AN ANALYSIS OF THE POTENTIAL LEGAL CONSTRAINTS ON THE USE OF ADVANCED ALCOHOL-TESTING TECHNOLOGY

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Prepared for
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National Highway Traffic Safety Administration
Washington, D.C. 20590

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16. Abstract

An analysis was made of the potential legal constraints on the use of existing and proposed devices that would be used at the roadside by police officers to measure drivers' blood alcohol concentrations.

Examination of current law revealed the chief constraints to be: the constitutional requirement that searches and seizures be "reasonable"; state implied-consent legislation; and court decisions that require the retention of breath ampoules.

As a result of these constraints: Devices requiring the tested subject's cooperation cannot be used unless there is "probable cause" to arrest for driving while intoxicated; legislation requiring that an officer arrest a driver before testing precludes the administration of all prearrest tests in most states; implied-consent legislation offers drivers a number of options that could limit the use of certain testing devices in some states; and police officers and prosecutors in a few states must retain breath ampoules for possible further testing.

Constraint resolution strategies include: administering active tests only when probable cause exists; amending implied-consent legislation to permit the use of new devices; and appealing adverse court decisions where necessary.

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CONTENTS

1.0 INTRODUCTION

This is one of a set of volumes concerned with the legal feasibility of proposed highway crash countermeasures. This volume addresses legal issues associated with the use of instruments to measure the alcohol concentration in the breath of drivers. The devices considered are in various stages of development. Some are in existence but are undergoing refinement as the state of technology develops. For example, a number of devices now exist that can quantitatively determine breath alcohol concentration (BAC). The quantitatively determined BAC value is used as evidence of impairment in prosecution of driving while intoxicated (DWI) offenses (1). In general, these devices are used at fixed locations, such as a police station. New technology is expected that would allow the manufacture of these devices in a portable form, which would allow their convenient use by an officer for roadside testing of a suspected offender.

Other devices are in a conceptual stage. They may be technically feasible, although that has not been established. The purpose of this inquiry is to identify the likely legal constraints that would be associated with their use to aid in determining if development of the devices should be pursued. An example of such a device is the Non-Cooperative Breath Tester (NCBT). This device would allow an officer to collect a breath sample from the normally expelled breath of a subject--the subject's cooperation would not be required to provide a breath sample. We term the NCBT a **passive** device because it does not require the subject's cooperation. Devices that require a subject to provide a breath sample by blowing into a collection system are termed **active** devices.

Active devices may collect a sample and store it temporarily for analysis within the same unit. Other active devices simply collect a breath sample and retain it for later analysis. Such devices are referred to as **remote sampling devices** or **remote collection devices.**

Active devices that analyze a breath sample have been classified as

either **quantitative** or **screening** devices. **Quantitative** devices produce a BAC reading that is specific. Quantitative devices are required to meet rigorous scientific standards for accuracy so that the specific BAC results can be introduced as evidence in a DWI trial. As the primary purpose for using a quantitative device is to obtain evidence for use at trial, these devices are often referred to as "evidential" test devices. As will be explained later, this use of the word "evidential" is not precise.

Screening devices are designed to indicate whether an individual's BAC is greater than a specified level. These devices are not sufficiently precise to produce a specific BAC reading. They are intended to provide information that would aid an officer in making decisions about how to deal with a suspected drinking driver. Usually, a driver who does not pass a screening test would be asked to take a quantitative test. This report examines the legal constraints that surround the use of active and passive alcohol breath-testing devices.

The research and analysis leading to preparation of this volume were conducted by staff of the Policy Analysis Division of The University of Michigan Highway Safety Research Institute (HSRI) for the National Highway Traffic Safety Administration (NHTSA) under Contract Number DOT-HS-7-01536.

1.1 Purpose of Volume

The legal issues that might constrain the implementation of highway crash countermeasures--including breath testing--are rooted in basic aspects of the American legal system and often involve complex issues of U.S. constitutional law and U.S. Supreme Court interpretations of that law. Thus, any discussion of legal issues and the potential constraints they impose must deal with prevailing constitutional principles. However, to treat these issues in a rigorous legal manner would be beyond the scope of this volume. It is not intended to provide legal advice. Rather, it is designed to be used by public safety officials and highway safety planners as a guide that will permit them to identify problem areas in countermeasure program implementation. Once identified, these problem areas can be discussed with legal counsel.

Within this context, the purpose of this volume is to provide a brief but relatively comprehensive review of the potential legal constraints that might be encountered in active and passive breath testing for alcohol with several advanced technology devices. It is designed to: identify important legal issues; show how they might arise; estimate their significance as constraints on the countermeasures; suggest methods that might be used to resolve those constraints; and assess the overall legal feasibility of those countermeasures.

1.2 Background

Drinking drivers are frequently involved in serious traffic crashes and have long been the target of enforcement, adjudication, and sanctioning by the traffic law system. As recently reviewed by Jones and Joscelyn (1979) findings show that approximately 40 to 55 percent of drivers fatally injured in traffic crashes have BACs in excess of .10% w/v. Comparable findings for personal-injury and property-damage crashes are nine to thirteen percent, and five percent respectively. Moreover, in spite of the fact that the legal standard for alcohol intoxication in most states is a BAC of .10% w/v, most of the drivers who are actually arrested have much higher BACs--usually above .15% and often above .20%. It is believed that police officers arrest only those drivers who show gross signs of impairment; this, in turn, may allow some drivers who are legally intoxicated to escape apprehension or arrest (Dozier 1976, p. 1; Belardo and Zink 1976, p. 1).

To remedy this perceived problem a variety of approaches and applications of technology have been suggested. One involves the development of a Non-Cooperative Breath Tester (NCBT). Such a device would collect samples of air and determine if alcohol were present. (In this volume we use "alcohol" as the equivalent of ethanol unless otherwise noted.) An officer using such a device could collect air in the vicinity of a subject and test for alcohol presence in the air. The device used in this manner would be an "extension of the officer's nose" except for the ability of the device to differentiate between alcohol and other substances. Evidence of the presence of alcohol could then provide the

foundation for further investigation by the officer to determine if the subject was intoxicated and if arrest for DWI was warranted.

Another problem associated with the apprehension of drinking drivers is the relatively long time required to process an arrested subject. The delay is inconvenient for both the offender and the officer, particularly if quantitative testing does not establish that the suspect was intoxicated.

One suggested approach for addressing this problem is to use portable screening devices to obtain preliminary information about the driver's BAC. As noted previously, these active devices require the subject's cooperation and provision of a deep lung air sample, and provide a qualitative estimate of BAC.

Proponents of this approach suggest that screening tests be conducted without the requirement for a formal arrest. As of December 1978, some twelve states and the District of Columbia had enacted legislation authorizing some form of prearrest test (2). Some of these statutes do not penalize drivers for refusing to cooperate and submit to a screening test, and other statutes provide for the screening test to be administered only at the request of the driver (3).

A complementary approach to address the problem has also been suggested as technology associated with quantitative breath-testing devices advances. Various breath-testing devices have been developed (Moulden and Voas 1975, pp. 9-30). While many are not readily portable, the technology to develop portable devices is available and such devices may reasonably be expected in the future. Many of the existing quantitative devices have been used "portably." In the 1950s the Indiana State Police used the Borkenstein Breathalyzer® for roadside testing. More recently, a number of jurisdictions have equipped vans with breath-testing equipment. Usually these vans are staffed by qualified technicians and go to the location where an officer has arrested an offender.

The use of portable quantitative devices has been suggested as a means of increasing arrests and reducing inconvenience to the suspected offender and to the officers. Another important aspect of roadside quantitative testing is that it allows the acquisition and analysis of a breath sample close in time to the time the suspect's driving took place.

Prompt administration of a quantitative breath test is believed most likely to produce accurate and relevant information on a suspected offender's BAC.

It is important to understand what prompt administration means. Breath testing rests on the examination of **deep lung breath.** It is important to preclude possible bias of test results by mouth alcohol resulting from recent ingestion of alcoholic beverages. Thus, test protocols require an officer to observe a subject for at least fifteen minutes prior to testing to ensure that ingestion does not occur so that the test results are valid. Fifteen minutes is regarded as the minimum time (Caddy, Sobell, and Sobell 1978; Erwin 1976, pp. 18-18.32, 18-18.3). Actual practice in many jurisdictions is to wait thirty minutes before testing a driver. Thus, the routine investigation of a DWI--including officer-violator conversation, driver's license check, psychomotor tests and breath-testing--results in a suspected driver remaining in the officer's custody for approximately thirty minutes to one hour. This time estimate applies to active testing whether it is quantitative or screening in nature.

Another class of device has been developed as an alternative or adjunct to quantitative roadside testing for BAC. The remote sampling device or remote collection device (RCD) is designed to collect a breath sample for later quantitative testing. The remote collection device may be used by itself, in conjunction with a screening device, or in conjunction with a quantitative device. In the latter case, the RCD would provide a second sample for a confirmatory test. The basic objective of using the RCD is to obtain a breath sample for quantitative testing as near in time to the time of the driver's operation of a vehicle as possible. As in the case of roadside quantitative testing, the objective is to obtain the most valid and most relevant evidence for use at trial.

These concepts and approaches will be the focus of the legal analyses presented in this volume.

1.3 Content of Volume

The remainder of this volume is organized into three sections. Section 2.0 is devoted to the identification and discussion of legal issues that can

arise in connection with the use of active (quantitative and screening) and passive alcohol breath-testing devices, and the potential constraints that can arise from those issues. Attention is devoted to statutory constraints imposed by implied consent legislation in addition to those imposed by constitutional provisions. Section 3.0 discusses approaches that can be used to resolve legal constraints. Section 4.0 discusses the overall legal feasibility of the active and passive testing devices, and presents recommendations concerning their use.

2.0 IDENTIFICATION AND DISCUSSION OF LEGAL ISSUES

Several distinct groups of legal issues are raised by the use of active and passive breath-testing devices. The first group of issues deals with the constitutional and statutory authority to use breath testing equipment. The second of these involves the constitutional issues raised by the use of these devices. The final group of issues arises from restrictions on alcohol testing imposed by implied-consent statutes, as well as statutory and common-law restrictions generally governing the arrest and prosecution of suspected offenders.

2.1 Constitutional/Statutory Authority to Use Breath-Testing Devices

The first set of legal considerations that affect the use of testing devices deals with the existence of legal authority—both constitutional and statutory--to use breath testing equipment. Constitutional authority includes both the power to control drinking drivers and the power to use scientific devices to aid in law enforcement.

Constitutional Authority. Justification for using alcohol breath test devices is ultimately based on the state's so-called "police power," that is, the power to legislate for the public health, safety, welfare, and morals (4). That power is broad and is bounded only by the limits imposed by the U.S. and state constitutions. Unless exercises of the police power infringe fundamental constitutional rights, or are unrelated to legitimate state purposes, courts will presume them constitutional (5). Courts have long recognized highway safety as an important state interest (6), and this interest has justified governmental action to remove drunk drivers from the highways (7).

Police agencies have come to use a wide variety of technological advances such as photography, radar, and fingerprint analysis to

investigate criminal offenses. The use of such technology is not unconstitutional per se; it is prohibited only when it violates fundamental rights, such as those discussed in this volume (8).

Forced chemical testing for BAC has been upheld against a number of constitutional challenges. Compelling a driver to submit to a blood test, at least in the absence of violence or brutality, does not violate the constitutional requirement of due process of law (9). Although testing produces evidence that tends to incriminate a driver, courts uniformly have held that tests do not violate the driver's constitutional privilege against self-incrimination (10) because they force a driver to give physical or "real" evidence rather than "testimony" (11). Finally, tests for alcohol conducted following a driver's arrest have been upheld as reasonable "searches incident to arrest" and therefore constitutional despite the absence of a search warrant (12). Thus, existing testing methods are not themselves barred by any constitutional constraints.

Even though the use of alcohol-testing devices is permitted by the Constitution, the use of a particular device may be restricted by statute. Moreover, if evidence legitimately gathered by a device is not considered scientifically valid and reliable by courts the use of that evidence in trials will be constrained. This is currently the case with the polygraph, the reliability of which has not been sufficiently established. Issues relating to scientific validity and reliability are discussed below.

Statutory Authority. The use of alcohol-testing devices is, under the Constitution, a permissible exercise of states' police power; therefore, statutes specifically authorizing the use of these devices are unnecessary. However, alcohol testing is governed in every state by statute, and those provisions in effect limit the authority of police officers to use breath-testing devices.

Every state has enacted a so-called "implied consent" law that governs chemical testing for BAC (Erwin 1976, pp. 33-1--33-56; Reeder 1972) (13). Specific provisions of these laws may vary from state to state, but they are alike in principle: they provide police officers with an alternative to physical force as a means of compelling drivers to submit to tests

(Comment 1976). That alternative is imposing a mandatory license suspension on those drivers who refuse to submit to tests (14). Implied-consent laws also prescribe the evidentiary weight that courts shall give test results (15), set out the circumstances under which an officer may order a driver tested (16), specify the types of tests (breath, blood, urine, or saliva) that may be administered (17), and authorize an administrative body, such as a state board of health, to issue regulations governing the testing process (18).

It should be emphasized that current forms of active chemical testing for BAC are considered "searches" (19) and are therefore governed by the Fourth Amendment to the U.S. Constitution, which requires that they be "reasonable" (20). Implied-consent statutes impose **additional** restrictions governing alcohol testing devices, but they may neither reduce nor take the place of those already imposed by the Fourth Amendment. Some confusion has arisen in the past with respect to the relationship between the U.S. Constitution and implied-consent legislation. This confusion can be diminished by keeping in mind that the Constitution imposes minimum conditions for chemical testing; those conditions cannot be eliminated--but can be enlarged upon—by legislation.

Implied-consent legislation is discussed in more detail later in this volume.

2.2 Constitutional/Statutory Issues Affecting the Circumstances Under Which Devices May Be Used

A second group of legal issues affecting the use of alcohol breath-testing technology concerns the circumstances under which devices may be used. Constitutional issues discussed in this section include: the authority of police officers to stop vehicles and investigate drivers; whether the use of testing equipment constitutes a "search"; and what justification is required to test a driver using active and passive devices, respectively. In addition, testing restrictions imposed by implied-consent statutes are discussed here.

Authority of Police Officers to Stop Vehicles and Investigate Drivers. Essential to the use of any of these devices is a lawful encounter between a police officer and a driver. Unless the officer is justified in making an initial stop or encounter, and unless he also has sufficient cause to conduct a test, evidence gained from that test may not be used to prosecute the driver for DWI. This is a result of the "fruit of the poisonous tree" principle, under which the products of an initial seizure that was illegal cannot be used as evidence against the illegally arrested suspect (21). Thus, if an officer stops a driver without sufficient justification and later tests him for alcohol content, the BAC results cannot be used as evidence at his trial for DWI. Therefore it must first be determined, in any case involving testing, whether the driver was validly stopped.

Police stops of automobiles are considered "seizures" and therefore, are governed by the Fourth Amendment and required to be "reasonable." Anytime a vehicle is stopped by a police officer, no matter how brief or unintrusive that stop might be, that encounter is a "seizure" governed by the Fourth Amendment (22). For such an encounter to be reasonable, it must either be based on probable cause or at least an officer's "reasonable suspicion" (23) that a traffic-law violation has occurred, or take place in connection with a "random stop." To be "random" a stop must be limited to general investigatory purposes (such as checking drivers' licenses), and must follow objective guidelines such as stopping, at random, every tenth vehicle (24). Justification for a stop could be supplied by the apparent commission of such moving traffic violations as speeding, disobeying traffic-control devices, or making illegal turns, as well as by erratic driving, unusually slow speed, "jackrabbit" starts, dramatic overcorrection of driving errors, or the presence of defective equipment. Therefore, when a police officer stops a vehicle that was driven erratically or in apparent violation of traffic laws, he has conducted a reasonable seizure. Similarly, a valid random (checkpoint or roadblock) stop is a reasonable seizure.

Once a police officer has lawfully stopped a vehicle he might also observe that the driver's speech is slurred, that his breath contains the

odor of intoxicants, or that there are liquor or beer containers inside the vehicle (25). Such observations are not considered searches--and are therefore not bound by Fourth Amendment reasonableness requirements—because they are considered "plain view" observations (26). Plain view requires: first, that the officer lawfully be in position to make the observation (actually, an "observation" could be made by **any** of the officer's senses) and second, that he make the observation "inadvertently." (27). Measured by these standards, the typical case in which an officer stops a vehicle on suspicion of a traffic-law violation and subsequently notices the driver might be impaired by alcohol is one of plain-view observation. Likewise, where a police officer responds to a traffic crash, or stops to aid a driver at the roadside, he is--as in the case of a forced stop on suspicion of a violation—in lawful position to make a plain-view observation of the driver's impairment.

Further discussions will assume that a police officer has made a valid stop and thus is in a lawful position to investigate a driver. Consequently, observations of the driver's impairment are reasonable under the Fourth Amendment. Whether those observations would provide sufficient justification to test the driver is discussed below.

Whether the Use of Testing Devices is a "Search". To qualify as a "search," an encounter between a police officer and an individual must be an intrusion on the individual's "reasonable expectation of privacy" (28). It has been said that two elements are required to establish a reasonable expectation of privacy: the individual must have a subjective expectation that a thing or activity will be kept private; and society must objectively recognize the reasonableness of that expectation (29).

In Schmerber v. California, (30) the U.S. Supreme Court concluded that compelled testing of blood for BAC—following the driver's arrest but not authorized by a search warrant—was governed by the Fourth Amendment and therefore was required to be reasonable. State courts have extended the reasoning of Schmerber to evidential breath testing as well (31). Thus, the use of an active quantitative device after a driver's arrest for DWI is a search.

Using the same reasoning that applies to postarrest tests, the use of a screening device is also a search, since it intrudes into a driver's reasonable expectation of privacy (32). Screening tests, like quantitative tests, require the subject's active cooperation and the provision of deep lung air. Thus, all active tests are searches.

In addition, the entire testing encounter is, for reasons set out below, likely to be characterized as a "seizure." This characterization is crucial with respect to the justification needed to conduct a prearrest test. As noted previously, the technology of breath testing requires that a subject be detained for from fifteen to thirty minutes to ensure that he consumes no food or beverage that would contaminate the test results. Such a detention of a driver is a "seizure" and might be considered by some courts to be a de facto "arrest," whether or not the officer who detained him intended to do so and whether or not he carried out the procedural formalities associated with an arrest (33).

In contrast to the active devices, it is unlikely that the use of the passive NCBT would be considered a "search." Owing to its passive nature, the NCBT might be characterized as "an extension of the officer's nose" and therefore similar to the use of binoculars and flashlights (34), or even to dogs trained to detect marijuana and other illicit drugs (35), all of which previously have been characterized by courts as nonsearches. However, the NCBT (as conceptualized) will be capable of discriminating between ethanol and such other substances as paint or perfume, the odors of which are sometimes confused by police officers with that of ethanol (36). Therefore an argument could be raised that since NCBT replaces—and does not merely enhance--an officer's sense of smell (37), the use of the NCBT device is a search. In addition, it is possible that owing to the NCBT's alcohol specificity, some courts might characterize NCBT use as a "test," which would place it under the restrictions of implied-consent legislation. This is discussed further below.

It is possible but not likely that an analogy would be drawn between the NCBT and airport preboarding screening, which a number of courts have characterized as a "search" (38). Even if courts considering the NCBT were to follow the airport search analogy, however, they likely

would characterize the NCBT as a "regulatory search," which likely would be reasonable with respect to any driver who was already lawfully stopped by a police officer (39).

Thus, the use of the active devices likely will be characterized by courts as searches, and tests using those devices will be governed by Fourth Amendment reasonableness requirements. On the other hand, the use of an NCBT probably would not be characterized as a search, but more likely as a plain-view observation to which the Fourth Amendment does not apply.

Justification Required to Use Active and Passive Devices. The level of cause required to justify the use of an active or passive device depends first of all on whether the use of that countermeasure is a "search" or "seizure" bringing the Fourth Amendment into play. As stated earlier, the use of an active device would be so classified while the use of the NCBT likely would not be.

Whether or not courts characterize NCBT use as a "search," it is likely that neither an arrest nor probable cause to arrest would be required to use the device. As mentioned before, all that would be necessary is a valid initial stop, and that stop would justify an officer's use of the NCBT to determine whether the driver had consumed alcohol.

A related question is presented with respect to whether a positive NCBT reading (i.e., that the driver's breath contains alcohol) would justify a further test. Under current law it appears that the NCBT reading, by itself, would not supply sufficient cause to administer a further test. Consumption of alcohol (which is all the NCBT indicates) is not by itself a traffic offense. Therefore, for reasons to be explained below, other evidence of possible impairment must accompany the positive NCBT results to justify administering further tests. Normally such evidence would be discovered by a police officer in the course of his routine investigation after stopping a driver.

As stated already, state courts have applied the Schmerber decision to breath testing and characterized it as a "search." Those state decisions properly apply Schmerber to evidential breath testing, for it requires that

the tested subject cooperate and supply a sample of deep lung air, not normally expelled breath. That being the case, such testing is required by the Fourth Amendment to be reasonable. Courts have developed an extensive body of law applying the reasonableness requirement to searches and also to seizures of the person. The general requirement laid down by courts is that for a search to be valid it must be justified by a warrant issued by a neutral judicial officer, and be based on probable cause (Ruschmann et al. 1979, pp. 140-150).

Courts have recognized that there exist situations in which it would be impractical for police officers to obtain a warrant; in the time required to secure a warrant, evidence of crime could disappear, be destroyed, or be moved out of the officer's jurisdiction. In these cases the Supreme Court has recognized exceptions to the warrant requirement. One such exception involves the **search incident to arrest.** In the case of Chimel v. California (40) the Supreme Court held that a police officer may, following the lawful arrest of a suspect, search the suspect's person and the area within his immediate control for weapons that could be used against the officer and for evidence that otherwise would be destroyed. Note that Chimel creates an exception to the warrant requirement but not to the probable-cause requirement, since the lawful arrest required probable cause in the first place. In 1973 the Supreme Court held that an arrest need not be a formal one in every case where an incident search is conducted. In that decision, Cupp v. Murphy (41), the Court held that an officer may conduct a limited search of the suspect's body for evidence that is "highly evanescent" (likely to disappear or be destroyed within a short period of time) **without** making a formal arrest, provided he has probable cause to arrest the suspect.

Although courts have made exceptions to both the warrant and formal arrest requirements, the U.S. Supreme Court has not relaxed the requirement of probable cause for a search for evidence of crime. Although "probable cause" is a term that cannot be defined precisely, the following definition has been used by the Supreme Court:

> In dealing with probable cause, however, as the very name implies, we deal with probabilities. These are not technical;

> they are the factual and practical considerations of everyday life on which reasonable and prudent men, not legal technicians, act. The standard of proof is accordingly correlative to what must be proved.
>
> The substances of all the definitions of probable cause 'is a reasonable ground for belief of guilt.' And this 'means less than evidence which would justify condemnation' or conviction . . . . At any rate, it has come to mean more than bare suspicion: Probable cause exists where 'the facts and circumstances within their [the officers'] knowledge and of which they had reasonable trustworthy information [are] sufficient in themselves to warrant a man of reasonable caution in the belief that' an offense has been or is being committed. (Citations omitted.) (42)

Probable cause need not be the "proof beyond a reasonable doubt" needed to convict the suspect of a crime, and a probable-cause determination may be based on evidence that would not be admissible in court (for example, hearsay). However, probable cause must be more than the officer's mere hunch or guess (43). In some jurisdictions the phrase "reasonable grounds to believe" is used as the equivalent of probable cause to arrest or search (44).

To be reasonable, any evidentiary search must be supported by probable cause. However, the Supreme Court has recognized certain classes of encounters that are governed by the Fourth Amendment, yet do not fall under its probable-cause requirements. One such class consists of **regulatory searches**, such as health and building-code inspections (45). These may be conducted with less probable cause than that required to search for evidence; this is because they are not "personal" in nature, they are not aimed at discovering evidence of crime, and there are not less intrusive means that would effectively abate conditions likely to produce such hazards as fires or disease (46).

A second class of encounters consists of **investigatory detentions.** Language in a 1969 Supreme Court decision, Davis v. Mississippi (47), indicates that certain identification procedures (here, fingerprinting) accompanied by brief detentions might be constitutional even when based on less than probable cause, provided "narrowly circumscribed procedures" are followed. However, Davis referred specifically to fingerprinting, an

identification procedure, as opposed to evidence-gathering procedures.

The third group of encounters the Court found justifiable on less than probable cause consists of what are commonly referred to as "stop-and-frisk" encounters. In 1968 the Court decided Terry v. Ohio (48) together with Sibron v. New York and Peters v. New York (49). In Terry, a police officer observed three men who appeared to be "casing" a store for a robbery. He approached the three suspects and asked them to identify themselves; when they replied with only a mumble he spun one of them (Terry) around, patted down his outer clothing ("frisked" him) for weapons, and discovered a pistol. In Terry's ensuing prosecution for unlawfully carrying a firearm, Terry challenged the constitionality of the frisk, arguing that since the officer lacked probable cause required for a search, he could not have frisked him. The U.S. Supreme Court disagreed. While the Court characterized the frisk as a "seizure" governed by the Fourth Amendment, the Court held that it was not governed by the same warrant-probable cause standard that applies to evidentiary searches. Rather, whether the frisk was "reasonable" under the Fourth Amendment was to be measured under the "balancing test" that the court had developed a year earlier in its administrative search decisions (50). The Terry court found the competing interests to be the officer's interest in protecting himself from armed attack on one hand, and the suspect's interest in avoiding intrusions on his personal security on the other. Balancing those interests, the Court held that an officer's frisk for weapons would be constitutionally permissible provided: (a) the officer has the equivalent of a "reasonable suspicion" that criminal activity is afoot and that the suspect may be armed (51); and (b), that the frisk is limited solely to the officer's protection, that is to discover weapons that could be used against him (52). The Supreme Court not only pointed out in the Terry opinion that the self-protective frisk was not to be confused with the Chimel-type search incident to arrest, but also stated in the Sibron case, decided the same day as Terry, that any search for evidence under the guise of self-protection exceeds the scope of Terry's constitutional authorization for the frisk (53).

Both federal and state courts maintain the sharp distinction between

self-protective frisks and more general searches for evidence-gathering. One recent case, which arose in the specific context of a traffic-violation stop, is illustrative. In that case, People v. Pritchett (54), the Appellate Court of Illinois was faced with the following fact situation: Following a valid initial stop for a traffic violation, the arresting officer validly asked the driver to leave his vehicle (55). Suspecting that the driver was armed, the officer frisked him and, in the course of the frisk removed an envelope. To determine whether the envelope contained a weapon, the officer opened it and discovered a "tobacco-like substance," but no weapon. Nevertheless, the officer continued to examine the substance and he determined it was marijuana, whereupon he arrested him for unlawful possession of the substance. The court reversed the driver's marijuana conviction, concluding that once the officer determined the driver was not armed, he could not search further without exceeding the lawful scope of a Terry frisk.

In sum, the Supreme Court has recognized that there are seizures that do not reach the level of an evidentiary search and that are justifiable on a standard of less than probable cause. **Nonevidentiary** seizures apparently are permitted on the basis of a "reasonable suspicion," which in Terry was defined as:

> . . . specific and articulate facts which, taken together with rational inferences from those facts, reasonably warrant (the) intrusion." (56)

However, chemical tests of a driver's breath or blood are evidentiary searches that remain subject to the probable-cause standard. The first Supreme Court case applying the Fourth Amendment to alcohol testing was Schmerber v. California (57). In that case a driver (Schmerber) involved in a traffic crash was brought to a hospital for treatment of his injuries. A police officer, who was present at the scene of the crash and at the hospital, noticed the odor of alcohol on Schmerber's breath (together with other signs of alcohol intoxication) and arrested him for DWI. Following the arrest, the officer directed a physician at the hospital to take a sample of Schmerber's blood. Schmerber, who on the

basis of the test results was later convicted of DWI, appealed his conviction claiming a number of constitutional violations, one of which was that the removal of his blood was an unreasonable search. The chief Fourth Amendment issue was whether the officer was entitled to conduct a warrantless search incident to the DWI arrest (which was based on probable cause but not a warrant). The Court held that the search was constitutional: it was incident to arrest; the arresting officer reasonably believed that any delay in testing would result in the loss of evidence; and the testing procedure was performed in a reasonable manner.

When Schmerber was decided California did not have an implied-consent statute. A later California decision (58), which dealt with whether forcible testing for alcohol was permitted under the state's implied-consent law, noted that implied consent's purpose was to substitute driver's license suspension for physical force as a means of compelling drivers to submit. That being the case, a conscious driver who refuses to submit cannot be compelled to do so, despite having given "implied consent." Thus, implied-consent legislation gives the driver a statutory right to accept license suspension in lieu of submitting to the test (59).

Implied-consent legislation has been upheld as constitutional by all state courts that have considered the issue (60). Most of these statutes require the driver's formal arrest as a condition to testing and specify that a police officer have "reasonable grounds to believe" that a driver is intoxicted before requiring the driver to choose between submitting or suffering a license suspension (61). Recently, a number of cases have arisen that deal with whether the driver's arrest for DWI must be a formal one, specifically, whether an officer must formally arrest an unconscious driver before drawing a sample. Many recent decisions, relying on Schmerber and Cupp, have held that so long as the arresting officer has probable cause to arrest, he may direct that a test be taken—whether or not the formalities of arrest have taken place (62). Note that none of these cases following Cupp relaxed the probable-cause requirement governing active testing for alcohol; they merely hold that a **formal** arrest is not a constitutional prerequisite to such testing.

As stated before, some twelve states and the District of Columbia have amended their implied-consent statutes to provide for some form of prearrest testing. It has been advocated by the Adjudication Branch of NHTSA's Office of Driver and Pedestrian Programs (U.S. Department of Transportation 1979) and by others (e.g., Hricko 1969) that prearrest testing would be constitutional when the testing officer has "reasonable suspicion"--as opposed to "probable cause" or "reasonable grounds to believe"—that the driver was intoxicated. So far, no appellate court and only one trial court has decided whether prearrest testing constitutionally could be required on less than probable cause. In that case, People v. Graser (63), a town court in New York held that the state's prearrest-testing statute was not unconstitutional on its face, and that "in appropriate circumstances and in an appropriate manner" (which the court stated do not include the mere happening of an accident or a nonmoving violation) an officer may request that a driver take the test on the basis of a "reasonable suspicion" that the driver is intoxicated. The Graser court analogized the relationship between the preliminary screening test and an evidential chemical test to that between a Terry-type frisk and a full-fledged body search. That analogy, it should be noted, is directly supported by no U.S. Supreme Court authority; rather, it is a substantive extension of the Supreme Court's holdings in Terry and Sibron.

The only reported appellate case dealing directly with prearrest breath testing (PBT) legislation is State Department of Public Safety v. Gravum (64). In Grovum the Minnesota Supreme Court dealt with the meaning of "arrest" under the state's implied-consent and PBT statutes. It did not deal with the level of probable cause required to justify the prearrest test: the Minnesota court carefully noted that in each of the cases before it the testing officers had probable cause to believe the drivers were intoxicated. Furthermore, the implied-consent statute imposed no penalties on drivers who refused only the screening test, and it required probable cause **plus** any of four circumstances (formal arrest for DWI; involvement in a traffic crash; refusal of the PBT; or a PBT reading of 0.10% and above) before an implied-consent test could be administered on pain of license suspension. Therefore, Grovum cannot be read as an

endorsement of NHTSA's assertion that prearrest breath tests based on "reasonable suspicion" are constitutional. At present the constitutionality of prearrest breath tests on the basis of less than probable cause awaits final resolution by the appellate courts. Meanwhile, current search-and-seizure decisions point to the conclusion that courts would require probable cause (reasonable grounds) to believe that a driver is intoxicated before a driver is required to submit to a test requiring active cooperation and the provision of a sample of deep lung air. Unlike the NCBT, which examines normally expelled air for alcohol content, the prearrest screening test requires cooperation plus deep lung air. Therefore, under current law probable cause must exist before the test is requested.

In alcohol-impairment cases, what constitutes "probable cause" to arrest for DWI depends on whether the state's DWI statute is "presumptive" or "per se." In the majority of states a BAC of 0.10% w/v raises a presumption (actually a nonbinding inference [65]) that the driver is intoxicated. However, to prove the driver's guilt of DWI under a "presumptive" statute it is necessary to prove that his driving actually had been impaired by alcohol (66). In the remaining states driving with a BAC of 0.10% w/v or above is an offense by itself.

Therefore, probable cause in a "presumption" state, has two elements: first, reasonable belief that the suspect's ability to driver safely is impaired; and second, reasonable belief that alcohol is present at impairing levels in his body. In a "per se" state, probable cause has only one element: reasonable belief that alcohol is present at impairing levels. Evidence of driving impairment includes, for example, unusually high or low speeds, "weaving" from side to side, "rapid" starts at intersections, overly cautious driving, and overcorrection of driving errors. Evidence of the presence of alcohol at impairing levels includes, for example, the odor of alcohol in the breath, watery or bloodshot eyes, slurred speech, lack of coordination, swaying, and the presence of open beverage containers in the vehicle. Considering the nature of this evidence, and that probable cause typically is interpreted as a "more likely than not" standard (67), in general a rather minimal amount of evidence is actually needed to

establish probable cause of DWI. (For a more precise definition of probable cause to arrest for DWI, we refer the reader to cases decided in the various state courts.) Because probable cause to arrest for DWI and test for BAC requires a minimal amount of evidence, NHTSA's assertion that screening tests are justifiable by only a "reasonable suspicion" could result in some courts equating what they currently consider "probable cause" with "reasonable suspicion," and creating a new--and more stringent—standard of probable cause. This anomalous result could in fact retard the police in making drinking-driving arrests and could result in fewer DWI prosecutions.

On the basis of existing search-and-seizure decisions of the Supreme Court, we conclude that any tests for alcohol that require the subject's active cooperation and a specimen of deep lung air, resulting in the driver's detention for fifteen minutes or more, must be based on a level of evidence equal to that of probable cause to arrest for an alcohol-impaired driving offense. It is not possible to define "probable cause" precisely, but case law establishes that only a minimal amount of evidence is required. Although the equivalent of probable cause to arrest the driver for DWI is required, a **formal** DWI arrest likely would not be. The probable cause requirement applies to any form of testing--whether it is characterized as "screening," "prearrest," "quantitative," or "postarrest"—that is an evidential search. Probable cause is not required in cases when a subject given **actual** consent to the test and waives the right to object to it; nor is probable cause required before using the NCBT, for it measures the driver's expelled breath, that is, the same breath that would encounter the officer's nose, rather than deep lung air.

In sum, the Fourth Amendment requires either arrest or probable cause to arrest before a compulsory test, using an active device, may be administered to a driver. The arrest is not required by the Constitution to be a formal one, so long as it is based on probable cause. On the other hand, the Fourth Amendment does not constrain the use of the passive NCBT, which is not a search; thus, the only constitutional restriction on NCBT use is a valid initial stop putting an officer in lawful position to use the device.

Statutory Provisions Governing the Circumstances Under Which Devices May Be Used. Every state has enacted some form of an implied-consent statute that sets out the conditions under which a police officer can compel the chemical testing of a driver. These statutes are intended to regulate active, quantitative alcohol testing. As stated previously, these statutes must be consistent with provisions of the U.S. and state constitutions. Thus, they can afford drivers additional protections regarding forced chemical testing, but they cannot cut back any constitutional rights that the driver has.

The Uniform Vehicle Code (UVC) version of the implied-consent statute authorizes compelled testing when an officer has "reasonable grounds to believe" (the equivalent of probable cause) that the driver had committed a DWI offense (68). However, the UVC authorizes license suspensions for refusal to submit only when a driver, **placed under arrest**, is warned of the consequences of his refusal, and chooses not to submit to a chemical test (69). Most states follow the UVC provisions and thus require a formal arrest prior to compelled chemical testing of drivers (70). However, as discussed earlier, the Schmerber and Cupp cases apparently establish that the Fourth Amendment does not require a formal arrest as a prerequisite to testing. That being the case, most implied-consent statutes actually impose greater legal constraints on alcohol testing than does the U.S. Constitution.

It follows that in states with UVC-type provisions, no penalties can be imposed under existing law on a driver who refuses to submit to a prearrest test. Specific legislation--such as that passed in some twelve states—would be necessary to authorize prearrest screening tests.

On the other hand, it is much less likely that implied-consent legislation would govern the use of passive NCBT devices, which do not provide a quantitative indication of a driver's BAC and which do not require the driver's participation. However, since the NCBT is intended to be "alcohol-specific," that is, capable of distinguishing ethanol from other volatile substances, some courts might characterize the NCBT as a test, which would place its use under the restrictions of the

implied-consent law. If the NCBT were held to be a test, then implied-consent legislation would all but preclude its use. This is so for two reasons. First of all, because most implied-consent statutes require a police officer to warn a driver concerning the test and its consequences prior to testing (71), surreptitious use of the NCBT would be prohibited. Second, most implied-consent statutes require a formal arrest and all such statutes require at least reasonable grounds to believe that a DWI violation had occurred. Under those circumstances an officer would almost certainly choose to arrest the driver and administer a quantitative evidential test instead of the nonevidential, nonquantitative NCBT.

Implied-consent statutes in many states offer drivers options that are not guaranteed them by the U.S. or state constitutions. The statutory option most relevant to roadside quantitative testing is the provision permitting a driver to choose among several kinds of tests—such as blood, breath, urine, or saliva. Although the Uniform Vehicle Code offers the driver no such choice of tests (72), a number of states guarantee such an option (73). This being the case, a driver conceivably could choose a test that would preclude administration of a breath test. However, because a breath test is the least intrusive and inconvenient testing method, and also because roadside testing could spare the driver the inconvenience of being transported to the stationhouse, it is likely that most drivers would choose a breath test.

In addition, most states offer a driver the right to obtain additional tests, performed at his own expense by a qualified person of his own choosing (Moulden and Voas 1975, p. 6) (74). Although exercise of this option would not constrain roadside testing, it could consume an officer's time while the driver is transported either to an appropriate testing facility or to the stationhouse to await testing. Such a result could strip the roadside testing approach of one of its benefits, namely saving police officers' time. It would not, however, preclude roadside testing.

Another provision that could constrain the use of roadside quantitative tests is the driver's limited right, in some states, to consult with an attorney to decide whether to submit to testing. A tested driver has no constitutional right to consult with counsel: a driver who submits to

chemical testing is not "giving testimony" and therefore he enjoys no right to have counsel present (75); nor is testing considered a "critical stage" of a criminal proceeding at which the defendant is entitled to have an attorney present (76). Despite this, a number of state courts have concluded that because a driver in that state is granted a statutory "option to refuse" (77) and also because a frequent consequence of chemical testing is a DWI conviction, potentially involving loss of license and confinement to jail (78), there exists a "limited right to consult with counsel" with respect to testing (79). Several states, through their implied-consent statutes, have also granted drivers limited rights to consult with their attorney (80); however, the UVC currently does not recognize such a right. Drivers' rights to counsel are limited in two respects: the driver is not necessarily entitled to have his attorney present; and the right is contingent on its not "unreasonably delaying" administration of the test. The existence of statutory rights to counsel would not impose a great constraint on roadside testing; although a driver faced with a roadside test could request access to a telephone, this request would at most delay the test for only a short time.

In sum, the roadside quantitative testing approach might be constrained by statutory provisions permitting drivers to demand additional or alternative tests, or to consult with counsel. None of those provisions prohibit the use of these devices; however, they could in a limited number of cases delay or even preclude the use of portable, roadside breath-testing devices. This is not viewed as a significant constraint.

Summary. Use of active and passive alcohol breath testing devices involve intrusions on drivers' privacy. Because the three "active" devices--the quantitative testers, the screening testers, and the remote collection devices—intrude on constitutionally protected privacy interests their use is governed by the Fourth Amendment prohibition of unreasonable searches and seizures. Current case law interprets the Fourth Amendment to require, as a condition of compelled chemical testing using active devices, either that the officer arrest the driver for DWI or that he have the equivalent of probable cause to arrest for that

offense. A formal arrest is not required. On the other hand, use of the passive NCBT likely will not be treated as a search; however, even if it were so characterized, it is unlikely that either a formal arrest or probable cause would be required prior to its use.

Implied-consent statutes, which govern alcohol testing in every state, frequently require a police officer to make a formal DWI arrest before he may test a driver; in those states, such statutes presently preclude the compelled, prearrest use of an active testing device. In a number of other states, implied-consent legislation has been supplemented by specific provisions authorizing prearrest testing. Although some statutes apparently authorize testing without probable cause and in a wide variety of circumstances—such as involvement in a traffic crash or commission of any moving violation--these provisions appear would, under existing case law, probably violate the Fourth Amendment and are not likely to withstand vigorous legal challenge.z

While it is unlikely that the NCBT would be considered a "test" governed by implied-consent legislation, some courts—owing to the alcohol specificity of the NCBT--might consider its use to be a test. In those states, its use would be precluded.

Passive testing likely would be permissible following any lawful police-driver encounter; active testing in the absence of probable cause likely would be unconstitutional; and all active testing is governed by requirements—which may include choice of tests and consultation with counsel--imposed by implied-consent legislation. Both constitutional and statutory conditions must be observed, otherwise evidence obtained from alcohol-testing devices cannot be used in a subsequent DWI prosecution.

2.3 Legal Considerations Affecting the Use of Test Results as Evidence of DWI

Even in cases when the use of an active or passive device is constitutional, that use nonetheless may be constrained by statutory and common-law (court-imposed) requirements governing the use of chemical results in DWI prosecutions. This section discusses: how the due process guarantee of a fair trial may affect alcohol testing; statutory and

administrative requirements setting out testing procedures; and the impact of laws generally governing the arrest and prosecution of suspected DWI offenders. This section also discusses the potential tort liability of police authorities using these countermeasures, and examines highway safety legislation that does not concern chemical testing per se, but which expresses public policies that may generate constraints to testing procedures.

Due Process of Law: The Guarantee of a Fair Trial. The quantitative test is intended to gather from a driver evidence to be introduced at trial. Any use of that evidence is therefore subject to the fair trial guarantees of the Sixth Amendment to the U.S. Constitution (81). Cases applying that constitutional provision have concluded that due process is violated when the prosecution intentionally destroys material evidence that would tend to acquit the defendant at trial (82). That reasoning was applied to DWI trials by the California Supreme Court in People v. Hitch (83). The Hitch court found that test results are material evidence of guilt of DWI, and that there exists a scientifically valid method by which breath samples could be reexamined for BAC by the defendant's experts; on that basis it concluded that the prosecution's intentional destruction--whether done in good faith or bad—of ampoules containing breath samples violated due process (84). Courts in a small number of other states so far have followed Hitch (85); however, most courts have declined to do so, one major reason being that there is dispute within the scientific community over whether there in fact exists a scientifically valid means of retesting ampoules (Reeder 1977, pp. 3-4; National Safety Council undated) (86).

Scientific Validity. Police agencies have for many years used chemical alcohol testing devices to measure drivers' BAC, and the scientific validity of a number of such devices has long been recognized by courts (87). However, before evidence gathered from a scientific device can be admitted at a DWI trial, it must be shown to be reliable. These requirements, which apply to all evidence produced by technological

devices, are as follows: the device must be shown to have been in proper working order; the operator must be properly trained and qualified; and proper operating procedures must have been followed (Erwin 1976, pp. 14-01—28-44; Cleary 1972, pp. 517-27, 763-66) (88). It is assumed that active breath testing devices will have been recognized by courts as scientifically valid. However, it should be noted that the roadside test and collection approach involves the transportation of testing equipment; consequently, this exposure might cause it to malfunction more frequently than nonportable testing devices. In addition, the testing of suspects likely will be carried out by police officers themselves rather than by medical personnel. These conditions of roadside use may increase the likelihood of inaccurate results at trial. Such a result would not preclude the use of the roadside approach, but it is likely to increase the practical difficulties of proving the validity of the devices and the procedures as they are placed in use.

Statutory and Administrative Regulations Governing Alcohol Testing. Implied-consent statutes normally impose a number of conditions that must be complied with by police officers; these include, for example, advising the driver of his rights in connection with testing or warning of the consequences of refusal (89). Some states also require that these implied-consent advisories be given in writing (90). In addition, implied-consent statutes normally authorize an administrative body, such as the state health department, to prescribe testing methods and procedures (91). Commonly, when a police officer fails to observe statutory procedures or when officers (or other persons who conduct chemical tests) fail to observe those procedures, it is possible that the test results would not be admitted at the driver's DWI trial (92).

Some regulations pertain to the accuracy and working condition of the testing devices or to the validity of test results. For example, devices must be calibrated at regular intervals (93), or test results must agree with one other within a given tolerance (94); if these provisions are not complied with, the results might not be admitted at trial. Those who use the quantitative devices must observe these requirements; however,

complying with them would not be much different in the case of the roadside testing than in the case of other alcohol testing. While these devices are designed to be transported in patrol vehicles, and while their exposure might cause them to malfunction more often than nonportable devices, they nonetheless operate on the same principles as existing testing equipment.

However, one particular provision that could constrain roadside implementation is the requirement that alcohol testing be conducted by a "qualified person." The UVC permits only medically trained personnel to administer blood tests, but does allow arresting police officers to conduct evidential breath tests (95); however, some statutes--apparently in the interest of fairness--specifically disqualify the arresting officer from administering any tests (96). Such statutes might require the arresting officer to summon another officer to the test site; this practice could detract from the time savings that the roadside testing is designed to produce. Finally, when evidence obtained by the roadside test must be introduced at trial, its "chain of custody" (that is, its whereabouts from the time of testing to the time of trial) must be established (Cleary 1972, pp. 527-28). The keeping of logs by police officers or some similar procedure therefore would be required in the course of roadside testing. This is not viewed as a significant problem.

Potential Tort Liability of Police Officers. Because one feature of the suggested countermeasure approaches will be roadside rather than stationhouse testing of suspected DWIs, it is likely that an increased number of alcohol impaired drivers would be identified by the roadside tests. If, as has been suggested, drivers identified as DWIs are released into the custody of a family member or a friend rather than detained at the stationhouse, it is possible that some released DWIs might resume driving. It has been suggested that a police agency could be held liable for any injuries caused by a released DWI, although current case law indicates that such a possibility is remote (Little and Cooper 1977). These legal considerations especially pertain to officers who test a driver at the roadside and as a result obtain quantitative demonstration of his

intoxication (97). Although possible tort liability does not at present pose a strong constraint, it should be considered by those who implement roadside testing programs. Principles of common sense and sound police procedure would discourage the immediate release of drivers whose abilities are known to be impaired.

Evidential Use of Breath Test Results. Discussion of breath testing technology and devices is often confused by the terminology used to describe the various devices. Deliberate use has been made in this volume of the terms **active** and **passive.** Active devices have been identified as **screening** devices, **quantitative** devices, and **remote sampling** devices.

In doing so we have attempted to follow the established terminology of the field, in particular, the language of the National Safety Council Committee on Alcohol and Drugs. Other terminology is in use. While well-intentioned and appropriate for communication in a limited context, the terminology tends to be confusing in the more general context. Specifically, we refer to the use of the phrase **evidential** tester to refer to quantitative test devices. Portable quantitative testers are often referred to by NHTSA personnel as **evidential roadside testers.**

Quantitative test devices are designed specifically to measure BAC values with sufficient precision to allow the introduction of the test result at trial as evidence of intoxication. The laws of most states provide that operating a vehicle with a BAC in excess of a specified level (usually .10% w/v) creates the **presumption** (actually a nonbinding inference) of DWI. In "presumption" states, additional evidence is required to show that the driver operated a motor vehicle and that the ability to drive was impaired. The requirement to prove impaired driving varies from state to state depending on the precise language of the statute and its interpretations by the courts of that state. A growing number of states have passed laws that make it illegal **per se** to operate a motor vehicle with a BAC in excess of a specified level (again, usually .10% w/v) (98). In these per se states, proof of an illegal BAC—but not proof of impaired driving—is required for conviction.

The initial thrust of breath testing technology was to produce breath testing devices that accurately measured BAC to develop evidence for use at trial as proof of intoxication. As the technology evolved, interest developed in devices that could provide a qualitative indication of intoxication that would serve as a guide to the officer in the field or to a driver who might use such a device as a self-tester. These devices were not intended to meet quantitative test standards and were termed by some **nonevidential** devices.

From a design standpoint or from a primary use standpoint such terminology may be accurate. From a legal standpoint, however, the terminology is inaccurate and creates confusion. All facts and circumstances associated with the investigation of an offense can constitute evidence. Results from a screening test could be admitted as evidence in a civil action for false arrest to establish the validity of an officer's actions. Screening tests that are specific for alcohol could be admitted along with the officer's testimony of impaired driving to prove a DWI offense in those cases where a driver took a screening test but refused a quantitative test.

Thus, one should recognize that all active tests produce evidence. Labeling some active tests "evidential" and others "nonevidential" is imprecise and can be misleading. The same is true for the emerging passive test technology. The passive NCBT is not intended to quantitatively measure a driver's BAC. It is intended to collect evidence—specifically to detect alcohol presence in the normally expelled breath of a driver. This information may be the evidence that, along with other relevant facts, constitutes the probable cause for the driver's DWI arrest. If no further tests are administered, as well may be the case when the driver refuses to take quantitative tests following an arrest, evidence of alcohol presence established by the NCBT could be an important element of the total evidence presented at a trial.

Perhaps the best way to obtain an adequate perspective on the evidential role of test devices is to remember that for many years drinking and driving offenses were prosecuted without test results. The arresting officer's testimony and that of other witnesses about the

impaired driving behavior of the charged driver was (and still is) sufficient grounds for conviction.

From a design perspective and from a system-management perspective, it is wise to conceive of an orderly progression in the use of passive and active devices that will result in precise, relevant, and persuasive evidence for use at trial. However, one should remember that even with the most sophisticated devices available, all of them will not be used in every case. Even if all devices are used, sometimes one or more will not function properly. Cases will be tried using the best evidence available. That evidence may come from any of the devices that we have discussed—passive and active.

Policy Considerations Found in Other Areas of Highway Safety. Because the roadside testing and prearrest screening countermeasures have not come into wide use, and because the NCBT so far is only a concept, existing law is unlikely to describe all the possible constraints affecting their implementation. This is likely to be especially true with respect to the NCBT, the use of which could offend widely held notions of privacy (Westin 1966). Court decisions have established quite clearly that the constitutional guarantee of privacy would not preclude officers from using devices such as the NCBT (99) and, as stated earlier, the Fourth Amendment probably poses no constraints to its use.

There do, however, exist statutes that express public policies against the surreptitious use of law-enforcement devices. Many states have, for example, passed legislation in effect prohibiting the police from "hiding" radar units or establishing speed zones in such a way as to trap unsuspecting drivers (Note 1974) (100). Some police forces, as a matter of departmental policy, prohibit the use of unmarked cars in traffic-law enforcement (101). Thus, it is possible that legislation would be passed that would prohibit or restrict surreptitious use of the NCBT.

In addition to the extent that legislatures fail to authorize the use of screening tests, retain arrest requirements in their implied-consent statutes, and provide drivers rights to alternative tests, additional tests, or attorney consultation, such legislation reflects public policies that

constrain the use of countermeasure devices.

Summary. In addition to the constitutional constraints that restrict the use of the active and passive breath tests for alcohol, other constraints may arise as the result of constitutional, statutory, common-law and public policy considerations that will affect their use in prosecuting drivers for DWI.

2.4 Summary of Legal Issues

The active and passive breath testing approaches are intended to be used by police officers to detect and identify DWI offenders. Taking enforcement action against drunk drivers, and using technological devices to aid in enforcement, is valid and constitutional.

Constitutional and statutory provisions restrict the circumstances under which testing can take place. These restrictions depend on whether testing is "active" or "passive." Use of active devices--that is, ones requiring the subject's cooperation and a deep lung air sample--has been characterized as a "search" and therefore must conform to Fourth Amendment standards of reasonableness. Accordingly, either the driver's formal arrest for DWI or probable cause to make a DWI arrest is required before any of these devices may constitutionally be used. This is so not only because active testing is a search, but also because the administration of any such test requires the detention of the tested driver, which is a seizure.

Even though the Constitution may not require a formal arrest prior to active testing, most states impose such a requirement by statute. In these states, any compelled prearrest testing is currently prohibited.

Administration of evidential tests is governed by implied-consent legislation, which may grant drivers rights not guaranteed them by the Constitution. These include, in some states, rights to additional tests, to choose among tests, and to consult with an attorney before testing. Those provisions might in some cases preclude or hamper the use of the active tests; however, none imposes an absolute prohibition on their use. The use of the NCBT is not a search. While it may be considered a test

in some states, it is unlikely to face any constraints other than the requirement of a valid initial stop. However, public attitudes regarding surreptitious devices--as evidenced by legislation in other areas—might trigger the passage of restrictive legislation.

In addition to the requirements governing stopping and testing drivers, there also exist constitutional, statutory, and common-law constraints on the use of test results obtained from these devices in DWI prosecutions. When quantitative testing devices are used, the constitutional fair trial guarantee governs the use of test results; some state courts have interpreted this to require retention of breath samples. In addition, the evidential testing process is governed by specific implied-consent provisions, which are designed to ensure fair and accurate test results. Finally, alcohol-testing devices are subject to principles of scientific validity and reliability that pertain to technological devices in general.

In sum, the following legal constraints to the use of active and passive breath tests for alcohol have been identified:

- the requirement of probable cause to arrest before any active device can be used;
- the application in some states of the Hitch rule requiring, as an aspect of due process, the retention of breath samples taken with a quantitative device;
- statutory rights to demand additional or alternative tests, or to consult with an attorney, which may hamper or even preclude testing in some cases;
- existing restrictions imposed by implied-consent legislation on the use of screening tests; and
- possible statutory restrictions on the use of passive (NCBT) testing devices.

3.0 APPROACHES TO CONSTRAINT RESOLUTION

This section discusses the principal constraints on the use of active and passive breath tests for alcohol. Methods for resolving, avoiding, or removing the identified constraints are suggested.

3.1 Constitutional Constraints

The basic legal constraint on the use of active or passive breath tests is the Fourth Amendment to the U.S. Constitution. It is unlikely that this constraint will be removed or that it can be avoided. Resolution of the issues associated with this constraint can be best addressed by adopting procedures that are in compliance with the Constitution.

The Adjudication Branch of the Office of Driver and Pedestrian Programs of NHTSA has suggested a scenario for the use of passive and active testing devices. The use of the NCBT is suggested following a lawful contact between an officer and a driver to determine if alcohol is present. If alcohol is found to be present, the driver would be required under the provisions of a prearrest test law to take an active screening test. If the driver did not pass this test, the driver would be arrested and asked to take an active quantitative test. The quantitative test might be administered at the roadside, at the police station, or at some other location; or a remote collection device might be used at the roadside to collect a breath specimen for later analysis.

In this scenario the use of the screening device is proposed to assist the officer in gathering evidence to **establish** probable cause to arrest for a DWI offense. This approach has also been stated in a recent NHTSA policy paper advocating the passage of prearrest breath testing legislation (U.S. Department of Transportation 1979, p. 2). Such use of the passive NCBT and the active screening test devices is suggested for those cases where physical evidence of the driver's impairment is equivocal or even absent (Dozier 1976, p. 1; Moulden and Voas 1975, pp.

4-5, 8).

As previously noted, the use of a passive device such as the NCBT does not constitute a search. Thus, significant legal issues are not likely to arise from its use following a lawful contact between an officer and an offender. We agree with the first portion of the NHTSA scenario. Public policy considerations suggest, however, that surreptitious use be avoided.

Current case law interpreting the Fourth Amendment indicates that the use of any active test device--that is, one requiring the subject's cooperation--is a search. At a minimum, therefore, evidence sufficient to constitute probable cause to arrest for DWI offense must exist to use an active test device. This is true whether the test involves a screening device or a quantitative device. We therefore conclude that use of an active screening device in the absence of probable cause is prohibited by the Fourth Amendment. Thus, we disagree with the NHTSA view that a screening device can be used to **establish** probable cause. To meet constitutional requirements we suggest that passive tests be used following a lawful officer-driver contact. Evidence obtained through the use of the passive device may be used in conjunction with all other evidence available to the officer (including, for example, evidence of impaired driving, slurred speech, poor physical coordination, and general appearance) to establish probable cause that a DWI offense has been committed. As we pointed out earlier, the probable-cause requirement in DWI cases is rather easily met. When probable cause has been established, we conclude that it is constitutionally permissible to administer an active breath test (either a screening test, a quantitiative test, or both) that requires the subject's cooperation to provide a sample.

Following this approach, we believe, will resolve the basic constitutional constraints. Additional statutory constraints exist, however, in most states.

3.2 Statutory Constraints

Statutory law exists in every state that constitutes a legal constraint on breath testing for alcohol. Implied-consent statutes are the most

common. In general, implied-consent statutes apply to active quantitative testing for BAC. No constitutional right exists for a driver to refuse a lawful test for BAC. However, implied-consent statutes grant this right, providing as a penalty for refusal that the driver's license will be suspended for a period of time. Other provisions of these laws usually require an arrest prior to requesting the driver to take a test, may provide for the opportunity to consult an attorney prior to taking a test, may provide for the driver to select the type of test to be given (blood, breath, or urine), and often provide for the driver to take additional tests for independent analysis.

Some of the provisions of these laws—such as the right to consult an attorney, or the right to refuse—do not constitute significant constraints. The provisions that constitute the major impediments are the provisions that allow the driver to select the test method, and the requirement of a **formal** arrest prior to requesting the test. Provisions that allow the driver to select the test can delay investigations that focus on alcohol impairment alone. Moreover, these provisions could defeat investigations that deal with impairment due to drugs other than with alcohol or alcohol in combination with other drugs. The requirement of a formal arrest precludes prearrest testing. This results in the practical elimination of the use of screening tests in many jurisdictions. In some jurisdictions, moreover, implied-consent legislation provides for only one test so that an officer could not request a driver to take both a screening test and a quantitative test.

Resolution of statutory constraints is straightforward but not easily done. First, an analysis must be conducted to ensure that the constraint perceived to exist actually exists. Many enforcement agencies are very conservatively interpreting existing law.

Second, if a legal constraint is found to exist due to the statutory law of a jurisdiction, modification of the law may be sought as a means of removing the constraint. This is not a simple process and is unlikely to be accomplished in a short period of time.

A major statutory constraint that directly affects the breath testing approaches of interest is the requirement that appears in most

implied-consent laws, including the Uniform Vehicle Code, that a formal arrest be made before a driver can be asked to take a test. This is a recognized constraint on using screening tests to identify impaired drivers. NHTSA has advocated the passage of laws that would allow prearrest testing to address this problem. The objective is worthy. As previously noted, however, we conclude that such laws would be valid only if they provided for testing when probable cause to arrest existed. An attempt to allow active testing when some lesser amount of evidence existed would not only be unconstitutional, but could also retard DWI law enforcement by creating judicial confusion over the definition of probable cause to arrest for DWI.

We suggest that a more direct approach to resolution of this legal constraint would be to amend the implied-consent laws to provide that a test may be requested by an officer when probable cause to arrest exists. This would meet the constitutional standard of reasonableness for the search, yet would eliminate the necessity for cumbersome compliance with formal arrest procedures. Revision of the implied-consent laws should also allow the arresting officer—not the driver—to choose among available tests. Provision for multiple tests should be made. This would eliminate possible constraints on the use of passive devices such as the NCBT and enable the sequential use of a screening test and a quantitative test.

This can be stated as a concept for constraint resolution quite simply. Implementation of the suggestion will be difficult. Implied-consent laws, drinking-driving laws, and criminal statutes present a complex array of intertwined legislation. Careful legislative drafting on a state-by-state basis would be required for full implementation. Modification of relevant Uniform Vehicle Code provisions would constitute a sound beginning for resolution of these critical statutory constraints.

3.3 Judicial Constraints

Courts in a few states have followed the precedent established in People v. Hitch (102) that requires police officers or prosecutors to retain breath ampoules, obtained in the course of quantitative breath testing, for additional testing by the defendant if so desired. In those jurisdictions,

the Hitch doctrine would constrain quantitative testing. It might also constrain the use of information gathered through passive or active screening testing should such information be offered as evidence at a DWI trial as proof of the offense.

Most courts, however, have refused to follow the Hitch case, rejecting the reasoning on which it was based. Recognized scientific authorities have strongly criticized the scientific basis on which the Hitch decision rests (National Safety Council undated, p. 21).

Resolution of this constraint can be best addressed by actively contesting Hitch-like cases in the first instance and ensuring that competent expert evidence is presented. Appeal of cases that follow Hitch is recommended.

3.4 Summary

The implementation of passive and active breath-testing approaches for alcohol is constrained by constitutional, statutory, and judicial considerations. The following approaches have been suggested for resolution of the major identified legal constraints.

- Passive testing should be openly conducted after lawful contact between an officer and a driver has occurred.
- Active testing (screening tests and quantitative tests) should be required only when there exists sufficient evidence to constitute probable cause to arrest for DWI.
- Provisions of existing statutory law of the several states constitute significant limitations on active testing. Amendment of the implied-consent laws to allow test(s) of a driver's breath when probable cause to arrest exists is recommended.
- Court-imposed requirements to retain breath ampoules for further testing, which follow the reasoning of the Hitch case, do not appear to be scientifically valid and should be contested through appropriate legal procedures.

4.0 CONCLUSIONS AND RECOMMENDATIONS

This volume has examined existing and potential legal constraints on the use of passive and active breath testing devices for alcohol.

The **passive** device, the Non-Cooperative Breath Tester (NCBT), is still in a conceptual stage. The proposed device would collect an air sample that would include the normally expelled breath of a driver and analyze the air sample for the presence of ethanol.

The use of the NCBT device following lawful contact between an officer and a driver does not raise any significant constitutional issues. Surreptitious use of the device may raise public policy issues. Thus, it is recommended that the device be used openly. As the device is expected to be ethanol-specific, and thus more than a mere "extension of an officer's nose," it may be viewed by some courts as a test for alcohol. If so, use of the NCBT device would be governed by existing statutory law regulating chemical tests for alcohol. This constraint could be resolved, if it arose, by modification of existing statutory law.

No significant legal constraints that would preclude implementation of the passive NCBT were identified. We note, however, that the technical feasibility of the device has not been established. Further, given the inherent intrusive nature of the device and intended use, important issues of public acceptability are likely to arise.

We recommend that the issues of public acceptability and technical feasibility be fully explored before extensive development work on the device is initiated. As part of the examination of public acceptability, an examination of the attitudes of the law system toward the use of such a device should be undertaken. In particular, the opinions of key judicial officers on the legal acceptability of such a device and its use should be sought.

Three **active** devices were considered. All require the cooperation of a subject who must provide a specimen of deep lung breath for analysis.

All three devices exist today but it is expected that improvements in technology will make their widespread use more feasible in the future. One is a screening device designed to indicate when an individual has a breath alcohol concentration (BAC) higher than a certain level. A **screening** device does not measure BAC with sufficient precision to warrant introduction of a quantitative reading in evidence but does provide a qualitative indication of intoxication. The second device is a **quantitative** tester intended to precisely measure BAC. Such devices exist and are in widespread use today. This volume focused on examination of issues that are likely to arise as advanced technology versions of these devices become more portable and are used to test drivers at the roadside. The third device (the Remote Collection Device) is also intended for roadside use. It collects a breath specimen and stores it for later analysis.

Active breath testers have been used for years in enforcement of drinking and driving laws. A considerable body of law establishes the validity of their use while also establishing the contexts in which they may be used. The use of an active breath tester is a search and is governed by the Fourth Amendment of the U.S. Constitution. The Fourth Amendment requires searches to be reasonable. In the case of active breath testers, a simple statement of the constitutional reasonableness requirement is that probable cause to arrest an individual for a drinking and driving offense must exist before an active breath test can be compelled.

Suggestions that active screening tests be used to **establish** probable cause appear to be in direct conflict with the Constitution. Similarly, statutes that authorize the administration of active tests to drivers, simply because of committing a traffic offense or involvement in a traffic accident, or other circumstances that do not by themselves constitute probable cause to arrest for alcohol-impaired driving, are likely to be found unconstitutional if challenged.

Many states have passed implied-consent laws providing that an officer **after arrest** may request a driver to submit to a chemical test for alcohol. The statutes give the driver the right to refuse, and receive

instead a driver's license suspension as the penalty for refusal. The "right to refuse" is a legislatively created right that does not exist as a matter of constitutional law. Further, it appears that it would be constitutional to require the test when probable cause to arrest existed without requiring a formal arrest.

We recommend that consideration be given to amend existing implied-consent laws to allow an officer to request that a driver submit to test(s) of the officer's choice when probable cause to arrest for DWI exists. Modification of implied-consent legislation in this manner would allow the use of screening tests followed by quantitative tests if warranted. The formal arrest process would then follow the testing procedure.

Existing statutory law relating to chemical testing for alcohol is extremely complex. It has evolved through considerable debate involving strongly-held opinions. Modification of existing law will not be simple. Our inquiry has focused on the legal feasibility in the context of legal theory and existing law. Our examination did not include an examination of legal or public attitudes. Thus, we recommend that **consideration** be given to amending existing implied-consent laws. We also recommend that further examination be undertaken of the legal and public acceptability of the suggested approach.

APPENDIX A
SELECTED IMPLIED-CONSENT PROVISIONS OF THE
UNIFORM VEHICLE CODE
(SUPPLEMENT II, 1976)

§ 6-205.1--Revocation of license for refusal to submit to chemical tests

(a) Any person who operates a motor vehicle upon the highways of this State shall be deemed to have given consent, subject to the provisions of § 11-902.1, to a chemical test or tests of his blood, breath, or urine for the purpose of determining the alcoholic or drug content of his blood if arrested for any offense arising out of acts alleged to have been committed while the person was driving or in actual physical control of a motor vehicle while under the influence of alcohol or any drug. The test or tests shall be administered at the direction of a law enforcement officer having reasonable grounds to believe the person to have been driving or in actual physical control of a motor vehicle upon the highways of this State while under the influence of alcohol or any drug. The law enforcement agency by which such officer is employed shall designate which of the aforesaid tests shall be administered.

(b) Any person who is dead, unconscious or who is otherwise in a condition rendering him incapable of refusal, shall be deemed not to have withdrawn the consent provided by paragraph (a) of this section and the test or tests may be administered, subject to the provisions of § 11-902.1.

(c) A person requested to submit to a chemical test as provided above shall be warned by the law enforcement officer requesting the test that a refusal to submit to the test will result in revocation of his license to operate a motor vehicle for six months. Following this warning, if a person under arrest refuses upon the request of a law enforcement officer to submit to a chemical test designated by the law enforcement agency as provided in paragraph (a) of this section, none shall be given, but the department (of motor vehicles), upon the receipt of a sworn report of the

law enforcement officer that he had reasonable grounds to believe the arrested person had been driving or was in actual physical control of a motor vehicle upon the highways of this State while under the influence of alcohol or any drug and that the person had refused to submit to the test upon the request of the law enforcement officer, shall revoke his license subject to review as hereinafter provided.

§ 11-902—Driving while under influence of alcohol or drugs

(a) A person shall not drive or be in actual physical control of any vehicle while:

1. There is 0.10 percent of more by weight of alcohol in his blood;
2. Under the influence of alcohol;
3. Under the influence of any drug to a degree which renders him incapable of safely driving; or
4. Under the combined influence of alcohol and any drug to a degree which renders him incapable of safety driving.

(b) The fact that any person charged with violating this section is or has been legally entitled to use alcohol or a drug shall not constitute a defense against any charge of violating this section.

(c) Except as otherwise provided in § 11-902.2, every person convicted of violating this section shall be punished by imprisonment for not less than 10 days nor more than one year, or by fine of not less than $100 nor more than $1,000, or by both such fine and imprisonment and, on a second or subsequent conviction, he shall be punished by imprisonment for not less than 90 days nor more than one year, and, in the discretion of the court, a fine of not more than $1,000.

§ 11-902.1—Chemical test

(a) Upon the trial of any civil or criminal action or proceeding arising out of acts alleged to have been committed by any person while driving or in actual physical control of a vehicle while under the influence of alcohol or drugs, evidence of the amount of alcohol or drug in a person's blood at the time alleged, as determined by a chemical analysis of the

person's blood, urine, breath or other bodily substance, shall be admissible. Where such a chemical test is made the following provisions shall apply:

1. Chemical analyses of the person's blood, urine, breath, or other bodily substance to be considered valid under the provisions of this section shall have been performed according to methods approved by the (State department of health) for this purpose. The (State department of health) is authorized to approve satisfactory techniques or methods, to ascertain the qualifications and competence of individuals to conduct such analyses, and to issue permits which shall be subject to termination or revocation at the discretion of the (State department of health).

2. When a person shall submit to a blood test at the request of a law enforcement officer under the provisions of § 6-205.1, only a physician or a registered nurse (or other qualified person) may withdraw blood for the purpose of determining the alcoholic content therein. This limitation shall not apply to the taking of breath or urine specimens.

3. The person tested may have a physician, or a qualified technician, chemist, registered nurse, or other qualified person of his own choosing administer a chemical test or tests in addition to any administered at the direction of a law enforcement officer. The failure or inability to obtain an additional test by a person shall not preclude the admission of evidence relating to the test or tests taken at the direction of a law enforcement officer.

4. Upon the request of the person who shall submit to a chemical test or tests at the request of a law enforcement officer, full information concerning the test or tests shall be made available to him or his attorney.

5. Percent by weight of alcohol in the blood shall be based upon grams of alcohol per 100 cubic centimeters of blood.

(b) Upon the trial of any civil or criminal action or proceeding arising out of acts alleged to have been committed by any person while driving or in actual physical control of a vehicle while under the influence of alcohol, the amount of alcohol in the person's blood at the time alleged as shown by chemical analysis of the person's blood, urine, breath, or other bodily substance shall give rise to the following presumptions:

1. If there was at that time 0.05 percent or less by weight of alcohol in the person's blood, it shall be presumed that the person was not under the influence of alcohol.

2. If there was at that time in excess of 0.05 percent but less than 0.10 percent by weight of alcohol in the person's blood, such fact shall not give rise to any presumption that the person was or was not under the influence of alcohol, but such fact may be considered with other competent evidence in determining whether the person was under the influence of alcohol.

3. If there was at that time 0.10 percent or more by weight of alcohol in the person's blood, it shall be presumed that the person was under the influence of alcohol.*

4. The foregoing provisions of this subsection shall not be construed as limiting the introduction of any other competent evidence bearing upon the question whether the person was under the influence of alcohol.

OPTIONAL (c) If a person under arrest refuses to submit to a chemical test under the provisions of § 6-205.1, evidence of refusal shall be admissible in any civil or criminal action or proceeding arising out of acts alleged to have been committed while the person was driving or in actual physical control of a motor vehicle while under the influence of alcohol or drugs.

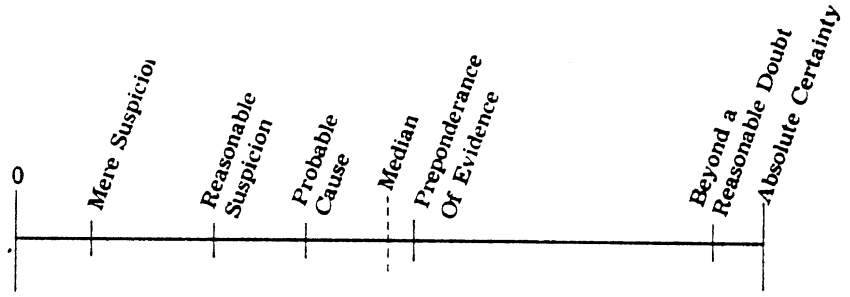
* Subsection (b)3 need not be enacted in any state adopting § 11-902(a)1 [which makes driving with a BAC of .10% or above an offense, irrespective of actual impairment of driving].

APPENDIX B

QUANTITATION OF PROBABLE CAUSE AND REASONABLE SUSPICION

The relationship among probable cause, reasonable suspicion, and other evidential standards has been put into quantitative terms by Professor J. L. Dowling in Criminal procedure. Teaching materials. Professor Dowling's "weight of evidence" scale and his explanation of it are reproduced here.

WEIGHT OF EVIDENCE



The above linear depiction represents weight of evidence (i.e., the amount of effect evidence should be given by its evaluator--judge, jury peace officer), beginning on the left with zero, or no evidence at all, and continuing to the right until the weight of evidence raises no other inference than absolute certainty of the proposition sought to be proven. Some slight distance short of absolute certainty lies the point representing the standard for conviction of a criminal offense in America, proof beyond a reasonable doubt. Likewise, just to the right of the median is the point which represents the degree of evidence required to recover damages in a civil lawsuit—the preponderance of the evidence.

Slightly to the right of the start of the continuum is a point designated "mere suspicion." This point represents a hunch, intuition, instinct, or otherwise inconclusive determination.

The minimum amount of information necessary to constitute probable cause may be seen to be more than mere suspicion but less than a

preponderance of the evidence. It is well short of proof beyond a reasonable doubt but certainly much greater than a hunch or intuitive guess.

FOOTNOTES

1. The abbreviation "DWI" is used throughout this volume to refer generically to drinking-driving offenses.

2. As of December 1978, the following "preliminary breath test" statutes had been enacted: FLA. STAT. § 322.261(1)(b) (1978); ME. REV. STAT. ANN. tit. 29, § 1312.11C (West Supp. 1978-79); MINN. STAT. ANN. § 169.121(6) (West Supp. 1979); MISS. CODE ANN. § 63-11-5 (1973); NEB. REV. STAT. § 39-669.08(3) (1974); N.Y. VEH. & TRAF. LAW § 1193a (McKinney 1973 and Supp. 1978-79); N.C. GEN. STAT. ANN. § 20-16.3 (1978); N.D. CENT. CODE § 39-20-14 (Supp. 1977); S.D. COMP. LAWS ANN. § 32-23-1.2 (1976); VA. CODE § 18.2-267 (Supp. 1979); and WIS. STAT. ANN. § 343.305(2)(a) (West Supp. 1979). D.C. CODE ANN. § 40-1002(b) (1973) could be termed a "preliminary breath test" statute since it allows police officers to require tests in cases where the driver is involved in a fatal or personal injury crash and is arrested for a traffic offense other than DWI; the test results could then be introduced at a subsequent DWI trial.

   Indiana's statute, IND. CODE ANN. § 9-4-4.5-3 (Burns Supp. 1978) specifies that chemical tests for alcohol are to be administered before arrest; however, since the equivalent of probable cause is required before any test can be demanded, the Indiana statute operates in the same manner as those of most other states.

3. See, e.g., FLA. STAT. § 322.261(1)(b)(1) (1978); ME. REV. STAT. ANN. tit. 29, § 1312.11C (West Supp. 1978-79); N.C. GEN. STAT. ANN. § 20-16.3 (1978); and VA. CODE §§ 18.2-267(a), 18.2-267(c) (Supp. 1979).

4. 16 AM. JUR. 2d Constitutional Law §§ 259-76 (1964); see generally, Berman v. Parker, 348 U.S. 26 (1954); and Cady v. City of Detroit, 289 Mich. 499, 286 N.W. 805 (1939).

5. Lawton v. Steele, 152 U.S. 133 (1894); see also, 16 AM. JUR. 2d Constitutional Law §§ 277-87 (1964).

6. The importance of the public interest in traffic safety was recognized in the following cases: Mackey v. Montrym, —U.S.—, 47 U.S.L.W. 4798 (1979); Dixon v. Love, 431 U.S. 105 (1977); California v. Byers, 402 U.S. 424 (1971) (plurality opinion); Schmerber v. California, 384 U.S. 757 (1966); and Hess v. Pawloski, 274 U.S. 352 (1927).

7. Schmerber v. California, 384 U.S. 757 (1966); Breithaupt v. Abram,

352 U.S. 432 (1957); Campbell v. Superior Court, 106 Ariz. 542, 479 P.2d 685 (1971); People v. Brown, 174 Colo. 513, 485 P.2d 500 (1971), appeal dismissed, 404 U.S. 1007 (1972).

8. In prosecutions based on radar speed measurements and chemical test results, the **use** of the scientific evidence—not the method of gathering it—was attacked; illustrative cases include Commonwealth v. Di Francesco, 458 Pa. 188, 329 A.2d 204 (1974) [chemical test for intoxication]; and Dooley v. Commonwealth, 198 Va. 32, 92 S.E.2d 348 (1956) [radar speed measurements]. See generally, the following passage from Breithaupt v. Abram, 352 U.S. 432, 439 (1957): "Modern community living requires modern scientific methods of crime detection lest the public go unprotected. The increasing slaughter on our highways, most of which should be avoidable, now reaches the astounding figures only heard on the battlefield. The States, through safety measures, modern scientific methods, and strict enforcement of traffic laws, are using all reasonable means to make automobile driving less dangerous."

9. Schmerber v. California, 384 U.S. 757 (1966); Breithaupt v. Abram, 352 U.S. 432 (1957); see also, People v. Superior Court of Kern County, 6 Cal. 3d 757, 493 P.2d 1145, 100 Cal. Rptr. 281 (1972).

10. U.S. CONST. amend. V states that "No person . . . shall be compelled in any criminal case to be a witness against himself . . . " This provision was held applicable to the states in Malloy v. Hogan, 378 U.S. 1 (1964).

11. Schmerber v. California, 384 U.S. 757 (1966).

12. See, Chimel v. California, 395 U.S. 752 (1969).

13. A typical implied-consent statute is found in UNIFORM VEHICLE CODE §§ 6-205.1, 11-902.1 (Supp. II 1976). These sections are set out in Appendix A to this volume.

14. UNIFORM VEHICLE CODE § 6-205.1(c) (Supp. II 1976). The period of suspension varies from state to state.

15. UNIFORM VEHICLE CODE § 11-902.1(b) (Supp. II 1976) sets out the presumptions (which actually are inferences, permitting—but not requiring—a judge or jury to reach a verdict on the basis of test results) raised by BAC levels: a BAC of .05% or less gives rise to a presumption of nonintoxication; a BAC between .05% and .10% gives rise to no presumption but is relevant evidence of intoxication; and a BAC of .10% or more gives rise to a presumption of intoxication. Most states have adopted the UVC presumptions. In addition, UNIFORM VEHICLE CODE § 11-902(a)(1) (Supp. II 1976) has defined a new offense, namely driving with a BAC of .10% or more. As of December 1978, some twelve states

have followed the UVC's "per se" provision; these are cited in note 98 below.

16. UNIFORM VEHICLE CODE § 6-205.1(a) (Supp. II 1976) requires that an officer must have "reasonable grounds to believe" (the equivalent of probable cause to believe) that the person was driving while "under the influence of alcohol or any drug," but does not specifically mention arrest. However, UNIFORM VEHICLE CODE § 6-205.1(c) (Supp. II 1976) provides that if a person **under arrest** refuses, after being warned of the consequences of his refusal to submit to a test, his driver's license will be suspended.

17. UNIFORM VEHICLE CODE § 11-902.1(a) (Supp. II 1976) authorizes tests of a driver's "blood, urine, breath, or other bodily substances."

18. UNIFORM VEHICLE CODE § 11-902.1(a)(1) (Supp. II 1976).

19. Schmerber v. California, 384 U.S. 757 (1966); see also, State v. Howard, 193 Neb. 45, 225 N.W.2d 391 (1975); State v. McCarthy, 123 N.J. Super. 513, 303 A.2d 626 (Essex County Ct. 1973); State v. Osburn, 13 Or. App. 92, 508 P.2d 837 (1973); and Commonwealth v. Quarles, 229 Pa. Super. Ct. 363, 324 A.2d 452 (1974) (plurality opinion).

20. U.S. CONST. amend. IV states that "The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated . . ." This provision was fully applied to the states in Mapp v. Ohio, 367 U.S. 643 (1961).

21. Wong Sun v. United States, 371 U.S. 471 (1963).

22. Delaware v. Prouse, — U.S. ---, 47 U.S.L.W. 4323 (1979); United States v. Martinez-Fuerte, 428 U.S. 543 (1976); United States v. Brignoni-Ponce, 422 U.S. 873 (1975).

23. In Delaware v. Prouse, --- U.S. ---, 47 U.S.L.W. 4323 (1979), the Court indicated the "reasonableness" requirement would, depending on the situation, be met by probable cause or some less stringent test (such as "reasonable suspicion"). The Court cited United States v. Brignoni-Ponce, 422 U.S. 873 (1975), as authority to the effect that some warrantless traffic **stops** could be conducted on the basis of less than probable cause.

24. Delaware v. Prouse, — U.S. —, —, 47 U.S.L.W. 4323, 4327 (1979) (concurring opinion).

25. In State v. Clark, 286 Or. 33, 593 P.2d 123 (1979) the Oregon Supreme Court took judicial notice of the following symptoms or "signs" of alcohol intoxication: (1) breath odor; (2) flushed

appearance; (3) lack of muscular coordination; (4) speech difficulties; (5) disorderly or unusual conduct; (6) mental disturbance; (7) visual disorders; (8) sleepiness; (9) muscular tremors; (10) dizziness; and (11) nausea.

26. Coolidge v. New Hampshire, 403 U.S. 443 (1971).

27. There is doubt as to whether the "inadvertance" requirement is still recognized; in this regard see, United States v. Bradshaw, 490 F.2d 1097, 1100-01 (4th Cir. 1974); and North v. Superior Court, 8 Cal. 3d 30, 502 P.2d 1305, 104 Cal. Rptr. 1305 (1972).

28. Katz v. United States, 389 U.S. 347 (1967).

29. Katz v. United States, 389 U.S. 347, 360 (1967) (concurring opinion).

30. Schmerber v. California, 384 U.S. 757 (1966).

31. See, e.g., State v. McCarthy, 123 N.J. Super. 513, 303 A.2d 626 (Essex County Ct. 1973); State v. Osburn, 13 Or. App. 92, 508 P.2d 837 (1973) [alcohol testing generally]; and Commonwealth v. Quarles, 229 Pa. Super. Ct. 363, 324 A.2d 452 (1974) (plurality opinion). There is, however, language in Quarles to the effect that breath testing is less intrusive than the blood testing that occurred in Schmerber.

32. See, People v. Graser, 393 N.Y.S.2d 1009 (Amherst Town Court 1977) in which the court treated the New York preliminary screening test as a "search and seizure" governed by the Fourth Amendment.

33. This analysis is suggested by a recent Supreme Court decision, Dunaway v. New York, — U.S. —, 47 U.S.L.W. 4635 (1979). The Court in Dunaway reaffirmed the application of the probable-cause standard to police seizures, except for a limited set of narrowly-circumscribed intrusions, such as "frisks" for weapons and brief questioning of drivers and passengers near international borders to detect illegal aliens. While Dunaway involved custodial interrogation of a suspect without probable cause to detain him, the general principles set out in that case likely would apply as well to any detention of a citizen.

34. United States v. Lee, 274 U.S. 559 (1927).

35. See, United States v. Solis, 536 F.2d 880 (9th Cir. 1976). The Solis Court offered the following justification for the reasonableness of using dogs to detect marijuana hidden in a trailer: (a) the invasion was confined to the space around the trailer; (b) no "sophisticated mechanical or electronic devices" were used; (c) the investigation was not indiscriminate but solely directed to the particular

contraband; (d) there was an expectation that the odor of marijuana would emanate from the trailer, and efforts to mask that odor were visible; (e) the method used by the officer was inoffensive; (f) there was no embarrassment to or search of the person; and (g) the target was a physical fact indicative of possible crime, not "protected communications."

Similar issues were raised in United States v. Bronstein, 521 F.2d 459 (2d Cir. 1975) [holding that no search occurred, since the items containing the marijuana detected by the dogs were left in a public place by their owner]; see also, United States v. Martinez-Miramontes, 494 F.2d 808 (9th Cir. 1974); and People v. Campbell, 67 Ill.2d 308, 367 N.E.2d 949 (1977).

36. The requirement that a testing device be ethanol-specific is discussed in Intoximeters, Inc. v. Commissioner of Administration, No. 29190 (Cole Co. Missouri Circuit Ct., October 24, 1976).

37. The plain view doctrine applies to all five senses, including the sense of smell; see, United States v. Solis, 536 F.2d 880, 882-83 (9th Cir. 1976). Decisions drawing an anology between "plain view" and "plain smell" include United States v. Johnston, 497 F.2d 397 (9th Cir. 1974); and United States v. Martinez-Miramontes, 494 F.2d 808 (9th Cir. 1974).

38. See, United States v. Alvorado, 495 F.2d 799 (2d Cir. 1974).

39. See, the cases cited below in note 45.

40. Chimel v. California, 395 U.S. 752 (1969).

41. Cupp v. Murphy, 412 U.S. 291 (1973).

42. Brinegar v. United States, 338 U.S. 160, 175-176 (1949); see also, Carroll v. United States, 267 U.S. 132, 162 (1925). This is the standard judicial definition of probable cause, at least as it relates to arrest. The American Law Institute has defined probable (reasonable) cause as a "substantial objective basis for believing that the person to be arrested committed the crime." See Dowling, J.L. 1976. Criminal procedure. Teaching materials. p. 134. St. Paul, Minnesota: West Publishing Company.

43. Poldo v. United States, 55 F.2d 866, 869 (9th Cir. 1932).

44. See Draper v. United States, 358 U.S. 307, 310, n. 3 (1959); Brinegar v. United States, 338 U.S. 160, 175 (1949). The American Law Institute's Model Code of Pre-Arraignment Procedure, Sec. 120.1(2) (Proposed Official Draft No. 1, 1972) uses the term "reasonable cause to believe" as the standard of cause authorizing a warrantless arrest.

45. Camara v. Municipal Court, 387 U.S. 523 (1967); See v. City of Seattle, 387 U.S. 541 (1967).

46. Camara v. Municipal Court, 387 U.S. 523, 537-38 (1967).

47. Davis v. Mississippi, 394 U.S. 721 (1969).

48. Terry v. Ohio, 392 U.S. 1 (1968).

49. Sibron v. New York, and Peters v. New York, 392 U.S. 41 (1968).

50. See the cases cited above in note 45.

51. See note 56 below and text accompanying.

52. The Terry court repeatedly stated that the frisk was intended solely for the protection of the officer and persons nearby from armed attack; it concluded that "there must be a narrowly drawn authority to permit a reasonable search for weapons for the protection of the police officer, where he has reason to believe that he is dealing with an armed and dangerous individual," 392 U.S. at 27, and noted elsewhere that "[t]he sole justification . . . is the protection of the police officer and others nearby, and it must therefore be confined in scope to an intrusion reasonably designed to discover (weapons)," 392 U.S. at 29.

53. In Sibron the court specifically stated: "It is axiomatic that (a search incident to arrest) may not precede an arrest and serve as part of its justification." 392 U.S. at 63.

54. People v. Pritchett, 74 Ill. App. 3d 1002, 393 N.E.2d 1157 (1979).

55. A 1977 Supreme Court decision, Pennsylvania v. Mimms, 434 U.S. 106 (1977), held that an officer may, **for his protection,** require a driver to step out of his vehicle. The Mimms court held that while requiring the driver to leave is a "seizure," its reasonableness is to be measured by a balancing test. Weighing the officer's interest in personal safety against the slight additional inconvenience to the validly stopped driver, the Court found the practice constitutional.

56. Terry v. Ohio, 392 U.S. 1, 21 (1968). "Reasonable suspicion" was the standard that appeared in New York's "stop-and-frisk" statute, under which justification the frisk in Sibron apparently took place. The Sibron decision did not directly rule on the constitutionality of the New York statue, nor did it state that a "reasonable suspicion" would justify all aspects of a "search for dangerous weapons." The Sibron court stated further that

> "At least some of the activity apparently permitted under the rubric of searching for dangerous weapons may thus be permissible under the Constitution only if the 'reasonable suspicion' of criminal activity rises to the level of probable cause. Finally, it is impossible to tell whether the standard of 'reasonable suspicion connotes the same sort of specifity, reliability, and objectivity which is the touchstone of permissible governmental action under the Fourth Amendment" (392 U.S. at 61, n. 20.)

The relationship between probable cause and reasonable suspicion has not been defined in quantitative terms by the Supreme Court. See, Dowling, J.L. 1976. Criminal procedure. Teaching materials. p. 369. St. Paul, Minnesota: West Publishing Company, in which it is stated "[R]easonable suspicion is not closely subjected to quantitative definition. It consists of something less than probable cause but more than a 'hunch.' Traditional factors used by officers in assessing probable cause . . . are also useful in attempting to weigh the presence of reasonable suspicion."

The author provides, at p. 134, a diagram describing the difference among "mere suspicion," "reasonable suspicion," and "probable cause." This diagram appears in Appendix B.

57. Schmerber v. California, 384 U.S. 757 (1966).

58. People v. Superior Court of Kern County, 6 Cal. 3d 757, 493 P.2d 1145, 100 Cal. Rptr. 281 (1972).

59. Rossell v. City and County of Honolulu, 59 Haw. 173, 579 P.2d 663 (1978).

60. See, e.g., Campbell v. Superior Court, 106 Ariz. 542, 479 P.2d 685 (1971); and People v. Brown, 174 Colo. 513, 485 P.2d 500 (1971), appeal dismissed, 404 U.S. 1007 (1972), which are typical.

61. See, UNIFORM VEHICLE CODE §§ 6-205.1(a), 6-205.1(c) (Supp. II 1976), the provisions of which are widely followed.

62. In this regard see, e.g., State v. Oevering, ---Minn.---, 268 N.W.2d 68 (1978); State v. Heintz, 286 Or. 239, 594 P.2d 385 (1979); Commonwealth v. Hlvasa, —Pa. Super.—, 405 A.2d 1270 (1979); and Van Order v. State, 600 P.2d 1056 (Wyo. 1979).

63. People v. Graser, 393 N.Y.S. 2d 1009 (Amherst Town Court 1977).

64. State, Department of Public Safety v. Grovum, 297 Minn. 66, 209 N.W.2d 788 (1973).

65. See, Commonwealth v. DiFrancesco, 458 Pa. 188, 329 A.2d 204 (1974); see also, Annot., 16 A.L.R. 3d 748 (1967).

66. See, e.g., People v. Lambert, 395 Mich. 296, 235 N.W.2d 338 (1975) which required as proof that the defendant was driving while under the influence of liquor (evidence) that the defendant's ability to drive was substantially and materially affected by the consumption of alcohol; and as proof of the lesser included offense of driving while impaired that the defendants' ability to drive was impaired by alcohol to the point that impairment of ability was visible to an ordinary, observant person.

67. "Some jurisdictions have equated probable cause to a standard whereby the facts indicate that it is 'more likely than not' that the suspect committed the act. This is likely a standard more stringent than Constitutionally required." Dowling, J.L. 1976. Criminal procedure. Teaching materials. p. 134. St. Paul, Minnesota: West Publishing Company.

68. UNIFORM VEHICLE CODE § 6-205.1(a) (Supp. II 1976).

69. UNIFORM VEHICLE CODE § 6-205.1(c) (Supp. II 1976).

70. See, e.g., the following statutes: CAL. VEH. CODE § 13353(a) (West 1971); ILL. ANN. STAT. ch. 95 1/2, § 11-501.1(a) (Smith-Hurd Supp. 1979); and MICH. COMP. LAWS ANN. §§ 257.625c(1)(a) (1977). In addition, a number of court decisions have affirmed the existence of the arrest requirement; cases are collected in State v. Oevering, --- Minn. ---, 268 N.W.2d 68, 74-75 (1978) (dissenting opinion). In some states without prearrest test provisions, the "arrest" need not be a formal or "legal" one so long as it is a physical one, that is, a restriction of the driver's freedom to move; in this regard see, Glass v. Commonwealth, Department of Transportation, Bureau of Traffic Safety, 460 Pa. 362, 333 A.2d 768 (1975).

71. UNIFORM VEHICLE CODE § 6-205.1(c) (Supp. II 1976).

72. UNIFORM VEHICLE CODE § 6-205.1(a) (Supp. II 1976).

73. See, e.g., CAL. VEH. CODE § 13353(a) (West 1971); see also, MINN. STAT. ANN. § 169.123(2) (West Supp. 1979) [driver may elect alternatives only when requested to take blood test]. As of December 31, 1977, the implied-consent laws of sixteen states and the District of Columbia offered drivers some choice of tests (Keane et al. 1978, p. 6).

74. See, e.g., UNIFORM VEHICLE CODE § 11-902.1(a)(3) (Supp. II 1976) ["physician, or a qualified technician, chemist, registered nurse, or other qualified person of his own choosing"]; ILL. ANN. STAT. ch. 95-1/2, § 11-501.1(a)(8) (Smith-Hurd Supp. 1978-79); and N.Y. VEH. & TRAF. LAW § 1194(8) (McKinney Supp. 1978-79). As of December

31, 1977, the implied-consent statutes of 42 states and the District of Columbia allowed drivers to obtain additional tests (Keane et al. 1978, p. 6).

75. In Schmerber v. California, 384 U.S. 757, 760-65 (1966) it was held that chemical testing was not "giving testimony." For that reason the safeguards--including the presence of counsel--that were guaranteed by Miranda v. Arizona, 384 U.S. 436 (1966) to persons interrogated while in custody do not apply. In this regard see, e.g., State v. Macuk, 57 N.J. 1, 268 A.2d 1 (1970); State v. Moore, 79 Wash. 2d 51, 483 P.2d 630 (1971); and State v. Bunders, 68 Wis. 2d 129, 227 N.W.2d 727 (1975).

76. Davis v. Pope, 128 Ga. App. 791, 197 S.E.2d 861 (1973); Newman v. Hacker, 530 S.W.2d 376 (Ky. 1975). Some state courts have reasoned that since the entire implied-consent procedure—including the revocation or suspension of licenses--is civil in nature, such criminal-law safeguards as counsel are unnecessary. Cases are collected in Dunn v. Petit, — R.I. —, 388 A.2d 809 (1978).

77. The "option to refuse" actually is a right to choose a mandatory license suspension in lieu of having evidence from chemical tests admitted at trial. In states where such a "right to refuse" is not recognized, the prosecution in a DWI trial may in effect penalize a driver for refusing by commenting on the refusal at the trial. In this regard see, e.g., UNIFORM VEHICLE CODE § 11-902.1(c) (Supp. II 1976) [optional provision]; ALA. CODE tit. 32, § 5-193(h) (1975); DEL. CODE tit. 21, § 2749 (1974); and IOWA CODE ANN. § 321B.11 (West Supp. 1978-79).

78. Only two states--Oregon and Wisconsin--do not make all DWI convictions punishable by possible confinement to jail; see in this regard, OR. REV. STAT. §§ 484.360, 484.365(3)(a) (1977); and WIS. STAT. ANN. § 346.65(2)(a)(1) (West Supp. 1979-80). All states provide for either mandatory or discretionary license suspension as a penalty for a DWI conviction.

79. See, e.g., Prideaux v. State, Department of Public Safety, 310 Minn. 405, 247 N.W.2d 385 (1976); People v. Gursey, 22 N.Y.2d 224, 239 N.E.2d 351, 292 N.Y.S.2d 416 (1968); and State v. Welch, 135 Vt. 316, 376 A.2d 351 (1977). While the Prideaux and Welch cases use the term "critical stage," they expressly based their holdings on the existence of a statutory right of attorney consultation. Thus while they constructed a line of reasoning leading to the conclusion that a constitutional right of attorney consultation existed, they ultimately refrained from deciding the constitutional issue and based their decisions on statutory provisions instead. See generally, Dunn v. Petit, — R.I. —, 388 A.2d 809, 812 (1978).

80. See, e.g., ILL. ANN. STAT. ch. 95-1/2, § 11-501.1(a)(3) (Smith-Hurd

Supp. 1978); MINN. STAT. ANN. § 169.123(3) (West Supp. 1979); and VT. STAT. ANN. tit. 23, § 1202(b) (1978); see also, Gooch v. Spradling, 523 S.W.2d 861 (Mo. Ct. App. 1975) [applying court rule granting arrested persons the right to contact counsel]; and Siegwald v. Curry, 40 Ohio App. 2d 313, 319 N.E.2d 381 (1974) [applying statute granting arrested persons the right to contact counsel].

81. U.S. CONST. amend. VI. The various Sixth Amendment fair trial guarantees have been held applicable to the states; see, e.g., Duncan v. Louisiana, 391 U.S. 145 (1968) [jury trial]; Klopfer v. North Carolina, 386 U.S. 213 (1967) [speedy trial]; Pointer v. Texas, 380 U.S. 400 (1965) [confrontation of adverse witnesses]; and Gideon v. Wainwright, 372 U.S. 335 (1963) [right to counsel].

82. Giglio v. United States, 405 U.S. 150 (1971); Brady v. Maryland, 373 U.S. 83 (1963).

83. People v. Hitch, 12 Cal. 3d 641, 527 P.2d 361, 117 Cal. Rptr. 9 (1974). Some states require, by statute, the retention of breath samples. In this regard see, e.g., VT. STAT. ANN. tit. 23, § 1203(a) (1978) [30 days].

84. The remedy for such a violation of due process is reversal of the conviction, and remend of the case for a new trial at which the defendant will be able to present his defense with full access to the material evidence. People v. Hitch, 12 Cal. 3d 641, 527 P.2d 361, 117 Cal. Rptr. 9 (1974).

85. See, e.g., Lauderdale v. State, 548 P.2d 376 (Alaska 1976); Scales v. City Court of the City of Mesa, — Ariz. ---, 594 P.2d 97 (1979); and Garcia v. District Court 21st Judicial District, — Colo. —, 589 P.2d 924 (1979).

86. See, e.g., People v. Godbout, 42 Ill. App. 3d 1001, 356 N.E.2d 865 (1976); People v. Stark, 73 Mich. App. 332, 251 N.W.2d 574 (1977); State v. Shutt, 116 N.H. 495, 363 A.2d 406 (1976); State v. Teare, 135 N.J. Super. 19, 342 A.2d 556 (App. Div. 1975); State v. Watson, 48 Ohio App. 2d 110, 355 N.E.2d 883 (1975); Edwards v. State, 544 P.2d 60 (Okla. Crim. 1975); State v. Reaves, 25 Or. App. 745, 550 P.2d 1403 (1976); State v. Michener, 25 Or. App. 523, 550 P.2d 449 (1976).

87. State v. Duguid, 50 Ariz. 276, 72 P.2d 435 (1937); Lawrence v. City of Los Angeles, 53 Cal. App. 2d 6, 127 P.2d 931 (1942); State v. Haner, 231 Iowa 348, 1 N.W.2d 91 (1941).

88. In State v. Baker, 56 Wash. 2d 856, 355 P.2d 806 (1960), the following prerequisites for the admission of breath test results were set out: (a) the testing device was properly checked out or in

proper working order at the time of the test; (b) the chemicals were correct in kind and compounded in proper proportions; (c) the test subject had nothing in his mouth and had taken nothing within fifteen minutes of the test; and (d) the test was given by a qualified operator in the proper manner.

89. See, e.g., CAL. VEH. CODE § 13353(a) (West 1971); MICH. COMP. LAWS ANN. § 257.625a(3) (1977); and N.Y. VEH. & TRAF. LAW § 1194(2) (McKinney Supp. 1978-79). It should be noted that most drivers who are tested for BAC have been arrested and advised of their rights under Miranda v. Arizona, 384 U.S. 436 (1966). In addition to the Miranda rights--which apply only to statements made while in custody, the tested driver frequently is advised of his statutory rights and of the consequences of his decisions with respect to testing. Therefore, it is possible that a driver might confuse the two sets of warnings and erroneously believe he has (or does not have) certain rights or options. This problem is discussed in Rust v. Department of Motor Vehicles, 267 Cal. App. 2d 545, 73 Cal. Rptr. 366 (1968); and Calvert v. State, Department of Revenue, Motor Vehicle Division, 184 Colo. 214, 519 P.2d 341 (1974).

90. See, e.g., COLO. REV. STAT. ANN. § 42-4-1202(b) (1974); ILL. ANN. STAT. ch. 95-1/2, § 11-501.1(a) (Smith-Hurd Supp. 1978); and IOWA CODE ANN. § 321B.3 (West Supp. 1978-79).

91. See, e.g., UNIFORM VEHICLE CODE § 11-902.1(a)(1) (Supp. II 1976).

92. See, e.g., Vigil v. State, Department of Revenue, Motor Vehicle Division, 184 Colo. 142, 519 P.2d 332 (1974); State v. Jensen, 216 N.W.2d 369 (Iowa 1974); and State v. Buckingham, --- S.D. ---, 240 N.W.2d 84 (1976).

93. CAL. ADMIN. CODE § 1221.4(a)(2), in Erwin, R.E. 1976. Defense of drunk driving cases. Criminal-civil. 3d ed., 2 vol., pp. 28-38.2—28-38.3. New York: Matthew Bender and Company, Inc.

94. CAL. ADMIN. CODE § 1221.4(a)(1), in Erwin, R.E. 1976. Defense of drunk driving cases. Criminal-civil. 3d ed., 2 vol., pp. 28-38.1—28-38.2. New York: Matthew Bender and Company, Inc.

95. See, UNIFORM VEHICLE CODE § 11-902.1(a)(2) (Supp. II 1976).

96. See, e.g., N.C. GEN. STAT. § 20-139.1(b) (1978).

97. In most states a BAC level of .10% or above raises a "presumption" (actually an inference) of intoxication, and a level between .05% and .10% is relevant evidence of intoxication that can be considered together with other evidence. See, UNIFORM VEHICLE CODE § 11-902.1(b) (Supp. II 1976). Therefore, it is likely that a driver who is tested at the roadside would have a BAC indicating to the

testing officer his probable—or at least possible—intoxication.

98. As of December 1978 the following so-called "per se" DWI statutes had been enacted: DEL. CODE tit. 21, §§ 4177(a), 4177(b) (Supp. 1978); FLA. STAT. §§ 316.193(3), 322.262(2)(c) (1978); MINN. STAT. ANN. § 169.121(1)(d) (West Supp. 1979); MO. ANN. STAT. § 577.012 (Vernon Cum. Supp. 1979); NEB. REV. STAT. § 39-669.07 (Cum. Supp. 1978); N.Y. VEH. & TRAF. LAW § 1192(2) (McKinney Supp. 1978-79); N.C. GEN. STAT. § 20-138(b) (1978); OR. REV. STAT. § 487.540(a) (1977); S.D. COMP. LAWS ANN. § 32-23-1(1) (1976); UTAH CODE ANN. § 41-6-44.2(a) (Supp. 1977); VT. STAT. ANN. tit. 23, § 1201(a)(1) (1978); and WIS. STAT. ANN. § 346.63(4) (West Supp. 1978-79). Similar legislation is pending in a number of other states.

99. Paul v. Davis, 424 U.S. 693 (1976).

100. See, e.g., GA. CODE ANN. §§ 68-2101—68-2111 (1975 and Supp. 1978) [prohibiting the use of radar, for example: within 500 feet of a sign warning that radar is being used, within 300 or 600 feet (depending on its location) of a signed reduction in the speed limit, anywhere the posted speed limit had been reduced within the preceding 30 days, on any grade in excess of seven percent, or where police or court revenues are subsidized by traffic fines; requiring that radar units be visible to traffic from a distance of at least 500 feet; and making the use of radar by local authorities subject to other restrictions not applicable to the state highway patrol]; ILL. ANN. STAT. ch. 95 1/2, § 11-602 (Smith-Hurd Supp. 1978) [prohibiting the use of devices within 500 feet of a change in the posted speed limit]; and MISS CODE ANN. § 63-3-519 (1973) [prohibiting local police agencies in municipalities having less than a given population from using radar on federal or state highways].

In addition a number of states require the placement of warning signs in areas where radar is being used; typical provisions include GA. CODE ANN. § 68-2105 (1975) [applies only to radar used by local authorities] and VA. CODE § 46.1-198.2 (1974).

101. In some jurisdictions, unmarked patrol vehicles may be prohibited by law; in this regard see, e.g., OHIO REV. CODE ANN. § 4549.13 (Page 1973).

102. People v. Hitch, 12 Cal. 3d 641, 527 P.2d 361, 117 Cal. Rptr. 9 (1974).

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