

2004 and 2006 Standardized Field Sobriety Testing (SFST) Revisions

In 2004 and 2005 several workgroups convened at the request of the National Highway Traffic Safety Administration (NHTSA) to review the Standardized Field Sobriety Testing (SFST) curriculum and make needed updates and revisions.

The attached information reflects the revisions completed by the various workgroups. The revisions listed were approved by the International Association of Chiefs of Police (IACP) DRE Technical Advisory Panel (TAP) and implemented into the September 2004 and February 2006 SFST curriculum.

SFST revisions contacts:

National Highway Traffic Safety Administration (NHTSA):

Dean Kuznieski,
NHTSA
Enforcement and Justice Services Division,
400 7th Street, S.W.,
Washington, DC 20590
Telephone: 202-366-9835
Fax: 202-366-2766
E-mail: Dean.Kuznieski@dot.gov

Bob Hohn
NHTSA
Impaired Driving Division
400 7th Street, S.W.
Washington, DC. 20590
Telephone: 202-366-9712
Fax: 202-366-2766
E-mail: bob.hohn@dot.gov

SFST Instructor Training Manual

Administrators Guide

□ Section E. Guidelines for Controlled Drinking Practices

The fourth paragraph on page 14 deals with volunteers wearing contact lens. Since the wearing of contact lens is no longer a factor in HGN testing, this paragraph was removed.

The fifth paragraph of Section E 2, states that volunteers should be brought to the training facility **two hours** before the practice session begins. This was revised to read **three hours** before the practice session begins to allow for proper preparation and alcohol assimilation into the blood stream.

Guidelines for achieving target BAC's, Page 14 Section E-3.

Table for achieving target BAC's was adjusted to target impairment levels at or about 0.13 BAC. The table was also adjusted to include the recommended number of drinks (over a three-hour period) for both men and women based on the following weights:

<u>WEIGHT</u>	<u>MEN</u>	<u>WOMEN</u>
110	5	4
120	6	5
130	6	5
140	7	5
150	7	6
160	8	6
170	8	7
180	9	7
190	9	7
200	10	8
210	10	8
220	10	8
230	11	9
240	11	9
250	12	10

The last sentence in the first paragraph on page 15 was deleted. This change was made to help minimize the chances of volunteers getting sick due to drinking too fast.

Page 17 second paragraph was revised to read that only the IACP/NHTSA Option tapes are approved for the SFST instruction.

SFST Instructor Training Manual

□ **Session I: Introduction and Overview**

Definition of Vertical Gaze Nystagmus was revised in Glossary of Terms to be consistent with the DRE definition.

□ **Session II: Detection and General Deterrence**

Page II-1, Part A., 2.b. was revised to reflect most current FARS data. Revised to read, **“In 2002, alcohol related fatalities rose to 17,419, representing 41 percent of all traffic fatalities.”**

Added an Instructor’s note to reflect, **“NHTSA 2002 FARS data.”**

PowerPoint slide II –2 was revised to reflect new data.

PowerPoint II –6 was revised to read:

“In 2002, alcohol was involved in approximately 41 percent of all fatal crashes, 9 percent of all reported injury crashes and 6 percent of all crashes. Fifty-four percent of all fatal crashes on weekends were alcohol related.”

“These alcohol related fatalities represent an average of one alcohol-related fatality every 30 minutes. Based on the most current cost data available, these alcohol-related fatalities cost society approximately \$54 billion in lost productivity, medical expenses, property damage and other related expenditures.”

Page II-20, Subpart 3., Dose-Response Relationships, subpart a. (4) & (5). Part (4) was revised to reflect 0.08 BAC and revised to read: **The so-called “illegal limit” of BAC is 0.08 in all states.**

PowerPoint II –23 was revised to reflect .08 BAC.

Section 3 a (5) on page II-20 was also revised to reflect the 0.08 reference. Section will now read **“If a person has a BAC of 0.08 it means there are 0.08 grams of pure ethanol in every 100 milliliters (“percent”) of his/her blood.”**

Added instructor note: **The term “percent” is sometimes informally used because the concentration is determined in units of one hundred.**

However, instead of being a “true” percent, the actual units are measured in mass (grams) of ethanol per volume (milliliters) of blood.

Subpart 3., b., page II-20, was revised to reflect the 0.08 reference.

Subpart 3., b. (3) was revised to reflect 0.08 reference to read: **“It is estimated that a person would have to consume four cans of beer, four glasses of wine or four shots of 80-proof whiskey in a fairly short period of time to reach a BAC of 0.08.”**

To clarify the statement in b. (3) an Instructor’s Note was added to read, **“Remind students of the numerous factors which determine actual BACs, (i.e., sex, weight, height, etc.)”**

Subpart 3., b. (6) was revised to reflect 0.08 to read: **“If one of the shot glasses was filled with pure ethanol and the other half-filled, there would be enough of the drug to bring an average man’s BAC to 0.08.”**

Session III: The Legal Environment

The Instructor’s Note on page III-14, opposite 7 b. was revised to read: **“For training purposes, the SFST’s are not at all flexible. They must be administered each time, exactly as outlined in this course.”**

Added 7 c to read; **“This decision was based upon an older edition of this manual and was a strict interpretation by the court.”**

Also added Instructor Note across from 7 c. to read: **“Regarding Homan and State vs. Schmitt, 101 Ohio St 3d 19, 2004.”**

Attachment A at the end of Session III entitled “Horizontal Gaze Nystagmus State Case Law Summary” was updated by the National Traffic Law Center.

Session IV: Overview of Detection, Note Taking and Testimony

No revisions

Session V: Phase One – Vehicle In Motion

Added instructor note to page V-12, in Part E in the Typical Reinforcing Cues of the Stopping Sequence, opposite item 2 in the instructor’s column that addresses the fleeing operator (as noted on slide V-8).

The Instructor's note added was **"Point out here the dangers inherent with fleeing operators. If time allows, review agency's pursuit policy."**

PowerPoint slide V-9 was corrected to read: **"Phase One: Task Two."**

Session VI: Phase Two – Personal Contact

No revisions

Session VII: Phase Three – Pre-Arrest Screening

The Section on Gaze Nystagmus, Horizontal Gaze Nystagmus – Definition, Concepts and Demonstration(Parts C and D) were moved forward, becoming Parts B and C. Part B., Divided Attention Tests: Concepts, Examples, Demonstrations were moved to Part E. Parts A, F & G remain the same.

The restructuring of this section puts the introduction to HGN section first to be consistent with other Sessions (i.e. VIII) and the standardization concept.

The order of the PowerPoint slides for this Session were also revised to coincide with the changes mentioned above.

Added Instructor Note at the end of Section C to suggest the showing of the video entitled, **"The Truth Is In the Eyes" (8 minutes and 50 seconds).**

Session VIII: Concepts and Principles of the SFST's

Page VIII-5, C., Horizontal Gaze Nystagmus, 1.,b., (first bullet), the word "usually" was deleted and replaced with **"generally"**

PowerPoint slide VIII-10 the two asterisks after Horizontal Gaze were deleted since there is no reference.

Page VIII-7, Section C 3d, an Instructor Note was revised to include current research on positional alcohol nystagmus. The revised Instructor Note reads; **"In the original HGN study, research was not conducted for performing HGN on people lying down. Current research demonstrates that HGN can be performed on someone in this position." "See Attachment A, page 5, #33, ""Nystagmus Testing in Intoxicated Individuals."""**

References to PAN I and Pan II were moved into the instructor notes section. Page VIII-10, 3e, the new definition of Vertical Gaze Nystagmus was added .

Page VIII-10, under Vertical Gaze Nystagmus (second bullet), the word “produce” was changed to “**cause.**” Also, in the instructors note opposite Vertical Gaze Nystagmus, the word “induce” was changed to “**cause.**”

Page VIII-13, 5., in the Administrative Procedures for Horizontal Gaze Nystagmus, the second paragraph was revised to read: “**It is important to administer the Horizontal Gaze Nystagmus test systematically using the following steps to ensure that nothing is overlooked.**”

An Instructor’s Note was added opposite this paragraph which reads, “**There are 10 steps in the systematic administration of the Horizontal Gaze Nystagmus test.**”

Page VIII-13, Section 5 a., the words “**Step I: Check for eyeglasses**” were added. In 5 b., the words “**Step II: Verbal Instructions**” were added.

Page VIII-14, in Section 5 c., the words “**Step III: Positioning the Stimulus**” were added. In 5 d., the words “**Step IV: Equal Pupil Size and Resting Nystagmus**” were added. In 5 e., the words “**Step V: Tracking**” were added. In Section 5 f., the words “**Step VI: Lack of Smooth Pursuit**” were added. In Section 5 g., the words “**Step VII: Distinct and Sustained Nystagmus at Maximum Deviation**” were added.

Page VIII-15, Section 5 h., the words “**Step VIII: Onset of Nystagmus Prior to 45 Degrees**” were added. In Section 5 i., the words “**Step IX: Total the Clues**” was added. In Section 5 j., the words “**Step X: Check for Vertical Nystagmus**” were added.

The Instructor’s Note directing the instructor to place different sized coins on an overhead projector, which had been on page VIII-13 was removed.

PowerPoint Slide VIII-11 was changed to reflect changes made.

Page VIII-16, the Instructor Note across from Section 6 a was revised to read: “**It is important that students start with the subjects left eye first. Then check the right eye for the same clue. This procedure should be used for all three clues.**”

Instructor Note across from Section 6 b was revised to direct the instructors to remind the students to check each eye twice for each clue.

Page VIII-17, the word “testing” was replaced with “**checking**” in 6 d.

Page VIII-17, the analogy of windshield wipers going across a wet windshield was added to the instructor notes addressing smooth pursuit.

Page VIII-18, first bullet in (1) was revised to read: “**It is necessary to move the object smoothly in order to check the eyes ability to pursue smoothly.**”

Page VIII-22, in the first bullet in Section f., the words “the test of” were replaced with “**check for.**”

Page VIII-34, opposite the bullets on administering VGN, an instructor’s note was added which reads: “**Remind students to make two checks for Vertical Nystagmus.**”

Page VIII-42, the instructors note section across from 8 h (first bullet), which read “If suspect can’t do test record as if all eight clues were observed” was revised to read: “**If suspect can’t do the test, record observed clues and document the reason for not completing the test, e.g. suspect’s safety.**”

Page VIII-50, Section G 8(h) in the instructors note section which read, “Record as if all four clues were observed” was revised to read, “**If suspect can’t do the test, record observed clues and document the reason for not completing the test, e.g. suspect’s safety.**”

Page VIII-58, an instructor note was added across from section d to read: “**Instruct students to place a letter “M” at bottom of vertical line to indicate missed heel to toe.**”

Page VIII-64, in the “Test Your Knowledge” examination, in questions #4, #9 and #13, the words “**Per the original research**” were inserted at the beginning of the questions.

PowerPoint slides VIII-21 and 25 were revised to reflect the scoring revisions to the Walk & Turn and One Leg Stand tests.

Attachment to Session VIII was updated to include the following studies:

1. “**Nystagmus Testing in Intoxicated Individuals**” – November 2003, by Citek, Ball and Rutledge.

2. **“The Robustness of the Horizontal Gaze Nystagmus (HGN) Test” - 2004, U.S. Department of Transportation.**

Session IX: Test Battery Demonstrations

No revisions

Session X: Dry Run Practice Sessions

Added a reference to check for resting nystagmus to Step 2 of the Student Proficiency Examination form. (Attachment A).

Session XI: Testing Subjects Practice – First Session

No revisions

Session XI-A: Testing Subjects Practice – First Session (Options)

Added the BAC results and SFST scoring clues for each of the volunteer drinkers.

Session XII: Processing The Arrested Suspect and Preparation For Trial

No revisions

Session XIII: Report Writing and Moot Court

No revisions

Session XIV: Testing Subjects Practice – Second Session

No revisions

Session XIV-A: Testing Subjects Practice – Second Session (Option Two)

Added the BAC results and SFST scoring clues for each of the volunteer drinkers.

Session XV: Review and Proficiency Examinations

Page XV-1, A, 1., c. revised to read, **“Nystagmus is caused by alcohol and/or other drugs and some medical conditions.”**

Page XV-2, added an instructor note opposite 5.,d., to read: **“Remind students to conduct a second pass the same as the first.”**

Page XV-3, added an instructor note opposite 6.g., to read: **“Remind students to conduct a second pass the same as the first.”**

Page XV-4, added an instructor note opposite 8.c., to read: **“Based on the original research.”**

Page XV-6, added an instructor note opposite 4.c., to read: **“Based on the original research.”**

Page XV-7, added an instructor note opposite 4.c., to read: **“Based on the original research.”**

PowerPoint slides XV-10 and XV-14 were revised to reflect the scoring changes for the Walk and Turn and One Leg Stand tests.

In Attachment A, the Student Proficiency Examination, the word **“repeat”** was placed in brackets and entered after Item #3. (Checking for equal tracking).

Session XVI: Written Examination and Program Conclusion

The DWI Detection and Standardized Field Sobriety Testing Post-Test was changed to Attachment A.

The DWI Detection and Standardized Field Sobriety Testing Remedial Test was changed to Attachment B.

Question 11, page 2 of the Remedial Test was revised along with the attached answer sheet to reflect the scoring changes for the Walk and Turn Test.

SFST Student Training Manual

Session I: Introduction and Overview

Revised definition of Vertical Gaze Nystagmus in the Glossary of Terms attachment to: **“An up and down jerking of the eyes which occurs when the eyes gaze upward at maximum elevation.”**

Session II: Detection and General Deterrence

Page II-1, the first paragraph last sentence was revised to reflect most current Fatal Accident Reporting System (FARS) data. Revised to read, **“In 2002, alcohol related fatalities rose to 17,419, representing 41 percent of all traffic fatalities. (NHTSA 2002 FARS data)”**

Page II-17 Dose-Response Relationships section, the first paragraph was revised to reflect 0.08 BAC information. Added: **“If a person has a BAC of 0.08 it means there 0.08 grams of pure ethanol in every 100 milliliter (“percent”) of his/her blood.”**

Session III: The Legal Environment

Page III-9 Ohio v. Homan was changed to read: **“State v. Homan.”**

Page III-10, under State v. Homan, added two sentences at the end of the first paragraph to read: **“This decision was based upon an older edition of this manual where an ambiguous phrase was strictly interpreted by the court. The phrase in question only applied to the use of the SFST’s for training purposes.”**

Attachment A at the end of Session III entitled “Horizontal Gaze Nystagmus State Case Law Summary” was updated by the National Traffic Law Center.

Session IV: Overview of Detection, Note Taking and Testimony

The DWI Investigation Field Notes form (Page IV-11) was revised to include Vertical Nystagmus under IV. (Also revised in all other sessions where the Field Investigation form is provided).

Session V: Phase One – Vehicle In Motion

No revisions

Session VI: Phase Two – Personal Contact

No revisions

Session VII: Phase Three – Pre-Arrest Screening

The section on Nystagmus and Divided Attention Tests were revised to reflect Nystagmus first followed by the Divided Attention tests. The definition of

Vertical Gaze Nystagmus (VGN) on Page VII-6, last paragraph, was revised to reflect the new definition. The restructuring of this section makes the testing sequence consistent with other sessions and reinforces standardization.

□ **Session VIII: Concepts and Principles of the SFST's**

Page VIII-4 section 2 (2), the explanation of Vertical Nystagmus was revised to follow the new definition.

Page VIII-5 under "Procedures to Access Possible Medical Impairment", a reference to checking for Resting Nystagmus was added.

Page VIII-5, section 2, the words "**and Sustained**" were added after the word "Distinct." "Sustained" was also added following word "distinct" in second sentence.

Page VIII-6, the last two paragraphs were revised to reflect the proper sequence of the medical checks prior to checking for the three clues of HGN.

Page VIII-7, second paragraph, added word "**sustained**" after word "distinct" in first sentence.

Page VIII-7, the box containing the administrative procedures for conducting the HGN test was changed to reflect the revised 10 step procedure.

Page VIII-9, Procedures for Walk and Turn Testing, 1. Instruction Stage, fourth instruction bullet was revised to read: "**Maintain this position until I have completed the instructions.**"

Page VIII-11, first paragraph following section H was revised to include new scoring for the Walk and Turn Test. Revised to read: "**If suspect can't do the test, record observed clues and document the reason for not completing the test, e.g. suspect's safety.**"

Page VIII-12, section 2, first bullet of the instructions was revised to read: "**When I tell you to start, raise one leg, either leg, with the foot approximately six inches off the ground, keeping your raised foot parallel to the ground.**"

Page VIII-13, section 3, the note following D was revised to read: "**If suspect can't do the test, record observed clues and document the reason for not completing the test, e.g., suspect's safety.**"

Page VIII-13, second paragraph under “Note” was revised to include the words: **“Based on original research.”**

Page VIII-14, words **“and sustained”** were added to the Horizontal Gaze Nystagmus box.

Page VIII-17, the last sentence that made reference to recording eight clues if a person cannot complete the Walk and Turn Test was removed.

Page VIII-19, the last sentence which made reference to recording four clues if a person cannot complete the One Leg Stand Test was removed.

Page VIII-20, questions #4, #9 and #13 in the “Test Your Knowledge” section were revised to include the words **“Per the original research.”**

Attachment B, “Scientific Publications and Research Reports Addressing Nystagmus” two new research papers; 1) **“Nystagmus Testing in Intoxicated Individuals”**, Citek, Ball and Rutledge, 2003., and 2) **“The Robustness of the Horizontal Gaze Nystagmus (HGN) Test”**, U.S. Department of Transportation, 2004 were added.

Session IX: Test Battery Demonstrations

No revisions

Session X: Dry Run Practice Sessions

Page X-3, added a reference to check for Resting Nystagmus in step #2.

Session XI: Testing Subjects Practice – First Session

No revisions

Session XI-A: Testing Subjects Practice – First Session (Options)

No revisions

Session XII: Processing The Arrested Suspect and Preparation For Trial

No revisions

Session XIII: Report Writing and Moot Court

No revisions

Session XIV: Testing Subjects Practice – Second Session

No revisions

Session XIV-A: Testing Subjects Practice – Second Session (Option Two)

Added a reference to check for resting nystagmus in Step #2 of the Student Proficiency Examination form on Page XIV-3.

Session XV: Review and Proficiency Examinations

Added a reference to check for Resting Nystagmus in Step 2 of the Student Proficiency Examination form (Attachment A, page 1).

Session XVI: Written Examination and Program Conclusion

Introduction to Drugged Driving

Page 3, section 3, Frequency of Drug Use; revised drug use data in last two paragraphs to include current Substance Abuse and Mental Health Services Administration (SAMHSA) data.

Page 4, included update drug use data from the National Household Survey on Drug Abuse (NHSDA).

Page 5, section B, added “**Resting Nystagmus**” as first bullet in first paragraph. Added definition and explanations of resting nystagmus under the bullets.

Pages 5 through 10, replaced the words “usually will” with the word “**generally**” when describing the effects of various drug categories.

Page 6, added explanation of early angle of onset of nystagmus under the PCP bullet. Also added reference to “Resting Nystagmus.”

Section 3 – Hallucinogens; action revised to read: “**Hallucinogens are drugs that affect a person’s perceptions, sensations, thinking, self awareness and emotions.**” Also added to drug charts at end of the session.

Added the revised definition of hallucinogens from the Random House College Dictionary (Revised Edition, 1980).

Section 5 – Narcotic Analgesics; added OxyContin to list of examples.

Section 7 – Cannabis; added “**Reddening of Conjunctiva**” to list of general indicators. Also added to the drug charts at end of session.

Section D – Drug Combinations; revised the definition of “polydrug use” in the second paragraph to read: “**Polydrug use is defined as using two or more drugs at the same time**” making the definition consistent with DRE.

Section D – Drug Combinations; revised the definitions of Null Effect, Overlapping Effect, Additive Effect and Antagonistic Effect to coincide with the DRE definitions.

CEH
5-04-06