Florida v. Riley: The Descent of Fourth Amendment Protections in Aerial Surveillance Cases

Introduction

Aerial surveillance is becoming an important law enforcement tool. The Fourth Amendment to the United States Constitution, however, limits law enforcement activity by protecting certain security interests against government intrusion. The exclusionary rule makes evidence seized in violation of the Fourth Amendment inadmissible.

On one hand, the Constitution should be adaptable to changing times, allowing the use of advancing technologies in the fight against crime. Courts generally have been receptive to this idea, provided fourth

1. The Fourth Amendment provides:
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. U.S. CONST. amend. IV. The Fourth Amendment applies to state governments through the Due Process Clause of the Fourteenth Amendment. Mapp v. Ohio, 367 U.S. 643 (1961).

“Probable cause,” for fourth amendment purposes, requires only that the facts available to the officer would cause a person of reasonable caution to believe certain items may be contraband or evidence of a crime. It does not demand that the belief be correct or more likely true than false. Texas v. Brown, 460 U.S. 730, 742 (1983).

“Search” is a term of art in fourth amendment terminology. It is defined by BLACK'S LAW DICTIONARY 1211 (5th ed. 1979) as:

An examination of a man's house or ... premises, or of his person, or of his vehicle ... etc., with a view to the discovery of contraband or ... some evidence of guilt to be used in the prosecution of a criminal action ... [against him]. State v. Woodall, 16 Ohio Misc. 226, 241 N.E.2d 755, 757.... [I]t is not a search to observe that which is open to view. People v. Carroll, 12 Ill.App.3d 869, 299 N.E.2d 134, 140.... Visual observation which infringes upon a person's reasonable expectation of privacy constitutes a “search” in the constitutional sense. People v. Harfmann, Colo. App., 555 P.2d 187, 189.

Within constitutional immunity (Fourth Amendment) from unreasonable searches and seizures, an examination or inspection without authority of law of premises or person with view to discovery of stolen, contraband, or illicit property, or for some evidence of guilt to be used in prosecution of a criminal action. Bush v. State, 64 Okl.Cr. 161, 77 P.2d 1184, 1187.


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amendment search standards have been met. On the other hand, aerial surveillance opens the door to possibly great governmental intrusion into the outdoor property and activities of every person, cutting against the central protection of personal security in the Fourth Amendment. The basic judicial question arises whether such surveillance constitutes a "search" for fourth amendment purposes.

Historically, a fourth amendment "search" required actual physical invasion. In 1967, the Supreme Court, in *Katz v. United States*, moved away from the physical invasion requirement and framed a new test: whether there is a "reasonable expectation of privacy" in the particular area. If so, the Court found that the Fourth Amendment protects against any warrantless intrusion into that area, regardless of physical invasion.

In 1989, the Supreme Court decided *Florida v. Riley*, which held that helicopter surveillance 400 feet over defendant Riley's backyard greenhouse was not a search under the Fourth Amendment. This decision followed the trend established by *California v. Ciraolo* and *Dow Chemical Co. v. United States*, further limiting fourth amendment protections in aerial surveillance cases. This Comment argues that the Supreme Court, by misapplying the *Katz* reasonable expectation of privacy standard, establishes a test of fourth amendment protections that is


5. See supra note 1. Note, however, that the Fourth Amendment does not define actions that constitute "searches." The courts have thus developed methods for determining if a search has occurred. See infra notes 14-58 and accompanying text.


8. *Id.* at 361 (Harlan, J., concurring).
too restrictive and is contrary to the goals of personal security protection embodied in the Fourth Amendment.

This Comment will analyze the historical underpinnings of the Riley decision. Further, it will discuss the impact of the decision on the future of aerial surveillance under the Fourth Amendment. Part I analyzes the evolution and scope of fourth amendment protection. Part II discusses the history of aerial surveillance under the Fourth Amendment. Parts III and IV analyze and critique the Riley decision itself, arguing that the Court, through misapplication of the Katz reasonable expectation of privacy test, severely curtails fourth amendment protection in aerial surveillance cases. Finally, Part V attempts to resolve four questions that will likely arise as lower courts try to implement the Court's reasoning: 1) Is the curtilage doctrine still valid?; 2) Who will bear the burden of proof regarding the reasonableness of an expectation of privacy?; 3) Is compliance with Federal Aviation Administration (FAA) regulations sufficient to defeat the reasonableness of an expectation of privacy?; and, 4) As technology continues to improve, has Riley left any limits consistent with the purposes of the Fourth Amendment on permissible aerial surveillance? This Comment concludes that the Supreme Court has imposed too stringent a test of fourth amendment privacy expectations, resulting in foreclosure of previously afforded protections, and that such a narrow test is unwarranted in view of the underlying policies of the Fourth Amendment.

I. History of Fourth Amendment Protections

A. Pre-1967: Property Rights and the Trespass Standard

Arbitrary searches and seizures by British officers under "general warrants" motivated the Framers to include the Fourth Amendment in the Bill of Rights. The Framers, in drafting the Fourth Amendment, intended the Amendment to safeguard people's security and privacy

13. See infra notes 22-28 and accompanying text. BLACK'S LAW DICTIONARY 346 (5th ed. 1979) defines curtilage as:

   A piece of ground commonly used with the dwelling house[,]... generally ... used for domestic purposes in the conduct of family affairs[,]... and enjoyed with it, for its more convenient occupation.

   For search and seizure purposes includes those outbuildings which are directly and intimately connected with the habitation and in proximity thereto and the land or grounds surrounding the dwelling which are necessary and convenient and habitually used for family purposes and carrying on domestic employment. State v. Hanson, 113 N.H. 689, 313 A.2d 730, 732.

against these arbitrary governmental invasions. The English common law developed protections against such invasions based on the property/tort concept of trespass. This idea formed the original basis of American fourth amendment protection as well.

Under this theory, an individual was protected from warrantless searches only if 1) a trespass (actual, nonconsensual, physical invasion) occurred; and 2) the trespass occurred on a "constitutionally protected area." Fourth amendment protections applied only if the search met both requirements.

The American common law automatically protected the home historically, the English common law protected only the home against warrantless searches and seizures. These protections were extended in Entick v. Carrington, 95 Eng. Rep. 807, 815-18 (K.B. 1765) to include curtilage and all other real property. As Lord Camden stated:

Our law holds the property of every man so sacred, that no man can set his foot upon his neighbor's close without his leave; if he does he is a trespasser... and if he will tread upon his neighbor's ground, he must justify it by law.

Id. at 817.


"Constitutionally protected area" also was defined narrowly, approximately by the plain language of the Fourth Amendment (with curtilage included in "houses," as it was at common law). See Berger v. New York, 388 U.S. 41 (1967); Lopez, 373 U.S. at 427; Lanza v. New York, 370 U.S. 139 (1962); Silverman, 365 U.S. at 505.


Thus, spying and eavesdropping were not unlawful, since eyes and ears could not trespass. Entick, 95 Eng. Rep. at 807. Followed in Boyd v. United States, 116 U.S. 616 (1886), and maintained well into the 20th century. See Olmstead, 277 U.S. at 438; Goldman, 316 U.S. at 129.

Further, electronic devices could be used so long as the "device [was] not... planted by an unlawful physical invasion of a constitutionally protected area." Lopez, 373 U.S. at 438-39 (citing Silverman, 365 U.S. at 505).
under the plain language of the Fourth Amendment. Any search by physical invasion was thus unreasonable per se, and required a warrant "in the absence of some one of a number of well defined 'exigent circumstances.'"21

Curtilage was also extended fourth amendment protection,22 for at common law the curtilage was viewed as intimately related to, or a virtual extension of, the dwelling house,24 and thus deserved the same protections afforded the dwelling house.25 This extension of protection has come to be known as the "curtilage doctrine."26

Fourth amendment protections, however, did not extend beyond the curtilage of a dwelling into the area known as the "open fields."27 The American common law drew the line of fourth amendment protection at the border between the curtilage and open fields.28 The Court in Hester v. United States29 gave virtually unlimited search authority for areas constituting "open fields."30

20. U.S. CONST.-amend. IV; see Payton v. New York, 445 U.S. 573, 586, 589 (1980); Silverman, 365 U.S. at 512 (the home is a "constitutionally protected area" under the Fourth Amendment).


22. See supra note 13.


25. See 4 W. BLACKSTONE, COMMENTARIES *225; Oliver, 466 U.S. at 170 (curtilage receives same protection as house).


Open fields [are those areas beyond the curtilage that] do not provide the setting for those intimate activities that the [Fourth] Amendment is intended to shelter from governmental interference or surveillance.

28. Note the difference here between the American common law and the English common law, which extended protections to all real property. Entick v. Carrington, 95 Eng. Rep. 807, 815-18 (K.B. 1765); see supra note 16.

29. 265 U.S. 57 (1924).

30. Id. The rule in Hester was based on explicit fourth amendment language: "[P]ersons, houses, papers, and effects," U.S. CONST. amend. IV, does not include open fields. In fact, "open fields" are per se unprotected. Hester, 265 U.S. 57 (1924); cf. Coolidge v. New Hampshire, 403 U.S. 443, 465-71 (1971); id. at 505-06 (Black, J., concurring and dissenting); id. at 521-22 (White, J., concurring and dissenting). The "open fields" exception is a different principle from the "plain view" doctrine. The plain view doctrine provides that warrantless seizure by police of contraband that comes within plain view during lawful searches or other observation of private areas may be reasonable under the Fourth Amendment, assuming the discovery is "inadvertent."

The "inadvertent" requirement means both a lack of advance knowledge of the location of particular evidence and a lack of intent to seize it by use of the doctrine as a pretext. Texas v.
The common law, however, has encountered problems in setting forth a clear test to distinguish curtilage from open fields. Such a test is critical given the tremendously different fourth amendment treatment afforded curtilage as opposed to open fields. Many different definitions have been proffered, but no satisfactory "bright-line" test has emerged.

B. Post-1967: *Katz* and the Reasonable Expectation of Privacy

In 1967, the landmark decision of *Katz v. United States* shifted the standards of fourth amendment protection away from strict property concepts, introducing the "reasonable expectation of privacy" standard.

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Probable cause is also required to invoke the plain view doctrine. Arizona v. Hicks, 480 U.S. 321 (1987).


32. Blackstone, for example, noted that the existence of a common fence is one way to measure curtilage. 4 W. BLACKSTONE, COMMENTARIES *225. Those areas beyond such a common fence are thereby defined as open fields. Areas that have been held to be open fields include: public highways and roads, United States v. Knotts, 460 U.S. 276, 282 (1983); farmland, Oliver v. United States, 466 U.S. 170, 179 (1984); woods behind a home, *id* at 174. This test is too simplistic. One wonders how the Blackstone test treats a house with more than one fence, or perhaps no continuous fence all the way around the house. For example, there are rarely continuous fences at the end of a driveway (although perhaps a gate), and yet one would intuitively expect to find the driveway within the curtilage.

More recent cases have recognized the inadequacy of the Blackstone test. In *Care v. United States*, 231 F.2d 22 (10th Cir.), *cert. denied*, 351 U.S. 932 (1956), the Tenth Circuit Court of Appeals stated, "Whether the place searched is within the curtilage is to be determined from the facts, including its proximity or annexation to the dwelling, its inclusion within the general enclosure surrounding the dwelling, and its use and enjoyment as an adjunct to the domestic economy of the family." *Id* at 25. See also, *Rakas v. Illinois*, 439 U.S. 128 (1978).

The Supreme Court, in *United States v. Dunn*, 480 U.S. 294 (1987), synthesized prior cases and set forth four factors for determining whether an area falls within the curtilage:

1. The proximity of the area . . . to the home;

2. Whether the area is . . . within an enclosure surrounding the home;

3. The nature of the uses to which the area is put; and

4. The steps taken by the resident to protect the area from observation by passersby.

*Id* at 301.

The court expressly stated that these factors were not a formula that yields the "correct" answers, but tools to see if an area is so intimately tied to the home itself that it should receive fourth amendment protection as curtilage. *Id*.


34. The origin of *Katz*’s protection of privacy interests as the fourth amendment standard is arguably seen in *Olmstead v. United States*, 277 U.S. 438, 474-78 (1928) (Brandeis, J., dissenting), overruled in *Katz*, 389 U.S. at 353. Justice Brandeis stressed the need for broad fourth amendment protection of defendant’s privacy interests, stating, “Whenever a telephone
In *Katz*, the FBI electronically eavesdropped on defendant as he used a public telephone booth to transmit wagering information.\(^{35}\)

The Court held that the Fourth Amendment “protects people, not places.”\(^{36}\) Therefore, what an individual “seeks to preserve as private, even in an area accessible to the public, may be constitutionally protected.”\(^{37}\) And, “[o]nce this much is acknowledged, . . . it becomes clear that the reach of [the Fourth] Amendment cannot turn upon the presence or absence of a physical intrusion . . . .”\(^{38}\)

Since Katz “justifiably relied” on the privacy of the phone booth, the FBI’s electronic wiretap and recording of calls was a “search and seizure” under the Fourth Amendment,\(^{39}\) despite the absence of physical trespass.\(^{40}\)

The reasonable expectation of privacy standard\(^{41}\) involves a two-prong inquiry.\(^{42}\) First, an individual must exhibit a subjective expectation of privacy, and second, that expectation must be one that society views as reasonable.\(^{43}\) Protection under the test requires compliance
with both prongs.\textsuperscript{44}

Due to the difficulty in proving state of mind, the first part of the \textit{Katz} test—the subjective expectation of privacy—must be manifested physically. Also, the physical manifestation requirement negates any theory of "knowing exposure."\textsuperscript{45}

In aerial surveillance cases, various lower courts are split, implementing two very different approaches to decide what behavior satisfies the physical manifestation requirement.

The first, a "ground-level" approach, requires protecting an activity from ground-level surveillance.\textsuperscript{46} Thus, a subjective expectation of privacy may be held reasonable if a party erects walls, fences, or anything intended to obstruct ground-level observation.\textsuperscript{47}

Other courts implement an "aerial" approach, requiring a party to shield activities from aerial observation before a subjective expectation of privacy will be found reasonable.\textsuperscript{48} This test is harder to meet than the ground-level test, since a party would, in many cases, be hard pressed to

\textsuperscript{44} \textit{Id.} at 361 (Harlan, J., concurring). The Court, while continuing to apply the two-prong test, has since recognized that it would not always be an adequate index of fourth amendment protection.

For example, if the Government were suddenly to announce on nationwide television that all homes henceforth would be subject to warrantless entry, individuals thereafter might not in fact entertain any actual expectation of privacy regarding their homes . . . . Similarly, if a refugee from a totalitarian country, unaware of this Nation's traditions, erroneously assumed that police were continuously monitoring his telephone conversations, a subjective expectation of privacy regarding the contents of his calls might be lacking as well . . . . [W]here an individual's subjective expectations had been "conditioned" by influences alien to well-recognized fourth amendment freedoms, [they] obviously could play no meaningful role in ascertaining what the scope of fourth amendment protection was. [I]n such cases, a normative inquiry would be proper.


\textsuperscript{45} That which "a person knowingly exposes to the public . . . is not a subject of fourth amendment protection." \textit{California v. Ciralo}, 476 U.S. 207, 213 (1986) (quoting \textit{Katz}, 389 U.S. at 351); \textit{see also} \textit{James v. United States}, 418 F.2d 1150 (D.C. Cir. 1969).


\textsuperscript{47} \textit{See} \textit{United States v. Van Dyke}, 643 F.2d 992 (4th Cir. 1981) (fences indicate a subjective expectation of privacy).

shield its activities from all possible aerial views. The party cannot satisfy the test absent this total shielding.\(^49\)

A court’s finding of a subjective privacy expectation triggers the objective expectation inquiry of \textit{Katz}: is the expectation “one that society is prepared to recognize as ‘reasonable’?”\(^50\) In other words, is the individual’s privacy expectation, viewed objectively, “justifiable” under the circumstances?\(^51\) Implementing the objective prong of the \textit{Katz} test requires balancing individual privacy rights against society’s legitimate law enforcement interests.\(^52\)

In considering the weight of the individual’s privacy interest, no single factor is conclusive.\(^53\) Courts have looked to the following factors:

1) The precautions taken by the person invoking the fourth amendment protection (\textit{i.e.}, were they of the sort customarily taken by those seeking privacy);\(^54\)

2) The way in which a person uses the location;\(^55\)

3) The Framers’ objections to the intrusion,\(^56\) and

4) The person’s property rights.\(^57\)

These factors suggest that the historic property line tests of the pre-\textit{Katz} period have survived as \textit{indicators} of post-\textit{Katz} reasonable expectation of privacy areas.\(^58\)


\(^{50}\) \textit{Katz} v. United States, 389 U.S. 347, 361 (1967) (Harlan, J., concurring).

\(^{51}\) Id. at 353.


\(^{54}\) See United States v. Chadwick, 433 U.S. 1, 11 (1977); \textit{Katz}, 389 U.S. at 352.


\(^{56}\) See \textit{Chadwick}, 433 U.S. at 7-9.

\(^{57}\) See Alderman v. United States, 394 U.S. 165 (1969); see also Rakas, 439 U.S. at 144 n.12 (since a property owner has the right to exclude others, he or she likely has a legitimate expectation of privacy in the property); \textit{id.} at 153 (Powell, J., concurring) (same); Patler v. Slayton, 503 F.2d 472, 478 (4th Cir. 1974) (“The maxim of \textit{Katz} that the Fourth Amendment protects ‘people not places’ is of only limited usefulness, for in considering what people can reasonably expect to maintain as private we must inevitably speak in terms of places.”); United States v. Roberts, 747 F.2d 537, 541-42 (9th Cir. 1984) (property line/curtilage analysis is initial inquiry in applying the \textit{Katz} test). \textit{But see} United States v. Broadhurst, 805 F.2d 849, 855 n.7 (9th Cir. 1986) (fourth amendment protection “turns on the degree of privacy which the individual is seeking to preserve, rather than on the ‘ancient concept of curtilage’”).

\(^{58}\) The seminal post-\textit{Katz} decision recognizing the survival of property line tests is \textit{Oliver} v. United States, 466 U.S. 170 (1984).

The \textit{Oliver} Court held that the “open fields” doctrine of \textit{Hester} v. United States, 265 U.S. 57 (1924), a property line concept, should be applied to determine whether a warrantless
II. Warrantless Aerial Surveillance Under the Fourth Amendment

In warrantless aerial surveillance cases with a valid subjective expectation of privacy, courts have utilized two approaches in determining whether a reasonable expectation of privacy exists. Under the first approach, the subjective expectation of privacy is per se reasonable, and thus warrantless surveillance is per se unreasonable under the Fourth Amendment.

Under the second approach, courts implement a balancing test. Different courts have applied various factors, but four factors commonly used are

1) Extent of compliance with minimum altitude regulations;

search was valid because it occurred in open fields. Justice Powell, writing for the majority, reaffirmed the rule in *Hester*, stating, "an individual may not legitimately demand privacy for activities conducted out of doors in fields, except in the area immediately surrounding the home." *Oliver*, 466 U.S. at 178.

If the area involved is outside the curtilage (i.e., in open fields), then, as a matter of law, there cannot be a legitimate expectation of privacy, and hence no fourth amendment protections extend. *Id.* at 180. The curtilage and open fields property lines clearly remain applicable after *Katz*.

The *Oliver* Court, however, limited the common law property line trespass standard in fourth amendment jurisprudence. The Court stated that simply because the government intrusion would be a trespass at common law, it was *not necessarily* a search under the Fourth Amendment. Trespass was held too broad a standard, and the existence of property rights inconclusive regarding expectations of privacy. Thus the Fourth Amendment may not be implicated even when trespass has occurred. *Id.* at 183.

The *Oliver* Court, in reaffirming *Hester*, concluded that the Fourth Amendment protects the curtilage. In light of the *Katz* test however, the Court's definition of curtilage was based on whether an individual had a reasonable expectation that an area should be treated as a home. *Id.* at 180. A central aspect of this determination, according to the Court, was whether the area harbored "intimate activity associated with the 'sanctity of a man's home and the privacies of life . . . .'" *Id.* (quoting *Boyd v. United States*, 116 U.S. 616, 630 (1886)).

59. See supra notes 46-49 and accompanying text for the two approaches generally used, "ground level" or "aerial," in deciding if a subjective privacy expectation exists.

60. People v. Ciraolo, 161 Cal. App. 3d 1081, 208 Cal. Rptr. 93 (1984), rev'd, 476 U.S. 207 (1986). This per se approach, however, is not a strict application of the *Katz* test, since under *Katz* two questions must be answered. To reason that "because a subjective expectation of privacy, therefore a reasonable expectation of privacy," does not inquire into society's objective view of the expectation of privacy.


Except when necessary for takeoff or landing, no person may operate an aircraft below the following altitudes: . . .
2) Commonness and frequency of plane overflights of the area; and
3) Duration of surveillance; and
4) Sensory-enhancing equipment used (i.e., telescopes, cameras, etc.)

A. The Supreme Court in Aerial Surveillance Cases

In 1986 the Supreme Court decided, for the first time, two aerial surveillance cases under the Fourth Amendment: *California v. Ciraolo* and *Dow Chemical Co. v. United States*. These two cases greatly impacted the *Katz* standard as applied to aerial surveillance cases, resulting in a narrowing of fourth amendment protection in this area. These cases were the primary predecessors of *Florida v. Riley*.

I. *California v. Ciraolo*

In *Ciraolo*, the police went to defendant's house after receiving an anonymous tip that defendant grew marijuana in his backyard. The police could not see into the yard because it was enclosed by two fences. The officers then obtained a private fixed-wing airplane for the specific purpose of observing Ciraolo's backyard. From an altitude of 1000
feet, the officers identified the marijuana plants, obtained a search warrant based on these observations, and seized the plants. The trial court denied Ciraolo’s motion to suppress the plants, and convicted the defendant for illegally cultivating marijuana.

The California Court of Appeal reversed, holding the warrantless aerial surveillance of defendant’s backyard unreasonable under the Fourth Amendment. The United States Supreme Court reversed, holding the warrantless aerial surveillance of a private residence’s curtilage from an altitude of 1000 feet valid under the Fourth Amendment.

The Ciraolo Court found Katz controlling. Under the two-prong test, Ciraolo met the subjective expectation of privacy test with respect to the curtilage, but the Court found this expectation “unreasonable.” The Court reaffirmed the curtilage doctrine, finding the yard within the curtilage of Ciraolo’s home. The Court, however, relied on three factors to find that although a person takes reasonable steps to protect the curtilage from some views, not all views of the curtilage are thereby foreclosed.

One factor was the availability of the airspace to the general public for air travel. The police viewed what “[a]ny member of the public... could have seen...” Additionally, the Ciraolo Court found that the police were situated legally under Federal Aviation Administration (FAA) regulations, and finally, the Court emphasized that the police conducted the observations in a “physically nonintrusive manner.”

2. Dow Chemical Co. v. United States

In Ciraolo’s companion case, Dow Chemical Co. v. United States, the Court also reaffirmed the curtilage doctrine, but held that no legitimate expectation of privacy attached to Dow’s 2000-acre manufacturing complex since it was not curtilage. Thus, the Court held that the Environmental Protection Agency’s (EPA) warrantless surveillance, using a sophisticated aerial mapping camera from altitudes of 1200, 3000, and 12,000 feet, was not a search under the Fourth Amendment.
In Dow, the EPA engaged in aerial surveillance without informing Dow. As soon as Dow discovered the observations, it sued to enjoin the surveillance as violating the Fourth Amendment. The district court, applying Katz, found a subjective expectation of privacy manifested by Dow's use of buildings and other enclosures to surround its open areas. The court proceeded to hold the subjective privacy expectation reasonable in light of trade secret protections restricting similar photography by Dow's commercial competitors. The district court thus granted the injunction.

The court of appeals reversed. Unlike the district court, the appellate court would have applied the "aerial" approach to determine whether Dow had a subjective expectation of privacy. Since Dow had not taken any precautions against aerial observation, the court stated that Dow likely had no subjective expectation of privacy. The court, however, rested its decision on other grounds. It accepted the subjective expectation of privacy finding of the district court and applied the second prong of the Katz test. The court viewed the area as more akin to "open fields" under Oliver v. United States than to a home or curtilage, and thus did not apply the curtilage doctrine to the area observed.

The Supreme Court affirmed, agreeing with the appellate court's exclusion of the area surveyed from curtilage:

The intimate activities associated with family privacy and the home and its curtilage simply do not reach the outdoor areas or spaces between structures and buildings of a manufacturing plant. The Dow Court, however, also refused to classify the area as "open fields." The land "can perhaps be seen as falling somewhere between 'open fields' and curtilage, but lacking some of the critical characteristics

80. Dow also alleged that the EPA had violated its statutory investigative authority, id. at 230, but that allegation is not relevant to this discussion.
84. Id. at 312-13.
86. Dow Chemical Co., 749 F.2d at 313-14.
III. Florida v. Riley

A. Factual Background

Deputy Sheriff Kurt Gell, of the Pasco County Sheriff’s office, acted upon an anonymous tip that marijuana was being grown on defendant Michael Riley’s property. Arriving at Riley’s mobile home, Gell could not view from ground level the contents of a greenhouse approximately ten to twenty feet behind the mobile home. A “DO NOT ENTER” sign was posted in front of the mobile home, and the greenhouse was enclosed on two sides by opaque walls. Trees, shrubs, and the mobile home itself obscured the view from the other sides.

Gell then obtained a helicopter and, at an altitude of 400 feet, circled over the property twice. As the helicopter circled, Gell made naked-eye observations of the greenhouse contents through openings in the sides. 
roof and sides. He concluded the greenhouse contained marijuana, and obtained a warrant based on these aerial observations. The subsequent search confirmed that marijuana was growing in the greenhouse, and Riley was charged with the manufacture and possession of marijuana under Florida law.

B. The Lower Court Decisions

The trial court granted Riley's motion to suppress the evidence, finding the warrantless aerial observation violated the Fourth Amendment. The court held that the greenhouse was within the curtilage, a constitutionally protected area. Further, the structure, and the roof, indicated a desire for privacy from aerial view. Riley, the court found, thus exhibited an actual and reasonable expectation of privacy in a constitutionally protected area, obtaining fourth amendment protection under the Katz test and curtilage doctrine.

The court of appeals reversed, relying on the prior Florida case of Randall v. State. The court stated that Riley's case differed from Randall "only in the fact that [Riley] had erected a roof over most of his greenhouse." The court held this difference irrelevant since both Randall and Riley manifested a reasonable expectation of privacy from aerial surveillance and the police were legally positioned.

The Florida Supreme Court reversed the appellate court and reinstated the motion to suppress granted by the trial court. In reversing, the Florida Supreme Court utilized the Katz two-prong test, finding that "as in Ciraolo, there is no question ... that the first prong of the Katz test

93. Id. Although there was dispute as to how the openings in the roof came to exist, the two missing roof panels resulted in approximately 10 percent of the roof area being exposed. Id.

94. Id.

95. The evidence seized included 44 marijuana plants found growing in the greenhouse. State v. Riley, 476 So. 2d 1354, 1355 (1985).


98. 458 So. 2d 822 (1984). In Randall, the police received a tip that the defendant was growing marijuana in his backyard, but could not see the plants from ground level because of a fence. The police identified the plants from a helicopter flying at a routine patrol altitude, obtained a warrant based on the observations, and seized the plants. Id. at 823-24. Despite finding a reasonable expectation of privacy from ground-level and aerial surveillance, the court concluded that aerial surveillance by the police from a legal location did not constitute an intrusion rising to the level of an impermissible search. Id. at 825.

99. 476 So. 2d at 1356.

100. Id.

has been met." The court also found, as in *Ciraolo*, that "the area in question constituted the curtilage," and therefore deserved a high degree of fourth amendment protection.

The Florida Supreme Court then distinguished *Ciraolo* and *Dow* in finding that Riley's expectation of privacy was reasonable, meeting the second prong of the *Katz* test. The court stated that *Ciraolo* stopped far short of sanctioning unlimited rights to aerial surveillance. Rather, it limited permissible observation "to the 'naked eye' from 'navigable airspace' at an 'altitude of 1000 feet' in a 'physically nonintrusive manner.'" The court distinguished *Riley* from *Ciraolo* and *Dow* on the grounds that helicopters hovering at 400 feet are different from fixed-wing aircraft flying at 1000 feet. The court observed that helicopter surveillance poses a peculiar risk to privacy, in that a person casually flying over the area in a fixed-wing aircraft could not just as easily "have seen everything that these officers observed" from their circling helicopter.

C. The United States Supreme Court

1. The Plurality Opinion

Justice White, writing for the plurality, reversed the Florida Supreme Court, holding that police surveillance by a helicopter 400 feet over respondent's greenhouse (curtilage) was not a search under the Fourth Amendment. The plurality, unlike the Florida Supreme Court, found *Ciraolo* controlling since the police, as in *Ciraolo*, were legally situated. The greenhouse was held within the curtilage of Riley's dwelling, unviewable

102. *Riley*, 511 So. 2d at 286. The court looked to the opacity of the greenhouse, the fence surrounding it, and the "DO NOT ENTER" sign as indicating Riley's subjective expectation of privacy.

103. Id. The greenhouse was held to be within close vicinity of the residence, and therefore within the purview of common law curtilage, following the definition set forth in *Oliver v. United States*, 466 U.S. 170, 180 (1984).

104. *Riley*, 511 So. 2d at 287.

105. Id. at 287-88 (citing Nat'l Org. for Reform of Marijuana Laws (NORML) v. Mullen, 608 F. Supp. 945 (N.D. Cal. 1985), and discussing with approval *People v. Sabo*, 185 Cal. App. 3d 845, 230 Cal. Rptr. 170 (aerial surveillance held unconstitutional on virtually identical facts to *Riley*), cert. denied, 481 U.S. 1058 (1986)).


107. See id. at 288.

108. The plurality consisted of Justices White, Rehnquist, Scalia, and Kennedy.

109. *Florida v. Riley*, 109 S. Ct. 693, 695 (1989) (plurality opinion). Because helicopters are not bound by the minimum altitudes for fixed-wing aircraft established by FAA regulations, the police were in "navigable airspace" for any member of the public flying in a helicopter. See statutes cited supra note 62.
from ground-level, like Ciraolo's yard. The plurality also held that Riley, like Ciraolo, manifested a subjective expectation of privacy from ground-level surveillance under the Katz test.

As in Ciraolo, however, the plurality went on to state that a subjective expectation of privacy from ground-level surveillance does not foreclose viewing from the air. Therefore, Riley did not manifest a reasonable expectation of privacy from aerial surveillance (i.e., the subjective expectation of privacy was not one that "society is prepared to recognize as 'reasonable'.") The plurality found that Riley, by failing to cover the entire roof of the greenhouse, left the contents "subject to viewing from the air." Effectively, Riley "knowingly expose[d]" the greenhouse contents, thereby exempting them from fourth amendment protection.

Moreover, the plurality stated that there is no indication that such helicopter flights were unheard of in Pasco County, and thus Riley could not reasonably have expected that his greenhouse would not be visible to those flying in navigable airspace, as in Ciraolo.

Finally, the plurality found no evidence that the helicopter interfered with Riley’s normal use of the greenhouse or other parts of the curtilage; "no intimate details connected with the use of the home or curtilage were observed, and there was no undue noise, no wind, dust, or threat of injury." Thus, the plurality found no fourth amendment violation.

2. Justice O'Connor's Concurrence

Justice O'Connor, in her concurrence, agreed that "police observation of the greenhouse in Riley's curtilage from a helicopter ... 400 feet [off the ground] did not violate an expectation of privacy 'that society is prepared to recognize as "reasonable."'" In her view, however, the plurality's approach overemphasized compliance with FAA regulations in determining the scope of fourth amendment protection. She argued

110. Riley, 109 S. Ct. at 696 (plurality opinion).
111. Id.
115. See id. at 696-97; cf. Ciraolo, 476 U.S. at 213 (quoting Katz, 389 U.S. at 351) ("What a person knowingly exposes to the public . . . is not a subject of fourth amendment protection.").
116. Riley, 109 S. Ct. at 696 (plurality opinion); see Ciraolo, 476 U.S. at 215.
117. Riley, 109 S. Ct. at 697 (plurality opinion). Note that this statement substitutes a test for the "physically nonintrusive" attribute of the observation in Ciraolo. Since the observation is found generally nonintrusive under this articulated standard, Ciraolo controls.
118. Id.
119. Riley, 109 S. Ct. at 697 (O'Connor, J., concurring) (quoting Katz, 389 U.S. at 361 (Harlan, J., concurring)).
that the FAA regulations were designed "to promote air safety not to protect [t]he right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures."  

Justice O'Connor rejected FAA-standard compliance as the relevant test. She argued that the relevant inquiry after Ciraolo was "whether the helicopter was in the public airways at an altitude at which members of the public travel with sufficient regularity that Riley's expectation of privacy from aerial observation was not 'one that society is prepared to recognize as "reasonable."' "  

She reasoned that flight in public airways is routine in today's society, so, as in Ciraolo, no reasonable expectation of privacy from observation from public airways is possible. Since "there is reason to believe that there is considerable public use of airspace at altitudes of 400 feet and above, and because Riley introduced no evidence to the contrary" in the lower courts, Justice O'Connor concluded Riley's expectation of privacy was unreasonable.

Justice O'Connor placed the burden of proof on the defendant to demonstrate the reasonableness of the privacy expectation and that the observation constituted a fourth amendment "search." In view of O'Connor's belief that flight in public airways is routine in our modern society, defendant's burden is substantial. To meet this burden, the defendant would have to show that public use of airspace at 400 feet is so rare that the public cannot be said to "generally use" such airspace; only then might aerial surveillance from such altitudes violate reasonable expectations of privacy, despite FAA-regulation compliance. After defining Riley's burden of proof, Justice O'Connor argued that the case should not be remanded since Riley had not introduced any evidence in the lower courts as to the amount of public use of the airways.

3. Justice Brennan's Dissent

Justice Brennan's dissent, joined by Justices Marshall and Stevens, was a scathing attack on the plurality's reasoning. The dissenters argued that the plurality acted as though Katz had never been decided. They claimed that the plurality "summarily conclude[d]" Riley's expectation...
of privacy was unreasonable because "[a]ny member of the public could legally have been flying over Riley's property in a helicopter at the altitude of 400 feet and could have observed Riley's greenhouse."\(^{128}\) The dissent claimed this was the wrong test: the Court should have examined whether a reasonable expectation of privacy could have existed. Justice Brennan argued that, under the plurality's test, the overflight frequency did not matter, since the expectation of privacy was defeated if one member of the public could have legally viewed the area.\(^{129}\) He continued, arguing that this was a poor standard since very few members of the public could have obtained a police officer's aerial view, and thus an expectation of privacy may have remained reasonable.

Justice Brennan further disparaged the plurality opinion for relying on flight safety regulations in defining the scope of fourth amendment protection. Additionally, he noted that the Supreme Court had consistently refused to equate police violation of law with fourth amendment infringement. Hence, he found it odd that the plurality relied so heavily on the legality of the officer's act.\(^{130}\)

Brennan, moreover, found no limit to the plurality's holding because FAA regulations set no minimum altitude for helicopters.\(^{131}\) The plurality's expressed limits of undue noise, wind, dust, or threat of injury,\(^{132}\) Brennan argued, have no place in fourth amendment jurisprudence; they give rise to possible tort remedies for inverse condemnation or nuisance. Justice Brennan concluded the Fourth Amendment need not protect against such intrusions.

Finally, Justice Brennan harshly criticized the plurality's "intimate details" exception\(^{133}\) as too vague and ambiguous. He accused the plurality of being results-oriented (\textit{i.e.}, finding no constitutional violation since this was a "drug case"), and argued that the Fourth Amendment cannot be so, since it was designed to protect everyone's security.\(^{134}\)

Justice Brennan criticized Justice O'Connor's rejection of the constitutional claim resulting from her belief that "considerable" public flying at this altitude occurred, and from Riley's failure to introduce "evidence to the contrary before the Florida courts."\(^{135}\) Brennan proposed, instead, either judicial notice of the helicopter flight frequency, or burden of proof allocation to the state (since it had greater access to the information) to show customary flight patterns and thus prove defendant's pri-

\(^{128}\) \textit{Id.} at 699-700 (Brennan, J., dissenting) (quoting plurality opinion, \textit{id.} at 697).
\(^{129}\) \textit{Id.} at 700.
\(^{130}\) \textit{Id.} at 700-01.
\(^{131}\) \textit{See} statutes cited \textit{supra} note 62.
\(^{132}\) \textit{Riley}, 109 S. Ct. at 697 (plurality opinion).
\(^{133}\) \textit{See supra} note 117 and accompanying text.
\(^{134}\) \textit{Riley}, 109 S. Ct. at 703 (Brennan, J., dissenting).
\(^{135}\) \textit{Id.} at 704 (quoting O'Connor, J., concurring, \textit{id.} at 699).
vacy expectation unreasonable.136

4. **Justice Blackmun’s Dissent**

In a dissent more narrowly focused than Justice Brennan’s, Justice Blackmun stated the question as “whether the helicopter surveillance over Riley’s property constituted a 'search' within the meaning of the Fourth Amendment.”137 Justice Blackmun phrased the essential inquiry as “whether Riley ha[d] a ‘reasonable expectation of privacy’ that no such surveillance would occur . . . .”138 He did not inquire whether the helicopter was in lawful airspace under FAA regulations,139 and noted that five justices agreed this was the proper approach.140 The same five justices, according to Justice Blackmun, agreed that the reasonableness of the expectation of privacy depended on the frequency of non-police helicopter flights at 400 feet. It was this factual point’s determination, Justice Blackmun suggested, that separated the justices.141

Justice Blackmun disliked Justice Brennan’s judicial notice approach to the determination. He felt that the Court should not adopt a national per se rule based on judicial notions alone.142 Rather, Justice Blackmun claimed, the record should have contained evidence on the subject.143

As to who carried the burden to introduce this evidence, Justice Blackmun would have imposed it on the prosecution to show the lack of any reasonable privacy expectation for surveillance below 1000 feet (that not covered by Ciraolo).144 Although the prosecution did not meet this burden, Justice Blackmun felt that the burden allocation issue previously was not clear, and thus he would have remanded the case to allow the prosecution to meet its burden.145

Justice Blackmun noted, on this point, that he and Justice O’Connor differed only in that O’Connor placed the burden on Riley, and would not allow him an opportunity to meet the burden on remand.146 Thus, he concluded, O’Connor joined the plurality’s view that no fourth amendment search occurred, and he dissented.147

136. Id.
137. Id. at 705 (Blackmun, J., dissenting).
138. Id.
139. Id.
141. Riley, 109 S. Ct. at 705 (Blackmun, J., dissenting).
142. Id.
143. Id.
144. Id.
145. Id. *But see* sources cited infra note 195.
146. Presumably because he did not try to do so in the Florida courts. *See id.* at 699 (O’Connor, J., concurring).
147. Id. at 705-06 (Blackmun, J., dissenting).
IV. Criticism of Riley's Holding and Analysis

A. Ciraolo Distinguished

When the Court held Ciraolo controlled in Riley, it both ignored several important differences between the two cases and misapplied the Katz test.

Ciraolo and Riley differ in one important fact. Ciraolo involved a fixed-wing aircraft, while Riley involved a helicopter. The Court held the two equal for inspection purposes since "private and commercial flight [by helicopter] in the public airways is routine" and there was no indication that such flights were unheard of in Pasco County, Florida. The Court thus concluded that Riley could not reasonably have expected that his greenhouse was protected from helicopter observation if the helicopter had been flying within the navigable airspace for fixed-wing aircraft. While such a conclusion may have been true, it did not relate to the case at hand. The helicopter was not within navigable airspace for fixed-wing aircraft—it was 100 feet below the lower limit for such aircraft.

Further, by holding the helicopter and fixed-wing craft equal, the Riley Court ignored crucial differences between the two aircraft.

First, a helicopter, unlike a fixed-wing aircraft, has an ability to hover. This gives passengers additional time to scan a particular area. The helicopter effectively becomes an aerial viewing platform, affording views otherwise unavailable. Also, by hovering, a helicopter allows passengers time to seek out small objects otherwise unviewable from constantly moving fixed-wing aircraft.

Further, the helicopter has the ability to move straight up and down. It therefore requires much less clear airspace to maneuver, whereas a fixed-wing aircraft that is forced to move horizontally and

148. Id. at 696 (plurality opinion) (quoting California v. Ciraolo, 476 U.S. 207, 215 (1986)).
149. Id.
150. Id.
151. See statutes cited supra note 62.
152. For purposes of this article, fixed-wing aircraft with the ability to hover, such as the Harrier or similar VTOL (Vertical Takeoff and Landing) aircraft, are ignored since they are primarily military aircraft. If such an aircraft were to someday be employed by law enforcement, it should be evaluated by the same fourth amendment standards as a helicopter because of its special flying abilities.
153. In the extreme case, one can imagine an area with just one possible view. In such a case, the helicopter could be positioned in just the right place to afford such a view, and could then hover to afford passengers and photographers a long look. This might not be possible with a constantly moving fixed-wing aircraft.
bank its turns requires much more clear airspace.\textsuperscript{155}

The crucial aspect of the analysis of \textit{Ciraolo} and \textit{Riley}, therefore, should not be that the helicopter and fixed-wing crafts are the same because public airway flight is so common. A helicopter has "truly unique capabilities,"\textsuperscript{156} and thus can be a more intrusive surveillance tool. Helicopter surveillance by law enforcement, therefore, deserves closer scrutiny since the dangers to fourth amendment liberties are greater.

The Supreme Court thus should have examined the differences in apparatus used before simply applying \textit{Ciraolo} to a helicopter surveillance case like \textit{Riley}. Fourth amendment protections should not vary with mere changes in police apparatus, and these protections should be construed broadly when such potentially intrusive devices as helicopters are used.

In addition to the difference in flying ability, another distinction between helicopters and fixed-wing aircraft can be drawn from the different definition of lawful altitudes for helicopters as compared with other aircraft under FAA regulations. In \textit{Ciraolo}, the aircraft flew at 1000 feet; in \textit{Riley}, the aircraft was 400 feet off the ground. The \textit{Riley} Court, while issuing a disclaimer,\textsuperscript{157} stated that \textit{Riley} was the same as \textit{Ciraolo} in that "[a]ny member of the public could legally have been flying over Riley's property in a helicopter at ... 400 feet and could have observed Riley's greenhouse. The police officer did no more."\textsuperscript{158} Further, the Court stated that "[w]e would have a different case if ... [flying the helicopter at 400 feet] had been contrary to law or regulation."\textsuperscript{159}

Despite the Court's disclaimer, the plurality intimately ties fourth amendment protection to FAA regulation compliance, a union rejected by the other five justices.\textsuperscript{160}

\textsuperscript{155} This attribute could be important. If the walls of a canyon, each 600 feet high, surrounded land to be observed, a plane could not survey the land at any lower than 600 feet (even disregarding FAA regulations). A helicopter, by contrast, could drop straight down \textit{into} the canyon and survey from any altitude.


\textsuperscript{157} Florida v. Riley, 109 S. Ct. 693, 697 (1989) (plurality opinion) ("This is not to say that an inspection of the curtilage of a house from an aircraft will always pass muster under the Fourth Amendment simply because the plane is within the navigable airspace specified by law.").

\textsuperscript{158} \textit{Id.} at 697.

\textsuperscript{159} \textit{Id.} at 696. Although the Court disclaims it, observation from navigable airspace (a legal vantage point) seems, under California v. \textit{Ciraolo}, 476 U.S. 207 (1986), Dow Chemical Co. v. United States, 476 U.S. 227 (1986), and now \textit{Riley}, automatically to pass constitutional muster. Even if non-automatic, it is clearly, in the words of the plurality, "\textit{of obvious importance} [in upholding such observation]." \textit{Riley}, 109 S. Ct. at 697 (emphasis added).

\textsuperscript{160} See \textit{supra} notes 139-140 and accompanying text.
The different treatment of helicopters and other aircraft under FAA regulations creates problems when fourth amendment protections are tied to these regulations.

First, the FAA minimum altitude regulations vary with changes in hazard level associated with population density. By tying fourth amendment protections to these regulations, greater fourth amendment protection exists in congested areas since surveillance must be conducted from farther away. Can it realistically be argued that mere changes of observation location within an area potentially as small as a county limits fourth amendment protection? The answer is no. The Fourth Amendment’s protections are not designed on a sliding scale to allow invasions in one area that are barred in another. The Amendment is a guarantor of each individual’s security, and it cannot grant one individual greater security merely because of fortuitous locale.

Second, the FAA regulations define “minimum safe altitudes.” The minimum altitudes specified relate expressly to potential obstacles encountered in flight. As Justice Brennan correctly noted, they are obviously safety regulations. As such, they should not be used as a yardstick to measure personal security, for they are unrelated to the security interests safeguarded by the Fourth Amendment.

Due to the different treatment of the two aircraft and the safety goals of the FAA regulations, the Riley Court should have been far more wary of holding Ciraolo, a fixed-wing aircraft surveillance case, controlling in Riley, a helicopter surveillance case, on the basis that the two craft were legally situated under FAA regulations.

Other factual differences between Ciraolo and Riley should have led the Court to distinguish the cases, rather than finding Ciraolo controlling in Riley.

Importantly from a fourth amendment perspective, the altitude differences between Ciraolo and Riley, 1000 feet and 400 feet, respectively, alter what is visible to the naked eye from 400 feet up, as opposed to 1000 feet. It is arguable that there is no reasonable expectation of privacy for objects viewable from 1000 feet up, because any object that can be seen clearly from 1000 feet away is likely so large that it cannot reasonably be expected to be concealed. It is “knowingly exposed” under Ciraolo.
The Court, by allowing the 1000-foot standard to be dropped to "400 feet by helicopter," allows a mere change in police apparatus to permit surveillance of significantly smaller objects otherwise unviewable. This causes severe problems for the curtilage doctrine. For example, a small item lying in the curtilage of a home, otherwise totally blocked from ground-level view and unviewable from 1000 feet, is now potentially visible to the police in helicopters at 400 feet. In such a case, it is difficult to say that the person keeping the item within the curtilage has no reasonable expectation of privacy attaching to it. By its holding, however, the Court effectively forces individuals to withdraw from their curtilage and to shelter objects within the confines of the home itself, behavior antithetical to the goals of the Fourth Amendment.

Justice Brennan also notes that the plurality's three apparent limits on surveillance—where it "interfere[s] with ... normal use of ... the curtilage"; where "intimate details connected with the use of the home or curtilage [are observed; or where there is] undue noise, ... wind, dust, or threat of injury"—are simply too vague to be effective. Additionally, the limits may vary with changes in location. The liberty guaranteed by the Fourth Amendment was designed to protect "the people" from an intrusive government, not just those in certain localities. The mere fact that the government does not disturb surrounding areas during its invasion is irrelevant to whether people's legitimate expectations of privacy are intruded upon.

Moreover, it is arguable that one's personal farming habits, conducted within a greenhouse, are "intimate details connected with the use

169. While permissible vision-enhancing devices would allow viewing of extremely small objects from high altitude, one wonders whether a court concerned with safeguarding privacy expectations might not bar such a device. Dow Chemical Co. v. United States, 476 U.S. 227, 238 (1986), indicated that certain high-tech equipment not generally available might be "constitutionally proscribed absent a warrant." The limits of this statement are untested, but Supreme Court support apparently exists for limiting overly intrusive high-tech equipment.

170. While it may be argued that only those with something to hide will be so affected, one must bear in mind that such an argument is contrary to the goals of personal security from governmental invasion underlying the Fourth Amendment. Rather, as Justice Brennan points out, the Fourth Amendment protects everyone's interest in personal security and privacy. "The question is not whether you and I must draw the blinds before we commit a crime. It is whether you and I must discipline ourselves to draw the blinds every time we enter a room, under pain of surveillance if we do not." Florida v. Riley, 109 S. Ct. 693, 703 (1989) (Brennan, J., dissenting) (quoting Amsterdam, Perspectives on the Fourth Amendment, 58 MINN. L. REV. 349, 403 (1974)).

171. Riley, 109 S. Ct. at 697 (plurality opinion).

172. See id. at 702-03 (Brennan, J., dissenting). Note also that there are other tort remedies that protect such invasionary interests, like nuisance or inverse condemnation. See id.

173. See U.S. CONST. amend. IV; see also supra text accompanying notes 161-162.
of the home or curtilage." Protecting an individual's expectation that he or she will not be watched by the government during such activities is at the heart of the Fourth Amendment. As technology advances, Justice Brennan's hypothetical regarding the silent, noiseless helicopter becomes more likely. The plurality's expressed limits of undue wind, noise, dust or threat of injury neither reflect the principles of personal security embodied in the Fourth Amendment and the *Katz* test, nor are they likely to stand the test of time. Further, lower courts face difficulties in quantifying the "undue" standards the Court proffered. The Fourth Amendment is thereby subjected to case by case, ad hoc adjudication, and protections are certain to vary by region. This cannot be the optimum result when personal security interests are at stake.

B. The Plurality's Misapplication of the *Katz* Reasonable Expectation of Privacy Test

The *Riley* decision, by following *Ciraolo*, further abandoned the two-prong *Katz* test for a reasonable expectation of privacy in aerial surveillance cases. The Court also ignored well-reasoned lower court decisions applying *Katz* to aerial surveillance cases. Under a proper application of the *Katz* test and subsequent case law, the *Riley* decision would have been very different, while remaining reconcilable with the *Ciraolo* decision.

The *Riley* Court found that Riley had a subjective privacy expectation from ground-level surveillance. The trees, shrubs, mobile home, and opaque walls surrounding the greenhouse and blocking its view, along with a "DO NOT ENTER" sign in front, all indicate that Riley expected privacy from ground-level observation, and took steps to prevent such observation. Under *Ciraolo* and *Dow*, however, preclusion of ground-level observation is not enough, since not all views are thereby foreclosed, and no expectation of privacy exists from aerial surveillance. The greenhouse itself, however, provides a key fact showing a privacy expectation from aerial surveillance, and a key distinction from *Ciraolo* and *Dow*.

Unlike both *Ciraolo* and *Dow*, Riley had built a shelter over the property at issue, albeit not a totally enclosed one. This shelter, nonexistent in both *Ciraolo* and *Dow*, manifested Riley's intent to foreclose even aerial viewing.

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174. *Riley*, 109 S. Ct. at 697 (plurality opinion). Although the Court seems to imply that more *controversial* behavior is the key to invoking this standard, that is not altogether clear from the opinion.

175. *Id.* at 702-03 (Brennan, J., dissenting).

176. *See infra* notes 183-191 & 193 and accompanying text.

177. *Compare* United States v. Dunn, 480 U.S. 294 (1987) (police trespass over fences evincing a subjective expectation of privacy was upheld, but under "open fields" exception).
The missing panels in the greenhouse roof, ten percent of the structure's roof area, are deemed by the plurality to constitute knowing exposure to the public flying overhead. Under the plurality's rule, if the contents of a sheltered area are viewable through any holes, the expectation of privacy is negated by "knowing exposure." This approach is exceedingly grudging and contrary to the necessarily broad protections properly afforded by the Fourth Amendment. "Knowing exposure" to aerial surveillance is qualitatively different from "knowing exposure" to sunlight and air—necessary items in a greenhouse environment. To charge Riley with "knowledge" that his greenhouse could be warrantlessly aerially surveyed simply because he provided his plants with necessities of life creates an extremely narrow scope of fourth amendment protection. This view is contrary to the general historical view that the Fourth Amendment should be construed broadly to protect against the "gradual depreciation" of such personal security rights.

Thus, under proper application of the Katz test, bearing the purposes of the Fourth Amendment closely in mind, Riley manifested a subjective privacy expectation from aerial surveillance under Katz. This result should hold, under the facts of Riley, even when one implements the stringent "aerial" approach to the Katz inquiry.

The plurality in Riley also misconstrues the second prong of the Katz test—whether the subjective expectation is reasonable. The Court states, in determining whether Riley held a reasonable privacy expectation, that "there is no indication that such flights are unheard of in Pasco County, Florida." This leads the plurality to conclude that no reasonable privacy expectation existed.

The Court's analysis and subsequent conclusions are flawed. First, in forming its conclusion, the plurality relies on statistics that are, at best, of questionable value. The statistics cited in footnote two of the Court's opinion sound impressive. Upon close examination, however, they are not meaningful. The stated number of helicopters in police use is a nine-year-old figure, and the plurality uses these general, national statistics to justify its result in Pasco County, Florida. This leads the plurality to conclude that no reasonable privacy expectation existed.

The first use of the helicopter by police was in New York in 1947, and today every state in the country uses helicopters in police work. As of 1980, there were 1500 of such aircraft used in police work. E. Brown, The Helicopter in Civil Operations 79 (1981). More than 10,000 helicopters, both public and private, are registered in the United States. Federal Aviation Administration, Census of U.S. Civil Aircraft, Calendar Year 1987, p. 12, and there are an estimated 31,697 helicopter pilots. Federal Aviation Administration, Statistical Handbook of Aviation, Calendar Year 1986, p. 147. 1988 Helicopter Annual 9.

181. Id. at n.2:

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Court's statement of the number of helicopters registered in the United States is misleading because it does not indicate those registered in Florida, much less those based in or near Pasco County. The determinative issue, however, is the reasonableness of the privacy expectation of the Pasco County residents. Further, the estimated number of helicopter pilots, without more, does nothing to show the unreasonableness of Riley's privacy expectation from aerial surveillance in his Florida home. In fact, with only 31,697 helicopter pilots of the approximately 240 million United States residents, one may logically conclude that the "public" certainly does not "generally use" such airspace. At most, only about .01 percent of the "public" is a helicopter pilot! For the plurality to base its conclusions on such misleading and relatively meaningless data is questionable.

By concluding, without meaningful support, that Riley had no reasonable privacy expectation in a historically protected area such as the curtilage, the plurality disregarded many well-reasoned lower court decisions, both federal and state, that have isolated certain factors in a post-Katz reasonable expectation of privacy inquiry for aerial surveillance. These factors include the

1) Altitude of the aircraft;  
2) Intensity of the surveillance;  
3) Equipment used in surveillance;  
4) Frequency of other flights over the area;  

182. Even with a full complement of passengers, say 10 per helicopter, only .14 percent of the "public" flies overhead in helicopters.  
183. For a more detailed analysis of various factors used in determining the constitutionality of aerial surveillance, see Note, Aerial Surveillance Withstands Fourth Amendment Scrutiny, 23 TULSA L.J. 259 (1987).  
186. Law enforcement is generally given broad latitude in this area, so long as the equipment is available to the general public. See Dow Chemical Co. v. United States, 476 U.S. 227, 238 (1986) (upholding use of a sophisticated aerial mapping camera, stating that even with such a sophisticated device "the photographs here are not so revealing . . . as to raise constitutional concerns"); supra notes 65 & 169 and accompanying text.  
187. See United States v. Allen, 633 F.2d 1282 (9th Cir. 1980) (no reasonable expectation of privacy from surveillance by routine coast guard flights), cert. denied, 454 U.S. 833 (1981); Florida v. Riley, 109 S. Ct. 693 (1989) (if defendant could show overflights were rare, his or
5) Steps taken to protect privacy;  
6) Level of open entry access to the area other than by defendant;  
7) Randomness of the search;  
8) Location/nature of the property under surveillance.

Proper application of the second prong of the *Katz* test, as Justice Blackmun correctly points out, requires inquiry into the actual frequency of non-police helicopter flights at an altitude of 400 feet. Whether Riley exposed the contents of his greenhouse to the public should be ascertained with reference to where the public reasonably would be expected to be. A line of well-reasoned post-*Ciraolo* cases *sustain privacy rights* within the home or curtilage when the observations are made from a lawful vantage point outside the curtilage, but from an area *not expected* to be used by the public at large, or from an area where one would not reasonably expect the public to have been. Even the petitioner State of Florida agreed that Riley and his rural Pasco County

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188. See Dow Chemical Co. v. United States, 476 U.S. 227 (1986); California v. Ciraolo, 476 U.S. 207 (1986); United States v. Broadhurst, 805 F.2d 849 (9th Cir. 1986); United States v. Allen, 633 F.2d 1282 (9th Cir. 1980), *cert. denied*, 454 U.S. 833 (1981). The above cases held the fact that defendant took steps to block ground-level views did not render aerial surveillance unconstitutional. But see sources cited *supra* notes 46-47 for the "ground-level" approach; People v. Sabo, 185 Cal. App. 3d 845, 230 Cal. Rptr. 170 (defendant's expectation of privacy was reasonable because of legitimate attempt to block aerial views), *cert. denied*, 481 U.S. 1058 (1986).

189. The greater the open entry access by people other than the defendant, the fewer reasonable expectations of privacy exist. See People v. Sneed, 32 Cal. App. 3d 535, 541, 108 Cal. Rptr. 146, 150 (1973); Dean v. Superior Court of Nevada County, 35 Cal. App. 3d 112, 115, 110 Cal. Rptr. 585, 588 (1973).

190. The less random the search, the less fourth amendment protection afforded. See United States v. Allen, 633 F.2d 1282, 1290 (9th Cir. 1980) (where justification exists for focused surveillance, as opposed to random surveillance, legitimacy under the Fourth Amendment increases), *cert. denied*, 454 U.S. 833 (1981); People v. Agee, 200 Cal. Rptr. 827, 837 (1984) (random aerial surveillance is analogous to the system in a police state and tends to violate the Fourth Amendment).

191. Several lower courts have carefully differentiated between observations of open fields (upheld) and curtilage (struck down), since warrantless police viewing by air of areas they cannot see from the ground violates reasonable expectations of privacy historically inherent in curtilage. See People v. Cook, 41 Cal. 3d 373, 382, 710 P.2d 299, 305, 221 Cal. Rptr. 499, 505 (1985) (fourth amendment rights to be free from warrantless searches are not waived simply because all views are not blocked or because the public may occasionally glance down); *Agee*, 200 Cal. Rptr. at 829 (there is a constitutional right of privacy from state surveillance in curtilage which cannot be invaded by ground or air unless the standards of the Fourth Amendment are met).


neighbors had no reason to anticipate low-altitude helicopter overflights in the area. 194

Given the broad protection historically afforded the curtilage by the Fourth Amendment, and the concession by the State that an expectation of privacy was legitimate in Riley's area, Riley should have satisfied the second prong of the Katz test. Katz was designed to safeguard the very interest that the State conceded Riley reasonably possessed.

The plurality considered no data on the above subjects. In such a situation, the proper result under Katz would be, at a minimum, for the Court to remand the case to allow proof on this critical aspect of the Katz test. As for which party bears the burden of proof on this issue, prior case law would impose the burden on Riley to show that helicopters did not actually fly over his home, and thus that his privacy expectation was reasonable. 195 In any event, the Court should have paid closer attention to the factors highlighted by the many lower court decisions on the subject. These courts have far greater experience in formulating standards for aerial surveillance cases than has the Supreme Court. No good reason exists for the Court not to at least consider the lower courts' reasoning.

By merely following Ciraolo as the ultimate authority on aerial surveillance law, the Riley plurality, along with Justice O'Connor, continues to cut into the narrowing scope of fourth amendment protection in aerial surveillance cases, and moves further away from the proper inquiries under Katz for protecting fourth amendment security interests.

V. Questions Raised by the Riley Decision

Several questions are raised by the Riley decision which lower courts must address in future aerial surveillance cases.

The first is whether any vitality remains in the curtilage doctrine. Despite the Court's statement that Riley's greenhouse was within the curtilage of his home, the Court disregarded lower court cases distinguishing such observation from observation of "open fields" and upheld the warrantless surveillance. Implicit in this holding is a firmer belief than initially expressed in Ciraolo that if the area observed, even if curtilage, is in "open view," such observation does not constitute an ille-


195. Rakas v. Illinois, 439 U.S. 128, 131 n.1 (1978) ("The proponent of a motion to suppress has the burden of establishing that his own fourth amendment rights were violated by the challenged search or seizure."); accord Rawlings v. Kentucky, 448 U.S. 98, 104-05 (1980); Simmons v. United States, 390 U.S. 377, 389-90 (1968); Jones v. United States, 362 U.S. 257, 261 (1960). But cf. both Justice Brennan's and Justice Blackmun's burden allocation to the prosecution, supra notes 136 & 144-145, respectively, and accompanying text. Nowhere does either Justice explain, however, why the above-cited cases would not control the burden allocation.

196. See supra notes 27-31 & 191.
Following Riley, unless care is taken to block all aerial as well as ground-level views, no fourth amendment protection will attach to the curtilage. This holding runs counter to the historical aims of the Fourth Amendment, as well as the underlying Katz test. An individual, under Katz, was never required to foreclose all views to manifest a privacy expectation. Now, however, one sees that potentially very small holes may negate such expectations. The curtilage doctrine has therefore effectively, though not expressly, been abandoned as a determinative factor in the protections afforded by the Fourth Amendment in aerial surveillance cases.

The Riley Court does leave room for reviving the curtilage doctrine. The prospective limiting of the holding to situations where no "intimate details" were viewed during the surveillance, with an expansive definition of the as yet undefined "intimate details," restores protection to the curtilage by protecting activities within it. The breadth of the definition that lower courts attach to "intimate details" remains to be seen, but to remain faithful to the traditional scope of fourth amendment protections, an expansive definition seems quite appropriate. Any activity reasonably susceptible of involving personal privacy interests should likely be protected. That is, any activity that could be performed in a manner traditionally believed "private" ought to receive protection. One must keep in mind that the Framers, in drafting the Fourth Amendment, attempted to bar an intrusive government. With the rapidly decreasing judicial protection of this goal in aerial surveillance cases, any reasonably broad interpretation of the Court's opinion that is possible should be entertained. To do otherwise is to satisfy oneself that the Fourth Amendment can be cut back in the name of some governmentally designated "noble cause," such as the "war on drugs." The rights granted by the Fourth Amendment were not designed to yield to governmentally designated causes. In fact, fear of government intrusion into private lives motivated the Fourth Amendment's original adoption.

The second question likely to arise regards who bears the burden of proof for showing the reasonableness of the privacy expectation. Although several justices differ as to which party they would allocate the burden, Justice O'Connor's assignment to the proponent of the motion to suppress (defendant) seems the most forceful in light of past precedent. Justice Brennan's burden assignment to the government is well-reasoned, both due to the state's greater access to customary flight pat-

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198. See supra notes 48-49, infra notes 207-209 and accompanying text for a discussion of the problems that arise under this type of standard.
199. See supra notes 171-175 and accompanying text for a full discussion of this limitation on the holding.
200. See supra note 195 and accompanying text.
tern information and the fact that "it is unclear whether the prosecution is a product of an unconstitutional, warrantless search." His argument might in fact persuade a lower court that is concerned with policy and practicality questions of burden of proof allocation. His allocation best aids the "truth seeking" process regarding reasonableness of privacy expectations, and simultaneously serves the personal liberty goals of the Fourth Amendment. Forcing the government to show that defendant's privacy expectation was unjustified may serve as a deterrent to warrantless government invasion in the first place. However, neither his opinion nor Justice Blackmun's discusses the prior cases imposing the burden on the defendant. Following Riley, it would appear that Justice O'Connor's view prevails under stare decisis—defendant will likely have the burden of proof to show his or her expectation of privacy was reasonable.

Also left undecided is the question whether FAA standards are proper for measuring the reasonableness of an individual's privacy expectation. The plurality effectively says yes, despite its disclaimer. The other five justices, however, reject such a standard, implying that mere legal positioning may not be sufficient to defeat a Katz reasonable expectation of privacy claim for curtilage observed. But, the composition of the current court, as well as the disposition of the Riley case without remand, effectively places the entire Katz standard of the reasonable expectation of privacy from warrantless aerial surveillance in doubt. The court neither made the proper inquiry under Katz's second prong nor sought proof (via remand) of the crucial information for such inquiry. One must therefore conclude, under Riley, that compliance with FAA regulations possesses more than "obvious importance" in defeating a reasonable privacy expectation claim.

As subsequent cases implement the Riley decision, fourth amendment protections are jeopardized. As technology improves, or more simply as police switch to helicopters for aerial surveillance, the limits on warrantless aerial surveillance will continue to descend to the "undue" noise, wind, dust, or threat of injury limits. It is doubtful that lower courts will agree on the conditions that meet those criteria. As technology advances even further, as at least Justices Brennan, Marshall, and Stevens believe it may, the Riley limits on aerial surveillance could be-
come altogether meaningless.  

VI. Conclusion

The Court would do well to recognize the problems of its approach to aerial surveillance cases. The Court should retreat from its "not all views are thereby foreclosed" standard as not in keeping with the necessarily broad construction of the Fourth Amendment as a protector of individuals' security interests, and listen to itself as well as the lower courts. The better standards for evaluating fourth amendment protections, in light of the Framers' desire to protect personal liberty and security, revolve around a "ground-level" approach to the physical manifestation requirement of the subjective privacy expectation, or at least a standard of "reasonableness" in taking steps to block aerial observation.

The Court's broad interpretation of Ciraolo and the resultant narrowing of fourth amendment protections against warrantless aerial surveillance in Riley lead to a time in which the government can, and will, be able to fly low and unobtrusively, looking down on an individual's private activities. Such constriction of the rights guaranteed by the Fourth Amendment are the realization of the concerns of the Supreme

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206. For example, police may implement a single-person rocket pack which does not produce "undue" noise, wind, dust, or threat of injury. Fourth amendment protection, hinging on individual privacy expectations, cannot be permitted to turn on such technological advances.


208. The Supreme Court itself, in Dow Chemical Co., 476 U.S. at 236, stated, "it could hardly be expected that Dow would erect a huge cover over a 2000-acre tract to manifest its subjective expectation of privacy." It is then disingenuous to find no reasonable expectation of privacy unless virtually all views are foreclosed!

209. See generally Dean v. Superior Court of Nevada County, 35 Cal. App. 3d 112, 116, 110 Cal. Rptr. 585, 588 (1973) ("Horizontal extensions of the occupant's terrestrial activity form a more realistic and reliable measure of privacy than the vertical dimension of altitude."); People v. Cook, 41 Cal. 3d 373, 382-83, 710 P.2d 299, 305, 221 Cal. Rptr. 499, 505 (1985) (fourth amendment rights to be free from warrantless searches are not waived simply because all views are not blocked or because the public may occasionally glance down); People v. Sabo, 185 Cal. App. 3d 845, 230 Cal. Rptr. 170 (observation unconstitutional because of legitimate attempt to block aerial views), cert. denied, 481 U.S. 1058 (1986); United States v. Cuevas-Sanchez, 821 F.2d 248 (5th Cir. 1987) (surveillance from positions not normally used by the public violates reasonable privacy expectations); Dow Chemical Co., 536 F. Supp. 1355, 1365 (E.D. Mich. 1982) ("This court is not prepared to conclude that . . . Dow must build a dome over . . . [its property] before it can be said to have manifested . . . an expectation of privacy."); Lorenzana v. Superior Court, 9 Cal. 3d 626, 636-37, 511 P.2d 33, 41, 108 Cal. Rptr. 585, 593 (1973);

Surely our state and federal Constitutions and the cases interpreting them foreclose a regression into an Orwellian society in which a citizen, in order to preserve a modicum of privacy, would be compelled to encase himself in a light-tight, air-proof box. The shadow of 1984 has fortunately not yet fallen upon us.
Court over 100 years ago, in *Boyd v. United States*. That Court wisely recognized that the Fourth Amendment must be interpreted broadly, to avoid continued narrowing of its protections. "A close and literal construction, deprives [constitutional provisions for the security of persons and property] of half their efficacy, and leads to a gradual depreciation of the right, as if it consisted more in sound than in substance." The current Supreme Court would do well to listen to the voices of its own past, and stop the Orwellian prophecy before it drops out of the sky upon us all.

*By Jon Gavenman*