Electronic Tracking Devices and the Fourth Amendment: Knotts, Karo, and the Questions Still Unanswered

Clifford S. Fishman

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ELECTRONIC TRACKING DEVICES AND THE FOURTH AMENDMENT: KNOTTS, KARO, AND THE QUESTIONS STILL UNANSWERED

Clifford S. Fishman*

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Visual surveillance is probably the second oldest investigative technique known to man.¹ Such surveillance has two basic forms: overt and covert. Overt surveillance has its uses. The visible presence of a uniformed police officer, for example, usually deters the would-be criminal, if only temporarily.

Covert visual surveillance, on the other hand, is far more useful to the investigator. The ability to observe and follow a suspect, unseen or unnoticed by him, enables the investigator to catch the perpetrator in the act of committing a crime, or to track the conspirator to his confederates or to his cache of contraband.

The traditional methods of covert visual surveillance are well known. Binoculars permit observation from a distance. Stealth or the anonymity of plain clothes permit surveillance up close, albeit with a greater risk of detection. Recently, advances in technology have provided investigators with alternatives unavailable even a few years ago. Electronic tracking devices, for example, make it possible for investigators to follow a suspect over great distances, and to monitor the location of particular objects, with little risk that the detectives will be detected.

Recently, the nation’s courts have struggled to fit the use of such devices within the framework of the Fourth Amendment’s ban against unreasonable searches and seizures.² The courts have faced such difficult questions as:

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¹ According to one Source, interrogation is an even older investigative technique. See Genesis 3:11:13.

² Since 1975, there have been more than 60 reported cases addressing these issues. See, e.g., United States v. Butts, 710 F.2d 1139, 1147 (5th Cir. 1983), rev’d, 729 F.2d 1514, cert. denied, 105 S. Ct. 181 (1984) (attaching an electronic “beeper” to the interior of an aircraft constitutes a “search” within the meaning of the Fourth Amendment); United States v. Sheikh, 654 F.2d 1057, 1071 (5th Cir. 1981), cert. denied, 455 U.S. 991 (1982) (using a beeper to trace a parcel of heroin and to determine when the parcel was opened is not a violation of the Fourth Amendment); United States v. Michael, 645 F.2d 252, 259 (5th Cir.), cert. denied, 454 U.S. 950, reh’g denied, 454 U.S. 1117 (1981) (installing and monitoring a beeper on the exterior of a vehicle to discover a defendant’s “drug manufacturing apparatus” does not transgress the Fourth Amendment); United States v. Shovea, 580 F.2d 1382, 1387-88 (10th Cir.), cert. denied, 439 U.S. 986 (1978), cert. denied, 440 U.S. 908 (1979) (if an electronic tracking device is attached to a vehicle without a court order, but the attachment can be justified by probable cause and exigent circumstances, such attachment does not violate the Fourth Amendment).
when does the use of an electronic tracking device constitute a "search"; under what circumstances is a warrant required; and what safeguards and restrictions must such a warrant contain?

In each of the last two years, the United States Supreme Court has decided a case requiring the application of the Fourth Amendment to such devices. In 1983, in United States v. Knotts, a unanimous Court agreed that the use of an electronic tracking device, or "beeper," to follow a drum of chloroform being driven on public roads does not constitute a search. In July of 1984, in United States v. Karo, the Court held that it also does not constitute a search for law enforcement officials to install a beeper into a container of chemicals with the consent of the seller but without the knowledge of the purchaser. The Court also held, however, that it does constitute a search, for which a warrant of some kind is required, to monitor the beeper after the container has come to rest in a location where a person enjoys Fourth Amendment protection.

The Karo decision is puzzling in many respects. For example, despite the absence of a valid warrant, the agents in Karo monitored the beeper as it passed through at least four different private residences, including the one from which incriminating evidence was seized; yet, the Court reversed the lower courts' suppression of the fruits of the beeper surveillance. The Court stressed several times the need for a "warrant" to authorize monitoring a beeper inside a suspect's home; nevertheless, despite the Fourth Amendment's unequivocal mandate that "no warrant shall issue, but upon probable cause," the Court expressly held open the question whether such a warrant could be issued upon the less demanding showing of a reasonable suspicion.

Knotts and Karo leave unanswered several other significant issues. Does it constitute a search to install a beeper into or onto someone else's property (for example, an automobile) without the owner's consent? Where is the precise dividing line between the warrantless monitoring that Knotts and Karo held not to be a search, and the kind of monitoring that Karo holds must be authorized by a warrant? Is probable cause required for such a warrant, or will a reasonable suspicion suffice, and in either event, how is a court to determine whether the appropriate standard has been satisfied? How will the courts apply, to a form of surveillance radically different from traditional searches and seizures, constitutional and statutory law governing the issuance and contents of warrants?

This article will examine the Knotts and Karo decisions, analyze the unanswered questions relating to the use of electronic tracking devices, and out-

line legislation that might best resolve those questions and strike a proper balance between the often conflicting values of individual privacy and effective law enforcement.

I. THE DEVICE: DEFINITIONS

To understand the Fourth Amendment implications of an electronic tracking device, it is first important to understand what such a device can and cannot do.

An electronic tracking device—also called a ‘beeper,’ ‘beacon,’ or ‘transponder’—is a miniature, battery-powered radio transmitter that emits a recurrent signal at a set frequency. When monitored by directional finders, the beeper provides information as to the location and movement of the object to which it is attached. A beeper is incapable of transmitting conversation or recording sounds. For this reason, beepers do not fall within the definition of wiretapping devices.

Two aspects of this definition merit further comment.

1. “Miniature.” To describe a beeper as a “miniature transmitter” may leave some readers with the impression that such a device could be slipped unnoticed into a jacket pocket or hatband. Beeper technology may someday reach this point, but it has not yet done so. During oral argument before the Supreme Court in the Karo case, counsel for the government displayed what he described as a typical beeper. It consisted of the device itself, appearing to be somewhat larger than a pack of extra-long cigarettes, and batteries of approximately the same size, implanted in a Styrofoam case.

2. “Beeper” and “Transponder.” Although there are similarities between beepers and transponders, they differ in several significant respects. A beeper utilized by the Drug Enforcement Administration operates on one watt of power—as compared to five watts for a walkie-talkie—and sends out continuous signals. When law enforcement agents monitor a beeper’s signals from two different points, by using principles of triangulation, they can determine the beeper’s approximate location. A transponder, on the other hand, is utilized primarily to track the location of airplanes, which are required by the Federal Aviation Administration to be equipped with such devices. A transponder emits signals only in response to a signal sent from a radar station. The radar equipment determines the plane’s location by calculating the time it takes for the transponder to respond to the initial signal.

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5. Butts, 710 F.2d at 1142-43.
The usefulness of a beeper or transponder in complementing visual surveillance is obvious. If such a device is installed in or on an automobile, ship or airplane, it becomes much easier for surveillants to follow that vehicle. Because it is no longer necessary to keep the target vehicle constantly in sight, there is less likelihood that those who are tailing it will be noticed. If the operator of the targeted vehicle manages to “lose” his followers, the device makes it much more likely that they can find the vehicle again, either in transit or after it has reached its destination.7

Similarly, if a beeper is installed in an object, investigators can follow that object wherever it is taken by monitoring the beeper. Once it has arrived at a particular location, by periodically spot-monitoring the beeper, investigators can ascertain whether the object has been taken elsewhere. Thus, in a limited sense, the beeper permits an investigator to “see” into a private place where a “beepered” object has been taken, to determine whether it is still there.8 Furthermore, some beepers are capable of transmitting additional information. For instance, if a particularly sophisticated beeper is installed in a package that is then sealed, the beeper will alter its signal when the package is later opened. Such a beeper enables the investigator to “see” what is being done to the package in the privacy of someone’s home, office, or other location.

To facilitate the analysis of the issues presented by beeper surveillance, it is helpful to develop a working vocabulary of terms that will be used frequently. The following definitions are offered:

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7. According to the government’s reply brief in Karo, supra note 6, under normal operating conditions, a beeper's signal can be monitored for a distance of two-to-four miles on an open road, and for up to twenty miles away in the air. In congested urban areas, interference with the reception of the beeper's signals may reduce its effective range to about two blocks. Reply Brief for the United States at 8 n.6, Karo.

8. The government asserted in Karo that it is often impossible for monitoring agents to determine whether the beeper (and its host object) is inside a particular premises or only in the vicinity of the premises. Brief for the United States at 25, Karo.

[A]gents can ascertain that the beeper is located somewhere in or around a particular structure or vehicle, but in the usual case they cannot determine its precise resting place without exposing themselves to detection. Thus, as a practical matter, a beeper ordinarily does not even disclose whether it has been taken inside a residence. Id.

The government further stated:

On a sidewalk, within 25 to 50 feet of a residence, agents may be able to ascertain whether a beeper is broadcasting from the front or back of a house, or from the right or left side of the structure. In order to avoid detection, however, agents monitor the signals from a position where they are out of sight of the suspects. Thus, as was the case here . . . the agents often do not get close enough to determine whether a beeper is inside or outside of particular premises. Id. at 9 n.6. The government emphasized this fact in arguing that monitoring a beeper after the host object has arrived at a residence or other premises is not a search. See infra note 231.
Consensual installation. Installation of a beeper into or onto an object, such as a drum of "precursor chemicals" or a vehicle, with the consent of the current owner of the item, that is thereafter sold or rented to the unwitting target of the surveillance.\footnote{In \textit{Karo}, the Supreme Court held that such installation and sale does not constitute either a search or a seizure. \textit{Karo}, 104 S. Ct. at 3301-02. For a detailed analysis of this aspect of the \textit{Karo} decision, see \textit{infra} notes 69-121 and accompanying text.}

Monitoring. Use of the beeper to determine the movement and location of, and sometimes additional evidence concerning, the object or vehicle into which the beeper has been installed. In \textit{Knotts} and \textit{Karo}, the Court implicitly divided beeper monitoring into three discrete categories: in-transit monitoring, general vicinity monitoring, and private location monitoring.\footnote{These terms and definitions are those of this author and not the Court's.}

\textit{In-transit monitoring}. Monitoring a beeper from the time and place it was installed into an object or vehicle until that object or vehicle has reached its apparent, or at least its initial, destination.\footnote{In \textit{Knotts}, the Supreme Court held that if the beeper was lawfully installed in the first place, in-transit monitoring does not constitute a "search" and, therefore, need not be justified by probable cause or reasonable suspicion, nor authorized in advance by a search warrant or other court order. \textit{Knotts}, 460 U.S. at 281-84. For a detailed discussion of this aspect of the \textit{Knotts} decision, see \textit{infra} notes 166-84 and accompanying text.}

\textit{General vicinity monitoring}. Conducting ground or aerial beeper surveillance to determine the general vicinity, but not the precise private location, to which the beepered object has been taken. The need for such monitoring might arise if, despite in-transit monitoring, the investigators lose track of the beepered object while it is in transit. In the \textit{Knotts} case, for example, in-transit monitoring did not provide the information the investigators sought because they lost both visual and beeper contact with the beepered object while it was in transit. They relocated it only when a helicopter equipped with a monitor picked up the signal after the object already had arrived at its destination in the general vicinity of the defendant's cabin.\footnote{The Supreme Court in \textit{Knotts} held that such monitoring, which enabled the officers to determine the general vicinity to which the object had been taken, was in essence, no more than a continuation of in-transit monitoring; hence, it did not constitute a search. \textit{Knotts}, 460 U.S. at 285. \textit{See infra} notes 285-87 and accompanying text.}

Alternatively, agents who have tracked a beepered object to a particular location subsequently may learn that the object is no longer there. In \textit{Karo}, the agents, confronted with this situation, monitored the beeper to ascertain that the object had been moved to a commercial storage facility. They did not, however, use the beeper to determine the particular locker in which the object had been placed.\footnote{In \textit{Karo}, the Court held that such monitoring did not intrude upon the defendants'}

\textit{Private location monitoring}. Monitoring that reveals whether the beeper...
and its host object are inside a particular private location (such as a home, office, or rented storage facility) where one or more individuals enjoy expectations of privacy protected by the Fourth Amendment.\footnote{14}

Precursor chemicals. Unregulated chemicals, lawful to possess, that are necessary ingredients in the manufacture of illicit drugs.

Signal altering beeper. A beeper designed to alter the speed of its signals upon the opening of the package in which it has been installed.

Trespassory installation. Installation of a beeper into or onto an object (such as a vehicle) without the consent of someone who has authority to give such consent. In practice, such installations are effected either by attaching a beeper to the outside or undercarriage of a vehicle, or by entering the vehicle and installing the beeper inside.\footnote{15}

II. BEEPERS AND THE FOURTH AMENDMENT: AN OVERVIEW

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.\footnote{16}

If evidence is obtained in a manner that violates a defendant’s Fourth Amendment rights, the prosecutor is not permitted to utilize that evidence at trial to establish that defendant’s guilt.\footnote{17} This principle, known as the

right to privacy in the locker and therefore did not constitute a search. \textit{Knotts}, 104 S. Ct. at 3306. \textit{See infra} notes 285-87 and accompanying text.

\footnote{14} The Supreme Court in \textit{Karo} held that private location monitoring of a beeper does constitute a search for which a warrant of some as yet unspecified character is required. \textit{Karo}, 104 S. Ct. at 3296. \textit{See infra} notes 226-50 and accompanying text.

\footnote{15} Some courts consider all trespassory installations, whether interior or exterior, to be a “search,” that is, an intrusion into the vehicle owner’s legitimate expectation of privacy; other courts have held that interior installation is a search, but that exterior installation is not. \textit{See infra} notes 151-57 and accompanying text.

\footnote{16} U.S. CONST. amend. IV. The Fourth Amendment was proposed and ratified primarily to preclude the issuance of general warrants and writs of assistance, forms of official intrusiveness with which the American colonists had become quite familiar in the decades before the Revolution. For a brief overview of the history of the Fourth Amendment, see 1 W. \textit{LaFave, Search and Seizure} 3-6 (1978 & Supp. 1984). For more detailed accounts, see generally J. \textit{Landyński, Search and Seizure and the Supreme Court} ch. 1 (1966); N. \textit{Lasson, The History and Development of the Fourth Amendment to the United States Constitution} (1937).

\footnote{17} \textit{Mapp v. Ohio}, 367 U.S. 643 (1961); \textit{Weeks v. United States}, 232 U.S. 383 (1914). It is important to remember that the fact that evidence was seized unlawfully does not automatically bar its use at trial; only those defendants whose personal Fourth Amendment rights were
“Fourth Amendment exclusionary rule,” is intended to deter law enforce-
ment officials from conducting unlawful searches and seizures by depriving
them of the incentive to do so.\textsuperscript{18}

\subsection*{A. Searches and Seizures}

Before a defendant may bring a challenge under the Fourth Amendment
exclusionary rule, he or she must show that either a “search” or a “seizure”
occurred.\textsuperscript{19} The scope of the Fourth Amendment thus depends upon the
definitions given to the words “search” and “seizure.” Each of these terms
has been the subject of extensive judicial analysis.

Analysis of the term “seizure” has focused primarily on what constitutes a
seizure of a person,\textsuperscript{20} but the Supreme Court has also debated what consti-
tutes the seizure of inanimate objects. The Court in 1984 set forth the rule:
“A ‘seizure’ of property occurs when there is some meaningful interference
with an individual’s possessory interests in that property.”\textsuperscript{21} Presumably, if

\begin{itemize}
  \item Nix v. Williams, 104 S. Ct. 2501, 2508-10 (1984); United States v. Ceccolini, 435 U.S.
        at 657-58. In \textit{Mapp}, the Court emphasized other purposes for the rule as well, including “the
        imperative of judicial integrity,” 367 U.S. at 659. More recently, the Court has stressed the
deterrent rationale as the primary reason for the rule’s existence.
        while police officers search his premises constitutes a “seizure” within the meaning of the
        Fourth Amendment); Reid v. Georgia, 448 U.S. 438, 440-41 (1980) (per curiam) (the detention
        of a defendant based solely on the fact that he fits the “drug courier profile” constitutes an
        unlawful “seizure” in violation of the Fourth Amendment); United States v. Mendenhall, 446
        U.S. 544, 551-54 (1980) (the brief detention of a defendant does not constitute a “seizure”
        within the meaning of the Fourth Amendment if she is merely stopped for identification and is
        free to proceed on her way); Brown v. Texas, 443 U.S. 47, 50 (1979) (the detention of a defendant
        constitutes a “seizure” within the meaning of the Fourth Amendment if he is not free to
        walk away); United States v. Brignoni-Ponce, 422 U.S. 873, 878 (1975) (the detention of a
        defendant by restraining his freedom to proceed on his way constitutes a “seizure” within the
        meaning of the Fourth Amendment); Cupp v. Murphy, 412 U.S. 291, 294 (1973) (the detention
        of a defendant against his will solely to take fingernail scrapings constitutes a “seizure”
        within the meaning of the Fourth Amendment); Davis v. Mississippi, 394 U.S. 721, 726-27
        (1969) (the detention of a defendant solely to obtain his fingerprints constitutes a “seizure” and
        is thus subject to Fourth Amendment constraints); Terry v. Ohio, 392 U.S. 1, 16, 19 n.16
        (1968) (the detention of a defendant that restrains his freedom to walk away constitutes a
        “seizure” within the meaning of the Fourth Amendment).
\end{itemize}
there has been no "meaningful interference" with the individual's "possessory interests in that property," no "seizure" has occurred. While this definition seems straightforward enough, in United States v. Karo, the Court divided sharply on its application.\textsuperscript{22}

The term "search" has been the subject of even greater judicial scrutiny. Until 1967, the Supreme Court consistently held that police investigative conduct did not constitute a "search" unless that conduct physically invaded a defendant's premises, property or possessions.\textsuperscript{23} In Katz v. United States,\textsuperscript{24} however, the Supreme Court declared that the interests protected by the Fourth Amendment were not limited to those of property and freedom from physical trespass. Rather, the Court, per Justice Stewart, emphasized:

[T]he Fourth Amendment protects people, not places. What a person knowingly exposes to the public, even in his own home or office, is not a subject of Fourth Amendment protection. But what he seeks to preserve as private, even in an area accessible to the public, may be constitutionally protected.\textsuperscript{25}

Although "the Fourth Amendment protects people, not places," the real question, as Justice Harlan stressed in his concurring opinion, is "what pro-
Electronic Tracking Devices

[The Fourth Amendment] affords to those people."\(^{26}\) Justice Harlan reasoned that Fourth Amendment protection exists only if two conditions exist: “[F]irst, that a person ha[s] exhibited an actual (subjective) expectation of privacy and, second, that the expectation be one that society is prepared to recognize as ‘reasonable.’”\(^{27}\)

Justice Harlan’s formula has since become the basic definition of the rights protected by the Fourth Amendment.\(^{28}\) Thus, if a defendant seeks to suppress evidence or information obtained by a law enforcement official, he must first establish that the official engaged in conduct that intruded upon his “reasonable (or ‘legitimate,’ or ‘justifiable’) expectation of privacy.” If the defendant can establish that there was in fact such an intrusion, a Fourth Amendment search has occurred, and the defendant is entitled to challenge the legality of that search. If the prosecutor cannot demonstrate that the investigators had obtained a valid search warrant supported by probable cause,\(^{29}\) or that the circumstances fit within an exception to the warrant or probable cause requirements,\(^{30}\) the information or evidence obtained as a

\(^{26}\) Id. at 361 (Harlan, J., concurring).

\(^{27}\) Id.

\(^{28}\) Justice Stewart’s majority opinion includes the observation that while the Fourth Amendment “protects individual privacy against certain kinds of governmental intrusion, . . . its protections go further, and often have nothing to do with privacy at all.” Id. at 350. In subsequent decisions, however, the Harlan concurrence has supplanted the Stewart majority opinion as the definitive statement of what the Fourth Amendment protects. See, e.g., Smith v. Maryland, 442 U.S. 735, 740 (1979) (quoting Katz, 389 U.S. at 361 (Harlan, J. concurring) (“Consistent with Katz, this Court uniformly has held that the application of the Fourth Amendment depends on whether the person invoking its protection can claim a ‘justifiable,’ a ‘reasonable,’ or a ‘legitimate expectation of privacy’ that has been invaded by government action.”)). See also Arkansas v. Sanders, 442 U.S. 753, 762 n.9 (1979); Rakas v. Illinois, 439 U.S. 128, 143 n.12 (1978); United States v. White, 401 U.S. 745, 752 (1971) (plurality opinion). See generally Note, A Reconsideration of the Katz Expectation of Privacy Test, 76 Mich. L. Rev. 154 (1977).

\(^{29}\) The Fourth Amendment provides, in part, that “no warrants shall issue, but upon probable cause, . . . particularly describing the place to be searched, and the . . . things to be seized.” U.S. Const. amend IV. Two Supreme Court decisions handed down in June of 1984, however, have rendered the probable cause and particular description requirements less absolute than they previously had been adjudged. In United States v. Leon, the Court held that the Fourth Amendment exclusionary rule does not bar a prosecutor from using evidence obtained by law enforcement officers acting in objectively reasonable reliance on a search warrant that was issued by a detached and neutral magistrate but that was ultimately found to be not supported by probable cause. 104 S. Ct. 3405 (1984). In Massachusetts v. Sheppard, the Court held that the Fourth Amendment exclusionary rule does not require exclusion of evidence seized by police officers pursuant to a warrant subsequently held to be invalid because of technical errors on the part of the issuing judge, 104 S. Ct. 3424 (1984). Despite these decisions, a valid warrant supported by probable cause is still the constitutional norm. Leon and Sheppard merely create reasonable and narrow exceptions to that norm.

\(^{30}\) For example, in many circumstances, a warrant is not needed to authorize a search of an automobile, so long as probable cause exists. See, e.g., Chambers v. Maroney, 399 U.S. 42,
result of the intrusion must be suppressed.\textsuperscript{31} If, on the other hand, the defendant is unable to establish that the investigators' conduct intruded upon his reasonable expectation of privacy, then no search or seizure occurred, no Fourth Amendment protected interest was infringed upon, and the defendant is not permitted to challenge the manner in which the evidence or information was obtained.\textsuperscript{32} Thus, in deciding whether the use of a beeper violated a defendant's Fourth Amendment rights, a key question is whether the use of the beeper constituted an intrusion into the defendant's reasonable expectation of privacy. If use of the beeper constitutes such an intrusion, its use must be measured against Fourth Amendment standards. If the use of the beeper does not constitute an intrusion, \textit{no} justification for its use is required.

\textbf{B. The Issues Involved}

The use of the beeper involves at least two, and sometimes as many as four, separate activities on the part of the police. To determine the admissibility of evidence derived from the use of a beeper, it is necessary to examine the Fourth Amendment implications of each action. In addition, several other issues, emerging from beeper case law, must be analyzed.

1. Installation. Does installation of a beeper constitute a "search" or "seizure"? Assuming installation constitutes a search or seizure, what factual justification (reasonable suspicion, probable cause) must exist at the time of installation? Under what circumstances must the police obtain a search warrant or other court order to authorize an installation?

2. "In-transit" monitoring.\textsuperscript{33} Assuming the beeper was installed law-

\textsuperscript{31} See supra notes 17-18 and accompanying text.

\textsuperscript{32} Thus, it does not constitute a "search" if a person surreptitiously tape records or transmits his conversations with a suspect. United States v. White, 401 U.S. 745 (1971). Similarly, it does not constitute a "search" if a telephone company, acting at the request of the police, utilizes a pen register to make a record of the local numbers dialed from a suspect's home. Smith v. Maryland, 442 U.S. 735 (1979). In each case, the Court held that the suspect had voluntarily shared his words or conveyed information; hence, he assumed the risk that the recipient of this information might be recording it for the police. For a further discussion of White, see Fishman, \textit{The Interception of Communications Without a Court Order: Title III, Consent, and the Expectation of Privacy}, 51 \textit{St. John's L. Rev.} 41, 47-50 (1976) [hereinafter cited as \textit{Interception of Communications}]. For a further discussion of Smith, see Fishman, \textit{Pen Registers and Privacy: Risks, Expectations, and the Nullification of Congressional Intent}, 29 \textit{Cath. U.L. Rev.} 557, 565-74, 581-89 (1980) [hereinafter cited as \textit{Pen Registers}].

\textsuperscript{33} For a definition of this term, see supra text accompanying note 11.
fully, does it constitute a search to monitor the beeper while the vehicle or object in which it was installed is in transit from the place of installation to some other location?

3. “General vicinity” monitoring. If the investigators lose track of the beeper at some point during an investigation, does it constitute a search if the agents monitor the beeper to determine the general vicinity (but not the precise private location) to which the beepered object has been taken?

4. “Private location” monitoring. Does it constitute a search to utilize the beeper to determine the precise private location to which the beepered object has been taken? Once that location has been ascertained, does it constitute a search to monitor the beeper to determine that the object is still there—or that it is no longer there? If private location monitoring does constitute a search, must a warrant or other court order first be obtained to authorize such monitoring?

5. Factual justification. Is probable cause, or only a reasonable suspicion, a prerequisite to lawful installation or monitoring? In either event, how is the presence or absence of the requisite quantum of proof to be ascertained in various circumstances?

6. Contents of warrant. Assuming the police are required to obtain a search warrant or other court order prior to installing or monitoring a beeper, what restrictions and provisions should or must such a court order contain?

7. Application of the exclusionary rule. Even if the police in a particular beeper surveillance case failed to comply with the appropriate Fourth Amendment standards, it is still necessary to determine whose rights, if any, were violated thereby, and whether events subsequent to the surveillance but

34. For a definition of this term, see supra text accompanying notes 12-13.

35. For a definition of this term, see supra text accompanying note 14.

36. See, e.g., United States v. Taylor, 716 F.2d 701, 704-06 (9th Cir. 1983); United States v. Bentley, 706 F.2d 1498, 1503-04 (8th Cir. 1983); United States v. Cooper, 682 F.2d 114, 115-16 (6th Cir.), cert. denied, 103 S. Ct. 112 (1982); United States v. Ellery, 678 F.2d 674, 677-78 (7th Cir. 1982); United States v. Moore, 562 F.2d 106, 113 (1st Cir. 1977), cert. denied, 435 U.S. 926 (1978); Dunivant v. State, 155 Ga. App. 884, 888, 273 S.E.2d 621, 625 (1980). Each of these cases discusses whether probable cause existed to install a beeper into a container. See infra notes 453-66 and accompanying text. See also United States v. Flynn, 664 F.2d 1296, 1302-06 (5th Cir.), cert. denied, 456 U.S. 930 (1982); United States v. Kupper, 693 F.2d 1129, 1130-33 (5th Cir. 1982); United States v. Holmes, 521 F.2d 859, 863, 866-67 (5th Cir. 1975), aff'd by equally divided court en banc, 537 F.2d 227 (5th Cir. 1976); United States v. Cofer, 444 F. Supp. 146, 150 (W.D. Tex. 1978). These cases discuss whether probable cause existed permitting installation or attachment of a beeper into or onto a vehicle.

37. Several courts have opined that such a warrant must contain a termination date but have not specified the maximum allowable period. See, e.g., Butts, 710 F.2d at 1150-51; United States v. Bailey, 628 F.2d 938, 944-46 (6th Cir. 1980); Cofer, 444 F. Supp. at 149-50. See infra notes 426-41 and accompanying text.
prior to the seizure of incriminating evidence cured the taint of the surveillance.\textsuperscript{38}

In \textit{United States v. Knotts},\textsuperscript{39} the Court focused on the second and third issues, concluding that in-transit monitoring did not constitute a search\textsuperscript{40} and that, at least in some circumstances, neither did general vicinity monitoring.\textsuperscript{41} In \textit{United States v. Karo},\textsuperscript{42} the Court addressed the first issue, ruling that consensual installation and subsequent sale of a beepered can of ether was neither a search nor a seizure.\textsuperscript{43} With regard to issue number three, \textit{Karo} reaffirmed and extended the \textit{Knotts} holding that general vicinity monitoring is not a search.\textsuperscript{44} The Court in \textit{Karo} also addressed the fourth issue, holding that private location monitoring is a search, subject to the Fourth Amendment warrant requirement.\textsuperscript{45} Further, \textit{Karo} cast an intriguing mixture of light and confusion upon issues five and six. The Court pointedly refused to decide whether probable cause, or only reasonable suspicion, is required to justify issuance of a beeper warrant.\textsuperscript{46} The Court volunteered advice, however, on what such a warrant might contain.\textsuperscript{47} In addition, the Court in \textit{Karo} applied the exclusionary rule (issue number seven) in a manner that may permit investigators to manipulate their way around the warrant requirement imposed in that case.\textsuperscript{48}

Although the Supreme Court rendered the \textit{Knotts} decision some sixteen months prior to \textit{Karo},\textsuperscript{49} this article will begin by examining the first issue addressed in \textit{Karo}, that is, the constitutional implications of consensual installation of a beeper into a chemical container and the subsequent sale of that container to a suspect.\textsuperscript{50} It will then discuss the law that has emerged

\textsuperscript{38} See \textit{infra} notes 307-27 and accompanying text.
\textsuperscript{39} \textit{Knotts}, 460 U.S. 276 (1983).
\textsuperscript{40} Id. at 282-84. See \textit{infra} notes 166-84 and accompanying text.
\textsuperscript{41} \textit{Knotts}, 460 U.S. at 284-85. See \textit{infra} notes 282-87 and accompanying text.
\textsuperscript{43} Id. at 3302.
\textsuperscript{44} Id. at 3306.
\textsuperscript{45} Id. at 3303-05. See \textit{infra} notes 226-50 and accompanying text.
\textsuperscript{46} \textit{Karo}, 104 S. Ct. at 3305 n.5. See \textit{infra} notes 420-87 and accompanying text.
\textsuperscript{47} \textit{Karo}, 104 S. Ct. at 3305. See \textit{infra} notes 427-28 and accompanying text.
\textsuperscript{48} \textit{Karo}, 104 S. Ct. at 3306-07. See \textit{infra} notes 328-76 and accompanying text.
\textsuperscript{49} \textit{Knotts} was decided on March 2, 1983; \textit{Karo} was decided on July 3, 1984.
\textsuperscript{50} The discussion of \textit{Karo} is divided and sandwiched around the \textit{Knotts} decision for several reasons. First, installation is the initial step in beeper surveillance; how a particular installation is treated under the Fourth Amendment significantly affects how the subsequent issues are to be resolved. If a particular installation is held to be unlawful in the absence of a warrant, for example, this initial illegality may irremediably taint all information derived from installation and monitoring. See \textit{infra} notes 315-20 and accompanying text. Second, while the \textit{Knotts} decision noted the importance of the installation question, that issue was not before the Court in \textit{Knotts}, and, except for one concurring opinion, none of the Justices in \textit{Knotts} addressed the issue, 460 U.S. at 279 n.*. Hence, detailed familiarity with \textit{Knotts} is not required
to date with regard to installation of beepers in other contexts, including the trespassory (nonconsensual) attachment of a beeper onto a suspect's vehicle. Next, the article will analyze the Court's categorization and treatment of the different classes of monitoring: the Knotts decision's treatment of in-transit monitoring; Karo's holding regarding private location monitoring; and the Knotts-Karo discussion of general vicinity monitoring. Thereafter, the article will examine the Court's application of the Karo rule. Finally, it will analyze, and offer answers to, several as yet unanswered questions about beeper surveillance.

III. INSTALLATION

A substantial number of beeper cases, including United States v. Knotts and United States v. Karo, involve consensual, nontrespassory installation of beepers into containers of precursor chemicals that are thereafter sold to suspects. In holding that such installation is neither a search nor a seizure and therefore not regulated by the Fourth Amendment, Karo resolved an issue that had sharply divided the nation's courts, and suggests how issues relating to installation in other contexts will be resolved. Discussion of the installation issue will, therefore, begin with an analysis of that aspect of the to understand the Karo treatment of the installation issue. Finally, Karo's discussion of installation is readily separable, both factually and analytically, from the other issues decided or discussed therein.

51. 460 U.S. at 276.
53. For a definition of "consensual installation," see supra text accompanying note 9.
54. Every court that has addressed the issue has held that the consensual installation of a beeper into a container of precursor chemicals prior to its delivery to the suspect does not constitute a search. United States v. Karo, 710 F.2d 1433 (10th Cir. 1983), rev'd on other grounds, 104 S. Ct. 3296 (1984); United States v. Lewis, 621 F.2d 1382, 1388 (5th Cir. 1980), cert. denied, 450 U.S. 936 (1981); Moore, 562 F.2d at 111; United States v. Knotts, 662 F.2d 515, 517 n.2 (8th Cir. 1981), rev'd on other grounds, 460 U.S. 276 (1983); Bailey, 628 F.2d at 943-44; United States v. Hufford, 539 F.2d 32, 33-34 (9th Cir.), cert. denied, 429 U.S. 1002 (1976); State v. Hendricks, 43 N.C. App. 245, 258 S.E.2d 872, 878 (1979) (inference); see also Dunivant, 155 Ga. App. at 884, 273 S.E.2d at 625 (endorsing the conclusions reached in Moore and Hufford, incorrectly cited as United States v. Martyniuk, but stating its holding in somewhat different terms).

Two courts had even so held where, prior to installation, the purchaser had made a down payment for the chemicals. Lewis, 621 F.2d at 1388 ("Arcane distinctions in contract or property law do not control for Fourth Amendment purposes"); Hufford, 539 F.2d at 33.

There was considerable disagreement, however, concerning whether search or seizure occurs at the moment the purchaser takes possession of the container. Two federal courts had held that this does not constitute a search or seizure. Knotts, 662 F.2d at 517 n.2; Hufford, 539 F.2d at 33-34. Two other federal courts and one state court, however, held that it does. Moore, 562 F.2d at 111; Karo, 710 F.2d at 1334; Hendricks, 43 N.C. App. at 258 S.E.2d. at 878 (1979). For other pre-Karo discussions of the issue, see Bailey, 628 F.2d at 938; Dunivant, 155 Ga. App. at 884, 273 S.E.2d at 621; Lewis, 621 F.2d at 1388-89.
**Karo** decision. The discussion will next focus on issues that have arisen or may arise regarding other consensual installations. Those issues involve installation of beepers into vehicles that are then rented to suspects; the installation of beepers into contraband by United States Customs officials; and the use of beepers in what might be called “inherently tainted transactions.” This section will conclude with a discussion of trespassory, that is, nonconsensual, installations of beepers.

### A. Consensual Installation

#### 1. United States v. Karo: Precursor Chemicals

Consensual installation of a beeper into a container of precursor chemicals prior to its delivery to the suspect does not raise any Fourth Amendment issues unless it is categorized as a “search” or a “seizure.” In *United States v. Karo*, the Court held that it is neither.

In *Karo*, federal Drug Enforcement Administration (DEA) agents learned that three suspects, Karo, Horton, and Harley, had ordered fifty gallons of ether from a government informant, Muehlenweg, who operated a photography related business in Albuquerque, New Mexico. Muehlenweg told the agents that the ether was to be used to extract cocaine from clothing that had been imported into the United States. The agents obtained a court order, later held to be invalid because the agents had made deliberate misrepresentations in the application for the order, authorizing the installation of a beeper into one of the cans and the monitoring of the beeper. With their

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55. For the aspects of *Karo* dealing with private location monitoring, see infra notes 208-81 and accompanying text.

56. See supra note 19 and accompanying text.

57. The three conspirators paid the informant $1,000 apiece for 10 five-gallon cans of ether (and perhaps additional chemicals or equipment). Brief of Harley and Horton in Opposition [to Granting Ceritorari] at 4-5 n.2, *Karo*.

58. Cocaine had been dissolved into a liquid solution and absorbed into clothing, which had then been imported into the United States; the conspirators planned to use the ether to extract the cocaine from the clothing. Brief for the United States at 3-4, *Karo*; Brief for Respondents Harley and Horton at 3, *Karo*.

59. *Karo*, 710 F.2d at 1435. The search warrant application named the informant as the target of the investigation, even though he was providing information against the true targets, the respondents. It listed seizures of evidence that had little or nothing to do with respondents; it allegedly implied that the investigation focused upon the manufacture of methamphetamines, although the agents, in fact, had probable cause to believe the ether would be used to precipitate cocaine from imported clothing. Brief for Respondents Harley and Horton in Opposition [to Petition for Certiorari] at 15, *Karo*. These misstatements were included in the affidavit in a spectacularly misguided effort to preserve the informant’s confidentiality. Brief for United States at 4 n.3, *Karo*. The suppression hearing judge concluded that the affidavit was “as phony as a three-dollar bill.” Brief of Respondents Harley and Horton In Opposition [to Petition for Certiorari] at 2, *Karo*. The government did not appeal that ruling.
informer's consent, they substituted their own can containing a beeper for one of the cans in the shipment and then had all ten cans painted to assure that they looked alike. Between September 20, 1980, when the agents observed Karo pick up the ether from the informer Muehlenweg, and February 10, 1981, the agents utilized a variety of surveillance techniques—including, but not limited to, beeper surveillance—to track the ether to three private houses, two rented lockers, the driveway of a fourth home, and, ultimately, a fifth house, where incriminating evidence was finally seized.

The suppression hearing judge suppressed the fruits of the beeper surveillance. The Tenth Circuit affirmed, holding, inter alia, that the installation and subsequent sale of the beepered can of ether to Karo constituted an unlawful "intrusion" into Karo's Fourth Amendment rights. The Supreme Court disagreed. Justice White, writing for a six-member majority, concluded that the installation and sale constituted neither a "search" nor a "seizure," and therefore did not violate Karo's Fourth Amendment rights.

a. "Search"

The Supreme Court began its analysis by observing that "the actual placement of the beeper into the can violated no one's Fourth Amendment rights." At the time of installation, the ether belonged to the informer, and the can in which it was installed belonged to the DEA. Thus, the Court reasoned, "by no stretch of the imagination could it be said that respondents had any legitimate expectation of privacy in [the can]" when the beeper was installed. In so holding, the Court was merely restating the obvious:

60. See supra note 59 and accompanying text. For the sequence of events after Karo took possession of the cans of ether, see infra notes 208-17 and accompanying text.

61. Karo, 710 F.2d at 1438-39. In so holding, the circuit court did not explicitly state whether it was categorizing this intrusion as a search or as a seizure. Given that the Fourth Amendment protects against "unreasonable searches and seizures," and not against "unreasonable intrusions" per se, this shortcoming leaves the circuit court opinion open to criticism; indeed, the Supreme Court did not pass up the opportunity. Karo, 104 S. Ct. at 3302. For the full text of the Fourth Amendment, see supra note 16 and accompanying text. See also supra note 29.


63. Id. The Court further observed that even if the beeper had been installed in one of the original cans, the informer's consent "was sufficient to validate the placement of the beeper in the can." Id. (citing United States v. Matlock, 415 U.S. 164 (1974) and Frazier v. Cupp, 394 U.S. 731 (1969)). In Matlock, the Court held that when the prosecution seeks to justify a warrantless search by proof of voluntary consent, it is not limited to proof that consent was given by the defendant [against whom the fruits of the search are to be offered at trial], but may show that permission to search was obtained from a third party who possessed common authority over or other sufficient relationship to the premises or effect sought to be inspected.

Matlock, 415 U.S. at 171. Similarly, in Frazier, the Court held that where a defendant had
no judge or court has seriously disputed the right of investigators, acting with the consent of the seller, to install a beeper in a chemical container prior to the sale of that container to the targets of an investigation.\(^{64}\)

Once ownership and possession of the container in \textit{Karo} passed from the seller to the buyer, however, the legal implications of the presence of the beeper passed beyond the scope of existing Fourth Amendment jurisprudence. Transfer of the beeper to the unwitting purchaser was not governed, for example, by the law regulating consent searches\(^{65}\) or consensual electronic surveillance,\(^{66}\) because at the moment the container became the buyer's, the seller no longer had the authority to give a binding consent.\(^{67}\)

Based upon these principles, the Tenth Circuit in \textit{Karo} previously concluded that

\begin{quote}
\textbf{an intrusion occurs at the time the item comes into the [buyer's] possession. All individuals have a legitimate expectation of privacy that objects coming into their rightful ownership do not have electronic devices attached to them, devices that would give law en-
\end{quote}

\begin{footnotes}
\item[64] Every court that has considered the issue has so held. \textit{See supra} note 54. Indeed, two courts have so held even though the purchaser had already made a down payment on the chemicals prior to the installation. Lewis, 621 F.2d at 1388 ("arcane distinctions in contract or property law do not control for Fourth Amendment purposes"); Hufford, 539 F.2d at 33.

\item[65] As a general rule, a consent to search is constitutionally valid against a subsequent Fourth Amendment challenge only if the government can show, by a preponderance of the evidence, that the consent to search was freely and voluntarily given, Schneckloth v. Bustamonte, 412 U.S. 218 (1973), and if someone other than the suspect authorized the search, that the consent was obtained from someone "who possessed common authority over or other sufficient relationship to the premises or effects sought to be inspected." Matlock, 415 U.S. at 171 (footnote omitted). \textit{See supra note} 63. Thus, a third party's consent is valid only if, by consenting, he or she is compromising his or her own privacy interests, as well as those of the target of the search. Hence, for example, a landlord may not consent to a search of his tenant's premises, even though the landlord may have some right of entry for purposes of inspecting or clearing the premises. Chapman v. United States, 365 U.S. 610 (1961). Similarly, hotel employees may not consent to the search of a particular room during the period in which it has been rented by a guest. Stoner v. California, 376 U.S. 483 (1964).


\item[67] \textit{See supra} note 65. Thus, it is simply not enough to say, as did the Eighth Circuit in \textit{Knotts}, that "the consent of the owner at the time of installation meets the requirements of the Fourth Amendment, even if the consenting owner intends to soon sell the 'bugged' property to an unsuspecting buyer. . . . \textit{Caveat emptor.}" Knotts, 662 F.2d at 517 n.2 (emphasis in original).
\end{footnotes}
forcement agents the opportunity to monitor the location of the objects at all times and in every place the objects are taken, including inside private residences and other areas where the right to be free from warrantless governmental intrusion is unquestioned.68

The Supreme Court rejected this reasoning. Observing that “a ‘search’ occurs when an expectation of privacy that society is prepared to consider reasonable is infringed,”69 the Supreme Court concluded that no such infringement occurred. “The mere transfer to Karo of a can containing an unmonitored beeper infringed no privacy interest,” the Court stated. “It conveyed no information that Karo wished to keep private, for it conveyed no information at all.”70

The Court conceded that the transfer of the beepered can of ether to Karo “created a potential for an invasion of privacy . . . .”71 The Court, however, stated that this was insufficient in and of itself to constitute an intrusion

68. Karo, 710 F.2d at 1438. The circuit court emphasized that its ruling—that an intrusion occurs at the moment the purchaser takes possession—was not based on the actual use to which the beeper was subsequently put. Rather, the sale of the beeper impregnated container constituted a search because the beeper “[gave] law enforcement agents the opportunity to monitor the location of the objects at all times and in every place the objects are taken.” Id. (emphasis added).

69. Karo, 104 S. Ct. at 3302 (citing Jacobsen, 104 S. Ct. at 1656). For a detailed discussion of Jacobsen, see infra notes 88-92 and accompanying text.

70. Karo, 104 S. Ct. at 3302 (emphasis in original). The installation of a beeper into a chemical container reveals nothing new to the authorities; they already know the nature of the chemical involved. See Jacobsen, 104 S. Ct. at 1659-60 (after a delivery company’s employees examined a damaged package, found it to contain a taped tube within which were plastic bags containing white powder, and so informed DEA agents, the fact that an agent might have brushed aside a crumpled newspaper that was partially covering the tube did not constitute a search, because the agent’s manual inspection of the tube and its contents revealed to the agent no more than he had already been told). Nor can the purchaser claim that he has a legitimate expectation that the fact of his purchase will remain private. The very fact that the installation is consensual presupposes that the authorities have learned of the impending purchase through the cooperation of the seller. By approaching the seller and seeking to purchase the chemicals, the purchaser assumes the risk that the seller will report the transaction to the authorities. See Smith, 442 U.S. at 735 (when a person dials his phone, he knowingly exposes numerical information to the telephone company, thereby assuming the risk that the company will make a record of this information at the request of the police); United States v. Miller, 425 U.S. 435, 442-44 (1976) (when a depositor reveals his financial affairs to a bank, by writing checks, making deposits and withdrawals, and the like, he assumes the risk that the bank will disclose this information to the government); White, 401 U.S. at 752 (it is not a search for an informer consensually to record or transmit his conversation with a suspect, since the suspect assumes the risk, when he confides in the informer, that the informer is doing so). The sale of the container may provide new information concerning the identity of the nominal or actual purchaser, but this information derives from the sale, not from the beeper installed inside the container. The agents could at least theoretically have obtained the same information by conducting visual surveillance of the sale and then following the purchaser. See infra text accompanying note 175.

71. Karo, 104 S. Ct. at 3302 (emphasis in original).
into Fourth Amendment interests: “[W]e have never held that potential, as opposed to actual, invasions of privacy constitute searches for purposes of the Fourth Amendment. . . . It is the exploitation of technological advances that implicates the Fourth Amendment, not their mere existence.”

The Court was correct in rejecting the Tenth Circuit’s contention that the mere potential for abuse renders the consensual installation and sale of a beepered container a search. A beeper-precursor chemical investigation has three stages: installation and sale; in-transit and (sometimes) general vicinity monitoring; and private location monitoring. The mere possibility that law enforcement officials might unlawfully engage in the third step should not automatically render the first step a search, particularly when the Supreme Court has held that the second step—constituting the immediate use to which the beeper will be put—is not a search. Virtually any investigative technique, including many which are not considered searches under the Fourth Amendment, could be abused in a way that would intrude unlawfully into someone’s legitimate expectation of privacy. Surely this potential for abuse is not in and of itself a reason to categorize, as a search, those aspects of the technique which do not so intrude.

72. Id. The Court likened the transfer of an unmonitored beeper to a police officer carrying a parabolic microphone capable of picking up conversations in nearby homes. Possession of the microphone does not constitute a search; the search occurs only when the microphone is in fact turned on and used to overhear private conversations. Id.

73. Knotts, 460 U.S. at 276. See infra notes 173-84 and accompanying text.

74. Thus, it does not constitute a search for an undercover agent or informer to finagle an invitation into a suspect’s home for the purpose of purchasing drugs or being made privy to the suspect’s criminal intentions. See Lewis v. United States, 385 U.S. 206 (1966) (undercover agent’s purchase of narcotics); Hoffa v. United States, 385 U.S. 293 (1966) (informant to whom suspect confided his efforts to bribe a jury); United States v. White, 401 U.S. 745 (1971) (informant wearing a transmitter while conversations with defendant were monitored by police officers outside). Quite clearly, an informer or undercover agent could violate a suspect’s Fourth Amendment rights. For example, if a suspect unwittingly invites an informer into his living room and then retires temporarily to a different part of the house, and in his absence the informer searches the living room, the search would be unlawful. The mere fact that an informer might act unlawfully, however, is no reason to classify as searches all lawful “non-search” activities in which informers engage. But see United States v. Padilla, 520 F.2d 526 (1st Cir. 1975). Padilla negotiated to sell drugs to an undercover agent, and instructed the agent to rent a room in a particular hotel for Padilla’s use. Id. at 527. Federal agents rented a room for Padilla, then installed a listening device. Id. Had the undercover agent worn the device into Padilla’s room, to enable other officers to monitor the conversation, this would not constitute a search. See infra note 140. Because they monitored the actual listening device only while the agent was in Padilla’s room, the government argued the fact that they instead installed the bug in the room should require no different result. Id. at 527-28. The First Circuit disagreed, reasoning that the potential for abuse was so great that the installation of the bug constituted a Fourth Amendment violation. Id. at 528. At least two courts have explicitly rejected Padilla. See United States v. Yonn, 702 F.2d 1341, 1347 n.5 (11th Cir. 1983) (the “hypothetical risk that protected conversations may be intercepted” is no reason to suppress
b. "Seizure"

The Court also concluded that the transfer of the beepered can of ether did not constitute a seizure. Quoting from its recent decision in United States v. Jacobsen,\textsuperscript{75} that "[a] ‘seizure’ of property occurs when ‘there is some meaningful interference with an individual’s possessory interests in that property,’"\textsuperscript{76} the Court stated:

Although the can may have contained an unknown and unwanted foreign object, it cannot be said that anyone’s possessory interest was interfered with in a meaningful way. At most, there was a technical trespass on the space occupied by the beeper. The existence of a physical trespass is only marginally relevant to the question of whether the Fourth Amendment has been violated, however, for an actual trespass is neither necessary nor sufficient to establish a constitutional violation.\textsuperscript{77}

The Court completed its discussion of the seizure issue with the questionable assertion that "if the presence of a beeper in the can constituted a seizure merely because of its occupation of space, it would follow that the presence of any object, regardless of its nature, would violate the Fourth Amendment."\textsuperscript{78}

Justice Stevens, joined by Justices Brennan and Marshall, dissented from lawfully recorded conversations). \textit{But see Yonn,} 702 F.2d at 1349-50 (Hatchett, J., dissenting) (the entry into the suspect’s room constituted an unlawful trespass); Rovinsky v. State, 605 S.W.2d 578 (Tex. Crim. 1980). Indeed, it is questionable whether \textit{Padilla} survives \textit{Karo.} 75. 104 S. Ct. 1652 (1984). For a discussion of \textit{Jacobsen, see infra} notes 88-92 and accompanying text.

\textsuperscript{76} \textit{Karo,} 104 S. Ct. at 3302 (citing \textit{Katz,} 389 U.S. at 34 as holding that a Fourth Amendment violation can occur without a trespass). The Court also cited Oliver v. United States, 104 S. Ct. 1735 (1984), where the police had trespassed upon defendant’s land; nevertheless, the Court held the police had not thereby violated the defendant’s Fourth Amendment rights. For a discussion of \textit{Katz, see supra} notes 24-28 and accompanying text. In \textit{Oliver, the Court upheld the constitutional validity of the “open fields” doctrine, originally enunciated in \textit{Hester v. United States,} which permits police to enter onto private land without a search warrant. See \textit{Hester v. United States,} 265 U.S. 57 (1924). Reasoning that the Fourth Amendment expressly protects only “[t]he right of the people to be secure in their persons, houses, papers and effects, from unreasonable searches and seizures,” U.S. CONST. amend. IV, (emphases added), the Court held that because an open field is neither a person, a house, papers, nor effects, police had not violated a landowner’s fourth amendment rights when they trespassed on his fenced and posted land and discovered a cultivated marijuana field. \textit{Oliver,} 104 S. Ct. at 1740. The Court made it clear that Fourth Amendment protection did extend from a house to its “curtilage,” which it defined as “the land immediately surrounding and associated with the home,” that is, “the area to which extends the intimate activity associated with the ‘sanctity of a man’s home and the privacies of life’ . . . .” \textit{Id.} at 1742 (quoting \textit{Boyd v. United States,} 116 U.S. 616, 630 (1886)).

\textsuperscript{77} \textit{Karo,} 104 S. Ct. at 3302.
the majority’s conclusion that sale of the beepered can was not a seizure. Basing his argument on the same text as the majority—the Court's pronouncement in United States v. Jacobsen that “[a] ‘seizure’ of property occurs when ‘there is some meaningful interference with an individual’s possessory interests in that property’,”—Justice Stevens vigorously protested the majority’s application of that definition.

The owner of property . . . has a right to exclude from it all the world, including the Government, and a concomitant right to use it exclusively for his own purposes. When the Government attaches an electronic monitoring device to that property, it infringes that exclusionary right; in a fundamental sense it has converted the property to its own use. Surely such an invasion is an ‘interference’ with possessory rights; the right to exclude, which attached as soon as the can respondents purchased was delivered, had been infringed. That interference is also ‘meaningful’; the character of the property is profoundly different when infected with an electronic bug than when it is entirely germ free.

The dissent likened sale of the beepered can of ether to the “attachment of a microphone to the heating duct of an apartment building in order to eavesdrop on conversations in a nearby apartment,” conduct that the Court condemned more than twenty years earlier as “usurping part of petitioners’ house” in violation of the Fourth Amendment. By selling the beepered can, Justice Stevens argued, the agents “usurped” the purchasers’ right to exclude the government from their “tangible personal property.” Indeed, Justice Stevens stated, “the Government in the most fundamental sense was asserting ‘dominion and control’ over the property—the power to use the property for its own purposes. And ‘asserting dominion and control’ is a ‘seizure’ in the most basic sense of the term.”

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80. Karo, 104 S. Ct. at 3311 (Stevens, J., concurring in part and dissenting in part) (footnote omitted). Ironically, it was Justice Stevens, writing for the Court in Jacobsen, who had coined the definition of “seizure” applied (or, according to Justice Stevens, misapplied) by the Karo majority. Justice Stevens also argued that it was irrelevant that the beeper had been installed prior to the delivery of the can to the respondents. “Once the delivery had been effected, the container was respondents’ property from which they had the right to exclude the government. It was at this point that the infringement of this constitutionally protected interest began.” Id. at 3311 n.2.
81. Id. at 3311.
83. Karo, 104 S. Ct. at 3311 (citing Jacobsen, 104 S. Ct. at 1660 (exercise of “dominion and control” over an object constitutes a seizure of it).
c. Evaluation

Neither opinion is entirely satisfactory. The dissent sweeps too broadly. The property owner's right to "exclude from it all the world," and "to use it exclusively for his own purposes," is far from absolute. Safety regulations, registration requirements, and so on impose some significant restrictions upon the owner's right to exclude the world from his possessions. Further, to liken installation of a locational beeper in a can of ether to the use of an apartment's heating system as a microphone ignores both the nature of the object in question and the nature of the information revealed.

Lastly, the *Karo* dissent relies too heavily and too literally upon the definition of "seizure" coined by the Court several months earlier in *United States v. Jacobsen*, without sufficient regard for the context in which the definition was coined or for the manner in which the term "seizure" had theretofore been applied. In *Jacobsen*, the Court, per Justice Stevens, noted that its definition of "seizure of property"—a "meaningful interference with an individual's possessory interests in that property"—was derived from the Court's "oft-repeated definition of the 'seizure' of a person within the meaning of the Fourth Amendment—meaningful interference, however brief, with an individual's freedom of movement." In each of the cases cited in *Jacobsen* in support of the definition, law enforcement officials had taken physical possession of property from the actual or constructive possession of the defendant. The same situation was present in *Jacobsen*. In *Karo*, by contrast,

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84. *Karo*, 104 S. Ct. at 3311 (Stevens, J., dissenting in part). Thus, *Karo* did not have the right to use the ether exclusively for his own purposes, where that purpose was the extraction of cocaine from imported clothing.


86. See infra notes 122-25, 142-48 and accompanying text.

87. See infra note 477 and accompanying text.


89. *Id.* at 1656.

90. *Id.* 1655 n.5.

91. For the "seizure of property" cases cited in *Jacobsen*, see supra note 21. For the "seizure of person" cases cited in *Jacobsen*, see supra note 20.

92. During their examination of a damaged package, the employees of a private freight carrier discovered that the package consisted of crumpled newspaper and a ten-inch tube of silver tape, inside of which they found several plastic bags containing white powder. *Jacobsen*, 104 S. Ct. at 1655. Suspecting that the powder was narcotics, they notified Drug Enforcement Administration agents. *Id.* Petitioners had conceded that based on this information, the agents had probable cause to believe that the package contained contraband. Upon arrival, the agents examined the tube (possibly brushing aside a crumpled newspaper to do so), observed the white powder, removed a small sample, and performed a chemical test that revealed the powder was cocaine. *Id.* After conducting a second positive field test, the agents rewrapped...
the DEA agents never interfered with respondents' freedom to move the can of ether, and indeed never even laid hands on the can, once it was sold to the respondents. Hence, the presale installation and post-sale presence of the beeper in the can did not constitute a seizure of the can—at least not as that term was defined, and applied, in *Jacobsen*.

Concededly, there is nothing inherently implausible or illogical about the application of the *Jacobsen* definition urged by the dissent in *Karo*. In a real

the package, obtained a warrant authorizing the search of the place to which it was addressed, delivered the package and later returned to execute the warrant and arrest the respondents. *Id.* Charged with possession of cocaine with intent to distribute, respondents moved to suppress the evidence on the ground that the warrant was the product of an illegal search and seizure. The trial judge denied the motion. The Court of Appeals for the Eighth Circuit reversed. United States v. Jacobsen, 683 F.2d 296 (8th Cir. 1982).

The Supreme Court reversed the court of appeals. The Court held, first, that it was not a search if an agent had brushed aside a crumpled sheet of newspaper and that it was not unreasonable for the agent to seize the tube from the box, since to do so compromised no privacy interest that had not already been compromised by the conduct of the freight carrier employees. 104 S. Ct. at 1659-61. “Although respondents had entrusted possession of the items to Federal Express, the decision [by the agents] to exert dominion and control over the package for their own purposes, clearly constituted a ‘seizure,’ though not . . . an unreasonable one.” *Jacobsen*, 104 S. Ct. at 1660 n.18. See United States v. Van Leeuwen, 397 U.S. 249, 253 (1970). In *Van Leeuwen*, the Court had held that it was not an unreasonable seizure for law enforcement officials to detain for a day a suspicious package that had been delivered to a post office for mailing while they obtained a warrant authorizing the search of the package.

Second, the Court in *Jacobsen* ruled that the removal of a small quantity of powder from one of the plastic bags, and the chemical analysis, “[did] not compromise any legitimate interests in privacy.” In other words, it was not a search because it did no more than reveal whether the powder was a narcotic drug, the “private” possession of which would be illegitimate in any event. *Jacobsen*, 104 S. Ct. at 1662.

Finally, the Court held that while the removal (and destruction through analysis) of the minute quantity of the powder was a Fourth Amendment “seizure,” it was reasonable, and therefore constitutionally permissible, for the agents to make this “seizure” without a warrant.

The law enforcement interests justifying the procedure were substantial; the suspicious nature of the material made it virtually certain that the substance tested was in fact contraband. Conversely, because only a trace amount of material was involved, the loss of which appears to have gone unnoticed by respondents, and since the property had already been lawfully detained, the seizure could, at most, have only a de minimis impact on any protected property interest. Under these circumstances, the safeguards of a warrant would only minimally advance Fourth Amendment interests. This warrantless ‘seizure’ was reasonable.

*Id.* at 1663 (citations omitted). The Court noted, “Where more substantial invasions of constitutionally protected interests are involved,” a seizure might be unlawful in the absence of a warrant or exigent circumstances. Further, the Court cautioned that not all seizures “of a small amount of material [are] necessarily reasonable. An agent’s arbitrary decision to take the ‘white powder’ he finds in a neighbor’s sugar bowl, or his medicine cabinet, and subject it to a field test for cocaine, might well work an unreasonable seizure.” *Id.* at 1663 n.28.

93. Ultimately, after more than four months of visual and beeper surveillance, the agents obtained a search warrant and seized the can of ether, as well as other incriminating evidence, in a cabin rented by several of the respondents. *Karo*, 104 S. Ct. at 3300-01. For a detailed recitation of the facts in *Karo*, see infra notes 208-24 and accompanying text.
sense, however, the approach urged by the dissent would constitute a significant expansion of the meaning of the term "seizure." This expansion would in turn extend application of the Fourth Amendment in a way that is difficult to anticipate or predict. The failure of the dissent to recognize these implications, or at least to address them squarely, is unfortunate.

The majority, on the other hand, by categorizing the presence of the beeper in the can of ether as a mere "technical trespass," may have set an unduly broad precedent in an age when progress in electronic miniaturization may be outpacing the ability of nonscientists to grasp the implications of that progress. In addition, in relegating the existence of a physical trespass to near irrelevance in the application of the Fourth Amendment, the Karo majority appears to have ignored and miscited prior case law.

Prior to Katz, the Court's basic rule under the Fourth Amendment had been that investigative conduct constituted a search or a seizure if, and only if, that conduct involved a physical intrusion or trespass into a defendant's "person[, house[, papers, or effects]." Since Katz, however, the Fourth Amendment has been seen as protecting "a 'justifiable,' a 'reasonable,' or a 'legitimate expectation of privacy' . . . ." But where should the Court turn for guidance in seeking to determine which expectations are justifiable, reasonable, or legitimate? As the Court noted in Rakas v. Illinois:

It would . . . be merely tautological to fall back on the notion that those expectations of privacy which are legitimate depend primarily on cases deciding exclusionary rule issues in criminal cases. Legitimation of expectations of privacy must have a source outside of the Fourth Amendment, either by reference to concepts of real or personal property law or to understandings that are recognized and permitted by society. One of the main rights attaching to property is the right to exclude . . . . [B]y focusing on legitimate expectations of privacy in Fourth Amendment jurisprudence, the Court

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94. Traditionally, a "search" occurred only if government agents physically intruded into a "constitutionally protected area." Katz redefined "search" in terms of "legitimate expectations of privacy," regardless of whether a physical intrusion occurred. See supra notes 23-28 and accompanying text. Similarly, "seizure" has always been understood to involve a physical taking or detaining. See supra notes 19-22 and accompanying text. The Karo dissent, had it won a majority of the Court, would have redefined "seizure" in terms of "'meaningful interference' with . . . possessory rights" regardless of whether a physical taking or detaining occurred. See Karo, 104 S. Ct. at 3311 (Stevens, J., dissenting).

95. Many may urge that such an expansion or extension of the Fourth Amendment is essential if the protection guaranteed by that amendment is to remain vigorous in the face of technological advances in surveillance equipment and techniques. My own views are set forth infra at notes 113-21 and accompanying text.


97. See supra notes 23, 77 and accompanying text.

has not altogether abandoned use of property concepts in determining the presence or absence of the privacy interests protected by that amendment.99

Analysis of *Karo* reveals the Court's willingness to abandon this concern for property concepts almost entirely. "The existence of a physical trespass," the *Karo* Court stated, "is only marginally relevant to the question of whether the Fourth Amendment has been violated . . . ."100 In support of this principle, the Court cited *Oliver v. United States*101 with the parenthetical comment: "trespass, but no Fourth Amendment violation."102 This citation is inappropriate. *Oliver* involved a trespass onto an open field. The Court in *Oliver* did not hold that a physical trespass, in all circumstances, fails to implicate the Fourth Amendment. Rather, the Court held that the trespass in that case did not violate the Fourth Amendment because the open field did not fall within the Fourth Amendment's explicit protection of "[t]he right of the people to be secure in their persons, houses, papers and effects . . . ."103 *Karo*, in contrast to *Oliver*, involved a trespass upon tangible personal property. Such property is a personal "effect"104 and therefore falls within the protection of the Fourth Amendment. Thus, *Karo* and *Oliver* are distinguishable; *Oliver* does not support the principle for which it is cited.

Interestingly, neither opinion in *Karo* places any significance on the nature

99. Rakas v. Illinois, 439 U.S. 128, 143-44 n.12 (1978) (emphasis added). As an example of the continued importance of property concepts, the Court cited *Alderman v. United States*, wherein the Court held, inter alia, that a homeowner could object to electronic surveillance conducted in his home, even though he himself was not a party to the conversations which were overheard. See 394 U.S. 165 (1969). On the other hand, the Court observed in *Rakas*, "even a property interest in premises may not be sufficient to establish a legitimate expectation of privacy with respect to particular items located on the premises or activity conducted thereon." Rakas, 439 U.S. at 143-44 n.12 (citing Katz, 389 U.S. at 351; Lewis, 385 U.S. at 210; United States v. Lee, 274 U.S. 559, 563 (1927); Hester, 265 U.S. at 58-59). In *Katz*, the Court observed that "what a person knowingly exposes to the public, even in his own home or office, is not a subject of Fourth Amendment protection . . . ." Katz, 389 U.S. at 351. *Lewis* and *Lee* are exemplary of that principle. In *Lewis*, the Court held that it does not constitute a search for an undercover police officer to engineer an invitation into a suspect's home and therein purchase marijuana. Lewis, 385 U.S. at 210. In *Lee*, the Court ruled that use of a searchlight to see what was piled on the deck of a ship did not constitute a search. Lee, 274 U.S. at 563. *Hester* first enunciated the "open fields doctrine," which was subsequently reaffirmed in *Oliver v. United States*, 104 S. Ct. 1735 (1984). For a discussion of that doctrine, see supra note 77 and accompanying text. See also infra notes 101-04 and accompanying text.

100. *Karo*, 104 S. Ct. at 3302.
103. *Oliver*, 104 S. Ct. at 1740. For a further discussion of *Oliver*, see supra note 77.
104. "The Framers [of the Constitution and of the Fourth Amendment] would have understood the term 'effects' to be limited to personal, rather than real, property." *Oliver*, 104 S. Ct. at 1740 n.7.
of the object into which the beeper was installed. The privacy implications of installing a beeper into a can of ether are obviously less significant than the implications of installing a beeper into a suitcase or an attache case (assuming miniaturization permitted such an installation) that is then sold to an unwitting suspect. A glance at the can—assuming, as is usually the case, that it is labeled\(^{105}\)—will reveal its contents. This fact, the Supreme Court has commented, in itself is quite significant in determining the applicability of the Fourth Amendment.\(^{106}\) An examination of the can will also reveal its contents, if it is imperfectly sealed.\(^{107}\)

A suitcase or attache case, by contrast, is often used as a place to store, and conceal, one's private and intimate belongings or papers. Placing a beeper inside a suitcase or attache case reveals nothing about what is later placed inside the case; it reveals no more information than does the beeper in the can of ether (that is, the location of the beepered object at a particular point in time). Yet, to conclude that the transfer to a suspect of a secretly beepered suitcase or attache case is neither a search nor a seizure leaves at least this writer with a far greater sense of

\(^{105}\) See, e.g., 29 C.F.R. § 1910.1000-.1045 (1984) (setting forth labeling requirements for various chemicals, including ether).

\(^{106}\) In Arkansas v. Sanders, 442 U.S. 753, 764 n.13 (1979), the Court observed:

Not all containers and packages found by police during the course of a search will deserve the full protection of the Fourth Amendment. Thus, some containers (for example a kit of burglar tools or a gun case) by their very nature cannot support any reasonable expectation of privacy because their contents can be inferred from their outward appearance.

See also Jacobsen, 104 S. Ct. at 1661 (tube of silver tape containing clear plastic bags containing white powder: "it was apparent that the tube and plastic bags contained contraband [cocaine] and little else"); hence, warrantless seizure was reasonable, as was removal of a small portion of powder for field testing); Texas v. Brown, 103 S. Ct. 1535, 1543 (1983) (opaque party balloon, knotted a half-inch from the top, with white powder in the knotted portion: "the distinctive character of the balloon itself spoke volumes as to its contents [heroin]—particularly to the trained eye of the officer"); hence, seizure by officer and subsequent warrantless analysis of its contents by a chemist did not constitute unlawful search or seizure) (plurality opinion). \(Id.\) at 1545 (Powell, J., concurring in the result); Robbins v. California, 453 U.S. 420, 428 (1981) (plurality opinion).

Id at 1545 (Powell, J., concurring in the result); Robbins v. California, 453 U.S. 420, 428 (1981) (plurality opinion).

Sometimes, of course, a chemical container will not bear a label revealing its contents. For example, the purchasers might remove or cover the label, or transfer the chemicals to a different, unlabeled, container, or they might have obtained the chemicals from a source which chose not to comply with the labeling regulations. Arguably, this would serve to enhance the suspect's privacy in the container and contents: "[T]he Fourth Amendment provides protection to the owner of every container that conceals its contents from plain view." United States v. Ross, 456 U.S. 798, 822-23 (1982) (emphasis added). See Robbins, 453 U.S. at 425-28; Arkansas, 442 U.S. at 764 n.13 (1979). It would be ananomalous, however, for a court to conclude that a person may enhance his constitutional protection by violating a safety regulation.

\(^{107}\) Indeed, investigators in Karo were able to detect the aroma of ether in the immediate vicinity of one of the houses to which the can was taken and one of the lockers in which it was stored. Karo, 104 S. Ct. at 3300. For a detailed recitation of the facts in Karo, see infra notes 208-24 and accompanying text.
disquiet than the same conclusion when applied to a can of ether or some other container of chemicals.  

The Court's holding in Karo, that the transfer of a secretly beepered can of ether to an unwitting suspect is neither a search nor a seizure, has its unsettling aspects. It is one thing to endorse the general principle that a mere potential for abuse is insufficient reason to categorize an investigative procedure as a search; it is quite another to say that we must assume the risk that any item of personal property we purchase might be secretly equipped with a device capable of electronically revealing its location to the police. In addition, beeper suppression litigation in most precursor chemical cases henceforth may focus exclusively on whether the initial owner consented to the installation, while treating the authorities' motivation in seeking to conduct beeper surveillance as legally irrelevant. The Karo ruling is likely to increase the frequency of beeper surveillance subject to no judicial screening or oversight.

The Karo ruling has further Fourth Amendment implications. By categorizing a beeper installation as a nonsearch, Karo creates the possibility that similar investigative procedures, by analogy, might also be classified as nonsearches.

108. For a discussion of consensual installation case law in other than a precursor chemical context, see infra notes 122-31 and accompanying text.

109. Indeed, since the installation occurs before the suspect takes possession and ownership, the suspect might lack standing to protest if the beeper is installed without the seller's consent. Concerning the concept of standing, see infra notes 309-14 and accompanying text.

110. The Karo ruling is likely to increase the frequency of beeper surveillance subject to no judicial screening or oversight.

111. The Karo ruling has further Fourth Amendment implications. By categorizing a beeper installation as a nonsearch, Karo creates the possibility that similar investigative procedures, by analogy, might also be classified as nonsearches.

112. Thus, in White, the Court held that it does not constitute a search for a consenting participant to secretly record or transmit his conversation with a suspect. White, 401 U.S. at 751. The Court reasoned that the suspect assumes the risk that the person to whom he is speaking is cooperating with the authorities. Therefore, he must also assume the risk that the cooperation includes transmitting or recording his words. In Miller, the Court held that when a person "reveals" his financial affairs to a bank (by writing checks, filling out deposit slips, and the like), he or she assumes the risk that the bank will disclose this information to the government. Miller, 425 U.S. at 442-44. The depositor, therefore, has no reasonable expecta-
Two considerations not addressed by either the majority or the Stevens dissent nevertheless confirm that the result arrived at on the installation issue in *Karo* is correct. These considerations are the practical consequences of a contrary conclusion, and the principle of judicial restraint.

*Practical consequences.* The question of private location monitoring aside, the installation, sale, in-transit, and general vicinity monitoring of a beeper do no more than facilitate the acquisition of information that the authorities could lawfully obtain—albeit with less certainty and greater risk—without the use of a beeper. This information is often essential if the authorities are to identify coconspirators, locate clandestine laboratories, and acquire probable cause for arrest and search warrants. If the sale of a beeper implanted drum of chemicals had been categorized as a search or seizure, subject to traditional Fourth Amendment requirements and restrictions, beeper surveillance would have been rendered unavailable to the police in situations where it is most greatly needed. Under such a ruling, the police would need probable cause and a warrant before they could use a minimally intrusive technique, the sole purpose of which is to enable them to obtain probable cause for a search warrant.  

113 Given society's substantial interest in preventing the manufacture and distribution of illicit drugs,  

114 and the comparison of privacy if the bank actually does so. In arriving at this conclusion, the Court placed heavy reliance on the *White* decision.

In *Smith*, the Court held that when a person dials his telephone, he knowingly conveys numerical information to the phone company. *Smith*, 442 U.S. 735 (1979). He, therefore, assumes the risk that the phone company is making a record of the numbers he dials at police request, and if this proves to be the case, no search has occurred. In arriving at this conclusion the Court placed heavy reliance on the *Miller* decision. In *Knotts*, the Court held that in-transit and at least some types of destination-determination monitoring do not constitute a search because when a person travels the public roads, he assumes the risk that he is conveying, to whomever is watching, his present location and his final destination. *Knotts*, 460 U.S. at 281-82. In arriving at this conclusion, the Court placed heavy reliance on *Smith*. See also *Jacobsen*, 104 S. Ct. at 1652. For a further discussion of the *White* decision, see generally *Interception of Communications*, supra note 32, at 47-50. For a further discussion of *Smith*, see *Pen Registers*, supra note 32, at 565-74, 581-89.

In offering this sequence of decisions, I do not intend to suggest that they represent a descent from virtue. I am of the opinion that *White*, *Miller*, *Knotts*, and *Jacobsen* were correctly decided. The sequence nevertheless demonstrates that the Court has built on prior precedent in the past and is likely to continue to do so in the future. For example, several lower courts have held that a *trespassory*—nonconsensual—installation of a beeper onto a target's vehicle is not a search. See infra notes 152-62 and accompanying text. One can readily foresee the Court relying on *Karo* to arrive at the same conclusion.

113 As the Court correctly observed, "Despite this holding, warrants for the installation and monitoring of a beeper will obviously be desirable since it may be useful, even critical, to monitor the beeper [under circumstances requiring a warrant]." *Karo*, 104 S. Ct. at 3302 n.3. For a discussion of the contents of such a warrant, and the factual predicate required for its issuance, see infra notes 426-87 and accompanying text.

114 See infra note 473 and accompanying text.
tively minor intrusion involved," such a result would have been most unfortunate.

Judicial restraint. The Fourth Amendment phrase "searches and seizures" traditionally has included only those investigative activities involving an overt physical seizure of or intrusion into "the people[s]' . . . persons, houses, papers, and effects." As a rule, the Supreme Court has declined to broaden the definition of these terms or to apply the Fourth Amendment to investigative procedures that do not involve a physical intrusion or seizure.

115. See infra notes 394-97 and accompanying text.

116. See U.S. Const. amend. IV; see also supra note 16 and accompanying text.

117. See supra notes 23-24 and accompanying text. Thus, the Court has refused to extend the Fourth Amendment to situations in which a suspect voluntarily conveys words or information to another, where the latter simultaneously transmits or records, or subsequently reveals, that information to the authorities. Smith, 442 U.S. at 735 (not a search for telephone company, acting at behest of police, to use pen register to make a record of the numbers dialed from a suspect's phone and then give this information to the police); Miller, 425 U.S. at 435 (not a search for a bank to reveal to the authorities its records of a customer's accounts); Couch v. United States, 409 U.S. 322 (1973) (when taxpayer voluntarily reveals business records to an accountant knowing the accountant will have to disclose much of the information contained therein on the taxpayer's tax return, taxpayer has no reasonable expectation of privacy with regard to the records if the IRS summons the accountant to surrender the records); White, 401 U.S. at 752 (no search where wired informer is voluntarily admitted by a suspect into the latter's home and transmits his conversation with suspect to police officers equipped with receiver); Hoffa, 385 U.S. at 302 (no search for informer to repeat to federal law enforcement agents his conversations with a suspect); Lewis, 385 U.S. at 206 (no search for an informer or undercover agent, concealing his true identity and purpose, to gain an invitation into a suspect's home to attempt to purchase narcotics); Lopez, 373 U.S. 427 (1963) (no search for informer or agent to secretly record his conversations with a suspect). Similarly, the Court has refused to categorize as a search the acquisition by the police of information concerning conduct that a suspect exposed to the public at large. Knotts, 460 U.S. at 285 (not a Fourth Amendment search to conduct in-transit and destination-determination monitoring of a beeper); United States v. Dionisio, 410 U.S. 1 (1973) (not a Fourth Amendment search to force a suspect to provide a grand jury with a voice exemplar, pursuant to a subpoena duces tecum); United States v. Mara, 410 U.S. 19 (1973) (same result with a subpoena duces tecum for handwriting exemplar). See infra notes 175-79 and accompanying text. But see Lo-Ji Sales, Inc. v. New York, 442 U.S. 319, 329 (1979) (where customers of a pornographic book store would have to pay to peruse contents of magazines or view films in coin operated booths, it constituted a search for a town justice with police escort to examine these materials without first paying as an ordinary customer would). Further, it is not a search for an officer to see or hear sounds or objects from within the home, so long as the officer is lawfully positioned where he can see or hear them. See C. Fishman, supra note 66, at § 26 (Supp. 1983) (overhearing with the "naked ear"); W. LaFave, supra note 16, at § 2.2(a) ("plain view" observations).

It is axiomatic that the Court in Katz, freed the Fourth Amendment from the narrow confines of property law. "The Fourth Amendment protects people, not places. What a person knowingly exposes to the public, even in his own home or office, is not a subject of Fourth Amendment protection. But what he seeks to preserve as private, even in an area accessible to the public, may be constitutionally protected." 389 U.S. at 351-52 (citations omitted). See also supra notes 100-02 and accompanying text. In Katz, federal agents placed a listening device on
This restraint is commendable for at least two reasons. First, traditional Fourth Amendment concepts and precedents do not translate well when applied to nontraditional investigative techniques. Indeed, the resulting confusion has on occasion infected the law governing traditional investigative procedures. Second, whether and to what degree nontraditional investigative procedures should be restrained or regulated is primarily a policy decision on which reasonable people can and do differ. Such a decision should be made by Congress through legislation, rather than by the Supreme Court in a constitutional decree. A decision that installation and sale constitutes a search requiring probable cause and a warrant would have established the point in constitutional concrete, and in all likelihood would

the outside of a phone booth Katz was known to frequent, and thereby overheard Katz' portion of telephone conversations. The Court held that when Katz closed the door of a telephone booth, thereby excluding the public ear (if not the public eye), he was constitutionally protected against the warrantless use of the eavesdropping device. Katz, 398 U.S. at 352-53. But Katz is the only case in which the Court has held that a search or seizure occurred without a physical seizure of, or intrusion into, a suspect's "person[, house[, papers, or effects]; and nonconsensual electronic surveillance of communications is the only investigative technique that has so classified. See generally 1 W. LAFAVE, supra note 16, at ch. 2.

118. See C. FISHMAN, supra note 66, at §§ 6, 7; Fishman, The "Minimization" Requirement in Electronic Surveillance: Title III, the Fourth Amendment, and the Dread Scott Decision, 28 Am. U.L. Rev. 315, 317-18 (1979) [hereinafter cited as The "Minimization" Requirement].

119. Justice Brennan's concurring opinion in Knotts appears to express some concern in this regard:

Katz . . . made quite clear that the Fourth Amendment protects against governmental invasions of a person's reasonable "expectation[s] of privacy," even when those invasions are not accompanied by physical intrusions. Cases such as Silverman v. United States, 365 U.S. 505, 509-12 (1961), however, hold that, when the government does engage in physical intrusion of a constitutionally protected area in order to obtain information, that intrusion may constitute a violation of the Fourth Amendment even if the same information could have been obtained by other means. I do not believe that Katz, or its progeny, have eroded that principle.

Knotts, 460 U.S. at 286 (emphasis in original); see also Burkoff, The Court that Devoured the Fourth Amendment: The Triumph of an Inconsistent Exclusionary Doctrine, 58 Or. L. Rev. 151, 187-88 (1979). Burkoff argued that, in applying the Fourth Amendment to wiretapping, the Court, in Scott v. United States, seriously undercut the deterrent rationale on which the Fourth Amendment exclusionary rule is primarily based. See Scott v. United States, 436 U.S. 128 (1978); see also C. FISHMAN, supra note 66, at §§ 152, 159, 159.1, 190; The "Minimization" Requirement, supra note 118, at 332-35.

120. Congress, after all, is the primary policymaking branch of government, as well as the most representative. The Court must consider the question in the context of one or at most a few somewhat haphazardly selected cases, and is in significant measure restricted in sources of information and opinion to the parties' briefs, amicus briefs, and scholarly publications. Congress, in contrast, can conduct hearings, elicit testimony from experts, peruse newspaper articles and editorials, ascertain in a number of ways the concerns and views of their constituents, and consider the question for an extended period of time. Congress is therefore in a better position to gauge what privacy expectations, if any, society does and should accept as reasonable with regard to the installation and use of beepers. Finally, Congress is in a far better
have stunted the development of creative and flexible ways to deal with the still-emerging issues posed by beeper surveillance.\textsuperscript{121}

2. *Other Consensual Installations*

\textit{a. In General}

The broad sweep of the Court's discussion of consensual installations and position than the Court to revise a policy judgment that has been found wanting in the light of experience.

Congress might decide ultimately to do nothing; it might forbid beeper surveillance altogether, the way it did wiretapping between 1934 and 1968 (The Communications Act of 1934, § 605, 48 Stat. 1103 (1934) (codified at 47 U.S.C. § 605 (1982))); see Nardone v. United States, 308 U.S. 338, 341 (1939)); Nardone v. United States, 302 U.S. 379 (1937). It might enact a statute similar in many respects to title III, requiring a warrant, regular reporting, and judicial supervision; or it might direct the Attorney General to promulgate regulations governing the use of beeper surveillance; or without disturbing a judicial determination that consensual installation and sale do not constitute a search. 

\textsuperscript{121} Zurcher v. Stanford Daily, 436 U.S. 547 (1978) provides a worthwhile example. In Zurcher, the Court held that neither a newspaper office, nor nonsuspect third persons generally, enjoyed any special protection from having their premises searched pursuant to a warrant, so long as probable cause was shown that evidence incriminating someone would be found on the premises. The Court therefore reversed a lower court ruling that before such a warrant could issue, the authorities would also have to show probable cause to believe that proceedings by means of a less intrusive subpoena duces tecum would be impracticable or would result in destruction or removal of the desired evidence. The decision was roundly criticized by the media as well as by prominent First and Fourth Amendment scholars. See, e.g., Cantrell, \textit{Zurcher: Third Party Searches and Freedom of the Press}, 62 MARQ. L. REV. 35 (1978); Note, \textit{Search and Seizure of a Third-Party Newspaper: Zurcher, Chief of Police of Palo Alto v. Stanford Daily}, 20 B.C.L. REV. 783 (1979); Dash, \textit{Police Power: An Ominous Growth}, Wash. Post, June 11, 1978, at C1, col. 1; Lewis, \textit{The Court and the Press}, N.Y. Times, June 8, 1978, at A27, col. 1; Reston, \textit{A Letter to the Whizzer}, N.Y. Times, June 2, 1978, at A23, col. 1. In response, Congress enacted the Privacy Protection Act of 1980. 42 U.S.C. § 2000aa (1982). In general, the statute provides that, except as specifically provided, it is "unlawful" for a law enforcement official to search or seize journalistic or scholarly "work product" material or other documentary material possessed for purposes disseminating information to the public. \textit{Id.} § 2000aa(a)-(b). The statute further provides that a person aggrieved by an unlawful search or seizure shall have a cause of action for damages. \textit{Id.} § 2000aa-6(a). However, "evidence otherwise admissible in a proceeding shall not be excluded on the basis of a violation of this Act." \textit{Id.} § 2000aa-6(e). In other words, Congress enacted a civil remedy to protect or compensate journalists, scholars, researchers, etc., while nevertheless permitting a federal prosecutor to offer in evidence at a criminal trial items seized in violation of the statute, so long as the seizure was in compliance with the Fourth Amendment. In addition, the statute instructed the Attorney General to promulgate guidelines regulating the seizure of physical evidence from nonsuspect third persons, and particularly seizures that might intrude upon a confidential relationship such as clergyman-parishioner, lawyer-client, or doctor-patient. \textit{Id.} § 2000aa-11(a). Again, however, evidence seized in violations of such guidelines is admissible in a criminal prosecution, so long as the seizure complied with the Fourth Amendment. \textit{Id.} §2000aa-12. The guidelines are set out at 28 C.F.R. § 59.4 (1984). In my view, \textit{Zurcher} is an appropriate exercise in judicial restraint and the Privacy Protection Act of 1980 is an appropriate exercise of congressional responsibility.
sales in Karo\textsuperscript{122} appears on its face to be applicable to all such installations and transfers, regardless of the sophistication of the beeper and regardless of where the beeper is being installed. Issues far more delicate than those before the Court in Karo, however, would be presented by the use of more sophisticated equipment,\textsuperscript{123} or by the installation of beepers into objects significantly more "private" than a container of chemicals.\textsuperscript{124} To date, few such cases have been reported.\textsuperscript{125}

\begin{itemize}
  \item \textsuperscript{122} See supra notes 61-83 and accompanying text.
  \item \textsuperscript{123} Suppose, for example, that the agents in Karo had installed, not merely a locational beeper, but an eavesdropping device. As the Karo opinion is written, the same result would be reached. The pretransfer installation of the device would not be a "search," because at the time of the installation the can was not yet the property of the suspects. See supra notes 62-63 and accompanying text. The transfer of the can would not be a "search," because the presence of the beeper revealed no information until and unless the device was monitored. See supra notes 69-72 and accompanying text. Finally, its post transfer presence would not be a "seizure," since it constituted no more than a technical trespass into the can. See supra notes 77-78 and accompanying text. Yet the threat to Fourth Amendment protected privacy posed by the presence of even an unmonitored eavesdropping device is far greater than that posed by a locational beeper—so much greater that principles applicable to the latter may be inadequate to deal with the former.

  The situation hypothesized here is distinguishable from the court's analogy to a police officer "walking down the street carrying [but not using] a parabolic microphone capable of picking up conversations in nearby homes . . . ." Karo, 104 S. Ct. at 3302. Even assuming the microphone and the bug are equally capable of monitoring conversations in the targeted premises, there are significant differences between carrying a microphone down the street and arranging for a suspect to unwittingly carry an eavesdropping device into his own home. One difference is the existence of the technical trespass, not merely into the can, but into the home. A second is that the device is a far more permanent fixture in the targeted premises than the microphone. The microphone can be removed by the police at will; the device cannot, unless the agents enter the host premises to remove it. A third is that the police are less able to control whose privacy the device potentially compromises, because they cannot control where the bugged container will be taken by the suspects (or by someone who is totally innocent and above suspicion). Fourth, a parabolic microphone has legitimate uses other than the invasion of privacy; an eavesdropping device hidden in a can of chemicals does not. Finally, the physical presence of a device inside someone's home is far more Orwellian than a powerful microphone across the street.

  \item \textsuperscript{124} See supra notes 105-06 and accompanying text.
  \item \textsuperscript{125} See United States v. Perez, 526 F.2d 859 (5th Cir.), cert. denied, 429 U.S. 846 (1976); United States v. Bishop, 530 F.2d 1156 (5th Cir.), cert. denied, 429 U.S. 843, 848 (1976). In Bishop, the court was not called upon to determine the applicability of the Fourth Amendment to installation or in-transit monitoring. The situation in Perez, and the legal principle that has emerged from the case, is sufficiently unusual to merit separate discussion. See infra note 391 and accompanying text.

  Several reported cases involve consensual installations into items other than precursor chemicals, in which the installation was authorized by a warrant. Thus, the courts were not called upon to consider whether such installation in fact constituted a search or seizure. United States v. Bentley, 706 F.2d 1498 (8th Cir.), cert. denied, 104 S. Ct. 2397 (1983) (tablet press sold to purchasers suspected of manufacturing methaqualone); United States v. Dunn, 674 F.2d 1093 (5th Cir. 1982), reh'g denied, 712 F.2d 1416 (1983), vacated, 104 S. Ct. 1380

\end{itemize}
b. Vehicles

Assume that police learn that $X$ is about to borrow or rent an airplane or automobile, and further suspect that he will use the vehicle for criminal purposes (for example, to import marijuana). With the owner's consent, they install a beeper or transponder$^{126}$ into the vehicle prior to the time that $X$ takes possession. Thereafter, they utilize the beeper to monitor the whereabouts of the vehicle. The surveillance results in the seizure of incriminating evidence. $X$ brings a motion to suppress, alleging that the installation and monitoring of the beeper violated his Fourth Amendment rights.

The pre-\textit{Karo} case law can be summarized simply. Barring unusual circumstances, the consensual installation of a beeper into a vehicle provides no basis for suppressing evidence obtained thereby.$^{127}$ Nor are Fourth Amend-

$^{126}$ See supra notes 5-6 and accompanying text.

$^{127}$ United States v. Cheshire, 569 F.2d 887 (5th Cir.), \textit{cert. denied}, 437 U.S. 956 (1978) (rented airplane, which was subsequently used to fly marijuana into the United States; without addressing whether installation was a search, court concluded that owner's consent satisfied the Fourth Amendment); United States v. Miroyan, 577 F.2d 489, 493 (9th Cir.), \textit{cert. denied}, 439 U.S. 896 (1978) (rented airplane, which was subsequently used to transport marijuana into the United States; defendant had already signed a rental agreement for that plane prior to installation of the beeper; held, installation did not violate renter's Fourth Amendment rights); United States v. Abel, 548 F.2d 591 (5th Cir.), \textit{cert. denied}, 431 U.S. 956 (1977) (airplane used to fly marijuana into the United States; unclear from opinion whether plane was rented, or merely borrowed); United States v. Curtis, 562 F.2d 1153, 1155-56 (9th Cir. 1977), \textit{cert. denied}, 439 U.S. 910 (1978) (rented airplane, subsequently used to fly marijuana into the United States; defendant had already signed a rental agreement for, and placed a down payment on, the particular airplane before beeper was installed); United States v. Devorce, 526 F. Supp. 191, 199-200 (D. Conn. 1981) (rented automobile, which suspects used as getaway vehicle in bank robbery; although police had obtained a warrant authorizing installation, court held that since installation occurred while the car was still in the owner's possession, installation did not violate Fourth Amendment); United States v. Tussell, 441 F. Supp. 1092, 1102 (M.D. Pa. 1977) (rented airplane, used to fly marijuana into the United States; beeper installed with permission of informant/pilot who had rented the plane on marijuana importers' behalf; held, that entry onto the plane to install the beeper was a search subject to Fourth Amendment protection, but that pilot's apparent authority to consent to installation rendered the search lawful); Houlihan v. State, 551 S.W.2d 719, 720 (Tex. Crim. App.), \textit{cert. denied}, 434 U.S. 955 (1977) (after negotiating to purchase 500 pounds of marijuana from suspect, undercover agent loaned his van installed with a beeper to suspect to bring the marijuana to him).

Two courts have held, however, that in usual circumstances installation of a beeper violated a defendant's Fourth Amendment rights despite the consent of the owner. In United States v. \textit{One 1967 Cessna Aircraft}, federal agents learned that a marijuana suspect was negotiating to \textit{purchase} (not merely rent) an airplane. 454 F. Supp. 1352, 1354 (C.D. Cal. 1978). After the suspect had made a down payment on the aircraft, the investigators persuaded the seller to permit them to install a beeper by telling him that after the plane was seized in the possession of the buyer, it would be returned to the seller as expeditiously as possible. \textit{Id.} at 1354-55. Some time after the sale was completed and the suspect took possession, government agents searched the plane and found three flakes of marijuana. \textit{Id.} at 1355. Thereafter, the govern-
ment rights violated where an informant, who is invited to accompany the suspect, wears a beeper on his or her body, or installs the beeper in the vehicle in which he and the suspect are traveling.

The Karo decision's treatment of consensual installations appears to be applicable as well to the prerental installation of a beeper into a vehicle. Indeed, Karo appears to govern the consensual installation of a beeper into

128. United States v. Arrendondo-Morales, 624 F.2d 681, 684-85 (5th Cir. 1980) (prosecution for importing undocumented aliens; informant wore the beeper during the entire automobile trip; court likened this to the "wired informant" situation in United States v. White, 401 U.S. 745 (1971)).

129. United States v. Conroy, 589 F.2d 1258, 1264 (5th Cir.), cert. denied, 444 U.S. 831 (1979). In Conroy, an informant crew member installed two beepers on a vessel, which then sailed into Haitian waters. Seven thousand pounds of marijuana were ultimately seized. The court reasoned that since the informant lawfully could have worn the beeper, was under no legal obligation to conceal his whereabouts, and was on board the ship throughout the period that the beeper was monitored, installation and use of the beepers "was not . . . an invasion of the privacy of others . . . ." 589 F.2d at 1264. Similarly, several courts have also held that the subsequent monitoring of a lawfully installed beeper violates no Fourth Amendment interests of those whose movements are revealed by the beeper. Indeed, every case cited in supra note 127, with the exception of One 1967 Cessna Aircraft and People v. Smith, so holds. The rationale for this latter ruling is that a person has no reasonable expectation of privacy with regard to his movements on the public streets or through the air. In arriving at this result, these courts correctly anticipated the result and the underlying reasoning of United States v. Knotts, 460 U.S. 276 (1983). See infra notes 173-84 and accompanying text.

130. See supra notes 62-78 and accompanying text.
and the subsequent sale of a vehicle.\textsuperscript{131}

3. Installation Into Contraband; "Tainted" Transactions

Several courts have held or stated in dictum that no Fourth Amendment rights are violated by the installation of a beeper into contraband, so long as the contraband is in the lawful possession of government agents at the time.\textsuperscript{132} The situation thus far has arisen only in cases involving the discovery of narcotics by United States Customs officials, who are authorized by law to open and inspect all packages and mail entering the United States from a foreign country.\textsuperscript{133} Not surprisingly, packages mailed from overseas are often found to contain contraband, such as heroin or cocaine, secreted in a hidden compartment of an apparently inoffensive item of personal property. When such a package has been discovered, law enforcement officials have two basic options. The first is simply to confiscate the entire package. Seizure prior to delivery, however, may make it difficult or impossible to prosecute successfully the intended recipient.\textsuperscript{134} From an investigative view-

\textsuperscript{131} If the sale of the can of ether in \textit{Karo} did not render the presence of the beeper a search or a seizure, the presence of a beeper (or transponder) in a vehicle should not do so, either. Indeed, in one sense, a beepered vehicle jeopardizes privacy interests even less than a beepered chemical container. See infra notes 149-62, 174-75 and accompanying text.

\textsuperscript{132} See infra notes 136-37.

\textsuperscript{133} In \textit{United States v. Ramsey}, the Supreme Court held:

That searches made at the border, pursuant to the longstanding right of the sovereign to protect itself by stopping and examining persons and property crossing into this country, are reasonable simply by virtue of the fact that they occur at the border, should, by now, require no extended demonstration. . . .

Border searches, then, from before the adoption of the Fourth Amendment, have been considered to be 'reasonable' by the single fact that the person or item in question had entered into our country from outside. There has never been any additional requirement that the reasonableness of a border search depended on the existence of probable cause. This longstanding recognition that searches at our borders without probable cause and without a warrant are nonetheless 'reasonable' has a history as old as the Fourth Amendment itself. We reaffirm it now.

431 U.S. 606, 616, 619 (1977). In \textit{Ramsey}, the Court upheld the opening and search of envelopes mailed from Thailand (which proved to contain heroin). The search had been conducted pursuant to 19 U.S.C. § 482 (1982), which authorizes customs officials to inspect incoming mail when they have "reasonable cause to suspect" that the mail contains illegally imported merchandise. Other statutes (and corresponding regulations) sweep even more broadly. For example, 19 U.S.C. § 1582 (1982) and 19 C.F.R. § 145.2 (1984) authorize the search of all incoming international mail, even without "reasonable cause to suspect" that a letter or package might contain contraband. See, e.g., \textit{Sheikh}, 654 F.2d at 1069-70. It should be noted that while these statutes authorize the warrantless search of incoming international mail, they do not authorize reading such mail, for which a warrant is required. See 19 C.F.R. § 145.3 (1984); cf. 18 U.S.C. § 1702 (1984).

134. Without proof that the intended recipient knew that the package contained contraband, it would be difficult to convict him or her of knowing possession or related crimes. See, e.g., \textit{Illinois v. Andreas}, 103 S. Ct. 3319, 3323 n.3 (1983); 21 U.S.C. §§ 841, 843-844 (1982).
point, a far more productive procedure is to allow the package to reach the intended recipient, wait until he or she has had time to open it, and then seize the package and arrest the person in possession of it.135

The use of a beeper greatly facilitates the latter technique. The officers first replace most of the heroin or cocaine with an inert powder, then install a beeper and reseal the hidden compartment. Next they either notify the addressee to pick up the package, or deliver it under carefully controlled circumstances. After the package is picked up or delivered, the police monitor the beeper to determine where the package is being taken (and, if the beeper is so equipped, to determine as well when the hidden compartment has been opened). When the officers consider the time is appropriate, they enter, search, seize, and arrest.

Every court that has considered the installation of a beeper under these circumstances has upheld its legality, even in the absence of a warrant or other court order.136 Several other courts have endorsed this result in dictum.137 The underlying rationale for this result was first expressed by the United States Court of Appeals for the First Circuit in *United States v. Emery*:

> [T]he beeper was not attached . . . to an object legitimately possessed by [appellant] . . . [R]ather, it was inserted into a package containing contraband, property which he had no right to possess. Therefore . . . the appellant in the instant case could have had no reasonable expectation of privacy as to the contraband. . . . [I]n inserting the beeper into the contraband, which had been legitimately discovered and constructively seized at the border, the government did not violate appellant's constitutionally protected freedom from unreasonable searches and seizures.138

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135. The inference of knowing and unlawful possession flows automatically and persuasively when it can be proved that a person opened the hidden compartment in which the contraband had been secreted.


138. *Emery*, 541 F.2d at 889-90. Each of the cases cited in the two preceding notes en-
Other courts have suggested that this reasoning is equally applicable to other “inherently tainted” transactions.139

The Karo decision lends further support to this reasoning. If the presence of a lawfully installed beeper in a can of noncontraband chemicals is neither a search nor a seizure,140 the same result undoubtedly will attain for the lawful installation of a beeper into a package containing contraband. Thus, insofar as installation and delivery is concerned, Karo leaves little reason to distinguish between contraband and noncontraband.141

B. Trespassory Installations

1. In General

In each of the situations discussed and cases cited thus far, the beeper was installed without an unlawful trespass into the container or vehicle. Will different standards apply if a beeper is installed into or onto an object without the consent of the owner or of someone (such as customs officials) with lawful authority to possess the object and examine its contents?

The nonconsensual, trespassory installation of a beeper to the inside of a
doors this reasoning. The Supreme Court has utilized similar reasoning in two recent cases. In United States v. Place, the Court held that exposing luggage to the sniff of a trained narcotics detection dog, which reveals only whether the luggage contains narcotics, is not a search. 103 S. Ct. 2637 (1983). See infra notes 394-96 and accompanying text. In Jacobsen, the Court held that where Drug Enforcement Administration agents had probable cause to believe that a tube containing white powder was cocaine, the act of opening the package, removing a small sample, and subjecting the sample to a chemical test, which destroyed the sample and revealed only whether the powder was a narcotic drug, “[did] not compromise any legitimate interest in privacy,” since “the interest in 'privately' possessing cocaine [is] illegitimate . . . .” Jacobsen, 104 S. Ct. at 1662.

One Ninth Circuit panel, however, has expressed reservations:

There appears to be an inherent danger in conditioning the legitimacy or reasonableness of the expectation of privacy on whether the item is contraband. Given full rein, such a dividing line could then be used to limit Fourth Amendment protections by the nature of the item seized, regardless of the reasonableness of the method used to obtain it. Would the warrantless physical search of a residence be reasonable because the occupants had no ‘legitimate’ expectation of privacy in the heroin they kept in the house?

United States v. Brock, 667 F.2d 1311, 1320 n.9 (9th Cir. 1982), cert. denied, 103 S. Ct. 1271 (1983) (dictum). The simple answer to the Ninth Circuit’s rhetorical question is no. Assuming the suspects had a reasonable expectation of privacy in the house itself, a warrant would be required to enter and search the house, unless the situation fell within a recognized exception to the warrant requirement. See generally 2 W. LAFAVE, SEARCH AND SEIZURE 3-28, 432-66 (1978 & Supp. 1984).

139. See infra notes 390-92 and accompanying text.
140. See supra notes 62-78 and accompanying text.
141. The contraband/noncontraband distinction may be quite significant, on the other hand, with regard to the lawfulness of private location monitoring. See infra notes 387-409 and accompanying text.
suitcase or similar container\textsuperscript{142} should be, and in all probability would be, categorized as a search, a seizure, or perhaps both.\textsuperscript{143} Presumably, therefore, barring exceptional circumstances, a warrant based upon probable cause would be required.\textsuperscript{144} The Karo decision strongly suggests, on the other hand, that the nonconsensual, trespassory attachment of a beeper to the outside of a package or container would not be considered a search or seizure.\textsuperscript{145} It would not be a search because the attachment, even though trespassory, would "convey[] no information at all."\textsuperscript{146} And, if the attachment of the beeper could be effected without physically transporting the container, or interfering with the suspect's ability to dispose of or transport it,\textsuperscript{147} the attachment would be "[a]t most . . . a technical trespass on the space occupied by the beeper,"\textsuperscript{148} and therefore not a seizure.

2. Vehicles

Entry by the police into the interior of a vehicle (without the consent of the owner) to install a beeper is clearly a search and may require a warrant.\textsuperscript{149} A warrant is also necessary if attachment of the beeper requires

\textsuperscript{142} This situation is, as yet, purely hypothetical. To the author's best knowledge, beepers are as yet neither small enough nor light enough to be put to such use without being discovered. See supra notes 6-7 and accompanying text.

\textsuperscript{143} To open the container would reveal its contents, which itself should suffice to be categorized as a search. "[T]he Fourth amendment provides protection to the owner of every container that conceals its contents from plain view." United States v. Ross, 456 U.S. 798, 822-23 (1982). See Robbins v. California, 453 U.S. 420, 425-28 (1981) (plurality opinion); Arkansas v. Sanders, 442 U.S. 753, 764 n.13 (1979). This principle should apply, even if the container was empty, and even if the investigators did not care to discover its contents. Alternatively, such installation, if not a search, might nevertheless be a more "meaningful interference with an individual's possessory interests in" that container than the transfer to a suspect of a chemical container in which a beeper has already been installed, and therefore classifiable as a seizure. Karo, 104 S. Ct. at 3302 (quoting Jacobsen, 104 S. Ct. at 1656)). See supra notes 75-77 and accompanying text.

\textsuperscript{144} See supra notes 29-31 and accompanying text; see also infra notes 266, 445 and accompanying text.

\textsuperscript{145} This assumes, of course, that the police have not unlawfully entered the target's home, office, etc. to install the beeper. Such unlawful entry would in many circumstances taint (that is, render suppressible) any information ultimately derived from the beeper surveillance. See infra notes 315-20 and accompanying text.

\textsuperscript{146} Karo, 104 S. Ct. at 3302. See supra notes 69-72 and accompanying text.

\textsuperscript{147} Such interference might itself be considered a seizure. See supra notes 21-22, 89 and accompanying text.

\textsuperscript{148} Butts, 710 F.2d at 1147 ("In our view, an individual clearly has a legitimate expectation that governmental agents will not encroach upon the interior of a vehicle [airplane] in such a fashion."); Hufford, 539 F.2d at 34 ("Had the agents not resorted to a warrant, entrance into the [defendant's private] garage and the opening of the truck's hood would have been an invasion of an area in which [defendant] had a reasonable expectation of privacy"); United
trespass onto private property.\textsuperscript{150} The law governing the trespassory installation of a beeper onto the exterior of a vehicle parked in public is less clear.\textsuperscript{151} The prevailing view prior to Karo was that a search warrant is not required to authorize the trespassory (that is, nonconsensual) attachment of a beeper to the exterior of a vehicle.\textsuperscript{152} The courts having so held justified the result by emphasizing the diminished privacy expectations a person enjoys in his automobile or airplane and the comparatively minor intrusion involved in the attachment.\textsuperscript{153} There

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\textsuperscript{151} Hufford, 539 F.2d at 34; see also United States v. Rowland, 448 F. Supp. 22 (N.D. Tex. 1977).

\textsuperscript{152} Prior to Katz v. United States, 389 U.S. 347 (1967), the Court had at least twice held that physical trespass into a suspect's property constituted a Fourth Amendment search. See supra note 23. The question, however, is whether the Katz "reasonable expectation of privacy" test supplements, rather than replaces, the traditional property based concept of Fourth Amendment protection—a proposition the Court appeared to ratify as recently as 1978 and one which still has adherents on the Court. See supra notes 99, 119 and accompanying text. If pushing a microphone thumbtack deep into a suspect's wall is a sufficient invasion of property rights to constitute a search, attaching a beeper to the undercarriage of an automobile arguably is also a sufficient invasion of property rights to constitute a search. See Clinton v. Virginia, 377 U.S. 158 (1964), rev'd per curiam, 204 Va. 275, 130 S.E.2d 437 (1963). But this analogy holds true only if one does not compare the investigative consequences of the "invasion." The microphone reveals what one has a right to expect will remain private; the beeper attached to a vehicle does not. See infra notes 173-84 and accompanying text.

\textsuperscript{153} Michael, 645 F.2d at 257-59 (assuming exterior attachment is a search, the intrusion is so minimal that a reasonable suspicion suffices to justify it); Moore, 562 F.2d at 112-13 (exterior attachment is a search requiring probable cause, but not requiring a warrant); People v. Colon, 96 Misc. 2d 659, 409 N.Y.S.2d 617 (N.Y. Sup. Ct. 1978) (apparently concluding that reasonable suspicion suffices, although in dictum only, since defendant lacked standing to raise the issue in the first place). See Karo, 710 F.2d at 1438 n.2 (in dictum cites Shovea, 580 F.2d 1382 (10th Cir. 1978), as imposing probable cause requirement); United States v. Bailey, 628 F.2d 938, 942 (6th Cir. 1980) (noting and discussing the issues without deciding them); United States v. Shovea, 580 F.2d 1382, 1387-88 (10th Cir.), cert. denied, 439 U.S. 966 (1978) (without deciding whether exterior attachment is a search, probable cause and exigent circumstances suffice); United States v. Frazier, 538 F.2d 1322, 1324-25 (8th Cir. 1976), cert. denied, 429 U.S. 1046 (1977) (whether exterior attachment constitutes a search is a "difficult question," but the existence of probable cause and exigent circumstances satisfy the Fourth Amendment in any event); United States v. Pretzinger, 542 F.2d 517, 520 (9th Cir. 1976) (sending mixed signals by suggesting in the same paragraph that such attachment is not a search and that a United States magistrate has the authority under the Federal Rules of Criminal Procedure 41 to issue a warrant authorizing such attachment). The Fifth Circuit had initially held that a warrant was required. See United States v. Holmes, 521 F.2d 859 (5th Cir. 1975), aff'd en banc, 537 F.2d 227 (5th Cir. 1976) (equally divided court). This precedent was, however, subsequently overruled in United States v. Michael, 645 F.2d 252, 257-59 (5th Cir.), cert. denied, 454 U.S. 950 (1981). See infra note 153.

\textsuperscript{153} See, e.g., Michael, 645 F.2d at 257-59 (target of investigation had little legitimate expectation of privacy with respect to the movements of his vehicle, to which a beeper was attached shortly after target had picked up precursor chemicals; thus, neither installation of
is disagreement, however, as to how much less than a warrant based on probable cause is required. One court has held that such attachment is lawful only if the authorities have probable cause to believe that evidence of crime will be discovered thereby; other courts have held that a reasonable suspicion suffices; and several judges have argued that trespassory exterior attachment is not a search at all.

The *Karo* decision suggests that the third viewpoint is the correct one. External attachment of a beeper onto a vehicle “conveys no information” to the installers, at least no information that the operator of the vehicle has not already “knowingly expose[d] to the public.” Granted, such installation creates a “potential” for the conveyance of information to the authorities, but a Fourth Amendment search occurs only when an actual, not merely a potential, invasion of privacy occurs.

*Jacobsen* and *Karo* also strongly suggest that attachment of a beeper to a vehicle’s exterior does not constitute a seizure. The attachment does not interfere with the vehicle owner’s “freedom of movement” of, in, or with the vehicle; it merely adds extra, unbargained-for optional equipment: an invisible tail.

Thus, although most of the lower courts that have considered the issue have held that the trespassory attachment of a beeper to a vehicle does con-
stitute a Fourth Amendment intrusion, there is serious question whether that result survives in light of the Karo and Jacobsen decisions.

IV. MONITORING

In United States v. Knotts, the Supreme Court unanimously held that, assuming the installation of a beeper into a drum of chloroform is lawful, the in-transit and at least some forms of general vicinity monitoring of the beeper do not constitute a search. The Court in United States v. Karo held unequivocally that private location monitoring of a beeper is a search. Karo also shed further light—and some confusion, as well—on the proper treatment of general vicinity monitoring. This section of this article will analyze these holdings.

A. In-transit Monitoring: Knotts

In United States v. Knotts, Minnesota police discovered that Tristan Armstrong periodically purchased chemicals that could be used to manufacture illicit drugs. The officers further discovered that after Armstrong purchased these chemicals, he would deliver them to an accomplice, Darryl Petschen. With the consent of the supplying chemical company, the officers installed a beeper in a five-gallon container of chloroform, one of the precursor chemicals necessary to manufacture amphetamines. The next time Armstrong purchased chemicals, he was given the container in which the beeper had been installed.

Using both visual surveillance and the beeper, the officers followed Armstrong to Petschen's home, where the container was transferred to Petschen's automobile. The officers then followed the vehicle into Wisconsin. During the latter part of his journey, Petschen began driving evasively, and the agents lost both visual and beeper contact with his vehicle. Approximately one hour later, a helicopter equipped with a monitor detected the beeper signal, now stationary, in the vicinity of a cabin occupied by Knotts in a rural part of Wisconsin.

After three days of intermittent visual surveillance of the cabin, police officers obtained a search warrant. Searching the cabin, they found a fully

164. Although all nine justices agreed that no search had occurred, four of the nine objected to other aspects of the majority opinion. See infra notes 185-91 and accompanying text.
165. See infra notes 282-87 and accompanying text.
167. It is unclear from the opinions in the case whether the officers in the helicopter could determine the precise location of the five-gallon drum, that is, whether it was in the cabin, on the porch, outside near the front or outside near the back.
operable, clandestine drug laboratory with equipment valued at more than $10,000, formulas for amphetamine and methamphetamine, and chemicals in sufficient quantity to produce fourteen pounds of pure amphetamine. Under a barrel outside the cabin, they also found the five-gallon container with the beeper.\footnote{Knotts, 460 U.S. at 277-79; see Knotts, 662 F.2d at 516.}

Armstrong, Petschen and Knotts were charged with conspiring to manufacture controlled substances. Armstrong pleaded guilty and testified for the government; Petschen and Knotts were tried and convicted of manufacturing controlled substances. On appeal, the Eighth Circuit reversed Knotts' conviction. The circuit court held that the use of the beeper to locate the chloroform at Knotts' cabin constituted an intrusion into his reasonable expectation of privacy, and that the failure of the police to obtain a warrant authorizing such an intrusion rendered the intrusion an unlawful search and seizure.\footnote{The court distinguished the use of a beeper in following a moving vehicle from the use of a beeper in determining an object's final resting place. The court explained that a principal rationale for allowing warrantless tracking of beepers, particularly beepers in or on an auto, is that beepers are merely a more effective means of observing what is already public. But people pass daily from public to private spheres. When police agents track bugged personal property without first obtaining a warrant, they must do so at the risk that this enhanced surveillance, intrusive at best, might push fortuitously and unreasonably into the private sphere protected by the Fourth Amendment. It did so in this case, where the beeper's signal was lost and found again only after the beeper-laden drum was on private property out of public view. Knotts, 662 F.2d at 518. Petschen's conviction, however, was affirmed. The court reasoned that he lacked a reasonable expectation of privacy in Knotts' cabin. Id. The question of standing is discussed infra in notes 309-14 and accompanying text.}

The government appealed and the Supreme Court reversed, reinstating Knotts' conviction.

To appreciate the limited nature of the Court's decision, it is important to understand what issues were not before the Court. First, Knotts did not challenge the lawfulness of the installation of the beeper.\footnote{Knotts assumed that he lacked standing to do so. Knotts, 460 U.S. at 279-80 n.**. He was probably correct. See infra notes 309-14 and accompanying text.} Second, there apparently was no indication that the officers continued to monitor the beeper after they initially located the beeper in the vicinity of Knotts' cabin.\footnote{Knotts, 460 U.S. at 284-85. See infra text accompanying note 183.} The only question before the Court in Knotts, therefore, was whether it constituted a "search" for the police to use the beeper to follow Petschen and, after having lost their quarry, to determine that the beepered container of chloroform had come to rest in the vicinity of Knotts' cabin.\footnote{Knotts, 460 U.S. at 284-85.} The Court held that it did not.

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168. Knotts, 460 U.S. at 277-79; see Knotts, 662 F.2d at 516.
169. The court distinguished the use of a beeper in following a moving vehicle from the use of a beeper in determining an object's final resting place. The court explained that a principal rationale for allowing warrantless tracking of beepers, particularly beepers in or on an auto, is that beepers are merely a more effective means of observing what is already public. But people pass daily from public to private spheres. When police agents track bugged personal property without first obtaining a warrant, they must do so at the risk that this enhanced surveillance, intrusive at best, might push fortuitously and unreasonably into the private sphere protected by the Fourth Amendment. It did so in this case, where the beeper's signal was lost and found again only after the beeper-laden drum was on private property out of public view.
170. Knotts, 662 F.2d at 518. Petschen's conviction, however, was affirmed. The court reasoned that he lacked a reasonable expectation of privacy in Knotts' cabin. Id. The question of standing is discussed infra in notes 309-14 and accompanying text.
1. The Court's Reasoning

The Court, per Justice Rehnquist, first reiterated that "the application of the Fourth Amendment depends on whether the person invoking its protection can claim a 'justifiable,' a 'reasonable,' or a 'legitimate expectation of privacy' that has been invaded by government action." That question, the Court stated, must be answered by applying the two-step analysis first enunciated by Justice Harlan in *Katz v. United States*.173 The Court then reviewed its prior holdings that a person enjoys only a limited expectation of privacy in an automobile.174 The Court continued:

A person travelling in an automobile on public thoroughfares has no reasonable expectation of privacy in his movements from one place to another. When Petschen travelled over the public streets he voluntarily conveyed to anyone who wanted to look the fact that he was travelling over particular roads in a particular direction, the fact of whatever stops he made, and the fact of his final destination when he exited from public roads onto private property.175

The Court acknowledged that Knotts, as the owner of the cabin and surrounding land,

undoubtedly had the traditional expectation of privacy within a dwelling place insofar as the cabin was concerned. . . . But no such expectation of privacy extended to the visual observation of Petschen's automobile arriving on his premises after leaving a public highway, nor to movements of objects such as the drum of chlo-

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174. One has a lesser expectation of privacy in a motor vehicle because its function is transportation and it seldom serves as one's residence or as the repository of personal effects. A car has little capacity for escaping public scrutiny. It travels public thoroughfares where both its occupants and its contents are in plain view. *Knotts*, 460 U.S. at 281 (quoting *Cardwell v. Lewis*, 417 U.S. 583, 590 (1974) (plurality opinion); citing *Rakas v. Illinois*, 439 U.S. 128, 153-54 n.2 (1978) (Powell, J., concurring); *South Dakota v. Opperman*, 428 U.S. 364, 368 (1976)). In *Cardwell*, the Court held that it was reasonable for police to seize a murder suspect's vehicle from the public lot where it had been parked, tow it to a more convenient location, and then take tire casts and paint scrapings from it, all without a warrant. *Cardwell*, 417 U.S. at 592-96. In *Opperman*, the Court upheld the warrantless search of a car that had been towed after it collected several parking tickets. *Opperman*, 428 U.S. at 384.

175. *Knotts*, 460 U.S. at 281-82. In fact, however, Petschen did not "voluntarily convey" his "final destination" to "anyone who wanted to look." Instead, he took evasive measures, in an effort (which, but for the beeper, would have been successful) to prevent the police, "who wanted to look [from learning his] final destination." For a further discussion of this aspect of the Court's opinion, see *infra* notes 192-207 and accompanying text.
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roform outside the cabin in the 'open fields.'

The Court emphasized that "[v]isual surveillance from public places . . . adjoining Knotts' premises would have sufficed to reveal all of these facts to the police." The fact that the police relied on the beeper in addition to visual surveillance to acquire this information "does not alter the situation." The Court concluded this portion of its analysis with the observation, "Nothing in the Fourth Amendment prohibited the police from augmenting the sensory faculties bestowed upon them at birth with such enhancement as science and technology afforded them in this case."

The Court noted that it was not authorizing the police to conduct "twenty-four hour surveillance of any citizen . . . without judicial knowledge or supervision," commenting that "if such dragnet type law enforcement practices . . . should . . . occur, there will be time enough then to determine whether different constitutional principles may be applicable." But the mere fact that "scientific devices such as the beeper enabled the police to be more effective in detecting crime," the Court stated, did not give rise to a constitutional violation. "We have never equated police efficiency with unconstitutionality, and we decline to do so now."

Finally, the Court rejected Knotts' claim—and the Eighth Circuit's con-

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176. Knotts, 460 U.S. at 282 (citing Hester v. United States, 265 U.S. 57 (1924)). Justice Blackmun, joined by Justices Brennan, Marshall, and Stevens, concurring in the result, objected to the citation to Hester and the "open fields" doctrine, noting that the Knotts case did not involve the open fields doctrine and that citation to that doctrine was particularly inappropriate because cases concerning the open fields doctrine had recently been accepted by the Court for argument and plenary consideration. Id. at 287 (Blackmun, J., concurring). Subsequently, in Oliver v. United States, the Court reaffirmed the "open fields" doctrine first enunciated in Hester, holding that police officers may enter and search an unoccupied or undeveloped area outside the "curtilage" of a dwelling without either a warrant or probable cause. Oliver, 104 S. Ct. 1735 (1984). For a further discussion of Oliver, see supra note 77 and infra note 231.

177. Knotts, 460 U.S. at 282.

178. Id. at 282-83 (citing Smith, 442 U.S. 735, 744-45 (1979); United States v. Lee, 274 U.S. 559, 563 (1927)). In Lee, the Court held that it did not constitute a search for law enforcement officials on the high seas to use a search light to enable them to see cases of liquor on the deck of a ship. The Court likened the use of a searchlight to the use of a field glass or marine glass, and concluded that use of these devices would constitute a search. Lee, 274 U.S. at 563. In Smith, the Court held that when the subscriber to telephone service dialed a number, he "voluntarily conveyed numerical information to the telephone company," and thereby assumed the risk that the company was using special equipment at police request to record the numbers dialed. Smith, 442 U.S. at 744. If the subscriber had placed the calls through an operator, the Court reasoned, he could have claimed no reasonable expectation of privacy if the operator retained a record of the numbers dialed. Id. No "different constitutional result is required," the Court stated, "because the telephone company has decided to automate." Id. at 745.

179. Id. at 284.

180. Id. at 283-84.

181. Id. at 284.
clusion—that the use of the beeper involved "the sanctity of [r]espondent's residence." 182

[N]othing in this record indicates that the beeper signal was received or relied upon after it had indicated that the drum containing the chloroform had ended its automotive journey at rest on respondent's premises in rural Wisconsin. Admittedly, because of the failure of the visual surveillance, the beeper enabled the law enforcement officials in this case to ascertain the ultimate resting place of the chloroform when they would not have been able to do so had they relied solely on their naked eyes. But scientific enhancement of this sort raises no constitutional issues which visual surveillance would not also raise. A police car following Petschen at a distance throughout his journey could have observed him leaving the public highway and arriving at the cabin owned by respondent, with the drum of chloroform still in the car. . . . [T]here is no indication that the beeper was used in any way to reveal information as to the movement of the drum within the cabin, or in any way that would not have been visible to the naked eye from outside the cabin. Just as notions of physical trespass based on the law of real property were not dispositive in *Katz*. . . . neither were they dispositive in *Hester v. United States*, 265 U.S. 57 (1924).183

The Court concluded that monitoring the beeper did not invade any legitimate expectation of privacy that Knotts could claim; hence, "there was neither a 'search' nor a 'seizure' within the contemplation of the Fourth Amendment."184

2. Concurring Opinions

All nine Justices concurred in the result. Four of the Justices, however, declined to join Justice Rehnquist's majority opinion. Justice Brennan, joined by Justice Marshall, wrote separately to note his concern over the "much more difficult" question of whether the installation of the beeper was lawful.185 He also decried the "formalism and confusion in this Court's recent attempts to redefine Fourth Amendment standing."186 Justice Blackmun, joined by Justices Brennan, Marshall and Stevens, objected to the majority's "gratuitous" reference to the "open fields" doctrine and citation

182. *Id.*
183. *Id.* at 284-85.
184. *Id.* at 285.
185. *Id.* at 286 (Brennan, J., concurring). For an analysis of the *Karo* decision relating to installation, see *supra* notes 56-121 and accompanying text. For other issues relating to installation, see *supra* notes 123-62 and accompanying text.
186. *Knotts*, 460 U.S. at 287 (Brennan, J., concurring). For a discussion of issues relating to standing, see *infra* notes 309-14 and accompanying text.
to *Hester v. United States.*

Justice Stevens, joined by Justices Brennan and Marshall, agreed with the majority that, putting the question of the beeper's installation aside, "it was entirely reasonable for the police officers to make use of the information received over the airwaves when they were trying to ascertain the ultimate destination of the chloroform." Justice Stevens objected, however, to the majority's statement that the Fourth Amendment does not inhibit "the police from augmenting the sensory faculties bestowed upon them at birth with such enhancement as science and technology afforded them," noting that the Court in *Katz* held to the contrary. "Although the augmentation in this case was unobjectionable," Justice Stevens stated, "it by no means follows that the use of electronic detection techniques does not implicate especially sensitive concerns."

Justice Stevens is, of course, correct. Electronic detection techniques, and other forms of scientific enhancement of the unaided eye and ear, do indeed "implicate especially sensitive concerns." It appears, however, that the majority was adequately alert to these concerns. Thus, the majority specified that the Fourth Amendment does not prohibit the technological enhancement of natural sensory faculties that occurred "in this case." Elsewhere, the Court commented that "scientific enhancement of this sort raises no constitutional issues that visual surveillance would not also raise." Still, Justice Stevens' separate opinion serves the worthwhile purpose of underscoring the "especially sensitive" implications of the use of technology in surveillance.

3. Evaluation and Analysis

The Court's unanimous conclusion, that the in-transit and general vicinity monitoring did not constitute a "search," deserves further comment. The Court's conclusion was based on the following reasoning:

a. The Fourth Amendment protects only legitimate expectations of privacy.

b. Because Petschen was traveling in public, he assumed the

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188. *Knotts*, 460 U.S. at 288 (Stevens, J., concurring).

189. *Id.* (Stevens, J., concurring). It should be noted that the majority opinion specified that the Fourth Amendment did not prohibit the technological enhancement of natural sensory faculties "in this case." *Id.* at 282 (emphasis added). For the entire passage of the majority's opinion, see supra text accompanying note 183.


191. *Id.* at 285 (emphasis added).

192. *Id.* at 280-81. See also supra notes 24-28 and accompanying text.
risk that his movements might be observed.\textsuperscript{193}

c. Had the police discovered Petschen's destination by conducting visual surveillance, they would not have intruded into any legitimate privacy expectation that Petschen could claim.\textsuperscript{194}

d. Because the police could have learned what they did by visual surveillance, no additional constitutional issues arise because they acquired that information by monitoring the beeper after they lost sight of Petschen.\textsuperscript{195}

This final step in the Court's analysis flows logically from the first three, but a plausible argument to the contrary also exists, depending upon how one determines which privacy expectations are reasonable. Granted, that in \textit{Katz v. United States}, the lodestone of Fourth Amendment analysis, the Court, per Justice Stewart, observed, "What one knowingly exposes to the public . . . is not a subject of Fourth Amendment protection."\textsuperscript{196} But how "public" must the "exposure" be before Fourth Amendment protections are waived; and are such protections waived regardless of the means utilized by the police to observe or overhear such "public" conduct? It is well-established that the Fourth Amendment right to privacy includes freedom from unauthorized and unjustified intrusions into one's person,\textsuperscript{197} home,\textsuperscript{198} office,\textsuperscript{199} luggage,\textsuperscript{200} or automobile.\textsuperscript{201} Might it not also include the right to make a reasonable assessment of whether one's "public" conduct is being monitored?

For example, if I make a phone call from a pay telephone—the kind without an enclosed booth—and a stranger is standing a few feet away, I have no

\begin{itemize}
\item \textsuperscript{193} \textit{Knotts}, 460 U.S. at 281-82. \textit{See supra} text accompanying note 175.
\item \textsuperscript{194} \textit{Knotts}, 460 U.S. at 281-82. Up to this point, there is nothing particularly noteworthy about the Court's reasoning, consisting, as it does, of little more than a restatement of firmly established principles. But the police did not learn of Petschen's destination by visual surveillance. They declined to conduct intensive, bumper-to-bumper surveillance, presumably because to do so would have alerted Petschen to the fact that he was being followed. This, in turn, might have prompted Petschen to change his plans and his destination, thereby frustrating the officers' efforts to find the clandestine laboratory. Because the officers on the ground conducted visual surveillance very cautiously, Petschen was able to elude them. His destination was not determined by visual surveillance but through the use of a helicopter equipped with a monitor.
\item \textsuperscript{195} \textit{Id.} at 285.
\item \textsuperscript{196} \textit{Katz}, 389 U.S. at 351. The next sentence of \textit{Katz} reads: "But what he seeks to preserve as private, even in an area accessible to the public, may be constitutionally protected." \textit{Id.} at 351-52.
\item \textsuperscript{197} \textit{See, e.g.}, Terry v. Ohio, 392 U.S. 1 (1968).
\item \textsuperscript{198} \textit{See, e.g.}, Payton v. New York, 445 U.S. 573 (1980).
\item \textsuperscript{199} \textit{See, e.g.}, Mancusi v. DeForte, 392 U.S. 364 (1968).
\item \textsuperscript{200} \textit{See, e.g.}, Arkansas v. Sanders, 442 U.S. 753 (1979); United States v. Chadwick, 433 U.S. 1 (1977).
\item \textsuperscript{201} \textit{See, e.g.}, Delaware v. Prouse, 440 U.S. 648 (1979).
\end{itemize}
Fourth Amendment complaint to make if the stranger happens to be a police officer who is listening to every word I say. By speaking loudly enough to be overheard by the bystander, I "knowingly expose" my words to the officer. If I want to avoid that risk, I can always wait until he moves out of earshot; and if he does not do so, I can still protect my privacy by hanging up and walking away. Suppose, instead, that when I approach the telephone, no one is in earshot except two teenagers holding hands and gazing fondly into one another's eyes. Assessing the probabilities, I place my call. I still have no Fourth Amendment complaint if in reality the couple belongs to the police department's special baby faced investigators' unit: that is the risk I choose to assume. By assuming this risk, however, must I also assume the risk that the police, acting without judicial authority, have attached an eavesdropping device to the side of the phone, and are electronically monitoring my words from several hundred yards away? For that matter, must I assume the latter risk even if no one is within sight or earshot?  

Drawing an analogy from this situation to the facts in *Knotts*, it might be argued that this is precisely the reasoning the Court has adopted: since Petschen assumed the risk that the police might be able to follow him to Knotts' cabin by visual surveillance without being noticed by him, he also assumed the risk that the drum of chloroform he received from Armstrong was equipped with a beeper that rendered visual—and visible—surveillance unnecessary. The analogy, however, is far from exact. Surveillance of one's location and surveillance of one's words differ, not merely in degree, but in kind. Under most circumstances, a person's location and travel simply are not "private," and surveillance, though potentially offensive, does not intrude as deeply or as dangerously into privacy and individual liberty as does surreptitious surveillance of what one says to friends, relatives and other confidants. Thus, it is not at all inconsistent for the Court to have held that electronic surveillance of communications is a search subject to Fourth Amendment protection, while also holding that electronic surveillance of public travel is not.

Individual privacy would have been enhanced if the Court had held that in-transit monitoring is an unlawful search unless authorized in advance by a

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203. Analysis by analogy is inherently risky in attempting to apply Fourth Amendment concepts to new forms of surveillance. See C. Fishman, *supra* note 66, at §§ 6-7.

search warrant supported by probable cause. This enhancement would have come, however, at the cost of diminishing the efficiency of law enforcement, because in some circumstances, the use of this technique would thereby be rendered legally impermissible. Individual privacy and effective law enforcement are both essential if we are to continue to exist as a free society. When these concerns come into conflict, as inevitably they do, the key questions are where the balance between them should be struck, and by whom. The in-transit monitoring of the beeper did no more than frustrate Pet-schen's efforts to evade lawful visual surveillance. The Court struck the proper balance in United States v. Knotts, holding that the in-transit monitoring of the beeper did not implicate legitimate privacy expectations and, therefore, did not constitute a search.

B. Private Location Monitoring: Karo

The facts in United States v. Karo are as complex as those in Knotts were simple. In August of 1980, Karo and two codefendants, Horton and Harley, ordered fifty gallons of ether from an informant, who alerted DEA agents to the shipment and told them that the ether would be used in the production of cocaine. With the consent of the informer, the agents substituted their own can containing a beeper for one of the cans in the shipment and then had all ten cans painted to give them a uniform appearance.

On September 20, 1980, the agents watched as Karo picked up the ether at the informant's house. By visual surveillance and in-transit monitoring, they followed Karo to his home. Later the same day, the agents monitored the beeper to determine that the can was still in Karo's home; still later, they

205. In Knotts, the police used the beeper in order to learn the whereabouts of, and to acquire probable cause to search, the clandestine drug laboratory. Knotts, 460 U.S. at 285. A court should be reluctant to require probable cause before the police are permitted to use an investigative technique that itself is primarily useful as a method to acquire probable cause. It is, of course, difficult to assess the degree to which imposition of a warrant requirement would hamper police efficiency without an appreciation of what factual showings do or do not amount to probable cause. See infra notes 453-66 and accompanying text.

206. Nothing is more destructive of individual liberty than unchecked lawlessness.

207. Where the issue under consideration is more one of public policy than of fundamental constitutional principles, the decision should be made by the Congress, not by the Court. See supra notes 116-21 and accompanying text.


209. See supra note 58.

210. 104 S. Ct. at 3300. Deliberately falsifying the facts in an effort to protect the identity of their informer, the agents obtained a warrant authorizing installation of the beeper. The warrant was later ruled invalid because of deliberate misrepresentations in the application, and the courts treated the case as if no warrant had been obtained. Id. at 3300-01. See supra note 59 and accompanying text.
Electronic Tracking Devices

discovered that it had been removed. Using the beeper, they located the can again, this time in Horton's home, where they could detect the smell of ether from the public sidewalk. Two days later, the agents discovered that the can had been moved a third time. Using the beeper, they learned that it was now in Horton's father's home.

The following day, the agents discovered that the can had been moved a fourth time. By monitoring the beeper, they traced it to a commercial self-storage facility.\(^{211}\) By subpoenaing the storage facility's records,\(^ {212}\) they determined that Horton and Harley had rented a particular locker at the facility. Using the beeper, the agents confirmed that the can was in the row of lockers indicated in the records, and then verified that the locker in question contained the ether when they detected its distinct odor surrounding the locker.\(^ {213}\) Approximately seventeen days later, the manager of the storage facility informed the agents that the ether had been moved yet a fifth time. Using their directional finder, the agents picked up the beeper signal three days later at another self-storage facility.\(^ {214}\) This time they determined the number of the locker by questioning the manager of the facility. With the permission of the manager, they installed in a separate locker a closed circuit video camera focused on the locker containing the ether.\(^ {215}\) For three-and-a-half months they watched the locker, during which time their otherwise unremitting boredom was relieved by the occasional visits of defendants Horton and Harley to the locker. Finally, on February 6, 1981, the agents watched on the closed circuit camera as a fourth defendant, Rhodes, removed the cans of ether from the locker. Using both visual and beeper surveillance, the agents followed the ether to Rhodes' residence, where it remained for a time in a truck parked in Rhodes' driveway. Later that day, the truck was followed to a residence in Taos, New Mexico, rented by Horton, Harley, and a fifth defendant, Steele. The agents monitored the beeper for three days to ascertain its continued presence inside the Taos resi-

\(^{211}\) 104 S. Ct. at 3300.
\(^{212}\) The monitoring equipment was not sensitive enough to reveal precisely which locker the ether was in. \textit{Id.}
\(^{213}\) \textit{Id.} On October 8, 1980, the agents obtained a court order authorizing the installation of an entry tone alarm in the door of locker 143. The alarm was designed to emit an electronic signal at the opening of the door. While installing the alarm, the agents observed that the cans of ether were still inside the locker. On October 16, Horton retrieved the contents of the locker; the alarm apparently failed to function. \textit{Id.}
\(^{214}\) The agents did not learn that the ether had been removed until the manager of the storage facility informed them that Horton had been there. \textit{Id.}
\(^{215}\) \textit{Id.} The agents had obtained another order authorizing the installation of an entry tone alarm in locker 15, but decided to rely on the camera instead of installing the alarm. \textit{Id.}
dence, and noticed on one cold, windy day that all the windows of the cabin were open, suggesting that the ether was being used. The agents then obtained and executed a search warrant. Horton, Harley, Steele, and a sixth defendant, Roth, were arrested at the residence.

The United States Court of Appeals for the Tenth Circuit suppressed the evidence as to Steele, Horton, Harley, and Roth, reasoning that each of them enjoyed a legitimate expectation of privacy in the house in Taos, and that that expectation was violated by the private location monitoring of the beeper in that house. In Karo, therefore, the Supreme Court squarely faced the issue of private location monitoring—an issue that had confused the nation's courts, and that the Court had avoided in Knotts.

Part III

216. Id. at 3300-01. The agents relied on the beeper, rather than on visual surveillance, for fear of being observed from the cabin.

217. Id. at 3301. The government maintained that, before it was moved to the Taos residence, the beeper revealed only that the can of ether was in the general vicinity of the various houses and lockers storing the ether, without revealing whether the can was actually inside a particular house or locker. See Brief for Appellant at 5. The government conceded, however, that the beeper had pinpointed the ether can's location as inside the Taos residence. Id. at 25. Although the government argued that this fact was constitutionally insignificant, the Court held otherwise. See infra notes 226-38 and accompanying text.

218. Karo, 710 F.2d at 1440-41. The Tenth Circuit also held that because ether is not contraband, special rules relevant to the installation and monitoring of a beeper in contraband cases were not applicable in Karo. Id. at 1436. The government did not appeal this aspect of Karo. The Tenth Circuit also held that the sale of the beepered can of ether to Karo violated Karo's Fourth Amendment rights. Id. at 1438-39. The Supreme Court reversed this aspect of the decision. See supra notes 62-74 and accompanying text.

219. "Private location monitoring," as used herein, means monitoring a beeper after the object into which it has been installed has been taken into a place in which privacy expectations are sufficiently great that barring exigent circumstances, a warrant is required before law enforcement officers are permitted to enter or search. See text accompanying supra note 14.

220. Several courts have held, or opined in dictum, that private location monitoring is lawful without a warrant in cases involving contraband or inherently tainted transactions. This doctrine probably survives the Karo decision. See infra notes 387-409 and accompanying text. In cases not involving contraband, on the other hand, most courts had held (prior to Karo) that a warrant is required to authorize private location monitoring. United States v. Karo, 710 F.2d 1433, 1439 (10th Cir. 1983) (fruits of surveillance suppressed for lack of valid warrant), aff'd in part and rev'd in part, 104 S. Ct. 3296 (1984); United States v. Knotts, 662 F.2d 515 (8th Cir. 1981), rev'd on other grounds, 103 S. Ct. 1081 (1983) (adopting the view expressed in Bailey and Moore); United States v. Bailey, 628 F.2d 938, 944 (6th Cir. 1980) (private location monitoring in two apartment buildings over a two-month period; although a warrant had been obtained, its lack of any time limit was held to have rendered it invalid; fruits of surveillance suppressed); United States v. Moore, 562 F.2d 106, 113 (1st Cir. 1977), cert. denied, 435 U.S. 926 (1978) (private location monitoring of precursor chemical in defendant's home for two weeks; fruits of surveillance suppressed); State v. Hendricks, 43 N.C. App. 245, 254-55, 258 S.E.2d 872, 880-81 (1979) (warrant based on probable cause had been obtained; hence, fruits of surveillance admissible). The Ninth Circuit, on the other hand, had held that in at least some circumstances, private location monitoring is not a search. United States v. Brock, 667 F.2d 1311, 1321-22 (9th Cir. 1982), cert. denied, 103 S. Ct. 1271 (1983).

221. The Knotts Court observed:
of the Karo decision and (less directly) portions of Part IV are devoted to that issue.

In Part III of Karo, the Court held, apparently unequivocally, that private location monitoring of a beeper constitutes a search subject to the Fourth Amendment warrant requirement. Later in the opinion, however, the Court applied this holding in a manner that appears to substantially reduce its significance. In addition, the Court left several important questions unresolved. In particular, the Court explicitly refused to consider whether a beeper surveillance warrant must be supported by probable cause, or whether the lesser showing of a reasonable suspicion will suffice. Further, Karo reaffirmed and broadened the Knotts holding that general vicinity monitoring is not a search, but did not draw a clear line between it and private location monitoring (which is a search subject to the Fourth Amendment warrant requirement).

1. The Court's Reasoning

In its discussion of private location monitoring, the Court first held that such monitoring constitutes a search. It then held that such a search is, as a rule, unlawful unless authorized by a warrant.

[N]othing in this record indicates that the beeper signal was received or relied upon after it had indicated that the drum containing the chloroform had ended its automotive journey at rest on respondent's premises in rural Wisconsin. . . . [T]here is no indication that the beeper was used in any way to reveal information as to the movement of the drum within the cabin, or in any way that would not have been visible to the naked eye from outside the cabin.

Knotts, 460 U.S. at 284-85. See also Karo, 104 S. Ct. at 3303 ("In Knotts, the record did not show that the beeper was monitored while the can containing it was inside the cabin, and we therefore had no occasion to consider whether a constitutional violation would have occurred had the fact been otherwise.").

222. See infra notes 328-65 and accompanying text.

223. Karo, 104 S. Ct. at 3305 n.5. See infra notes 442-87 and accompanying text.

224. See infra notes 282-306 and accompanying text.

225. Karo, 104 S. Ct. at 3303-05. Seven of the nine Justices concurred in this conclusion, and the reasoning whereby it was reached. Justice White wrote the opinion of the Court, in which the Chief Justice and Justices Blackmun and Powell joined. Justice Stevens, joined by Justices Brennan and Marshall, agreed with most aspects of this section of Justice White's opinion, although they dissented from most other aspects of the decision. See supra notes 79-83 and accompanying text (dissenting from conclusion that installation and sale do not constitute a seizure). See also infra notes 367-68 (dissenting from conclusion that the evidence seized is admissible as to all defendants). Justice O'Connor, joined by Justice Rehnquist, concurred in most aspects of the White opinion, but disagreed with some aspects of the White analysis of the private location monitoring issue. See infra notes 251-55 and accompanying text.
a. Search

The Court began its discussion by distinguishing the facts and holding in Knotts from the facts in Karo.

[In Knotts, t]he Court held that since the movements of the automobile and the arrival of the can containing the beeper in the area of the cabin could have been observed by the naked eye, no Fourth Amendment violation was committed by monitoring the beeper during the trip to the cabin. In Knotts, the record did not show that the beeper was monitored while the can containing it was inside the cabin . . . .226

In Karo, by contrast, "there is no gainsaying that the beeper was used to locate the ether in a specific house in Taos, New Mexico, and that that information was in turn used to secure a warrant for the search of the house."227 Unlike Knotts, therefore, Karo "presents the question whether the monitoring of a beeper in a private residence, a location not open to visual surveillance, violates the Fourth Amendment rights of those who have a justifiable interest in the privacy of the residence . . . . [W]e think that it does."228

In supporting its conclusion, the Court began by restating fundamental Fourth Amendment principles. First, "private residences are places in which the individual normally expects privacy free of governmental intrusion not authorized by a warrant, and that expectation is plainly one that society is prepared to recognize as justifiable."229 Second, "[s]earches and seizures inside a home without a warrant are presumptively unreasonable absent exigent circumstances."230

Next, the Court considered whether the private location monitoring constituted a sufficient intrusion into the residence to be considered a search,

226. Karo, 104 S. Ct. at 3303 (emphasis added).
227. Id. (emphasis added). The Court quoted directly from the DEA agent’s affidavit for a warrant to search the Taos residence. The affidavit specified that during a multiday period, the beeper’s signals were "emanating from inside the . . . residence." Id.
228. Id.
229. Id.
230. Id. (citing Welsh v. Wisconsin, 104 S. Ct. 2091 (1984); Steagald v. United States, 451 U.S. 204, 211-12 (1981); Payton v. New York, 445 U.S. 573, 586 (1980)). In Welsh, the Court held that it is unconstitutional for police to forcibly enter a person’s home to arrest him for driving while intoxicated, especially where that offense is considered only a civil violation. Welsh, 104 S. Ct. at 2098-99. The Court stated that concern over the evidence of intoxication dissipating while a warrant is being obtained is insufficient reason to dispense with the warrant requirement. Id. at 2099-100. In Payton, the Court held that, absent exigent circumstances, entry into a suspect’s home to effect a routine felony arrest in the absence of an arrest warrant is unconstitutional. Payton, 445 U.S. at 587-89. In Steagald, the Court held that, barring exigent circumstances, police may not enter the home of a third person to arrest a suspect whom they believe is hiding therein unless they first obtain a search warrant authorizing them to search that premises for the suspect. Steagald, 451 U.S. at 213.
and concluded that it did. Certainly, the Court reasoned, if a DEA agent, surreptitiously and without a warrant, entered the Taos residence to verify the ether’s presence therein,

there is little doubt that he would have engaged in an unreasonable search within the meaning of the Fourth Amendment. For purposes of the Amendment, the result is the same where, without a warrant, the Government surreptitiously employs an electronic device to obtain information that it could not have obtained by observation from outside the curtilage of the house. The beeper tells the agent that a particular article is actually located at a particular time in the private residence and is in the possession of the person or persons whose residence is being surveilled.231

231. *Karo*, 104 S. Ct. at 3303. The government protested that often this is not the case; rather, "agents monitoring a beeper are often unable to determine whether the beeper is located inside a particular house, rather than on a porch or in an adjacent yard." Reply Brief for the United States at 8, *Karo*, 104 S. Ct. 3296 (1984). The government argued that, in such situations, no true private location monitoring has taken place. Such surveillance, the government reasoned, is therefore no more intrusive than that which occurred in *Knotts*—that is, it should not be classified as a search. *Id.* at 25-27, *Karo*. Even where the beeper reveals the presence of chemicals inside a particular residence (which the government conceded occurred with regard to the house in Taos), the government argued, no different result should attain, because this information would be no more helpful to the investigators than the knowledge that the container was in the immediate vicinity of the residence.

To agents attempting to track the movement of precursor chemicals, the information conveyed by a beeper has essentially the same utility whether the beeper is broadcasting from inside or outside a particular structure: for purposes of following the chemicals to the next location, or of obtaining a warrant to search the place where the chemicals are presently situated, the precise location of the chemicals is of little or no moment. Reply Brief for the United States at 8-9, *Karo*. Even assuming the government’s factual assertions are correct, however, they do not necessarily support the legal conclusions the Government urged. The protection of privacy that the Fourth Amendment affords to a person’s house also extends to some extent to the “curtilage” of his residence, that is, “the land immediately surrounding and associated with the home.” *Oliver*, 104 S. Ct. at 1742.

The curtilage is the area to which extends the intimate activity associated with the “sanctity of a man’s home and the privacies of life,” and therefore has been considered part of the home itself for Fourth Amendment purposes. Thus, courts have extended Fourth Amendment protection to the curtilage; and they have defined the curtilage . . . by reference to the factors that determine whether an individual reasonably may expect that an area immediately adjacent to the home will remain private. *Id.* (citation omitted). Thus, whether the beeper implanted can had been inside the house, or (as the government hypothesized in its reply brief) on the front porch or in an adjacent yard, private location monitoring of its presence arguably constituted a search within the scope of the Fourth Amendment.

Naturally, if investigators had been able to see and recognize the can from a place where they had a right to be—the street, the sidewalk, or even the front porch—this would not have constituted a search. “What a person knowingly exposes to the public, even in his own home or office, is not a subject of Fourth Amendment protection.” *Katz*, 389 U.S. 347, 351. But there is no suggestion in *Karo* that such a “knowing exposure” occurred.
And this would have been true, the Court emphasized, even if the agents had tracked the beepered article to the residence by visual surveillance, for "the later monitoring not only verifies the officers' observations but also establishes that the article remains on the premises."232

In its brief and again at oral argument, the government argued that private location monitoring is so minimal an intrusion that it should not be considered a search.233 The Court conceded that such monitoring is less intrusive than a full-scale search, but it does reveal a critical fact about the interior of the premises that the Government is extremely interested in knowing and that it could not have otherwise obtained without a warrant. The case is thus not like Knotts, for there the beeper told the authorities nothing about the interior of Knotts' cabin. The information obtained in Knotts was 'voluntarily conveyed to anyone who wanted to look. . . . [H]ere, as we have said, the monitoring indicated that the beeper was inside the house, a fact that could not have been visually verified.

We cannot accept the Government's contention that it should be completely free from the constraints of the Fourth Amendment to determine by means of an electronic device, without a warrant and without probable cause or reasonable suspicion, whether a particular article—or a person, for that matter—is in an individual's home at a particular time. Indiscriminate monitoring of property that has been withdrawn from public view would present far too serious a threat to privacy interests in the home to escape entirely some sort of Fourth Amendment oversight.234

Although the specific factual context under discussion in Part III of Karo was a private residence (the house in Taos),235 the rule enunciated therein (that private location monitoring constitutes a search) is not limited to residential monitoring. Later in the opinion, the Court explicitly stated that this

232. Karo, 104 S. Ct. at 3303. Thus, private location monitoring differs from consensual installation: the latter reveals no information, and therefore is not a search while the former does reveal information, and therefore is a search. See supra notes 62-74 and accompanying text.

233. This theory was only one of several upon which the government sought to secure a reversal of the suppression of the evidence. At oral argument, however, once counsel for the government enunciated this theory, the Justices never allowed him to leave it, despite several attempts on his part. Thus, the government was forced to devote its entire time allotment to defending what in my opinion was its least plausible theory. Ironically, the Court ultimately did reverse the lower court's judgment, on a theory neither briefed nor argued by the parties. See infra note 368 and accompanying text.

234. Karo, 104 S. Ct. at 3303-04 (citation omitted).

235. Later in the opinion, the Court also indicated that the nonwarranted private location monitoring of the beeper in Karo's home (the beepered can's first stop on its five-month tour) also constituted an unlawful search. Id. at 3307 n.7.
holding applies as well to other locations in which privacy expectations are recognized as reasonable. The Court drew a careful distinction, however, between monitoring that reveals an object’s presence inside such a location and therefore constitutes a search and monitoring that only reveals that the object is in the general vicinity of such a location. Such monitoring, the Court made clear, is not a search.

b. The Warrant Requirement

The Court then turned to a determination of the “sort of Fourth Amendment oversight” required and concluded that, barring exigent circumstances, private location monitoring of a beeper inside a private residence is lawful only if authorized by a warrant. “We . . . reject the government’s contention,” the Court stated, “that it should be able to monitor beepers in private residences without a warrant” whenever the requisite factual basis (probable cause? reasonable suspicion?) suggests that criminal activity is afoot.

The Court again commenced its discussion by enunciating a fundamental Fourth Amendment principle: “Warrantless searches are presumptively unreasonable, though the Court has recognized a few limited exceptions to this general rule.” The government had argued that beeper surveillance should be excepted from the warrant requirement, asserting that to require a warrant would do little to protect individual privacy while imposing substantial practical problems on investigators. The Court disagreed with this argument, noting that it had already rejected the contention that “the beeper constitutes only a miniscule intrusion on protected privacy interests.” Significant privacy interests were indeed at stake, the Court found.

The primary reason for the warrant requirement is to interpose a

236. In discussing the beeper surveillance that enabled the agents to track the beepered can to the second storage facility, the Court emphasized that the beeper revealed only that the can was somewhere in the warehouse; the specific locker in which it was located was discovered by other means. Id. at 3306. “Monitoring the beeper revealed nothing about the contents of the locker that Horton and Harley had rented and hence was not a search of that locker.” Id. The Court noted: “Had the monitoring disclosed the presence of the container within a particular locker the result would be otherwise, for surely Horton and Harley had a reasonable expectation of privacy in their own storage locker.” Id. at 3306 n.6.

237. See supra notes 227-34 and accompanying text.

238. See supra notes 226, 233-34 and accompanying text.

239. Karo, 104 S. Ct. at 3304. See supra text accompanying note 234.

240. Karo, 104 S. Ct. at 3304-05.


'neutral and detached magistrate' between the citizen and 'the officer engaged in the often competitive enterprise of ferreting out crime. . . . Requiring a warrant will have the salutary effect of ensuring that use of beepers is not abused, by imposing upon agents the requirement that they demonstrate in advance their justification for the desired search.243

The Court added that "if truly exigent circumstances exist no warrant is required under general Fourth Amendment principles."244

The government had protested that requiring a warrant to authorize private location monitoring would for all practical purposes require investigators to obtain a warrant whenever they seek to use a beeper, because there would be no way of knowing in advance whether the beepered object would be taken inside private premises.245 The Court dismissed this complaint, observing, "The argument that a warrant would oblige the Government to obtain warrants in a large number of cases is hardly a compelling argument against the requirement."246

The Court ended its discussion of private location monitoring by addressing the application of the Fourth Amendment particularity requirement to beeper surveillance. The Fourth Amendment requires a warrant to "particularly describ[e] the place to be searched . . . ."247 Because the "place" to which the beepered object will be taken cannot be known until the object arrives, how could a warrant "describe" that place in advance? The Court held that this conundrum provided neither a reason against imposing the warrant requirement, nor a particularly difficult barrier for investigators to overcome when seeking a warrant:

[I]t will still be possible to describe the object into which the beeper is to be placed, the circumstances that led agents to wish to

243. Id. at 3305 (quoting Johnson v. United States, 383 U.S. 10, 14 (1948)). The Court added: "Those suspected of drug offenses are no less entitled to [the protection of a detached and neutral magistrate] than those suspected of nondrug offenses." Id.

244. Id.

245. Id. The government probably exaggerated. No warrant is needed to authorize in-transit and general vicinity monitoring; often—as in Knotts—such monitoring will provide investigators with all the information they need. Thus, even where the grounds for a warrant are lacking, investigators may be willing to gamble that they can achieve their goals without conducting private location monitoring, or that in-transit and general vicinity monitoring, visual surveillance, and other sources of information will eventually provide enough information to enable them to obtain a private location monitoring warrant. See infra notes 295-304 and accompanying text.

246. Karo, 104 S. Ct. at 3305. The Court added: "It is worthy of note that, in any event, this is not a particularly attractive case in which to argue that it is impractical to obtain a warrant, since a warrant was in fact obtained in this case, seemingly on probable cause." Id.

247. The text of the Fourth Amendment may be found supra at text accompanying note 16.
install the beeper, and the length of time for which beeper surveillance is requested. In our view, this information will suffice to permit issuance of a warrant authorizing beeper installation and surveillance.\footnote{248}

The Court concluded, "In sum, we discern no reason for deviating from the general rule that a search of a house should be conducted pursuant to a warrant."\footnote{249} The Court refused, however, to address a crucial issue: whether a showing of reasonable suspicion rather than probable cause would suffice for the issuance of such a warrant.\footnote{250}

2. Dissenting and Concurring Opinions

The opinion of the Court, authored by Justice White, was joined by only three other justices: the Chief Justice and Justices Blackmun and Powell. Justice O'Connor, joined by Justice Rehnquist, concurred in the result and in the Court's analysis of the installation issue. Justices O'Connor and Rehnquist also concurred in the general principle that private location monitoring is a search, but argued that this is so only in very limited circumstances. According to Justice O'Connor, "When a closed container is moved by permission into a home, the homeowner and others with an expectation of privacy in the home itself surrender any expectation of privacy they might otherwise retain in the movements of the container—unless it is their container or under their dominion and control."\footnote{251} By giving permission to the container's owner to move the container in and out of the house, Justice O'Connor reasoned, the homeowner has effectively surrendered his privacy insofar as the location of the container may be concerned, or so we should assume absent evidence to the contrary. In other words, one who lacks dominion and control over the object's location has no privacy interest invaded when that information [that is, the object's location] is disclosed. It is simply not his secret that the beeper is disclosing \ldots \footnote{252}

It is difficult to grasp Justice O'Connor's reasoning. If I give a friend permission to store a container in my home, surely I retain the right to change my mind and to order him to remove it. Thus, it would seem that, even if it is not my container (and I would lack power to lawfully consent to

\begin{footnotes}
\item[248] Karo, 104 S. Ct. at 3305.
\item[249] Id.
\item[250] Id. at 3305 n.5. See infra notes 442-87 and accompanying text.
\item[251] Karo, 104 S. Ct. at 3308 (O'Connor, J., concurring in part and concurring in the judgment) (emphasis in original).
\item[252] Id. at 3310 (emphasis in original).
\end{footnotes}
an examination of its contents by police), while it is in my house I do not “lack[] dominion and control over the [container’s] location.”

It is true, of course, that by giving my friend permission to store the object in my home, I am sharing the privacy of my home with him to that extent, and I have no Fourth Amendment complaint to make if my friend later tells the police where the object is; that is the risk I assume whenever I share private information with anyone. Arguably, I also assume the risk that my friend had consented in advance to the installation of a beeper in the container, to enable the police to ascertain its continued presence in my home. But surely I do not thereby also assume the risk that the authorities have, unbeknownst to both me and my friend, installed a beeper in the container.

Whereas Justices O’Connor and Rehnquist complained that the Court’s ruling on the private location monitoring issue swept too broadly, Justice Stevens, joined by Justices Brennan and Marshall, agreed with the rule enunciated by the Court, but protested that the Court had applied that rule in too narrow a fashion. Justice Stevens interpreted Part III of the Court’s opinion as “correctly concluding that when beeper surveillance reveals the location of property that has been concealed from public view, it constitutes a ‘search’ within the meaning of the Fourth Amendment. I join Part III on

253. See supra notes 25-27, 117 and accompanying text.
254. By monitoring the beeper, installed with my friend’s consent but without my knowledge, the police arguably are learning no more than what I have already revealed to my friend, that is, the object’s continued presence in my home. Obviously, however, in the absence of a warrant, the police could not lawfully monitor an eavesdropping device hidden inside the container, even if my friend had consented to the installation. I am not “knowingly exposing” to him what is said in my home in his absence, and he therefore lacks the legal authority to give the police permission to overhear such conversations. See supra notes 63-67, and infra note 477 and accompanying text.
255. As Justice White observed in commenting on the O’Connor concurrence:
A homeowner takes the risk that his guest will cooperate with the Government but not the risk that a trustworthy friend has been bugged by the Government without his knowledge or consent. . . . There would be nothing left of the Fourth Amendment right to privacy if anything that a hypothetical government informant might reveal is stripped of constitutional protection.
Karo, 104 S. Ct. at 3304 n.4. Justice Stevens, dissenting from other aspects of the Karo decision, agreed with the Court’s rejection of Justice O’Connor’s approach to post transit monitoring, and added: “I do not believe that electronic surveillance has become or ever should be permitted to become so pervasive that homeowners must expect [that is, must assume the risk in a constitutional sense] that containers brought into their homes are infested with electronic bugs.” Id. at 3312 n.7 (Stevens, J., dissenting in part and dissenting in the judgment).
256. Justices Stevens, Brennan and Marshall dissented from the majority’s conclusion that consensual installation and subsequent transfer of a beeper is not a seizure. See supra notes 79-83 and accompanying text. They also dissented from the majority’s conclusion that, despite the unlawful private location monitoring that had occurred at the house in Taos, the evidence was admissible against all defendants. See infra notes 367-68 and accompanying text.
that understanding."\textsuperscript{257} The Stevens opinion stressed that "[t]his protection is not limited to times when the beeper was in a home,"\textsuperscript{258} but also exists in other locations—even in the trunk of an automobile, under appropriate circumstances.\textsuperscript{259} Justice Stevens' opinion may perhaps emphasize this point more dramatically than does the White opinion, but there is no substantial divergence between the two in this regard.\textsuperscript{260} The two opinions disagree dramatically, however, in the application of the rule announced in Part III of \textit{Karo}, particularly in how that rule interacts with the "fruit of the poisonous tree" doctrine. This aspect of \textit{Karo} will be discussed below.\textsuperscript{261}

3. Evaluation

In holding that private location monitoring of a beeper constitutes a search subject to Fourth Amendment regulation, the Court properly resolved the conflict thus posed between protection of privacy and the promotion of efficient and effective law enforcement. Private location monitoring of a beeper implicates "especially sensitive concerns"\textsuperscript{262} under the Fourth Amendment precisely because it occurs after the object installed with a beeper has been taken to a "place"—most often the home of one or more of the defendants—\textsuperscript{263} where Fourth Amendment protection is at its

\textsuperscript{257} \textit{Karo}, 104 S. Ct. at 3310 (Stevens, J., concurring in part and dissenting in part).
\textsuperscript{258} Id. at 3313.
\textsuperscript{259} When a person drives down a public thoroughfare in a car with a can of ether concealed in a trunk, he is not exposing to public view the fact that he is in possession of a can of ether; the can is still 'withdrawn from public view' and hence its location is entitled to constitutional protection.
\textsuperscript{260} See supra note 236 and accompanying text and infra note 276.
\textsuperscript{261} See infra notes 328-68 and accompanying text.
\textsuperscript{263} Although private location monitoring cases preceding \textit{Karo} involved a variety of "places," most involved homes. See United States v. Brock, 667 F.2d 1311 (9th Cir. 1982), \textit{cert. denied}, 460 U.S. 1022 (1983) (cabin rented or owned by defendants); United States v. Sheikh, 654 F.2d 1057 (5th Cir. 1981), \textit{cert. denied}, 455 U.S. 991 (1982) (U.S. Customs-contraband case; hotel room); United States v. Cassity, 631 F.2d 461 (6th Cir. 1980) (home); United States v. Bailey, 628 F.2d 938 (6th Cir. 1980) (undetermined location in one apartment complex, then a locked storage room in the basement of a second apartment complex); United States v. Lewis, 621 F.2d 1382 (5th Cir. 1980) (farm); United States v. Botero, 589 F.2d 430 (9th Cir. 1978), \textit{cert. denied}, 441 U.S. 944 (1979) (U.S. Customs-contraband case; defendant's apartment); United States v. Clayborne, 584 F.2d 346 (10th Cir. 1978) (home of a defendant, then a warehouse); United States v. Dubrofsky, 581 F.2d 208 (9th Cir. 1978) (U.S. Customs-contraband case; home of an uninvolved acquaintance of defendant); United States v. Moore, 562 F.2d 106 (1st Cir. 1977), \textit{cert. denied}, 435 U.S. 926 (1978) (home); United States v. Emery, 541 F.2d 887 (1st Cir. 1976) (U.S. Customs-contraband case; home); State v. Hendricks, 43 N.C. App. 245, 258 S.E.2d 872 (1979) (home).
greatest.\textsuperscript{264}

As a rule, police intrusion into a person's home or other private location is unlawful unless the officer has first obtained a warrant.\textsuperscript{265} Exceptions to the warrant requirement exist, but only in narrow and carefully restricted circumstances.\textsuperscript{266} More specifically, virtually every investigative technique that reveals information about the contents of or activities within a person's home or other private location is classified as a search. Investigative intrusion into private locations has been exempted from the protection of the

\begin{footnotesize}
\begin{enumerate}
\item[264.] "At the very core [of the Fourth Amendment] stands the right of a man to retreat into his own home and there be free from unreasonable governmental intrusion." Silverman v. United States, 365 U.S. 505, 511 (1961). The Fourth Amendment thus codifies the immortal words of William Pitt:

\begin{quote}
The poorest man may, in his cottage, bid defiance to all the force of the Crown. It may be frail; its roof may shake; the wind may blow through it; the storm may enter; the rain may enter; but the King of England may not enter; all his force dares not cross the threshold of the ruined tenement.
\end{quote}


\item[265.] The Supreme Court stated in Johnson v. United States:

\begin{quote}
Crime, even in the privacy of one's own quarters, is, of course, of grave concern to society, and the law allows such crime to be reached on proper showing. The right of officers to thrust themselves into a home is also a grave concern, not only to the individual but to a society which chooses to dwell in reasonable security and freedom from surveillance. When the right of privacy must reasonably yield to the right of search is, as a rule, to be decided by a judicial officer, not by a policeman or government enforcement agent.
\end{quote}

333 U.S. 10, 14 (1948). Johnson was quoted with approval in United States v. Knotts, 460 U.S. 276, 282 (1983) and Payton v. New York, 445 U.S. 573, 586 (1980). According to Katz v. United States, 389 U.S. 347 (1967) (placement of listening device on outside of phone booth constitutes a search and is lawful only if authorized in advance by a warrant), the Fourth Amendment protects privacy interests even if there has been no physical penetration into a location where a defendant enjoyed a reasonable expectation of privacy.

\item[266.] Entry and, depending upon the circumstances, search without a warrant, is permissible if officers are in hot pursuit of a fleeing suspect. United States v. Santana, 427 U.S. 38 (1976); Warden v. Hayden, 387 U.S. 294 (1967). When there is probable cause to believe that readily destructible evidence is present, the Supreme Court has on several occasions suggested, but has never explicitly held, that under some circumstances it may be permissible to enter for the limited purpose of securing the premises, while holding that a warrant is required before the premises may be searched. Vale v. Louisiana, 399 U.S. 30 (1970); United States v. Jeffers, 342 U.S. 48 (1951); McDonald v. United States, 335 U.S. 451 (1948); Johnson, 333 U.S. 10 (1948). See Segura v. United States, 104 S. Ct. 3380 (1984). Warrantless entry is also lawful if valid consent is obtained. United States v. Matlock, 415 U.S. 164 (1974); Schneckloth v. Bustamonte, 412 U.S. 218 (1973). See generally 2 W. LaFave, Search and Seizure § 6.5 (1978 & Supp. 1984).
\end{enumerate}
\end{footnotesize}
Fourth Amendment only when it involves information or activities that a suspect "knowingly exposes to the public,"267 or when the investigative procedure reveals only the presence or absence of contraband.268 Because the target of beeper surveillance has not "knowingly expose[d]" his home or other private location to beeper surveillance, this exclusion from the definition of "search" does not apply.269 To exclude private location monitoring of a beeper within a person's home from the definition of "search," therefore, would be to go further than any Supreme Court ruling to date.270

To be sure, such a holding would not have posed a major threat to the privacy that we enjoy as members of a free society.271 To exclude private location monitoring from the reach of the Fourth Amendment would, however, in significant measure rewrite the Court's formula, promulgated in Katz v. United States,272 defining the reach of the Fourth Amendment. After such a ruling, that which "a person [carefully conceals from] the public, 267. "What a person knowingly exposes to the public, even in his own home or office, is not a subject of Fourth Amendment protection." Katz v. United States, 389 U.S. 347, 351 (1967). See supra notes 25-27, 117 and accompanying text. Thus, if a suspect stores a beeper implanted container in a place accessible to the public, monitoring the beeper arguably would not constitute a search. For example, if a drum of a precursor chemical is stored inside a privately owned premises, but in a place where passersby or public invitees can readily see it, this "knowing exposure" of the drum might strip the defendants of their otherwise valid expectation of privacy with regard to the presence of the object inside that premises.

268. See United States v. Jacobsen, 104 S. Ct. 1652, 1662 (1984), discussed supra at notes 89-92 and accompanying text. In Jacobsen, a chemical test revealed no more than whether the substance in a lawfully seized package was cocaine. This, the Court stated, was not a search, because the chemical analysis "[did] not compromise any legitimate interest in privacy," as there is no legitimate right to possess cocaine in the first place. See also United States v. Place, 103 S. Ct. 2637, 2644-45 (1983) (allowing a narcotics trained dog to sniff a suitcase is not a search in part because the only information revealed is whether the suitcase contains contraband), infra note 395.

269. This presupposes that the "private location" is one in which the defendants enjoy a "reasonable expectation of privacy." See infra notes 309-14 and accompanying text. If the defendants lack such an expectation in the location in question, a search of that location does not violate their rights. For example, if the defendants secrete an object in an empty house without the knowledge or permission of the owner, they have no basis to complain if the police enter and search. See Rakas v. Illinois, 439 U.S. 128, 141 n.9 (1978); Jones v. United States, 362 U.S. 257, 261 (1960). The same would be true if instead of entering and searching, investigators monitored a beepered container in the house.

Concerning the Fourth Amendment implications of private location monitoring of a beeper installed into a package containing contraband, see infra notes 387-98 and accompanying text.

270. See supra notes 265-67 and accompanying text.

271. Considerations of cost, manpower, and simple common sense on the part of investigators would suffice to protect against wholesale beeper surveillance.

272. "What a person knowingly exposes to the public, even in his own home or office, is not a subject of Fourth Amendment protection. But what he seeks to preserve as private, even in an area accessible to the public, may be constitutionally protected." Katz, 389 U.S. at 351-52.
even in his own home or office, [might not be] a subject of Fourth Amendment protection." Such a precedent would have threatened a principle that is fundamental and central to our nation's history and values. In holding that private location monitoring is a search subject to the Fourth Amendment, the Supreme Court paid proper heed to that history and remained true to those values.

The statements in the White and Stevens opinions extending the Karo rule to locations other than residences, such as storage lockers and automobile trunks, are constitutionally sound. Such locations traditionally enjoy Fourth Amendment protection; the fact that beeper surveillance intrudes, even minimally, into these locations suffices to categorize the surveillance as a search. Thus, the Court correctly rejected the government's argument that the intrusion entailed by private location monitoring is so slight as to remove it from the category of Fourth Amendment searches.

The same may be said for the Court's imposition of the warrant requirement. By requiring a warrant, the Court assured that the use of private location monitoring will be subject to impartial oversight and review. Impo-

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274. It is worth remembering, and repeating, that a major cause of the American Revolution was unwarranted intrusion by officers of the Crown into the colonists' homes. See supra note 16.

275. See supra note 276 and accompanying text.

276. See supra note 259 and accompanying text. It is noteworthy that in Knotts, "agents watched as [the beepered container] was delivered to Knotts' codefendant and placed in his car." Karo, 104 S. Ct. at 3312 (Stevens, J., concurring in part and dissenting in part) (emphasis added). Similarly, in Karo, "the ether was seen being loaded into Horton's truck" after its removal from the second locker and before its trip to the house in Taos. Id. at 3306 (emphasis added). This was a fact of some significance in the ultimate resolution of Karo. See infra notes 335, 347-52 and accompanying text. The key point here is that in each case, the agents learned that the beepered container was placed into the vehicle in question, not by monitoring the beeper, which would have constituted a search of that vehicle, subject to Fourth Amendment standards and requirements, but by visual surveillance of conduct "knowingly exposed to the public"—conduct which, the Court emphasized in Katz, is "not a subject of Fourth Amendment protection." Katz, 389 U.S. at 351. Katz is discussed in greater detail in supra notes 24-28 and accompanying text.

277. Although "the Fourth Amendment protects people, not places," Katz, 389 U.S. at 351, the protection it affords to those people "[g]enerally . . . requires reference to a 'place.'" Id. at 361 (Harlan, J., concurring).

278. Twice in recent years the Court has held that it does not constitute a search for police to use an investigative procedure that reveals only whether an object, otherwise protected by the Fourth Amendment, contains contraband. United States v. Jacobsen, 104 S. Ct. 1652 (1984) (removal of a small quantity of powder from a tube and performance of a chemical analysis did not constitute a search); United States v. Place, 103 S. Ct. 2637 (1983) (permitting a trained narcotics detection dog to sniff a suspected drug courier's suitcases did not constitute a search). In Karo, the government did not claim, and logically could not, that the ether in the beepered can was contraband. Whether private location monitoring of a container containing contraband is a search is discussed infra at notes 387-409 and accompanying text.
osition of the requirement should also help assure that those whose privacy is intruded upon will eventually receive notice of that fact. The ruling is also likely to check any tendency on the part of law enforcement officials to install beepers into containers indiscriminately without a valid factual basis. The key question—as yet unanswered—is what that factual basis must be: probable cause or the lesser standard of reasonable suspicion? To this question Karo provides no answer.

C. General Vicinity Monitoring

In Knotts, the Court held that in-transit monitoring is not a search, because such monitoring only enables investigators to learn what visual surveillance would also reveal: the public travels of the beepered object. As it turned out in Knotts, in-transit monitoring did not suffice to enable the investigators to discover the beepered object’s location. To determine the destination of the can of chloroform, it was necessary to conduct aerial beeper surveillance, that revealed that the object had come to rest in the general vicinity of Knotts’ cabin in rural Wisconsin. The use of the beeper did not constitute a search because visual surveillance of Petschen’s route, though unsuccessful in this case, could have revealed the same information without intruding into the privacy of Knotts’ cabin.

Similarly, in Karo, in-transit monitoring was of no use to the investigators in tracing the can of ether from the first storage facility to the second. The investigators did not discover the can’s removal from the first facility until the manager informed them of this fact several days later. The agents had to monitor the beeper to ascertain that the can had been taken to the second facility. Here, as in Knotts, the Court held that no search occurred be-

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279. A judge issuing such a warrant has the authority to insist upon post surveillance notice, and should do so, while permitting investigators to obtain postponement of notice on a showing that earlier notice would jeopardize an ongoing investigation. See, e.g., 18 U.S.C. § 2518(8)(d) (1982) (requiring notice of wiretapping or eavesdropping to be served within 90 days of the termination of the wiretap or eavesdrop order, unless the judge authorizes postponement of notice); see also C. Fishman, supra note 66 §§ 203-213 (1978 & Supp. 1984). Notice and other issues relating to the warrant requirement, are discussed more fully infra at notes 419-41 and accompanying text.

280. Knowing that they will not be permitted to conduct nonwarrant monitoring of a beeper once it has been taken into a private location, investigators are unlikely to use a beeper unless there is a realistic chance that eventually they will be able to obtain a warrant, based on whatever factual showing (probable cause or reasonable suspicion) is ultimately held to be required. See supra note 245 and infra text accompanying notes 295-301.

281. See infra notes 442-87 and accompanying text.

282. “General vicinity monitoring” is defined in text accompanying supra notes 12-13.


cause this monitoring did not reveal—and, therefore, did not intrude upon the privacy of—the specific locker the defendants had rented at the second facility.

The rule that emerges from these decisions is that even where in-transit monitoring is unavailing, it does not constitute a search for agents to use a beeper to determine the destination of a beepered object—so long as the monitoring reveals only the general vicinity, and not the precise private location, of the object.

Justice Stevens, dissenting, took strong exception to the majority's conclusion that no search occurred when the agents used the beeper to determine that the ether was somewhere in the second storage facility:

The agents did not know who was in possession of the property or where it was once it entered Karo's house. From that moment on it was concealed from view. Because the beeper enabled the agents to learn the location of property otherwise concealed from public view, it infringed a privacy interest protected by the Fourth Amendment.

Justice Stevens reasoned that the use of the beeper constituted a search: 

"[The ether container's] location [continued to be] a secret and hence by revealing its location the beeper infringed an expectation of privacy. Without the beeper, the agents would have never found the warehouse . . . ," the visual surveillance of the locker within the warehouse, he argued, was therefore tainted by this search.

Neither the majority's logic nor the dissent's is compelling. The dissent sweeps too broadly. Many investigative techniques "enable[] agents to learn the location of property otherwise concealed from public view [without] infringing[] a privacy interest protected by the Fourth Amendment." Had the agents maintained visual surveillance of the first storage facility, they could have observed the suspects transfer the ether from the first to the second warehouse. Further, upon learning that the ether had been removed from the first facility, the agents could have interviewed personnel at every

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287. "Had the monitoring disclosed the presence of the container with in a particular locker," the *Karo* Court stated, "the result [that is, the conclusion that no search occurred] would be otherwise, for surely Horton and Harley had a reasonable expectation of privacy in their own storage locker." *Id.* at 3306 n.6. *See supra* note 236 and accompanying text.

288. *Karo*, 104 S. Ct. at 3314 (Stevens, J., dissenting in relevant part) (footnote omitted).

289. *Id.* at 3314 n.11.

290. *Compare supra* text accompanying note 288.

291. Indeed, the agents attempted the electronic equivalent of such visual surveillance by installing—pursuant to a warrant—an entry tone alarm into the door jamb of the locker. The alarm was intended to alert the agents to the fact that the locker was being opened; presumably, upon receiving such an alarm, they would have rushed to the storage facility to conduct
other storage facility in Albuquerque until, with luck, they found the warehouse in question.\textsuperscript{292} Alternatively, in theory, an informer might have learned of the ether's new location and reported it to the authorities. Any of these techniques would have "enabled the agents to learn the location of property otherwise concealed from public view," yet none of them would have "infringed upon a privacy interest protected by the Fourth Amendment."\textsuperscript{293} Why should using a beeper, to determine only the general vicinity to which the ether had been moved, be regarded differently?\textsuperscript{294} Justice Stevens enunciates no persuasive reason.

The rule enunciated by the \textit{Karo} majority appears, on initial examination, to have the virtue of simplicity: monitoring that reveals a beepered object's presence in a particular private location is a search, while monitoring that reveals only the general vicinity of the object is not a search. But where is the line between the two to be drawn?

Suppose, for example, investigators suspect that an about-to-be-purchased container of a precursor chemical will be used to manufacture illicit drugs, but lack sufficient information to obtain a beeper surveillance warrant.\textsuperscript{295} Nevertheless, with the consent of the seller, they install a beeper for the purpose of discovering where the container will be taken. The agents hope that this information, coupled with what they already know, will enable them to obtain such a warrant. They watch as the container is loaded into a vehicle; thereafter, by visual surveillance and in-transit monitoring, they follow the container to a multistory building housing numerous small businesses—offices, light industry, and the like. \textit{Knotts} makes clear that this is visual surveillance of the suspects' activities. The alarm, however, failed to function. \textit{Karo}, 104 S. Ct. at 3300.

\textsuperscript{292} By renting a locker in and bringing the ether to the second storage facility, the defendants "knowingly exposed" these acts to employees of the second warehouse. See \textit{Katz}, 389 U.S. at 351; see also \textit{supra} note 117 and accompanying text. Absent the beeper, of course, the agents would have had no way of knowing that the ether was still in Albuquerque, let alone in another storage facility in that city. Whether they would have canvassed personnel at all such facilities in the city, therefore, is problematical at the least. Nevertheless, had they done so, and had they learned thereby the ether's new location, their investigative activity would not have been categorized as a search.

\textsuperscript{293} Visual surveillance of conduct "knowingly exposed to the public" is not a search. \textit{Katz}, 389 U.S. at 351. Nor does it constitute a search if a defendant "knowingly conveys... information" to a civilian who then reveals it to the police. \textit{See supra} note 117.

\textsuperscript{294} It is probably quite significant that the agents learned that the ether had been moved from the first locker, not by monitoring the beeper, but from the manager of the first storage facility. Detecting the ether's removal by monitoring the beeper would have constituted an unlawful search of the locker. \textit{See supra} note 276 and \textit{infra} notes 347-50 and accompanying text.

\textsuperscript{295} The quantum of information required to obtain such a warrant is itself a matter of considerable uncertainty. \textit{See infra} notes 442-87 and accompanying text.
not a search.  

Alternatively, suppose the agents lose track of the vehicle after it leaves the seller, and subsequently locate the beepered object in the building by general vicinity monitoring—a use of the beeper that Knotts and Karo hold not to be a search.

Suppose further that the information acquired thus far is helpful, but not helpful enough: there are thirty-two different companies in the building, eight on each of four floors. The agents know, from Karo, that they cannot use the beeper to determine the precise office or business in the building to which the beepered object was taken because this would constitute private location monitoring for which a warrant is required.  

If they can eliminate some or most of these establishments from suspicion, however, they will be able to focus their nonelectronic investigative efforts accordingly. Would it constitute a search to use the beeper to determine to which floor the container had been taken—thereby reducing the foci of subsequent attention from thirty-two establishments to a more manageable eight? And if this is not a search, that is, if this information is still “general” enough to avoid being categorized as an intrusion into the privacy of the eight businesses on that floor, would it constitute a search to use the beeper to determine whether the container is in one of the offices or shops to the right or to the left of the elevator—thereby reducing the foci of suspicion from eight to four?

Suppose there had been only four businesses on that floor, and using the beeper enabled the investigators to eliminate from suspicion the two establishments to the right of the elevator. Would this constitute a search?

It is, to say the least, far easier to pose these questions than to offer ra-

296. Knotts, 460 U.S. at 285. See supra notes 174-84 and accompanying text. If an officer is able to follow the possessor into the building and to the door to which the container is being delivered, the officer has not engaged in a search because he has simply observed conduct that the deliverer “knowingly exposed to the public.”


298. Karo, 104 S. Ct. at 3303-05. See supra notes 226-43 and accompanying text.

299. Such a limited use of the beeper would probably require access to the elevators and central corridors of the building. If these areas were closed to the public at large, nonconsensual police presence there might itself constitute an unlawful intrusion into the privacy of the building’s occupants. See generally 1 W. LaFave, supra note 16, at § 2.4(b). On the other hand, by monitoring the beeper while driving around the building, the police perhaps could accomplish the same objective.

300. Although this procedure arguably intrudes upon the privacy of those offices or businesses, it also has a significant privacy-enhancing impact: the beeper frees the agents of the need to investigate the affairs of the other 24 or 28 companies, and of their owners, employees and customers.

301. Similarly, in Karo, suppose the agents had used the beeper to determine the floor on which the can of ether had been stored; the quadrant of the floor; the row of lockers?
tional answers to them. Taking the Court's holding to its logical conclusion, however, it would appear that so long as the monitoring does not disclose conclusively which of two or more private locations (houses, hotel rooms, lockers, automobile trunks, or whatever) contains the beepered object, monitoring the beeper does not constitute a search. Such a rule would significantly diminish the privacy-enhancing impact of the Court's holding in *Karo* that private location monitoring constitutes a search. On the other hand, it would provide a "bright line" whereby investigators and judges alike could distinguish between general vicinity monitoring, which is not a search, and private location monitoring, which is.

Until the law is clarified considerably, investigators may be forced to play a form of "Fourth Amendment roulette." Each additional piece of information they derive from the beeper—each narrowing of the investigative focus—puts them a step closer to what is needed to obtain a beeper

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302. The precise language of the Court bears repeating:

[T]he beeper informed the agents only that the ether was somewhere in the warehouse; it did not identify the specific locker in which the ether was located. Monitoring the beeper revealed nothing about the contents of the locker that Horton and Harley had rented and hence was not a search of that locker. *Karo*, 104 S. Ct. at 3306. In a footnote immediately after this passage, the Court added: "Had the monitoring disclosed the presence of the container within a particular locker the result would be otherwise, for surely Horton and Harley had a reasonable expectation of privacy in their own storage locker." *Id.* at 3306 n.6 (emphasis added).

303. Often, investigators may be able quickly to eliminate all but one of the locations indicated by the beeper. On the other hand, the same is often said with regard to the use of traditional, nonelectronic investigative techniques.

304. Even assuming a "bright line" exists between "general vicinity" and "private location" monitoring, drawing a legal distinction between the two may easily lead to absurd results. Consider again the facts in *Karo*. The agents learned that the ether had been moved from the first storage facility only when the manager informed them of this fact. Suppose, when they activated the beeper, the agents discovered that the ether was being moved through the streets of Albuquerque. Given the rule enunciated in *Karo*, if the agents had used the beeper to locate and identify the particular car or truck that was transporting the ether, this would have constituted a search: the contents of a truck or automobile usually (to paraphrase *Katz*) are not "knowingly exposed to the public," and therefore are "subjects of Fourth Amendment protection." *See Katz*, 389 U.S. at 351. Although automobiles may often be searched without a warrant under circumstances in which a warrant would be required for fixed premises, intrusions into such areas are unquestionably searches, lawful only if Fourth Amendment standards are satisfied. *See*, e.g., United States v. Ross, 456 U.S. 798 (1982); Texas v. White, 423 U.S. 67 (1975); Chambers v. Maroney, 399 U.S. 42 (1970). If a court subsequently concluded that the agents lacked the factual basis required to justify such a search, this illegality would very likely have tainted the agents' subsequent discovery that the ether was being taken to the second warehouse, which in turn might have tainted all subsequently discovered information and evidence. Concerning "taint" and related issues, see *infra* notes 309-27 and accompanying text. On the other hand, if the agents had forborne closing in on the ether while it was in transit, and, once it had come to rest, utilized the beeper to determine only the general vicinity of its destination (that is, the second warehouse), this, we know from the actual resolution of the *Karo* case, would not have constituted a search at all.
surveillance warrant permitting private location monitoring. Yet, the agents will have no sure way of knowing at what point the use of the beeper crosses the line that separates nonsearch from search—a crossing that could prove fatal to the investigation. To say the least, this state of affairs is unsettling; it promotes neither police efficiency nor individual privacy.

V. APPLICATION OF THE KARO RULE

In Karo, the Court held that it violates the Fourth Amendment for law enforcement officials to engage in nonwarrant private location monitoring. The agents engaged in such monitoring on several occasions. After the can arrived in Karo’s home, it was only through unlawful private location monitoring of the beeper that the agents learned that the can had been removed from the premises. Using the beeper, they traced the can to Horton’s home. It was only through further unlawful private location monitoring that the agents learned that the can had been moved from that location to Horton’s father’s residence. Once again, only by conducting additional unlawful private location monitoring did the agents learn that the can had been removed from that premises and was resting somewhere in the first commercial storage facility. Many additional moves and months later, the agents

305. Suppose, for example, police lose track of a vehicle carrying a beepered container of a precursor chemical, and subsequent surface or aerial surveillance locates the container in a suburban development of single-family houses. Would it constitute a search if the beeper revealed the block the container was on? The side of the street? Suppose the beeper enabled the investigators to pinpoint the container as being in one of a group of four houses? If, upon subsequent investigation, the officers learn that one (and only one) of those houses is occupied by someone with a lengthy record of involvement in illicit manufacture or distribution of drugs, probable cause presumably would then exist to believe that the container is in that house, and that the chemical is likely to be used in the manufacture of illicit substances; and the agents would be able to obtain a beeper surveillance warrant authorizing private location monitoring of the beeper.

306. Continuing the situation hypothesized in supra note 305, suppose the beeper surveillance reveals that the container is either in a particular house or in its backyard. Conceivably, this discovery could be made inadvertently, despite efforts on the part of the officers to restrict their discovery to the more general information that the container is somewhere within a group of houses and their yards. Is this a permissible nonsearch, because the agents still do not know whether the container is inside the home or in the yard, where it might be visible from a neighboring yard? Alternatively, does it constitute an unlawful warrantless search, on the theory that the yard constitutes the curtilage of the home? See supra notes 77, 231 and accompanying text.

307. The Court noted that “the unwarranted monitoring of the beeper in Karo’s house” was unlawful. Karo, 104 S. Ct. at 3307 n.7. For a detailed recitation of the facts in Karo, see supra notes 208-17 and accompanying text.

308. Although the Court did not explicitly discuss the monitoring in Horton’s home or in his father’s home, clearly these incidents of warrantless monitoring were no more lawful than the earlier private location monitoring in Karo’s home or the later private location monitoring at the house in Taos.
conducted unlawful private location monitoring of the beeper for several days in the Taos house rented by Horton, Harley, and another defendant, Steele.

Thus, it was only by unlawful use of the beeper on several separate occasions that the agents were able to keep track of the beeper until the ether arrived at the house in Taos, where the incriminating evidence that was the subject of the suppression litigation was seized. Nevertheless, the Supreme Court held that the evidence was admissible against each of the defendants. Though the Court, in so holding, acted in a manner consistent with accepted Fourth Amendment principles, it significantly undermined the substantive rule—that private location monitoring is unlawful in the absence of a warrant—it had just enunciated.

A. Applying the Fourth Amendment Exclusionary Rule

Certain basic principles have emerged from the Supreme Court's decisions applying the Fourth Amendment exclusionary rule. To comprehend the reasoning and ultimate result in *Karo*, it is necessary to understand these principles as well as three underlying concepts: standing, taint, and taint aversion.

1. Standing

It is a well-established principle that "Fourth Amendment rights are personal rights which, like some other constitutional rights, may not be vicariously asserted." 309

The established principle is that suppression of the product of a Fourth Amendment violation can be successfully urged only by those whose rights were violated by the search itself, not by those who are aggrieved solely by the introduction of damaging evidence. Co-conspirators and co-defendants have been accorded no special standing. 310

310. *Id.* at 171-72. In *Alderman*, the Court considered several unrelated cases with a common factual setting. In each case, after several defendants had been convicted for conspiring to commit various crimes, it was discovered that the government had engaged in warrantless electronic surveillance of some defendants' conversations. The Court held, inter alia, that only those defendants whose conversations had actually been overheard, or on whose premises the surveillance had occurred, had standing to challenge the legality of the surveillance. Co-defendants whose personal Fourth Amendment rights were not violated could not seek to suppress the intercepted conversations.

An example will illustrate the impact of this principle. Assume that police unlawfully search X’s home, hoping to obtain evidence incriminating X, Y, and Z, and in fact seize such evidence. The government seeks to use this evidence against all three defendants. All three move to suppress, arguing that the unlawful search of X’s home requires the exclusion of the evidence at trial. X’s motion to suppress will be granted, and the evidence excluded as to him, because his Fourth Amendment rights were violated by the unlawful search of his home. Unless Y or Z can show that their privacy was also violated by the search of X’s home, however, the evidence will be admissible against each of them. Y, to win suppression of the evidence, must demonstrate that he had a right to privacy in X’s home and that the search violated this right. Even if Y succeeds in doing so, this would avail

whether it serves any useful analytical purpose to consider this principle a matter of standing, distinct from the merits of a defendant's Fourth Amendment claim. . . . [W]e think the better analysis forthrightly focuses on the extent of a particular defendant's rights under the Fourth Amendment, rather than on any theoretically separate, but invariably intertwined concept of standing.

Rakas, 439 U.S. at 138-39. Nevertheless, the term “standing” facilitates ease of expression. As used herein, a person has “standing” under the Fourth Amendment to challenge the legality of police conduct only if he can show that the police conduct intruded upon his own Fourth Amendment protected privacy.

311. United States v. Payner, 447 U.S. 727 (1980); Alderman v. United States, 394 U.S. 165, 171-76 (1969). Alderman is summarized supra in note 310. Payner is an extreme example of the impact of the standing requirement. An Internal Revenue Service (IRS) agent, learning that a Bahamian bank official was in Miami on business, arranged to introduce the banker to a female dinner companion. While the banker was at a restaurant, the agent unlawfully broke into the banker’s hotel room, removed the banker’s locked briefcase, unlawfully opened it and photographed the 400 bank records contained therein. The briefcase and papers were then returned to the banker’s hotel room. The agent was well aware of the lawlessness of his conduct, but guessed, correctly, that the documents would reveal criminal conduct on the part of American customers of the bank. The agent was also aware that the customers so exposed would not have standing to challenge the search. United States v. Payner, 434 F. Supp. 113, 131 & n.69 (1977). Payner was one such customer. Indicted for making false statements on his income tax return, he moved to suppress evidence derived from the illegal search. The Supreme Court ruled that the motion should have been denied. Although the IRS agent's conduct clearly violated the Fourth Amendment rights of the Bahamian banker, the Court held that Payner had no Fourth Amendment right to privacy within the banker's hotel room or briefcase; hence, the agent's violation of the banker's rights did not violate Payner's constitutionally protected right to privacy. In other words, Payner did not have standing to assert the agent's violation of the banker's rights as a basis to suppress the evidence.

312. Even if Y had been “legitimately on the premises” at the time of the search, this fact, without more, would not give Y standing to challenge the legality of the search or win suppression of the evidence. Rakas, 439 U.S. at 148. Alternatively, if Y had been a houseguest of X's for several days and was still staying there on the date of the search this probably would suffice to show that Y's Fourth Amendment rights, as well as X's, were intruded upon by the search. See Rakas, 439 U.S. at 142-43; Jones v. United States, 362 U.S. 257, 259, 267 (1960); see generally 3 W. LAFAVE, SEARCH AND SEIZURE § 11.3 (1978 & Supp. 1984).
Z nothing; to win suppression of the evidence, Z must make his own individual showing.

Applying this example to the context of beeper surveillance, assume unlawful private location monitoring of the beeper in X’s home enables the police to acquire evidence incriminating X, Y, and Z.\textsuperscript{313} As a rule, X will succeed in suppressing the fruits of the beeper surveillance,\textsuperscript{314} because the unlawful surveillance violated his Fourth Amendment right to be secure against an unreasonable search. Barring additional facts or unusual circumstances, however, Y and Z will not win suppression on this ground.

2. "Poisonous Trees" and "Tainted Fruit"

Suppose police unlawfully enter X’s home. Once inside, they see, in plain view, contraband or other clearly incriminating evidence. Is it admissible against X at trial?

There is nothing per se unlawful about the seizure of the evidence; the police have the right to seize incriminating evidence when they come upon it in plain view.\textsuperscript{315} Nevertheless, the evidence must be suppressed; the unlawful entry into X’s home taints the otherwise lawful seizure.\textsuperscript{316}

Suppose further that the evidence seized from X’s home provides police with probable cause to believe that additional contraband may be found in Y’s home. They proceed thence, and seize evidence incriminating both X and Y. X seeks to suppress this evidence. Unless X can establish that he had a reasonable expectation of privacy in Y’s home, he cannot challenge the legality of the search of Y’s home. That search intruded upon only Y’s privacy.\textsuperscript{317} X has standing, however, to seek, and in all likelihood to win, suppression of the evidence seized from Y’s home, because, insofar as X is concerned, the police obtained that evidence by exploiting the earlier, unlaw-

\begin{itemize}
\item \textsuperscript{313} See infra note 320 and accompanying text.
\item \textsuperscript{314} The concept of “tainted fruit” is discussed infra at notes 315-20 and accompanying text.
\item \textsuperscript{316} See Steagald v. United States, 451 U.S. 204 (1981) (drugs suppressed); Payton v. New York, 445 U.S. 573 (1980) (shell casing connecting defendant to a homicide suppressed). “Poisonous trees” are not limited, of course, to unlawful entries into a person’s home. An unlawful arrest, unlawful seizure of evidence, or unlawful interrogation may provide the initial illegality that taints subsequently obtained evidence. See generally 3 W. LAFAVE, supra note 312, at § 11.4; Pitler, “The Fruit of the Poisonous Tree” Revisited and Shepardized, 56 CALIF. L. REV. 579 (1968).
\item \textsuperscript{317} See supra note 312 and accompanying text.
\end{itemize}
ful search of X's home.\textsuperscript{318} To use a time-worn metaphor, the unlawful search of X's home is a "poisonous tree"; the evidence subsequently seized from Y's home is, as to X, the tainted, and therefore suppressible, "fruit of the poisonous tree."\textsuperscript{319}

Quite clearly, unlawful private location monitoring in appropriate circumstances may constitute a "poisonous tree," requiring the suppression of otherwise lawfully seized evidence—suppression, that is, as to those defendants with standing to complain of the unlawful monitoring.\textsuperscript{320}

3. Averting Taint: Independent Source, Inevitable Discovery, Attenuation

The Court has rejected the proposition that "all evidence is 'fruit of the poisonous tree' simply because it would not have come to light but for the illegal actions of the police."\textsuperscript{321} Several concepts have emerged under which rigid application of the taint rule may be averted.

The situation in which the most persuasive theoretical case can be made for nonapplication of the taint rule arises when the authorities can demonstrate that they would have acquired the evidence in question even without the prior illegality. There are two variations on this theme: the "independent source" doctrine and the "inevitable discovery" doctrine.

The "independent source" doctrine holds that if the authorities had an


\textsuperscript{319} The phrase is Justice Frankfurter's. Nardone v. United States, 308 U.S. 338, 341 (1939).

\textsuperscript{320} For example, assume that government agents conduct warrantless private location monitoring of a beepered chemical container, and discover that the container is in X's home. This information provides the missing link necessary to establish probable cause for a warrant to search X's home. The officers enter and seize other chemicals, laboratory equipment, and illegally manufactured methamphetamine. Subsequent investigation reveals that Y and Z had purchased most of the chemicals and equipment seized in X's basement. Based on this and other information, Y and Z are indicted along with X and charged with conspiring to manufacture methamphetamine.

Prior to trial, all three defendants move to suppress everything that was seized from X's basement. X's motion will be granted. Even though the evidence was seized pursuant to a warrant based upon probable cause, the probable cause depended upon information derived from unlawful private location monitoring. The monitoring taints everything seized pursuant to it.

In all probability, however, Y's motion and Z's will be denied. Although the monitoring of the beeper without a warrant violated X's rights, Y and Z lack standing to complain of this—or of the resulting search of X's basement—unless they can somehow show that they, too, had a Fourth Amendment protected right to privacy in X's basement. Their status as X's codefendants and coconspirators avails them nothing for Fourth Amendment purposes. See Alderman, 394 U.S. at 172; supra text accompanying note 310.

untainted source that provided the same information as they obtained from the tainted source, the information thus obtained is considered to be untainted.\textsuperscript{322} The "inevitable discovery" doctrine provides that if the police seize evidence illegally, but subsequently demonstrate to a judge that, employing lawful techniques, they inevitably would have come upon the evidence in question, the evidence is admissible.\textsuperscript{323}

More difficult conceptually is the principle of "attenuation" or "dissipa-

\textsuperscript{322} Thus, for example, if a search warrant is issued on an investigator's affidavit that included information that was tainted or that included factual allegations that the affiant knew to be false, a reviewing court in a subsequent challenge to the validity of the warrant should excise retroactively the offensive portion of the affidavit. If what is left suffices to establish probable cause, the warrant is valid despite the presence of tainted information or untrue assertions in the supporting affidavit. \textit{Karo}, 104 S. Ct. at 3305-06 (tainted information); \textit{Franks v. Delaware}, 438 U.S. 154, 171-72 (1978) (deliberately false information). Concerning \textit{Karo}, see infra note 341 and accompanying text. \textit{See also} \textit{Segura v. United States}, 104 S. Ct. 3380 (1984).

\textsuperscript{323} The Supreme Court explicitly endorsed the doctrine in \textit{Nix v. Williams}, 104 S. Ct. 2501, 2509-10 (1984). This remarkable case merits at least brief discussion. On Christmas Eve, 1968, a 10-year-old girl disappeared from a YMCA in Des Moines, Iowa. Evidence very quickly came to light implicating Williams, who had recently escaped from a mental hospital. The next day, Williams' car was found in Davenport, Iowa, 160 miles east of Des Moines, and items of clothing belonging to Williams and the girl were found at a rest stop between the two cities. \textit{Id.} at 2504-05. Police and volunteers immediately began a systematic, detailed, large-scale search of the area. Meanwhile, Williams surrendered to local police in Davenport and was promptly arraigned. He contacted a Des Moines attorney, who arranged for a Davenport attorney to represent Williams temporarily. Des Moines police informed counsel that they would drive to Davenport, pick up Williams, and return him to Des Moines without questioning him. \textit{Id.} at 2505.

During the drive from Davenport back to Des Moines, Detective Leaming, one of the officers assigned to transport Williams, asked Williams to think about these facts: that Williams was the only person who knew where the girl's body was; that a major snowstorm was expected to hit the area soon; that after the storm, even Williams might not be able to find the body; and that "the parents of this little girl should be entitled to a Christian burial for the little girl who was snatched away from them on Christmas eve and murdered." \textit{Id.} at 2505. Williams thought about this for several minutes, then took the officers to his victim's corpse.

Prior to trial and on appeal following his conviction for murder, Williams sought to suppress the fact that he had taken the authorities to the girl's body, arguing that Detective Leaming's "Christian burial speech" constituted unlawful interrogation in violation of Williams' Fifth and Sixth Amendment rights. Further, he sought to suppress the corpse and physical evidence found in its immediate vicinity, arguing that all such items were tainted by the illegal interrogation. \textit{Id.}

From virtually every imaginable perspective, Detective Leaming's conduct was exemplary. He employed no force, no threats, no coercion; rather, he appealed to Robert Williams' sense of decency and compassion, by urging Williams to have pity on his victim's family. In 1977, the Supreme Court held, nevertheless, that in the peculiar and abstract context of constitutional law, Detective Leaming, by appealing to a child murderer's better nature, had acted unlawfully: he had interrogated Williams in violation of the latter's Sixth Amendment right to counsel. \textit{See Brewer v. Williams}, 430 U.S. 387 (1977). The Court remanded for a new trial, at which the jury would not be permitted to learn that Williams led the police to the victim's
tion” of the taint. Under this theory, even if one can trace a direct, “but for” causal chain from the initial illegality to the ultimate acquisition of the evidence in question, intervening events and the passage of time may combine to attenuate the taint sufficiently so that the evidence is not considered tainted, and, therefore, is admissible at trial.\textsuperscript{324} While there is no simple test

body. The Court withheld judgment on whether the corpse itself, and the physical evidence found nearby, should also be suppressed as the tainted fruit of the unlawful interrogation.

On remand, the state court concluded that, had Williams not brought the police to his victim’s body, the meticulous, systematic search then in progress inevitably would have uncovered the grisly evidence within a short period of time, in essentially the same condition in which it was actually found. Testimony concerning the discovery of the body and its condition, an autopsy report, and the physical evidence found near the body were again admitted at trial (although the jury was not permitted to learn of Williams’ role in the discovery of the body). Williams was again convicted and the state supreme court affirmed. State v. Williams, 285 N.W.2d 248 (Iowa 1979). The United States Court of Appeals for the Eighth Circuit reversed, ruling that evidence relating to the victim’s corpse and nearby evidence should not have been admitted at trial. Williams v. Nix, 700 F.2d 1164 (1983).

The Supreme Court reversed the federal circuit court, reinstating the conviction. Nix v. Williams, 104 S. Ct. 2501 (1984). The Court reasoned that where the prosecution can show, by a preponderance of the evidence, that the evidence ultimately or inevitably would have been discovered by lawful means (in the instant case, the foot-by-foot search of the area in which the body was in fact found), suppression of the evidence would have virtually no deterrent effect on future potential police misconduct; hence, such evidence should be admissible at trial. \textit{Id.} at 2508-09.

\textsuperscript{324} See, e.g., United States v. Ceccolini, 435 U.S. 268 (1978). In December of 1974, Biro, a police officer assigned to traffic patrol, was chatting with a friend, Lois Hennessey, in Ceccolini’s flower shop, where she was employed. Noticing an envelope with money sticking out of it lying on the drawer of the cash register behind the counter, the officer picked up the envelope, glanced through its contents, and discovered that it contained not only money but policy slips, that is, notations of unlawful gambling. Replacing the envelope, and without telling Ms. Hennessey what it contained, he asked her about it. She replied that Ceccolini had given her the envelope and instructed her to give it to someone else.

The next day, Biro told a local detective what he had seen. The detective, in turn, passed the information on to an FBI agent. Coincidentally, the FBI had been investigating suspected gambling in that town for over a year, and in fact had for a time conducted surveillance of Ceccolini’s flower shop, although such surveillance had been curtailed in December of 1973, a full year before Officer Biro’s casual albeit unlawful perusal of the envelope. Four months after learning of the incident, the FBI agent interviewed Ms. Hennessey in her home in the presence of several relatives. She told the agent she was studying police science, and was quite happy to cooperate with the authorities. Ultimately, she provided testimony concerning the envelope incident that led to Ceccolini’s indictment and conviction for perjuriously denying having taken policy bets in the flower shop.

Following the conviction, however, the trial judge granted Ceccolini’s motion to suppress Ms. Hennessey’s testimony, ruling that it was tainted by Officer Biro’s illegal examination of the envelope. Without Ms. Hennessey’s testimony, there was little evidence of Ceccolini’s guilt; accordingly, the judge reversed the conviction. The Second Circuit affirmed, reasoning that “the road to Miss Hennessey’s testimony from Officer Biro’s concededly unconstitutional search is both straight and uninterrupted.” 542 F.2d 136, 142 (2d Cir. 1976).

The Supreme Court reversed, ruling that “the connection between the lawless conduct of the police and the discovery of the challenged evidence ha[dl] ‘become so attenuated as to dissipate
to determine whether, in any given sequence of events, the "attenuation point" has been reached, analysis must begin with an understanding of the principle underlying the attenuation rule. As Justice Powell explained: "The notion of the 'dissipation of the taint' attempts to mark the point at which the detrimental consequences of illegal police action become so attenuated that the deterrent effect of the exclusionary rule no longer justifies its cost."\(^3\)\(^2\)\(^5\)

the taint.'" Ceccolini, 435 U.S. at 273-74 (quoting Wong Sun v. United States, 371 U.S. 471, 487 (1963); citing Nardone v. United States, 308 U.S. 338, 341 (1939)). The Court emphasized that Ms. Hennessey's decision to testify was entirely voluntary on her part and in no way coerced or induced by Biro's discovery of the policy slips; that the slips themselves were not used in questioning her; that substantial periods of time elapsed between Biro's illegal search, the FBI's initial interview with the witness, and her testimony at trial; and that the FBI might have eventually interviewed Ms. Hennessey about Ceccolini in any event. Ceccolini, 435 U.S. at 279.

Earlier in its opinion, the Court had reiterated its oft stated principle that the exclusionary rule should be applied only in situations where suppression of evidence is likely to deter further, similar police misconduct. Id. at 275. See supra note 18. Returning to this theme, the Court stressed that there was "not the slightest evidence to suggest" that Biro had done what he did with the intent or expectation of uncovering evidence of illicit gambling, or of finding a witness who might testify about such activity. Ceccolini, 435 U.S. at 279-80. Given this fact, the Court concluded,

Application of the exclusionary rule in this situation could not have the slightest deterrent effect on the behavior of an officer such as Biro. The cost of permanently silencing Hennessey is too great for an evenhanded system of law enforcement to bear in order to secure such a speculative and very likely negligible deterrent effect.

Id. at 280.

325. Brown v. Illinois, 422 U.S. 590, 609 (1975) (Powell, J., concurring). See also Ceccolini, 435 U.S. at 280, quoted supra at note 324. Brown provides a worthwhile contrast to Ceccolini. In Brown, the police arrested Brown, knowing they lacked lawful grounds to do so. They then advised him of his Fifth Amendment rights (that is, they read him the "Miranda warnings") and, within two hours, Brown confessed to a murder. The Court ruled that the confession should have been suppressed. The brief interval between the unlawful arrest and the administration of the Miranda warnings was insufficient, the Court held, to attenuate the taint of the unlawful arrest, particularly in light of the purposeful nature of the police misconduct. Brown, 422 U.S. at 604-05. Accord, Taylor v. Alabama, 457 U.S. 687 (1982) (Although six hours elapsed between the illegal arrest and petitioner's confession, and although petitioner had been advised of his Miranda rights three times and had been permitted to visit briefly with his girlfriend and neighbor before he confessed, the confession was the impermissible fruit of the unlawful arrest.); Dunaway v. New York, 442 U.S. 200 (1979) (illegal seizure and detention of suspect for questioning tainted subsequent incriminating statements); cf. Wong Sun v. United States, 371 U.S. 471 (1963). In Wong Sun, federal narcotics agents unlawfully arrested Wong Sun and charged him with drug related offenses. He was arraigned and released on his own recognizance. Several days later, of his own volition, he went to the agents' office and made incriminating statements. The Supreme Court held that these statements were properly admitted against him at trial. His release from custody, and his own decision several days later to make statements to the agents, had so attenuated the connection between the arrest and the statement as to "dissipate the taint." Wong Sun, 371 U.S. at 491.

For a detailed discussion of the "tainted fruit" and "attenuation" doctrines, see 3 W. LAFAVE, supra note 312, at § 11.4; Pitler, supra note 316, at 579 (1968).
The most logical way to analyze taint and taint aversion issues is to examine the sequence of events chronologically, defendant-by-defendant. Each step in an investigative sequence, beginning with the very first, should be analyzed, to determine whether that step intruded upon any defendant's Fourth Amendment protected right to privacy. If there were such an intrusion into a particular defendant's right to privacy, a determination must be made whether that intrusion was lawful. For example, if the police searched defendant X's home and seized incriminating evidence, then admissibility of that evidence against X at trial depends upon whether the search was lawful. If the search were unlawful, that is, if it violated defendant X's Fourth Amendment rights, then, as to defendant X, that illegality also taints all subsequently obtained evidence the government might seek to use against X—unless the taint is averted by operation of the independent source, inevitable discovery, or attenuation doctrines.

B. The Karo "Attenuation" Analysis

1. The Majority Opinion

In Part IV of Karo, a six-judge majority (the White plurality, plus Justices O'Connor and Rehnquist, concurring) held that although information relating to beeper surveillance in the private residences (including the house at Taos) would be inadmissible at trial, the physical evidence seized from the house at Taos—evidence that, but for the beeper surveillance, would not have been discovered—should not have been suppressed as to any defendant. The Court ruled the evidence was admissible at trial against all of the defendants. 328

Given the long-established concepts of standing and taint aversion, this result is defensible and, although certainly debatable, probably correct. The majority's explanation of how it arrived at this result, on the other hand,

326. See supra notes 317-19 and accompanying text.
327. Although an unlawful search or seizure may taint subsequent discoveries, it can have no such effect on a prior lawful search or seizure. A search that is lawful when the police conduct it on the first of the month cannot retroactively be made unlawful by a transgression the police commit on the second or third day of the month.
328. The Tenth Circuit held that Karo had the right to seek and win suppression of the fruits of the beeper surveillance because his rights had been violated by the transfer of the can of ether containing the beeper to him without authorization of a valid warrant; Horton, Harley, and Steele were entitled to suppress the fruits of the surveillance because they had jointly rented the house in Taos, the final place from which the beeper was unlawfully monitored; and Roth could do likewise since he had been a guest at the house for several days and nights. Because the beeper was not monitored in any location in which Rhodes had a legitimate expectation of privacy, the Tenth Circuit held that the trial judge had erred in suppressing the evidence as to him. Karo, 710 F.2d at 1441.
lacks clarity of thought and expression. The Court begins at the end, works its way toward the beginning, and glosses over several important aspects of the case altogether.

a. Summary

Before examining Part IV of the opinion as the Court wrote it, therefore, a chronology of the investigation is offered together with a brief summary of how the Court explicitly or implicitly treated each aspect of it.

1. The agents lawfully tracked the beepered can from the informant to Karo's house.

2. Thereafter the agents engaged in unlawful private location monitoring, violating the rights of Karo and Horton and ultimately leading the agents to the first storage facility.

3. Having used the beeper to locate the can somewhere in the first storage facility, the agents used a variety of lawful means to track the can, ultimately, to a particular locker in the second storage facility. The manner in which this information was acquired sufficed to attenuate the taint of the unlawful private location monitoring outlined in step two.

4. Similarly, the agents employed only lawful methods to track the can from the second locker to the vicinity of the house in Taos.

5. Finally, the agents engaged in unlawful private location monitoring of the can at the house in Taos. Because the warrant authorizing the search

329. Indeed, Part IV of the opinion reminds me of the pedagogical approach of one of my least fondly remembered law professors, who regarded it akin to original sin to make any legal concept easy to understand. Rather, his approach to virtually every subject was to inundate his class with a melange of references, hypotheticals, parables, and analogies, intending thereby to force his students always to analyze and synthesize every legal principle for, and teach it to, themselves, presumably on the theory that even those students who were unsuccessful would benefit greatly from the intellectual effort involved. Most students, of course, simply bought a hornbook and stopped attending class—an option not available to attorneys and judges, nor to law professors who choose to write about the Karo decision.

330. In essence, the next five paragraphs of the text constitute an outline of what the Court should have said, and how it should have said it, to arrive at the result it did. (One of the perks of being a law professor is the freedom to indulge in acts of gross presumptuousness.)

331. This stage of the surveillance consisted solely of visual surveillance and in-transit monitoring, a sort held not to be a search in United States v. Knotts, 460 U.S. 276 (1983). See supra notes 173-81 and accompanying text.

332. See infra note 338 and accompanying text.

333. See supra notes 211-15 and accompanying text.

334. This conclusion is at best implicit in the Court's discussion; indeed, the reader is required to infer it from the Court's rather loose discussion of the facts. See infra notes 345-47, 354-57 and accompanying text.

335. This stage of the investigation consisted solely of visual surveillance and in-transit monitoring, and hence was not a Fourth Amendment search at all. See supra note 331.

336. See supra notes 227-43 and accompanying text.
of that house was supported by probable cause independent of this unlawful monitoring, however, evidence seized pursuant to that warrant was admissible.\footnote{337}{See infra notes 341-43, 345-47 and accompanying text.}

\textit{b. The Court's Reasoning}

The Court began Part IV by spelling out the ramifications of its holding in Part III that nonwarrant private location monitoring is an unlawful search. Rather than begin with the first instance of such monitoring,\footnote{338}{Later in the opinion the Court commented that "the unwarranted monitoring of the beeper in Karo's house would foreclose using that evidence [that is, that the beeper had been in Karo's house] against him . . . ." Karo, 104 S. Ct. at 3307 n.7. Presumably, the fact that the beeper was later monitored inside Horton's home likewise would be inadmissible against Horton. The Court did not address whether Horton would be able to suppress the fact that the ether thereafter was monitored inside Horton's father's home. These issues are discussed more fully infra at notes 345-62 and accompanying text. This aspect of Karo corresponds to the portion of the summary accompanying supra note 332.} the Court focused upon the monitoring in Taos.

\[B\]y maintaining the beeper the agents verified that the ether was actually located in the Taos house and that it remained there while the warrant [to search that house] was sought. This information was obtained without a warrant and would therefore be inadmissible at trial against those with a privacy interest in the house—Horton, Harley, Steele, and Roth.\footnote{339}{Id. at 3305. This aspect of Karo corresponds to the portion of the summary accompanying supra note 332.} In other words, at trial, the agents would not be permitted to testify that they monitored the beeper and ascertained thereby that the ether was inside the house in Taos.

The Court proceeded to focus upon whether the evidence seized pursuant to the search warrant was properly suppressed by the courts below. Because information relating to the beeper surveillance at Taos was included in the warrant application, the use of this information "would . . . invalidate the warrant for the search of the house" if the information "proved to be critical to establishing probable cause for the issuance of the warrant."\footnote{340}{Id. See supra note 320 and accompanying text.} If, on the other hand, "sufficient untainted evidence [were] presented in the warrant affidavit to establish probable cause, the warrant was . . . valid" despite the inclusion of the information tainted by the beeper surveillance.\footnote{341}{Id. (citing Franks v. Delaware, 438 U.S. 154, 172 (1978). See supra note 322.}

The affidavit recounted the months-long tracking of the evidence, including the visual and beeper surveillance of Horton's pick-up on its trip from Albuquerque to the immediate vicinity of
the Taos residence; its departure a short time later without the ether; its later return to the residence; and the visual observation of the residence with its windows open on a cold night.\textsuperscript{342}

The Court concluded that this information alone established probable cause for the search warrant.

Next, the Court considered whether any of this additional information “was itself the fruit of a Fourth Amendment violation to which any of the occupants of the house could object.”\textsuperscript{343} Steele and Roth lacked standing to raise such an objection, the Court decided, because they “had no interest in any of the arguably private places in which the beeper was monitored prior to its arrival in Taos. Therefore, the evidence seized in the house would be admissible against them.”\textsuperscript{344}

Turning to Horton and Harley, the Court quickly reviewed the ether’s earlier stops: Karo’s home, Horton’s home, Horton’s father’s home, a locker rented by Horton and Harley in a storage facility, and then another locker rented by them in a second storage facility; and finally, to Taos. “Assuming for present purposes that prior to its arrival at the second warehouse the beeper was illegally used to locate the ether in a house or other place in which Horton or Harley had a justifiable claim to privacy,”\textsuperscript{345} the Court concluded that “such use of the beeper does not taint its later use in locating the ether and tracking it to Taos.”\textsuperscript{346} The Court explained:

The movement of the ether from the first warehouse was undetected, but by monitoring the beeper the agents discovered that it had been moved to the second storage facility. \textit{No prior monitoring of the beeper contributed to this discovery}; using the beeper for this purpose was thus untainted by any possible prior illegality. Furthermore, the beeper informed the agents only that the ether was somewhere in the warehouse; it did not identify the specific locker in which the ether was located. Monitoring the beeper revealed nothing about the contents of the locker that Horton and Harley

\textsuperscript{342} \textit{Karo}, 104 S. Ct. at 3306. It is unclear from the published opinions in the case whether the information that the truck departed the house without the beeper was derived from monitoring the beeper or from visual surveillance. This aspect of \textit{Karo} corresponds to the portion of the summary accompanying supra note 337.

\textsuperscript{343} \textit{Karo}, 104 S. Ct. at 3306.

\textsuperscript{344} \emph{Id.}

\textsuperscript{345} \emph{Id.} Presumably, neither Horton nor Harley could assert such a claim in Karo’s home. Unquestionably, Horton could assert such an interest in his own home, and perhaps his father’s. Absent additional information, it is unclear whether Harley could assert such an interest in either of these places. Both Horton and Harley could assert such an interest in the locker at the first storage facility since they jointly rented the locker. \emph{Id.} at 3306 n.6. See infra notes 347, 354-58 and accompanying text.

\textsuperscript{346} \textit{Karo}, 104 S. Ct. at 3306.
had rented and hence was not a search of that locker. The locker was identified only when agents traversing the public parts of the facility found that the smell of ether was coming from a specific locker.347

Thereafter, the Court stressed, the agents learned that the ether was being moved from the second locker by visual and not beeper surveillance.348 Likewise, "the ether was seen being loaded into Horton's truck" after its removal from the second locker,349 that is, the agents learned of its presence in that vehicle by visual and not beeper surveillance.350 Visual and beeper surveillance tracked the ether to "the vicinity of the house in Taos";351 but this beeper surveillance consisted merely of in-transit monitoring, which, the Court had already held in Knotts, did not constitute a search.352

Having thus located the Taos residence in a manner (the Court concluded) untainted by the unlawful monitoring which had occurred prior to the ether's arrival at the second storage facility, the agents proceeded to acquire probable cause to search the Taos house independent of the unlawful private location beeper monitoring they conducted at that site. Thus, the Court concluded, "The evidence seized in the house should not have been suppressed with respect to any of the respondents."353

Regrettably, the Court's explanation of its reasoning contains a significant misstatement of fact. It is simply not true that prior monitoring of the beeper did not contribute to the discovery that the beepered can had been moved to the second storage facility.354 Had there been "no prior [unlawful] monitoring of the beeper," the agents would not have "discovered" that the

347. Id. (emphasis added). This aspect of Karo corresponds to the portion of the summary accompanying supra note 334. The italicized portion of this quotation is a plain misstatement of fact. See infra notes 355-57 and accompanying text. At the end of the quoted passage, the Court noted that "Had the monitoring disclosed the presence of the container within a particular locker," this would have constituted a search of that locker. Karo, 104 S. Ct. at 3306 n.6. See supra notes 285-87 and accompanying text.

348. 104 S. Ct. at 3300, 3306.
349. Id. at 3306.
350. See supra note 276 and accompanying text.
351. Karo, 104 S. Ct. at 3306. Had the agents lost track of the beeper en route to Taos, and then used the beeper to ascertain that the container was inside, rather than merely "in the vicinity of," the house in Taos, this presumptively would have constituted unlawful private location monitoring. See supra note 287 and accompanying text.
352. See supra notes 175-81 and accompanying text. The aspect of Karo discussed in this paragraph corresponds to the portion of my summary accompanying supra note 335.
353. Karo, 104 S. Ct. at 3306-07. The Court noted that although the monitoring of the beeper inside Karo's home had been illegal, this "did not taint the discovery of the ether in the second warehouse and the ensuing surveillance of the trip to Taos." Id. at 3307 n.7. The Court had already concluded that the evidence was admissible as to Steele and Roth. See supra note 344 and accompanying text.
354. Karo, 104 S. Ct. at 3306. See supra note 347 and accompanying text.
can had been taken from Karo's home to Horton's.355 Had there been "no prior [unlawful] monitoring of the beeper," the agents would not have "discovered" that the can had been taken from Horton's residence to his father's.356 Had the agents not engaged in a third instance of "prior [unlawful] monitoring of the beeper," they would not have "discovered" that the can had been taken from Horton's father's home to the first storage facility.357 These several instances of prior—and unlawful—monitoring not only "contributed to [the] discovery" that the can had been moved to the second storage facility; they constituted essential, "but for" steps in that discovery.358

While this misstatement of fact represents a serious flaw in the Court's explanation of its reasoning, the reasoning itself is sound. The agents learned of the ether's removal when the manager of the storage facility voluntarily informed them of this fact.359 Apparently, the majority concluded, sub silentio, that this voluntary act on the manager's part sufficed to attenuate the taint of the prior, unlawful monitoring. If this indeed were the Court's reasoning, it is entirely consistent with prior taint-attenuation precedent.360

It is significant that the agents used the beeper to locate the can in the second warehouse only after learning, in a manner untainted by the prior

355. *Karo*, 104 S. Ct. at 3300. Because the agents lacked a valid beeper surveillance warrant, private location monitoring at Karo's home was unlawful. In the absence of such monitoring, the agents would have had no way of knowing whether the can had been removed, let alone that it had been taken to Horton's home.

356. Once the beeper led the agents to Horton's home, the smell of ether was discernible from the sidewalk. Nevertheless, it was only by monitoring the beeper two days later that they learned that the can was no longer there, but had been moved to the home of Horton's father. *Karo*, 104 S. Ct. at 3300.

357. *Id.*

358. Having ascertained that the ether was inside locker number 143 of the first storage facility, the agents obtained a court order authorizing installation of an entry tone alarm into the door jam of the locker. The alarm was designed to alert the agents as soon as the locker was opened. Somehow, however, the suspects removed the ether from the locker without sounding the alarm. *Karo*, 104 S. Ct. at 3300.

359. *Id.*

360. *Karo* may be analogized to United States v. Ceccolini, 435 U.S. 268 (1978), described in *supra* note 324. In each case, an initial illegality led the authorities to a witness who then voluntarily conveyed additional information to the agents. There are also dissimilarities. In *Ceccolini*, the illegality was a casual act, not intended to lead to incriminating evidence, while in *Karo*, the illegal monitoring clearly was intended to acquire evidence of crime. In this respect, the attenuation argument in *Karo* is weaker than that in *Ceccolini*. On the other hand, in *Ceccolini*, the information volunteered to the authorities proved to be a key aspect of the government's case, while in *Karo*, the information volunteered by the manager of the first storage facility proved to be only the first untainted link in a fairly lengthy investigative sequence. In this respect, the attenuation argument in *Karo* is perhaps stronger than that in *Ceccolini*. 
unlawful private location monitoring, that the can was no longer in the first facility. Monitoring the beeper while the can was in the first locker would have constituted an unlawful search of that locker.\textsuperscript{361} Monitoring the beeper and thereby discovering that the ether was \textit{no longer} in the first locker also would have constituted an unlawful search of the locker.\textsuperscript{362} This very likely would have tainted their subsequent discovery that the ether had been moved to the "general vicinity" of the second storage facility, which in turn might have tainted all subsequently obtained information and evidence—at least as to Horton and Harley, the individuals with a privacy interest in the first locker.

Turning to the second locker, the Court stressed that the beeper revealed \textit{only} that the can had been moved to a second storage facility; the agents did not use the beeper to ascertain in which locker it had been placed. Instead, they obtained this information through direct observation (the ether's smell) and the facility manager. Thus, the Court reasoned, "Monitoring the beeper revealed nothing about the contents of the locker that Horton and Harley had rented and hence was not a search of that locker."\textsuperscript{363} This was indeed fortunate, because "[h]ad the monitoring disclosed the presence of the container within a particular locker the result would [have been] otherwise, for surely Horton and Harley had a reasonable expectation of privacy in their own storage locker."\textsuperscript{364} Likewise, using the beeper to discover that the ether had been removed from the second storage locker and was on route to Taos would have constituted an unlawful search of the locker,\textsuperscript{365} and presumably would have tainted all subsequently obtained information and evidence—including information and evidence derived from the house in Taos.

In sum, the Court held that everything the agents did and learned from the time the ether was located at the second facility to the time it arrived in the vicinity of the house in Taos was lawful and untainted. Further, although the subsequent private location monitoring of the beeper inside that house was unlawful (and therefore could not be testified to), the warrant

\textsuperscript{361} The \textit{Karo} Court said as much with regard to the second locker in the second warehouse. \textit{See Karo}, 104 S. Ct. at 3307 n.7. \textit{See infra} text accompanying note 364. There is no earthly reason why the same result would not apply to the first locker.

\textsuperscript{362} Discovering that the ether is no longer in the locker intrudes upon defendants' privacy therein just as much as would monitoring that reveals the ether is still there. If the agents had discovered by monitoring the beeper that the ether had been taken from the first locker only after the defendants' rental period had expired, this would not constitute an invasion of defendants' legitimate expectations of privacy in that locker, since defendants' privacy expectations therein would have expired with their lease.

\textsuperscript{363} \textit{Karo}, 104 S. Ct. at 3306.

\textsuperscript{364} \textit{Id.} at 3306 n.6.

\textsuperscript{365} \textit{See supra} note 362.
authorizing the search of the house was based on sufficient untainted information to establish probable cause independent of the unlawful monitoring. Hence, the evidence seized in the house in Taos was admissible against all defendants.

2. The Dissent

Justice Stevens, joined by Justices Marshall and Brennan, objected to two aspects of Part IV of the majority opinion. First, he disagreed with the majority's implicit conclusion that the taint of the earlier unlawful private location monitoring (of Karo's, Horton's, and Horton's father's homes) was attenuated by the manner in which the agents learned of the can's removal from the first locker and of its new location in the second warehouse. Second, he objected to the Court's conclusion that an independent, untainted probable cause existed for the Taos search warrant. 366

In disagreeing with the majority's implicit attenuation analysis, Justice Stevens reasoned:

If monitoring of a beeper constitutes a search because it 'establishes that the article remains on the premises,' ante, at [104 S. Ct.] 3303, it is no less a search when it establishes that the article has left the premises. For this reason, the Court's holding in Part IV of its opinion that any violation of respondents' privacy rights before the can left the second warehouse did not taint its later monitoring is flawed. The later monitoring necessarily told police that the container had left areas the Court considers protected, and therefore itself violated privacy rights. 367

Finally, Justice Stevens argued that the question whether the Taos search warrant application contained sufficient untainted information to establish probable cause was not properly before the Court. Noting that the issue was neither included in the petition for certiorari nor briefed by the parties, he objected to what he categorized as the Court's "de novo examination of the record" to decide the issue. 368

3. Evaluation

Justice Stevens' dissent, except perhaps on the final point, is unpersuasive. It is, of course, true that when the police "search" someone's home (or auto or locker) for an object, that search is no less a search if the object they are

366. Karo, 104 S. Ct. at 3303. In addition, Justice Stevens protested the majority's conclusion that using the monitor to determine the general vicinity of the beeper (the second warehouse) was not a search. See supra notes 228-30 and accompanying text.

367. Karo, 104 S. Ct. at 3313 n.8 (Stevens, J., dissenting).

368. Id. at 3314.
looking for happens not to be there, and there is no reason to doubt that the *Karo* majority recognized as much. This does not mean, however, that every subsequent search of a new location for the same object ipso facto also constitutes a new search of the *first* location. The majority's attenuation analysis, unarticulated and implicit though it is, is consistent with existing precedent; and although Justice Stevens may disagree with that analysis, the majority's rationale is not dramatically or inherently flawed.

The result in *Karo*, nevertheless, is distressing. There is no gainsaying the fact that DEA lied to a federal district judge and, for all practical purposes, got away with it. Further, the result is dependent upon the distinct-

369. See supra note 362.

370. See supra note 360 and accompanying text.

371. See supra note 360 and accompanying text.

372. See supra note 59 and accompanying text.

373. Some evidence will be suppressed as a result of the Court's decision. At the very end of his plurality opinion, Justice White noted that "the unwarranted monitoring of the beeper in Karo's house would foreclose using that evidence against him . . . ." *Karo*, 104 S. Ct. at 3307 n.7. By this, the Court apparently meant that, at trial, the agents would not be permitted to testify that private location monitoring of the beeper had revealed the ether's presence in Karo's home since the ether had been traced to Karo's home in the first place by lawful visual surveillance and in-transit monitoring, however, the agents should be permitted to testify that the ether arrived at Karo's home. *Id.* at 3300. All that would be excluded is testimony that the beeper enabled the agents to learn that the ether remained there for awhile, and then left again.

Presumably, Karo would also be able to suppress the fact that the ether was taken to Horton's home after it left Karo’s. The agents learned of the ether's departure from Karo's home, after all, by using the monitor to "search" Karo's home for the beeper.

Horton clearly should be able to suppress the fact that the can of ether was in his home: the agents discovered this only by conducting unlawful private location monitoring of the beepered can while it was there, where clearly Horton enjoyed a reasonable expectation of privacy. Further, for two distinct reasons, Horton should also be able to suppress the fact that the ether was taken from his own home to his father's. First, a court might find that Horton enjoyed a reasonable expectation of privacy in his father's home. Even if that proposition is rejected, the fact remains that the agents were able to track the ether to Horton's father's home only after their unlawful private location monitoring of Horton's home revealed the ether was no longer there. Since this constituted a second unlawful search of Horton's home, the evidence of its subsequent location is, developed as to Horton, tainted.

Logically, Karo and Horton should also be able to suppress the fact that the ether was next taken to the first storage warehouse: as to these defendants, this fact is the fruit of the prior unlawful monitoring that violated the rights of each. Finally, the Court explicitly ruled that all information and evidence relating to the second locker, the trip from that locker to the house in Taos, and the evidence seized in that house is admissible. *Id.* at 3306. The agents, however, are not to be permitted to testify that they ascertained the continued presence of the
tion between general vicinity monitoring and private location monitoring, a distinction that is readily susceptible to manipulation by law enforcement officials. Such, however, are the vicissitudes of the Fourth Amendment exclusionary rule and the manner in which it is applied.

VI. THE QUESTIONS STILL UNANSWERED

Twice within a sixteen-month period, the Supreme Court rendered decisions on the applicability of the Fourth Amendment to beeper surveillance. While the *Knotts* and *Karo* decisions resolved many of the issues that have arisen with regard to such surveillance, numerous questions remain unanswered. Until they are answered—by subsequent court decisions or by legislation—law enforcement officials and judges will be uncertain as to what is required for certain types of beeper surveillance to be lawful, with concomitant risks to law enforcement, efficiency, and personal liberty.

A. Installation

1. Consensual Installations

In *Karo*, the Court held that it constitutes neither a search nor a seizure for law enforcement officials, acting with the consent of the current owner of a container of chemicals, to install a beeper into the container and to deliver the container to the target of an investigation. The broad terminology used by the Court suggests that it would reach the same result if a far more sophisticated device were consensually installed into an item far more private and personal in nature—for example, a suitcase or attache case. Despite the broad sweep of Part II of the *Karo* decision, when progress in miniaturization makes the installation of such a device a practical possibility, different issues will be posed than exist with regard to drums or cans of chemicals.

2. Trespassory Installations

Further, *Karo* offers only indirect guidance with regard to trespassory, that is, nonconsensual, installations. Prior to *Karo*, the lower courts were

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374. See supra notes 12-14, 282-306 and accompanying text.
375. See supra notes 295-306 and accompanying text.
377. See supra notes 69-78 and accompanying text.
378. See supra text following note 5.
379. See supra notes 105-08, 123-24, 142-48 and accompanying text.
380. See supra notes 142-48 and accompanying text.
sharply divided over whether such an installation, particularly onto or into a vehicle, constituted a search or seizure.\textsuperscript{381} *Karo* implies, however, that many such installations do not fall within the scope of Fourth Amendment protection.\textsuperscript{382}

B. Monitoring

1. General Vicinity or Private Location Monitoring

In *Knotts*, the Court unanimously held that in-transit monitoring does not constitute a search.\textsuperscript{383} In *Karo*, a four-justice plurality and three otherwise dissenting justices held that private location monitoring is a search subject to the warrant requirement,\textsuperscript{384} while the plurality and two concurring justices held that general vicinity monitoring is not a search.\textsuperscript{385} As yet unresolved is where the line is to be drawn between general vicinity monitoring and private location monitoring.\textsuperscript{386}

2. Private Location Monitoring: Contraband

Prior to the *Karo* decision, several courts held or stated in dictum that no Fourth Amendment rights are violated by the warrantless installation of a beeper into contraband, stolen property, or items involved in other inherently tainted transactions, so long as the item in question is in the lawful possession of government agents at the time of installation.\textsuperscript{387} The rationale underlying these decisions is that a person does not have a reasonable expectation of privacy with regard to items that are per se unlawful to possess.\textsuperscript{388} *Karo*, of course, confirms these holdings, albeit on the alternate ground that consensual installation is neither a search nor a seizure regardless of the object into which the beeper is installed.\textsuperscript{389}

Prior to *Karo*, several courts also held or indicated in dictum that a warrant should not be required to authorize private location monitoring of a beeper that has been installed in contraband\textsuperscript{390} or into instrumentalities in-

\textsuperscript{381} See supra notes 149-57 and accompanying text.

\textsuperscript{382} See supra notes 158-62 and accompanying text.

\textsuperscript{383} See supra notes 172-84 and accompanying text.

\textsuperscript{384} See supra notes 228-46, 256-60 and accompanying text.

\textsuperscript{385} See supra notes 282-87 and accompanying text.

\textsuperscript{386} See supra notes 295-306 and accompanying text.

\textsuperscript{387} See supra notes 132-39 and accompanying text.

\textsuperscript{388} See supra text accompanying note 138.

\textsuperscript{389} See supra notes 140-41 and accompanying text.

\textsuperscript{390} United States v. Sheikh, 654 F.2d 1057, 1071 (5th Cir. 1981), cert. denied, 455 U.S. 991 (1982); United States v. Dubrofsky, 581 F.2d 208, 211 (9th Cir. 1978); United States v. Emery, 541 F.2d 887, 890 (1st Cir. 1976). See United States v. Bailey, 628 F.2d 938, 942-43 (6th Cir. 1980) (dictum). *Sheikh, Dubrofsky, and Emery* also uphold the use of a signal alter-
volved in other inherently tainted transactions. Again, the rationale underlying several of these decisions is that there is no reasonable or legitimate

ing beeper. The Ninth Circuit decisions were based on that court's conclusion that private location monitoring did not constitute a search. "[A] beeper which says no more than 'the package is being opened' does not constitute an intrusion entitled to the protection of Katz." Dubrofsky, 581 F.2d at 212. See also United States v. Brock, 667 F.2d 1311, 1320-22 (9th Cir. 1982), cert. denied, 460 U.S. 1022 (1983). This rationale was rejected in Karo.

The First Circuit, in Emery, and the Fifth Circuit, in Sheikh, somewhat less specifically held that such monitoring did not violate the defendants' Fourth Amendment rights, without specifying whether this conclusion was based on the theory that such monitoring was not a search, or on the alternate theory that the surveillance constituted a search that was reasonable despite the absence of a warrant.

The courts, however, have properly been unwilling to apply the principle unless the transaction is inherently "tainted" ab initio.

[T]here is a clear line of demarcation between, on the one hand, contraband and other items, such as stolen goods, whose possession is illegal, and on the other, goods, whatever their suspected use, whose possession is legal. The narcotics peddler in whose heroin a beeper is planted has no privacy interest in the substance; but the same is not so of legally-possessed substances into which a beeper is placed, even if these are destined later to be used in the commission of a crime.

expectation of privacy with regard to such items. Thus, the question is whether this rationale survives the holding in *Karo* that private location monitoring constitutes a search that, barring exigent circumstances, must be authorized in advance by a warrant.

Despite *Karo*, private location monitoring of a beeper installed into a container of known contraband should not be categorized as a search. Such use of a beeper closely parallels the use of another sophisticated investigative technique recently examined by the Supreme Court. In *United States v. Place*, the Court held, inter alia, that exposing a suspected drug courier's suitcases to a trained narcotics detection dog is not a search. The Court reasoned:

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392. See supra note 391.
393. See supra notes 226-46 and accompanying text.
395. Law enforcement officers at the Miami International Airport became suspicious of respondent Place as he waited in line to purchase a ticket for a flight to LaGuardia Airport in New York City. The officers approached him and asked to see his ticket and some identification; he complied. When permission was asked to search his suitcase, which he had checked with the airline, he consented. Because his flight was about to depart, however, the agents decided not to search the luggage. After they inspected the address tags on the luggage, Place was allowed to embark on the flight.

Further investigation revealed discrepancies between the information on the address tags and the information Place had given the airline. The Miami police therefore relayed this information concerning Place to DEA agents in New York City.

After Place disembarked at LaGuardia and claimed his two bags, two DEA agents approached him, identified themselves, and told him they believed he might be carrying narcotics. Place claimed he had recognized the agents as "cops" as soon as he had deplaned (he had made a similar claim to the Miami police when they had approached him), and claimed that Miami police had already searched his luggage before he boarded the plane. The agents responded that they had heard to the contrary, and asked whether he consented to a search of his luggage. Place demurred. An agent told Place they were going to take his luggage to a federal judge and attempt to obtain a warrant to search it, and that Place was entitled to accompany them if he wished. Place declined, but obtained telephone numbers from the agents where they could be reached. The agents then took the bags to Kennedy Airport, and, approximately ninety minutes after the initial seizure, they subjected the bags to a "sniff test" by a narcotics detection dog. The dog reacted positively to one of the suitcases. Because it was by then late Friday afternoon, the agents retained the luggage until Monday morning, when they obtained a search warrant for that bag. Inside, they found 1,125 grams of cocaine. Place was convicted of possession and appealed. The United States Court of Appeals for the Second Circuit reversed, holding that the prolonged detention of the luggage had violated Place's Fourth Amendment rights. 660 F.2d 44 (1981).

The Supreme Court affirmed. It held, first, that the DEA agents at LaGuardia had a reasonable suspicion that the suitcase contained narcotics, and that this established an adequate factual basis to detain the suitcases temporarily. 103 S. Ct. at 2641-44. It further held that exposing the suitcases to the canine "sniff" was not a search. Id. at 2644-45. In addition, the Court ruled that under the circumstances, the ninety minute period between the seizure of the luggage on reasonable suspicion and the canine sniff was excessive. It therefore affirmed the Second Circuit's reversal of Place's conviction. 103 S. Ct. at 2645-46.
[A] person possesses a privacy interest in the contents of personal luggage that is protected by the Fourth Amendment. A 'canine sniff' by a well-trained narcotics detection dog, however, does not require opening the luggage. It does not expose noncontraband items that otherwise would remain hidden from public view, as does, for example, an officer's rummaging through the contents of the luggage. Thus, the manner in which information is obtained through this investigative technique is much less intrusive than a typical search. Moreover, the sniff discloses only the presence or absence of narcotics, a contraband item. Thus, despite the fact that the sniff tells the authorities something about the contents of the luggage, the information obtained is limited. This limited disclosure also ensures that the owner of the property is not subjected to the embarrassment and inconvenience entailed in less discriminate and more intrusive investigative methods.

In these respects, the canine sniff is sui generis. We are aware of no other investigative procedure that is so limited both in the manner in which the information is obtained and in the content of the information revealed by the procedure. Therefore, we conclude that . . . exposure of respondent's luggage, which was located in a public place, to a trained canine . . . did not constitute a 'search' within the meaning of the Fourth Amendment.396

The parallels between the "canine sniff" and private location monitoring of a beeper installed into a container of contraband are substantial, so much so in fact that with the substitution of a few appropriate words, most of the passage from the Place decision quoted above would apply equally well to private location monitoring of such a container:

[A] person possesses a privacy interest in [his home] that is protected by the Fourth Amendment. [Private location monitoring], however, does not require [entry into the home]. It does not expose noncontraband items that otherwise would remain hidden from public view as does, for example, an officer's rummaging through the [home]. Thus, the manner in which information is obtained through this investigative technique is much less intrusive than a typical search. Moreover, the [beeper] discloses only the presence or absence of . . . a contraband item. Thus, despite the fact that the [beeper] tells the authorities something about the contents of the [home], the information obtained is limited. This limited disclosure also ensures that the [occupant of the home] is not subjected to the embarrassment and inconvenience entailed in less discriminate and more intrusive investigative methods.397

396. 103 S. Ct. at 2644-45 (citation omitted).
397. This passage consists of the just quoted passage from United States v. Place, 103 S. Ct.
The "canine sniff," in other words, may be less *sui* and more *generis* than the Court may have thought.\(^{398}\)

While a warrant should not be required to authorize private location monitoring of a beeper inserted inside a container of contraband, a traditional search and seizure warrant normally would be required to authorize physical entry into the private location in question and the search for the contraband (and for that matter, to search for the beeper).\(^{399}\) To be valid, a search warrant, among other things, must "particularly describe" the place to be searched.\(^{400}\) Where the package in question is to be delivered to a specific address, a warrant to search that location easily may be obtained in advance of the actual delivery: the agent applying for the warrant would have no difficulty specifying the place to be searched.

Suppose, though, the intended recipient has arranged to pick up the package at an airport or post office. The agents would have no advance knowledge of where the package is to be taken. Could the agents nevertheless obtain a warrant before notifying the intended recipient that the package is available to be picked up, authorizing the entry and search of whatever premises into which the package later is taken? In other words, would it satisfy the Fourth Amendment requirement that a warrant "particularly describ[el]" the place to be searched, if the warrant specified that "the place

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\(^{398}\) For further support that private location monitoring of a beeper, which has been installed into a container of contraband, is not a search, see United States v. Jacobsen, 104 S. Ct. 1652 (1984) (removal of a minute quantity of powder from a lawfully seized container did not constitute a search; warrantless performance of chemical test to determine whether powder was cocaine was not an unreasonable seizure). *Jacobsen* is discussed in greater detail supra, at note 92.

\(^{399}\) "[I]f truly exigent circumstances exist, no warrant is required under general Fourth Amendment principles." United States v. Karo, 104 S. Ct. at 3305. For a detailed discussion of the "exigent circumstances" exception to the warrant requirement, see 2 W. LAFAVE, SEARCH AND SEIZURE § 6.5(a), (b) (1978 & Supp. 1984).

\(^{400}\) The full text of the Fourth Amendment is set out at text accompanying supra note 16.

\(^{401}\) Although the Supreme Court has not explicitly ruled upon the validity of an "anticipatory search warrant," numerous courts have upheld such warrants in "controlled delivery" cases. See 1 W. LAFAVE, supra note 16, at § 3.7(c). Predelivery search warrants are sought in controlled delivery of contraband cases because otherwise there is some risk that the contraband will be moved elsewhere while the agents are seeking a post delivery warrant.
to be searched" is whatever location to which the package is taken?402

I know of no black letter law covering such a warrant. Language in *Karo*
permits the inference, however, that such a warrant would be valid. In justi-
fying its holding that private location monitoring constitutes a search that,
absent exigent circumstances, must be authorized by a warrant,403 the Court
commented:

We are also unpersuaded by the argument that a warrant should
not be required because of the difficulty in satisfying the particular-
ity requirement of the Fourth Amendment. The Government con-
tends that it would be impossible to describe the "place" to be
searched, because the location of the place is precisely what is
sought to be discovered through [the use of the beeper]. However
ture that may be, it will still be possible to describe the object into
which the beeper is to be placed, the circumstances that led the
agents to wish to install the beeper, and the length of time for
which beeper surveillance is requested. In our view, this informa-
tion will suffice to permit issuance of a warrant authorizing beeper
installation and surveillance.404

The situation about which the Court was speaking and the situation hy-
pothesized quite obviously are distinguishable. Private location monitoring
is as minimally intrusive a search as has yet been devised,405 in dramatic
contrast to the entry of law enforcement officials into a premises and the
search for the container, the contraband and the beeper. It is difficult to see,
however, why this distinction should make any difference in assessing the
validity of either warrant insofar as the particularity requirement is con-
cerned. The primary purpose underlying the constitutional requirement that
a warrant must "particularly describ[e] the place to be searched" is to mini-
mize the risk that the officers will mistakenly search the wrong
premises.406 With an electronic beacon to guide the officers, such a risk would be minimal
indeed.407 Given that the alternative to such a search warrant would often

402. If the agents are able to use a signal altering beeper (see text following *supra* note 14),
the warrant might specify that the place to be searched is the premises in which the beeper is
located at the time the beeper signals that the compartment containing the contraband is being
opened.
403. *See supra* notes 226-46 and accompanying text.
404. *Karo*, 104 S. Ct. at 3305 (citation omitted).
405. *Cf.* text accompanying *supra* note 397.
406. 2 W. LAFAVE, *supra* note 399, at § 4.5, at 72. Professor LaFave suggests that the
particularity requirement is also related to the probable cause requirement: if the agents can-
not specifically describe the place to be searched, questions may arise as to whether they truly
know where the items sought are. *Id.* Where the beeper is implanted in a container of con-
traband, the existence of probable cause is axiomatic.
407. Circumstances can be imagined, of course, in which the beeper reveals only that it is
somewhere within a warren of small, closely crowded private premises, but not precisely which
3. Private Location Monitoring of Vehicles

Assume a beeper is lawfully installed into or onto a vehicle, but that surveillants nevertheless lose track of the vehicle. Eventually the beeper enables them to trace the car to a residential street. This use of the beeper consists merely of general vicinity monitoring, and therefore is not a search. If the car is visible from the street, the situation poses no Fourth Amendment issue.

Suppose, though, the car is not visible from the street; it must, therefore, be parked in one of the several one- or two-car garages connected to the houses that line the street. Would monitoring the beeper to determine which garage contains the vehicle constitute a search; and if so, would it be unlawful without a warrant?

Knotts and Karo point in somewhat different directions. A garage is a private location; monitoring that reveals which garage contains the car therefore would, according to Karo, constitute a search requiring a warrant. The Knotts decision, on the other hand, quite specifically held that "[a] person traveling in an automobile on public thoroughfares has no reasonable expectation of privacy in his movements from one place to another," because by driving on public streets, the driver "voluntarily convey[s] to anyone who want[s] to look the fact that he [is] traveling over particular roads in a particular direction, the fact of whatever stops he [makes], and the one. In such a case, the agents would lack probable cause to search any of the premises, because the beeper has not revealed the location to which the beeper was taken.

408. See supra note 266. The longer the agents wait after the beepered object is taken inside the premises, the greater the risk that the contraband will be removed from the package and taken to a different premises. The presence of the beeper inside the package also creates a substantial risk that the recipients, upon seeing the beeper and recognizing its implications, will destroy the contraband before law enforcement officers can enter and seize it. Where a signal altering beeper has been employed, the most propitious time for entry and search is as soon as the beeper indicates that the package or compartment has been opened.

409. "A grudging or negative attitude by reviewing courts toward warrants will tend to discourage police officers from submitting their evidence to a judicial officer before acting." United States v. Ventresca, 380 U.S. 102, 108 (1965). But see Steagald v. United States, 451 U.S. 204 (1981) (where police have warrant to arrest X and believe that X is in Y's home, they may not, in the absence of consent or exigent circumstances, enter Y's home to search for X unless they first obtain a warrant authorizing the search of Y's home for X).

410. See supra notes 126-31, 149-62 and accompanying text.


412. If the garage is affixed to a home, a search of the garage is in a real sense a search of a portion of the home as well.
fact of his final destination when he exit[s] from public roads onto private property."\textsuperscript{413} That police acquire the same information electronically rather than visually, \textit{Knotts} holds, does not retroactively create a reasonable privacy expectation that did not exist in the first place.\textsuperscript{414}

While the legal principles enunciated in either case logically might be applied to the situation under discussion, \textit{Karo} appears to—and should—control. The \textit{Karo} decision clearly limited the \textit{Knotts} approach to general vicinity monitoring by refusing to apply it to private location monitoring.\textsuperscript{415} Furthermore, categorizing such monitoring as a search is not likely to impose severe additional burdens upon the investigators.\textsuperscript{416} The need to provide lower courts and investigators with something approximating a "bright line" dividing monitoring constituting a search from that which is not is another reason why the \textit{Karo} rule should be applied to the situation at hand.\textsuperscript{417} Thus, even when the beepered object is a vehicle, the \textit{Karo} rule strikes the proper balance between the competing interests of efficient law enforcement and individual privacy.\textsuperscript{418}

\footnotesize
\textsuperscript{413} \textit{Knotts}, 460 U.S. at 281-82. The Court also emphasized the "diminished expectation of privacy" a person enjoys in an automobile generally. \textit{Id.} at 281.

\textsuperscript{414} "A police car following Petschen at a distance throughout his journey could have observed him leaving the public highway and arriving at the cabin owned by respondent, with the drum of chloroform still in the car." \textit{Id.} at 285.

\textsuperscript{415} It is clear that the Court was unwilling in \textit{Karo} to apply the \textit{Knotts} "could have" analysis in too broad a fashion. See supra note 414. In \textit{Karo}, the agents "could have" maintained constant visual surveillance of Karo's home, and thereby "could have" learned how long the ether was kept there. They theoretically "could have" conducted an around-the-clock visual surveillance of the first locker. In theory, they "could have" walked into the second storage facility one foot behind Horton and Harley and watched as the suspects loaded the ether into the second locker. The Court, nevertheless, explicitly ruled that the electronic equivalents of these "could haves" do constitute searches subject to the Fourth Amendment warrant requirement. \textit{Karo}, 104 S. Ct. at 3306 n.6 (the locker); \textit{id.} at 3307 n.7 (Karo's home); see also \textit{id.} at 3304 n.4 ("There would be nothing left of the Fourth Amendment right to privacy if anything that a hypothetical government informant might reveal is stripped of constitutional protection." (emphasis in original)).

\textsuperscript{416} In most instances, the agents will have been able to note the vehicle's license plate, from which they can learn the owner's name and address. If the listed owner lives on the block indicated by the beeper, probable cause would thereby exist to believe that the car is in the garage attached to that house. If the listed owner does not live on that block, the agents are still permitted to monitor the beeper some distance away (so they cannot learn from the beeper in which particular garage the car is located; see supra notes 282-306 and accompanying text), to ascertain when the car is being moved; once this occurs, they can again conduct in-transit monitoring. Finally, "if truly exigent circumstances exist no warrant is required under general Fourth Amendment principles." \textit{Karo}, 104 S. Ct. at 3305.

\textsuperscript{417} Indeed, the \textit{Karo} Court went out of its way to state, in dictum, that private location monitoring of a storage locker is a search. 104 S. Ct. at 3306 n.6. This suggests that the Court may have been seeking to lay down a bright line. On the other hand, the line still has some frayed edges. See supra notes 295-306 and accompanying text.

\textsuperscript{418} See supra notes 271-74 and accompanying text.
C. Issues Relating to the Warrant Requirement

In *Karo*, the Court held that private location monitoring constitutes a search that, barring exigent circumstances, is lawful only if authorized by a warrant.\textsuperscript{419} This holding leaves several important questions unresolved. These questions involve the source of judicial authority to issue warrants tailored to the peculiar circumstances of beeper surveillance; procedural matters relating to the issuance and execution of such warrants; post-execution procedures; and the factual showings required to support such warrants.

1. Judicial Authority to Issue Beeper Surveillance Warrants

The Fourth Amendment instructs, rather laconically, that "no warrants shall issue, but upon probable cause, supported by oath or affirmation, and particularly describing the place to be searched, and the person or thing to be seized."\textsuperscript{420} Thus it provides little explicit guidance as to who may seek and who may issue a search warrant, what it should contain, how it is to be executed, and what must be done after the search is completed. Under federal law, search warrants are regulated by rule 41 of the Federal Rules of Criminal Procedure. Because beeper surveillance differs so substantially from traditional searches, however, it would be virtually impossible to draft an effective beeper warrant that complies with that rule's provisions.\textsuperscript{421}

Despite the absence of legislation explicitly authorizing the issuance of beeper surveillance warrants, judicial authority clearly exists to issue warrants that differ significantly from a rule 41 warrant. On several prior occasions, the Supreme Court has held this to be the case with regard to other forms of electronic surveillance,\textsuperscript{422} and the Court said as much again in

\textsuperscript{419} *Karo*, 104 S. Ct. at 3303. See supra notes 226-50 and accompanying text.

\textsuperscript{420} The Fourth Amendment is set out in full supra at text accompanying note 16.


In addition, judicial flexibility and creativity is explicitly permitted by rule 57(b) of the Federal Rules of Criminal Procedure, and by the All Writs Act. Rule 57(b) provides: "If no procedure is specifically prescribed by rule, the court may proceed in any lawful manner not inconsistent with these rules or with any applicable statute." The All Writs Act reads: "The Supreme Court and all courts established by Act of Congress may issue all writs necessary or appropriate in aid of their respective jurisdictions and agreeable to the usages and principles of law." The Supreme Court has relied upon these provisions in the past to uphold electronic surveillance search warrants not explicitly authorized by statute, and they are equally applicable in the context of beeper surveillance.

2. Procedural Matters

Given the substantial differences between private location monitoring and a traditional search, rule 41 and the vast volume of search warrant related case law provide little direct guidance to the investigator and the judge with regard to the issuance and execution of a beeper warrant. The need for legislative standards is particularly acute in this regard; unless and until such legislation is enacted, judges and investigators will have to endure by relying on common sense and general Fourth Amendment principles.

a. Particularity

The Fourth Amendment requires that a search warrant particularly describe the place to be searched, and the persons or things to be seized. Because the very purpose of beeper surveillance is to determine the places to which the beepered object will be taken, it will often be impossible for government agents to specify in advance "the place to be searched" by the surveillance. In Karo, however, the Court explicitly stated that the constitutional particularity requirement would be satisfied so long as the warrant and application "describe the object into which the beeper is to be placed, the circumstances that led the agents to wish to install the beeper, and the length of time for which beeper surveillance is requested."
b. Time and Duration of Surveillance

Rule 41(c)(1) of the Federal Rules of Criminal Procedure states that a search warrant must be executed within ten days of issuance, and normally must be executed during the daytime. Such limitations are wholly impracticable when applied to beeper or transponder surveillance, and the nation’s courts have recognized as much. Although courts have invalidated warrants containing no termination date, various courts have issued or upheld warrants authorizing surveillance for periods of up to ninety days.

Certainly, a beeper warrant should have a termination date, at which time the investigators must report to a judge the progress achieved or explain the lack thereof. As to the maximum allowable period, there is no clear answer. In Berger v. New York, the Supreme Court held that it violated the Constitution for a state to authorize issuance of an eavesdropping warrant for sixty days on a single showing of probable cause. In response, when Congress enacted title III, it authorized judges to issue wire or oral interception orders of up to thirty days’ duration. Presumably, therefore, a beeper warrant of thirty days’ duration is constitutionally safe, but a sixty-day warrant might not be. On the other hand, the analogy to wiretapping and eavesdropping orders is far from exact. The latter forms of surveillance are substantially more intrusive than private location beeper monitoring, and experience has shown that the targets of beeper investigations often allow extensive periods of time to elapse before taking the beepered chemical container to their clandestine laboratory.

Until the matter is resolved by legislation or by the Supreme Court, the

429. United States v. Bailey, 628 F.2d 938, 945-46 (6th Cir. 1980); United States v. Cofer, 444 F. Supp. 146, 149 (W.D. Tex. 1978); see United States v. Curtis, 562 F.2d 1153, 1156 (9th Cir. 1977) (warrant must contain reasonable time limitation). But see United States v. Butts, 729 F.2d 1514 (5th Cir. 1984) (en banc) (reversing a panel’s suppression of the fruits of transponder surveillance of an airplane two days after the 30-day warrant had expired).

430. United States v. Chavez, 603 F.2d 143, 146 (10th Cir. 1979) (60 day warrant followed by 60-day renewal); see United States v. Long, 674 F.2d 848, 852 (11th Cir. 1982); United States v. Cady, 651 F.2d 290, 291 (5th Cir. 1981). In Long and Cady, a warrant authorized surveillance for 90 days. In each case, the court held the actual duration of the surveillance was reasonable (17 days in Cady, a week in Long), and therefore concluded it was unnecessary to address whether surveillance for the entire authorized period would have been excessive. Long, 674 F.2d at 852; Cady, 651 F.2d at 291. See also Cofer, 444 F. Supp. at 149-50 (concluding, in dictum, that 30 days should be the maximum permitted period). Several other courts have noted the issuance of 30-day warrants without comment. See United States v. Kupper, 693 F.2d 1129, 1131-32 (5th Cir. 1982); United States v. Pretzinger, 542 F.2d 517, 519 (9th Cir. 1976).


433. In Karo, more than four-and-one-half months elapsed between Karo’s purchase and the arrival of the ether in Taos. Karo, 104 S. Ct. at 3300.
cautious approach is probably the wisest. Investigators should seek, and judges should issue, warrants of no more than thirty days’ duration. If the investigation has not concluded by the end of this period, the agents should submit a report to the issuing judge detailing what has happened to the beeper during this period, together with whatever other information about the suspects they have gathered in the interim, and seek a renewal for an additional thirty days. So long as the judge is satisfied that the agents have been reasonably diligent in pursuing the investigation—and often, as in Karo, diligence will amount to little more than watchful waiting—the judge should have no qualms about issuing an extension of the warrant for an additional thirty days. Indeed, given the comparatively minor intrusion involved in private location monitoring, it would be appropriate for a judge to grant a series of extensions unless intervening events substantially negate the original factual basis for the warrant.

c. Geography and Jurisdiction

Rule 41 of the Federal Rules of Criminal Procedure states that a search warrant must be obtained from a magistrate or judge sitting in the judicial district “wherein the property or person sought is located . . . .” To apply this provision to a beeper warrant would be an exercise in absurdity. As the Fifth Circuit has noted, “To require a warrant from each jurisdiction into and through which the [beepered container] might travel, or come to rest, would be to put an almost impossible burden upon the government for no valid purpose.”

A beeper warrant should, therefore, expressly authorize thirty days’ surveillance wherever the beepered object is taken. At the end of the thirty-day period, administrative convenience should dictate whether a renewal should be sought from the issuing judge, or from a judge in the jurisdiction in which the beepered object is then located. While there is no explicit statutory authority for such a practice, rule 57(b), the All Writs Act, and simple common sense should suffice to justify it.

\[434\] FED. R. CRIM. P. 41(a). See also 18 U.S.C. § 2518(3) (1982) (a judge may issue a title III wiretapping or eavesdropping warrant only if the location to be tapped or bugged is “within the territorial jurisdiction of the court in which the judge is sitting . . . .”).


\[436\] Matters of geography and jurisdiction present particularly acute problems with regard to warrants issued by state judges: such a warrant would be without effect once the beeper crossed into a different state.
d. Inventory and Notice: "Necessity"

Rule 41(d) of the Federal Rules of Criminal Procedure directs that the target of a search warrant must be given "a copy of the warrant and a receipt for the property taken" at the time the search is conducted. Obviously, presearch or midsearch notice would totally frustrate the very purpose of beeper surveillance. The Supreme Court has held on three occasions that such notice is not required with regard to electronic surveillance of communications, and these holdings, together with the discretion afforded a judge by the All Writs Act and rule 57(b), negate any need for presurveillance notice in the beeper context.

At the completion of the investigation, on the other hand, the issuing judge should require the investigators to submit an inventory to the court listing all locations that were subjected to private location monitoring, and listing all known individuals with privacy interests in such locations. The judge should then order that notice of such surveillance be served within ninety days of termination of the surveillance on those individuals who the judge concludes should receive such notice. Where premature notice would

437. In Berger v. New York, 388 U.S. 41 (1967), the Court held, inter alia, that New York's eavesdropping statute was unconstitutional because "it permits unconsented entry" without first requiring "some showing of special facts" or "exigent circumstances." Such a showing of exigency, the Court continued, "in order to avoid notice, would appear more important in eavesdropping,. . . than that required when conventional procedures of search and seizure are utilized." 388 U.S. at 60. It is not altogether clear what kind of "special facts" or "exigent circumstances" the Court had in mind: exigent circumstances justifying entry without notice, or exigent circumstances justifying the use of electronic surveillance. Clearly, however, the Berger court acknowledged that presearch notice was not an absolute constitutional prerequisite to a lawful entry for purposes of installing an eavesdropping device.

In Dalia v. United States, 441 U.S. 238, 249-54 (1979), the Court held that, although title III did not explicitly authorize surreptitious entry into a premises to install a listening device, such authority was implicit in the statute. In addition, in Katz, 389 U.S. at 355-56 n.16, the Court acknowledged that it would be absurd to require presearch notice in a wiretapping or eavesdropping context.

438. Some kind of inventory procedure is probably a constitutional prerequisite to a valid electronic search of any sort. See Berger, 388 U.S. at 60 (condemning New York's eavesdropping statute for the absence of such a provision). Title III, enacted in 1968, requires that no later than 90 days after interception of communication ceases, the issuing judge must "cause" notice concerning the interceptions to be served upon those who are named as targets of the interception order. Such notice is also to be served upon any other individual whom the judge determines should be notified. 18 U.S.C. § 2518(8)(d) (1982). In United States v. Donovan, 429 U.S. 413 (1977), the Supreme Court held that this provision required the investigators to provide the judge with the information the judge would need to exercise discretion as to who is to be notified, and outlined procedures whereby this obligation might best be satisfied. Id. at 430-32. The inventory and notice procedures suggested in the text accompanying this footnote are modeled after the procedures outlined in title III and Donovan. See C. Fishman, supra note 66, at §§ 203-208.

The purpose of the title III notice provision is two-fold. First, it assures that those whose
jeopardize an investigation, postponements should be permitted, so long as those whose privacy has been intruded upon are notified eventually.439

Title III provides that before a wiretap or eavesdrop warrant may be issued, the applicant must show, and the judge must find, that "normal investigative procedures" have not provided and would not provide the evidence sought, or would be too dangerous to employ.440 Several commentators have argued that this provision is constitutionally mandated by Berger and Katz as a substitute for the presearch notice normally required.441 Because beeper surveillance, including private location monitoring, is already far less intrusive than many traditional investigative procedures (for example, entry and search pursuant to a search warrant), it is difficult to see any procedural or constitutional purpose that would be served in requiring a similar showing as a prerequisite to a private location monitoring beeper surveillance warrant.

3. Appropriate Fourth Amendment Standard

The government argued in Karo that if private location monitoring is classified as a search, a showing of reasonable suspicion rather than probable cause should suffice to justify such a search. In a footnote, the Court disposed—temporarily—of the question:

privacy has been intruded upon learn of the intrusion, thereby enabling them to bring a civil cause of action if they believe the invasion to have been unlawful. Second, the notice provision in and of itself "should insure the community that the [interception] techniques are reasonably employed." S. REP. No. 1097, 90th Cong., 2d Sess., reprinted in 1968 U.S. CODE CONG. & AD. NEWS 2112, 2194. Notice of private location beeper surveillance would serve the same purposes.

441. See, e.g., Cook, Electronic Surveillance, Title III, and the Requirement of Necessity, 2 HASTINGS CONST. L.Q. 571, 577-78 (1976); Goldsmith, The Supreme Court and Title III: Rewriting the Law of Electronic Surveillance, 74 J. CRIM. L. & CRIMINOLOGY 1, 135-36 (1983); Hodges, Electronic Visual Surveillance and the Fourth Amendment: The Arrival of Big Brother?, 3 HASTINGS CONST. L.Q. 261, 288-89 (1976). Additional support for the theory that the "other procedures" showing is a constitutional prerequisite has been drawn from suggestions in Berger and Katz that the Fourth Amendment as a general rule requires investigators to use the least intrusive method available to acquire the information or evidence. Berger, 388 U.S. at 57 (see supra note 437); Katz, 389 U.S. at 355-56; see also supra note 437. The Supreme Court has since rejected this latter proposition, however. See Zurcher v. Stanford Daily, 436 U.S. 547, 560-62 (1978) (where investigators seek a warrant authorizing the search of a newspaper office for evidence of crime, the only factual showing required by the Fourth Amendment is probable cause; even if the employees of the newspaper are not themselves suspected of wrongdoing, there is no additional requirement that the applicant show that less intrusive methods would not likely produce the items sought). For a further discussion of Zurcher and the congressional response to it, see supra note 121.
That issue, however, is not before us. The initial warrant was not invalidated for want of probable cause, which plainly existed, but for misleading statements in the affidavit [submitted in support of the original beeper surveillance warrant prior to the informer's sale of the ether to the suspects]. . . . It will be time enough to resolve the probable cause-reasonable suspicion issue in a case that requires it.\textsuperscript{442}

It is difficult to know what to make of this footnote. Having held that private location monitoring constitutes a search that normally must be authorized by a warrant, the Court quite logically could have dispensed with the probable cause-reasonable suspicion issue by quoting the explicit language of the Fourth Amendment: "no warrants shall issue, but upon probable cause."\textsuperscript{3} Thus, although this footnote is on one level unremarkable—the Court merely avoided an issue it was not obliged to decide—the very fact that the Court acknowledged the issue as an unresolved question is noteworthy.

The concluding section of this article urges Congress to enact legislation that would authorize the issuance of a beeper surveillance order upon a showing of reasonable suspicion that such surveillance (including private location monitoring) will reveal evidence of a particular crime. This of course raises the obvious question: would the Supreme Court uphold the constitutionality of such legislation?

For the Court to hold, in a subsequent case, that reasonable suspicion rather than probable cause suffices, the Court, implicitly or explicitly, would have to choose one of two options. The first is to ignore the explicit language of the Fourth Amendment—that is, to engage in judicial legislation of the most blatant sort, in total rejection of the concept of judicial restraint. The second is to acknowledge that the references in \textit{Karo} to "warrant" should henceforth be read to mean "court order similar in many respects to a search warrant."\textsuperscript{443}

This subsection of the article examines the probable cause—reasonable suspicion issue.

\textit{a. The Probable Cause and Warrant Requirements}

As a rule, the search of a person or of a home or other private location is lawful only if the police have probable cause to believe that the item or person sought will be found therein and the search has been authorized by a

\textsuperscript{442} \textit{Karo}, 104 S. Ct. at 3305 n.5.
\textsuperscript{443} See infra text following note 487.
\textsuperscript{444} It may be argued, of course, that the second option consists merely of the first option, superficially disguised.
warrant. Although the Supreme Court has upheld warrantless searches in exceptional circumstances, \(^\text{445}\) in the absence of a valid consent the Court has always insisted upon probable cause before police officers may lawfully enter onto private premises, let alone search them. \(^\text{446}\) Even in the realm of administrative searches to enforce safety and health regulations unrelated to enforcement of the criminal law, the Court has insisted that officials obtain a warrant based upon probable cause. The showing of "probable cause," however, required to authorize such searches differs significantly from the probable cause necessary to justify a law enforcement search. \(^\text{447}\)

\(^{445}\) Exceptions to the warrant requirement include consent searches (see supra notes 63-65; see generally 2 W. LAFAVE, SEARCH AND SEIZURE ch. 8 (1978 & Supp. 1984)), searches conducted during hot pursuit of a fleeing suspect or other emergency situation (see supra note 266), and searches incident to arrest (see Chimel v. California, 395 U.S. 752 (1969)). In Chimel, the Court held that if police lawfully arrest a person in his home, they may lawfully search the immediate area in which the arrest took place, but not the whole house nor, necessarily, the whole room. See generally 2 W. LAFAVE, supra at § 6.3(b). It should be noted that while the officers do not need a warrant, or even probable cause, to conduct a search incident to arrest, the precedent arrest must be lawful, that is, the police officer must have had probable cause to believe that the arrestee was committing or had committed an offense. Further, if the arrest and subsequent search incident occurs in the arrestee's home, the officers usually must have an arrest warrant. Payton v. New York, 445 U.S. 573 (1980). See generally 2 W. LAFAVE, supra at § 6.1.

\(^{446}\) See generally 2 W. LAFAVE, supra note 445, at §§ 6.1, 6.2, 6.5, 6.6. Two narrow and partial exceptions may be said to exist to the probable cause requirement. If the police have probable cause to believe that a person has committed a crime, and have probable cause to believe that a particular premises is the suspect's home, then assuming they have an arrest warrant or exigent circumstances exist, they may enter the premises in an effort to arrest the suspect, even though they lack probable cause to believe that the suspect is at home at the time. Payton v. New York, 445 U.S. 573, 601 (1980) (inference); see 2 W. LAFAVE, supra note 445, at § 6.1 nn.26.3-26.4. Second, if a police officer lawfully arrests a person outside his home, and circumstances require the arrestee to enter his home before going to the police station, the officer may lawfully enter the home with the arrestee, regardless of the lack of probable cause to believe that anything unlawful might be found therein. Washington v. Chrisman, 455 U.S. 1 (1982) (after arresting an under-age student for carrying alcoholic beverages on campus, it was lawful for campus police officer to accompany student into his dormitory room to obtain his identification; contraband in plain view once the officer was inside the room was properly seized). In each of these situations, although the officer lacked probable cause that focused on the premises, probable cause existed to arrest the occupant for a specific crime.

\(^{447}\) Camara v. Municipal Court, 387 U.S. 523 (1967) ("administrative" search of residence by municipal health and safety inspectors constitutes a significant Fourth Amendment intrusion that, absent resident's consent, is unlawful without a warrant). In Camara, the Court stated that, to secure such a warrant, the applicant need not establish probable cause that a particular residence contains violations of the health or housing code being enforced. Rather, it suffices if the applicant demonstrates that reasonable legislative or administrative standards exist for conducting searches of dwellings in a particular area or of a particular type. Id. at 534-39; see Marshall v. Barlow's Inc., 436 U.S. 307 (1978) (same concerning workplace inspections pursuant to the Occupational Safety and Health Act); See v. City of Seattle, 387 U.S. 541 (1967) (similar holding with regard to right of fire inspector to inspect a locked commercial warehouse). If the employer does not consent to inspection of the job site, a war-
b. The "Reasonable Suspicion" Exception to the Probable Cause Requirement

Although the Fourth Amendment generally requires probable cause as a condition precedent to a lawful search, commencing with the seminal decision of Terry v. Ohio, the Supreme Court has held that in appropriate circumstances, law enforcement officials may temporarily detain (seize) an individual or a suitcase and may also sometimes frisk (search) the individual in the absence of probable cause, so long as the officials have a "reasonable suspicion" justifying the detention or search.\(^4\)

Probable cause for such a warrant is established if the particular location was chosen to be searched "on the basis of a general administrative plan for the enforcement of the Act derived from neutral sources"—for example, the type of industry, number of employees. Id. at 323-24.

\(^4\) 392 U.S. 1 (1968).

\(^4\) 448. Id. at 27. In general, the Court has been willing to find that a reasonable suspicion exists so long as the officer is able to articulate specific aspects of the situation that prompted the suspicion. In Terry, an experienced police officer saw two men standing on a Cleveland street corner in the middle of the afternoon; one of the suspects walked up the street, peered into a store, walked on, started back, looked into the store again, and then returned to his companion. A few minutes later the companion did basically the same thing. While the officer watched, the two made a total of approximately one dozen such trips. They also conferred with a third man. The officer, thinking that the suspects were "casing" a store prior to committing a robbery, stopped them, grabbed Terry, patted him down, and found a weapon. Id. at 5-7. The Court concluded that the officer had had a reasonable suspicion that Terry and his companion were planning to commit a crime, and were armed and dangerous. Hence, the stop (seizure) and carefully limited search (frisk) were reasonable under the circumstances. Id. at 29-31.

In Adams v. Williams, 407 U.S. 143 (1972), while a police sergeant was patrolling the streets of a high crime district at 2:15 in the morning, a person known to the sergeant approached and told him that an individual seated in a nearby car, carrying narcotics, had a gun at his waist. (The informant apparently did not reveal how he had acquired this information.) The Court held that this tip sufficed to establish a reasonable suspicion that the individual was armed; hence, it was lawful for the officer to pat the area of the individual's waistband and remove the fully loaded revolver found. Id. at 146-47. See also Place, 103 S. Ct. at 2641-44, supra text accompanying notes 394-96, infra notes 450-52 and accompanying text (temporary detention of airline passenger's luggage lawful on reasonable suspicion that suitcases contain narcotics); Florida v. Royer, 103 S. Ct. 1319, 1325 (1983) (reasonable suspicion of narcotics possession justifies temporary detention of airline passenger at airport); Michigan v. Summers, 452 U.S. 692, 705 (1981) (approving brief detention of occupants on premises while authorities search premises pursuant to valid warrant). But see Reid v. Georgia, 448 U.S. 438, 440-41 (1980) (that an airline traveler appeared to fit a "drug courier profile" did not, by itself, establish reasonable suspicion); Brown v. Texas, 443 U.S. 47, 52 (1979) (presence of a "suspicious-looking" person in an alley where drug traffic was known to be heavy did not in and of itself establish reasonable suspicion justifying temporary detention and demand that he identify himself).

In United States v. Brignoni-Ponce, 422 U.S. 873 (1973), the Court held that immigration officials could lawfully stop a vehicle in the general vicinity of the nation's border if the officials had a reasonable suspicion that the vehicle contained illegal immigrants. The mere fact that the occupants appear to be of Mexican ancestry was insufficient to meet this standard. The
To determine whether a particular seizure, detention, or search fits within the "reasonable suspicion" exception to the probable cause requirement, "[w]e must balance the nature and quality of the intrusion on the individual's Fourth Amendment interests against the importance of the governmental interests alleged to justify the intrusion." For example, the Court recently held that law enforcement officials could seize and detain an airline passenger's luggage for a brief period of time if they had a reasonable suspicion that the luggage contained narcotics. The Court reasoned that society's compelling interest in preventing the distribution of drugs and the "inherently transient nature of drug courier activity at airports" justified the limited intrusion occasioned by the detention of the luggage on less than probable cause.

\[c.\ \text{Evaluation and Analysis}\]

The government should often be able to establish probable cause for a beeper warrant with comparatively little difficulty. To begin with, if a trustworthy informant provides reliably obtained information that a suspect will use soon-to-be-purchased chemicals or equipment to manufacture illicit drugs, probable cause to install the beeper is established. Indeed, even an anonymous tip, coupled with sufficient corroboration, will establish probable cause.

Court suggested, however, several factors that would be relevant in assessing the reasonableness of the officer's suspicion, including the characteristics of the area: information the officer might have received about recent illegal border crossings in the area; the behavior of the driver (for example, apparent attempts to evade the officers); whether the vehicle was a kind frequently used for transporting concealed aliens; whether the vehicle appeared to be heavily loaded, or carrying an unusually large number of passengers; whether the passengers' or driver's appearance—haircut, clothing, etc.—was characteristic of persons who live in Mexico; and any other facts which the officer, in light of his experience, considered meaningful. Id. at 284-87. See also United States v. Cortez, 449 U.S. 411, 418 (1981) (stop near border of vehicle suspected of transporting illegal aliens; "totality of the circumstances" must be assessed to determine if there is a "particularized suspicion ... that the ... individual being stopped is engaged in wrongdoing").

450. Place, 103 S. Ct. at 2642.
451. Id.
452. Id. at 2643. The Court also held that exposing the suitcases to a specially trained narcotics detection dog did not constitute a search. Id. at 2645. The Court, however, further held that 90 minutes was too long a period to hold the suitcases until they and the dog were brought together. Id. at 2644-46.
453. In Spinelli v. United States, 393 U.S. 410 (1969), the Supreme Court held that to establish probable cause for a search warrant based on informant hearsay, the supporting affidavit must set forth facts from which an issuing magistrate could conclude that the informant is credible, and must also set forth sufficient facts to establish that the informant obtained the information in a reliable way. Id. at 415-18.
Frequently, however, an investigation commences when a chemical company notifies law enforcement officials that someone has placed an order for precursor chemicals. In such cases, investigators lack direct evidence that the suspect will use these items to manufacture illicit drugs, and the key question is whether probable cause can be inferred from the surrounding circumstances. For example, in United States v. Moore, the manager of a chemical company informed a DEA agent that Moore, purporting to represent a plastics company at a specified address, had placed an order for substantial amounts of various chemicals, all ingredients and precursors of phencyclidine. Agents ascertained that the alleged business address was an apartment house, and that neither Moore nor the company he claimed to represent was licensed to manufacture controlled substances. The First Circuit held that, based on these facts,

the agents had probable cause to believe that a controlled substance was about to be made illegally. The call from the drug company, the discovery that the address given by the purchasers [an apartment building] was not one where a chemical manufacturer would operate, and the nature of chemicals purchased, in light of the agents' familiarity with the manufacture of controlled substances, together created a sufficient basis for believing a criminal enterprise [was] under way.

It is difficult to determine from many of the reported cases, however, the precise nature of the information available to the agents. If a suspect orders everything that is needed to manufacture a particular controlled substance (for example, phencyclidine, methaqualone, methamphetamine), and if the only known use for this particular combination of chemicals is the manufacture of that controlled substance, there can be little doubt that probable cause for search warrant.


457. Id. at 113. Moore is quoted approvingly in Dunivant v. State, 155 Ga. App. 884, 273 S.E.2d 621 (1980), which is factually similar.

458. To establish that chemicals in question are precursors to or essential ingredients in the preparation of controlled substances, the government should be required to offer expert opinion (for example, the affidavit or testimony of a chemist or experienced investigator).
cause exists to believe that the chemicals have been ordered for that precise purpose. The same conclusion should be drawn where investigators learn that a suspect, who is not licensed to manufacture controlled substances, has ordered specialized equipment, the only likely use for which is the manufacture of a controlled substance.\(^{459}\)

The less complete the agents' information, however, the greater the uncertainty. Suppose, for example, the agents have learned that a suspect has ordered or obtained many of the chemicals necessary to manufacture a controlled substance, but lack specific information that the suspect has also ordered or obtained other, equally essential ingredients. When coupled with other suspicious circumstances, this should still suffice to establish probable cause.\(^{460}\) Indeed, one court found probable cause even where the information concerned only a single precursor chemical.\(^{461}\)

\(^{459}\) See United States v. Bentley, 706 F.2d 1498 (8th Cir. 1983). In Bentley, DEA agents learned from a reliable informant that individuals had ordered a tablet press and punches and dies bearing a marking that was a pharmaceutical identification for methaqualone. They ascertained that neither of the names involved in the orders were registered with DEA for the manufacture of methaqualone. Submitting this information in an affidavit, the agents obtained a court order authorizing the placement of a beeper in the base of the tablet press. The Tenth Circuit concluded that, "[a]lthough a close case may be presented," the affidavit established probable cause to believe the equipment was going to be used for unlawful purposes. Id. at 1503. In actuality, the case does not seem close at all; the existence of probable cause is quite obvious.

\(^{460}\) See United States v. Anton, 633 F.2d 1252 (7th Cir. 1980), cert. denied, 449 U.S. 1084 (1981). In Anton, which did not involve the use of a beeper, agents learned that defendant had ordered numerous chemicals, some under a fictitious name, and brought them to his home. Visual surveillance (including an examination of empty containers found in the trash) over a three-month period enabled the investigators to compile a lengthy list of the chemicals defendant had been using. In the opinion of a DEA chemist, the list was a near-complete recipe of the essential ingredients for the manufacture of MDA, a controlled substance. This information was included in an affidavit, together with a statement that no legitimate commercial or industrial activity appeared to be occurring at the residence, and a warrant was issued authorizing the search of the residence. Quantities of MDA were found during the search, and the defendant was charged. A district court judge concluded that the affidavit failed to establish probable cause. On appeal, the Seventh Circuit reversed, stating:

Here, large quantities of chemicals were being purchased, sometimes under a false name. Although some or all of these chemicals may have household uses, when several are bought at the same time a strong inference arises that they are being combined. When the possible combinations of these chemicals includes an end product which is an illegal substance, it is reasonable to infer that manufacture of such a substance is taking place. The empty containers and movement of various chemical pails [from the garage to the house and back, as observed by the officers conducting visual surveillance] raise an inference that the chemicals were being used. The fact that no legitimate business use of such large quantities of chemicals appeared to be taking place at Anton's residence further buttresses the probability that an illegal use was occurring. Probable cause did exist for the search . . . .

Id. at 1254.

\(^{461}\) In United States v. Ellery, 678 F.2d 674 (7th Cir. 1982), for example, the owner-
If probable cause is made out whenever someone not registered with the DEA for the manufacture of controlled substances seeks to obtain one or more precursor chemicals or specialized lab equipment, then requiring probable cause imposes no barrier whatsoever to investigative use of beepers, and requiring a warrant imposes only a minor administrative inconvenience (barring exigent circumstances, which would excuse the failure to obtain a warrant in any event). By the same token, requiring a warrant would contribute precious little to the protection of individual privacy. Assuming this fact alone does not amount to probable cause, as it obviously cannot, there will nevertheless be times when the purchase of a single precursor chemical will arouse reasonable suspicions. If the lack of probable cause

proprietor of a chemical company received a mail order from a man identifying himself as "Tom Thomson," requesting that five kilograms of norephedrine hydrochloride be shipped to a residential apartment in Chicago. He notified DEA agents, who subsequently submitted an affidavit, seeking court authorization to place a beeper in the package of the substance. The affidavit informed the issuing judge that the substance has no common household use, but is an important ingredient necessary for the manufacture of amphetamine, that no businesses appeared to be operating at the address listed in the letter, and that no residence or telephone was listed in "Thomson's" name at that address. The affidavit also alleged that a high risk of detection existed if normal surveillance procedures were employed. The latter allegation is apparently modeled after 18 U.S.C. § 2518(l)(c) (1982), which provides that an application for a wiretap or eavesdropping warrant must establish that other investigative procedures have been tried and failed, or reasonably appear to be either unlikely to succeed if tried or too dangerous. See 18 U.S.C. § 2518(3)(c) (1982) (permitting a judge to issue the wiretap or eavesdropping warrant only if, inter alia, the judge concludes that the application has made an adequate showing concerning the unavailability of other investigative procedures); C. Fishman, supra note 66, at §§ 88-89. The Seventh Circuit held that these facts, as interpreted in an experienced investigator's affidavit, established probable cause. Ellery, 678 F.2d at 677-78. Ultimately, the beeper enabled the agents to track the package to defendant Ellery's apartment in a different building. After additional information was accumulated, the agents obtained and executed a search warrant, seizing substantial quantities of several controlled substances and precursor chemicals necessary for the production of several others.

462. Indeed, to establish so permissive a standard of probable cause in precursor chemical cases might eventually affect the probable cause determination in other situations, thereby diminishing the overall protection to privacy afforded by the Fourth Amendment.

463. Karo, 104 S. Ct. at 3305 ("[I]f truly exigent circumstances exist, no warrant is required under general Fourth Amendment principles.").

464. Many of the chemicals necessary to manufacture or prepare illicit drugs have common and lawful industrial uses. A few examples will suffice. I have been informed by a DEA chemist that ether and hydrochloric acid are necessary for the preparation of cocaine hydrochloride, the basic form of cocaine; acetic anhydride, a widely used industrial solvent, which is also used in making perfume, is essential in the "cooking" process in producing heroin; pure, concentrated ammonia is an ingredient in the manufacture of amphetamine and related drugs; and sulfuric acid, sodium hydroxide, and sodium bicarbonate are all useful in the separation and purification of a wide variety of drugs (including, for example, methamphetamine).

465. Suppose DEA agents learn that X has ordered a substantial quantity of pure, concentrated ammonia. Checking into X's background, they learn that he is sharing living quarters with Y, who had previously been arrested for possession of a small quantity of amphetamines. Given that ammonia is a precursor of amphetamines, this information would provide the
in such cases precludes private location monitoring, there is substantial risk that the investigation will produce nothing—perhaps at a cost of considerable time and effort.⁴⁶⁶

agents with reason to suspect that X and Y, or unknown associates, are preparing to manufacture amphetamines. Without knowing more, however, it is, to say the least, questionable that the information establishes probable cause. By installing a beeper in the ammonia container, the agents can conduct in-transit and general vicinity monitoring. With luck, such monitoring—which Knotts and Karo hold are not a search at all, see supra notes 56-74, 166-84 and accompanying text—will enable them to discover the precise location to which the ammonia was taken. If fate is particularly kind, visual surveillance of that location might reveal additional information—empty containers of other precursor chemicals, for example—sufficient to establish probable cause, at which point the agents could obtain a warrant authorizing a search of the premises. Alternatively, they might discover that the ammonia has been taken to a manufacturing plant, which has many legitimate uses for the substance, information which would enable them to close out the investigation with few, if any, qualms. On the other hand, in-transit and general vicinity monitoring, even when coupled with other investigative techniques, might not suffice to reveal the particular premises to which the ammonia was taken. Alternatively, the agents might learn that the ammonia has been taken to a location—the home of third person, about whom nothing is known, or a rented storage locker—which does little to dispel the agents' suspicions, but does equally little toward elevating it to probable cause.

⁴⁶⁶. Continuing the situation hypothesized in supra note 466, once having located the ammonia, other investigative options, in the absence of private location monitoring, are available to the agents, including visual surveillance and the use of informants or undercover agents. Visual surveillance, however, has several potential drawbacks. First, the physical location or layout of the ammonia's location may render it impossible to conduct such surveillance. Second, investigators might have to watch around-the-clock to safeguard against the drum being taken elsewhere during gaps in the surveillance. If reported cases are any indication, it is common for those involved in the manufacture of illicit drugs to bring their supplies to at least one temporary resting place for a day or more before they are taken to the illicit laboratory. See e.g., United States v. Karo, 104 S. Ct. 3296 (1984) (three homes and two rented storage lockers); United States v. Cassity, 720 F.2d 451 (6th Cir. 1983); United States v. Taylor, 716 F.2d 701 (9th Cir. 1983); United States v. Brock, 667 F.2d 1311 (9th Cir. 1982), cert. denied, 103 S. Ct. 1271 (1983); United States v. Bailey, 628 F.2d 938 (6th Cir. 1980); United States v. Clayborne, 584 F.2d 346 (10th Cir. 1978). Third, the more intensive the surveillance, the greater the risk it will be detected by the suspects, in which case the suspects might simply obtain more ammonia from a different source, leaving the container in question behind as bait to distract the investigators. Fourth, if the suspects have not yet accumulated everything they need to begin production, such surveillance might be fruitless for several weeks or months—as in the Karo case, where no use was made of the ether for more than four months until it was finally taken to a clandestine laboratory. See supra notes 208-17 and accompanying text. Such surveillance would constitute an enormous drain on law enforcement resources already stretched dangerously thin, perhaps unnecessarily, given the substantial possibility that the ammonia was sought for a lawful purpose in the first place. See infra note 474 (concerning the magnitude of the drug problem in America). Sixth, extensive and prolonged visual surveillance, though not a search under the Fourth Amendment, see generally 1 W. LaFAVE, supra note 16, at § 2.7(e), nevertheless is, in many respects, far more intrusive than private location monitoring would be. See infra note 483.

Other options are also available. For example, informants could be questioned to ascertain if anything is known of the activities of X and Y; an undercover agent might attempt to strike up an acquaintance with the suspects; or chemical companies in the area might be questioned
Thus, to require probable cause as the factual predicate for a private location monitoring warrant will hamper effective and efficient enforcement of the nation's drug laws. This, in and of itself, is of course insufficient reason to exempt such surveillance and such warrants from the probable cause requirement. The Fourth Amendment's insistence upon probable cause no doubt "interferes" frequently with police efficiency, but such "interference" is one of the prices we pay for the "right . . . to be secure in [our] persons, houses, papers and effects . . . ." Absent a "knowing exposure" or other voluntary relinquishment of Fourth Amendment protection, the Supreme Court has never upheld law enforcement intrusion into a suspect's home or other private location unless probable cause for such intrusion could be shown. Nor should any exception to this rule be created unless circumstances are particularly compelling.

Private location monitoring, at least in precursor chemical cases, presents just such circumstances. Such monitoring should be lawful so long as the monitoring agents have obtained a court order predicated upon reasonable suspicion that the chemical installed with a beeper is being or eventually will be used for criminal purposes. to determine whether X or Y had purchased other chemicals or laboratory equipment. Such techniques might succeed. On the other hand, they might alert the suspects to the investigation; or such methods might produce no additional information—a result that would not necessarily dispel the initial suspicion.

The final option is to allow the investigation to lie dormant or to die, unless the agents happen upon additional information serendipitously.

467. U.S. CONST., amend. IV. See supra text accompanying note 16.

468. State and lower federal courts have upheld police entries into homes where there is reasonable suspicion that someone is in need of assistance or is threatened with death or bodily harm, and occasionally for other purposes as well. See generally 2 W. LAFAVE, SEARCH AND SEIZURE §§ 6.5(d), 6.6 (1978 & Supp. 1984). While this principle is undoubtedly sound, it is predicated on the judgment that the protection of human life from imminent risk is more important than affording the location in question all of the traditional protections usually guaranteed by the Fourth Amendment. The principle is clearly inapplicable to the legitimate but substantially less immediately compelling need of enabling the police to keep track of items which, regardless of the underlying intent with which they are possessed, are not themselves contraband.

469. Cf. 18 U.S.C. § 2518(3) (1982) (judge may issue eavesdropping warrant upon a showing of probable cause to believe that "an individual is committing, has committed, or is about to commit a particular offense . . . [and that] particular communications concerning that offense will be [intercepted] . . . ." (emphasis added)); see C. FISHMAN, supra note 66, at § 69.

470. If trespassory attachment of a tracking device to the exterior of a vehicle is classified as a "seizure" (see supra notes 152, 158-62 and accompanying text), reasonable suspicion that the vehicle is being used in criminal conduct should suffice to justify the "seizure." The placement of the device is, as the Supreme Court said in KARO with regard to a beeper in a chemical container, "at most . . . a technical trespass on the space occupied by the [device]." 104 S. Ct. at 3302. See supra note 77 and accompanying text. Placement of a beeper or transponder normally permits the investigators to acquire only information that is itself not protected by
Would such a court order survive a Fourth Amendment challenge? To determine whether a particular search or seizure fits within the "reasonable suspicion" exception to the probable cause requirement, the Supreme Court held, in *United States v. Place*, "We must balance the nature and quality of the intrusion on the individual's Fourth Amendment interests against the importance of the governmental interests alleged to justify the intrusion." Private location monitoring in precursor chemical cases satisfies both prongs of this test. First, the intrusion is comparatively minor: the surveillance reveals only whether the beepered object is within the premises in question.

the Fourth Amendment. See *supra* notes 410-18 and accompanying text. The need to employ a beeper or transponder to track a vehicle is often substantial, and cars and airplanes are even more "transient" than "drug courier activity at airports." See *supra* note 452 and accompanying text. This should excuse such installations from the warrant requirement. If use of a device is prohibited in the absence of probable cause, there is significant risk that the investigators will "lose" the vehicle, at least for the period of time that is important to the investigation.

Installation of a tracking device in the interior of a vehicle, on the other hand, should and will likely be held unlawful in the absence of probable cause. Interior installation is, theoretically, far more intrusive than exterior attachment—and even, arguably, more intrusive than private location monitoring of a beepered chemical container—because it requires what they do not: physical entry by an investigator into a private location. Although "[o]ne has a lesser expectation of privacy in a motor vehicle," *United States v. Knotts*, 460 U.S. at 281, probable cause as a rule is required before police may lawfully search the interior of an automobile or other vehicle, even though a search warrant generally is not required. See *United States v. Ross*, 456 U.S. 798 (1982); *Chambers v. Maroney*, 399 U.S. 42 (1970); *Carroll v. United States*, 267 U.S. 132 (1925). See also *New York v. Belton*, 453 U.S. 454 (1981) (when police lawfully—that is, with probable cause—arrest an occupant of a car, they may lawfully search the passenger compartment, and all containers therein, incident to the lawful arrest).

Still, arguments exist in favor of applying the reasonable suspicion standard, rather than requiring probable cause, for interior installation of a tracking device in a vehicle. Physical entry into a vehicle often reveals little that is not already plainly visible from outside. Further, vehicles—particularly aircraft, where the need for interior installation is apparently far greater than with automobiles—are subject to extensive safety regulations and periodic inspections, a factor that diminishes considerably the privacy expectations one enjoys therein. Finally, if the entering agent avoids exploring or examining the interior of the vehicle beyond that which is necessary to install the device, this helps keep the degree of intrusion to a minimum—hardly a "search" at all.

471. *United States v. Place*, 103 S. Ct. 2637, 2642 (1983). See *supra* notes 394-96 and accompanying text. In *Place*, the Court reasoned that society's compelling interest in preventing the distribution of drugs and the "inherently transient nature of drug courier activity at airports" justified the brief detention of a disembarking airline passenger's luggage in the absence of probable cause, so long as reasonable suspicion existed. 103 S. Ct. at 2643. Society's interest in interdicting the manufacture of illicit drugs is equally compelling in the precursor chemical context. The conduct in question in such investigations is not as "transient" as "drug courier activity at airports." Indeed, sometimes, as in *Karo*, the suspects will wait for months, and relocate the chemicals several times, before finally taking their supplies to the clandestine laboratory. Private location monitoring and temporary detention of a suitcase are nonetheless analogous in that each is a comparatively minor intrusion, and that in each situation, law enforcement agents often have no other less intrusive, practical alternative available to them. See *supra* notes 465-66; *infra* note 488.
Indeed, in some instances, such surveillance might even protect the premises and its occupants from a far greater intrusion. Second, in precursor chemical cases, the intrusion is justified by society's compelling need to prevent the manufacture of illicit drugs.

472. Such monitoring might reveal that the item in question has been moved from the premises, which might dissuade the investigators from obtaining a warrant authorizing them to conduct a search.

473. Statistics provided to me by the Public Affairs Office of the DEA suggest the magnitude of the problem. In 1983, for example, DEA agents and state and local law enforcement officers assigned to various DEA Task Forces seized 20,194,113 dosage units of "dangerous drugs"—stimulants, depressants, and hallucinogens, not including heroin, cocaine or cannabis. In 1982, DEA agents and affiliated local enforcement officers seized 51,001,831 dosage units. These statistics do not include seizures by state and local police who were not affiliated with DEA. To fully appreciate these figures, one must understand that the number of dosage units seized probably represents only a small fraction of those manufactured and consumed.

The financial aspects of the dangerous drug problem are equally depressing. Although the "street price" of a dosage unit of a dangerous drug varies from substance to substance and from region to region, the DEA official with whom I spoke advised me that undercover purchases by its agents average from three to five dollars per dosage unit. Overall, DEA estimates that total sales of such drugs total in the tens of billions of dollars annually. It is, lamentably, reasonable to assume that little of this money is reported to the Internal Revenue Service. It is equally reasonable to assume that a substantial portion of this money is used to finance other illicit ventures.

A third way to examine the magnitude of the problem is to assess the toll such drugs take on those who consume them. The National Institute on Drug Abuse (NIDA) estimates that in 1982, more than four million people in this country used hallucinogens—more than three million of them falling within the 12-25 age group. The DEA official with whom I spoke advised me that undercover purchases by its agents average from three to five dollars per dosage unit. Overall, DEA estimates that total sales of such drugs total in the tens of billions of dollars annually. It is, lamentably, reasonable to assume that little of this money is reported to the Internal Revenue Service. It is equally reasonable to assume that a substantial portion of this money is used to finance other illicit ventures.

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It is impossible to assess with any accuracy the long-range impact that the use of drugs will have upon the mental and physical health of those who abuse them but locally conducted studies provide dramatic hints as to the short-range impact. For example, a four-month study revealed that the hallucinogen PCP is responsible for 35% to 45% of the emergency admissions at St. Elizabeth's, a federal mental hospital in Washington, D.C. See Wash. Post, Aug. 7, 1984, at A1, col. 7. Indeed, Washington's drug users often refer to PCP as "the key to St. E.'s" and "Hinckley," for would-be presidential assassin John Hinckley, who is confined at St. Elizabeth's Hospital. Id.

NIDA has attempted to provide information on a national scale concerning the short-range impact of drug ingestion. The Drug Abuse Warning Network (DAWN) consists of a non-random sample of emergency rooms in 26 standard metropolitan statistical areas located throughout the continental United States, and selected emergency rooms in other areas of the nation. In 1981, out of 4,706 emergency room facilities in the United States, 819 participated in DAWN. A report was submitted for each drug abuse patient who visited a DAWN emergency room. DAWN defines drug abuse as the nonmedical use of a substance for psychic effect, dependence, or suicide attempt/gesture. NATIONAL INSTITUTE ON DRUG ABUSE STATISTICAL SERIES, ANNUAL DATA REPORT 1981 at 1, 2 (Series I, Number 1, 1982). In 1981, the participating emergency rooms reported a total of 121,268 drug abuse episodes in which patients receiving treatment mentioned having abused one or more drugs shortly before suffering the effects that prompted their being taken to the emergency room. The typical patient mentioned having taken 1.644 different drugs per episode. Among the more frequently men-
Several arguments can be made against applying the reasonable suspicion standard to private location monitoring. First, unlike the situations in which the standard has been applied in the past, private location monitoring intrudes into the privacy of a fixed premises—often a person’s home, to which the Fourth Amendment affords especially strong protection.\textsuperscript{474}

While this aspect of private location monitoring distinguishes it from existing reasonable suspicion precedents, this distinction is not necessarily dispositive.\textsuperscript{475} The privacy of the home, like the right to be secure from intrusions upon one’s person,\textsuperscript{476} is a cherished one, but it is not inviolable. A physical search of one’s house constitutes a devastating intrusion into individual privacy and a substantial offense against individual dignity. It is appropriate, therefore, to insist upon probable cause and a warrant before such an intrusion should be permitted. If, however, the physical entry into and search of, for example, a person’s home, office, or storage locker, ranks near the top on any list of intrusiveness and offensiveness, private location monitoring of a beeper within such a location surely must rank near the bottom.\textsuperscript{477} There is no inherent reason why the authorities should be forced

\textsuperscript{474} See supra notes 263-68 and accompanying text.

\textsuperscript{475} See Terry v. Ohio, 392 U.S. 1 (1968). The first case to enunciate and apply the reasonable suspicion standard, Terry authorizes the physical seizure of a suspect’s person and a physical patdown of the suspect’s clothing, procedures which are arguably far more intrusive and far more offensive than beeper surveillance.

\textsuperscript{476} See supra note 475.

\textsuperscript{477} To date, beeper technology has developed to the extent that once the beepered object comes to rest, law enforcement officials can, by monitoring the signal from a number of different locations, obtain a “fix” on where the beeper is. Sometimes the beeper provides information as to the particular premises (for example, a private residence or office) it is in or near; sometimes, only the building (for example, an office or apartment building). See supra notes 7, 231. In the latter situation, the officers’ ability to further pinpoint the beeper’s location depends upon whether they can walk through the building monitoring the signals.

The more sophisticated the beeper, of course, the more information it reveals. A signal altering beeper, for example, reveals more than merely its location; it also reveals the fact that someone inside the premises is opening the package, container or compartment in which the beeper was installed. This significantly magnifies the intrusiveness of the beeper surveillance. Use of such a beeper (except in per se contraband cases, see supra notes 387-98 and accompanying text) should therefore be lawful only if the agents have a warrant based on probable
to offer the same degree of justification for the latter as they are justly re-
quired to do for the former. Indeed, as this article has attempted to demon-
strate, when the degree of intrusiveness and the societal interest involved are 
balanced, persuasively reasons emerge for applying the less demanding rea-
sonable suspicion standard.

A second argument against the constitutionality of applying the reason-
able suspicion standard to private location monitoring is that the investiga-
tive procedures to which the standard has been applied to date take at most 
several minutes, while surveillance of the beeper may continue for months 
before an investigation is terminated. The thought that agents might 
monitor a beepered object in a suspect's home for several months, without 
probable cause, is unsettling. Yet, if agents who have lawfully learned (by 
visual surveillance, in-transit or general vicinity monitoring, or a combina-
tion of all three) the whereabouts of the beepered object are determined to 
learn whether the object will be left or moved, the maintenance of an 
around-the-clock visual surveillance of the premises would not constitute a 
search at all. Private location monitoring, even over an extended period, 
simply permits the agents to achieve the same goal—probably with greater 
success, certainly at less expense, and probably with less intrusion into the 
lives of those who occupy the premises in question. Further, because such 
monitoring is lawful only pursuant to a warrant, the need for prolonged sur-
veillance will be subjected to periodic judicial scrutiny. Thus, while the 
potential duration of private location monitoring distinguishes it from ex-
isting "reasonable suspicion" searches, this distinction does not render the 
surveillance so intrusive as to mandate application of the probable cause and 
warrant requirements.

cause rather than merely a reasonable suspicion to believe that the container or its contents are 
being used for a criminal purpose. See supra notes 132-41 and accompanying text. At the 
extreme, a beeper that is also capable of transmitting sounds and conversations would consti-
would be lawful only if an eavesdropping warrant were obtained pursuant to title III of the 
corresponding state statute.

478. See supra notes 449-52, 471 and accompanying text.
479. See supra note 449 and accompanying text.
480. In United States v. Karo, 104 S. Ct. 3296 (1984), the surveillance lasted more than 
four months. See supra notes 208-17 and accompanying text.
481. See generally 1 W. LaFAVE, supra note 16, at § 2.7(e).
482. Around-the-clock visual surveillance will reveal far more about the occupants (for 
instance, when they come, when they go or who visits them) than merely monitoring the 
beeper.
483. See supra notes 429-33 and accompanying text. Conscientious law enforcement offi-
cials are aware that if an investigative technique is abused, judicial, legislative or executive 
action might substantially restrict or preclude its use altogether.
Finally, it might be argued that the principle of judicial restraint militates against the acceptance of new exceptions to black letter constitutional standards: the Fourth Amendment explicitly directs that “no warrants shall issue, but upon probable cause.” 484 A certain degree of flexibility and creativity is essential, however, if the courts and Congress sensibly are to apply eighteenth century concepts and language to twentieth century surveillance procedures. Private location beeper surveillance “seizes” nothing, and constitutes a “search” only in a very limited and somewhat artificial sense. If the Fourth Amendment is to be interpreted with sufficient flexibility so as to apply to such surveillance—as the Court properly held485—a corresponding degree of flexibility must be afforded to the courts and Congress in determining the appropriate standard by which the “reasonableness” of such a search is determined.486 The reasonable suspicion standard strikes the best balance between the protection of individual privacy and society’s profound interest in effective law enforcement, particularly with regard to the importation or manufacture of illicit drugs.

VII. The Legislative Answer: A Modest Proposal

The unsettled questions of policy and procedure can best be resolved by legislation. To properly balance the interests of individual privacy and effective law enforcement, such legislation should regulate all aspects of the use of electronic tracking devices, including those—consensual installation and in-transit and general vicinity monitoring—that currently are immune from judicial scrutiny. Such legislation should provide as follows:

1. A court order should be required to authorize the consensual installation of a beeper into any object in which a person other than the consenting party will subsequently acquire a reasonable expectation of privacy. The effect of this would be to require a court order in precursor chemical cases, but not in cases where customs officials intercept narcotics or other contra-

484. At least one Justice has expressed concern that each additional exception to the probable cause and warrant requirements adds momentum to the “tendency on the part of the Court to convert the Terry decision into a general statement that the Fourth Amendment requires only that any seizure be reasonable.” United States v. Place, 103 S. Ct. 2637, 2652 (Blackmun, J., concurring) (commenting upon the Court’s conclusion that reasonable suspicion that an airline passenger’s luggage contained narcotics was sufficient justification to detain the luggage temporarily, until it could be exposed to a trained narcotics detection dog).

485. See supra notes 265-70 and accompanying text.

486. It should be remembered that should the Court hold that reasonable suspicion is constitutionally sufficient to authorize issuance of a private location monitoring warrant, Congress would nevertheless have unlimited authority to impose whatever restrictions or regulations it saw fit. See supra note 120 and accompanying text.
band per se that is mailed or shipped to the United States from overseas, nor in other inherently tainted transactions.

2. Similarly, a court order should be required to authorize the trespassory installation of a tracking device to the exterior of a vehicle.

3. The court order should, for a period of up to thirty days, authorize law enforcement officials to conduct in-transit, general vicinity and private location monitoring, wherever the object in question is taken.

4. To secure such a court order, an investigator should be required to submit affidavits or other evidence establishing a reasonable suspicion that evidence or information relating to particularly described criminal conduct (manufacture, importation or distribution of drugs, trafficking in stolen property, etc.) will be discovered by the use of the device.487

5. Where investigators seek to conduct a trespassory (i.e., nonconsensual) installation into the interior of a vehicle (for example, into the passenger or storage compartment of a car, truck, airplane, etc.), they should first be required to obtain a court order based upon probable cause to believe that evidence or information relating to particularly described criminal conduct will be discovered by the use of the device.

6. At the end of the thirty day period, investigators should be required to report to the issuing judge (or a judge of comparable jurisdiction in the federal district in which the beepered object is then located) the progress of the investigation to date. Where appropriate, they may request an extension of the court order for an additional thirty days. Extensions should be granted so long as reasonable suspicion continues to exist that the use of the beeper is revealing or will reveal information relating to the specified criminal conduct.

7. In exigent circumstances, investigators should be permitted to install a beeper without first obtaining a beeper surveillance order, provided that an application for such an order is submitted to an appropriate judge within ninety six hours of the installation. If the judge concludes that the grounds for such an order existed at the time of the installation and that circumstances rendered it impracticable to obtain such an order in advance of the installation, the judge should issue an order retroactively approving the in-

stallation and use of the beeper and authorizing continued use of the beeper for a thirty day period commencing with the installation.

8. Within 90 days of the termination of surveillance, investigators should be required to submit an inventory to an appropriate judge listing all locations that were subjected to private location monitoring and listing all known individuals with a privacy interest in such locations. The judge would then order that notice of the surveillance be served on those individuals who the judge concludes should receive notice. Upon a showing that notice would jeopardize an investigation or endanger someone's safety, notice should be postponed.

9. A defendant in a criminal prosecution whose reasonable expectations of privacy were intruded upon by beeper surveillance should be empowered, prior to trial, to bring a motion seeking to suppress the evidence or information derived from the surveillance. Such motion shall be granted if a court concludes that the surveillance was conducted in violation of the statute.

Such legislation would have several benefits. First, it would ensure judicial oversight of those aspects of beeper surveillance—consensual installation, in-transit and general vicinity monitoring—which currently are beyond the scope of the Fourth Amendment, thereby enhancing individual privacy and providing a check against potential abuse. Second, it would enhance effective law enforcement by resolving the uncertainties which currently exist in the law. At present, investigators who have reasonable suspicion but lack probable cause cannot know whether they must, or can, obtain a court order authorizing trespassory exterior installation of a beeper onto a vehicle, and must guess at when lawful warrantless general vicinity monitoring crosses the line and becomes unlawful private location monitoring. A judge to whom an application is submitted for an order authorizing trespassory installation or private location monitoring likewise cannot now know whether reasonable suspicion suffices, or whether probable cause is required. By requiring reasonable suspicion for all aspects of beeper surveillance, such legislation would establish a uniform standard that would enable investigators and judges to know what is required without imposing excessive barriers to the use of a minimally intrusive and highly effective investigative technique. Finally, such legislation would establish standardized procedures governing the issuance and execution of such court orders while assuring that those whose privacy is invaded by the surveillance eventually receive notice of what has occurred.

VIII. CONCLUSION

Since our nation was founded, Americans have cherished the right, em-
bodied in the Fourth Amendment, to be free from unlawful snooping by the government. That right is now threatened by advances in technology that were unimaginable even a generation ago. At the same time, an equally precious right—to live in safety, confident that those who obey the laws will be protected from those who do not—is also threatened, by criminal organizations who utilize both technology and terror for their own purposes, and by a pervasive traffic in illicit drugs that corrupts the health, minds and souls of its immediate victims, and degrades the quality of life of all who come into even indirect contact with it.

With ever increasing frequency, the nation's courts are being faced with the task of striking an appropriate balance between these often conflicting but equally essential values: individual privacy, and effective and efficient law enforcement. To deny the police the right to utilize the fruits of technology, or to place unwieldy preconditions on such use, is to surrender a significant advantage to society's predators; to permit such use without adequate judicial oversight risks placing our right to privacy in the sole discretion of the police.

In *Knotts* and *Karo*, the Supreme Court was called upon to reconcile these values as applied to electronic tracking devices. Proceeding with caution, the Court declined to categorize as either a search or a seizure those aspects of beeper surveillance that do no more than assist the police in monitoring public conduct. The executive and legislative branches of government, therefore, are free to permit, regulate or prohibit such surveillance as they deem appropriate. When a beeper was used to intrude into a private location, on the other hand, the Court, remaining true to fundamental Fourth Amendment principles, insisted that investigators first obtain a warrant. Although the *Karo* opinion is something less than a model of clarity, ultimately the Court struck the right balance.

*Knotts* and *Karo* leave several important questions unanswered. Neither case required the Court to consider whether trespassory installation of a beeper constitutes a search or seizure. It is still unclear where the line is to be drawn between beeper surveillance of public conduct (in-transit and general vicinity monitoring), which is not a search, and surveillance of private conduct (private location monitoring), which is.

The most important unanswered question is whether a warrant authorizing private location monitoring must be based, as traditional search warrants must be, upon probable cause, or whether the less demanding standard of reasonable suspicion will suffice. Law enforcement officials often are able to acquire probable cause to conduct private location monitoring of a beeper installed into a container of precursor chemicals to be sold to a suspect.
Cases have arisen and are likely to arise, however, where reasonable suspicions exist although probable cause is lacking. It is in just such instances that the need to install a beeper, and to conduct private location monitoring, is the greatest. In many cases, such surveillance will be the most efficient, least expensive, and by far the least intrusive means available to determine whether probable cause exists to believe that criminal activity is afoot, and if so, where. Thus, the vital but oft-conflicting interests of effective law enforcement and individual privacy can best be balanced by the enactment of legislation that establishes comprehensive standards regulating such surveillance, and that requires reasonable suspicion, rather than probable cause, as the legal prerequisite to court-authorized private location beeper surveillance.

488. Resuming the situation hypothesized in *supra* notes 466-67, if a private location monitoring warrant may be obtained based on reasonable suspicion, the agents' options are multiplied considerably. They can and should conduct visual surveillance, make inquiries of informants, and attempt to infiltrate with an undercover agent, as circumstances and resources permit. Most important, they can also monitor the location of the ammonia, unobtrusively and with minimal intrusion. If nothing comes of such surveillance, little is lost, either in terms of law enforcement resources or individual privacy. Alternatively, if the private location monitoring, together with more traditional techniques, leads to the acquisition of probable cause, criminals will be brought to the bar of justice, dangerous contraband will be kept from poisoning the nation's streets, and perhaps fewer lives will be ruined by or lost to the scourge of illicit drugs.