id.*, § 6.09[A], at 93–94 (noting the Court's challenge in dealing with modern technology).

56. *United States v. Knotts*, 460 U.S. 276, 278–79 (1983). Chloroform is a chemical used in the manufacturing of methamphetamine. *Id.* at 278. The police discovered the laboratory after obtaining a search warrant for the cabin based on the information gathered from the transmitter. *Id.* at 279.

57. *Id.*

because the transmitter did not provide any information about activities inside the cabin.⁵⁸

The Court considered a similar issue but reached a different conclusion in *United States v. Karo*.⁵⁹ In *Karo*, federal agents received information that three defendants purchased ether to extract cocaine from clothes imported into the United States.⁶⁰ Before the defendants picked up the ether container, the agents placed an electronic monitoring device in the container and monitored the container's movements.⁶¹ Based on the tracking information gathered, the police obtained a warrant to search the home where the officers believed the ether was being used.⁶² However, unlike the *Knotts* situation, the federal agents in *Karo* were unable to visually monitor the container during the entire transaction.⁶³ Instead, they had to rely on the electronic monitoring device, which revealed the container's movements both outside and *inside* the defendants' home.⁶⁴ The Supreme Court concluded that the agents' actions in monitoring the container's location with the electronic device while in the home constituted an unconstitutional Fourth Amendment search.⁶⁵ The fact that the agents could not have verified the movements of the ether container inside the home without using the monitoring technology was critical to the Court's analysis.⁶⁶ *Karo*'s facts are differentiable from the facts in *Knotts* on this point because the tracker used in the *Knotts* container provided no information to the government about the container's movement within the defendants' cabin.⁶⁷ Thus, with reference to technological innovation, *Karo* reaffirmed the strong protection given to the home under the Fourth Amendment.⁶⁸

58. *Id.* at 284–85; see also DRESSLER & MICHAELS, *supra* note 13, § 6.09[C], at 96 (explaining that the Court's holding was based on two important facts: (1) the police could have secured the same information by following the defendant's vehicle, and (2) the device had a limited use and did not reveal any private activities in the home).

59. *United States v. Karo*, 468 U.S. 705, 718 (1984).

60. *Id.* at 708.

61. *Id.*

62. *Id.* at 710.

63. *Id.* at 708–10. The officers had also lost the signal of the transmitter in *Knotts*, but it was recovered within one hour, with assistance of a helicopter. *Knotts*, 460 U.S. at 278. By contrast, the *Karo* agents lost track of their transmitter several occasions when it moved undetected between various locations. *Karo*, 468 U.S. at 708–10. In each instance the police were ultimately able to relocate the tracker, in one instance to the very locker in which it was located. *Id.*

64. *Karo*, 468 U.S. at 708–10.

65. *Id.* at 716–19 (explaining that the fact that the beeper monitored the container inside the home was of great importance to the Court's determination given the presumption that warrantless searches of the home are unreasonable).

66. See *id.* at 715–16.

67. *Id.* at 715 (quoting *Knotts*, 460 U.S. at 281) (emphasis added).

68. *Id.* at 718.

Kyllo v. United States reaffirmed this strong protection afforded to the interior of the home under the Fourth Amendment.⁶⁹ In *Kyllo*, two federal agents, suspecting the defendant was growing marijuana in his home, sought to confirm their suspicions by using a thermal imaging camera to scan the defendant's home from a vehicle parked across the street.⁷⁰ The agents used the results of the scan to obtain a search warrant.⁷¹ Upon entering the home, the agents confirmed that the defendant was indeed growing over 100 marijuana plants inside.⁷² The defendant challenged the thermal scan as a violation of the Fourth Amendment.⁷³ The Supreme Court held that the scan constituted a Fourth Amendment search, reasoning that government use of technology, not readily available for public use, without a warrant, to obtain intimate details of one's home not otherwise discoverable without physical intrusion into the protected area, is an unreasonable search.⁷⁴

The *Knotts*, *Karo* and *Kyllo* trio of cases underscore the Fourth Amendment's strong presumption in favor of protecting the home.⁷⁵ The Court has emphasized "that the Fourth Amendment draws 'a firm line at the entrance of the house.'"⁷⁶ These cases suggest that if a technological innovation is used to gather details about a home that are not otherwise discoverable without physical intrusion into the space, whether from the ground or from the sky, then the use is a presumptively unreasonable search.⁷⁷ These cases also indicate that technology used to conduct a search must be available for public use for the search to be considered reasonable.⁷⁸

69. See *Kyllo v. United States*, 533 U.S. 27, 40 (2001) (holding that the use of a thermal imaging device to measure the amount of heat coming from inside of a home violated the Fourth Amendment).

70. *Id.* at 29–30.

71. *Id.* at 30. The scan revealed that "the roof over the garage and a side wall of [the defendant's] home were relatively hot compared to the rest of the home and substantially warmer than neighboring homes." *Id.* This fact was consistent with the use of high-intensity halide lights for the interior growth of marijuana. *Id.*

72. *Id.*

73. *Id.*

74. *Id.* at 40.

75. See *supra* notes 55, 63, 71 and accompanying text.

76. *Kyllo*, 533 U.S. at 40 (quoting *Payton v. New York*, 445 U.S. 573, 590 (1980)).

77. Travis Dunlap, *We've Got Our Eyes on You: When Surveillance by Unmanned Aircraft Systems Constitutes a Fourth Amendment Search*, 51 S. TEX. L. REV. 173, 197 (2009).

78. See Vacek, *supra* note 51, at 683 (suggesting the test for whether a technology is available for general public use may "turn on whether Wal-Mart sells it or not"); see also Simmons, *supra* note 31, at 1334 (explaining that what the court likely meant by "general public use" is "that if a technology becomes so widespread and commonplace that it changes societal expectations of privacy, its use is no longer considered a 'search'").

5. *Ciraolo and Riley: The Fourth Amendment and Aerial Surveillance of the Home*

As UAVs become part of everyday day activities, the Supreme Court will not approach aerial surveillance in a void. In the past, the Court has used *Katz's* reasonable expectation of privacy test to determine whether aerial surveillance of a home constitutes a Fourth Amendment search.⁷⁹ In *California v. Ciraolo*, two police officers, acting on a telephone tip, flew an airplane 1,000 feet over the defendant's property, and were able to identify large marijuana plants growing in the defendant's yard.⁸⁰ Armed with the information gathered from the aerial surveillance, the officers obtained a search warrant, searched the defendant's property, and found the marijuana plants.⁸¹ The defendant challenged the police's flyover, arguing that an intricate fencing system surrounding the property expressed an expectation of privacy.⁸² The Supreme Court concluded that building fences around the property did not create a reasonable expectation that the area would not be viewed from above.⁸³ The Court further stated that "[t]he Fourth Amendment simply does not require the police travelling in the public airways . . . to obtain a warrant in order to observe what is visible to the naked eye."⁸⁴ Finally, the Court concluded that because the observations were conducted from legally navigable airspace, the aerial surveillance did not constitute a Fourth Amendment search.⁸⁵

79. See DRESSLER & MICHAELS, *supra* note 13, § 6.07[A], at 87–88 (explaining the basic rules for constitutional aerial surveillance); Vacek, *supra* note 51, at 682 (noting that the Court has generally held that aerial surveillance from an aircraft in navigable airspace is permitted because one does not have a privacy interest in anything that can be seen from above).

80. *California v. Ciraolo*, 476 U.S. 207, 209 (1986). The area where the defendant was growing marijuana was not visible from the ground because the yard was completely fenced in. *Id.* The officers were readily able to identify the plants as marijuana using the naked eye. *Id.* at 213.

81. *Id.* at 209–10.

82. *Id.* at 211.

83. *Id.* at 214. In fact, the Court noted that the defendant's fence was not sufficient to manifest a complete expectation of privacy because it would not be sufficient to "shield these plants from the eyes of a citizen or a policeman perched on the top of a truck or a two-level bus". *Id.* at 211. The Court also noted that "[w]hat a person knowingly exposes to the public . . . is not subject of Fourth Amendment protection." *Id.* at 213 (quoting *Katz v. United States*, 389 U.S. 347, 351 (1967)).

84. *Id.* at 215.

85. *Id.* at 213–15. Current federal regulations establish the following minimum safe altitudes for flight in an airplane: 1,000 feet "[o]ver any congested area of a city, town, or settlement, or over any open air assembly of persons" and 500 feet in all other areas. 14 C.F.R. § 91.119(b)(c) (2012). Helicopters, powered parachutes, and weight-shift-control aircraft may operate at lower altitudes so long as "the operation is conducted without hazard to persons or property on the surface." § 91.119(d). The Court reasoned that, while the yard was in the curtilage of the defendant's home, the Fourth Amendment's protection of curtilage only extends to "intimate activity associated with the 'sanctity of a man's home and the privacies of life'" and police are not required to ignore what they can see from a public vantage point. *Ciarolo*, 476 U.S. at 212 (quoting *Oliver v. United States*, 466 U.S. 170, 180 (1984)).

In *Florida v. Riley*, the Court extended the *Ciraolo* reasoning to a low level helicopter flyover that revealed that the defendant was growing marijuana in a greenhouse, which was within twenty feet of the defendant's trailer and had translucent roofing with missing panels.⁸⁶ The defendant challenged the aerial surveillance as an unreasonable search.⁸⁷ The Supreme Court held that there was no violation of the Fourth Amendment because the defendant could not reasonably expect that his greenhouse was free from aerial observation.⁸⁸ In reaching this conclusion, the Court noted that the helicopter had been flying at a legal altitude and that it had not hindered the defendant's use of the area surveyed.⁸⁹

Together, *Ciarolo* and *Riley* suggest that aerial surveillance of a home will generally not constitute a Fourth Amendment search.⁹⁰ The holdings in these two cases though are limited to aerial surveillance conducted from "public

86. *Florida v. Riley*, 488 U.S. 445, 448–49 (1989). In *Riley*, a police officer conducted a naked-eye aerial surveillance of the defendant's property from a helicopter flying 400 feet above the defendant's property. *Id.* at 448. During the flyover, the police officer identified marijuana through the openings in the roof and side of the greenhouse, neither of which were visible from public vantage points on the ground. *Id.*

87. *Id.* at 447–48.

88. *Id.* at 450–51.

89. *Id.* at 450–52. The *Riley* Court's language appears to echo the language of *United States v. Causby*, where the Court considered whether low-level flyovers infringed on a person's property rights. See *United States v. Causby*, 328 U.S. 256, 266–67 (1946) (holding that "airspace, apart from the immediate reaches above the land, is part of the public domain" and that "[f]lights over private land are not a taking, unless they are so low and so frequent as to be a direct and immediate interference with the enjoyment and use of the land"). One scholar questions whether the case facts truly support the Court's decision by questioning how often low-level flights occur and how anticipated they are, noting that because flying "a helicopter at 400 feet over a residential dwelling may be technically allowed by regulation, it is neither prudent nor safe. The noise and disruption produced would likely result in complaints and lawsuits, and the pilot's options for safe landing in the event of an emergency are severely limited at that low altitude." Vacek, *supra* note 51, at 682 n.51.

90. Vacek, *supra* note 51, at 681. The use of aerial surveillance was also challenged in *Dow Chemical Co. v. United States*. *Dow Chem. Co. v. United States*, 476 U.S. 227, 230 (1986). In *Dow Chemical*, a chemical manufacturer took significant security precautions to prevent its 2,000 acre facility from being visible from the ground and the air. *Id.* at 229. The defendant challenged the government's hiring of a private pilot to fly over its facility and take pictures with a "precision aerial mapping camera" as part of the government's environmental regulation efforts. *Id.* The aerial surveillance was conducted without a warrant after the chemical manufacturer refused to allow Environmental Protection Agency officials to conduct a follow-up visit to photograph the facility. *Id.* Dow argued that the aerial surveillance constituted a search because it had a reasonable and legitimate expectation of privacy—the industrial complex was analogous to the curtilage of a home—and the aerial mapping camera enhanced the government's senses in ways unavailable to the public. *Id.* at 232–33. The Supreme Court found that the government "was not employing some unique sensory device," and that the industrial complex was "comparable to an open field and as such it is open to the view and observation of persons in aircraft lawfully in the public airspace." *Id.* at 238–39. As a result, the Court concluded that the "aerial photographs of an industrial plant complex from navigable airspace" did not constitute a Fourth Amendment search. *Id.* at 239.

navigable airspace,” “in a physically nonintrusive manner,” and without revealing “intimate activities traditionally connected with the use of a home or curtilage.”⁹¹ Aerial surveillance is also subject to *Kyllo*’s requirement that the technology used to observe the home is available to the general public and that it does not reveal information about the inside of the home that is not apparent from the outside.⁹²

6. United States v. Jones: *Back to the Future, a New Twist or More of the Same?*

Decided in January 2012, *United States v. Jones*⁹³ is arguably the Supreme Court’s most significant Fourth Amendment case since *Katz*.⁹⁴ In *Jones*, federal agents and local police suspected the defendant was trafficking narcotics and installed a global positioning system (GPS) tracking device on the car the defendant was driving.⁹⁵ The data from the GPS device connected the defendant to a drug stash house and led to his indictment.⁹⁶ At trial, the defendant challenged the GPS evidence as being the product of an unlawful search.⁹⁷ The Supreme Court unanimously held that use of the GPS under the factual circumstances constituted a Fourth Amendment search.⁹⁸ While the Justices agreed on the outcome, they reached the conclusion by three differing sets of analysis.⁹⁹

91. DRESSLER & MICHAELS, *supra* note 13, § 6.07[A] at 87–88; *see also* United States v. Warford, 439 F.3d 836, 843–44 (8th Cir. 2006) (holding that police observation of a marijuana growing operation from a helicopter at a height of 200 to 300 feet was not a search because the aircraft was at a legally permissible altitude, there was no evidence that it interfered with the use of the property, and the flight was not so rare that the defendant could argue that he had a reasonable expectation of privacy); United States v. Boyster, 436 F.3d 986, 992 (8th Cir. 2006) (holding that the use of National Guard helicopters to survey marijuana growing around a defendant’s residence did not constitute a search).

92. *See infra* notes 120–21 and accompanying text.

93. United States v. Jones, 132 S. Ct. 945, 949 (2012) (finding that a search occurred when a GPS was placed on a car by the police), *mandamus denied sub nom. In re Jones*, 670 F.3d 265 (D.C. Cir. 2012).

94. *See* Fabio Arcila, Jr., *GPS Tracking Out of Fourth Amendment Dead Ends: United States v. Jones and the Katz Conundrum*, 91 N.C. L. REV. 1, 5 (2012) (stating that the *Jones* decision “has the potential to be the Supreme Court’s most important Fourth Amendment decision since it decided *Katz v. United States*”).

95. *Jones*, 132 S. Ct. at 948. The car was registered in the name of the defendant’s wife. *Id.* The District of Columbia’s Metropolitan Police obtained a warrant to install a GPS device on the car in the District of Columbia within ten days of the warrant’s issue. *Id.* However, the GPS device was installed on the eleventh day and in the neighboring state of Maryland. *Id.* Subsequently, the government used the GPS device to track the defendant’s movements for a period of twenty-eight days and obtained over two thousand pages of data. *Id.*

96. *Id.* at 948–49. The defendant’s first trial, for the same charge, ended with a hung jury, and he was indicted again. *Id.*

97. *Id.* at 948.

98. *Id.* at 947, 949.

99. *See infra* notes 100–08 and accompanying text.

Justice Scalia wrote the Court's majority opinion, which changed the Fourth Amendment search analysis to include both *Katz's* reasonable expectation of privacy test and the traditional property rights determination.¹⁰⁰ Justice Scalia described *Jones* as a case in which the police physically intruded onto the Defendant's property to obtain information.¹⁰¹ He reasoned that the framers of the Fourth Amendment drafted the text to have a property connection and that the police action in *Jones* would have been considered unreasonable at the time of the Amendment's adoption.¹⁰² Justice Scalia explained that the *Katz* test "added to, not substituted for, the common law trespassory test" and used the historical property rights analysis to conclude that the installation of the GPS tracking system on the defendant's car was a search.¹⁰³

Justice Sotomayor agreed with Justice Scalia's analysis that a Fourth Amendment search occurs when the government enters into a constitutionally protected area to collect information.¹⁰⁴ However, in a separate concurring opinion, Justice Sotomayor emphasized the importance of the *Katz* test, explaining that without a physical trespass, Fourth Amendment analysis is determined by a violation of a person's reasonable expectation of privacy.¹⁰⁵ Thus, both Justices Scalia and Sotomayor viewed the historical property rights test and *Katz's* reasonable expectation of privacy test as a two part inquiry, working together to determine whether a Fourth Amendment search has occurred.¹⁰⁶ However, Justice Sotomayor also agreed with Justice Alito's assessment that both tests may be ill-suited for current realities.¹⁰⁷ Justice Sotomayor acknowledged that technological advances mean that a physical entry is not necessary for surveillance, and noted that the trespass doctrine may not be helpful when evaluating cases involving advanced surveillance technologies.¹⁰⁸ She also highlighted that these advances will impact the *Katz* test because the advances will lead to different societal expectations of privacy.¹⁰⁹ Justice Sotomayor also explained that *Katz's* proposition that if an individual chooses to disclose information to another, then such information

100. *Jones*, 132 S. Ct. at 953; see also Kevin Emas & Tamara Pallas, *United States v. Jones: Does Katz Still Have Nine Lives?*, 24 ST. THOMAS L. REV. 116, 153 (2012) (describing how Justice Scalia's opinion "construct[s] a 'new' test that is purely property-rights driven" and is "the starting point for the emergence, or perhaps re-emergence, of a 'trespass-first' test").

101. *Jones*, 132 Sup. Ct. at 949.

102. *Id.*

103. *Id.* at 948–49, 952–53. The Court's embrace of the property-based analysis is significant because *Katz's* reasonable expectation of privacy test had served as the basis of the Court's Fourth Amendment search analysis for nearly 40 years. CLANCY, *THE FOURTH AMENDMENT*, *supra* note 25, § 3.1.1, at 47.

104. *Jones*, 132 S. Ct. at 954 (Sotomayor, J., concurring).

105. *Id.* at 954–55 (quoting *Kyllo v. United States*, 533 U.S. 27, 33 (2001)).

106. See *id.* at 952–55.

107. *Id.* at 955.

108. *Id.*

109. *Id.*

cannot reasonably be expected to be private, does not acknowledge the new challenges of the digital information age where individuals reveal information about themselves regularly in the course of an ordinary routine.¹¹⁰ Accordingly, Justice Sotomayor's opinion suggests the need to re-analyze the Court's Fourth Amendment jurisprudence.¹¹¹

Justice Alito's concurring opinion also expressed concern that current Fourth Amendment jurisprudence does not meet the needs of the populous in light of emerging technologies.¹¹² While Justice Alito opined that the *Katz* test should be the sole Fourth Amendment test, he also made a distinction between short and long-term monitoring of persons, concluding that only short-term monitoring is reasonable.¹¹³ Justice Alito ultimately called for legislative action

110. *Id.* at 957. Justice Sotomayor notes the following examples: “[p]eople disclose the phone numbers that they dial or text to their cellular providers, the URLs that they visit and the e-mail addresses with which they correspond to their Internet service providers; and the books, groceries and medications they purchase to online retailers.” *Id.*

111. Scholars have pointed to the language in Justice Sotomayor's and Justice Alito's concurring opinions to suggest that a majority of Supreme Court Justices would support a mosaic theory of the Fourth Amendment. See Orin S. Kerr, *The Mosaic Theory of the Fourth Amendment*, 111 MICH. L. REV. 311, 313 (2012). Under the mosaic theory, a single act of permissible surveillance may not amount to a Fourth Amendment search, but an on-going sequence of permissible observations may together become an impermissible search, as “[p]rolonged surveillance reveals types of information not revealed by short-term surveillance.” See *United States v. Maynard*, 615 F.3d 544, 562 (D.C. Cir. 2010), *cert. granted*, 131 S. Ct. 3064 (2011), *aff'd in part sub nom. United States v. Jones*, 132 S. Ct. 945 (2012), *mandamus denied sub nom. In re Jones* 670 F.3d 256 (D.C. Cir. 2012); see also Kerr, *supra*, at 313 (explaining that the mosaic theory allows the Court to consider the constitutionality of searches “as a collective sequence of steps rather than as individual steps”). Notably, the mosaic theory supplied the basis of the District of Columbia Circuit's opinion in *Jones*. See *Maynard*, 615 F.3d at 562; see also Kerr, *supra* (noting that the D.C. Circuit court adopted the mosaic theory in *Jones*). The mosaic theory originated in national security jurisprudence, as courts wrestled with the correct application of the Freedom of Information Act (“FOIA”) in light of concerns that ordinarily insignificant information may become more important when aggregated with other information. Bethany L. Dickman, Note, *Untying Knotts: The Application of Mosaic Theory to GPS Surveillance in United States v. Maynard*, 60 AM. U. L. REV. 731, 736–37 (2011). The courts' concerns were based on fears that a potential adversary of the United States “could use FOIA to gather individual items of information and piece them together to discover and exploit vulnerabilities.” *Id.* at 736–37.

112. See *Jones*, 132 S. Ct. at 962–63 (Alito, J., concurring). Justice Alito criticizes the property-rights test, explaining that the fact that an originalist approach considering what law enforcement officials may have done at the time the Constitution was ratified is an “unwise” and “highly artificial” means of determining what constituted a search. *Id.* at 957–58. Justice Alito also asserted that the property-rights test is unsupported by current law and the language of the Fourth Amendment. *Id.* Justice Alito also expressed concerns about maintaining *Katz*'s reasonable expectation of privacy test because as technology changes, so will people's expectations. See *id.* at 962.

113. *Id.* at 964. Justice Alito applied the *Katz* test to the *Jones* facts and found that, under the objective prong, society has recognized that monitoring an individual's movements on public streets for a short period of time is reasonable, but that long-term use of GPS devices for the same purpose encroaches on privacy expectations. *Id.*

in light of the judiciary's limited powers to address privacy concerns raised by emerging technologies that can impact Fourth Amendment protections.¹¹⁴

The Supreme Court's decision in *Jones* thus suggests that both the traditional property-rights approach and the *Katz* test are valid analyses to determine when a Fourth Amendment search occurs. Therefore, cases involving UAVs should be analyzed using both tests.¹¹⁵

B. A New Challenge for the Fourth Amendment: The Domestic Use of Unmanned Aerial Vehicles is Set to Expand

While the history of drones is as long as the history of aviation,¹¹⁶ the Federal Aviation Administration's ("FAA") safety regulations have served as a significant impediment to widespread civilian use of UAVs in the United States.¹¹⁷ The FAA Modernization and Reform Act requires the FAA to

114. *Id.* at 964; see Orin S. Kerr, *The Fourth Amendment and New Technologies: Constitutional Myths and the Case for Caution*, 102 MICH. L. REV. 801, 805 (2004) (stating that "statutory rules rather than constitutional rules should provide the primary source of privacy protections regulating law-enforcement use of rapidly developing technologies").

115. The Supreme Court's decision in *Florida v. Jardines* reaffirmed that the traditional property rights analysis of the Fourth Amendment is, together with the *Katz* test, a valid "search" test. See *Florida v. Jardines*, 133 S. Ct. 1409, 1417–18 (2013). In *Jardines*, the Court held that a police officer's approach to the front door of a home with a drug-sniffing dog in order to obtain information about the presence of marijuana in the home constituted a Fourth Amendment search. *Id.* at 1413, 1417–18. The Court reasoned that by approaching the home's front door, the officer impermissibly trespassed upon the home's curtilage, which is protected by the Fourth Amendment. *Id.* at 1414.

116. See Charles Jarnot, *History*, in INTRODUCTION TO UNMANNED AIRCRAFT SYSTEMS 1, 1 (Richard Barnhart et al. eds., 2012); Dunlap, *supra* note 77, at 176–79 (tracing UAVs back to an aircraft developed for the Navy in 1915). In fact, Charles Jarnot traced the history of unnamed aerial vehicles to the kites, hot air balloons and other early aircraft that pre-date the dawn of modern aviation. Jarnot, *supra*, at 1–2. First developed as an Aerial Torpedo for the U.S. Navy in 1918, the military has extensively used UAVs for reconnaissance and intelligence-gathering roles over the last century. *Id.* at 3, 5, 7–14; Dunlap, *supra* note 77, at 176–79. Today, there are approximately 7,494 UAVs serving the U.S. military, which accounts for approximately forty-one percent of the U.S. military's total aircraft inventory. GERTLER, *supra* note 7, at 9, fig. I. The military's use of drones has increased exponentially in the last decade; by comparison, in 2005 UAVs comprised only five percent of military aircraft. *Id.* at 9. The U.S. military first widely deployed contemporary UAV systems during Operation Desert Storm, which illustrated their potential, thereby resulted in fast-tracking investments in modern UAV systems. *Id.* at 2; see also Jarnot, *supra* at 14–15. Improved drone systems also debuted during U.S. operations in the Balkans in the 1990s. GERTLER, *supra* note 7, at 2. However, UAVs did not gain the pre-eminent military roles that they have today until the conflicts in Afghanistan and Iraq post-9/11. See Jarnot, *supra* at 15.

117. See Vacek, *supra* note 51, at 686–88 (noting that the burdensome FAA authorization process has challenged law enforcement's ability to operate drones). Aiming to maintain UAV operations apart from "airspace frequently traversed by jet airliners and helicopters," the FAA typically only permits UAVs to operate "over relatively unpopulated areas." Dunlap, *supra* note 77, at 182–83. FAA regulations also require all UAV operators to obtain a Certificate of Authorization (COA) prior to use, a process overseen by small office within the FAA that has been overwhelmed by applications. Vacek, *supra* note 51, at 686–87. Once the operator obtains a COA,

establish regulations for the testing and licensing of commercial drones by 2015 and charges the FAA with expediting the Certificate of Authorization process within the ninety day period after the law was passed.¹¹⁸ Many fear these provisions will lead to an expansion of the use of UAVs by law enforcement and may result in more *Brossart*-like events around the country.¹¹⁹ In fact, the FAA estimates that as many as 15,000 UAVs may be in the nation's skies by 2020.¹²⁰ Some predict that UAV use could soon grow into an eighty-nine billion dollar industry worldwide.¹²¹

it is "only valid for a limited time and [imposes] strict requirements, such as daylight only flights, required 'chase' aircraft and numerous safety precautions." Dunlap, *supra* note 77, at 183. A chase aircraft is "a manned aircraft that is used to follow a UA[V] and serves as the see-and-avoid function for total flight safety. The pilot of the chase aircraft monitors for conflicting aircraft and is in constant radio contact with the pilot in command of the UA[V] who is on the ground." U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-12-981, UNMANNED AIRCRAFT SYSTEMS: MEASURING PROGRESS AND ADDRESSING POTENTIAL PRIVACY CONCERNS WOULD FACILITATE INTEGRATION INTO THE NATIONAL AIRSPACE SYSTEM 15 n.22 (2012).

118. The FAA Modernization and Reform Act of 2012, Pub. L. No. 112-95, §§ 332, 334, 126 Stat. 73, 76-77. The deadline for publishing the expedited COA regulations was November 10, 2012. Tim Starks, *Fear of Prying*, CQ WEEKLY, Oct. 22, 2012, at 2090, 2097. The Act also requires that the FAA to:

[n]ot later than 270 days after the date of enactment of this Act . . . issue guidance regarding the operation of public unmanned aircraft systems to (1) expedite the issuance of a certificate of authorization process;(2) provide for a collaborative process with public agencies to allow for an incremental expansion of access to the national airspace system as technology matures and the necessary safety analysis and data become available, and until standards are completed and technology issues are resolved . . .

FAA Modernization and Reform Act of 2012, § 334(a)(1)-(2); *see also* §§ 331-335 (providing more rules and guidance on how the act must be implemented). In contrast to the United States, Japan, South Korea, and Israel have already fully integrated UAVs into their national airspace systems. CHAD HADDAL & JEREMIAH GERTLER, CONG. RESEARCH SERV., RS21698, HOMELAND SECURITY: UNMANNED AERIAL VEHICLES AND BORDER SURVEILLANCE 7 (2010). *Id.*

119. Shaun Waterman, *Coming to a Sky Near You; Drones over U.S. get OK by Congress*, WASH. TIMES, Feb. 8, 2012, at A1.

120. FEDERAL AVIATION ADMINISTRATION, FAA AEROSPACE FORECAST: FISCAL YEARS 2010-2030, at 48 (2010).

121. *See* Starks, *supra* note 118 at 2091. UAV use has expanded to the civilian sector and is used for a number of purposes from weather forecasting, to homeland security and traffic enforcement. *See* Dunlap, *supra* note 77, at 179 (stating that civilian missions for UAVs include "emissions monitoring, weather forecasting, topographical mapping, wildlife management, wildfire prevention and response, water management, homeland security, various commercial applications and traffic management"). A number of companies and states are actively seeking to profit from the expansion of civilian UAV use. *See* Barry Neild, *Not just for Military Use, Drones Turn Civilian*, CNN (June 12, 2013 6:57 AM), <http://www.cnn.com/2012/07/12/world/europe/civilian-drones-farnborough/index.html>. For example, the head of Maryland's Office of Military and Federal Affairs sees the state as uniquely positioned to benefit from the impending UAV boom. *See* Matthew Hay Brown, *Maryland Sees a Future in Drones*, BALT. SUN (Aug. 13, 2012), http://articles.baltimoresun.com/2012-08-13/news/bs-md-drones-20120813_1_unmanned-aircraft-drones-unmanned-aerial-vehicle. He highlighted that Maryland already has at least two-dozen businesses working on UAVs and that the state boasts a unique combination of universities, federal facilities, and private sector interest in the industry. *Id.* Similarly, the

The widespread use of UAVs in the United States has the potential to change many aspects of daily life.¹²² UAVs can be used both for commercial purposes such as photography and agricultural purposes,¹²³ as well as for governmental purposes such as surveillance.¹²⁴ Most public concern about the expanded use of UAVs relates to their use by law enforcement as they give agencies the ability to consistently monitor and investigate suspects from the sky, which potentially

government of Oklahoma has developed a strategic plan to encourage the development of UAV businesses in the state. See GOVERNOR'S UNMANNED AERIAL SYSTEMS COUNCIL, REPORT OF THE GOVERNOR'S UNMANNED AERIAL SYSTEMS COUNCIL: A STRATEGIC PLAN FOR THE DEVELOPMENT OF AN UNMANNED AERIAL SYSTEMS ENTERPRISE IN THE STATE OF OKLAHOMA 5 (2012). The plan emphasized that Oklahoma has a number of advantages over other states in the development of UAV business, including its robust infrastructure to support UAV test flights, mature aviation market, and favorable geographical location. *Id.* at 5, 11–14. The UAV design and development industry has grown organically along the Columbia River Gorge Region on the Washington-Oregon border, where a number of amateur aeronautical engineers and start-up enterprises are developing drone technology that has been adopted by the military and exhibited around the world. See Richard Connif, *Drones are Ready for Takeoff*, SMITHSONIAN MAG. (June 2011), available at <http://www.smithsonianmag.com/science-nature/Drones-are-Ready-for-Takeoff.html?c=y&page=1>. On December 30, 2013, the FAA announced the selection of six congressionally-mandated UAV test sites that will conduct necessary research for the integration of UAVs into the national airspace system. Press Release, Federal Aviation Administration, FAA Selects Unmanned Aircraft Systems Research and Test Sites (Dec. 30, 2013), available at http://www.faa.gov/news/press_releases/news_story.cfm?newsid=15576. The six test sites are located in Alaska, Nevada, New York, North Dakota, Texas, and Virginia. *Id.*

122. See Connif, *supra* note 121 (suggesting that “the adjustment to drones will be as challenging as the adjustment to horseless carriages at the start of the 20th Century” and chronicling how drones are increasingly used for civilian purposes and for performing new missions that formerly required a human-guided aircraft).

123. See, e.g., Dunlap, *supra* note 77, at 179 n.43 (noting that most UAVs are used commercially in “Japan for agricultural purposes” and that they can do the work of approximately fifteen men). UAVs are also being marketed as an inexpensive alternative to private security. See Neild, *supra* note 121.

124. FED. AVIATION ADMIN., FACTSHEET: UNMANNED AIRCRAFT SYSTEMS (UAS) (2011), available at http://www.faa.gov/about/initiatives/uas/media/uas_fact_sheet.pdf [hereinafter FAA, FACTSHEET: UNMANNED AIRCRAFT SYSTEMS]. U.S. Customs and Border Protection (CBP) operates the largest law enforcement drone fleet in the United States. See Rob Margetta & Tim Starks, *Eyes on the Border, at a High Cost*, CQ WEEKLY, Oct. 22, 2012, at 2094, 2094. However, a number of CBP's drones are not being used to their maximum potential due to their high operating costs. *Id.* at 2094–95. Other federal agencies operating drones within the United States include: the Department of Defense, which utilizes them for “training for overseas operations”; NASA, which employs them for “wildfire mapping and collect[ing] hurricane data”; the Department of the Interior, which uses them for “Geological Survey studies”; the Department of Energy, which conducts “drone research at national laboratories”; The Department of Justice, for FBI law-enforcement support; the Defense Advanced Research Projects Agency (DARPA), which conducts “drone research”; and the Department of State, which is testing drones for its “embassy surveillance program.” Starks, *supra* note 118, at 2092. State and local government agencies, including the Mississippi Department of Marine Resources, the Miami-Dade, Florida Police Department and the Montgomery County, Texas Sheriff's Office are also using drone for a variety of missions. *Id.* at 2092–93.

diminishes Fourth Amendment protections.¹²⁵ This concern is heightened because UAVs are able to conduct surveillance undetected due to their design and their capability to fly at high altitudes.¹²⁶ As the cost of using UAVs decreases, and their ease of use and availability increases,¹²⁷ many fear that current Fourth Amendment jurisprudence does not afford enough protection from government surveillance by drones.¹²⁸

C. *State v. Brossart: Unmanned Aerial Vehicles Become Part of American Life*

Against the background of an expected expansion of domestic UAV use *State v. Brossart* has attracted widespread media attention because it is among the earliest and most dramatic cases involving UAV use by law enforcement

125. See Vacek, *supra* note 51, at 677 (discussing how new legislation should be enacted to deal with the new issues raised by the use of drones); Associated Press, *Talk of Drones Patrolling U.S. Skies Spawns Anxiety*, USA TODAY (June 19, 2012 9:13 AM), <http://www.usatoday.com/news/washington/story/2012-06-19/drone-backlash/55682654/1> (noting how many groups have raised concerns about the privacy issues related to drone use); Koebler, *supra* note 17 (discussing a Brookings Institute Panel that focused on UAV use and warned that, while UAVs can benefit law enforcement and businesses, the implications of widespread use should be thoroughly considered by the government); Jennifer Lynch, *Are Drones Watching You?*, ELECTRONIC FRONTIER FOUND. (Jan. 10, 2012), <https://www.eff.org/deeplinks/2012/01/drones-are-watching-you> (highlighting the extensive surveillance capabilities of UAVs and their ability to go undetected, raising Fourth Amendment concerns). In fact, the FBI has acknowledged that it has already deployed drones in limited domestic law enforcement operations. See Craig Whitlock, *FAA Says it Authorized 4 FBI Drone Missions*, WASH. POST, June 21, 2013, at A7 (detailing FBI use of drones on United States soil during four FBI missions); Jake Miller, *FBI Director Acknowledges Domestic Drone Use*, CBS NEWS (June 19, 2013, 12:36 PM), http://www.cbsnews.com/8301-250_162-57590065/fbi-director-acknowledges-domestic-drone-use/. Other concerns regarding the increased civilian UAV use include the fear that they may threaten air safety, cause mid-air collisions, or be used as a terrorist weapon. Starks, *supra* note 118, at 2096.

126. Lynch, *supra* note 125. Modern UAVs “come in a variety of shapes and sizes” and can have a “wingspan as large as a Boeing 737 or be smaller than a radio-controlled model aircraft.” FAA, FACTSHEET: UNMANNED AIRCRAFT SYSTEMS, *supra* note 124. The U.S. military’s largest drone, the Global Hawk, has a length of 48 feet, a wingspan of 131 feet, weighs 32,250 pounds and can reach an altitude of 60,000 feet. GERTLER, *supra* note 7, at 31 tbl.6, 32 fig.5. In contrast, CQ Weekly highlights that AeroVironment, Inc. has developed the Nano Hummingbird, a drone that weighs less than an ounce. Starks, *supra* note 118, at 2091. In fact, there has been speculation in the press that the United States has developed and utilized insect-sized UAVs that allow for nearly undetectable close-range surveillance. Tom Leonard, *US Accused of Using Robotic Insect Spies*, DAILY TELEGRAPH (LONDON) (Oct. 11, 2007), at 19.

127. See Abramson, *supra* note 17 (examining how homemade UAVs are being built and operated by hobbyists using readily available parts at a lower cost and how police departments in rural areas can use them because they are small and easily transported).

128. See Starks, *supra* note 118, at 2090, 2092, 2095 (reporting that many members of Congress are concerned by both the loss of privacy drones may cause and the Court’s failure to adequately curtail aerial surveillance, leading to Republican and Democratic members of Congress introducing legislation to strengthen the public’s privacy protections against the government’s use of drones on civilians).

officials in United States.¹²⁹ The conflict arose in June 2011 when three cow-calf pairs belonging to Chris Anderson entered an abandoned missile site rented by Rodney Brossart.¹³⁰ After locating the cattle on Brossart's rented property, Anderson approached Brossart and offered to remove the cattle from Brossart's land.¹³¹ However, Brossart told Anderson that he could not remove the cattle until he paid for the damages they had done to his property.¹³² Anderson then contacted the Nelson County, North Dakota Sheriff's Office for assistance in recovering the cattle.¹³³

Upon learning of the disagreement between Anderson and Brossart, the sheriff's office dispatched officers to speak with Brossart regarding the disputed cattle.¹³⁴ During that conversation, the officers advised Brossart that they had proof of Anderson's ownership of the cattle and offered to confirm ownership by looking at the cattle.¹³⁵ In response, Brossart warned the officers that they would not return if they attempted to enter his property.¹³⁶ Taking this warning

129. See Starks, *supra* note 118, at 2093 (discussing the use of a drone in a situation involving a North Dakota rancher); Koebler, *supra* note 6 (explaining the holding in *Brossart* validated the use of UAVs under the circumstances); Koebler, *supra* note 10 (laying out the facts in *Brossart* and stating that Brossart was "the first American citizen to be arrested with the help of a Predator surveillance drone"); see also *Domestic Drone Justice: US Court Green-Lights Police UAV Use*, *supra* note 10 (reporting the *Brossart* decision on a Russian-sponsored news website).

130. State's Response to Defendants' Combined Motion to Dismiss at 2, *State v. Brossart*, No. 32-2011-CR-00049 (Dist. Ct. N.D. July 31, 2012).

131. *Id.* at 2–3.

132. Brief in Support of Motion to Dismiss at 2, *State v. Brossart*, No. 32-2011-CR-00049 (Dist. Ct. N.D. July 31, 2012). Brossart alleged that Anderson's cow-calf pairs consumed "feed and hay intended for the Brossarts' own cattle," and that he was acting consistent with North Dakota law by requiring payment for their return. *Id.* (quoting N.D. Cent. Code § 36-11-10(1) (2011)) (according to North Dakota law, "the person suffering damages by reason of the trespass of any livestock may take up the offending livestock" and "may retain the livestock . . . until . . . [t]he damages sustained by reason of the trespass and the costs in the action to recover the damages have been paid.").

133. Brief in Support of Motion to Dismiss, *supra* note 132, at 2–3; State's Response to Defendants' Combined Motion to Dismiss, *supra* note 130, at 3.

134. Brief in Support of Motion to Dismiss, *supra* note 132, at 3; State's Response to Defendants' Combined Motion to Dismiss, *supra* note 130, at 3. The *Brossart* events took place in Lakota, North Dakota, a small town with a population of 672. Koebler, *supra* note 10; see Community Facts for Lakota City, North Dakota, U.S. CENSUS BUREAU, <http://factfinder2.census.gov/> (enter "Lakota City, North Dakota" in state, county, town, or zip code search box and click on "Profile of General Population and Housing Characteristics: 2010" under the "2010 Demographic Profile SF" Dataset). Brossart had a history of litigating against the Nelson County Sheriff's Office. See *State v. Brossart*, 729 N.W.2d 137 (N.D. 2007) (affirming Brossart's conviction for disorderly conduct and resisting arrest based on a confrontation with police following a citation for unauthorized maintenance of a road); State's Response to Defendants' Combined Motion to Dismiss, *supra* note 130, at 7–8. The officers, accompanied by a field agent of the North Dakota Stockmen's Association, located Brossart while he was working near his farm. Brief in Support of Motion to Dismiss, *supra* note 128, at 3; State's Response to Defendants' Combined Motion to Dismiss, *supra* note 130, at 3.

135. State's Response to Defendants' Combined Motion to Dismiss, *supra* note 130, at 3.

136. *State v. Brossart*, No. 32-2011-CR-00049, Slip Op., at 3–4 (Dist. Ct. N.D. July 31, 2012).

as a threat, the officers asked Brossart to cooperate or face arrest.¹³⁷ Brossart ignored their request and returned to his tractor, prompting the officers to detain him.¹³⁸ The officers then approached Thomas Brossart, Brossart's adult son who had arrived on the scene, and requested to enter the Brossart property to "check on the cattle."¹³⁹ Thomas advised the officers that they would not be allowed on the property to see the cattle until they had a valid search warrant.¹⁴⁰ The officers then left the scene to obtain a warrant.¹⁴¹

The officers obtained a search warrant permitting them to enter the rented land that afternoon and served the warrant at the Brossart home, which was located a half-mile from the rented land.¹⁴² However, as they entered onto Brossart's property to serve the search warrant, the three Brossart sons, Alex, Thomas and Jacob, rushed at the officers with guns drawn.¹⁴³ This action resulted in a standoff between the officers and the three sons.¹⁴⁴ During the standoff, the police deployed an MQ-9 Predator B Drone obtained through an agreement with

137. *Id.* at 4.

138. Brief in Support of Motion to Dismiss, *supra* note 132, at 3; State's Response to Defendants' Combined Motion to Dismiss, *supra* note 130, at 3. The police argue that Brossart was arrested for committing the following misdemeanors under the North Dakota Livestock Estray Law: "resisting arrest, criminal mischief, theft of property and terrorizing." *Id.* at 4, 12. Brossart actively resisted his arrest and ordered the officers to "show him the writ." *Id.* at 3. As a result, the officers tased Brossart several times before placing Brossart in the patrol car. Brief in Support of Motion to Dismiss, *supra* note 132, at 3–4. Following the incident, "Brossart appeared to be passed out and unresponsive" and an ambulance was called. *Brossart*, No. 32-2011-CR-00049, at 4. Jacob and Abby Brossart, two of Brossart's adult children, were also detained during this initial encounter. Brief in Support of Motion to Dismiss, *supra* note 132, at 3–4; State's Response to Defendants' Combined Motion to Dismiss, *supra* note 130, at 9–10. The police claim that Jacob Brossart was detained for approaching the Brossart pickup after his father yelled at him to get two rifles located in the front seat of the pickup. State's Response to Defendants' Combined Motion to Dismiss, *supra* note 130, at 9. He was not arrested at that time and he was released after his father was placed in the police car. *Id.* Abby was arrested after she struck the right arm of one of the officers. State's Response to Defendants' Combined Motion to Dismiss, *supra* note 130, at 9–10.

139. Brief in Support of Motion to Dismiss, *supra* note 132, at 4.

140. State's Response to Defendants' Combined Motion to Dismiss, *supra* note 130, at 10.

141. Brief in Support of Motion to Dismiss, *supra* note 132, at 4; State's Response to Defendants' Combined Motion to Dismiss, *supra* note 130, at 10.

142. Brief in Support of Motion to Dismiss, *supra* note 132, at 4; State's Response to Defendants' Combined Motion to Dismiss, *supra* note 130, at 10. Prior to serving the warrant at the Brossart home, officers returned to the Brossart's rented property, where they were confronted by Thomas and Alex Brossart. *Brossart*, No. 32-2011-CR-00049, at 5. The police then approached the Brossart home to serve the search warrant directly to an adult from whose property the evidence was being taken. *See* State's Response to Defendants' Combined Motion to Dismiss, *supra* note 130, at 10–11. North Dakota law allows an officer who is taking property under a warrant to serve the warrant directly to the person who owns the property from which the property is taken or leave to it at the location from where the property was taken. N.D. R. CRIM. P. 41(d)(2).

143. State's Response to Defendants' Combined Motion to Dismiss, *supra* note 130, at 10.

144. *Id.*

the United States Department of Homeland Security.¹⁴⁵ The UAV was deployed without obtaining an additional warrant, purportedly “to help assure that there weren’t any weapons [on the Brossart property] and to make the arrest safer for both the Brossarts and law enforcement.”¹⁴⁶ The next morning, officers entered the Brossart property to recover the cattle and arrested three of the Brossart children after they again confronted officers.¹⁴⁷ The Brossarts did not learn that a UAV had been deployed during the standoff until after their arrest.¹⁴⁸

The Brossarts filed motions to dismiss the criminal charges against them or, in the alternative, to suppress evidence against them.¹⁴⁹ They contended that the court should suppress the evidence gathered through the use of the UAV because UAV technology is not available to the general public,¹⁵⁰ and because it was obtained in an unreasonable manner.¹⁵¹ The trial court denied the motions, finding that “there was no improper use of an unmanned aerial vehicle,” as “[i]t appears to have had no bearing on” the charges brought against the Brossarts.¹⁵²

145. See *Brossart*, No. 32-2011-CR-00049, at 6; Koebler, *supra* note 6. U.S. Customs and Border Protection (CBP), a component of the Department of Homeland Security, currently operates the largest law enforcement drone fleet in the United States. Margetta & Starks, *supra* note 124, at 2094–95. The fleet is made up of 10 MQ-9 Predator B’s that are used to monitor the U.S. border. *Id.* CBP’s MQ-9 Predator B drones have a length of 36 feet, a wingspan of 66 feet, and can operate for up to 20 hours at an altitude of up to 50,000 feet and with a speed of up to 240 knots (276 miles per hour). *Id.* CBP’s MQ-9 Predator B drones operate from four bases around the United States, including one in Grand Forks Air Force Base in North Dakota. *Id.* This type of cooperation between CBP and local law enforcement is not unprecedented; drones from various DHS components have been used domestically to “support federal and state agencies such as the Federal Bureau of Investigation (FBI), the Department of Defense (DOD) Immigration and Customs Enforcement (ICE), the U.S. Secret Service and the Texas Rangers.” RICHARD M. THOMPSON II, CONG. RESEARCH SERV., R42701, DRONES IN DOMESTIC SURVEILLANCE OPERATIONS: FOURTH AMENDMENT IMPLICATIONS AND LEGISLATIVE RESPONSES 3 (2012).

146. KOEBLER, *supra* note 10; see Brief in Support of Motion to Dismiss, *supra* note 132, at 5, 19 (discussing the warrantless use of the UAV that gathered the intelligence); State’s Response to Defendants’ Combined Motion to Dismiss, *supra* note 130, at 12 (acknowledging the use of the drone, but arguing that it was not used for investigative purposes).

147. Brief in Support of Motion to Dismiss, *supra* note 132, at 5. The Brossart children were arrested for “commit[ing] the offense of terrorizing.” State’s Resp. to Defs.’ Combined Mot. to Dismiss, *supra* note 130, at 13.

148. Koebler, *supra* note 10.

149. Brief in Support of Motion to Dismiss, *supra* note 132, at 1. The Brossarts presented the following arguments: (1) the charges presented against Rodney Brossart were improvident; (2) Rodney Brossart was improperly arrested without a warrant as a crime had not occurred; (3) the police used excessive force in Rodney Brossart’s arrest; (4) unlawful de facto arrest of Jacob Brossart; (5) unlawful arrest of Abbey Brossart; (6) warrantless entry into the Brossart property; (7) the use of the UAV was unlawful; and (8) general use of outrageous police conduct, requiring suppression of the evidence. *Id.* at 8, 12, 15, 17–20.

150. *Id.* at 19 (citing *Kyllo v. United States*, 533 U.S. 27, 29 (2001)).

151. *Id.* at 20.

152. *State v. Brossart*, No. 32-2011-CR-00049, Slip op. at 12 (Dist. Ct. N.D. July 31, 2012).

II. THE BROSSART FACTS DO NOT AMOUNT TO A FOURTH AMENDMENT SEARCH

Based on the evolution of Fourth Amendment jurisprudence, the determination of whether the *Brossart* facts constitute a Fourth Amendment search must be made using both the historical property right analysis of the Fourth Amendment and the *Katz* reasonable expectation of privacy test.¹⁵³ Applying these tests, the *Brossart* court correctly found that use of a UAV did not constitute a Fourth Amendment search.¹⁵⁴ However, the *Brossart* decision underscores that the Fourth Amendment should provide greater protections against searches by UAVs and similar technologies.

A. Applying the Property Rights Test in *Brossart*

Justice Scalia's majority opinion in *Jones* breathed new life into the traditional property rights analysis of the Fourth Amendment, which now must be used in conjunction with *Katz*'s reasonable expectation of privacy test to analyze whether a Fourth Amendment search has occurred.¹⁵⁵ Under this test, the government's physical trespass on private property in an effort to discover information is an unreasonable Fourth Amendment search.¹⁵⁶ Existing case law suggests that the government's use of a UAV in circumstances like those in *Brossart* does not constitute a trespass.¹⁵⁷

Current jurisprudence on low-altitude airspace property rights is not well-defined.¹⁵⁸ In *United States v. Causby*, the Supreme Court held that "[f]lights over private land are not a taking, unless they are so low and so frequent as to be a direct and immediate interference with the enjoyment and use of the land."¹⁵⁹ This language is echoed in *Ciraolo* and *Riley*, which suggest that investigations conducted from an airplane or a helicopter flying from legally navigable airspace do not constitute a Fourth Amendment search, unless the investigation affects the defendant's use of his property.¹⁶⁰ Applying these precedents, the *Brossart* court found that the government's use of a UAV did

153. See *supra* note 112 and accompanying text.

154. See KOEBLER, *supra* note 10.

155. See *supra*, Part I.A.6.

156. U.S. v. Jones, 132 S. Ct. 945, 949 (2012) *mandamus denied sub nom. In re Jones*, 670 F.3d 265 (D.C. Cir. 2012); see also CLANCY, THE FOURTH AMENDMENT, *supra* note 25, at 51–55 (discussing the property rights analysis, which looked at Fourth Amendment questions in light of whether a constitutionally protected area was breached).

157. See *infra* notes 156–59 and accompanying text.

158. See Colin Cahoon, Comment, *Low Altitude Airspace: A Property Rights No-Man's Land*, 56 J. AIR L. & COM. 157, 198 (1990) ("With no definitive standard yet enunciated, and courts mixed in their approach to the question, landowners must still wonder just exactly what their property rights are to the airspace above their land.").

159. *United States v. Causby*, 328 U.S. 256, 266–67 (1946). The *Causby* decision recognized that "airspace is a public highway," but emphasized that a landowner "must have exclusive control of the immediate reaches of the enveloping atmosphere." *Id.* at 264 (emphasis added).

160. See *supra* note 86 Part I.A.5.

not constitute a Fourth Amendment violation because there was no evidence that the flyover occurred outside navigable airspace or interfered with the Brossart's use of the land.¹⁶¹

Given the facts, the Brossarts could not argue that a trespass occurred. In their brief, the Brossarts alleged that the UAV "was not visible or detectable by ordinary observation."¹⁶² This allegation suggests that the MQ-9 Predator B drone used during the standoff must have been at a sufficient altitude to fly undetected.¹⁶³ Brossart also admitted that he did not learn of the drone's use until months after his arrest, indicating that the drone did not interfere with his use of the land.¹⁶⁴ Thus, the *Brossart* court could not find that the Government physically trespassed into Brossart's land.

B. Applying the Katz Test in Brossart

To successfully prove that the Nelson County Sheriff Office's deployment of a UAV over their property during the standoff constituted a Fourth Amendment search, the Brossarts needed to meet both the subjective and objective prongs of the *Katz* test in order.¹⁶⁵ As the Brossarts' property was marked with a "No Trespassing" sign, and they repeatedly asked the sheriff to produce a search warrant, it seems clear that they possessed a subjective expectation of privacy and thus easily met *Katz's* subjective prong.¹⁶⁶ However, applying the principles established through subsequent *Katz*-based jurisprudence, the Brossarts had difficulty meeting the objective prong of the test.¹⁶⁷

1. The Brossart Court Could Not Find That the Technology Used to Survey the Brossart's Property was Unreasonable

The Brossarts' strongest argument that the use of the UAV did not comport with society's expectations of privacy is *Kyllo's* assertion that a government search investigating the details of a home and utilizing "a device that is not in general public use" is presumptively unreasonable under the Fourth Amendment.¹⁶⁸ Under this argument, the defendants could have challenged

161. See *infra* notes 159–162 and accompanying text.

162. Brief in Support of Motion to Dismiss, *supra* note 132, at 19.

163. The MQ-9 Predator B is a relatively large drone that can travel at up to 276 miles per hour at an altitude of 50,000 feet. See *supra* note 141. In fact, the MQ-9 Predator B is thirteen feet longer, has a wingspan sixteen feet longer and a more powerful engine than earlier Predator models. GERTLER, *supra* note 7, at 35. Flying at altitude above 500 feet is generally considered to be within navigable airspace in rural areas. See *supra* note 82 and accompanying text.

164. KOEBLER, *supra* note 10.

165. See *supra*, Part I A.6.

166. See *Oliver v. United States*, 466 U.S. 170, 189 n.9 (1984) (acknowledging that by placing "No Trespassing" signs and fences, the defendants may have had an expectation of privacy).

167. *Katz*, 389 U.S. at 361 (Harlan, J., concurring).

168. *Kyllo v. United States*, 533 U.S. 26, 40 (2001).

both the use of the UAV to survey their property, as well as the use of the technology that the UAV carries.

a. Past Fourth Amendment Jurisprudence Permits Aerial Surveillance

Even applying the *Kyllo* standard, the court correctly found that the mere use of the UAV does not constitute a Fourth Amendment search. In its aerial surveillance jurisprudence, the Supreme Court has repeatedly found that the government is free to inspect what is visible from “the vantage point of an aircraft flying in the navigable airspace.”¹⁶⁹ Observation conducted from a UAV is analogous to observation conducted from airplanes and helicopters.¹⁷⁰ This analogy suggests that, as the use of aerial surveillance has become commonplace, the court’s decision in *Brossart* is in line with the Supreme Court’s aerial surveillance decisions.¹⁷¹

b. The Brossart Defendants Did Not Challenge the Use of the Technology Carried by the Drone

The Brossarts’ best argument would have been a challenge to the use of the technology carried by the UAV. CBP’s MQ-9 Predator B drones are equipped with electro-optical and infrared sensors and a surface search radar that can locate moving targets on the ground.¹⁷² Unlike aircrafts, these tools are sense-enhancing technologies not in general public use and can be compared to the infrared thermal image scanner used by government agents in *Kyllo*.¹⁷³ However, while the Brossarts argued that *Kyllo*’s holding on sense-enhancing technology should apply in their case, they failed to challenge the use of these

169. *Florida v. Riley*, 488 U.S. 445, 450 (1989); *see also California v. Ciraolo*, 476 U.S. 207, 213–14 (1986) (concluding that the defendant’s expectation of privacy from information that it willingly exposed to aerial surveillance “is unreasonable and is not an expectation that society is prepared to honor”).

170. *See U.S. CUSTOMS AND BORDER PATROL OFFICE OF PUB. AFFAIRS, UNMANNED AIRCRAFT SYSTEM MQ-9 PREDATOR B* (2011), available at http://www.cbp.gov/linkhandler/cgov/newsroom/fact_sheets/marine/uas.ctt/uas.pdf. In fact, the MQ-9 Predator B may be more analogous to airplanes and helicopters than other UAVs as it is remotely piloted from the ground. *Id.* In contrast, future drone systems could be fully automated and controlled entirely by on-board computers and sensors. *See Starks, supra* note 118, at 2096 (reporting that Congress allowed the FAA to authorize that drones be outfitted with technologies that avoid collisions and allow them to become pilotless); *Connif, supra* note 121 (describing how current unmanned aircraft “typically require at least two people . . . doing ground control” and that developers are envisioning future drones that could “take off . . . land [and] refuel without human assistance”).

171. *See supra* Part I.A.5.

172. U.S. CUSTOMS AND BORDER PATROL, *supra* note 170.

173. *See Kyllo*, 533 U.S. at 29–30, 34 (discussing the mechanics of the thermal imagers and describing the technology as not commonly used by the public).

technologies, instead concentrating exclusively on the UAV itself.¹⁷⁴ As this argument was not articulated, the *Brossart* court could not consider it.¹⁷⁵

2. *The Brossarts Did Not Allege that the UAV Observed the Interior of the Brossart Home*

The *Brossart* argument that the government violated the Fourth Amendment by using technological capabilities unavailable to the general public was insufficient for the court to find that a Fourth Amendment search occurred.¹⁷⁶ In *Oliver*, the Court held that an individual has no reasonable expectation of privacy in activities conducted in open fields, except for those intimate activities conducted within the curtilage of the home.¹⁷⁷ *Oliver* also demonstrates that “open fields” is an expansive term that includes closed-off areas close to a defendant’s home, even if the areas cannot be seen from publicly-accessible land.¹⁷⁸ To successfully challenge the use of a UAV as an impermissible search, the *Brossarts* needed to demonstrate that the UAV and its instruments revealed information about the interior of their home.¹⁷⁹ The *Brossart* facts do not provide sufficient information about the specific areas the UAV observed and the *Brossarts* did not argue that the UAV revealed any information about the interior of their home.¹⁸⁰ As a result, the *Brossart* court could not consider this argument.¹⁸¹

3. *The Length of the UAV Observations May Not Have Been Unreasonable*

Applying the *Katz* test in his *Jones* dissent, Justice Alito wrote that, under existing Fourth Amendment jurisprudence, “relatively short-term monitoring of a person’s movements” is considered reasonable, but “longer term” monitoring “impinges on expectations of privacy” in many situations.¹⁸² While Justice Alito’s decision does not clearly identify the line between short and long-term surveillance, this language suggests that the *Brossarts* could have challenged the

174. Brief in Support of Motion to Dismiss, *supra* note 132, at 19.

175. See *State v. Brossart*, No. 32-2011-CR-00049, Slip op. at 12 (Dist. Ct. N.D. July 31, 2012).

176. See *id.* (finding that the use of a UAV was not unreasonable in this case); Brief in Support of Motion to Dismiss, *supra* note 132, at 19 (noting that the *Kyllo* decision suggests that the use of sense-enhancing technology is unreasonable under the Fourth Amendment).

177. See *Oliver v. United States*, 466 U.S. 170, 180 (1984).

178. See *supra* notes 44–46 and accompanying text.

179. See *Kyllo v. United States*, 533 U.S. 27, 34 (2001) (finding a Fourth Amendment violation where technology not in public use was used to gather information about the interior of the home).

180. Brief in Support of Motion to Dismiss, *supra* note 132, at 19–20.

181. See *Brossart*, No. 23-2011-CR-00049 at 12 (dismissing the UAV argument without discussion).

182. *United States v. Jones*, 132 S. Ct. 945, 964 (2012) (Alito, J., concurring), *mandamus denied sub nom. In re Joes*, 670 F.3d 265 (D.C. Cir. 2012).

length of the UAV observations.¹⁸³ However, the *Brossart* facts suggest that the UAV's observations were conducted over a short period of time on the morning when the arrests took place,¹⁸⁴ which is far shorter than the four-week period of observation implicated in *Jones*.¹⁸⁵ Furthermore, the Brossarts failed to present the argument that the length of the observations was unreasonable.¹⁸⁶ As a result, the *Brossart* court was unable to find that the period of observation was unreasonably long.¹⁸⁷

C. The Brossart Court Correctly Found that the Use of an Unmanned Aerial Vehicle Did Not Constitute a Fourth Amendment Search

The Nelson County District Court correctly found that the use of a UAV did not constitute a Fourth Amendment search. Based on current Fourth Amendment jurisprudence, the court could have only concluded that a Fourth Amendment search had occurred if the defendants alleged that the UAV carried sense-enhancing technology that was used to monitor the interior of the Brossart home.¹⁸⁸ The Brossart's Brief in Support of a Motion to Dismiss only challenges the government's use of a UAV on the basis that UAVs are not currently available for general public use.¹⁸⁹ As UAVs are strongly analogous to other aircrafts and the aerial surveillance likely took place from navigable airspace, the *Brossart* court correctly denied the Brossarts' motion to dismiss.¹⁹⁰

III. BROSSART HIGHLIGHTS THE NEED TO STRENGTHEN FOURTH AMENDMENT PROTECTIONS IN LIGHT OF THE IMPENDING WIDESPREAD DOMESTIC UAV USE

A close analysis of the *Brossart* facts reveals that the case was properly decided under existing Fourth Amendment jurisprudence. However, *Brossart* also highlights how the imminent expansion of the use of UAVs on civilians in the United States presents a challenge to current Fourth Amendment jurisprudence.¹⁹¹ The use of UAVs will require that both the courts and

183. See *id.* (noting that there is not a specific time where monitoring becomes unreasonable, though four weeks was in *Jones*, and acknowledging that another case could "present more difficult questions").

184. Brief in Support of Motion to Dismiss, *supra* note 132, at 4–5.

185. See *supra* note 92 and accompanying text.

186. Brief in Support of Motion to Dismiss, *supra* note 132, at 19–20.

187. See *State v. Brossart*, No. 32-2011-CR-00049, Slip op. at 12 (Dist. Ct. N.D. July 31, 2012).

188. See *Kyllo v. United States*, 533 U.S. 27, 34 (2001); *Oliver v. United States*, 466 U.S. 170, 180 (1984).

189. See Brief in Support of Motion to Dismiss, *supra* note 132, at 19–20.

190. See *supra* notes 172–74 and accompanying text.

191. See *supra* notes 119–26 and accompanying text.

Congress properly balance the government's desire to use a powerful law-enforcement tool with privacy protections for individuals.¹⁹²

This challenge was foreshadowed in Justice Sotomayor's concurring opinion in *United States v. Jones*.¹⁹³ Like the GPS technology used in *Jones*, UAVs allow the Government to inexpensively monitor a person's every movement, and to "ascertain, more or less at will, their political and religious beliefs, sexual habits and so on."¹⁹⁴ Such extensive surveillance certainly has the capacity to chill "associational and expressive freedoms."¹⁹⁵ Yet, so long as such monitoring occurs in open fields, or, in most cases, in the curtilage of the home, current Fourth Amendment search jurisprudence will not protect individuals in circumstances similar to Mr. Brossart.¹⁹⁶

In *Jones*, Justice Alito suggests that legislation is the most effective way to balance privacy and public safety concerns related to the government's use of devices that allow for long-term monitoring of individuals.¹⁹⁷ Now that Congress has authorized an increased use of UAVs for civilian purposes, it should also enact measures that give the government the ability to use this powerful law-enforcement tool, while safeguarding the public's privacy.¹⁹⁸

Current legislative initiatives suggest that there is a bipartisan push for legislation to balance the government's use of UAVs with the public's privacy concerns.¹⁹⁹ Three bills aiming to protect the public's privacy from increased use of UAVs for civilian government purposes were introduced in the 112th Congress.²⁰⁰ However, these bills have been criticized as overly broad in protecting privacy and severely limiting the government's ability to use

192. See Starks, *supra* note 118, at 2090 (noting the potential privacy concerns of widespread UAV use and the need for legislative action).

193. See *supra* notes 98–105 and accompanying text.

194. *United States v. Jones*, 132 S. Ct. 945, 956 (Sotomayor, J., concurring), *mandamus denied sub nom. In re Jones*, 670 F.3d 265 (D.C. Cir. 2012). Scholars have pointed to this language as supporting the adoption of the mosaic theory of the Fourth Amendment. See *supra* note 108.

195. See *Jones*, 132 S. Ct. at 956.

196. See *supra* Part II.C.

197. See *Jones*, 132 S. Ct. at 963–64 (Alito, J., concurring).

198. Congressional action to regulate the use of emerging practices and technologies for privacy purposes has firm precedents. See *id.* at 962–63 (discussing legislation passed to deal with Fourth Amendment questions related to wiretapping).

199. See Starks, *supra* note 118, at 2090, 2092–93 (discussing bipartisan legislative action to address the privacy concerns related to UAVs); see also Associated Press, *supra* note 125 (noting that concerns over the civil-liberty issues raised by the use of UAVs has led to bipartisan discussions of UAV legislation).

200. See THOMPSON, *supra* note 145, at 18–19. The bills include the Preserving Freedom from Unwarranted Surveillance Act of 2012 (H.R. 5925, S. 3287), the Preserving American Privacy Act of 2012 (H.R. 6199), and the Farmers' Privacy Act of 2012 (H.R. 5961). *Id.* Concerns over the potential dangers the government's domestic use of UAVs have also been raised in the new 113th Congress, leading to a thirteen-hour filibuster seeking to block the Senate's approval of the President's nominee to lead the CIA. See Ed O'Keefe and Aaron Blake, *Senator Holds Long Filibuster to Oppose Obama's Drone Policy*, WASH. POST, Mar. 7, 2013, at A2.

UAVs.²⁰¹ For example, the Preserving American Privacy Act of 2012 would only permit UAV use by law enforcement “except pursuant to [a] warrant and in the investigation of a felony” and excludes all evidence obtained in violation of the Act from criminal proceedings.²⁰² This approach may prevent law enforcement from operating UAVs in open fields for securing large-crowd events or enforcing traffic laws, both of which are permitted under current jurisprudence. The Preserving Freedom from Unwarranted Surveillance Act of 2012 takes a more nuanced approach, prohibiting the warrantless use of a UAV to collect evidence regarding criminal conduct or a violation of a regulation, but specifically allowing UAVs to be used to patrol the border, to prevent imminent danger to life, and to manage situation with high risks of terrorist attacks.²⁰³ Yet, this proposed Act is overly restrictive because it prevents law enforcement from using UAVs in open fields.²⁰⁴

Instead, Congress should find a way to allow law enforcement to use this valuable tool in all necessary circumstances, while also taking into consideration Fourth Amendment rights.²⁰⁵ To accomplish this, Congress should aim to clarify how current principles of Fourth Amendment jurisprudence apply to UAVs and add additional privacy protections that account for their unique capabilities.²⁰⁶ Following current Fourth Amendment principles, stronger privacy protections should be applied to criminal and regulatory investigations and more liberal rules applied to non-invasive uses, such as locating lost persons or assessing damages from natural disasters.²⁰⁷ Similarly, Congress should codify the Fourth Amendment’s strong protection of the home by requiring that a warrant be issued before the government can use UAV-mounted technologies

201. See Starks, *supra* note 118, at 2095–96 (noting that some members of Congress, local government officials, and UAV industry representatives have expressed concerns that an over-regulation of privacy concerns may stifle the industry’s growth and prevent the government from using UAVs for desirable purposes); Tim Adelman, *Flurry of ‘Drone’ Bills’ Shows Congress Has Much to Learn*, THE HILL (Sept. 20, 2012, 6:59 AM), <http://thehill.com/blogs/congress-blog/foreign-policy/250597-flurry-of-drone-bills-shows-congress-has-much-to-learn> (arguing that Congress is right to consider privacy protection measures as UAV technology becomes widely used, but that such measures should not excessively limit the government’s use of UAV’s).

202. H.R. 6199, 112th Cong. §§ 2–3 (2012).

203. S. 3287, 112th Cong. §§ 3–4 (2012); H.R. 5925, 112th Cong. §§ 2–3 (2012).

204. See THOMPSON, *supra* note 145, at 18 (showing there is no open fields exception under either form of the bill).

205. See Starks, *supra* note 118, at 2095 (noting the importance of legislation that does not overly restrict UAV use).

206. See THOMPSON, *supra* note 145, at 18 (discussing legislation that has restricted government surveillance tools further than the court, and suggesting Congress do the same with UAVs).

207. Jones suggests that the latter category would not constitute a search, as “mere visual observation does not constitute a search.” See *United States v. Jones*, 132 S. Ct. 945, 950 (2012), *mandamus denied sub nom. In re Jones*, 670 F.3d 265 (D.C. Cir. 2012). Tim Adelman argues that the use of UAVs to find lost hikers, survey multi-car crashes, and other similar activities are government uses of drones that do not intrude on privacy and should not be discouraged. Adelman, *supra* note 201.

to conduct surveillance revealing information about the interior of the home.²⁰⁸ To address privacy concerns of long-term UAV surveillance, Congress should permit surveillance of spaces falling within the open fields doctrine, but place a time limit on aerial surveillance preventing the government from conducting long-term investigations of individuals without prior judicial approval.²⁰⁹ Lastly, Congressional action should also aim to limit unwanted invasions of privacy by private citizens, which falls outside of the scope of the Fourth Amendment.²¹⁰

IV. CONCLUSION

As the use of UAVs domestically becomes significantly more widespread, many have expressed concerns about capacity of current Fourth Amendment search jurisprudence's to effectively manage both privacy rights and law enforcement's use of this new and powerful tool. As one of the first cases in the United States in which a UAV was used, *State v. Brossart* has become a symbol of the anxiety brought on by domestic use of UAVs. Nonetheless, the *Brossart* facts do not pose new questions of law. But, the case highlights some of the weaknesses of current Fourth Amendment jurisprudence on searches, particularly as to how courts handle new technologies. It also serves as a call to both the courts and legislators to more clearly define the Fourth Amendment's protections in light of emerging technologies.

208. See *supra* Part I A.4 (highlighting the Court's strong protection of the home).

209. See *supra* notes 82–83 and accompanying text.

210. See ERWIN CHEMERINSKY, CONSTITUTIONAL LAW: PRINCIPLES AND POLICIES 5 (4th ed. 2011) (explaining that the Constitution's protection of civil liberties "appl[ies] only to the government; private conduct generally does not have to comply with the Constitution"). Section 5 of The Preserving American Privacy Act of 2012 forbids federal agencies from permitting private entities from monitoring an individual "without the consent of that other private person or the owner of any real property on which that other private person is present." H.R. 6199, 112th Cong. §5 (2012).

