

Horizontal Gaze Nystagmus: The New Drunk Driving Alchemy

by William A. Pangman

Introduction

The use of Horizontal Gaze Nystagmus (HGN) as a field sobriety test began in the early 1980's on an experimental basis in the western states. But after the National Highway Traffic Safety Administration of the United States Department of Transportation (NHTSA) labelled it "the most effective procedure for testing drivers at roadside to determine whether or not they are intoxicated,"¹ use of the procedure spread like wildfire to law enforcement agencies in over half of the jurisdictions in this country. Today, police agencies and impressionable courts are unquestioningly accepting this superficial test without a clear understanding of its dubious scientific basis and inherent limitations.

According to NHTSA, the advantages of Horizontal Gaze Nystagmus measurement as a field sobriety test is that an officer can quickly and cheaply determine whether a driver suspected of intoxication has a blood alcohol concentration (BAC) above or below .10% merely by observing the reaction of the suspect's eyes in tracking a moving object. However, the Horizontal Gaze Nystagmus test is a relatively new procedure. Since very little thorough research has yet been conducted on its effectiveness as a field sobriety test, it is understandable that the validity of this procedure in determining blood alcohol content is questionable and subject to a

variety of legal and factual challenges. This article will critically analyze the use of HGN as a test for evaluating suspected drunk drivers.

The Eyes Have It: What's HGN?

Nystagmus is an involuntary, rapid oscillation of the eyes which occurs when a person looks to the side at an object. Although there are many types of nystagmus, the type usually used in field sobriety testing is labelled "Horizontal Gaze Nystagmus" and is characterized by involuntary pendular (back and forth) movement of the eye. The field test is a measurement

There's language in her eye,
her cheek, her lip,
Nay, the foot speaks; her wanton
spirits look out
At every joint and motive
of her body.
—William Shakespeare

of the angle of onset of this jerking movement when the eye tracks a steadily moving object, such as a pencil or pen flashlight. The field test presumes that through measuring at what point a subject's eye begins jerking, a rough approximation of blood alcohol content can be determined.

NHTSA's Cross-Eyed Study

NHTSA's proposed HGN test consists of

noting the angle of nystagmus onset in each eye as that eye is laterally deviated at an angle of 45° from the subject's nose.² If gaze nystagmus is observed at this angle, NHTSA feels that the subject can be correctly classified as being at a BAC of .10% or higher 78% of the time.³ NHTSA bases these conclusions on their own research findings that a strong correlation exists between blood alcohol concentration and the angle of lateral deviation of the eyes at which horizontal gaze nystagmus is first observed.

NHTSA's research findings have been questioned with regard to the incidence of false positives.⁴ Some 50 to 60 percent of all individuals exhibit a gaze nystagmus indistinguishable from alcohol gaze nystagmus if they deviate their eyes more than 40° to the side.⁵ The test proposed by NHTSA requires the subject to deviate his or her eyes 45° to the side. This would seem to indicate that the NHTSA HGN test should result in a greater number of false positives, i.e., individuals with BAC below .10% who are nonetheless classified as being above .10% BAC. NHTSA's experimental procedure has been severely criticized for its deliberate screening out of people at high risk for being classified as false positives.⁶ The NHTSA researchers then assumed that any nystagmus observed in the alcohol-free control subjects at a maximum lateral deviation of the eyes was due solely to the influence of drugs. This assumption was false, since 50 to 60 percent of normal individuals will exhibit nystagmus when the eyes are deviated to the lateral extreme.⁷

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1. NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION, IMPROVED SOBRIETY TESTING (DOT HS-806-512, 1984) [hereinafter cited as SOBRIETY TESTING]; NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION, FIELD EVALUATION OF A BEHAVIORAL TEST BATTERY FOR DWI (DOT HS-806-475, 1983) [hereinafter cited as FIELD EVALUATION]; NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION, DEVELOPMENT AND FIELD TEST OF PSYCHOPHYSICAL TESTS FOR DWI ARREST (DOT HS-805-864, 1981) [hereinafter cited as DEVELOPMENT]; NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION, PSY-

CHOPHYSICAL TESTS FOR DWI ARREST (DOT HS-802-424, 1977) [hereinafter cited as PSYCHOPHYSICAL TESTS].

2. See SOBRIETY TESTING, *supra* note 1.

3. See DEVELOPMENT, *supra* note 1.

4. D. NICHOLS, DRINKING/DRIVING LITIGATION §2, at 2 (1985).

5. TOGLIA ELECTRONYSTAGMOGRAPHY: TECHNICAL ASPECTS AND ATLAS (1976).

6. See D. NICHOLS, *supra* note 4; DEVELOPMENT, *supra* note 1.

7. See TOGLIA, *supra* note 5.

Scientific Community Looks Askance

The NHTSA research findings are not in agreement with those of other scientific researchers.⁸ NHTSA claims that test subjects should be classified as having a BAC greater than or equal to .10% if nystagmus is observed at a lateral deviation of the eyes of 45°. In contrast, most other studies in which gaze nystagmus has been measured involve a cut-off point between 30-40° revealing a lower BAC level than .10%. One researcher has observed that HGN appears at a threshold BAC of .06% at a lateral deviation of the eyes of only 40°.⁹ This researcher chose 40° as a measuring point in order to scientifically decrease the number of false positives in his studies. Furthermore, although it was observed that a BAC of .06% and a lateral deviation of 40°

lation between degree of onset of HGN and BAC.

Keeping an Eye on the Testing Procedure

Even if there were complete agreement in the scientific community about the correlation between the degree of onset of HGN and BAC, NHTSA's proposal regarding the use of HGN as a roadside screening test would still present problems.

The final manual produced by NHTSA to instruct law enforcement officials and others in the use of AGN [alcohol gaze nystagmus] as a sobriety test defines nystagmus as a jerking of the eyes. This definition is imprecise and could lead to some confusion. Nystagmus is a rapid, involuntary oscillation of the eyes. Alcohol gaze nystagmus is a jerking type of horizontal gaze nystagmus, which means it has two movement components of unequal speed. In the case of AGN, when the eyeball looks to one side (lateral deviation of the eye), there is a slow drift of the eyeball toward the nose followed by a quick corrective movement back to the lateral position. The quick movement is known as a saccade. This succession of movement can be very fine, with the eyeball flickering back and forth within a fraction of a degree, or the sweep of the movement can be somewhat broader. Given only NHTSA's narrow definition of nystagmus, the layperson could conceivably mistake the quick...saccadic [movement] that the eyeball makes while tracking a moving object...such as the object used by the examiner during an AGN test for nystagmus.¹²

It is also important to note that all the research studies, including those conducted by NHTSA, reflect data obtained with the aid of mechanical devices which hold the head in a stable position and precisely measure the angle of lateral deviation of the eye.¹³ In fact, NHTSA's researchers

themselves have pointed out the critical need for accurate measurement of the angle of lateral deviation.¹⁴ Notwithstanding, NHTSA recommended that the angle of lateral deviation of a subject's eyes, when the test is conducted at the roadside by an officer, be determined merely by visual estimation of the examiner.¹⁵ And although officers may be instructed to use their flashlights as a chinrest for subjects, the stability of the subject's head, another critical factor, is open to question when the test is conducted roadside. Therefore, the validity of even the NHTSA research data when applied in only a semi-quantitative manner suggested by their own procedures presents inevitable problems with inconsistency, inaccuracy, and subjectivity in the application of the data to a roadside field sobriety context.

In the Wink of an Eye

Interestingly, nystagmus can result from many factors other than intoxication, including a variety of common pathological, chemical, and natural causes. Nystagmus can be caused by problems in an individual's inner ear labyrinth. In fact, irrigating the ears with warm or cold water (not a far-fetched scenario under particular weather conditions) is a source of error. Physiological problems such as certain kinds of diseases may also result in gaze nystagmus. Influenza, streptococcus infections, vertigo, measles, syphilis, arteriosclerosis, muscular dystrophy, multiple sclerosis, Korsakoff's Syndrome, brain hemorrhage, epilepsy, and other psychogenic disorders all have been shown to cause nystagmus.¹⁶ Furthermore, conditions such as hypertension, motion sick-

14. DEVELOPMENT, *supra* note 1.

15. SOBRIETY TESTING, *supra* note 1.

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8. See D. NICHOLS, *supra* note 4, and 3.

9. Aschan, *Different Types of Alcohol Nystagmus*, 140 ACTA OTO-LARYNGOLOGICA SUPP. 69 (1957); Aschan, *Positional Nystagmus in Man During and After Alcohol Intoxication*, 17 Q.J. STUDIES ON ALCOHOL 381-405 (1956).

10. Lehti, *The Effect of Blood Alcohol Concentration on the Onset of Gaze Nystagmus*, 13 BLUTALKOHOL 411 (1976).

11. Umeda & Sakata, *Alcohol and the Oculomotor System*, 87 ANNALS OTOL. RHINO. 392 (1978).

12. See D. NICHOLS, *supra* note 4, at 4. For an excellent treatment of scientific and legal issues regarding nystagmus, see *id.* §4.4.2 See also Rashbass, *The Relationship Between Saccadic and Smooth Tracking Eye Movements*, 159 J. PHYSIOLOGY 326 (1961); Robinson, *Eye Movement Control in Primates*, 161 SCIENCE 1219 (1968).

13. DEVELOPMENT, *supra* note 1; Lehti, *supra* note 10; Aschan, *supra* note 9.

ness, sunstroke, eyestrain, eye muscle fatigue, glaucoma, and changes in atmospheric pressure may result in gaze nystagmus.¹⁷ The consumption of common substances such as caffeine, nicotine, or aspirin also lead to nystagmus almost identical to that caused by alcohol consumption.¹⁸

The effects of circadian rhythms (bi-rhythms) which are the result of our internal biological clocks can produce different bodily reactions to alcohol, depending on the time of day. One study concludes that after midnight, the angle of onset for HGN is decreased by 5° because of this factor.¹⁹ Although this phenomenon was examined by the NHTSA researchers, it was omitted from the manual distributed to law enforcement officials.²⁰ Since a great number of DWI arrests occur in the early morning hours, even NHTSA's own data would seem to in-

How many furtive inclinations are
avowed by the eye, though
dissembled by the lips!

—Ralph Waldo Emerson

dicating that the sensitivity of HGN to alcohol is enhanced during the hours of the day when the greatest number of DWI arrests occur. Also, prolonged use of the eyes with insufficient lighting or in strained conditions can cause temporary nystagmus.²¹ In addition, it has been shown that fatigue by itself increases the amount of roving ocular movements (ROM) observed in a subject.²² These ROM's are of an oscillating nature and could be mistaken for nystagmus.

The Eye of the Beholder

Although cloaked in objective scientific garb, the simple fact remains that the HGN

"test" is one of the most subjective alcohol detection techniques currently used by law enforcement. Not only is HGN one of the least sensitive measures of alcohol intoxication, but the field test results are subject to a wide margin of error because the angle of lateral deviation of a subject's eyes are determined merely by the estimation of the examiner. The officer himself decides at what point the nystagmus begins.

The absurdity of this subjective procedure as it affects the reliability of results is best illustrated by one of the most recent studies conducted by a prosecution-oriented research group in Santa Clara County, California.²³ The study measured the correlation of police officer estimations of the angle of onset of nystagmus against chemical tests involving breath and blood samples. The data in the study revealed that there was virtually no correlation between the actual value of blood alcohol concentration and the predicted value based upon the angle of onset of nystagmus. However, a correlation did develop between the breath alcohol reading and the level predicted by the alcohol gaze nystagmus. Interestingly, the study concluded that this was caused by the very subjective nature of the test itself:

Since the police officers are the ones operating the breath testing equipment, it appears that, at least in some of the cases, an already known breath alcohol value may have influenced the determination of the angle of onset.²⁴

Simply put, the cops fudged the horizontal gaze nystagmus determination to correspond with the already known correct answer determined by the breath test result. However, because they did not know what the correct answer was when the blood sample was tested (since someone else did the analysis), they could not

come close to the correct BAC. These were highly trained California police officers, experienced and familiar with the test

Look not in my eyes, for fear
They may mirror true the sight I see,
And there you find your face too clear
And love it and be lost like me.
One the long night through must lie
Spent in star-defeated sighs,
But why should you as well as I
Perish? gaze not in my eyes.

—Bishop Samuel Horsley

procedures and aware that their results were being scrutinized for accuracy and cross-checked against actual BAC determinations. Nevertheless, the study concluded that

[f]rom this data it is difficult to see how the measurement of the angle of onset of nystagmus could be used to accurately predict a person's blood alcohol level. The search for a method to determine blood alcohol levels without actually sampling fluid or breath from the person has, as yet, not been fruitful. While nystagmus appears to be useful as a roadside sobriety test, at this time its use to predict a person's blood alcohol level does not appear to be warranted.²⁵

This study points out the fact that horizontal gaze nystagmus tests should never be intended as a substitute for actual blood or breath alcohol testing. The purpose of the procedure, if any, is strictly a field screening function, like other presumptive tests. Its admissibility should be no more expansive than other presumptive tests such as preliminary breath tests which usually may only be admitted on the issue of probable cause and not submitted for consideration by the trier of fact in the case-in-chief. Certainly, the results purporting to determine a blood alcohol level should never be legally admissible—and defense counsel should strenuously argue against their admission if the results are so offered. If the officer merely testifies that the defendant "flunked" the nystagmus test, this changes nothing. One "flunks" by hav-

16. L. TAYLOR, *DRUNK DRIVING DEFENSE* (2d ed. 1986).

17. *Id.* at 336.

18. *Id.*

19. *Id.*

20. Sharp, Moskowitz & Burns, *Circadian Effects on Alcohol Gaze Nystagmus*, 18 *PSYCHOPHYSIOLOGY* 193 (1981).

21. See D. NICHOLS, *supra* note 4, at 4.

22. Goldberg, *Effects and After-Effects of Alcohol*,

Tranquilizers, and Fatigue on Ocular Phenomena, in *ALCOHOL AND ROAD TRAFFIC PROCEEDINGS OF THE THIRD INTERNATIONAL CONFERENCE ON ALCOHOL AND ROAD TRAFFIC* (1963).

23. Santa Clara Laboratory of Criminalistics, 1557 Berger Dr., Suite B-2, San Jose, CA 95112. Noris, *The Correlation of Angle of Onset of Nystagmus With Blood Alcohol Level: Report of a Field Trial* (unpub. manuscript, n.d.).

24. *Id.* at 2.

25. *Id.*

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ing a reading in excess of a certain blood alcohol level—and so the test remains one designed to determine the blood alcohol content of an individual.²⁶

Challenges to Admissibility of HGN Test Results

The horizontal gaze nystagmus test does not involve a chemical analysis, nor does it require a sample of breath, blood, or urine. Hence, the nystagmus test cannot be deemed a chemical test for intoxication under statutory implied consent provisions. Absent statutory admissibility, the test must have an ordinary foundation.

The Scientific Community Does Not See Eye to Eye

The test is also a different type of test from balancing on one leg or walking a

straight line because it rests upon assertion of scientific legitimacy rather than upon common knowledge. Therefore, more specific rules apply to determine its admissibility.²⁷ Some courts adopt the rule of *Frye v. United States*,²⁸ which requires that a general theory, in order to be relied upon, must be in conformity with a generally accepted explanatory theory. Counsel should argue inadmissibility due to failure of the procedure to comply with *Frye*-type requirements for scientific evidence, i.e., gaze nystagmus is not yet widely accepted within the scientific community as a blood alcohol testing procedure. Under the *Frye* standard, it is not enough that a qualified expert, or even several experts, testify that a particular scientific technique is valid; *Frye* imposes a special burden—the technique must be generally accepted by

the relevant scientific community.

Courts Reject HGN at First Glance

In the first appellate decision to address the issue of the admissibility of nystagmus, a California court rejected the test. In reversing a drunk driving conviction because of error in admitting the officer's testimony concerning the nystagmus test, the court in *People v. Loomis*,²⁹ held that the test was inadmissible for two independent reasons. First, the officer's testimony concerning the defendant's blood alcohol level based on the nystagmus test constituted an expert opinion, and the officer was not qualified as a medical expert:

[T]he trial court erred when it ruled the officer was not testifying as an expert but could give an opinion of blood alcohol

27. *Symposium on Science on Rules of Evidence*, 99 F.R.D. 187 (1984).

28. *Frye v. U.S.*, 293 F. 1013 (D.C. Cir. 1923).

29. *People v. Loomis*, 156 Cal.App.3d 1 (1984).

26. L. TAYLOR, *supra* note 16, §2.4.4, at 232.

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level based on his training, experience and the number of times he had given the nystagmus test.³⁰

The court continued, however:

Even if the officer's testimony had been offered as an expert opinion, it would have been error to allow it. . . . The test for determining the underlying reliability of a new scientific technique was described in the germinal case of *Frye v. U.S.* (D.C. Cir. 1923) 293 F.2d 1013, 1014. . . . [T]he thing from which the deduction is made must be sufficiently established to have gained general acceptance in the particular field in which it belongs. Applying this rule to the present case makes it clear the testimony regarding Loomis' blood alcohol level based on the lateral gaze nystagmus test was inadmissible.³¹

Although the court in *Loomis* did not consider it, counsel should argue a third ground for inadmissibility on nystagmus evidence: failure to comply with blood alcohol testing standards. The nystagmus test must be recognized for what it is: a test to determine an individual's blood alcohol level. As such, it must comply with the

If this be magic, let it be an art.

—William Shakespeare

same requirements (calibration, maintenance, licensing, etc.) as do breath, blood, and/or urine testing, which, of course, it cannot do.³²

It should be reversible error for the trial court to permit testimony from the officer that, based upon the horizontal gaze nystagmus test, a person had a blood alcohol concentration of .10% or more. To allow such testimony would raise a number of due process problems, since the arresting officer's reading of the test results cannot be verified or duplicated by an independent party.³³ Moreover, because the test has a wide margin of error, it cannot begin to satisfy a conscientious court that testimony as to the test results are suffi-

ciently probative so as to overcome the obvious prejudicial impact of such evidence. Relatively more accurate chemical testing devices are readily available, and should be preferred, when compared to the dubious horizontal gaze nystagmus field test.

In *People v. Loomis*, the arresting officer testified that he had been a police officer for five years, received 400 hours of training in detection of drunk drivers, and worked for a special drunk driver detail for three years. During this time, he had made 2,500 DWI traffic stops and used the nystagmus test in all of the stops. Further, he testified that of the 1,000 people he had arrested for drunk driving, the result of his field tests when compared against chemical tests were within .02% about 96% of the time. Notwithstanding this evidence of the particular officer's qualifications, the California court, nevertheless, held the nystagmus results inadmissible, stating that the arresting officer was not qualified to testify as lay or expert witness.³⁴

HGN Gets the Evil Eye

The appellate Court of Illinois, Fourth District, recently dealt with the issue of whether admission of testimony regarding results of a horizontal gaze nystagmus test was proper. The court in *People v. Vega*³⁵ held that a "horizontal gaze nystagmus test" was evidence beyond the general knowledge of the average individual and required a proper foundation, by way of expert testimony, for its introduction. The court found this especially true in technological evidence which jurors, in general, find to be extremely trustworthy.

The Illinois court in *Vega* found there had been no foundation concerning the validity of the nystagmus test other than the testimony of the arresting officer. In the court's opinion, this was inadequate foundation for the admission of the testimony regarding the results of the test. However, even though the admission of the nystagmus test was error, there was found to be

sufficient other evidence to sustain the verdict.

Some Courts Look the Other Way

Contrary to the approach of California and Illinois, the Arizona Supreme Court recently ruled that in the hands of a trained officer, the horizontal gaze nystagmus test is reasonably trustworthy under the *Frye* standard and may, therefore, be admitted. In *State v. Superior Court*³⁶ the court noted that evidence which merely forms the basis for probable cause does not have to be tested under the *Frye* rule. The Arizona court concluded that the HGN test when properly conducted by a trained officer, together with driving observations, performance on field sobriety tests, and other observations, may be used to help establish probable cause to arrest. This portion of

When I came back from Lyonesse
With magic in my eyes,
All marked with mute surmise
My radiance rare and fathomless,
When I came back from Lyonesse
With magic in my eyes!

—Thomas Hardy

the decision is not in substantial agreement with the rulings of courts in other jurisdictions, and is in conformity with the position advanced in this article. The Arizona court, however, went further and, based upon the record in that case, concluded that the HGN test has been generally accepted in the relevant scientific community and hence may yield admissible evidence when administered properly. Essentially, the Arizona Supreme Court held that the HGN test satisfies the *Frye* test of general acceptance. Under the court's ruling, testimony of a defendant's nystagmus is admissible on the issue of blood alcohol level when accompanied by proper foundation as to the techniques used and the officer's ability to use them, as would be other field sobriety test results on the question of the accuracy of the chemical analysis. The court limited its ruling, however, to make it clear

33. E.g., *People v. Vega*, 145 Ill.App.3d 996, 496 N.E.2d 501 (1986); *State v. Walstad*, 119 Wis.2d 483, 351 N.W.2d 469 (1984); *State v. Disch*, 119 Wis.2d 461, 351 N.W.2d 492 (1984); *State v. Ehlen*, 119 Wis.2d 451, 330 N.W.2d 248 (1984).

34. *Loomis*, *supra* note 29, at *id.*

35. *Supra* note 33.

36. *State v. Superior Court*, 718 P.2d 171 (Ariz. 1986).

30. *Id.* at 6.

31. *Id.* (emphasis in original).

32. L. TAYLOR, *supra* note 16, §2.4.4, at 233.

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that it did not mean that evidence of nystagmus is admissible to prove a BAC of .10% or more in the absence of a laboratory chemical analysis of blood, breath, or urine. HGN test results, according to the Arizona Supreme Court, would not be admitted as direct, independent evidence to quantify blood alcohol content. It was felt that such use of HGN test results would raise a number of due process problems. Evidence of HGN test results was held to be admissible only to corroborate the challenged accuracy of chemical test results.

It is important to note that the Arizona court did not appear to have before it a full record detailing the debate in the scientific community concerning horizontal gaze nystagmus as it is currently utilized in the field sobriety context. In any event, the Arizona court still required expert testimony to lay the foundation for a proper challenge to the techniques, training, and procedure of the officer conducting the test should be sufficient to undermine attempts to establish this foundation solely through the testimony of the officer. Additional expert testimony would be necessary to elaborate upon the significance of any nystagmus allegedly observed by the officer. In the absence of such expert testimony, even the Arizona court would be hard-pressed to find sufficient foundation to allow admission of the HGN test results.

Examine the Jerk

Nystagmus evidence must be examined and challenged at each legal level. First, can the test show intoxication or merely cast doubt upon sobriety? When legal and harmless substances and conditions cause HGN, alcohol intoxication is not necessarily indicated by the presence of nystagmus. Second, challenge the officer's ability to accurately measure HGN with a pen light when medical technologists with clinical instruments cannot agree upon nystagmus relationship to alcohol concentration. Finally, do not allow the officer to bootstrap NGTSA reports into evidence via hearsay. Most likely, the officer's first-hand knowledge of nystagmus and its relationship to the particular defendant's BAC will not permit him to testify as an expert. In testifying to the defendant's blood alcohol level based on the nystagmus test, the officer is actually giving his "medical"

opinion. Because the officer is not an expert in applied ophthalmology he is not capable of determining the actual cause of nystagmus or competently assisting the jury to understand the significance or meaning of any eye phenomenon observed.

Finally, if all else fails, challenge the weight to be accorded this evidence if it is ultimately admitted to the trier of fact. The officer may certainly have been mistaken about exactly when the jerking began, may have measured the angle

The Horizontal Gaze Nystagmus test determines blood alcohol concentration like the Hunt Brothers predict silver prices.

—William Pangman

incorrectly, may have misinterpreted the response, or may have administered the test in some other faulty way. And, of course, the officer may be fudging; unlike chemical test results, there is no record of the results in the nystagmus procedure.

Counsel should also inquire on cross-examination as to what objective criteria the officer used in deciding whether the defendant "passed" or "failed." Remember also that separate, distinct readings must be obtained for each eye. Could one half of one's brain be drunk and the other half not? Is that what is meant by "half in the bag"? All criteria employed by law enforcement agencies is subjective—with the possible exception of the "45 degree" standard, which in any event is not universally substantiated in the literature. This lack of objective standards should be contrasted with the very precise scoring system recommended by the National Highway Traffic and Safety Administration.³⁷

Conclusion: The Slight of Hand is Quicker Than the Eye

NHTSA's endorsement of the horizontal gaze nystagmus test has enchanted both law enforcement and the courts by its spell-binding claims of an almost mystical ability to reliably divine intoxication. As a result, HGN is being utilized, admitted, and believed faithfully and without question in an increasing number of jurisdictions. In certain areas, police officers travelling in self-proclaimed "wolf packs" may make as many as 400 arrests in one night using the horizontal gaze nystagmus test. All this haunting power is conceded to a procedure which the studies indicate to be in a similar category of predictive reliability as the reading of tea leaves, newspaper astrology, a dowser with a willow switch, and the soothsaying presages of Rasputin.

The growing use and acceptance of this talismanic indicator of intoxication is, no doubt, a further consequence of the current panic by the American public and its officials over the "carnage" on the nation's highways. Although drunk driving and its often fatal effects are a legitimate concern, perverted scientific legerdemain such as the horizontal gaze nystagmus test should not be allowed to cast its mesmerizing spell upon a naive jury. It is, therefore, imperative that knowledgeable, articulate, and forceful arguments be advanced by defense counsel at every possible juncture in efforts to exorcise this skillfully deceptive black magic before it charms its way irretrievably into every trial where a citizen stands accused of drunk driving.

37. SOBRIETY TESTING, *supra* note 1.

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