

# **Standardized Field Sobriety Tests:**

**An Introduction To Tests You Will Never Pass**

**By:**

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Lecture Presented:

Oklahoma Criminal Defense Lawyers Association's  
- DUI Defense Seminar -  
September 7, 2001 - The Westin Hotel

Sobriety testing takes on many forms, chemical or non-chemical, pursuant to whichever stage that is viewed during the entire process of a Driving Under the Influence arrest. It is not uncommon during the infancy of this type of arrest situation for the arresting officer to utilize various forms of “field” sobriety tests to judge the impairment level of the contacted suspect. This written material will examine the “Standardized” field sobriety tests that are the accepted as valid and reliable by the National Highway Traffic Safety Administration (NHTSA.) These Standardized Field Tests are the only recommended and accepted testing battery by the International Association Chiefs of Police for use in the field by Law Enforcement individuals.

### **HISTORY OF THE SFSTs**

The effect of alcohol on human behavior, specifically during the task of driving a motor vehicle, was studied in the early ‘70’s by NHTSA in an effort to curtail the trend of drinking/intoxicated drivers on the roadways. The NHTSA Standardized Field Sobriety Test battery is the culmination of this behavioral research performed by the Southern California Research Institute. In late 1975 SCRI began their initial research using 19 participants in the first pilot studies designed to create maneuvers that could assist police officers in making DUI arrest decisions. These pilot studies were headed by Marcelline Burns & Herbert Moskowitz. The focus was to create a testing battery that was “essential ...to represent a variety of skills.”<sup>1</sup>

The researchers further went on to note that “...some persons are unduly handicapped on certain kinds of tests due to age, physical impairment, or language or cultural barriers.”<sup>2</sup> The result was a focus on tests which included large muscle coordination, balance, and “cognitive skills.”<sup>3</sup> These two researchers then administered a battery of six tests which represented the above criteria to 238 participants in an effort to assess the potential for these tests to detect persons possibly impaired by alcohol.

The final recommendation for further study of the most accurate of these tests was released in 1977. These recommended tests are comprised of the current test battery still

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<sup>1</sup>*Burns & Moskowitz, Psychophysical Tests For DWI Arrest, DOT H.S. 802-424* pg, 10

<sup>2</sup>*Id.*

<sup>3</sup>*Id.*

currently in use today; the One-Leg-Stand, Walk-And-Turn, & Horizontal Gaze Nystagmus tests<sup>4</sup>.

NHTSA commissioned SCRI again in 1981 in an effort to create “standardized” elements for these recommended tests to assess the possible increase of sensitivity to alcohol, as well as, to ensure the maintenance of their accuracy and reliability.<sup>5</sup> This study took the recommended three test battery and created the basic set of standardized instructions and grading scales that accompany the SFSTs today. These “new and improved” tests were administered to 296 and then 145 participants in a two-part laboratory setting to ensure test-re-test reliability. The tests were then field tested in a field environment by local law enforcement officers to assess if they improved their correct arrest/release decisions . The test battery showed an 81% accuracy by the officers in the laboratory setting. The field study showed an increase of 8% of correct arrest decisions by the participating officers<sup>6</sup>. It was this study that served as the basis for a final evaluation that would provide the springboard for NHTSA’s recommendation for nationwide use of these sobriety tests<sup>7</sup>.

This final evaluation came in 1983 as a NHTSA sponsored study from SCRI. This study was performed solely in the field by researcher trained officers in Maryland, Washington D.C., Virginia, and North Carolina. It was following this study that NHTSA made it’s recommendation to the International Association of Chiefs of Police that there existed a new tool

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<sup>4</sup>Other tests that were reviewed during this initial development of the FST battery were: finger count, finger-to-nose, and tracing. These tests were eliminated for various reasons ranging from their respective level of accuracy in comparison to the three recommended tests to their difficulty in administration at roadside.

<sup>5</sup> Tharp, Burns, and Moskowitz, *Development and Field Test of Psychophysical Test for DWI Arrest - Final Report*. DOT H.S. 805-864 (1981)

<sup>6</sup>The 1981 study reflects an increase in positive data with regard to the accuracy of arrest decision. However, it is important to note that the researchers noted a disappointing lack of participation from the 4 police agencies that were used. To quote the researchers with regard to test battery effectiveness “*As a result trends are reported, but the data are not appropriate for significance testing; the assumptions for underlying statistics which would be of interest are not met by the data. However, every trend reported is in the direction of improved performance resulting from the test battery. The potential utility of the test battery appears to be supported.*” The test battery was recommended for use in the field upon admittedly questionable data and trends.

<sup>7</sup>It is upon these laboratory tests that NHTSA bases their percentages of accuracy for the field test battery.

for the detection and deterrence of drivers who were suspected of DUI.

The IACP accepted and implemented the SFST battery into its recommended training for officers in 1986<sup>8</sup>. There have been revisions to this recommended training by NHTSA in 1992, 1995, and 2000<sup>9</sup>.

There have been separate studies completed in the last few years by agencies other than SCRI. Colorado DOT sponsored a validation study in 1995 which claims to have produced an accuracy rate of 93% for correct arrests.<sup>10</sup> Florida in 1997 validated the tests at an accuracy rate of 95% for BAC's of 0.08 or higher.<sup>11</sup> And, in 1998, the San Diego validation study performed by ANACAPA Sciences, Inc. produced an accuracy rate of 91% for BAC's of 0.08 or higher as well.<sup>12, 13</sup>

### **THE SFST BATTERY**

The **STANDARDIZED** field sobriety test battery is comprised of three tests. The One-Leg-Stand, Walk-And Turn, & Horizontal Gaze Nystagmus. An important facet of the SFST training<sup>14</sup> is the stressing of this standardization during the administration and scoring of these tests. Indeed, NHTSA's training manual highlights the fact that the SFST battery validation only

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<sup>8</sup>A copy of this recommended training is included in these written materials.

<sup>9</sup>Dr. Marcelline Burns, who is accepted as the original researcher on the tests, is not on the committee that decides and implements these changes which involve both vernacular and procedural amendments to the original SCRI research procedures.

<sup>10</sup>A Colorado Validation Study of the Standardized Field Sobriety Test (SFST) Battery, NHTSA Project Number 95-408-17-05)

<sup>11</sup>A Florida Validation Study of the Standardized Field Sobriety Test (S.F.S.T.) Battery

<sup>12</sup>The Detection of DWI at BACs Below 0.10

<sup>13</sup>An excellent source for the attack of these subsequent studies can be found in *NHTSA Field Sobriety Tests - Vaildation vs Invalidation, The Champion*, April 2001, Vol. XXV No.3., by Phillip B. Price, Sr. & Spurgeon Cole.

<sup>14</sup> The **DWI Detection and Standardized Field Sobriety Testing** training program consists of 16 different programs. They include the pharmacology and physiology of ethanol, in the body, personal contact with a suspect pre-arresting screening, instruction on how to produce clear and concise notes, what the *per se* law is in their state, the detection of impaired drivers, and the proper administration of the three field sobriety tests.

applies when the tests that are performed when following the “prescribed, standardized manner<sup>15</sup>.” The Ohio State Supreme Court is the first to acknowledge that strict compliance to standardized procedures could not serve as evidence of probable cause to arrest for DUI.<sup>16</sup> This strict compliance is this first line of defense concerning the SFSTs.

## **HGN**

The test that causes the most discussion about its acceptance is the Horizontal Gaze Nystagmus test, or HGN. The HGN is a physical test that is caused by disturbances in the vestibular system located in the inner ear, and by the sedative effects of alcohol or other drugs. Of course, these are not the only means from which an officer might see nystagmus.<sup>17</sup> This is considered to be the most accurate test in determining impairment within the SFST battery claiming a 77% accuracy rate.

The HGN is a test that will many times produce opportunities for the strict compliance attack during its administration, and the subsequent testimony of the arresting officer. The standardized elements of the HGN include verbal instructions to stand with the arms to the subject’s side<sup>18</sup>, and the removal of eyeglasses. The testing stimulus must then be situated approximately 12 to 15 inches from the subject’s eyes<sup>19</sup>. The officer **MUST** then check for equal

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<sup>15</sup> **DWI Detection and Standardized Field Sobriety Testing**, section VIII, Page 3.

<sup>16</sup> *State v Homan*, 89 Ohio St.3d 421 (2000)

<sup>17</sup>See Dell’Osso, L.F. Ph.D., *Nystagmus, Saccadic Intrusions/Oscillations and Oscillopsia*, **Current Neuro-Ophthalmology@**, Vol. 1 (1991) Chapter 9. This documents lists 45 different types of nystagmus. Also, refer to **DWI Detection and Standardized Field Sobriety Testing**, Student Manual, Section VIII, Page 4-5.

<sup>18</sup>The HGN can be performed with a seated subject according Dr. Burns. The provision for this manipulation of the test is that the subject must be facing the officer with their shoulders squared to him. **NOTE:** The officer can **not** simply have the subject turn their head to face him. The extra strain that is placed on the neck may influence the test. In addition, the officer may not be able to fully see the subject’s eyes.

What should be noted, however, is the fact that although the one of the originating doctors has made this variation acceptable, one should refer to the manual’s admonition for variation (fn. 15) before accepting a State’s assertion of “Well, Dr. Burns said it was OK, it must be OK.”

<sup>19</sup>While Dr. Burns has repeatedly defended the possibility and feasibility of the stimulus being situated 11-16" from the face, it is a clever and effective means to demonstrate the “crossing of the eyes” from a too close stimulus to a judge or jury to show how the proper positioning of the stimulus is

tracking of the stimulus by the eyes<sup>20</sup>, and for the pupil size of both eyes. It is only after the above elements that the passes for Lack of Smooth Pursuit, **DISTINCT** Nystagmus At Maximum Deviation, and Nystagmus Prior to 45 Degrees are to be performed. Each of these passes require a minimum of two **COMPLETE** passes across the plane of the eyes, and have 1 clue that may be assessed per eye per test<sup>21</sup>. The next standardized step is to total the clues seen, and then *check for vertical nystagmus*<sup>22</sup>. There is a possibility for 6 clues during this test.

**Walk-And-Turn (WAT)**

The Walk-And Turn test is a psycho-physical, divided attention test that was originally designed to reflect the constant decisions required during the task of driving. Although NHTSA has abandoned their initial defense that the SFST battery was applicable to (representative of) impaired driving, the WAT survives as an alcohol sensitive counting and balancing test. This test claims to have an accuracy rate of 68% per the NHTSA laboratory studies.

The possibility of attack during this test is very high due to the increased amount of required instructions necessary prior to administration, and the 8 possible clues<sup>23</sup>. Questions that

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required.

<sup>20</sup>The lack of equal tracking of the subject’s eyes should result in the cancellation of the HGN as this is typically a sign of some sort of medical impairment, or a glass eye. It is not a scoring pass, and has no clue to be assigned.

<sup>21</sup> For example:

Lack of smooth pursuit	- 2 passes - 1 clue per eye for nystagmus seen	- 2 total clues
Distinct Nystagmus at Maximum Deviation	- 2 passes - 1 clue per eye for nystagmus seen	- 2 total clues
Nystagmus Prior to 45 Degrees	- 2 passes - 1 clue per eye for nystagmus seen	- 2 total clues

<sup>22</sup> I emphasize this point because 9 out of 10 HGN tests that are administered at roadside do not include this portion of the HGN. This is elimination plays very well in a strict compliance defense.

<sup>23</sup>This chart reflects the amount of opportunity that a subject has to commit the possible clues.

Can’t Balance During Instructions		1 Clue
Starts Test Too Soon		1 Clue
Stops While Walking	1 Clue x 18 Steps =	18 Clues
Doesn’t Touch Heel To Toe	1 Clue x 18 Steps =	18 Clues
Steps Off Line	1 Clue x 18 Steps =	18 Clues
Wrong Number Of Steps	1 Clue x 2 Ways (Up & Back)	2 Clues

defense counsel may consider asking of the officer should include:

- Questions regarding the instructions given to the defendant on the night of the arrest<sup>24</sup>.
- Questions about required demonstration of the tests to the subject prior to beginning.
- Questions concerning the manner in which the subject performed the test in order to receive whatever clue assessed.
- Questions concerning the step where that clue originated.
- Questions about the amount of times a certain clue was assessed.<sup>25</sup>
- Questions regarding the officer's inquiry as to any physical problems with the subject (feet, legs, knees, etc.)

The WAT was originally limited in administration by a subject's age and weight. The provisions that persons who were 50 pounds overweight or 65 years of age or older was changed in 1995 to allow only the age requirement. Persons of all weights are acceptable under the newest guidelines as well (2000 Revision.) Also, NHTSA indicates that persons who are wearing heels of 2" in height or greater should be given the opportunity to remove their shoes.

The entire set of instructions, limitations, and scoring parameters are included in these written materials in Section VIII, *Concepts and Principles of the Standardized Field Sobriety Tests*, in the NHTSA Student Manual pages 10-12.

### **One-Leg-Stand (OLS)**

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Uses Arms To Balance	1 Clue x 18 Steps =	18 Clues
Improper Turn		1 Clue
Loses Balance During Turn		<u>1 Clue</u>
	<b><u>Total Clues Possible:</u></b>	78 Clues
	<b><u>Total Clues Needed To Fail:</u></b>	2 Clues
	<b><u>Percentage Required to Pass:</u></b>	97%

<sup>24</sup>It is very hard for a suspect to perform these divided attention tests without the proper set of instructions. For example: An officer instructs a suspect to take 10 steps instead of 9 and in addition tells him to pivot, but does not demonstrate the proper turn. This automatically creates 2 clues for the officer before the suspect even begins the test, and further creates a "lock" for an arrest decision.

<sup>25</sup>Each clue may only be assessed once for the entirety of the test. If a subject steps off the line 17 of 18 times and does nothing else wrong, then the score should reflect a total of 1 clue. Based upon this type of scenario, the officer should release the suspect.

The OLS is the second psycho-physical, divided attention, counting and balancing test in the NHTSA SFST battery. It is also sensitive to alcohol impairment, and has been assigned a accuracy rate of 65%. This test is much like the WAT is the attacks that defense may have during it's administration<sup>26</sup>. There are 4 total clues possible for this test. Points of interest for questions should include:

- Proper set of instructions
- Demonstration of test to subject
- Definition of swaying
- How many times did subject put foot down<sup>27</sup>
- Which foot did subject raise<sup>28</sup>
- Questions regarding the officer's inquiry as to any physical problems with the subject (feet, legs, knees, etc.)

Persons who are over 50 pounds of weight or are 65 years of age or older will be limited in their performance of the OLS. Also, NHTSA indicates that persons who are wearing heels of 2" in height or greater should be given the opportunity to remove their shoes.

The entire set of instructions, limitations, and scoring parameters are included in these written materials in Section VIII, *Concepts and Principles of the Standardized Field Sobriety Tests*, in the NHTSA Student Manual pages 13-14.

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<sup>26</sup>This chart reflects the amount of opportunity that a subject has to commit the possible clues.

Sways While Balancing	1 Clue x 30 Seconds	30 Clues
Uses Arms To Balance	1 Clue x 30 Seconds	30 Clues
Hopping	1 Clue x 30 Seconds	30 Clues
Puts Foot Down	1 Clue x 30 Seconds	<u>30 Clues</u>

**Total Clues Possible:** 120 Clues

**Total Required to Fail:** 2 Clues

**Percentage Required To Pass:** 98%

<sup>27</sup>The subject is allowed to put his foot down 3 times before the test is to be cancelled. Many officers become frustrated by this time and cease the test after the subject put his foot down the first time. While this is indeed a clue, the subject should be instructed to raise their foot again and start counting where they left off.

<sup>28</sup>This is included only as a means to demonstrate the possibility that the officer did not invest the proper amount of attention during the test, or the possibility that the officer may testify to his instruction of a specific foot to be raised. It does not matter which foot the subject raises for the test, and proper instructions dictate this fact.

## Alphabet & Counting Tests

The alphabet and counting tests were studied during the initial phases of the NHTSA sponsored research for accurate and reliable field tests. They were eliminated from the field test battery for reasons, but are still included in the NHTSA training as “pre-exit interview techniques.” They are **NOT** considered as part of the NHTSA SFST battery, and are considered unreliable. Below is an excerpt from the NHTSA Student Manual, Section VI, *Personal Contact*, Page 4-6:

### **PRE-EXIT INTERVIEW TECHNIQUES**

A basic purpose of the face-to-face observation and interview of the driver is to identify and gather evidence of alcohol and/or other drug influence. This is the purpose of each task in each phase of DWI detection.

During the face-to-face observation and interview stage, it is not necessary to gather sufficient evidence to arrest the driver immediately for DWI.

There are a number of techniques you can use while the driver is still behind the wheel. Most of these techniques apply the concept of divided attention. They require the driver to concentrate on two or more things at the same time. They include both questioning techniques and psychophysical (mind/body) tasks.

**These techniques are not as reliable as the standardized field sobriety tests but they can still be useful for obtaining evidence of impairment. THESE TECHNIQUES DO NOT REPLACE THE SFST.**

#### ALPHABET

This technique requires the subject to recite a part of the alphabet. You instruct the subject to recite the alphabet beginning with a letter other than A and stopping at a letter other than Z. For example, you might say to a driver, "Recite the alphabet, beginning with the letter E as in Edward and stopping with the letter P as in Paul." This divides the driver's attention because the driver must concentrate to begin at an unusual starting point and recall where to stop.

#### COUNT DOWN

This technique requires the subject to count out loud 15 or more numbers in reverse sequence. For example, you might request a driver to, "Count out loud backwards, starting with the number 68 and ending with the number 53." This, too, divides attention because the driver must continuously concentrate to count backwards while trying to recall where to stop.

NOTE: This technique should never be given using starting and stopping points that end in 0 or 5 because these numbers are too easy to recall. For example, do not request that the driver count backwards from 65 to 50. Instead, ask the driver to count backwards from 64 to 49.

#### FINGER COUNT

In this technique, the subject is asked to touch the tip of the thumb in turn to the tip of each finger on the same hand while simultaneously counting up one, two, three, four; then to reverse direction on the fingers while simultaneously counting down four, three, two, one.

### Under 21 - Valid Tests?

Oklahoma has made provisions to protect our youth by making it illegal for a person who is under the age of 21 to drive a motor vehicle with "any measurable amount" of alcohol in their system, or a BAC above 0.02%. Many times these individuals are contacted in the same fashion as the older suspects; typically a violation of speeding<sup>29</sup> or one of the 20 Visual Cues for Detecting DWI Drivers at night.<sup>30</sup> These young people are then given the same SFST battery as

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<sup>29</sup>Note that this is not included as a visual cue in the guide for Detecting Drunk Drivers at Night list. In fact it can be argued that a person who is speeding may well be more in control of their driving due to their ability to operate a vehicle at a high rate of speed and make the quick decisions that are required to do so.

<sup>30</sup>The 20 cues to "Detecting Drunk Drivers at Night" are:

1. Turning with wide radius
2. Almost striking object or vehicle
3. Weaving
4. Straddling center lane or lane marker
5. **Appearing to be drunk** (I like that one)
6. Driving on other than designated roadway
7. Driving into opposing or crossing traffic
8. Slow response to traffic signals

are the older drivers, and the officer's arrest decision is based upon the results of these tests.

The 1981 NHTSA sponsored study had to make provisions in their data for the presence of under 21 drivers in the field study.<sup>31</sup> This was due to the fact that it is illegal to provide alcohol to minors in the United States, and therefore there could be no laboratory analysis to assess the performance of those under 21 during the accepted SFST battery. The lack of testing for this specific age group for SFST validation may provide an opportunity for argument for their suppression from your case.

### Conclusion

The field sobriety test battery that is currently in use has the potential to be accurate if used properly. Many times, however, officers who are given the power to make the arrest/release decision innovate in their administration of the tests due to lack of training. These tests are standardized for a purpose; To make the testing as fair and impartial to the subject as possible. It is the subjective nature of the SFST that makes them little more than roadside exercises which lead to a pre-determined outcome: another notch on the officer's belt, and the arrest of your client.

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9. Turning abruptly or illegally
  10. Stopping inappropriately
  11. Accelerating/decelerating rapidly
  12. Headlights off
  13. Swerving
  14. Following too closely
  15. Drifting
  16. Speed slower than 10 mph below speed limit
  17. Stopping without cause in traffic lane
  18. Tires on center lane or lane marker
  19. Braking erratically
  20. Signaling inconsistent with driving

<sup>31</sup>Of the 3128 drivers who were contacted and had a data form submitted upon them, 23% were under the age of 21. Further, 14.2% of the 384 persons who were suspected of being DUI were under 21 as well. Tharp, Burns, and Moskowitz, *Development and Field Test of Psychophysical Test for DWI Arrest - Final Report*. DOT H.S. 805-864 (1981), Pg. 13