

**National Association of State  
Boating Law Administrators  
(NASBLA)**



**Boating Under the Influence  
Detection and Enforcement  
Course**

**Student Manual**



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## Foreword

The National Association of State Boating Law Administrators' (NASBLA) mission is to protect, promote and enhance safe and enjoyable boating on our nation's waterways and to foster partnerships and cooperation among recreational boating safety interests.

As a means of achieving the purposes set forth in the mission statement, NASBLA is committed to the following *strategic goals*. The association will:

- Establish a broad national coalition of boating safety partners to advocate for national policies, research and resources to support the recreational boating safety (RBS) agenda;
- Maintain a canon of contemporary model boating laws and regulations to provide both a resource and benchmark for states working to achieve best RBS management practices;
- Function as the certifying body for national standards on the content and delivery of boater education courses for the boating public and officer training courses for the marine law enforcement professional;
- Serve as the information nexus for state boating law administrators and other boating professionals to foster interstate communication and cooperation on RBS policy issues and to facilitate greater uniformity and reciprocity among and between state programs;
- Administer the foremost professional development and continuing education academy for state boating officials in all levels of state agency management; and
- Build a comprehensive government affairs and outreach program to advance the association's public policy agenda

## Acknowledgements

The National Association of State Boating Law Administrators and the state recreational boating safety programs are indebted to the NASBLA Law Enforcement committee, and especially to Kevin Kelly, chief, Recreational Boating Safety, Eighth Coast Guard District, Richard Moore, boating law administrator with the Florida Fish & Wildlife Conservation Commission, Nick Humphrey, Missouri State Water Patrol, and Tim Baumgarten, Arizona Game & Fish, for bringing this product to fruition. Mr. Kelly served as the principle developer and primary author of the BUI curriculum and worked closely with Mr. Moore, Mr. Humphrey and Mr. Baumgarten in updating this edition.

## PREFACE

This student manual provides a reference for students of the Boating Under the Influence Enforcement Training Program presented by the National Association of State Boating Law Administrators (NASBLA). The acronym BUI means Boating Under the Influence and is synonymous with terms such as BWI, OUI, OUII, etc. These terms are commonly used in conjunction with violations involving the operation of vessels by persons under the influence of alcohol and/or other drugs. While many of the concepts used in this course also apply to violations involving impaired automobile drivers, the focus of this course is the alcohol-impaired operator of a vessel.

**The procedures outlined in this manual describe how the Standardized Field Sobriety Tests (SFSTs) are to be administered under ideal conditions. We recognize that the SFSTs will not always be administered under ideal conditions in the field because such conditions will not always exist in a given location. Even when administered under less than ideal conditions, they generally serve as valid and useful indicators of impairment. Slight variations from the ideal, i.e., the inability to find a perfectly smooth, level surface adjacent to a body of water, may have some effect on the evidentiary weight given to the results. However, this does not necessarily make the SFSTs invalid.**

The enforcement of alcohol impaired operation laws is a complex and demanding law enforcement responsibility. It is for this reason that a separate block of instruction on this topic is deemed necessary to ensure that officers are given the skills to effectively **detect** and **apprehend** impaired operators. The materials discussed in this course of instruction are substantially in accordance with the guidelines set forth by the National Highway Traffic Safety Administration (NHTSA). Modifications to the topics have been made to accommodate the more complex challenges relating to BUI enforcement.

All course participants should note that the ability to maintain the skills learned in this course will rapidly diminish if they are not reinforced by consistent field application and occasional in-service training. This does not imply that this training is so complex or confusing that it can only be mastered by exceptionally-skilled officers. The techniques of BUI detection and use of the Standardized Field Sobriety Tests can be readily grasped by anyone of average competence, provided that they are willing to devote the appropriate time and effort to study and practice.

## NASBLA Boating Under the Influence Course

*(Times are tentative and subject to change.)*

### DAY 1

- 8:00 - 8:50 a.m. ....Introduction and Overview (Session 1)
- 9:00 - 9:50 a.m. ....Detection/General Deterrence (Session 2)
- 10:00 - 10:50 a.m. ....Legal Environment (Session 3)
- 11:00 - 11:50 a.m. ....Note-Taking and Testimony (Session 4)
- 11:50 am - 1:00 p.m. ....Lunch (on your own)
- 1:00 pm - 1:50 p.m. ....Phase 1 – Vessel in Motion (Session 5)
- 2:00 - 2:50 p.m. ....Phase 2 – Personal Contact (Session 6)
- 3:00 - 3:50 p.m.....Phase 3 – Preliminary Screening (Session 7)
- 4:00 - 4:50 p.m.....Afloat Battery – SFST (Session 8)

### DAY 2

- 8:00 - 10:50 a.m.....Concepts & Principles of SFSTs (Session 9)
- 11:00 - 11:50 a.m. ....Ashore Battery SFSTs ((Session 10)
- 11:50 a.m. - 1:00 p.m. ....Lunch (on your own)
- 1:00 - 1:30 p.m.....Dry Run Practice Session (Session 11)
- 1:40 - 2:20 p.m..... Testing Subject Video Session 1 (Session 12)
- 2:20 – 3:00 p.m.....Testing Subject Video Session 2 (Session 12)
- 3:10 - 4:00 p.m..... Processing Suspect/Trial Preparation (Session 13)
- 4:10 – 4:30 pm.....Briefing for Wet Lab
- 6:30 – 9:30 pm .....Live Wet Lab

### DAY 3

- 7:00-9:50 a.m..... Review/Proficiency Exam (Session 15)
- 10:00 – 10:50 a.m. .... Logistical Preparedness (Session 14)
- 11:00 - 12:00 p.m. ....Post Test/Critiques/Certificate Presentations (Session 16)

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<b>Session 1</b>	<b>Introduction and Overview</b>
<b>Session 2</b>	<b>Detection &amp; General Deterrence</b>
<b>Session 3</b>	<b>The Legal Environment</b>
<b>Session 4</b>	<b>Overview of Detection, Note-taking and Testimony</b>
<b>Session 5</b>	<b>Phase One: Vessel in Motion</b>
<b>Session 6</b>	<b>Phase Two: Personal Contact</b>
<b>Session 7</b>	<b>Phase Three: Pre-arrest Screening</b>
<b>Session 8</b>	<b>Afloat Battery Standardized Field Sobriety Tests</b>
<b>Session 9</b>	<b>Concepts and Principles of the NHTSA Standardized Field Sobriety Tests</b>
<b>Session 10</b>	<b>Ashore Battery Standardized Field Sobriety Tests</b>
<b>Session 11</b>	<b>“Dry-Run” Practice Session - Ashore</b>
<b>Session 12</b>	<b>“Testing Subjects” Practice Sessions</b>
<b>Session 13</b>	<b>Processing the Arrested Suspect &amp; Preparing for Trial</b>
<b>Session 14</b>	<b>Logistical Preparation for BUI Enforcement</b>
<b>Session 15</b>	<b>Review and Proficiency Examinations</b>
<b>Session 16</b>	<b>Written Examination and Program Conclusion</b>



# **SESSION I**

## **Introduction and Overview**

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SESSION I**

SLIDES  
1 - 1,2

**INTRODUCTION AND OVERVIEW**

Upon successfully completing this session, the student will be able to:

- state the goals and objectives of the course;
- describe the course schedule and activities;
- demonstrate his or her pre-training knowledge of course topics.

**CONTENT SEGMENTS**

- A. Welcoming Remarks and Objectives**
- B. Administrative Details**
- C. Pre-Test**

**LEARNING ACTIVITIES**

- o Instructor-Led Presentations
- o Written Examination

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## BUI DETECTION AND STANDARDIZED FIELD SOBRIETY TESTING

### GOALS AND OBJECTIVES

SLIDE  
I - 3

#### 1. Ultimate Goal

To increase deterrence of BUI violations and thereby reduce the number of accidents, deaths and injuries caused by impaired operators.

SLIDE  
I - 4

#### 2. Enforcement-Related Goals

- a. Understand enforcement's role in general BUI deterrence.
- b. Understand detection phases, indicators, clues and techniques.
- c. Understand requirements for organizing and presenting testimonial and documentary evidence in BUI cases.

SLIDE  
I - 5

#### 3. Job Performance Objectives

As a result of this training, the student will become significantly better able to:

- a. recognize and interpret evidence of BUI violations;
- b. administer and interpret standardized field sobriety tests; and
- c. describe BUI evidence clearly and convincingly in written reports and verbal testimony.

#### 4. Enabling Objectives

In pursuit of the job performance objectives, the student will come to:

- a. understand the tasks and decisions of BUI detection;
- b. recognize the magnitude and scope of BUI-related accidents, deaths, injuries, property loss and other social aspects of the BUI problem;
- c. understand the deterrence effects of BUI enforcement;
- d. understand the BUI enforcement legal environment;
- e. know and recognize typical vessel maneuvers and human indicators symptomatic of BUI that are associated with initial observation of boats in operation;

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- f. know and recognize typical reinforcing maneuvers and indicators that become known during the stopping sequence;
- g. know and recognize typical sensory and other clues of alcohol and/or drug influence that may be seen during face-to-face contact with BUI suspects;
- h. know and recognize typical behavioral clues of alcohol influence that may be seen during the suspect's exit from the boat;
- i. understand the role and relevance of psychophysical testing in pre-arrest screening of BUI suspects;
- j. understand the role and relevance of preliminary breath testing in pre-arrest screening of BUI suspects;
- k. know and carry out appropriate administrative procedures for validated divided attention psychophysical tests;
- l. know and carry out appropriate administrative procedures for the horizontal gaze nystagmus test;
- m. know and recognize typical clues of alcohol and/or drug influence that may be seen during administration of the standardized field sobriety tests;
- n. understand the factors that may affect the accuracy of preliminary breath testing devices;
- o. understand the elements of BUI prosecution and their relevance to BUI arrest reporting;
- p. choose appropriate descriptive terms to convey relevant observations of BUI evidence; and
- q. write clear, descriptive narrative BUI arrest reports.

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## GLOSSARY OF TERMS

ALVEOLAR BREATH - Breath from the deepest part of the lung.

BLOOD ALCOHOL CONCENTRATION (BAC) - The level of alcohol in a person's blood. The number of grams of alcohol in 100 ml of blood.

BREATH ALCOHOL CONCENTRATION (BrAC) - The level of alcohol in a person's breath. The number of grams of alcohol in 210 liters of breath.

BUI - Boating Under the Influence (also known as OUI, BWI, OUII) - Operating a vessel while under the influence of alcohol or other drugs.

BUI DETECTION PROCESS - The entire process of identifying and gathering evidence to determine whether a suspect should be arrested for a BUI violation. The BUI detection process has three phases:

- Phase One - Vessel In Motion
- Phase Two - Personal Contact
- Phase Three - Pre-arrest Screening

CLUE – a specifically defined objective indicator or impairment .

CUE - Something said or done that provides a subjective signal to an observer.

DIVIDED ATTENTION TEST - A test which requires the subject to concentrate on both mental and physical tasks at the same time.

EVIDENCE - Any means by which some alleged fact that has been submitted to investigation may either be established or disproved. Evidence of a BUI violation may be of various types:

- a. Physical (or real) evidence: something tangible, visible or audible.
- b. Well-established facts (judicial notice).
- c. Demonstrative evidence: demonstrations performed in the courtroom.
- d. Written matter or documentation.
- e. Testimony.

FIELD SOBRIETY TEST - Any one of several afloat/ashore tests that can be used to determine whether a suspect is impaired.

HORIZONTAL GAZE NYSTAGMUS (HGN) - A field sobriety test based on the involuntary jerking of the eyes as they gaze toward the side.

ILLEGAL PER SE (Unlawful in and of itself) - Used to describe a law that makes it illegal to drive while having a statutorily prohibited Blood Alcohol Concentration.

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**INDICATORS OF IMPAIRMENT** – Signs or symptoms that are commonly exhibited by a subject and are associated with alcohol or drugs.

**NYSTAGMUS** - An involuntary jerking of the eyes.

**ONE-LEG STAND (OLS)** - A divided-attention field sobriety test that requires a subject to balance on one leg for at least 30 seconds.

**PERSONAL CONTACT** - The second phase in the BUI detection process. In this phase, the officer observes and interviews the operator face to face; determines whether the officer will continue with a BUI investigation and observes the operator's exit from the vessel.

**PRE-ARREST SCREENING** - The third phase in the BUI detection process. In this phase, the officer administers field sobriety tests to determine whether there is probable cause to arrest the operator for BUI and administers or arranges for a preliminary breath test.

**PRELIMINARY BREATH TEST (PBT)** - A pre-arrest breath test administered during a BUI investigation. Used to confirm the officer's observations are due to the person's blood alcohol concentration.

**PBT** - A commonly used acronym to describe a preliminary breath testing instrument used to obtain a pre-arrest breath sample.

**PSYCHOPHYSICAL (Mind-body)** - Used to describe field sobriety tests that measure a person's ability to perform both mental and physical tasks.

**STANDARDIZED FIELD SOBRIETY TEST BATTERY (SFST)** - A battery of three tests – Horizontal Gaze Nystagmus, Walk-and-Turn and One-Leg Stand – administered and evaluated in a standardized manner to obtain validated indicators of impairment based on NHTSA sponsored research.

**TIDAL BREATH** - Breath that moves in and out of the upper part of the lungs and mouth during normal breathing.

**VESSEL IN MOTION** - The first phase in the BUI detection process. In this phase the officer observes the vessel in operation, determines whether to stop the vessel, and observes the stopping sequence.

**WALK-AND-TURN (WAT)** - A divided-attention field sobriety test that requires the subject to walk nine heel to toe steps on a line, turn and return with nine heel to toe steps.

## **SESSION 2**

### **Detection and General Deterrence**

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## SESSION II

SLIDES  
2- 1,2,3

### DETECTION AND GENERAL DETERRENCE

Upon successfully completing this session, the student will be able to:

- describe the frequency of BUI violations and accidents;
- define General Deterrence;
- describe the relationship between Detection and General Deterrence;
- describe a brief history of alcohol;
- identify common types of alcohol;
- Describe the physiologic processes of absorption, distribution and elimination of alcohol in the human body.

#### CONTENT SEGMENTS

- A. The BUI Problem
- B. The Concept of General Deterrence
- C. Relating Detection to Deterrence Potential
- D. Evidence of Effective Detection and Effective Deterrence
- E. Physiology of Alcohol

#### LEARNING ACTIVITIES

- o Instructor-Led Presentations
- o Reading Assignments



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SLIDES  
2 - 4,5,6

### BUI DETERRENCE: AN OVERVIEW

Throughout the nation, alcohol is a major contributor to both traffic and boating fatalities. Each year, hundreds of people die in boating accidents. According to 2006 Coast Guard sponsored research to estimate the incidence and costs of boating accidents attributed to alcohol use, alcohol involvement in boating accidents was found to be statistically similar to that for motor vehicle accidents. In addition the study concluded that approximately 23% of fatalities resulted from accidents in which alcohol/drugs were noted as a contributing factor, yet any estimate is likely to understate alcohol involvement. Most boating enforcement officers agree that the actual number of alcohol related fatalities is higher. Although, numerous studies have shown that alcohol use increases both the likelihood and severity of boating accidents, the majority of hard statistical data involves traffic accidents. Throughout this section we will discuss the effects of alcohol consumption on a person's ability to operate a vessel. However, much of the statistical information will come from motor vehicle-related studies. When discussing statistics related to motor vehicles, we will refer to "drivers." Where the data relates to boaters, we will refer to "operators."

Alcohol-related boat accidents are about ten times more likely to result in death than are similar accidents that do not involve alcohol. Drinking operators are more likely than other operators to take excessive risks, such as speeding or turning abruptly. Drinking operators are also more likely than other operators to have delayed reaction times. They may not be able to react quickly enough to slow down before crashing and are less likely to wear PFDs. BUI violations and accidents are not simply the work of a relatively few "problem drinkers" or "problem drug users." Many people commit BUI, at least occasionally:

- In a random survey of drivers stopped at all hours during one week, 12% had been drinking; 2% had a Blood Alcohol Concentration (BAC) of 0.10 or more.
- In numerous random surveys of drivers stopped during late evening-early morning weekend hours, approximately 10% had a BAC of 0.10 or more.

Given the historical relationship between boating and alcohol consumption, there is a real possibility that, if a similar study were performed with boaters, the percentages would be as high, if not higher. Compliance data derived from sobriety checkpoint operations along the Colorado River over a 10 year period, indicated approximately 35% of all boat operators consumed alcohol while boating and the arrest rate averaged 10%.

Recreational boaters want the BUI laws enforced. This is supported by the views identified through a national survey of recreational boaters conducted by the U.S. Coast Guard in 2002. Over 92% of the respondents either agreed or strongly

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agreed that laws pertaining to boating while impaired should be strongly enforced.

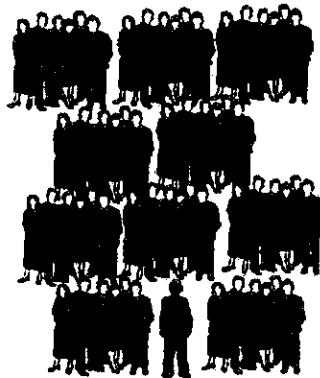
SLIDES  
2-7,8

### GENERAL DETERRENCE

One approach to reducing the number of drinking operators is general deterrence. General deterrence of BUI is based on the boating public's fear of being arrested. If enough violators come to believe there is a good chance they will get caught, at least some of them will stop committing BUI at least some of the time. However, unless there is a real risk of arrest, there will not be much fear of arrest.

Law enforcement officers must arrest enough violators enough of the time to convince the general public that they will get caught, sooner or later, if they continue to boat while impaired.

How many BUI violators must be arrested in order to convince the public that there is a real risk of arrest for BUI? There are no studies that have specifically addressed BUI; however, several programs have demonstrated that arresting one DWI violator for every 400 DWI violations committed can achieve significant deterrence. Currently, however, there are 500-2,000 DWI violations committed for every DWI violator arrested. (See Exhibit 2-3.) When the chances of being arrested are one in 2,000, the average DWI violator has little to fear. Given that there are far fewer "marine" police officers, it is logical that the chances of being caught for BUI are even less than for DWI. Even without any studies, there is no doubt that only a very small percentage of BUI violators get caught.



Chances of a DWI violator being arrested are as low as 1 in 2000.

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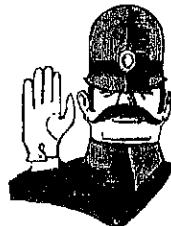
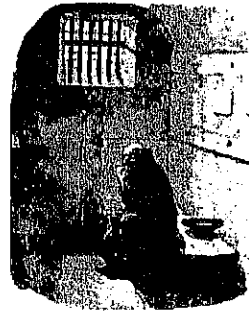
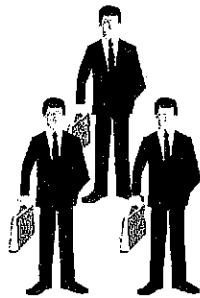
Why is the BUI arrest to violations ratio so low? There are four noteworthy reasons:

- BUI violators vastly outnumber police officers. It is not possible to arrest every drinking operator each time they commit BUI.
- Waterways do not have "lane lines" and navigation rules are more general than traffic regulations, therefore the vessel operation of an impaired operator is more difficult to distinguish from a sober one.
- Some officers are not highly skilled at BUI detection. They fail to recognize and arrest many BUI violators during boating safety inspections.
- Some officers are not motivated to detect and arrest BUI violators.

### SIGNIFICANT FINDINGS

In a study conducted in Fort Lauderdale, Florida, only 22% of traffic violators who were stopped with BACs between 0.10 and 0.20 were arrested for DWI. The remaining violators were cited for other violations, even though they were legally "under the influence." In this study, breath tests were administered to the violators by researchers after the police officers had completed their investigations. The officers failed to detect 78% of the DWI violators they investigated.

The implication of this study, and of other similar studies, is that for every DWI violator actually arrested for DWI, three others are contacted by police officers, but are not arrested for DWI. (See Exhibit 2-4.) It is clear that significant improvement in the arrest rate could be achieved if officers were more skilled at DWI detection. The same reasoning applies to BUI.



For every DWI violator arrested,  
3 others are contacted face-to-face by police  
but not arrested.

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Several enforcement programs have succeeded in achieving significant DWI deterrence. Consider, for example, the three-year, intensive weekend DWI enforcement program in Stockton, California. Under that program:

- arrests increased 500%;
- weekend nighttime accidents decreased 34%;
- the proportion of nighttime weekend operators legally under the influence dropped from 9% to 6%.

As with DWI, improved BUI detection can be achieved in virtually every jurisdiction in the country. The keys to success are police officers that are:

- skilled at BUI detection;
- willing to arrest every BUI violator who is detected;
- supported by their agencies in all aspects of this program, from policy through practical application.

### THE PROBLEM OF BUI

#### HOW WIDESPREAD IS BUI?

While not all of those who operate a vessel after drinking have a BAC of 0.08 or more (the presumptive or illegal per se limit for BUI in most states), many operators do have BACs in excess of 0.08.

A frequently quoted, and often misinterpreted, statistics place the average incidence of DWI at one driver in 50. Averaged across all hours of the day and all days of the week, 2% of the drivers on the road are DWI. That 1 in 50 figure is offered as evidence that a relatively small segment of America's drivers -- the so-called "problem" group -- account for the majority of traffic deaths. There's nothing wrong with that figure as a statistical average, but police officers know that at certain times and places considerably more than 2% of drivers are under the influence of alcohol. National Highway Traffic Safety Administration research suggests that during the late-night weekend hours, as many as 10% of drivers on the roads may be DWI. On certain holiday weekends, and other critical times, the figure may go even higher.

This rationale also applies to BUI. There are certainly times of the day and locations where the incidence of BUI operators will be higher than other times and locations. The incidence of BUI would certainly be higher on a weekend afternoon or night in an area where there are many waterfront bars frequented by boaters than it would be in an area frequented by families water-skiing during mid-morning. Likewise, one would expect the incidence of BUI among people who are participating in adventure sports such as white-water kayaking to be lower than among boaters entertaining friends onboard their cabin cruisers.

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### HOW MANY? HOW OFTEN?

The issue of how many BUIs are on the water at any given time is an important factor in measuring the magnitude of the problem. However, from an overall boating safety perspective, the more important issue may be the number of operators who ever commit BUI. Just how widespread is this violation? In enforcement terms, how many people do we need to deter?

DWI studies suggest that one in 4 drivers have committed DWI at least once. Unfortunately the inherent differences between boating and driving make it difficult to relate these statistics from the traffic studies directly to boating.

Even without hard data, there is little doubt that BUI is a regular occurrence. The usual reason for driving a vehicle is transportation from one point to another. People who commit DWI are usually trying to get somewhere. Although there are exceptions, they are generally not going out in their vehicles to drink. On the other hand, there are many reasons why people boat. True, boating is a form of transportation, but more often the reasons for going out on a boat involve recreation or pleasure. It is not uncommon for people to go out in their boat to entertain friends or just to relax. For many, the consumption of alcohol goes hand in hand with entertaining and relaxing. This means that, in addition to having people who drink at dockside bars and use their boats as transportation to and from the bar, there are many instances where people are on their boat to "party." Even without hard data, it seems logical that the percentage of operators who are BUI is even higher than for drivers.

### SOCIETY'S PROBLEM AND THE SOLUTION

It doesn't matter whether there is no hard data to establish the percentage of operators who are BUI at any given time. The fact is that far more than 2% of American operators actively contribute to the BUI problem. BUI is a crime committed by a substantial segment of boaters. It has been and remains a popular crime; one that many people from all walks and stations of life commit. Even with all the awareness of the dangers of drinking, many boaters see nothing wrong with going fishing or cruising and having a "few" beers. BUI is a crime that can be fought successfully only through a societal approach of comprehensive community-based programs.

## THE SOLUTIONS

### THE ULTIMATE GOAL: CHANGING BEHAVIOR

What must comprehensive, community-based BUI programs seek to accomplish? Ultimately, nothing less than fundamental behavioral change on a widespread basis will eliminate the problem of BUI. The goal is to encourage more Americans to:

- avoid committing BUI by avoiding or controlling drinking prior to and while operating a boat;
- intervene actively to prevent others from committing BUI (for example, putting into practice the theme "friends don't let friends operate drunk"); and
- avoid riding with operators who are under the influence of alcohol.

The final test of the value of BUI countermeasures on the national, state and local levels is whether they succeed in getting significantly more people to modify their behavior. The programs also pursue other more immediate objectives that support or reinforce the ultimate goal. However, the ultimate goal is to change society's perception of boating while impaired to an unacceptable form of behavior at all levels.

### PURSUING THE GOAL: TWO APPROACHES

How can we bring about these changes in behavior? How can we induce more people to avoid BUI violations, prevent others from drinking and operating, and avoid becoming passive "statistics" by refusing to ride with drinking operators? Two general approaches must be taken to achieve this goal. One is prevention. This gives promise of the ultimate, lasting solution to the BUI problem but will require a substantial amount of time to mature fully. The other is deterrence. This offers only a partial or limited solution, but it is available right now.

### PREVENTION: THE ULTIMATE SOLUTION

BUI countermeasures that strive for the ultimate achievement of drinking and boating behavioral changes have been grouped under the label "Prevention." There are many kinds of BUI preventive activities with various channels, such as schools, mass media, concerned civic groups and so on, available for distributing information. The various preventive efforts focus on different specific behaviors and address different target groups. However, they seek to change drinking and boating behavior by promoting more positive attitudes and by fostering a set of values that reflects individual responsibilities toward drinking and boating.

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Preventive countermeasures seek society's acceptance of the fact that BUI is wrong. Some people believe that drinking and boating is strictly an individual's personal business -- that it is up to each person to decide whether to accept the risk of operating a boat after drinking. Preventive activities try to dispel that outmoded and irresponsible belief. Instead, they promote the idea that no one has the right to endanger others by drinking and boating or to risk becoming a burden (economically and otherwise) to others as a result of injuries suffered while drinking and boating. Realistically, everyone has an obligation not only to control their own drinking and driving but also speak up when others are about to commit the violation. Only when all of society views BUI as a negative behavior that cannot be tolerated or condoned, will the public's behavior begin to change. That is the long-term solution.

In many respects, the solution is even more difficult to achieve than programs aimed at DWI prevention. The consumption of alcohol has long been associated with certain recreational activities. Boating is one of those activities.

BUI prevention will never be 100 percent successful. In reality, there will always be people who drink and boat. However, with new sets of values come new behaviors. For example, one need only look at the proliferation of "Thank You for Not Smoking" signs. Displaying such a sign a generation ago would have been viewed as impolite, if not anti-social. Today, "No Smoking" policies are strictly enforced in many work areas.

BUI prevention through basic shifts in attitudes and values can work. Given enough time, it will work. The key word is "time." A full generation or more must grow to maturity before new attitudes take hold and start to change behavior. We can look at today's children and expect that their attitude toward drinking and boating will be different from their parents'; however, we need an interim solution, and we need it NOW.

### BUI DETERRENCE

#### DETERRENCE: THE INTERIM SOLUTION

BUI countermeasures that seek a shortcut to the ultimate goal of behavioral change generally are labeled "Deterrence." Deterrence can be described as negative reinforcement. Some deterrence countermeasures focus primarily on changing individual drinking and boating behavior while others seek to influence people to intervene into others' drinking and boating decisions.

The key feature of deterrence is that it strives to change BUI behavior without dealing directly with the prevailing attitudes about the rightness or wrongness of BUI. Deterrence uses a mechanism quite distinct from attitudinal change: fear of apprehension and application of sanctions.







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### THE FEAR OF BEING CAUGHT AND PUNISHED

Large-scale BUI deterrence programs try to control the BUI behavior of the boating public by appealing to the public's presumed fear of being caught. Most actual or potential BUI violators view the prospect of being arrested with extreme distaste. For some, the arrest, with its attendant handcuffing, booking, publicity, and other stigmatizing and traumatizing features, is the thing most to be feared. For others, the prospective punishment (jail, stiff fine, lawyer's fees, etc.) causes most of the concern. Still others fear most the long-term costs and inconvenience of a BUI arrest: criminal record, stigma of arrest, etc. For many violators the fear probably is a combination of all of these. Regardless, if enough violators are sufficiently fearful of BUI arrest, some of them will avoid committing the violation at least some of the time.

Fear by itself will not change people's attitudes. If boaters do not see anything inherently wrong with drinking and boating in the first place, the prospect of arrest and punishment will not help them change their views. However, fear sometimes can be enough to keep them from putting their anti-social attitudes into practice.

This type of BUI deterrence, based on the fear of being caught, is commonly called general deterrence. It applies to the boating public generally and presumably affects the behavior of those who have never been caught. There is an element of fear of the unknown at work here.

Another type of BUI deterrence, called specific deterrence, applies to those who have been caught and arrested. The typical specific deterrent involves some type of punishment, perhaps a fine, involuntary community service, or a jail term. The punishment is imposed as a way to convince the specific violator that there is indeed something to fear as a result of being caught and to emphasize that if there is a next time, the punishment will be more severe. It is the fear of the known that comes into play in this case.

The concept of BUI deterrence through fear of apprehension and punishment seems sound. But will it work in actual practice? The crux of the problem is this: If the boating public is to fear arrest and punishment for BUI, they must perceive that there is an appreciable risk of being caught and convicted if they commit the crime. If actual and potential BUI violators come to believe that the chance of being arrested is nil, they will quickly lose whatever fear of arrest they may have felt.

Enforcement is the mechanism for creating and sustaining a healthy fear of being caught for BUI. No specific deterrence program can amount to much unless police officers arrest large numbers of violators; no punishment or rehabilitation program can affect behavior on a large scale unless it is applied to many people. General deterrence absolutely depends on enforcement -- the fear of being caught is a direct function of the number of people who are caught.

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Obviously, the police alone cannot do the job. Legislators must supply sound laws that the police can enforce. Prosecutors must vigorously prosecute BUI violators, and the judiciary must adjudicate fairly and deliver the punishment prescribed by law. The media must publicize the enforcement effort and communicate the fact that the risk is not worth the probable outcome. Each of these elements plays a supportive role in BUI deterrence.

### HOW GREAT A RISK IS THERE?

The question now is, are violators afraid of being caught? More importantly, should they be afraid? Is there truly an appreciable risk of being arrested if one commits BUI?

The answer to all of these questions unfortunately is: probably not. In most jurisdictions, the number of BUI arrests appears to fall short of what would be required to sustain a public perception that there is a significant risk of being caught.

Sometimes, it is possible to enhance the perceived risk, at least for a while, through intensive publicity. However, media "hype" without correspondingly intensified enforcement has never been enough to maintain the climate of fear for very long.

### HOW MUCH SHOULD THE PUBLIC FEAR?

In reality, there is little reason for the boating public to fear BUI arrest, even if they drink and boat. Although there is no hard data concerning how many BUI violators are caught compared to how many violations are occurring, deterrence will work only if we increase the number of BUI arrests. The question is, how much do we have to increase arrests to make deterrence work?

### CHANGING THE ODDS

Surprisingly, any increase in arrests could be expected to have an affect on deterrence. Every arrest will probably have a ripple effect, especially if harsh penalties are given to the violator. Arrest one member of a boat club, and every member who drinks and boats will be made aware of the possibility that they may also be caught.

We don't have to arrest every BUI offender every time in order to convince him or her that they have something to fear. We only have to arrest enough of them enough of the time to convince many of them that it can happen to them. As the arrest rate increases, the odds are that it will happen to them eventually. The law of averages (cumulative probability) will catch up with them, and sooner than we might expect.

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The following statistics display the cumulative probability (as a percentage) of being arrested at least once during the course of one, two or three years as a function of the arrest rate on any given night. These statistics are based on the assumption that the average violator commits a violation 80 times each year. (NOTE: We are not claiming that every violator commits BUI 80 times a year. This chart is offered as an example. It is drawn from data related to DWI violations.)

### Percent of violators arrested after...

<b>Nightly Arrest Rate</b>	<b>One Year</b>	<b>Two Years</b>	<b>Three Years</b>
1 in 2000	3.9%	7.7%	11.3%
1 in 1000	7.7%	14.8%	21.3%
1 in 500	14.8%	27.4%	38.2%
1 in 200	33.0%	55.2%	70.0%

Clearly, the chances of being caught accumulate very quickly as the arrest/violation ratio increases. If we could maintain a ratio of one arrest in every 500 violations (a level of enforcement currently maintained in some jurisdictions), then by the time one year has passed, slightly more than one of every seven people (14.8%) who have committed a violation during that year will have been arrested at least once. It probably is a high enough chance to get the attention – and fear – of many violators. If we could achieve an arrest ratio of 1 in 200 (a level attainable by officers skilled in DWI detection), we will arrest fully one-third of all violators at least once every year, and we will arrest more than half of them by the time two years have gone by.

## BUI DETECTION: THE KEY TO DETERRENCE

### CAN IT BE DONE, AND WILL IT WORK?

Is there any evidence that a practical and realistic increase in BUI enforcement activity will produce a significant degree of general deterrence and a corresponding change in BUI behavior? Yes, there is. The following studies dealt with DWI violations, but this information should directly to BUI enforcement also.

As early as 1975, in the city of Stockton, California, a study showed that the city's total number of DWI arrests (700) was considerably less than one percent of the areas licensed number of operators (130,000). The implication here was that Stockton police were only maintaining the arrest/violation ratio of 1 to 2,000, or less. In addition, roadside surveys on Friday and Saturday nights disclosed that 9 percent of the drivers were operating with BACs of 0.10 or higher.

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Then things changed. Beginning in 1976 and continuing at planned intervals through the first half of 1979, Stockton police conducted intensive DWI enforcement on weekend nights. The officers involved were extensively trained. The enforcement effort was heavily publicized and additional equipment (PBTs and cassette recorders) was made available. The police effort was closely coordinated with the District Attorney's office, the County Probation office, and other allied criminal justice and safety organizations. All things paid off. By the time the project came to a close in 1979, DWI arrests had increased by over 500 percent, weekend nighttime collisions had decreased by 34 percent, and the number of operators committing DWI dropped one-third.

Since the historical Stockton study, numerous states have conducted similar studies to determine the degree of effect that DWI arrests would have on alcohol-related fatalities in general and total fatalities in particular. Most of these studies were conducted between 1978 and 1986.

The results of these studies graphically illustrated in each state that when the number of arrests for DWI increased, the percent of alcohol-related fatalities decreased. Further, the results of a study conducted in Florida from 1981 to 1983 showed that when DWI arrests per licensed driver increased, total fatalities decreased (12-month moving average).

### DETECTION: THE KEY TO DETERRENCE

It is important to understand how increased BUI enforcement can affect deterrence. Deterrence can vastly exceed the level of enforcement that officers achieve on any given night. True, weekend BUI arrests can increase by as much as 500 percent, as the DWI arrests did in the Stockton study. However, even though the study showed they started with an enforcement ratio no better than 1-in-2000, the tremendous increase in DWI arrests probably only brought the arrest ratio to about 1-in-400. Regardless of the fact that 399 DWI drivers avoided arrest, the increased enforcement effort convinced at least one-third of the violators to change their behavior substantially.

The law of averages quickly starts to catch up with DWI/BUI operators when the enforcement ratio improves to the 1-in-400 ratio. At that level, unless violators change their behavior, many of them will be caught, or at least will have known someone who has been arrested. Coupled with the heavy publicity given to the enforcement effort, those experiences were enough to raise the perception level of apprehension among DWI drivers that in time they would be caught. As a result, many of them changed their behavior. This is the best example of general deterrence.

In addition, during the same time that DWI arrests went up over 500 percent in Stockton, citations for other traffic violations increased by a comparatively modest 99 percent. The implication is that Stockton's officers were stopping and

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contacting only twice as many possible violators as they had before, but they were coming up with more than five times as many DWI arrests.

What have the results of these studies shown? They have shown that a community will benefit from their officers' increased skills at BUI detection. Principally because of their special training, the officers were better able to recognize "clues" of impairment when they observed vessels in motion, and they were more familiar with the "clues" or human indicators of impairment exhibited by violators during personal contact. The officers also had more confidence in the field sobriety tests used to investigate their suspects. The most important factor was that far fewer of the violators being stopped now avoided detection and arrest.

The difficulty in detecting DWI among drivers personally contacted by officers has been well documented. Analysis of roadside survey and arrest data suggest that for every DWI violator arrested, three others actually have face-to-face contact with police officers but are allowed to go without arrest. Direct support of that inference was found in the Fort Lauderdale BAC study, where researchers demonstrated that police officers arrested only 22 percent of the DWI drivers they contacted whose BAC levels were subsequently shown to be between 0.10 and 0.20.

The ability to detect BUI violators is the key to general deterrence and possibly the greatest impediment to it. If we accept the three-to-one ratio of failed detentions as being reasonably accurate, the implications are rather alarming. Consider the impact on a BUI violator's subsequent behavior when, after being stopped by the police, they are allowed to continue operating. Very likely, these BUI violators and their friends will become even more convinced of their ability to handle drinking and boating. Further, they will come to believe that they will never be arrested because police officers can't determine when they are "over the limit." Instead of creating general BUI deterrence, this attitude breeds specific reinforcement. This helps to develop a feeling among BUI violators that they have nothing more to fear from police than an occasional ticket for a minor boating offense.

On the positive side, the ratio of undetected to detected violations suggests that much can be accomplished with existing resources, if we use those resources as efficiently as possible. By simply improving detection skills of law enforcement officers, we could experience an increase in the arrest/violation ratio significantly without any increase in contacts.

## PHYSIOLOGY OF ALCOHOL

SLIDES  
2 - 9,,10

### A BRIEF OVERVIEW OF ALCOHOL

Alcohol is the most abused drug in the United States.

"Alcohol" is the name given to a family of closely related and naturally occurring chemicals. Each of the chemicals that are called an "alcohol" is made up of molecules that contain a single oxygen atom and varying numbers of hydrogen and carbon atoms. The simplest alcohol has only one carbon atom and four hydrogen atoms. The next alcohol has two carbons and six hydrogens. The third alcohol has three carbons and eight hydrogens. The next one in the "chain" has one more carbon and two more hydrogen atoms than the one before. That is how the alcohols differ from one another.

Alcohols are molecularly very similar and produce similar effects. They produce intoxicating effect when ingested into the human body. Only one of them is meant for human consumption. However, when ingested in substantial quantities it can cause death.

SLIDES  
2 - 11,12

The ingestible alcohol is known as ethyl alcohol, or ethanol. Its chemical abbreviation is ETOH. The "ET" stands for "ethyl" and the "OH" represents the single oxygen atom and one of the hydrogen atom, bonded together in what chemicals refer to as the "hydroxy radical." Ethanol is the variety of alcohol that has two carbon atoms. Two of ethanol's best-known analogs are methyl alcohol (or methanol), commonly called "wood alcohol," and isopropyl alcohol (or isopropanol), also known as "rubbing alcohol."

SLIDE  
2 - 13

Ethanol is the alcohol that features prominently in impaired driving. Ethanol is beverage alcohol -- the active ingredient in beer, wine, whiskey, liquors, etc. Ethanol production starts with fermentation. That is a kind of decomposition in which the sugars in fruit, grains and other organic material combine with yeast to product the chemical ethanol. This can occur naturally, as yeast spores in the air encounter decomposing fruit and grains. However, most of the ethanol in the world didn't ferment naturally -- it was produced under human supervision.

When an alcoholic beverage is produced by fermentation, the maximum ethanol content that can be reached is about 14%. At that concentration, the yeast dies, so the fermentation stops. Obtaining higher ethanol content requires a process called **distillation**. This involves heating the beverage until the ethanol "boils off," then collecting the ethanol vapor. It is possible to do this because ethanol boils at a lower temperature than water.

**Distilled spirits** is the name given to high-ethanol-concentration beverages produced by distillation, including rum, whiskey, gin, vodka, etc. The ethanol

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concentration of distilled spirits usually is expressed in terms of proof, which is a number corresponding to twice the ethanol percentage. For example, an 80-proof beverage has an ethanol concentration of 40 percent.

SLIDES  
2-14,15

Over the millennia during which people have used and abused ethanol, some standard-size servings of the different beverages have evolved. Beer, for example, is normally dispensed in 12-ounce servings. Since beer has an ethanol concentration of about 4%, the typical bottle or can of beer contains a little less than one-half ounce of pure ethanol. A standard glass of wine has about four ounces of liquid. Wine is about 12% alcohol, so the glass of wine also has a bit less than one-half ounce of ethanol in it. Whiskey and other distilled spirits are dispensed by the "shot glass," usually containing about one and one-quarter ounce of fluid. At a typical concentration of 40% ethanol (80-proof), the standard shot of whiskey has approximately one-half ounce of ethanol. Therefore, as far as their alcoholic contents are concerned, **a can of beer, a glass of wine and a shot of whiskey are all the same.**

### PHYSIOLOGIC PROCESSES

Ethanol is a central nervous system depressant. It doesn't affect a person until it gets into their central nervous system, i.e., the brain, brain stem and spinal cord. Ethanol enters the brain by getting into the blood. In order to get into the blood, it must be in the body.

There are a number of ways ethanol can enter the body. It can be inhaled. Ethanol fumes, when taken into the lungs, will pass into the bloodstream and a positive blood alcohol concentration (BAC) will develop. However, prolonged breathing of fairly concentrated fumes would be required to produce a significantly high BAC. Ethanol could also be injected directly into a vein; it would then flow with the blood back to the heart, where it would be pumped first to the lungs and then to the brain. And it could be inserted, as an enema and pass quickly from the large intestine into the blood. But none of these methods are of any practical significance because alcohol is usually introduced into the body orally, i.e., by drinking.

### Absorption

SLIDE  
2- 16

Once the ethanol gets into the stomach, it has to move into the blood. The process by which this happens is known as absorption. One very important fact that pertains to alcohol absorption is that alcohol does not have to be digested in order to move from the stomach to the blood. Another very important fact is that alcohol can pass directly through the walls of the stomach. These two facts, taken together, mean that under the right circumstances absorption of alcohol can be accomplished quickly. The ideal circumstance for rapid absorption is to drink on an empty stomach.



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SLIDE  
2 - 17

When the alcohol enters the empty stomach, about 20% of it will make its way directly through the stomach walls. The remaining 80% will pass through the base of the stomach and enter the small intestine, from which it is readily absorbed into the blood. Because the body doesn't need to digest the alcohol before admitting it into the bloodstream, the small intestine will be open to the alcohol as soon as the alcohol hits the stomach.

But what if there is food in the stomach? Suppose the person has had something to eat shortly before drinking or eats food while drinking -- will that affect the absorption of alcohol?

SLIDE  
2 - 18

Yes, it will. Food has to be at least partially digested in the stomach before it can pass to the small intestine. When the brain senses that food is in the stomach, it commands a muscle at the base of the stomach to constrict and cut off the passage to the small intestine. The muscle is called the pylorus, or pyloric valve. As long as it remains constricted, little or nothing will move out of the stomach and into the small intestine. If alcohol is in the stomach along with the food, the alcohol will also remain trapped behind the pylorus. Some of the alcohol trapped in the stomach will begin to break down chemically before it ever gets into the blood. In time, as the digestive process continues, the pylorus will begin to relax, and some of the alcohol and food will pass through. But the overall effect will be to slow the absorption significantly. Because the alcohol takes more time to get into the blood, and because the body will continue to process and eliminate the alcohol that does manage to get in there, the drinker's BAC will not climb as high as it would have if he or she had consumed alcohol on an empty stomach.

### Distribution

SLIDES  
2-19,20

Once the alcohol moves from the stomach into the blood, it will be distributed throughout the body by the blood. Alcohol has an affinity for water. The blood will carry the alcohol to the various tissues and organs of the body and deposit the alcohol in them in proportion to their water content. Brain tissue has a high water content, so the brain receives a substantial share of the distributed alcohol. Muscle tissue has reasonably high water content, but fat tissue contains very little water. Thus, very little alcohol will be deposited in the drinker's body fat. This is one factor that differentiates alcohol from certain other drugs, notably PCP and THC, which are very soluble in fat.

SLIDES  
2- 21,22

The affinity of alcohol for water, and its lack of affinity for fat, helps explain an important difference in the way alcohol affects women and men. Pound for pound, the typical female's body contains a good deal less water than does the typical man's. This is because women have additional adipose (fatty) tissue, designed in part to protect a child in the womb. A

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Swedish pioneer in alcohol research, E.M.P. Widmark, determined that the typical male body is about 68% water, the typical female only about 55%. Thus, when a woman drinks, she has less fluid pound-for-pound in which to distribute the alcohol.

SLIDE  
2 - 23

If a woman and a man who weighed the same drank exactly the same amount of alcohol under the same circumstances, her BAC would climb higher than his. When coupled with the fact that the average woman is smaller than the average man, it becomes apparent that a given amount of alcohol will cause a higher BAC in a woman than it usually will in a man.

### Elimination

SLIDE  
2 - 24

As soon as the alcohol enters the blood stream, the body starts trying to get rid of it. Some of the alcohol will be directly expelled from the body chemically unchanged. For example, some alcohol will leave the body in the breath, urine, sweat, tears, etc. However, only a small portion (about 2-10%) of the ingested alcohol will be directly eliminated.

Most of the alcohol a person drinks is eliminated by metabolism. Metabolism is a process of chemical change. In this case, alcohol reacts with oxygen in the body and changes, through a series of intermediate steps, into carbon dioxide and water -- both of which are directly expelled from the body.

SLIDE  
2 - 25

Most of the metabolism of alcohol in the body takes place in the liver. An enzyme known as alcohol dehydrogenase acts to speed up the reaction of alcohol with oxygen. The speed of the reaction varies somewhat from person to person, and even from time to time for any given person. On the average, however, a person's blood alcohol concentration - after reaching peak value - will drop by about 0.015 per hour. For example, if the person reaches a maximum BAC of 0.15, it will take about ten hours for the person to eliminate all of the alcohol.

For the average-sized male, a BAC of 0.015 is equivalent to about two-thirds of the alcohol content of a standard drink (i.e., about two-thirds of a can of beer, of glass of wine or shot of whiskey). For the average-sized female, that same BAC would be reached on just one-half of a standard drink. So the typical male will eliminate about two-thirds of a drink per hour, while the typical female will burn up about one-half of a drink in that hour.

We can control the rate at which alcohol enters our bloodstream. For example, we can gulp down our drinks, or slowly sip them. We can drink on an empty stomach, or we can take the precaution of eating before drinking. We can choose to drink a lot, or a little. But once the alcohol gets into the blood, there is nothing we can do to affect how quickly it leaves. Coffee won't accelerate the rate at

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which our livers metabolize alcohol. Neither will exercise, deep breathing, or a cold shower. We simply have to wait for the process of metabolism to move along at its own speed.

### DOSE-RESPONSE RELATIONSHIPS

People sometimes ask, "How 'high' is 'drunk'? What is the 'legal limit' for 'drunk boating'? How much can a person drink before becoming 'impaired'?"

There is no simple answer to these or similar questions, except to say that any amount of alcohol will affect a person's ability to operate to some degree. It is true that the laws of nearly all states establish a BAC limit at which it is explicitly unlawful to operate a vessel. In most cases, that "limit" is either 0.08 or 0.10 BAC. **But every state also makes it unlawful to drive when "under the influence" of alcohol**, and the law admits the possibility that a particular person may be under the influence at a much lower BAC.

How much alcohol does someone have to drink to reach these kinds of BACs? Obviously, as we've already seen, it depends on how much time the person spends drinking, whether the person is a man or a woman, how large the person is, whether the drinking takes place on an empty stomach, and certain other factors. But let's take as an example a 175-pound man. If he drinks two beers, or two shots of whiskey, in quick succession on an empty stomach, his BAC will climb to slightly above 0.04. Two more beers will boost him above 0.08. One more will push him over 0.10. In one respect, then, it doesn't take very much alcohol to impair someone -- "a couple of beers" can do it.

SLIDE  
2 - 26

But in another respect, when we contrast alcohol with virtually any other drug, we find that impairment by alcohol requires a vastly larger dose than does impairment by the others. Consider exactly what a BAC of 0.08 means. Blood alcohol concentration is expressed in terms of the "number of grams of alcohol in every **100 milliliters** of blood." When we find that a person has a BAC of 0.08, that means that there is one eighth of a gram of pure ethanol in any given 100 milliliter sample of blood. One eighth of a gram is equal to eighty milligrams (a milligram is one-thousandth of a gram). So, at a BAC of 0.08, the person has 80 milligrams of alcohol in every 100 milliliters of blood.

SLIDE  
2 - 27

Another way to measure alcohol levels in the body is by breath sampling. Breath alcohol concentration (BrAC) is expressed in terms of the "number of grams of alcohol in every **210 liters** of breath." When we find that a person has a BrAC of 0.08, that means that there is one-eighth of a gram of ethanol in any given 210 liter sample of breath.





SLIDE  
2-28

**EFFECTS OF ALCOHOL ON THE BRAIN**

As we said earlier, alcohol is a central nervous system depressant. It slows down or blocks the processes of the brain. We will now discuss in detail the effects of alcohol on the body as shown by BAC levels.

<b>BAC</b>	<b>Effects of alcohol</b>
.03	Reactions are measurably slowed by the time BAC reaches .03
.04	Individuals have difficulty dividing attention
.05	An individual's judgment and inhibitions are measurably impaired.  NOTE: Studies conducted at two universities show 60% of attacks on law enforcement are by individuals with a .05 or greater BAC.
.08	Vision is impaired. A subject may lose peripheral vision or have difficulty focusing.
.10	Motor coordination is significantly impaired.
Above .10	May show progressive deterioration of emotional control, lack of comprehension of time and place, and false perception of objects and people.
.40 - .50	Person may become unconscious and comatose. If BAC continues to rise, vital functions, such as respiration and heartbeat stop around .50.

## STRESSORS

SLIDE  
2 - 29

Stressors defined:

- A stressor is a stimulus that causes stress.
- Stressors are common in boating.
- Stressors affect people differently.
- Stressors add to the effects of alcohol.
- The effects of stressors mimic intoxication.

There are two major categories of stressors and they are medical and environmental.

Types of medical stressors include:

- Insulin shock
- Speech disorders
- Head injuries
- Kidney ailments
- Mental disorders
- Vertigo
- Seasickness

Environmental stressors are divided into two general types; daytime and nighttime. General types of stressors may be encountered any time of day and are associated with the operation of boats.

Note: If you are in doubt whether the individual's condition is caused by a medical stressor or the person is in fact intoxicated, consult proper medical authority.

### Types of General Stressors

SLIDE  
2 - 30

Fatigue – Fatigue due to long hours of being in a boat results in slowed reactions and reasoning ability. Studies have shown that a fatigued operator operating at a speed of 30 MPH will travel 70 feet further in reacting to a visual stimulus than a rested operator.

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Noise – The adverse effects of noise begin at the 80 dB range. (About the level of noise outboard engines produce.) Noise creates changes in the heart rate and blood flow which can result in:

- Loss of balance
- Tunnel vision
- Decrease in mental performance
- Interference with verbal communications

Shock (not first aid definition) – Shock is caused by G-forces exerted as the boat's hull bounces on the water. The average out-drive unit undergoes a minimum of two G's when riding on calm water. The forces increase as wave height increases. This can cause motion sickness, which leads to decreased reaction time.

Vibration – Produces effects similar to those caused by shock

Law Enforcement presence – Officer presence can also be considered a stressor on an operator

### Types of Daytime Stressors

Heat – The detrimental effects of heat increase the presence of salt and water, which is a typical combination in a maritime environment. The table below shows the effects of heat on an individual:

Outside Temperature	Results on Boater
76 – 86 F	Divided attention is affected.
84 – 90 F	Decrease in perception/response and auditory functions.
Over 91 F	Dexterity and motor functions affected.

Sun glare – Causes the eyes to constrict producing eyestrain, which reduces the ability to see and slows reaction time.

Time pressure – The pressure of needing to be someplace at a certain time causes increased respiration and leads to similar symptoms of those caused by noise.

### Types of Nighttime Stressors

Nighttime and daytime stressors are nearly identical. However, operating at night adds additional stressors.



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Background lighting – Affects boater's navigation by "hiding" other vessels or navigation aids. The strain of trying to pick out objects at night results in increased respiration and in severe cases, panic may set in.

Unfamiliar surroundings – If not experienced in the area, the lack of prominent daytime landmarks and unfamiliar objects causes an increased concern for safety.

There is one major point that the officer must understand when dealing with stressors:

**Stressors affect an individual's behavior and reaction times, which slows response in an emergency situation.**

This will make a person under the effects of stressors appear to be intoxicated even though they may not have had anything to drink. When added to the use of drugs and/or alcohol, stressors can have an additive effect on an individual.

**TEST YOUR KNOWLEDGE**

INSTRUCTIONS: Complete the following sentences.

1. \_\_\_\_\_ deterrence is based on the fear of being caught.
2. \_\_\_\_\_ deterrence is based on the punishment being imposed on a person who has been caught.
3. True or False: Most of the operators who are BUI and encounter police are arrested for BUI.
4. In the Fort Lauderdale study, police officers arrested \_\_\_\_ percent of the vehicle drivers they contacted whose BACs were .10 to .20.
5. Name three different chemicals that are alcohols. \_\_\_\_\_  
Which of these is beverage alcohol, intended for human consumption? \_\_\_\_\_  
What is the chemical symbol for beverage alcohol? \_\_\_\_\_
6. What is the name of the chemical process by which beverage alcohol is produced naturally? \_\_\_\_\_  
What is the name of the process used to produce **high-concentration** beverage alcohol? \_\_\_\_\_
7. Multiple Choice: "Blood alcohol concentration is the number of \_\_\_\_ of alcohol in every 100 milliliters of blood."  
  
A. grams  
B. milligrams  
C. nanograms
8. True or False: Pound-for-pound, the average woman contains more water than does the average man.
9. What do we mean by the "proof" of an alcoholic beverage? \_\_\_\_\_  
\_\_\_\_\_
10. Every chemical that is an "alcohol" contains what three elements? \_\_\_\_\_  
\_\_\_\_\_
11. True or False: Most of the alcohol that a person drinks is absorbed into the blood via the small intestine.
12. What is the name of the muscle that controls the passage from the stomach to the lower gastrointestinal tract? \_\_\_\_\_

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13. True or False: Alcohol can pass directly through the stomach walls and enter the bloodstream.
14. Multiple Choice: Suppose a man and a woman who both weigh 160 pounds arrive at a party and start to drink at the same time. Two hours later, they both have a BAC of 0.10. Chances are:
- A. he had more to drink than she did
  - B. they drank just about the same amount of alcohol.
  - C. he had less to drink than she did
15. In which organ of the body does most of the metabolism of the alcohol take place? \_\_\_\_\_
16. What is the name of the enzyme that aids the metabolism of alcohol?  
\_\_\_\_\_
17. Multiple Choice: Once a person reaches his or her peak BAC, it will drop at a rate of about \_\_\_ per hour.
- A. 0.025
  - B. 0.015
  - C. 0.010
18. True or False: It takes about thirty minutes for the average 175-pound man to "burn off" the alcohol in one 12-ounce can of beer.

## **SESSION 3**

### The Legal Environment

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### SESSION 3

SLIDES  
3 - 1,2

#### THE LEGAL ENVIRONMENT

Upon successfully completing the session, the student will be able to:

- state and discuss the elements of BUI offenses;
- discuss the provisions of the implied consent law;
- discuss the relevance of chemical test evidence;
- discuss precedents established through case law.

#### CONTENT SEGMENTS

- A. Basic BUI Statute: Operating While Under The Influence
- B. Implied Consent Law and Presumptions
- C. Illegal Per Se Statute: Operating With A Prescribed Blood Alcohol Concentration
- D. Preliminary Breath Testing
- E. Case Law Review

#### LEARNING ACTIVITIES

- Instructor-Led Presentations
- Reading Assignments

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## INTRODUCTION

An understanding of drinking and boating laws that apply in your jurisdiction is critical to BUI enforcement. All states (and many local jurisdictions) have their own drinking and boating laws. While the specific language of these laws may vary significantly, most include the following provisions:

- a Basic BUI Law;
- an Implied Consent Law;
- an Illegal Per Se Law;
- a Preliminary Breath Testing Law.

In the following pages, these four types of boating and driving laws are discussed in detail. You are responsible for learning whether and how each law applies in your jurisdiction. Worksheets are provided to guide you in learning about the specifics of your laws.

## BASIC BUI LAW

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A state's basic BUI statute may be subtitled Operating While Under the Influence, or something similar. Typically, the statute describes the who, what, where and how of the offense in language similar to the following:

It is unlawful for any person to operate or be in actual physical control of any vessel within this state while under the influence of alcohol and/or any drug.

### ARREST

In order to arrest someone for a basic BUI violation, a law enforcement officer must have probable cause to believe that all elements of the offense are present. That is, the officer must have probable cause to believe that the person in question

- was operating or in actual physical control of
- a vessel (or any other conveyance prescribed by local or state law)
- within this state or waters of this state
- while under the influence of alcohol, drug (including prescription) or both.

Note: In some states it is unlawful to operate a vessel while under the influence anywhere in the state on public or private property (waterways). In other states, the law applies only to public waters (local, state, federal).

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### CONVICTION

In order to convict a person of BUI, it is necessary to establish that all four elements were present. With regard to under the influence, courts have generally held that phrase to mean that the ability to operate a vessel has been affected or impaired. To convict person of a basic BUI violation, it is usually necessary to show that the person's capability of safely operating the vessel has been impaired. If BUI is a criminal offense, the facts must be established "beyond a reasonable doubt." If BUI is an infraction, or a civil violation, the standard of proof may be less. In either case, it is the officer's responsibility to collect and thoroughly document all evidence.

### IMPLIED CONSENT LAW

#### DESCRIPTION

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The question of the level of impairment necessary to convict for "operating under the influence" is not completely clear. Some courts have held that the slightest degree of impairment in operating ability means the operator is "under the influence." Other courts have held that there must be evidence of substantial impairment before BUI conviction is warranted. Therefore, proving that an operator was "under the influence" has been (and continues to be) difficult. Further, some states have instituted specific provisions for "operating while impaired," which usually has a lower standard of proof and correspondingly lower penalties.

To help standardize the levels, and to assist enforcement officers in gathering evidence, states have enacted **Implied Consent Laws**. The principal purpose of the Implied Consent Law is to encourage people arrested for BUI to submit to a chemical test to provide scientific evidence of alcohol influence. The Implied Consent Law usually includes language similar to the following:

"Any person who operates or is in actual physical control of a vessel upon the public waters of this state shall be deemed to have given consent to a chemical test for the purpose of determining the alcohol and/or drug content of the defendant's blood."

The Implied Consent Law requires the operator to submit to a chemical test(s). Further, the law provides penalties (civil or criminal depending on the statute) for refusal to submit to the test. Keep in mind that in most states, the implied consent provisions of the law apply only after the person has been arrested and have no bearing on a person's decision to submit to field sobriety testing. The law also provides for some penalty that results if the operator refuses to the test(s) such as fines, civil assessments, suspension of an operator's license, or operating privileges. The provisions for penalties are a means of encouraging those arrested for BUI to submit to the test so that valuable chemical evidence may be obtained.

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### LEGAL PRESUMPTIONS

#### DESCRIPTION

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Legal presumptions define the significance of the scientific chemical test evidence. Generally, a presumption provides an interpretation or a legal guideline for the chemical test evidence like the following:

For example, if the chemical test shows that the person's blood alcohol concentration (BAC) is \_\_\_ or more, the person shall be presumed to be under the influence. If the test shows that the BAC is \_\_\_ or less, it shall be presumed that the person is not under the influence. If the test shows that the BAC is more than \_\_\_ but less than \_\_\_, there is no presumption as to whether the person is or is not under the influence.

NOTE: These laws vary from state to state. Be familiar with your specific state law.

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When establishing that a person is "under the influence, the weight of the chemical test evidence is presumptive of alcohol influence and may not be conclusive.

If there is no evidence to the contrary, the court may accept the legal presumption and conclude that the operator was or was not under the influence based on the chemical test alone. However, other evidence, such as testimony about the operator's appearance, behavior or speech and results of field sobriety tests may be sufficient to overcome a lower level of presumption from a chemical test.

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It is possible for a person whose BAC at the time of arrest which is above the presumptive level, to be acquitted of BUI. It is also possible for a person whose BAC at the time is below the presumptive level to be convicted of BUI. Consider the following examples:

An operator is arrested for BUI. A chemical test administered to the operator shows a BAC of 0.13. At the subsequent trial, the evidence from the chemical test is introduced. In addition, the arresting officer testifies about the operator's appearance, behavior and driving. The testimony is sketchy, confused and unclear. Another witness testifies that the operator drove, behaved and spoke normally. The court finds the operator not guilty of BUI.

An operator is arrested for BUI. A chemical test administered to the operator shows a BAC of 0.03. At the subsequent trial, the evidence from the chemical test is introduced. In addition, the arresting officer testifies about the operator's stuporous appearance, slurred speech, impaired driving and inability to perform divided attention field sobriety tests. The testimony is clear and descriptive. The court finds the operator guilty of BUI.

The difference in outcomes for the two examples cited is directly attributable to evidence other than the chemical test evidence presented in court. Remember that the chemical test provides presumptive evidence of alcohol influence; it does not provide



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conclusive evidence. While the "legal limit" in a given jurisdiction may be 0.08 BAC , many people will demonstrate impaired driving ability long before that "limit" is reached.

### ILLEGAL PER SE LAW

#### DESCRIPTION

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Most states include in their BUI Law a provision making it illegal to operate a vessel while having a statutorily prescribed blood alcohol concentration, or BAC. This provision, often called an Illegal Per Se Law, creates another drinking and driving offense which is related to, but different from, the basic BUI offense. Following is a typical illegal Per Se Provision:

It is unlawful for any person to operate, or be in actual physical control of, any vessel within this state while having a blood alcohol concentration at, or above, the state's established level.

The Illegal Per Se Law makes it an offense in and of itself to operate a vessel while having a BAC at, or above, the state's level. To convict an operator of an Illegal Per Se Violation, it is sufficient to establish that the operator's BAC was at, or above, the state's level while operating a vessel in the state. It is not necessary to establish that the operator was under the influence. (In many states this is similar or identical to the provisions for "operating while impaired.") If a subject is prosecuted for an illegal per se violation, the defense must attack the validity of the chemical test and the manner in which it was obtained to overcome the profound weight of the evidence.

NOTE: These laws vary from state to state. Be aware of your state's law.

The Illegal Per Se Law does not replace the basic BUI law. Rather, the two work together. Each defines a separate offense:

- The basic BUI Law makes it an offense to operate a vessel while under the influence of alcohol and/or any drug.
- The Illegal Per Se Law makes it an offense to operate a vessel while having a blood alcohol level above the statutorily prohibited limit.

For the basic BUI offense, the chemical test result is presumptive evidence. For the Illegal Per Se offense, the chemical test result is conclusive evidence.

#### PURPOSE

The principal purpose of the Illegal Per Se Law is to aid in prosecution of drinking and driving offenders. The law reduces the state's burden of proof. It is not necessary for the prosecutor to show that the operator was "under the influence." The state is not required

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to demonstrate that the operator's ability to drive was affected. It is sufficient for the state to show that the operator's BAC was at, or above, the state's prescribed level.

While the statute aids in prosecution, it does not significantly ease drinking and driving enforcement. An officer must still have probable cause to believe that the operator is under the influence before an arrest can be made. The Implied Consent Law usually requires that the operator be under arrest before consenting to the chemical test. The law also requires that the arrest be made for "acts alleged to have been committed while operating a vessel while under the influence." Therefore, the officer generally must establish probable cause that the offense has been committed and make a valid arrest before the chemical test can be administered.

### SUMMARY

Police officers dealing with drinking and driving suspects must continue to rely primarily on their own investigative skills to determine whether an arrest should be made. Usually it is impossible to obtain a legally admissible chemical test result until after the operator has been arrested. Sometimes operators will refuse the chemical test after they have been arrested. Then the case will depend strictly upon the officer's observations and testimony. **When making a BUI arrest, always assume that the chemical test evidence will not be available.** It is critical to organize and present observations and testimony in a clear and convincing manner. In this way, more operators who violate drinking and boating laws will be convicted, regardless of whether they take the chemical tests, and regardless of the test results.

## PRELIMINARY BREATH TEST LAW

### DESCRIPTION

Many states have enacted preliminary breath testing laws. These laws permit an officer to request an operator suspected of BUI to submit to a breath test prior to arresting the operator for BUI. Preliminary breath test laws vary significantly from one state to another. A typical statute reads as follows:

When an officer has reason to believe that a person has committed the offense of operating while under the influence, the officer may request that person to provide a sample of breath for a preliminary test of the alcohol content of the blood using a device (PBT) approved for this purpose.

### APPLICATION

PBT results are used solely to determine the presence or absence of alcohol and help officer determine if alcohol is a cause of the impairment observed. The results are obtained pre-arrest and should support the probable cause already established. Usually are not admissible in court, however, PBT laws may provide statutory or administrative penalties if the operator refuses to submit to the test. PBT laws vary greatly, so know your state guidelines.

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### CASE LAW REVIEW

The following cases are landmark court decisions relevant to the admissibility of Horizontal Gaze Nystagmus (HGN). Challenges to the admissibility of HGN have been based on (1) scientific validity and reliability; (2) relationship of HGN to specific BAC level; (3) officer training, experience, and application.

**STATE vs. BLAKE** (Arizona, 1986) 718 P.2d 171 (Arizona, 1986); see Also State vs. Superior Court of County of Cochise, 149 Ariz 269, 718 P.2d 171, 60 ALR 4th, 1103.

The Blake case established a very important precedent in Arizona. The trial court ruled that the HGN test was not reliable under Frye v. United States, 293 F.2d 1013 (DC Cir. 1923) and thus could not be used as part of probable cause. The trial court dismissed the case. This ruling was appealed by the state and the order of dismissal was reversed by the court of appeals, and the case was remanded for further proceedings (7/25/85).

This is the landmark ruling on HGN because it was the first case decided at a State Supreme Court. The Arizona Supreme Court found that HGN satisfies the Frye standards for evidence to corroborate, or attack, the issue of a suspect's impairment.

The Frye standards are those set by the U.S. Supreme Court to govern the admissibility of "new" scientific evidence. In effect, the Arizona Supreme Court took judicial notice of HGN, so that it is no longer necessary, in Arizona, to introduce expert scientific testimony to secure the admissibility of HGN. However, the court did set standard governing the training of officers who would be qualified to testify about HGN, and the court explicitly ruled that HGN cannot be used to establish BAC quantitatively in the absence of a chemical test.

: "We find that the horizontal gaze nystagmus test properly administered by a trained police officer is sufficiently reliable to be a factor in establishing probable cause to arrest an operator for violating A.R.S.28-692 (B). We further find that the horizontal gaze nystagmus test satisfies the Frye test for reliability and may be admitted in evidence to corroborate or attack, but not to quantify, the chemical analysis of the accused's blood alcohol content. It may not be used to establish the accused's level of blood alcohol in the absence of a chemical analysis showing the proscribed level in the accused's blood, breath or urine. In subsection "(A) Prosecutions" it is admissible, as is other evidence of the defendant's behavior, to prove that he was "under the influence."

A detailed analysis of the facts reviewed by the Supreme Court is contained in the opinion. PEOPLE vs. LOOMIS (California, 1984) 156 Cal. App. 3d 1, 203 Cal. Rptr. 767 (Cal. Super. 1984)

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### STATE vs. CLARK (Montana, 1988) 762 P.2d 853 (Montana, 1988)

The court ruled that HGN results may be admitted at trial. This ruling was not based on the Frye standards but was based on more "liberal" rules of evidence: the court held that all scientific evidence should be admitted unless it is "exaggerated popular opinion." In this case, no attempt was made to infer a quantitative estimate of BAC from the angle of onset.

### STATE vs. BRESSON (Ohio, 1990)

The state's highest court held that HGN results could be used (1) to establish probable cause for a DUI arrest and (2) as evidence at a DUI trial to prove that a person was driving a motor vessel while under the influence of alcohol. Results of HGN test could not be used to prove a specific BAC level.

### STATE vs. MURPHY (Iowa, 1990)

The court held that the results of a HGN test could be admitted into evidence at a DUI trial to prove the intoxication of the operator. (Not to be used to determine specific BAC level.) The court considered HGN to be one of the SFSTs officers administer and in this case the officer was properly trained to administer the test. The court felt that the officer did not have to qualify as an expert witness because the observations were objective in nature and the officer needed no special qualifications to be able to interpret the results.

### STATE vs. BUENING (Illinois, 1992)

The court ruled HGN test results admissible since they represented observed "behavior" and could be used. Such evidence could not be used to determine specific BAC level.

### STATE vs. HILL (Missouri, 1993)

The court ruled HGN admissible. Such evidence could not be admitted to establish a specific BAC. It was interesting to note that court would allow an officer's testimony, **based on experience**, regarding how a person's performance on SFSTs compared with breathalyzer results that indicate a BAC level or 0.10 or more.

#### TO SUMMARIZE:

The prevailing trend in court is to accept HGN as evidence of impairment, provided the proper scientific foundation is laid. However, courts consistently reject any attempt to derive a quantitative estimate of BAC from nystagmus. Keep in mind that neither nystagmus nor any other elements of the drug recognition examination are intended to substitute for chemical testing. It is true that there is an approximate, statistical relationship between BAC and angle of onset, but this approximate relationship is not sufficiently reliable to permit BAC "prediction" in any individual case.

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***Delaware v. Prouse***  
440 U.S. 648 (1979)

Argued: January 17, 1979

Decided: March 27, 1979

Criminal Procedure: Search and Seizure, Vehicles

### **Subjects:**

### **Facts of the Case**

A Delaware patrolman stopped William Prouse's car to make a routine check of his driver's license and vehicle registration. The officer had not observed any traffic violation or suspicious conduct on the part of Prouse. After stopping the car, the officer uncovered marijuana. The marijuana was later used to indict Prouse.

### **Question Presented**

Did the officer's search of Prouse's automobile constitute an unreasonable search and seizure under the Fourth Amendment?

### **Conclusion**

Yes. In an 8-to-1 decision, the Court held that the privacy interests of travelers outweighed the state interests in discretionary spot checks of automobiles. The Court found that random checks made only marginal contributions to roadway safety and compliance with registration requirements; less intrusive means could have been used to serve the same ends. Officers must be held to a "probable cause" standard for searches, otherwise individuals would be subject to "unfettered governmental intrusion" each time they entered an automobile.

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### *State of Florida v Casal*

Florida Supreme Court  
January 14, 1982  
Fla. 410 So. 2d 152

First, the Court considered where the state's interest lies. One main interest was promoting maritime safety. All motorboats must contain certain safety equipment and lighting devices. §371.57, Fla. Stat. (1977). In *Prouse*, the Supreme Court stated that the state of Delaware had several alternative methods of promoting public highway safety, including annual automobile inspections and frequent enforcement of traffic violations. These methods were not available to marine patrol officers. The main concern that motorboats be safely equipped cannot be furthered by requiring periodic safety inspections. Unlike automobiles, the items of safety equipment required to be on boats, such as life jackets and fire extinguishers, are easily detachable. A periodic inspection could not insure that such equipment would be on board when the boat was being operated. Nor are such safety violations observable and therefore subject to as frequent enforcement as automobile violations.

The Florida Supreme Court held that the expectation of privacy does not hold true for motorboat travel. It is not a pervasive or necessary mode of transportation for most people. There is not as great a sense of security and privacy when traveling in a boat as when traveling in an automobile. Thus subjecting boats to random spot checks for fishing permits or registration certificates does not seriously circumscribe the Fourth Amendment.

The Supreme Court in *Prouse* explicitly stated that its holding did not preclude the state of Delaware from developing a system of spot checks. The Court went so far as to suggest the possibility of setting up roadblocks where all traffic is stopped. 440 U.S. at 663, 99 S.Ct. a 1401. Cf. *United States v Martinet-Fuerte*, 428 U.S. 543, 96 S.Ct. 3074, 49 L.Ed.2d 1116 (1976) (checkpoint stops and questioning may be made in absence of any individualized suspicion).

They noted that this less intrusive alternative is not available to the marine patrol. Boat travel is not limited by fixed roadways. Unlike an automobile, a boat at sea can travel in any direction – even in harbors where there are channels which boats must follow, it would be impossible to establish a checkpoint on the water since boats cannot come to a complete stop and line up behind each other on the water as cars can on roads.

In sum, the Court found that the state's interest in random stopping and brief detention of motorboats for the limited purpose of checking fishing permits, registration certificates and safety equipment outweighs a person's interest in being completely free from such limited intrusion. In light of the absence of less restrictive alternatives, which would accomplish the state's goals, spot checks of motorboats are not unreasonable under the Fourth Amendment. The district court erred in holding that State marine officers must have probable cause to stop a vessel for the limited purposes discussed above.

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They also considered an issue that the district court did not need to reach. That is the question whether the marine patrol officers, having lawfully stopped respondent's vessel, had probable cause to search it. As they had held earlier, after the initial stopping and boarding a vessel, the marine patrol must have probable cause before conducting any further search or inspection. *Tingley v Brown; Hill v State*. With respect to safety inspections, the legislature had decided that not even the initial boarding may be conducted without consent or probable cause. § 37.1.58, Fla. Stat. (1977). In this case, consent was freely given to board the vessel and to look in the icebox. In *Casal*, the officers were not given consent and were precluded from further searching the vessel unless they had probable cause to believe that a crime was being or was about to be committed, and this probable cause cannot be based on mere suspicion.

### ***Schenekl v. State***

Court of Criminal Appeals of Texas  
No. 1529-99 (2000)

A game warden was on patrol around midnight on Lake Lewisville, Texas, when he saw Schenekl's boat leaving a marina. The warden stopped Schenekl for a routine water safety check. After the warden boarded, he observed Schenekl had trouble answering questions, fumbled with his fingers, and smelled of alcoholic beverage. The warden administered preliminary sobriety tests to Schenekl, then asked him to accompany him to shore for more complete tests. Schenekl agreed.

Schenekl underwent further sobriety testing on shore and failed. The warden arrested Schenekl. A Texas state law authorized an officer to perform a water safety check by stopping and boarding a boat without probable cause or reasonable suspicion. Charged with boating while intoxicated, Schenekl plead not guilty. He argued the law authorizing police to conduct random water safety checks was unconstitutional. The court disagreed and convicted Schenekl. Schenekl appealed.

### **Decision: Conviction affirmed**

The state law was constitutional.

Valid law enforcement practices such as random stops and checkpoints balance legitimate governmental interests against the individual's right to be free from arbitrary interference from law officers. The Texas law was here was intended to "promote recreational water safety for persons and property." The state had a substantial interest in protecting the health and well-being of its citizens and in promoting recreational water safety.

There were no reasonable alternatives to random water stops. While police easily establish checkpoints on roadways, the lack of established waterways for boating made water checkpoints impractical. Checkpoints at docks would not have been effective. Only random safety checks would have been effective. On the other hand, the level of intrusion here was minimal. Unlike automobiles, boating was not a basic, pervasive, or generally necessary form of transportation. It was more commonly associated with

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recreation than necessity. Also the water stops here were for a brief inspection, not a full-blown search of the boat or driver.

see also: *Delaware v. Prouse*, 440 U.S. 648, 99 S.Ct. 1391, 59 L.Ed.2d 660 (1979)  
see also: *Brown v. Texas*, 443 U.S. 47, 99 S.Ct. 2637, 61 L.Ed.2d 357 (1979)

### SFSTs and Strict Compliance: *State v. Homan* Case Law Summary

National Traffic Law Center

American Prosecutors Research Institute

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The Ohio Supreme Court recently held in *Ohio v. Homan*, 732 N.E.2d 952 (Ohio 2000), that standardized field sobriety tests conducted in a manner that departs from the methods established by the National Highway Traffic Safety Administration (NHTSA) "are inherently unreliable". *Id.* at 955. In a 4 to 2 decision dated August 16, 2000, the court determined that the administration of field sobriety tests, including the one-leg-stand and walk-and-turn tests, must be performed in strict compliance with the directives issued by NHTSA. *Id.* at 957. See generally NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION, U.S. DEPARTMENT OF TRANSPORTATION, PUB. NO. HS 178 R2/00, DWI DETECTION AND STANDARDIZED FIELD SOBRIETY TESTING STUDENT MANUAL (2000) [hereinafter NHTSA SFST STUDENT MANUAL]. The court concluded that because the arresting officer admitted to not having strictly complied with established police procedure during the administration of the HGN and walk-and-turn tests, the results of the SFSTs must be excluded. *Homan*, 732 N.E.2d at 957. 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 SFSTs for training purposes.

The Ohio Supreme Court attempted to distinguish *Homan* from prior court rulings that allow for substantial compliance in other testing areas. In *Ohio v. Plummer*, 490 N.E.2d 902, 905 (Ohio 1986), for example, the court held that there need only be substantial compliance with an administrative regulation requiring the refrigeration of urine specimens when not in transit or under examination. The court noted that "strict compliance with this regulation would not always be realistic or humanly possible." *Homan*, 732 N.E.2d at 957 (quoting *Plummer*, 490 N.E.2d at 905). In contrast, the *Homan* court found "it is well established that in field sobriety testing even minor deviations from the standardized procedures can severely bias the results." *Id.* In reaching this conclusion, the court relied on the NHTSA SFST STUDENT MANUAL, which reads "if any one of the standardized field sobriety test elements is changed, the validity is compromised." *Id.* at 956. The court appeared to ignore, however, the preface to the student manual, which states:

The procedures outlined in this manual describe how Standardized Field Sobriety Tests (SFSTs) are to be administered under ideal conditions. We recognize that the SFSTs will not always be administered under ideal conditions in the field, because such conditions will not always exist. Even when administered under less than ideal conditions, they will generally serve as valid and



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useful indicators of impairment. Slight variations from the ideal, i.e., the inability to find a perfectly smooth surface at roadside, may have some effect on the evidentiary weight given to the results. However, this does not necessarily make SFSTs invalid. NHTSA SFST Student Manual (2000).

As previously noted, the *Homan* court was not unanimous in its decision. Although the dissent did not cite the manual preface, it clearly adopted the same rationale. *Homan*, 732 N.E.2d at 960 (Lundberg, J., dissenting). The dissent argued that any deviation from NHTSA's procedures should go to the weight of the evidence, not its admissibility. *Id.* at 959. It further stated that by permitting a substantial compliance requirement for SFSTs, any potential compromise in the validity of the test could still be challenged by the defense, thus allowing for an attack on the weight to be given the evidence without the need to summarily exclude it. *Id.* at 960. Other states have examined the issues raised in *Homan*. One of the leading cases is *Florida v. Meador*, 674 So.2d 826 (Fla. Dist. Ct. App. 1996). In *Meador*, the State of Florida appealed a pretrial order excluding the results of field sobriety tests. *Id.* at 827. The trial court excluded those results after finding that the officer had not strictly complied with NHTSA's guidelines. *Id.* The threshold question on appeal was "whether testimony concerning the results of field sobriety tests is to be treated as lay observations of intoxication or as scientific evidence of impairment." *Id.* at 831. Excluding the HGN test and addressing only the psychomotor tests, the court held:

The mere fact that the NHTSA studies attempted to quantify the reliability of the field sobriety tests in predicting unlawful BAC's does not convert all of the observations of a person's performance into scientific evidence. The police officer's observations of the field sobriety exercises, other than the HGN test, should be placed in the same category as other commonly understood signs of impairment, such as glassy or bloodshot eyes, slurred speech, staggering, flushed face, labile emotions, odor of alcohol or driving patterns . . . . As long as the testimony of the officers is restricted to lay observations, we agree with the state that . . . the probative value of the psychomotor testing is not outweighed by the danger of unfair prejudice.

*Id.* at 831.

In reaching this conclusion, the Florida court took notice of decisions in two other states. In *Pennsylvania v. Ragan*, 652 A.2d 925, 928 (Pa. Super. Ct. 1995), *appeal denied*, 664 A.2d 540 (Pa. 1995), the Pennsylvania Superior Court held that the one-leg-stand, finger-to-nose and walking-in-a-straight-line tests involve observations within the common experience of the ordinary citizen, and thus are admissible as non-scientific evidence of intoxication. *Meador*, 674 So.2d at 831 (*citing Ragan*, 652 A.2d at 928). Similarly, in *Illinois v. Sides*, 556 N.E.2d 778 (Ill. App. Ct. 1990), the Illinois Court of Appeals stated:

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In assessing the defendant's mental and physical faculties at a time relevant to the charge that he was driving an automobile while under the influence of alcohol, it is entirely appropriate for the jury to consider the defendant's ability to perform the simple physical tasks which comprise the field sobriety tests. The jury's inference that a defendant who had difficulty performing some of these tasks may have been similarly impaired in his ability to think and act with ordinary care when in operation of an automobile is entirely justified and one which the law permits the jury to draw. Certainly in our modern society, a juror's common observations and experiences in life would include not only the driving of an automobile, but a familiarity with the degree of physical and mental acuity required to do so.

*Id.* at 779.

Wisconsin is another state with court decisions in agreement with the above. In ***Wisconsin v. Curran***, 559 N.W.2d 925 (Wis. Ct. App. 1996), the defendant argued that a finger dexterity test was not scientifically valid and that the walk-and-turn and one-leg stand tests were administered in a manner that deviated from the NHTSA SFST STUDENT MANUAL and were thus invalid. In rejecting the defendant's claim, the court held that just because the manual referred only to a specific three-test battery consisting of the walk-and-turn test, one-leg-stand test, and HGN test, it does not mean other combinations of such tests are not reliable. The court further stated, "it is not the province of this court to determine what weight to give evidence." *Id.*

Additionally, in ***Wisconsin v. Drew***, No. 97-2182, 1998 Wisc. App. LEXIS 199 (Wis. Ct. App. Feb. 19, 1998), the Wisconsin Court of Appeals rejected the defendant's claim that the field sobriety tests were not sufficiently reliable. Noting that no part of the NHTSA SFST STUDENT MANUAL was proffered as evidence by the defendant, the court stated:

Perhaps it is true that the NHTSA manual describes a three test battery that is claimed to be highly reliable in identifying persons whose blood-alcohol concentration are over .10 when administered in a standardized manner and assessed on the basis of standardized criteria. This does not necessarily mean, however, that other combinations of sobriety tests not described in the manual are not reliable as well in assessing whether a person's ability to operate a motor vehicle is impaired by alcohol . . . . We are unaware of any legal authority in Wisconsin for the proposition that the NHTSA described tests, and only those tests, may be relied upon by law enforcement.

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*Id.* at \*8. See also *Dunn v. Woodman*, No. 99-0664, 1999 Wisc. App. LEXIS 1022 (Wis. Ct. App. Sept. 16, 1999) (holding that a police officer's lay observations formed during administration of field sobriety tests may be used for probable cause to arrest); *Wautoma v. Wehe*, No. 99-0238, 1999 Wisc. App. LEXIS 764 (Wis. Ct. App. July 15, 1999) (holding that expert testimony is not helpful in determining validity and reliability of field sobriety tests since lay observations of police officers are admissible).

In *Tennessee v. Williams*, C.C.A. No. 01C01-9707-CR-00309, 1998 Tenn. Crim. App. LEXIS 1189, at \*3 (Tenn. Crim. App. Nov. 20, 1998), the officer who administered the SFSTs conceded that the heel-to-toe test is preferably performed on a flat surface, though in the instant case the test was performed in a valley, "midway between two hills". *Id.* Additionally, the officer admitted that there was no fog line at that point in the road to serve as a straight line for the performance of the test. *Id.* Nevertheless, the appellate court refused to rule that the trial court's failure to suppress the results was error, stating that "[t]he conditions under which the tests were performed relate to the weight to be afforded the test results, not the admissibility of the results." *Id.* at \*8. Georgia has also held that the results of field sobriety tests are admissible despite evidence that the tests were not administered in strict compliance with NHTSA's guidelines. In *Georgia v. Pastorini*, 474 S.E.2d 122, 125 (Ga. Ct. App. 1996), the Georgia Court of Appeals held that testimony indicating the officer had failed to administer the tests in accordance with his training "affects only the weight to be given the tests . . . [C]redibility of evidence such as this should be left for jury determination." *Id.* See also *Cann-Hanson v. Georgia*, 478 S.E.2d 460, 461 (Ga. Ct. App. 1996) (evidence that the officer did not fully comply with NHTSA guidelines did not destroy the probative value of the tests).

A subsequent Georgia case takes this rationale even further. In *Cantwell v. Georgia*, 497 S.E.2d 609, 611 (Ga. Ct. App. 1998), the appellate court adopted the State's view that the officer who administered the field sobriety tests testified as a lay witness. Prior to trial, the State made a motion *in limine* to exclude any mention of NHTSA SFST training received by the arresting officer. *Id.* at 610. Instead, the State asserted that the officer would testify as a lay witness and only as to his observations of the defendant as he performed the tests. *Id.* The State further asserted that the officer "would not testify as to any 'point system' or whether the defendant passed or failed the tests." *Id.* The trial court granted the State's motion and defendant appealed, arguing that he was prevented from questioning the officer about his training and from calling an expert witness regarding the proper methods of administering and evaluating the tests. *Id.* The Georgia Court of Appeals upheld the conviction, stating:

[I]f the State chooses to have the officer testify as a lay witness and describe the actions of the defendant in performing simple exercises such as the "leg lift" and "walk and turn" without referring to any "points" system or using the words "pass" or "fail", cross-examination on NHTSA procedures is irrelevant, regardless of whether the officer is trained in them or not.

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*Id.*

In another case, *Hawkins v. Georgia*, 476 S.E.2d 803 (Ga. Ct. App. 1996), the Georgia Court of Appeals explained:

With regard to the "ABCs," "walk and turn," and "leg lift" field sobriety tests given appellant, the word "tests" is a misnomer; these are physical dexterity exercises that common sense, common experience, and the "law of nature" show are performed less well after drinking alcohol. The screening of these gross motor skills is hardly the type of "scientific principle or technique" to which *Harper* [*Harper v. State*, 292 S.E.2d 389 (Ga. 1982)] referred, and this Court will not hold these physical manifestations of impairment, which could be as obvious to the layperson as to the expert, to such a standard of admissibility.

*Id.* at 807.

Texas applied the same rationale in *Cloud v. Texas*, No. 03-99-00165-CR, 2000 Tex. App. LEXIS 3518 (Tex. Crim. App. May 25, 2000). In rejecting defendant's argument that he should be afforded a pretrial hearing on the scientific reliability of the field sobriety tests, the Texas Court of Criminal Appeals stated:

Unlike the horizontal gaze nystagmus ("HGN"), these tests— the walk-and-turn, alphabet recital, and finger dexterity tests— are not based on any novel scientific theory. The State introduced the testimony to show impairment of physical and mental faculties. These [field sobriety tests] involve observation of directed, basic tasks and are barely distinguishable from lay observation of undirected behavior. There was no reason to preliminarily inquire into the scientific basis of the tests outside the presence of the jury.

*Id.* at \*4.

The Hawaii Supreme Court made a similar determination in *Hawaii v. Toyomura*, 904 P.2d 893 (Haw. 1995). Over defense objections, the trial court allowed the arresting officer to give an opinion as to defendant's state of sobriety based upon, among other things, defendant's performance of field sobriety tests. *Id.* at 899. In overruling the objection, the trial court stated, "I think any . . . lay person can have an opinion regarding sobriety." *Id.* While reaffirming the holding in *Hawaii v. Nishi*, 852 P.2d 476 (Haw. Ct. App. 1993) that a police officer may not give an expert opinion about whether a person is intoxicated based on field sobriety tests, the court held that an officer may still give an opinion from a lay person's point of view. *Toyomura*, 904 P.2d at 911.

Finally, in *Smith v. Wyoming*, No. 00-71, 2000 Wyo. LEXIS 202, at \*10 (Wyo. Oct. 4, 2000), the defendant contended that a police officer could only testify as to field sobriety

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test results if the tests were conducted in strict compliance with the procedures established by NHTSA. The court rejected this argument:

Considering that there may be other means of law enforcement training available now and in the future, for the purpose of establishing probable cause, a law enforcement officer may testify to the results of field sobriety tests (including the horizontal gaze nystagmus test) if it is shown that the officer has been adequately trained in the administration and assessment of those field sobriety tests and conducted them in substantial accordance with that training . . . [P]urported deficiencies in the administration of the sobriety tests go to the weight accorded the evidence and not to its admissibility.

*Id.* at \*11, 14.

### CONCLUSION

The Ohio Supreme Court is the only court to have held that deviations from NHTSA guidelines in the administration of SFSTs render test results inherently unreliable and inadmissible. The appellate courts of nine other states have reviewed the admissibility of both SFSTs and other physical dexterity tests and have held that deviations from NHTSA guidelines should not result in the suppression of test results. This common sense approach embraces the idea that although certain field sobriety tests like HGN may be scientific in nature, not all such tests fall into that realm. As these courts have recognized, many commonly used field sobriety tests, including the walk-and-turn and the one-leg-stand, are simple dexterity tests that can be interpreted by the fact finder through the use of common sense and experience. Thus, as a majority of courts have ruled, a deviation from NHTSA guidelines in the administration of SFSTs should go to the weight of the evidence, not its admissibility.

### EVIDENCE: field sobriety testing

**Schmerber v. California, 384 U.S. 757 (1966)** Petitioner was convicted in Los Angeles Municipal Court of the criminal offense of driving an automobile while under the influence of intoxicating liquor.[fn1] He had been arrested at a hospital while receiving treatment for injuries suffered in an accident involving the automobile that he had apparently been driving.[fn2] At the direction of a police officer, a blood sample was then withdrawn from petitioner's body by a physician at the hospital **without a search warrant**. Page 759 The chemical analysis of this sample revealed a percent by weight of alcohol in his blood at the time of the offense which indicated intoxication, and the report of this analysis was admitted in evidence at the trial. Petitioner objected to receipt of this evidence of the analysis on the ground that the blood had been withdrawn despite his refusal, on the advice of his counsel, to consent to the test. He contended that in that circumstance the withdrawal of the blood and the admission of the analysis in evidence denied him due process of law under the Fourteenth Amendment, as well as specific guarantees of the Bill of Rights secured against the States by that

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Amendment: his privilege against self-incrimination under the Fifth Amendment; his right to counsel under the Sixth Amendment; and his right not to be subjected to unreasonable searches and seizures in violation of the Fourth Amendment. The Appellate Department of the California Superior Court rejected these contentions and affirmed the conviction.[fn3] In view of constitutional decisions of the Supreme Court when these issues were considered, *Breithaupt v. Abram*, 352 U.S. 432 — see *Escobedo v. Illinois*, 378 U.S. 478; *Malloy v. Hogan*, 378 U.S. 1, and *Mapp v. Ohio*, 367 U.S. 643 — Granted certiorari, 382 U.S. 971. the decision was affirmed.

**Arizona v. Lee**, Westlaw, 1995,184 Ariz. 230, 908 P.2d 44. The State Court of Appeals addressed the issue of whether post-arrest Miranda is required preceding the administration of field sobriety tests and an intoxilyzer test. According to the State, the arresting officer was not required to give post-arrest Miranda warnings to a defendant prior to requesting that she perform field sobriety tests or prior to requesting that she submit to an intoxilyzer test. The appeals court affirmed the trial court's suppression of any post-arrest statements and reversed the trial courts suppression of the field sobriety tests, intoxilyzer test and refusal to take the test because field sobriety and intoxilyzer tests are nontestimonial in nature, we vacate the trial court's order suppressing evidence of the field sobriety tests and the refusal to take the intoxilyzer test.

The privilege against self-incrimination protects an accused only from being compelled to testify against himself, or otherwise provide the State with evidence of a testimonial or communicative nature...."*Schmerber v. California*, 384 U.S. 757, 761, 86 S.Ct. 1826, 1830, 16 L.Ed.2d 908 (1966). Testimonial or communicative evidence "reveals the subjective knowledge or thought processes of the subject." *State v. Theriault*, 144 Ariz. 166, 167, 696 P.2d 718, 719 (App.1984). However, an accused is not protected from being compelled to produce "real or physical evidence." *Schmerber*, 384 U.S. at 764, 86 S.Ct. at 1832. "[B]oth federal and state courts have usually held that it offers no protection against compulsion to submit to fingerprinting, photographing, or measurements, to write or speak for identification, to appear in court, to stand, to assume a stance, to walk, or to make a particular gesture." *Id.* at 764, 86 S.Ct. at 1832.

The United States Supreme Court considered "the 'testimonial' and 'compulsion' components of the privilege against self-incrimination in the context of pretrial questioning." *Muniz*, 496 U.S. at 590, 110 S.Ct. at 2644. In *Muniz*, the defendant was arrested and transported to a booking center where, while videotaped, he was questioned, performed three sobriety tests, and was requested to submit to a breathalyzer test. *Id.* at 585-86, 110 S.Ct. at 2642. Only at the end of this process, upon the defendant's refusal to submit to the breathalyzer, was he advised for the first time of his *Miranda* rights. *Id.* at 586, 110 S.Ct. at 2642. However, the Court found "that any slurring of speech and other evidence of lack of muscular coordination revealed by Muniz's responses to the officer's direct questions constitute[d] nontestimonial components of those responses." *Id.* at 592, 110 S.Ct. at 2645. Thus, we conclude that field sobriety tests are nontestimonial in nature and therefore *Miranda* warnings are not required prior to administering the tests.

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Our analysis of field sobriety tests is equally applicable to the intoxilyzer test. "*Miranda* is not applicable to evidence obtained from a breathalyzer test since *Miranda* is 'bottomed on the privilege against self-incrimination and bars the use of communications by or testimonial utterances of a person unless and until the four-fold warning has been given and applied. A breathalyzer test is unrelated to a communication by the subject.' " *Campbell v. Superior Court*, 106 Ariz. 542, 552 n. 8, 479 P.2d 685, 695 n. 8 (1971) (quoting *State v. Kenderski*, 99 N.J.Super. 224, 239 A.2d 249, 251 (App.Div.1968)). Accordingly, we hold that *Miranda* warnings were not required prior to requesting that defendant submit to the intoxilyzer test. Further, evidence of defendant's refusal to submit to the intoxilyzer test. Further, evidence of defendant's refusal to submit to the intoxilyzer test is admissible.

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### TEST YOUR KNOWLEDGE

INSTRUCTIONS: Complete the following sentences.

1. The elements of the Basic BUI Law are:
  - a.
  - b.
  - c.
  - d.
2. If BUI is a criminal offense, the standard of proof is \_\_\_\_\_  
\_\_\_\_\_.
3. The purpose of the Implied Consent Law is \_\_\_\_\_  
\_\_\_\_\_.
4. Under the Implied Consent Law, chemical test evidence is \_\_\_\_\_  
evidence.
5. The Illegal Per Se Law makes it unlawful to \_\_\_\_\_  
\_\_\_\_\_.
6. The PBT law permits an officer to request an operator suspected of BUI to  
\_\_\_\_\_.
7. PBT results are used solely to help determine \_\_\_\_\_  
\_\_\_\_\_.



**ATTACHMENTS**

- A. State and Federal Appellate Court Cases on Horizontal Gaze Nystagmus
- B. Scientific Publications and Research Reports Addressing Nystagmus
- C. Blake Case

**STATE AND FEDERAL APPELLATE COURT CASES  
ON HORIZONTAL GAZE NYSTAGMUS**

**(May 8, 1995)**

This paper summarizes the opinions of State and Federal courts that have considered the admissibility of the results of the Horizontal Gaze Nystagmus (HGN) test at trial. Most of the cases summarized are appellate court decisions. Ref: 60 ALR4th 1129.

**Alabama.** The court held that the admission of HGN test results at a DUI trial was "not harmless error" if a proper foundation for the test's results had not been made by the State. However, the court further stated that this holding did not necessarily mean that it would approve the admissibility of HGN results even if there were a "proper foundation". 574 So.2d at 859 The court felt that it had "not been presented with sufficient evidence concerning the test's reliability of acceptance by the scientific community to address that question." See *Ex parte State of Alabama*, 574 So.2d 859 (Ala. 1990)\*\* and *Malone vs. City of Silverhill*, 575 So.2d 106 (Ala. 1990)\*\*. A law enforcement officer's testimony concerning his training in the use of the HGN test was not sufficient evidence of the scientific reliability of such test to warrant the admissibility of its results into evidence at a DUI trial. *Brunson v. State*, 580 So.2d 62 (Ala. Cr.App. 1991) (cert. den. by the Alabama Supreme Court), *Johnson v. State*, 591 So.2d 580 (Ala. Cr.App. 1991), and *Desselle v. State*, 596 So.2d 602 (Ala. Cr. App. 1991)

**Alaska.** The court of appeals held that the results of an HGN test could be used alone to determine if there is probable cause to make a DUI arrest where there was other evidence of intoxication (e.g., bloodshot eyes) even if the defendant passed four (4) other field sobriety tests. However, the court made it clear that HGN test results were not to be admitted into evidence at a DUI trial to "corroborate" a chemical test for intoxication. *State v. Grier*, 791 P.2d 627 (Alaska App. 1990)

**Arizona.** HGN test results may be admitted as evidence of driving under the influence. The court felt that HGN satisfied the Frye\* test. However, the court held that HGN test results cannot be used to prove a specific alcohol concentration. Statutory law requires that an alcohol concentration be determined by a chemical analysis of a defendant's blood, breath, or urine. The court also held that the HGN test results could be used to determine probable cause of DUI for arrest purposes. *State v. Superior Court*, 718 P.2d 171 (Ariz. 1986)\*\*. In cases where there is no chemical test to determine an alcohol concentration for intoxication purposes, HGN test results can be admitted the same as other field sobriety tests to show a "neurological dysfunction, one cause of which could be alcohol ingestion." 799 P.2d 860. However, HGN test results cannot be used to establish an alcohol concentration.

The court, in a footnote, discusses the factual differences in this case and the *Ricke* case below decided by the court of appeals. *State ex. rel. Hamilton v. City Court of City of Mesa*, 799 P.2d 855 (Ariz. 1990)\*\*. Also, if the defendant is not careful when cross-

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examining the officer who administered the HGN test, they could "open the door" to the possible introduction of evidence by the State that relates HGN result to an alcohol concentration. *State v. Cook*, 834 P.2d 1267 (Ariz.App.Div. 2 1993) In a "per se case" decided by the court of appeals, the court held that HGN test results could be admitted into evidence to corroborate chemical test evidence that a person was operating a motor vehicle with an alcohol concentration at or above 0.10. The State Supreme Court appears to have approved this holding in the *Mesa* case; see footnote 2 in 799 P.2d at 858. *State ex rel. McDougall v. Ricke*, 778 P.2d 1358 (Ariz. App. 1989) Note: An appellate court has held that it was error to admit the results of an HGN test in situations where the defendant was wearing hard contact lenses during the test. However, such error was considered harmless given other aspects of the case. *State v. Stevens*, 1994 Ariz.App. LEXIS 184, \_\_\_\_\_ P.2d \_\_\_\_\_ (Ariz.App. 1994)

**Arkansas.** The results of an HGN test may be admitted for the purpose of proving intoxication. The court, however, has apparently indirectly held that HGN results cannot be used to establish a specific alcohol concentration. *Whitson v. State*, 863 S.W.2d 794 (Ark. 1993)\*\* For a prior case by the Arkansas Court Appeals that reached similar conclusions, see *Middleton v. State*, 780 S.W.2d 581 (Ark. App. 1989)

**California.** In *People v. Leahy*, 882 P.2d 321 (Calif. 1994)\*\*, the court held (1) that a police officer, unless they have scientific expertise, cannot give an opinion concerning HGN test results and (2) HGN must be shown to be generally accepted in the scientific community. The court felt that the *Kelly/Frye*\* standard must be satisfied.

**Georgia.** The court considered the HGN a type of field sobriety test and allowed the results of such test to be introduced into evidence as would other such tests. *Manley v. State*, 424 S.E.2d 818 (Ga.App. 1992) In an earlier decision, the court felt that there may have been error in the admission of the results of an HGN test at a DUI trial. The court reached this opinion based on the fact that the State introduced no proof that this test was accepted within the scientific community. However, the introduction of HGN results was considered "harmless error" due to the fact that there was other sufficient evidence upon which the court could have based a DUI conviction. *Foster v. State*, 420 S.E.2d 78 (Ga. App. 1992) For a similar case, see *Ross v. State*, 386 S.E.2d 721 (Ga. App. 1989).

**Idaho.** HGN test results are admissible into evidence at a DUI trial. However, such results cannot be used to determine an alcohol concentration. *State v. Garrett*, 811 P.2d 488 (Idaho 1991), and *State v. Gleason*, 844 P.2d 691 (Idaho 1992)

**Illinois.** The appellate courts in this State have reached contrary positions on whether HGN test results should be admitted into evidence at a DUI trial. Because the State did not provide a proper foundation to establish the scientific reliability of the HGN test, the results of such test could not be admitted into evidence. *People v. Vega*, 496 N.E.2d 501 011. (App. 4 Dist. 1986) (reaffirmed in *People v. Sides*, 556 N.E.2d 778 011. App. 4 Dist. 1990), and *People v. Smith*, 538 N.E.2d 1268 (In. App. 2 Dist. 1989). In another case, the HGN test results could not be admitted at a BUI trial to establish an alcohol

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concentration. Statutory law provides that an alcohol concentration be determined by an analysis of bodily substances. *People v. Dakuras*, 527 N.E.2d 163 011. App. 2 Dist. 1988). Note: In one case, HGN test results were admitted because the defendant did not object to such admissibility. *People v. Seymoure*, 511 N.E.2d 986 (11. App. 4 Dist. 1987). However, HGN tests can be used as a factor by law enforcement officers to establish probable cause to make a DUI arrest. *People v. Griffith*, 493 N.E.2d 413 011. (App. 5 Dist. 1986) and *People v. Furness*, 526 N.E.2d 947 (In. App. 5 Dist. 1988) Note: In *People v. Jebelian*, 561 N.E.2d 1079 011. (App. 3 DST. 1990), the court raised the possibility that HGN test results were not evidence, but the court made no specific holding on this issue. Nevertheless, in another appellate court HGN test results were admitted into evidence at a DUI trial based on the reasoning that they represented observed "behavior" and, therefore, could be used without a scientific foundation to establish whether the defendant was under the influence of alcohol. However, such evidence could not be used to determine a specific alcohol concentration. *People v. Buening*, 592 N.E.2d 1222 011. (App. 5 Dist. 1992) In another case, the decision of the *Buening* court was supported. However, the court also held that HGN test results "are not conclusive evidence of intoxication" but are only one of several factors which must be considered to determine if a person was under the influence of alcohol. *People v. Wiebler*, 640 N.E.2d 24 (Ill.App. 3 Dist. 1994)

**Iowa.** The results of an HGN test could be admitted into evidence at a DUI trial to prove the intoxication of an operator. Note: HGN test results, however, were not used to determine a specific alcohol concentration. The court considered the HGN test to be one of the standard field sobriety tests law enforcement officers administer to persons suspected of a DUI offense. The officer, in this case, was properly trained to administer the HGN test and other field sobriety tests. These tests are especially designed to assist an officer's observations in determining if a person is intoxicated. The court felt that the officer did not have to qualify as an expert witness because the observations of intoxication obtained from the HGN test results were objective in nature. Therefore, there was no need that an officer be specially qualified to be able to interpret such results. The Iowa court based its decision to a large degree on *State v. Negal*, 506 N.E.2d 285 (Ohio App. 1986). *State v. Murphy*, 451 N.W.2d 154 (Iowa 1990)\*\*. Note: The *Murphy* case was indirectly affirmed in *State v. Edman*, 452 N.W.2d 169 (Iowa 1990)\*\*.

**Kansas.** The court held that HGN test results could not be admitted into evidence at a DUI trial. The court felt that the HGN test was scientific in nature and that, as a result, it was not the same as other field sobriety tests. In order to be admissible, therefore, the HGN test will have to satisfy the *Frye\** test. *State v. Witte*, 836 P.2d 1110 (Kan. 1992)\*\*

**Louisiana.** The court held that the "HGN test meets the standards of admissibility in *Frye\** and, a proper foundation, may be admitted as evidence of intoxication." 561 So.2d at 887 Note: The court did not directly address the issue of whether HGN test results could be admitted into evidence at a DUI trial to establish a specific BAC level. *State v. Armstrong*, 561 So.2d 883 (La.App. 2 Cir. 1990) (writ denied by the Louisiana Supreme

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Court, 568 So.2d 1077 (La. 1990)), and *State v. Breiting*, 623 So.2d 23, (La.App. 1 Cir. 1993)

**Minnesota.** Using the *Frye*\* standard, the results of an HGN test can be admitted into evidence at a trial of a person charged with driving while under the influence of drugs. The HGN test was part of the 12-step protocol used by law enforcement officers, who have been trained as Drug Recognition Experts, to determine if a person should be arrested for DUI drugs. *State v. Klawitter*, 518 N.W.2d 577 (Minn. 1994)\*\*

**Missouri.** The results of an HGN test can be admitted into evidence as proof of intoxication. It is interesting to note that, even though the court held that the results of the test could not be admitted to establish a specific alcohol concentration, it, nevertheless, held that a law enforcement officer could testify as to his or her experience concerning how a person's performance on the HGN test compares with breathalyzer test results that indicated an alcohol concentration of 0.10 or more. The court based its decision on the *Frye*\* rule. *State v. Hill*, 865 S.W.2d 702 (Mo.App. W.D. 1993).

**Montana.** HGN test results may be admitted into evidence at a DUI trial. The court did not follow the general acceptance rule for scientific evidence, the *Frye*\* test, in reaching the holding in this case. Using more "liberalized" rules of evidence, the court felt that all scientific evidence should be admitted unless it is "exaggerated popular opinion" and likely to be prejudicial. *State v. Clark*, 762 P.2d 853 (Mont. 1988)\*\*.

**Nebraska.** It was error to admit the HGN test results into evidence at a DUI trial. The court felt that the State had not established the scientific reliability of the test via a proper foundation. Note: Nevertheless, the court held that such admission was not prejudicial to the defendant and upheld his DUI conviction. There was other evidence that indicated the defendant's guilt. *State v. Borchardt*, 395 N.W.2d 551 (Neb. 1986)\*\*.

**New York.** In a DUI case related to operating while under the influence of drugs, the court held that HGN test results were admissible. The court felt that the HGN test met the *Frye*\* standard for admissibility. *People v. Quinn*, 580 N.Y.S.2d 818 (Dist.Ct. 1991)

**North Dakota.** The results of an HGN test can be admitted into evidence at a DUI trial provided it is a part of the standard field sobriety tests. *City of Fargo v. McLaughlin*, 512 N.W.2d 700 (N.D. 1994)\*\*

**Ohio.** The State's supreme court has held that the results of an HGN test could be used (1) to establish probable cause of a DUI arrest and (2) as evidence at a DUI trial to prove that a person was driving a motor vehicle while under the influence of alcohol. However, the court also held that the results of an HGN test could not be used to prove specific alcohol concentration. *State v. Bresson*, 554 N.E.2d 1330 (Ohio 1990)\*\*; *Columbus v. Anderson*, 600 N.E.2d 712 (OhioApp. 10 Dist. 1991), and *State v. Scott*, 606 N.E.2d 1023 (OhioApp. 3 Dist. 1992). Note: In an earlier decision, the Ohio Court of

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Appeals held that the results of an HGN test could be admitted into evidence at a DUI trial. The court reasoned that the HGN test was just another "field sobriety test" and, as such, a police officer could testify as to his or her observations while conducting the test without the need to be qualified as an expert witness. *State v. Nega*, 506 N.E.2d 285 (Ohio App. 1986).

**Oklahoma.** The court felt that HGN test results could not be admitted into evidence because the HGN test had not met the Frye\* standard. *Yell v. State*, 856 P.2d 996 (Ok. Cr. 1993)\*\*

**Oregon.** The Oregon Court of Appeals has held that the results of an HGN test may be admitted into evidence. I.e., law enforcement officers may now testify as to the defendants' reactions to the test and what the test meant to the officers. *State v. O'Key*, 858 P.2d 904 (Or.App. 1993) This decision reversed a prior one by this court on the same subject. *State v. Reed*, 732 P.2d 66 (Of. App. 1987) Note: An HGN test is considered a type of field sobriety test. Such tests are considered searches under Oregon law. *State v. Nagel*, 880 P.2d 451 (Of. 1994)

**Pennsylvania.** HGN test results could not be admitted into evidence at a DUI trial. The court held that the State had failed to "establish an adequate foundation for the admission of the test results." *Com. v. Miller*, 532 A.2d 1186 (Pa. Super. 1987), *Com. v. Apollo*, 603 A.2d 1023 (Pa. Super. 1992), and *Com. v. Moore*, 635 A.2d 625 (Pa. Super. 1993)

**South Carolina.** The court felt that the HGN test was one of the field sobriety tests. The results of the HGN test could be admitted into evidence in conjunction with the evidence obtained from other field sobriety tests. *State v. Sullivan*, 426 S.E.2D 766 (S.C. 1993)\*\*

**Tennessee.** The Tennessee Supreme Court held that testimony concerning Horizontal Gaze Nystagmus (HGN) sobriety test is "scientific, technical, or other specialized knowledge" and, therefore, must be offered through expert witness. *State of Tennessee v. Murphy*. Oct. 13, 1997. 953 S.W.2d200 (Tenn.1997)

**Texas.** HGN test results could be admitted into evidence at a DUI trial to prove intoxication. *Emerson v. State*, 880 S.W.2d 759 (Tex. Cr. App. 1994)\*\*

**Washington.** In order to be admissible, HGN must be shown to meet generally accepted scientific principles. The court used the Frye\* standard. *State v. Cissne*, 865 P.2d 564 (Wa.App.Div. 3 1994)

**West Virginia.** The court felt that if the HGN test is proven reliable, its results could be admitted into evidence to prove that an operator was under the influence. However, HGN test results could not be used as a measure of a person's alcohol concentration. Again, as in other States, HGN test results are not recognized in the statutes as a method for determining alcohol concentration. Note: In the specific case before the

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court, the State offered no evidence of the scientific reliability of the HGN test. *State v. Barker*, 366 S.E.2d 642 (W.Va. 1988)\*\*.

**Wisconsin.** The court held that HGN test results could be admitted into evidence at a DUI trial. The Wisconsin court's reasoning was similar to that of the Ohio Court of Appeals in *State v. Negal*, 506 N.E.2d 285 (Ohio App. 1986). The court considered that HGN test results were "merely behavioral observations based upon the officer's training and experience. It required little more expertise than is acquired by anyone who observes unusual behavior in persons suspected of drinking intoxicants." The court disagreed with the defendant's argument that the HGN test involved scientific principles such that it was necessary for the witness to be a qualified professional. *Wisconsin v. Peters*, 419 N.W.2d 575 (unpublished limited precedent opinion) (Wis. App. Dist. 3 1987), & *State v. Keller*, 1995 Wisc. App. LEXIS 446 (Wis.App. 1990), HGN test results were used as evidence of probable cause of a drunk driving offense. However, in this published opinion, the scientific reliability of this test was not an issue before the court.

**United States.** HGN test results could be admitted into evidence at a DUI trial as part of the results of a series of tests performed on an operator to determine if he or she was under the influence of alcohol. There was no indication that the results of the HGN test were used to establish a specific alcohol concentration. Note: The operator, in this case, was charged with violating Federal regulations that prohibit a person from operating a motor vehicle on Federal park lands while under the influence of alcohol. *U.S. v. Van Griffin*, 874 F.2d 634 (9th Cir. 1989) Comment: Both the U.S. Supreme Court and the U.S. Court of Appeals for the Fourth circuit have mentioned in opinions that law enforcement officers have used the HGN test as a field sobriety test. These courts, however, made no determinations as to the reliability of the HGN test or to the admissibility of the test's results into evidence at a DUI trial. *Pennsylvania v. Muntiz*, 496 U.S. 582, 110 S.Ct. 638, 110 L.Ed.2d 528 (1990), and *U.S. v. Reid*, 929 F.2d 990 (4th Cir. 1991)

**\*Frye v. United States**, 293 F. 1013 (D.C. Ct. of App. 1923) In this case, the court held, that before a scientific principle could be admitted into evidence, it "must be sufficiently established to have gained general acceptance in the particular field in which it belongs." 293 F. at 1014 The U.S. Supreme Court has recently held that the *Frye* standard does not apply to the admission of scientific expert testimony in cases tried in Federal courts. Instead, the Court held that this standard has been superseded by Federal Rule of Evidence 702. *Daubert v. Merrell Dow Pharmaceuticals* \_\_\_\_ U.S. \_\_\_\_ 113 S.Ct. 2786, 125 L.Ed.2d 469 (1993)

\*\* Opinion of the State's highest court.

**SCIENTIFIC PUBLICATIONS AND RESEARCH  
REPORTS ADDRESSING NYSTAGMUS**

1. Anderson, Schweitz & Snyder, Field Evaluation of Behavioral Test Battery for DUI, U.S. Dept. of Transportation Rep. No. DOT-HS-806-475 0983) (field evaluation of the field sobriety test battery (HGN, one-leg stand, and walk and turn) conducted by police officers from four jurisdictions indicated that the battery was approximately 80% effective in determining BAC above and below 0.10).
2. Arend, R., Dioquino, T., Burns, M., Fiorentino, D., Brown, T., Gguyen, S., and Seymour, C. (1999). A Florida Validation Study of the Standardized Field Sobriety test (SFST) Battery, Department of Transportation, State of Florida.
3. Aschan, Different Types of Alcohol Nystagmus. 140 ACTA OTOLARYNGOL SUPP. 69 (Sweden 1958) ("From a medico-legal viewpoint, simultaneous recording of AGN (Alcohol Gaze Nystagmus) and PAN (positional alcoholic nystagmus) should be of value, since it will show in which phase the patient's blood alcohol curve is...").
4. Aschan & Bergstedt, Positional Alcoholic Nystagmus in Man Following Repeated Alcohol Doses, 80 ACTA OTOLARYNGOL SUPP. 330 (Sweden 1975) (abstract available on DIALOG, file 173: Embase 1975-79) (degree of intoxication influences both PAN I and PAN II).
5. Aschan, Bergstedt, Goldberg & Laurell, Positional Nystagmus in Man During and After Alcohol Intoxication, 17 Q.J. OF STUD. ON ALCOHOL, Sept. 1956, at 381. Study distinguishing two types of alcohol-induced nystagmus, PAN (positional alcoholic nystagmus) I and PAN II, found intensity of PAN I, with onset about one-half hour after alcohol ingestion, was proportional to amount of alcohol taken.
6. Baloh, Sharma, Moskowitz & Griffith, Effect of Alcohol and Marijuana on Eye Movements, 50 AVIAT. SPACE ENVIRON. MED., Jan 1979, at 18 (abstract available on DIALOG, file 153: Medline 1979-79) (smooth pursuit eye movement effects of alcohol overshadowed those of marijuana).
7. Barnes, The Effects of Ethyl Alcohol on Visual Pursuit and Suppression of the Vestibulo-Ocular Reflex, 406 ACTA OTOLARYNGOL SUPP. 161 (Sweden 1984) (ethyl alcohol disrupted visual pursuit eye movement by increasing number of nystagmic "catch-up saccades").
8. Burns, M. (2007) The Robustness of the Horizontal Gaze Nystagmus Test Final Report, US Department of Transportation, DTNH22-98-D-55079, Washington, D.C.



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9. Burns, M. and Anderson, E.W. (1995). A Colorado Validation Study of the Standardized Field Sobriety Test (SFST) Battery. Colorado Department of Transportation.
10. Burns, M. Fiorentino, D., and Stuster, J. (2000). The Observational Threshold of Horizontal Gaze Nystagmus. In, Proceedings of the International Council on Alcohol, Drugs, and Traffic Safety, Stockholm, Sweden, May.
11. Burns & Moskowitz, Psychophysical Tests for DUI Arrest, U.S. Dept. of Transportation Rep. No. DOT-HS-802-424 (1977) (recommended the three-test battery developed by SCRI (one-leg stand, walk and turn, and HGN) to aid officers in discriminating BAC level).
12. Burns, M. (1997), A Florida Validation Study of Field Sobriety Test (SFST) Battery, U.S. Department of Transportation No. DOT-AL-97-05-14-01.
13. Church & Williams, Dose- and Time-Dependent Effects of Ethanol, 54 ELECTROENCEPHALOGRAPHY & CLIN. NEUROPHYSIOL., Aug. 1982, at 161 (abstract available on DIALOG, file 11: Psychinfo 1967-85 or file 72: Embase 1982-85) (positional alcohol nystagmus increased with dose levels of ethanol).
14. Compton, Use of the Gaze Nystagmus Test to Screen Operators at DUI Sobriety, U.S. Dept. of Transportation (1984) (field evaluation of HGN test administered to operators through car window in approximately 40 seconds: "the nystagmus test scored identified 95% of the impaired operators" at 2; 15% false positive for sober operators, id.).
15. Fregly, Bergstedt & Graybiel, Relationships Between Blood Alcohol, Positional Alcohol Nystagmus and Postural Equilibrium, 28 Q.J. OF STUD. ON ALCOHOL, March 1967, at 11, 17 (declines from baseline performance levels correlated with peak PAN I responses and peak blood alcohol levels).
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18. L.R. Erwin, DEFENSE OF DRUNK DRIVING CASES (3rd ed. 1985) ("A strong correlation exists between the BAC and the angle of onset of (gaze) nystagmus." Id. at 8.15A(3).

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volunteers whose "caloric eye tracking pattern" (CETP) was normal before alcohol intake, influence of alcohol on oculomotor system appeared consistently in the following order: (1) abnormality of CETP, (2) positional alcohol nystagmus, (3) abnormality of eye tracking pattern, (4) alcohol gaze nystagmus).

37. Wilkinson, Kime & Prunell, Alcohol and Human Eye Movement, 97 BRAIN 785 (1974) (oral dose of ethyl alcohol impaired smooth pursuit eye movement of all human subjects).
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### RANDOM STOPS OF VESSELS WHICH RESULTED IN BUI CONVICTIONS

State law varies regarding the need to establish probable cause before stopping a vessel. While the Supreme Court set the standard for vehicle stops in *Delaware v. Prouse*, case law exists that indicates vehicles and vessels may be treated differently regarding random stops. The greater leeway for vessel enforcement seems based on the great dissimilarity in water-based vs. land-based conditions. Following are summaries of appeals court cases in which a random stop resulted in a BUI conviction. In each case, the appeals court upheld the state's actions in stopping the vessel.

#### **Georgia:**

*Dalton v. The State*, No. A94A1542, Feb. 6, 1995. Defendant was convicted in the State Court, Hall County, of boating under the influence of alcohol, and he appealed. The Court of Appeals held that the statute authorizing stop and boarding of any vessel for purposes of inspection, authorized Department of Natural Resources' rangers to stop boats randomly without probable cause or reasonable suspicion that the defendant had committed the offense.

#### **Texas:**

*Schenekl v. The State*, No. 2-98-386-CR, June 10, 1999. Defendant was convicted in the County Criminal Court No. 3, Denton County, of boating while intoxicated, and he appealed. The Court of Appeals held: (1) enforcement provisions of the state Water Safety Act did not authorize searches and seizures that violated the Fourth Amendment (2) defendant was not deprived of his constitutional right to a speedy trial.

#### **North Carolina:**

*Pike v. State of North Carolina*, No. C0A99-675, July 18, 2000. Defendant was convicted of operating a motor vessel while impaired (OWI) and filed a motion to suppress the evidence of the stop by Wildlife Resources officers. The Court of Appeals held that (1) as a matter of first impression, the officers' stop of the defendant's boat without any reasonable, articulable suspicion of criminal activity for purposes of inspecting the boat for compliance with safety regulations was reasonable (2) officers had the right to arrest the defendant for OWI, as evidence of his intoxication was in plain view.

#### **Georgia:**

*Peruzzi v. State of Georgia*, No. S02A0592, July 15, 2002. Mr. Peruzzi was convicted of operating a watercraft while under the influence of alcohol (BUI). He appealed because the boat was stopped without probable cause. The Supreme Court of Georgia held that "unlike cars traveling upon a public road, boats on an open body of water such as Lake Peachtree, originate from a large number of docks and launches and need not follow any particular path. A roadblock is clearly infeasible and the emphasis in this case is on the procedural aspects of the stop." The Court upheld the conviction and found no constitutional violations relating to the stop.

## Horizontal Gaze Nystagmus State Chart Summary

	AL	AK	AZ	AR	CA	CO	CT	DE	DC	FL	GA	HI
I. Evidentiary admissibility												
A. Not scientific - admissible as an SFST												
B. Scientific test - scientific standard not applicable				X						X		
C. Scientific test - meets scientific standard		X	X		X		X	X			X	X
D. Scientific test - does not meet scientific standard												
E. Scientific test - inadequate evidence presented to determine if HGN meets scientific standard	X											
F. Scientific standard - state follows:												
1. FRYE - general acceptance	X	X	X		X							
2. Daubert/FRE - reliability							X	X			X	X
3. Other											X	
II. Police officer may testify about:												
A. HGN scientific reliability at admissibility hearing												
B. Correlation between HGN and alcohol at trial												
C. HGN test results based on training and experience in administration of the test		X	X		X		X	X		X	X	X
III. Purpose and limits of HGN test results												
A. Probable cause determination in criminal hearing		X	X				X	X				X
B. Probable cause determination in civil hearing								X				
C. Evidence of impairment		X	X	X	X			X			X	
D. Quantify BAC												
E. Same evidentiary weight as other field tests				X								

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	ID	IL	IN	IA	KS	KY	LA	ME	MD	MA	MI	MN
I. Evidentiary admissibility												
A. Not scientific - admissible as an SFST				X								
B. Scientific test - scientific standard not applicable												
C. Scientific test - meets scientific standard	X	X					X	X	X		X	X
D. Scientific test - does not meet scientific standard										X		
E. Scientific test - inadequate evidence presented to determine if HGN meets scientific standard					X							
F. Scientific standard - state follows:												
1. <i>FRYE</i> - general acceptance		X			X				X	X	X	X
2. <i>Daubert/FRE</i> - reliability	X						X	X		X		
3. Other												
II. Police officer may testify about:												
A. HGN scientific reliability at admissibility hearing												
B. Correlation between HGN and alcohol at trial												
C. HGN test results based on training and experience in administration of the test	X	X		X			X	X	X	X	X	X
III. Purpose and limits of HGN test results												
A. Probable cause determination in criminal hearing	X	X					X	X				
B. Probable cause determination in civil hearing												
C. Evidence of impairment		X		X			X	X				X
D. Quantify BAC												
E. Same evidentiary weight as other field tests		X		X								

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	MS	MO	MT	NE	NV	NH	NJ	NM	NY	NC	ND	OH
I. Evidentiary admissibility												
A. Not scientific - admissible as an SFST											X	X
B. Scientific test - scientific standard not applicable			X									
C. Scientific test - meets scientific standard		X		X			X		X			
D. Scientific test - does not meet scientific standard	X							X		X		
E. Scientific test - inadequate evidence presented to determine if HGN meets scientific standard												
F. Scientific standard - state follows:												
1. FRYE - general acceptance	X	X		X			X		X			
2. Daubert/FRE - reliability			X					X		X		
3. Other												
II. Police officer may testify about:												
A. HGN scientific reliability at admissibility hearing										X		
B. Correlation between HGN and alcohol at trial			X							X	X	X
C. HGN test results based on training and Experience in administration of the test		X	X	X				X		X		
III. Purpose and limits of HGN test results												
A. Probable cause determination in criminal hearing	X			X								X
B. Probable cause determination in civil hearing												
C. Evidence of impairment		X	X	X			X			X	X	X
D. Quantify BAC												
E. Same evidentiary weight as other field tests				X							X	X



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	OK	OR	PA	RI	SC	SD	TN	TX	UT	VT	VA	WA
I. Evidentiary admissibility												
A. Not scientific - admissible as an SFST					X				X			
B. Scientific test - scientific standard not applicable			X									
C. Scientific test - meets scientific standard		X						X				
D. Scientific test - does not meet scientific standard							X					X
E. Scientific test - inadequate evidence presented to determine if HGN meets scientific standard	X		X									
F. Scientific standard - state follows:												
1. FRYE - general acceptance			X									X
2. Daubert/FRE - reliability	X	X					X					
3. Other							X					
II. Police officer may testify about:												
A. HGN scientific reliability at admissibility hearing												
B. Correlation between HGN and alcohol at trial												
C. HGN test results based on training and Experience in administration of the test	X	X			X			X	X			
III. Purpose and limits of HGN test results												
A. Probable cause determination in criminal hearing												
B. Probable cause determination in civil hearing												
C. Evidence of impairment		X			X			X				
D. Quantify BAC												
E. Same evidentiary weight as other field tests	X				X				X			

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	WV	WI	WY	TOTALS
I. Evidentiary admissibility				
A. Not scientific - admissible as an SFST				5
B. Scientific test - scientific standard not applicable			X	3
C. Scientific test - meets scientific standard		X		20
D. Scientific test - does not meet scientific standard				1
E. Scientific test - inadequate evidence presented to determine if HGN meets scientific standard	X		X	10
F. Scientific standard - state follows:				
1. <i>FRYE</i> - general acceptance			X	18
2. <i>Daubert/FRE</i> - <i>reliability</i>	X	X		15
3. Other				2
II. Police officer may testify about:				
A. HGN scientific reliability at admissibility hearing				0
B. Correlation between HGN and alcohol at trial				2
C. HGN test results based on training and experience in administration of the test	X	X		31
III. Purpose and limits of HGN test results				
A. Probable cause determination in criminal hearing				12
B. Probable cause determination in civil hearing				3
C. Evidence of impairment		X		23
D. Quantify BAC				0
E. Same evidentiary weight as other field tests	X			10

## **SESSION 4**

**Overview of Detection,  
Note-Taking and Testimony**

# National Association of State Boating Law Administrators

## SESSION 4

SLIDES  
4-1,2

### OVERVIEW OF DETECTION, NOTE-TAKING AND TESTIMONY

Upon successfully completing this session, the student will be able to:

- describe the three phases of detection;
- describe the tasks and key decision of each phase;
- discuss the uses of a standard note-taking guide; and
- discuss guidelines for effective testimony.

#### CONTENT SEGMENTS

- A. Three Phases of Detection
- B. BUI Investigation Field Notes
- C. Courtroom Testimony

#### LEARNING ACTIVITIES

- Instructor-Led Presentations
- Reading Assignments

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### BUI DETECTION

SLIDE  
4-3

Detection is both the most difficult task in the BUI enforcement effort and the most important. If officers fail to detect BUI violators, the BUI countermeasures program ultimately will fail. If officers do not detect and arrest BUI violators, the prosecutors cannot prosecute them, the courts and operator licensing officials cannot impose sanctions on them, and treatment and rehabilitation programs will go unused.

The term "BUI detection" has been used in many different ways. Consequently, it does not mean the same thing to all police officers. For the purposes of this training, BUI detection is defined as:

#### **THE ENTIRE PROCESS OF IDENTIFYING AND GATHERING EVIDENCE TO DETERMINE WHETHER A SUSPECT SHOULD BE ARRESTED FOR A BUI VIOLATION.**

The detection process begins when the police officer first suspects that a BUI violation may be occurring and ends when the officer decides that there is or is not sufficient probable cause to arrest the suspect for BUI.

Your attention may be called to a particular vessel or individual for a variety of reasons. The precipitating event may be a loud noise; a splash of water, an obvious operational violation, behavior that is unusual but not necessarily illegal, an equipment defect, or almost anything else. The initial "spark" of detection may carry with it an immediate, strong suspicion that the operator is under the influence; only a slight, ill-formed suspicion; or even no suspicion at all at that time. In any case, it sets in motion a process wherein you focus on a particular individual and have the opportunity to observe that individual and to accumulate additional evidence.

The detection process ends when you decide either to arrest or not to arrest the individual for BUI. That decision, ideally, is based on all of the evidence that has become known since your attention first was drawn to the suspect. Effective BUI enforcers do not leap to the arrest/no arrest decision. Rather, they proceed carefully through a series of intermediate steps, each of which helps to identify the collective evidence.

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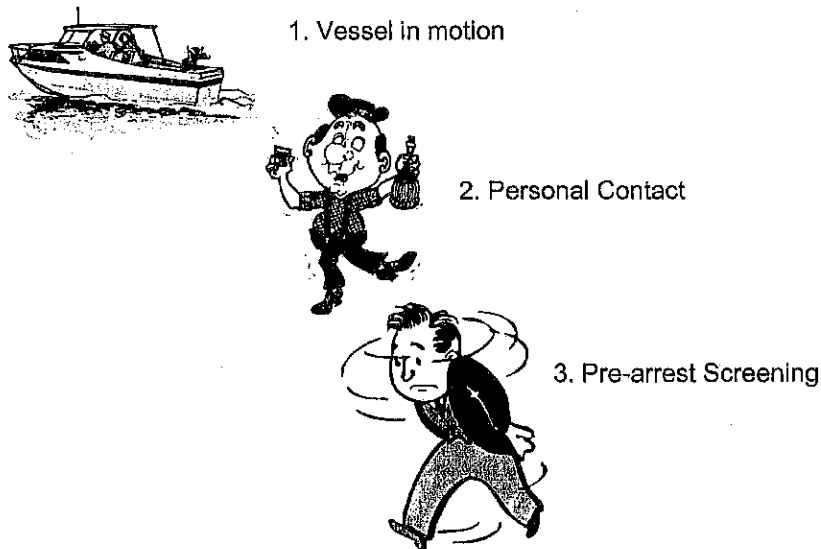
### DETECTION PHASES

SLIDE  
4 - 4

The typical BUI contact involves three separate and distinct phases:

- Phase One: Vessel in motion
- Phase Two: Personal contact
- Phase Three: Pre-arrest screening

### BUI DETECTION PHASES



In Phase One, you usually observe the operator operating the vessel. In Phase Two, after you have begun the boarding, there usually is an opportunity to observe and speak with the operator face-to-face. In Phase Three, you usually have an opportunity to administer some formal, structured field sobriety tests to the operator to evaluate the degree of impairment. Some jurisdictions allow you to administer a preliminary breath test in addition to field sobriety tests to verify that alcohol is the cause of the impairment.

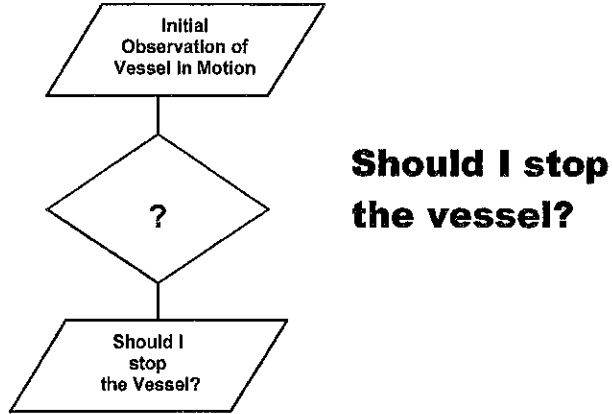
The BUI detection process does not always include all three phases. Sometimes there are BUI detection contacts in which Phase One is absent; that is, cases in which you have no opportunity to observe the vessel in motion. This may occur at the scene of an accident to which you have been called, during equipment safety checks, or when you have responded to a request for boater assistance. Sometimes there are BUI contacts in which Phase Three never occurs. There are cases in which you would not administer formal tests to the operator. These may occur when the operator is grossly intoxicated or badly injured or refuses to submit to tests.

SLIDE  
4-5

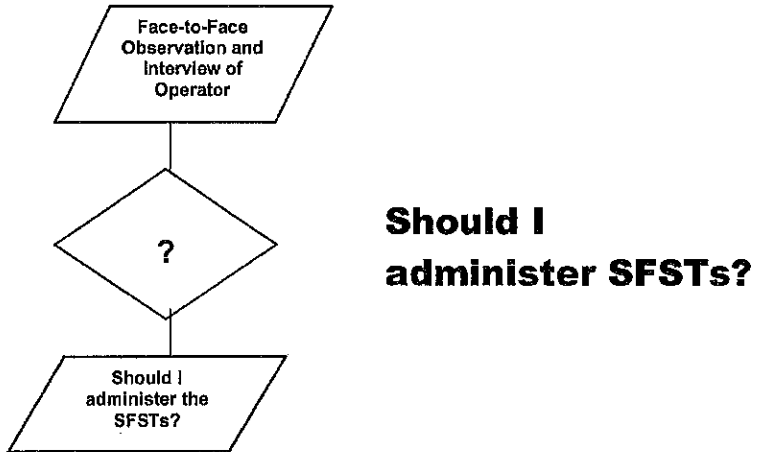
**BUI DETECTION PHASES**

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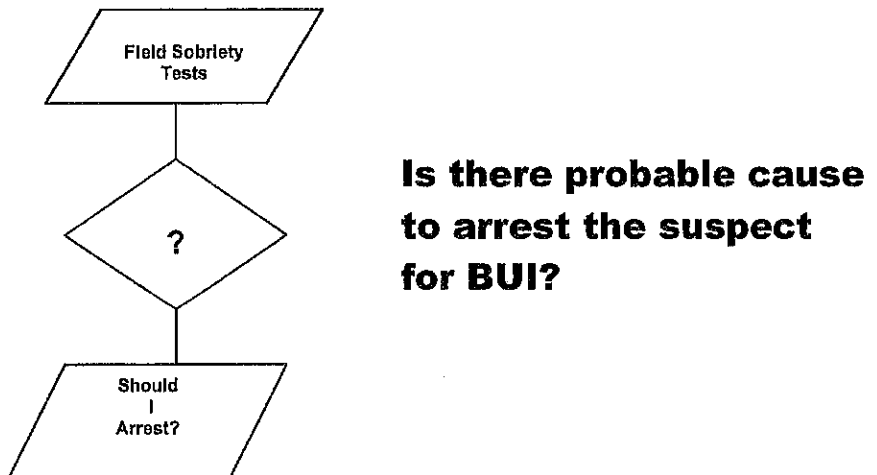
Phase One:  
Vessel in Motion



Phase Two:  
Personal Contact



Phase Three:  
Pre-arrest Screening



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### MAJOR TASKS AND DECISIONS

Each detection phase usually involves one major decision. (See Exhibit 4-2.)

In Phase One: Your first task is to observe the vessel in operation. Based on this observation, you must decide whether there is sufficient cause to command the operator to stop. Your second task is to observe the stopping sequence.

In Phase Two: Your first task is to observe and interview the operator face-to-face. Based on this observation, you must decide whether there is sufficient cause to instruct the operator to take the field sobriety tests.

In Phase Three: Your first task is to administer structured, formal psychophysical tests. Based on these tests, you must decide whether there is sufficient probable cause to arrest the operator for BUI. Your second task is then to arrange for (or administer) a breath test.

Each of the major decisions can have any one of three different outcomes:

1. Yes - Do it Now
2. Wait - Look for Additional Evidence
3. No - Don't Do It

Consider the following examples.

#### 1. Yes - Do It Now

Phase One: Yes, there are reasonable grounds to stop the vessel.

Phase Two: Yes, there is enough reason to suspect impairment to justify administering the field sobriety tests.

Phase Three: Yes, there is probable cause to arrest the operator for BUI right now.

#### 2. Wait - Look for Additional Evidence

Phase One: Don't stop the vessel yet; keep following and observing it a bit longer.

Phase Two: Don't administer the field sobriety tests right away. Do the equipment checks while observing the operator a bit longer. (This option may be limited if the officer's personal safety is at risk.)



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Phase Three: Don't arrest the operator yet; administer another field sobriety test before deciding.

### 3. Don't Do It:

Phase One: No, there are no grounds for stopping that vessel.

Phase Two: No, there isn't enough evidence of BUI to justify administering field sobriety tests.

Phase Three: No, there is not sufficient probable cause to believe this operator has committed BUI.

## OFFICER RESPONSIBILITY

SLIDE  
4 -- 6

In each phase of detection, you must determine whether there is sufficient evidence to establish "reasonable suspicion" necessary to proceed to the next step in the detection process. It is always your duty to carry out whatever tasks are appropriate and to make sure that all relevant evidence of BUI is brought to light.

### BUI DETECTION

Answers to questions like these can aid in BUI detection.

#### Phase One:

- What is the vessel doing?
- Do I have grounds to stop the vessel? (if needed)
- How does the operator respond to my signal to stop?
- How does the operator handle the vessel during the stopping sequence?

#### Phase Two:

- When I approach the vessel, what do I see?
- When I talk with the operator, what do I hear, see and smell?
- How does the operator respond to my questions?
- Should I instruct the operator to exit the vessel?
- How does the operator exit?

#### Phase Three:

- Should I administer field sobriety tests to the operator?
- How does the operator perform those tests?
- What exactly did the operator do wrong when performing the test?
- Do I have probable cause to arrest for BUI?
- Should I administer a preliminary breath test?
- What are the results of the preliminary breath test?

The most successful BUI detectors are those officers who:

- know what to look and listen for;
- have the skills to ask the right kinds of questions;
- choose and use the right kinds of tests;
- make the correct observations; and
- are motivated and apply their knowledge and skill whenever they contact someone who may be under the influence.

Officers like these are likely to make more arrests and to document the clear, convincing evidence needed to secure convictions.

# National Association of State Boating Law Administrators

## NOTE-TAKING AND TESTIMONY

### INTRODUCTION

SLIDE  
4-7

A basic skill needed for BUI enforcement is the ability to describe your observations graphically. Just as detection is the process of collecting evidence, description largely is the process of conveying evidence. Successful description demands the ability to convey evidence clearly and convincingly. Your challenge is to communicate evidence to people who were not there to see, hear and smell the evidence themselves. Your tools are the words that make up your written report and verbal testimony. You must communicate with the supervisor, the prosecutor, the judge, the jury, and even with the defense attorney. You are trying to "print a word picture" for those people, to develop a sharp mental image that allows them to "see" what you saw; "hear" what you heard; and "smell" what you smelled.

Officers with the knowledge, skills and motivation to select the most appropriate words for both written reports and courtroom testimony will communicate clearly and convincingly, making them more successful in BUI prosecution.

### USING CLEAR AND CONVINCING LANGUAGE

Field notes are only as good as the information they contain. Reports must be clearly written and events accurately described if the reports are to have evidentiary value. One persistent problem with BUI incident reports is the use of vague language to describe conditions, events and statements. When vague language is used, reports provide a confused picture of what happened. When clear language is used, reports provide an accurate picture of what happened. Clear and convincing field notes provide strong evidence in court.

Consider the following examples.

#### Vague Language

- Operated negligently
- Operated vessel erratically.
- Operator appeared intoxicated.
- Vessel stopped in unusual fashion.

#### Clear Language

- Vessel ran through a marked swim area.
- Weaving from side to side. Crossed in front of another vessel.
- Operator's eyes bloodshot; gaze fixed; hands shaking. Strong odor of alcoholic beverage on operator's breath.
- Vessel struck dock, ran aground.

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### BUI INVESTIGATION FIELD NOTES

One of the most critical tasks in the BUI enforcement process is the recognition and retention of facts and clues that establish probable cause to stop, investigate and subsequently arrest persons suspected of driving or operating a vessel while under the influence of alcohol, drugs or both. The evidence gathered during the detection process must establish the elements of the violation and must be documented to support successful prosecution of the violator. This evidence is largely sensory (sight, smell, hearing) in nature, and therefore is extremely short-lived.

You must be able to recognize and act on the facts and circumstances with which you are confronted. But you also must be able to recall those observations and describe them clearly and convincingly to secure a conviction. You may be inundated with evidence of BUI, i.e., sights, sounds, and smells. You recognize this evidence, sometimes subconsciously, and on this evidence base your decisions to stop, to investigate and ultimately to arrest.

Since evidence of a BUI violation is short-lived, you need a system and tools for recording field notes at scenes of BUI investigations.

One way to improve the effectiveness of your handwritten field notes is to use a structured note-taking guide. The guide makes it easy to record brief "notes" on each step of the detection process and ensures that vital evidence is documented.

The field notes provide the information necessary for completion of required BUI report forms and assist you in preparing a written account of the incident. The field notes will also be useful if you are required to provide oral testimony, since they can be used to refresh your memory.

A model note-taking guide is provided for your use. A brief description follows. Details are provided in subsequent units.

### NOTE-TAKING GUIDE

SLIDE  
4-8

Remember that you must document those actions that gave you reasonable suspicion or probable cause to justify further investigation of a suspected BUI incident.

Observations section provides space to record basic information describing the suspect, general observations, such as the suspect's manner of speech, attitude, clothing, etc. and the date and time the incident occurred as well as pre-test questions.

SLIDE  
4-9

HGN section provides space to record results of the HGN test. It can be part of the afloat or ashore test battery.

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SLIDES  
4-10,11

Afloat test battery section provides space to record the results of all afloat field sobriety tests that were administered.

SLIDES  
4-12,13

Ashore test battery section provides space to record the results of all ashore field sobriety tests that were administered.

Chemical test section provides space to record the results of the preliminary breath test (PBT) if such a test was given.

Comment section provides space for additional comments.

Since this is a note-taking guide and space is limited, you will have to develop your own "shorthand" system. Your notes should be as descriptive as possible and should create "mental pictures" of the facts, circumstances or events being described. You will use these notes to refresh your memory, to write the arrest report and to testify in court.

NOTE: Field Notes may be subpoenaed as evidence in court. It is important that any "shorthand" system you use be describable, usable, complete and consistent.

### COURTROOM TESTIMONY

The arresting officer must be fully prepared to testify in court on any case. Testimonial evidence in BUI cases usually is the only way to establish that the accused was in fact the operator of the vessel alleged to have been involved in the BUI incident. Testimonial evidence also may be the primary, and sometimes the only, means of establishing that the accused was intoxicated or under the influence of alcohol or drugs. Even when scientific evidence is available, supportive testimonial evidence will be required to permit introduction of that scientific evidence in court.

### PREPARATION

SLIDE  
4-14

Testimonial evidence must be clear and convincing to be effective. The first requirement for effective testimony is preparation. Testimony preparation begins at the time of the BUI incident. From the very beginning of the BUI contact, it is your responsibility to:

- recognize significant evidence;
- compile complete, accurate Field Notes; and
- prepare a complete and accurate incident report.

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Testimony preparation continues prior to trial. Just before the trial, you should:

- review Field Notes;
- review case jacket/file;
- mentally organize elements of offense and the evidence available to prove each element;
- mentally organize testimony to convey observations clearly and convincingly; and
- discuss the case with the prosecutor.

### IN COURT

SLIDE  
4-15

In court, your testimony should be organized chronologically and should cover each phase of the BUI incident:

- initial observation of vessel, the operator or both;
- reinforcing clues, maneuvers or actions observed after signaling operator to stop, but before operator's vessel came to a stop;
- statements and other evidence obtained during your initial face-to-face contact with operator;
- pre-arrest field sobriety tests administered to the operator;
- the arrest itself, including procedures used to inform suspect of arrest, admonish suspect of rights, and so on;

SLIDE  
4-16

- suspect's actions and statements subsequent to the arrest;
- observation and interrogation of suspect subsequent to the arrest;
- the request for the chemical test, including the procedures used, admonition of rights and requirements, and so on;
- the conduct and results of the chemical test, if you were also the testing officer.

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**TEST YOUR KNOWLEDGE**

INSTRUCTIONS: Complete the following sentences.

1. BUI detection is defined as \_\_\_\_\_  
\_\_\_\_\_
2. The three phases in a typical BUI contact are:  
Phase One \_\_\_\_\_  
Phase Two \_\_\_\_\_  
Phase Three \_\_\_\_\_
3. In Phase One, the officer usually has an opportunity to \_\_\_\_\_  
\_\_\_\_\_
4. Phase Three may not occur if \_\_\_\_\_  
\_\_\_\_\_
5. In Phase Two, the officer must decide \_\_\_\_\_  
\_\_\_\_\_
6. Each major decision can have any one of \_\_\_\_\_ different outcomes.  
These are \_\_\_\_\_  
\_\_\_\_\_
7. At each phase of detection, the officer must determine \_\_\_\_\_  
\_\_\_\_\_
8. Evidence of BUI is largely \_\_\_\_\_ in nature.
9. Police officers need a system and tools for recording field notes at scenes of BUI investigations because BUI evidence is \_\_\_\_\_.
10. Testimony preparations begins \_\_\_\_\_  
\_\_\_\_\_

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11. List two things the officer should do to prepare testimony just before the trial.

a. \_\_\_\_\_

b. \_\_\_\_\_

12. In court, the officer's testimony should be organized \_\_\_\_\_.







## **SESSION 5**

Phase One: Vessel in Motion

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**SESSION 5**

**PHASE ONE: VESSEL IN MOTION**

SLIDE  
5-1,2

Upon successfully completing this session, the student will be able to:

- identify typical cues of Detection Phase One;
- describe the observed cues clearly and convincingly.

<b>CONTENT SEGMENTS</b>	<b>LEARNING ACTIVITIES</b>
A. Overview: Tasks and Decision	⊙ Instructor-Led Presentations
B. Initial Observations: Visual Cues of Impaired Operation	⊙ Videotape Presentations
C. Recognition and Description of Initial Cues	⊙ Instructor-Led Demonstrations
D. Reinforcing Cues of the Stopping Sequence	⊙ Student Presentations
E. Recognition and Description of Initial and Reinforcing Cues	

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### BUI DETECTION PHASE ONE: VESSEL IN MOTION

SLIDE  
5 - 3

#### 1. TASKS AND DECISION

The first task in Phase One: Vessel in Motion is to observe the vessel in operation to note any initial cues of a possible BUI violation. At this point, you must decide if there is sufficient cause to stop the vessel, either to conduct further investigation to determine if the suspect may be impaired or for another boating violation. You are not committed to arresting the suspect for BUI based on this initial observation, but rather you should concentrate on gathering all relevant evidence that may suggest impairment. Your second task during phase one is to observe the manner in which the suspect responds to your signal to stop and to note any additional evidence of a BUI violation.

SLIDE  
5 - 4

The first task, observing the vessel in motion, begins when you first notice the vessel, operator or both. Your attention may be drawn to the vessel by such things as:

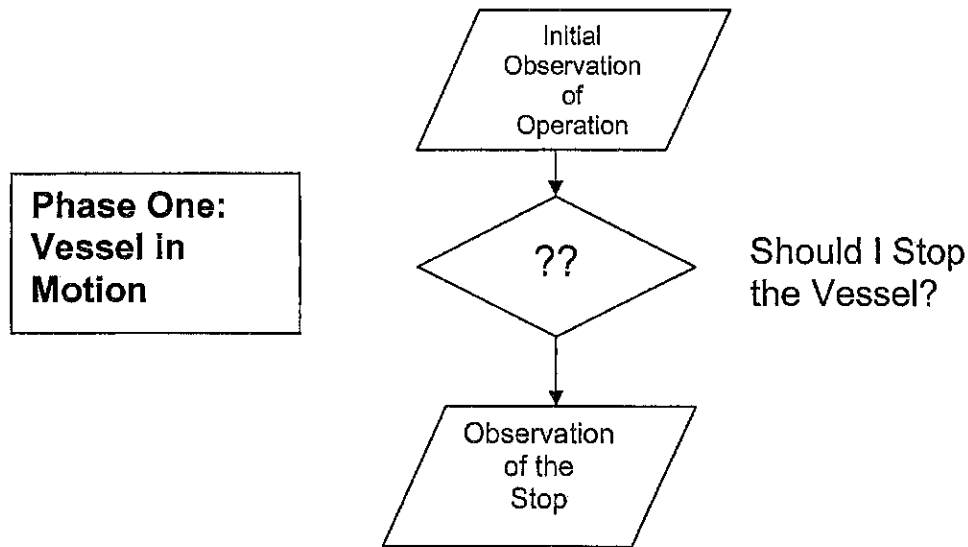
- o a moving boating violation;
- o an equipment violation;
- o an expired registration or safety inspection decal;
- o unusual operating actions; or
- o "evidence of drinking" or drugs in vessel.

If this initial observation discloses vessel maneuvers or human behaviors that may be associated with impairment, you may develop an initial suspicion of BUI.

Based upon this initial observation of the vessel in motion, you must decide whether there is reasonable suspicion to stop the vessel. At this point, you have three choices:

- o stop the vessel;
- o continue to observe the vessel; or
- o disregard the vessel.

Phase One Tasks and Decisions



2. INITIAL OBSERVATIONS: VISUAL CUES TO BUI

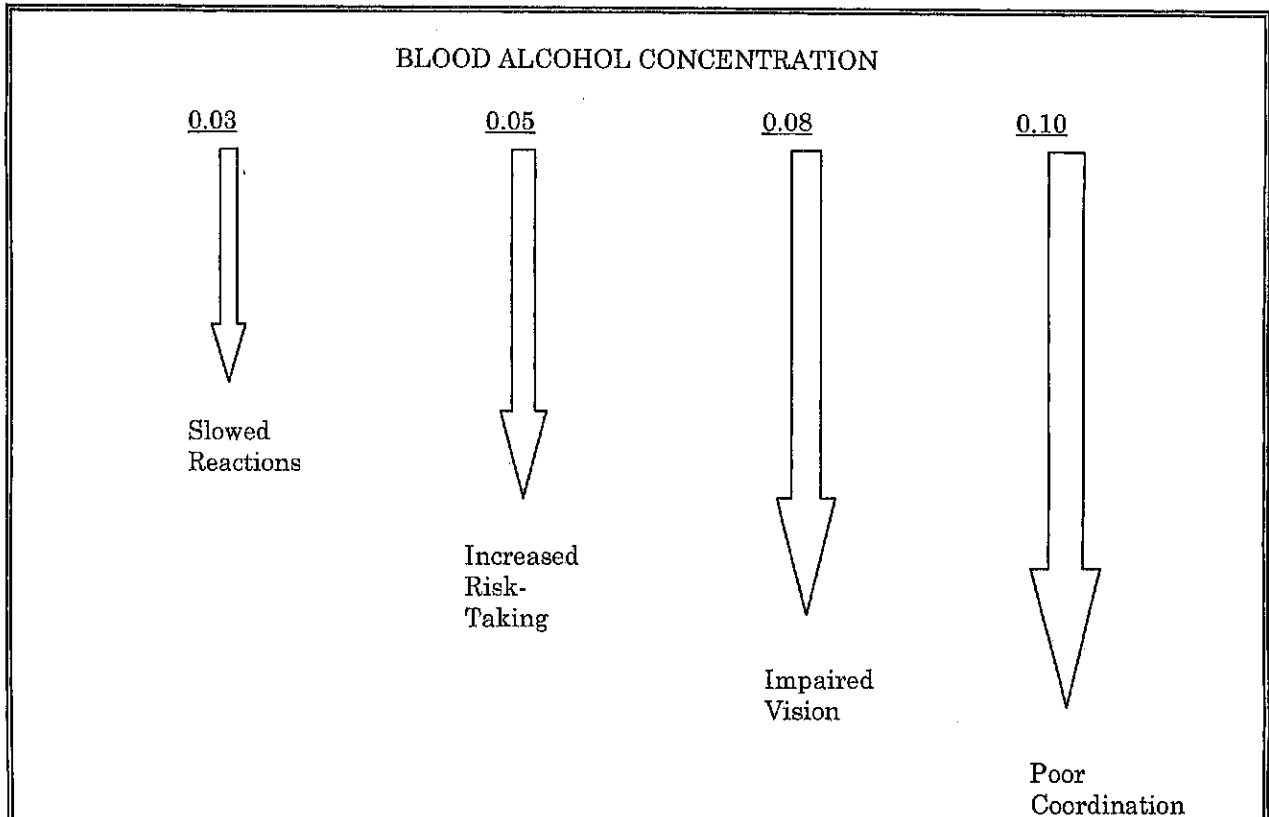
Operators who are impaired frequently exhibit certain effects or symptoms of impairment. These include:

- o slowed reactions;
- o impaired judgment as evidenced by a willingness to take risks;
- o impaired vision; and
- o poor coordination

The next page presents common symptoms of alcohol influence. This unit focuses on alcohol impairment because research currently provides more information about the effects of alcohol on operating than it does about the effects of other drugs on operating. Remember that whether the driver is impaired due to alcohol or other drugs, the law enforcement detection process is the same, and the offense is still BUI.

The common effects of alcohol on the operator's mental and physical faculties lead to predictable operating violations and vessel-operating characteristics. These cues and their associated probabilities are described in the following special section, "Visual Cue Descriptions."

COMMON SIGNS OF ALCOHOL INFLUENCE



VISUAL CUE DESCRIPTIONS

**Appearing to be Impaired** - This cue is actually one or more of a set of cues related to the personal behavior or appearance of the operator. Examples of specific cues might include:

- o Eye fixation
- o Tightly gripping the steering wheel
- o Slouching in the seat
- o Gesturing erratically or obscenely
- o Face close to the windshield
- o Operator's head protruding from vessel

**Almost Striking Object or Vessel** - The observed vessel almost strikes a stationary object or another moving vessel. Examples include passing abnormally close to a buoy or other object; passing abnormally close to another moving vessel; and causing another vessel to maneuver to avoid collision.

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**Weaving** - Weaving occurs when the vessel alternately moves toward one side of the waterway and then the other, creating a zigzag course. The pattern of lateral movement is relatively regular as one steering correction is closely followed by another.

**Swerving** - A swerve is an abrupt turn away from a generally straight course. Swerving might occur when the operator discovers the approach of an oncoming boat or discovers that the vessel is going too close to shore.

**Following Too Closely** - The vessel is observed following another vessel unreasonably or unnecessarily close.

**Stopping Inappropriately** - The observed vessel stops at an inappropriate location or under inappropriate conditions.

**Turning Abruptly or Illegally** - The operator executes any turn that is abnormally abrupt or illegal. Specific examples include turning with excessive speed or turning sharply into oncoming boating traffic.

**Accelerating or Decelerating Rapidly** - This cue encompasses any acceleration or deceleration that is significantly more rapid than that required by the boating conditions. A vessel might alternately accelerate and decelerate rapidly.

**Navigation Lights Off** - The observed vessel is being operated with no navigation lights during a period when required.

**Other Factors** - Two other factors separate motor vehicle drivers from boat operators in terms of judgment and skill of operation. The first of these is often referred to as the "second nature effect." This can best be described as individuals operating a motor vehicle routinely, traveling over much the same territory that he or she travels during the course of the week, perhaps commuting to and from work. There is a familiarity with, and expectation for, certain flow patterns in traffic, highway conditions, intersections, congestion, and other hazards normally encountered on the roadway. The motor vehicle driver in familiar territory often operates under a second nature effect to the extent that driving a vehicle often does not take 100 percent of the driver's attention. The second nature effect often helps drivers who have had a moderate amount of alcohol to drive home without incident.

Boaters, on the other hand, rarely have the opportunity to operate with a second nature effect. This is due to several factors, such as the lack of controlled traffic flow (traffic may approach virtually from 360 degrees).

Boat traffic approaches at widely varying speeds. There is an absence of roadway advisory signs or other regulatory controls that would keep traffic moving in uniform patterns. The intoxicated vessel operator, unlike the

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intoxicated motor vehicle driver, is unable to rely on the second nature effect and may experience more difficulty in normal operation without emergencies present.

Another factor to be considered is the marine environment itself. Unlike cars, boats are not equipped with brakes, and stopping distances, according to speed and hull design, are considerably longer. Most boaters do not operate boats enough on a regular basis to become as proficient in judgment of stopping distances and capabilities as they are with their own vehicles. Coupled with the general unfamiliarity with rules-of-the-road, which prescribe steering directions in meeting and overtaking situations, most boaters are generally left with only a single tactic -- avoidance. Experienced mariners, who make livelihoods from activities on the waterways, are familiar enough with the capabilities of their vessels to maneuver routinely within their vessel's capabilities and limitations. Recreational boaters, on the other hand, may not know the distance of travel required to bring their vessels to a complete stop from a cruising speed.

### 3. DIVIDED ATTENTION

SLIDE  
5 - 5

It is important to understand the effects of alcohol that are exhibited in operating a vessel so the significance of visual cues will be recognized. Operating a vessel is a complex task involving a number of subtasks, many of which occur simultaneously. These include:

- o steering;
- o controlling the throttle;
- o signaling (if required);
- o controlling the throttle to stop;
- o operating the gearshift;
- o observing other boating traffic;
- o observing navigation aids/waterway markers; and
- o making decisions (whether to stop, turn, speed up, slow down).

Safe operating demands the ability to divide attention among these various tasks. "Divided attention" simply means the ability to concentrate on two or more things at the same time. Under the influence of alcohol and/or other drugs, an operator's ability to divide attention is impaired. As a result, the impaired operator tends to concentrate on only the most important or critical parts of operating and to disregard the less important parts, often creating unexpected or dangerous situations for other operators.

Some of the most significant evidence from all three phases of BUI detection can be related directly to the effects of alcohol and/or other drugs on divided attention ability. We will return to the concept of divided attention in Session 6. Personal Contact and Session 7. Pre-arrest Screening.



#### 4. RECOGNIZING AND DESCRIBING INITIAL CUES

SLIDE  
5 - 6

Observing the vessel in operation is the first task in BUI detection. Proper performance of that task requires two distinct but related abilities:

- o the ability to recognize evidence of impairment; and
- o the ability to describe that evidence clearly and convincingly.

It is not enough that you observe and recognize symptoms of impaired operating. You also must be able to describe what happened so that others will have a clear mental picture of what took place. Improving your ability to recognize and clearly describe observational evidence requires practice.

#### 5. THE STOPPING SEQUENCE

SLIDE  
5 - 7

Your second task during Phase One of the detection process is to observe the manner in which the operator responds to your signal to stop and to note any additional evidence of a BUI violation.

Cues reinforcing the suspicion of BUI may be found in the stopping sequence. After the command to stop is given, the impaired operator may exhibit additional important evidence of BUI. These cues may include:

- o an attempt to flee;
- o no response;
- o slow response;
- o an abrupt swerve;
- o sudden stop; and
- o striking another boat and/or object.

Some of these cues are exhibited because the stop command places additional demands on the operator's ability to divide attention. The signal to stop creates a new situation with which the operator must cope. Flashing emergency lights or a siren demand and divert the operator's attention, requiring that the operator now divide attention between operating and responding to the stop command. Just the act of stopping requires the operator simultaneously to turn the steering wheel and reduce speed.

Thus, the operator's task becomes more complex when the stop command is given. An impaired operator may not be able to handle this more complex task and additional evidence of impairment may appear.

SLIDE  
5 – 8

It is your responsibility to recognize, record and convey the additional evidence of operating impairment that may become known during the stopping sequence. This task, like Task One, observing the vessel in operation, requires:

- o the ability to recognize evidence of impairment; and
- o the ability to describe that evidence clearly and convincingly.

Recognizing and describing the reinforcing cues of BUI that appear during the stopping sequence requires practice.

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### TEST YOUR KNOWLEDGE

INSTRUCTIONS: Complete the following sentences.

1. The Phase One tasks are \_\_\_\_\_
2. Two common symptoms of impairment are:
  - a.
  - b.
3. Alcohol impairs the ability to \_\_\_\_\_ among tasks.
4. Three cues reinforcing the suspicion of BUI which may be observed during the stopping sequence are:
  - a.
  - b.
  - c.

=



**SESSION 6**

Phase Two: Personal Contact

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**SESSION 6**

**PHASE TWO: PERSONAL CONTACT**

SLIDES  
6 – 1,2

Upon successfully completing this session, the student will be able to:

- o identify typical cues of Detection Phase Two;
- o describe the observed cues clearly and convincingly.

<b>CONTENT SEGMENTS</b>	<b>LEARNING ACTIVITIES</b>
A. Overview: Tasks and Decision	⊙ Instructor-Led Presentations
B. Typical Investigation Cues of the Vessel Operator Interview	⊙ Videotape Presentations
C. Recognition and Description of Investigative Cues	⊙ Instructor-Led Demonstrations
D. Recognition and Description of Initial, Reinforcing and Investigative Cues	⊙ Student Presentations
E. Interview/Questions Techniques	
F. Typical Cues of the Exit Sequence	

# National Association of State Boating Law Administrators

## PERSONAL CONTACT

### OVERVIEW

BUI Detection Phase Two: Personal Contact, like Phases One and Three, comprises two major evidence-gathering tasks and one major decision. Your first task is to approach, observe and interview the operator while he or she is still in the vessel to note any face-to-face evidence of impairment. During this face-to-face contact, you may administer some simple pre-exit sobriety tests to gain additional information to evaluate whether or not the operator is impaired. After this evaluation, you must decide whether to request the operator to exit the vessel for further field sobriety testing. In some jurisdictions departmental policy may dictate that all operators stopped on suspicion of BUI be instructed to exit. It is important to note that by instructing the operator to exit the vessel, you still are not committed to an arrest; this is simply another step in the BUI detection process. Once you have requested the operator to exit the vessel, your second task is to observe the manner in which the operator exits to note any additional evidence of impairment.

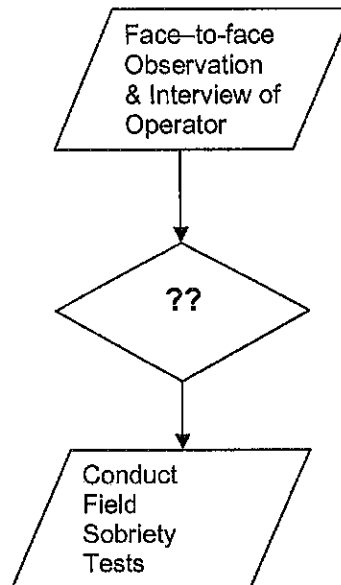
NOTE: You may initiate Phase Two without Phase One. This may occur, for example, when you have responded to the scene of a boating accident.

### TASK ONE - Observations and Interview

SLIDE  
6 - 3

The first task of Phase Two, observation and interview of the operator, begins as soon as the suspect vessel and the patrol vessel have come to complete stops. It continues through your approach to the suspect vessel and involves all conversation between you and the operator prior to the operator's exit from the vessel.

Phase Two:  
Personal  
Contact





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You may have developed a strong suspicion that the operator is impaired prior to the face-to-face observation and interview. You may have developed this suspicion by observing something unusual while the vessel was in motion or during the stopping sequence, or you may have developed no suspicion of BUI prior to the face-to-face contact. The vessel operation and the stop may have been normal; you may have seen no actions suggesting BUI. For example, you may have stopped the vessel for an equipment/registration violation, or where no unusual driving was evident. In some cases, Phase One will have been absent. You may first encounter the operator and vessel after a crash or when responding to a request for assistance.

Regardless of the evidence that may have become known during Detection Phase One, your initial face-to-face contact with the operator usually provides the first definite indications that the operator is impaired.

### **DECISION**

Based upon your face-to-face interview and observation of the operator, and upon your previous observations of the vessel in motion and the stopping sequence, you must decide whether there is sufficient reason to instruct the operator to step from the vessel. This is a discretionary decision to be based on what the officer sees, hears and smells during observation and interview with the operator. If you decide to instruct the operator to exit, you must closely observe the operator's actions during the exit from the vessel and note any evidence of impairment.

### **TYPICAL INVESTIGATION CUES: THE OPERATOR INTERVIEW**

Face-to-face observation and interview of the operator allows you to use three senses to gather evidence of alcohol and/or other drug influence:

- o the sense of sight;
- o the sense of hearing; and
- o the sense of smell.

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### SIGHT

SLIDE  
6-6

There are a number of things you might see during the interview that would be describable cues or evidence of alcohol and/or other drug influence.

Among them are:

- o bloodshot, watery eyes;
- o pupil size;
- o soiled clothing;
- o fumbling fingers;
- o alcohol containers;
- o drugs or drug paraphernalia;
- o bruises, bumps or scratches;
- o unusual actions.

### HEARING

SLIDE  
6-7

Among the things you might hear during the interview that would be describable cues or evidence of alcohol and/or other drug influence are:

- o slurred speech;
- o admission of drinking;
- o inconsistent responses;
- o abusive language;
- o unusual statements.

### SMELL

SLIDE  
6-8

There are things you might smell during the interview that would be describable cues or evidence of alcohol and/or other drug influence. Typically these include:

- o alcoholic beverages;
- o marijuana;
- o "cover up" odors like breath sprays;
- o unusual odors.

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### REQUIRED ABILITIES

Proper face-to-face observation and interview of the operator demands two distinct but related abilities:

- o the ability to recognize the sensory evidence of alcohol and/or other drug influence; and
- o the ability to describe that evidence clearly and convincingly.

### ADDITIONAL SYMPTOMS OF ALCOHOL IMPAIRMENT

**Odor of Alcoholic Beverage** - Alcohol in its pure form is odorless. The correct term is "odor of alcoholic beverage." The odor is caused by the manufacturing process when the alcohol is mixed with the other ingredients of the beverage. When reporting an odor of alcoholic beverage, be specific in noting the location of the odor. Is it due to having spilled it on clothing, sweating profusely (i.e., a boater drinking heavily on a hot day), expiring breath, or having spilled alcoholic beverage in close proximity to location of operator. What type of odor? If no odor is detected, the operator can still be under the influence. A lack of odor may be due to the method of alcohol ingestion or the use of mouthwash, breath mints, tobacco, etc., to cover the odor of alcoholic beverage. Generally, the odor can be described as MILD, MODERATE, or STRONG. The odor will vary with the type of alcoholic beverage, as well as the amount, i.e., a vessel operator drinking a large amount of straight vodka can have a mild odor of alcoholic beverage; an operator drinking a small amount of beer can have a strong odor of alcoholic beverage. The type of odor does not automatically equate to the state of an individual's sobriety, i.e., a person with a mild odor of alcoholic beverage can be under the influence and vice versa.

**Facial Symptoms** - A flushed and drawn face may indicate intoxication. However, it may also be caused by a combination of exposure to sun, wind and salt; while boating, some people have naturally ruddy complexions. Facial muscles may be completely relaxed which gives the appearance of the face losing its shape and which is most noticeable in the area of the cheeks and mouth. In smokers, it is readily identified by a cigarette that appears to be falling out of the mouth. Due to the anesthetizing effect of alcohol, a smoker may not feel a cigarette between the lips.

**Eye Symptoms** - A combination of bloodshot appearance in the eyes, pupil size and reaction to light can assist in determining if the individual is under the influence of alcohol, drugs, or a combination of the two. Intoxication or a combination of eyestrain, exposure to irritants, lack of sleep and/or exposure to sunlight may cause bloodshot eyes. If the cause is alcohol intoxication, most or all of the whites of the eyes will be covered with a red-pink color. If the cause is due to marijuana use, there will be vivid red streaks zigzagging in

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the whites of the eyes. When the eyes have the red-pink color with the vivid streaks of red zigzagging through the red-pink color, it can be due to a combination use of marijuana and alcohol. Alcohol and/or drugs can cause the pupils to be slow, sluggish, or not react to light.

**Speech Symptoms** - Slurred speech can be a symptom of intoxication or simply an inability to pronounce words correctly. There may be an elongation of syllables in the words due to the mild anesthetic effects of alcohol causing the tongue to feel "thickened" (similar to the effects of Novocain). When recording slurred words, pick words with different vowel/consonant combinations to be sure the slurred speech is not due to a speech impediment. Slurred speech may also be caused by brain damage. Loose changing of speech patterns is another symptom to look for. Speech may change from rapid to slow or vice versa, loud to soft or vice versa, or articulate to confused and vice versa.

**Behavior Patterns** - Human behavior is affected when drugs and/or alcohol reach the central nervous system. The centers of judgment, moral values and inhibitions will be the first areas affected. The officer should look for changes in the behavioral patterns, i.e., cooperative to uncooperative, cooperative to threatening, or threatening to pleading. The individual may not be responsive to the situation or surroundings. There may also be changes in mood: serious to silly, happy to depressed, or caring to uncaring.

**Subjective Symptoms** - Until chemical testing is mandatory for all individuals suspected of violating Boating/Alcohol laws, the enforcement officer will have to rely on subjective symptoms exhibited by a vessel operator to determine if the operator is indeed in violation of the law. This should not pose any problems because for years this was the only method available to determine whether a motor vehicle operator was under the influence. A **TRAINED** officer has no problem observing the subjective symptoms of being under the influence and correctly interpreting them.

The subjective symptoms exhibited by an individual under the influence are external manifestations caused by the effects of alcohol and/or drugs on the body's central nervous system and brain, as described previously. These symptoms will be apparent by observations of the various effects on the individual's anatomy and by use of balance and coordination tests to demonstrate how the individual's balance, coordination and mental powers have been affected. It is very important to remember that observation of only one subjective symptom is insufficient to make a determination that the individual is under the influence. There are many reasons, other than intoxication, that could explain a particular symptom. The **TRAINED** officer makes determinations based on the entire series of observations, since each additional observation decreases the probability that there is an alternative explanation to the fact that the person is under the influence.

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### PRE-EXIT INTERVIEW TECHNIQUES

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

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

There are a number of techniques you can use while the operator is still behind the wheel. Most of these techniques apply the concept of divided attention. They require the operator 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 SFSTs.**

#### Questioning Techniques

SLIDE  
6 - 9

The questions you ask and the way in which you ask them can constitute simple divided attention tasks. Three techniques are particularly pertinent:

- o asking for two things simultaneously;
- o asking interrupting or distracting questions; and,
- o asking unusual questions.

An example of the first technique, asking for two things simultaneously, is requesting that the operator produce both the operator's license and the vessel registration. Possible evidence of impairment may become known as the operator responds to this dual request. Be alert for the operator who:

- o forgets to produce both documents;
- o produces documents other than the ones requested;
- o fails to see the license, registration or both while searching through wallet or purse;
- o fumbles or drops wallet, purse, license or registration;
- o is unable to retrieve documents using fingertips.

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The second technique, asking interrupting or distracting questions, forces the operator to divide attention between searching for the license or registration and answering a new question. While the operator is responding to the request for license, registration or both, you ask an unrelated question such as, "Without looking at your watch, what time is it right now?" Possible evidence of impairment may be disclosed by the interrupting or distracting question. Be alert for the operator who:

- o ignores the question and concentrates only on the license or registration search;
- o forgets to resume the search after answering the question;
- o supplies a grossly incorrect answer to the question.

The third technique, asking unusual questions, is employed after you have obtained the operator's license and registration. Using this technique, you seek verifying information through unusual questions. For example, while holding the operator's license, you might ask the operator, "What is your middle name?"

There are many such questions that the operator normally would be able to answer easily but which might prove difficult if the operator is impaired, simply because they are unusual questions. Unusual questions require the operator to process information; this can be especially difficult when the operator does not expect to have to process information. For example, an operator may respond to the question about the middle name by giving a first name. In this case, the operator ignored the unusual question and responded instead to a usual -- but unasked -- question.

### TASK TWO – The Exit Sequence

SLIDE  
6 – 10

Your decision to instruct the operator to step from the vessel usually is made after you have developed a suspicion that the operator is impaired.\* Even though that suspicion may be very strong, usually the suspect is not yet under arrest when you give the instruction.

How the operator steps and walks from the vessel and actions or behavior during the exit sequence may provide important evidence of impairment. Be alert to the operator who:

- o shows angry or unusual reactions;
- o cannot follow instructions;
- o leaves the vessel in gear;
- o "climbs" out of vessel;

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- o leans against vessel;
- o keeps hands on vessel for balance.

Proper face-to-face observation and interview of an operator requires the ability to recognize the sensory evidence of alcohol and/or other drug influence and the ability to describe that evidence clearly and convincingly. Developing these abilities takes practice.

Physical evidence of drinking may be present. Empty beverage containers, coolers, or other signs may be visible in the vessel. The officer may ask the operator if, when, and how much he/she was drinking. Asking where the operator is headed, where he/she had come from, and the time left are all questions that may provide useful information. After evaluating the results of this face-to-face contact during PHASE TWO, the officer must decide whether to request the vessel operator to perform formal field sobriety tests.

**NOTE:** You may instruct a suspect to exit the vessel as a means of ensuring your own safety. Safety considerations take precedence over all other considerations.







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**TEST YOUR KNOWLEDGE**

INSTRUCTIONS: Complete the following sentences.

1. The two major evidence-gathering tasks of Phase Two are:
  - a.
  - b.
2. The major decision of Phase Two is \_\_\_\_\_.
3. Among the describable cues an officer might see during the Phase Two interview are these three:
  - a.
  - b.
  - c.
4. Among the describable cues an officer might hear during the interview are these three:
  - a.
  - b.
  - c.
5. Among the describable cues an officer might smell during the interview are these two:
  - a.
  - b.
6. The techniques an officer uses in asking questions constitute simple divided attention tasks. These techniques include:
  - a.
  - b.
7. Leaning against the vessel is a cue to BUI which may be observed during \_\_\_\_\_.

**SESSION 7**

Phase Three: Pre-arrest Screening

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## SESSION 7

### PHASE THREE: PRE-ARREST SCREENING

SLIDE  
7-1,2

Upon successfully completing this session, the student will be able to:

- describe the role of psychophysical and preliminary breath tests;
- define and describe the concepts of divided attention and nystagmus;
- discuss the advantages and limitations of preliminary breath testing;
- discuss the arrest decision process.

#### CONTENT SEGMENTS

#### LEARNING ACTIVITIES

A. Overview: Tasks and Decision

• Instructor-Led Presentations

B. Divided Attention Tests: Concepts, Examples, Demonstrations

• Instructor-Led Presentations

C. Horizontal Gaze Nystagmus – Concepts, Demonstration

D. Vertical Nystagmus

E. Advantages and Limitations of Preliminary Breath Testing

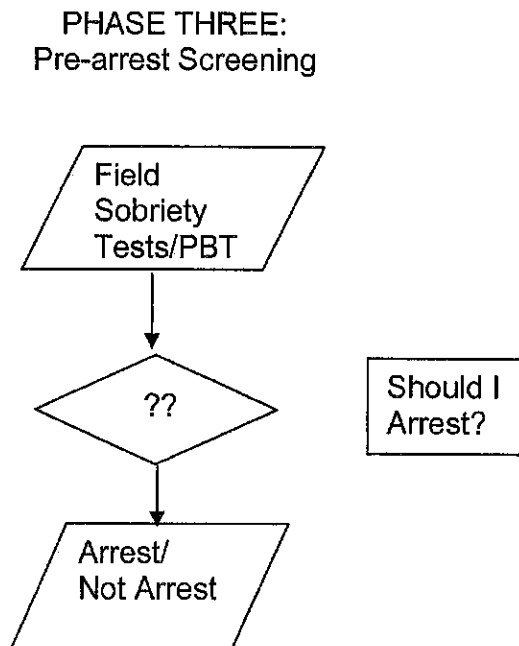
F. The Arrest Decision

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### PRE-ARREST SCREENING

#### PHASE THREE: TASKS AND DECISION

SLIDE 7-3 As in Phases One and Two, BUI Detection Phase Three – Pre-arrest Screening – has two major evidence-gathering tasks and one major decision.



Your first task in Phase Three is to administer psychophysical (field) sobriety tests. Based on these tests and on all other evidence from Phase One and Two, you must decide whether there is sufficient probable cause to arrest the boat operator for BUI. Your second task may then be to administer (or arrange for) a preliminary breath test (PBT) to confirm the chemical basis of the boat operator's impairment, if your agency uses PBTs. The entire detection process culminates in the arrest/no arrest decision.

#### Administering the Standardized Field Sobriety Tests

Standardized Field Sobriety Tests (SFSTs) are a means of measuring a person's degree of intoxication to establish if a violation of BUI regulations exists. These tests are designed to show neurological impairment in an individual's:

- Judgment
- Coordination
- Memory

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- Ability to divide attention
- Ability to perform simple tasks

### Procedure for Administering SFSTs

There are general procedures that must be followed when administering SFSTs

1. Give specific instructions.
2. Seek understanding from the person.
3. Demonstrate the test.
4. Again, seek understanding from the person.

### Interpreting Results of SFSTs

Interpreting the results of SFSTs relies on the officer remaining objective by making decisions based on the facts and clues gathered during all three phases.

To properly interpret the SFST the officer must also rely on:

- training
- experience
- professional judgment

### SFST Considerations

Before and during the administration of field sobriety testing the officer must take into account some considerations. They are:

- Safety of the officer
  - Safety of the officer is the first concern. Do not underestimate the danger of assault from a subject.
- Safety of the subject
  - Safety of the subject is a major concern in administering any SFST. An officer may be held liable if negligent in caring for the subject's safety. Where possible, when testing a subject, another team member should position himself or herself behind the subject to act as a "safety net" to catch the subject if he or she should fall. If doubt exists that the test may injure or cause pain to the subject, do not give that test.

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### Two Part Test Battery

The Standardized Field Sobriety Tests are broken into two separate batteries. They are:

- Afloat Test Battery
- Ashore Test Battery

### Afloat Test Battery

The afloat test battery is made up of 6 separate field sobriety tests. These tests are:

- Horizontal Gaze Nystagmus
- Alphabet Test
- Backwards Count
- Finger Count
- Palm Pat
- Finger to Nose

### Ashore Test Battery

The ashore test battery consists of 3 separate field sobriety tests. These tests are:

- Horizontal Gaze Nystagmus
- Walk and Turn
- One Leg Stand

### Type of Test Battery to Administer

The type of test battery to be administered to the subject is a decision that the officer must make. Considerations to help with the decision are:

- location of the subject and vessel
- location of available docks
- any physical limitations of the subject

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### Pre-Test Questioning

SLIDE  
7 - 4

Pre-test questions are required to be asked before the administration of any SFST. They will assist the officer by:

- Determining whether or not the observations may be due to intoxication.
- Establish which test(s) should not be given to the subject for safety reasons.
- Ensuring that the SFST results do not contain false clues from injuries or disabilities of the subject.

The use of pre-test questions has been upheld in courts throughout the U.S. as an investigative tool and as such, does not require a Miranda Warning.

Below are the pre-test questions which should always be asked before administering any SFST:

- Do you have any physical defects?
- Do you have any physical disabilities?
- Do you have any defects in your feet, legs, ankles or hips?
- Do you have any defects with your eyes?
- Are you sick or injured?
- Are you under the care of a doctor or dentist?
- Are you taking any medications or drugs?
- How far did you go in school?

### Optional questions

There are many other questions that the officer could use to assist in determining if the behaviors exhibited by the subject are due to intoxication or to other factors. These other questions could include:

- How long have you been underway?
- When was the last time you ate?
- When was the last time you slept?
- How many alcoholic beverages did you drink today?
- Over what length of time?



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### PSYCHOPHYSICAL TESTS

SLIDE  
7-5

Psychophysical tests are methods of assessing a suspect's mental and physical impairment. These tests focus precisely on the abilities needed for safe operation: balance, coordination, information processing and so on.

Psychophysical testing actually begins as soon as you come into face-to-face contact with the suspect and begin the interview. Psychophysical testing continues as the suspect exits the vessel and you observe the manner of the exit and walk from the vessel. The most significant psychophysical tests are the three scientifically validated tests normally administered at roadside for DUI investigations.

### PRELIMINARY BREATH TEST

The preliminary breath test (PBT) can help to corroborate all other evidence and to confirm your judgment as to whether the suspect is under the influence. Usually PBT results cannot be introduced as evidence against the boat operator in court. However, state laws vary in this regard.

### THE ARREST DECISION

The BUI detection process concludes with the arrest decision. This decision is based on all of the evidence you have obtained during all three detection phases: on observation of the vehicle in motion and during the stopping sequence, on face-to-face observation and while interviewing the boat operator.

### DIVIDED ATTENTION TESTS

SLIDE  
7-6

Many of the most reliable and useful psychophysical tests employ the concept of divided attention – they require the subject to concentrate on two things at once. Operating a boat is a complex task. In order to operate safely, boat operators must simultaneously control steering, acceleration and slowing; react appropriately to a constantly changing environment; and perform many other tasks. Alcohol and many other drugs substantially reduce a person's ability to divide attention among tasks such as these. Under the influence of alcohol or other drugs, boat operators often must ignore the less critical tasks of operation in order to focus their impaired attention on the more critical tasks. For example, a boat operator may ignore other boats and focus instead on speed control.

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Even when under the influence, many people can handle a single focused-attention task fairly well. For example, a boat operator may be able to keep the vessel within the proper channel as long as the channel remains fairly straight. However, most people, when under the influence, cannot satisfactorily divide their attention to handle multiple tasks at once.

SLIDE  
7-7

The concept of divided attention has been applied to psychophysical testing. Field sobriety tests that simulate the divided-attention characteristics of driving have been developed and are being used by police departments nationwide. The best of these tests exercise the same mental and physical capabilities that a person needs to drive safely:

- information processing
- short-term memory
- judgment and decision making
- balance
- steady, sure reactions
- clear vision
- small muscle control
- coordination of limbs

Any test that requires a person to demonstrate two or more of these capabilities simultaneously is potentially a good psychophysical test.

SLIDE  
7-8

**Simplicity** is the key to divided-attention field sobriety testing. It is not enough to select a test that simply divides the subject's attention. The test also must be reasonably simple for the average person to perform when sober. Tests that are difficult for a sober subject to perform have little or no evidentiary value.

### **PRELIMINARY BREATH TESTING**

SLIDE  
7-9

The basic purpose of preliminary breath testing (PBT) is to demonstrate the association of alcohol with the observable evidence of the suspect's impairment. The suspect's impairment is established through sensory evidence: what the officer sees, hears and smells. The PBT provides the evidence that alcohol is the chemical basis of that impairment by yielding an on-the-spot indication of the suspect's blood alcohol concentration (BAC). The PBT provides direct indication of the BAC level. It does not indicate the level of the suspect's impairment. Impairment varies widely among individuals with the same BAC level.

Preliminary breath testing, like psychophysical testing, is a stage in the pre-arrest screening of a BUI suspect. Usually the suspect is not yet under arrest when requested to submit to the preliminary breath test. The BUI incident remains at the investigative stage; the accusatory stage has not yet begun.

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The PBT result is only one of many factors the officer considers in determining whether the suspect should be arrested for BUI. It should never be the sole basis for a BUI arrest. Nevertheless, the PBT result is an important factor because it provides direct indication of alcohol influence. All other evidence, from initial observation of the vessel in operation through formal psychophysical testing, indicates alcohol influence indirectly, based on impairment of the suspect's mental and physical faculties.

### ADVANTAGES OF PBT

SLIDE  
7 - 10

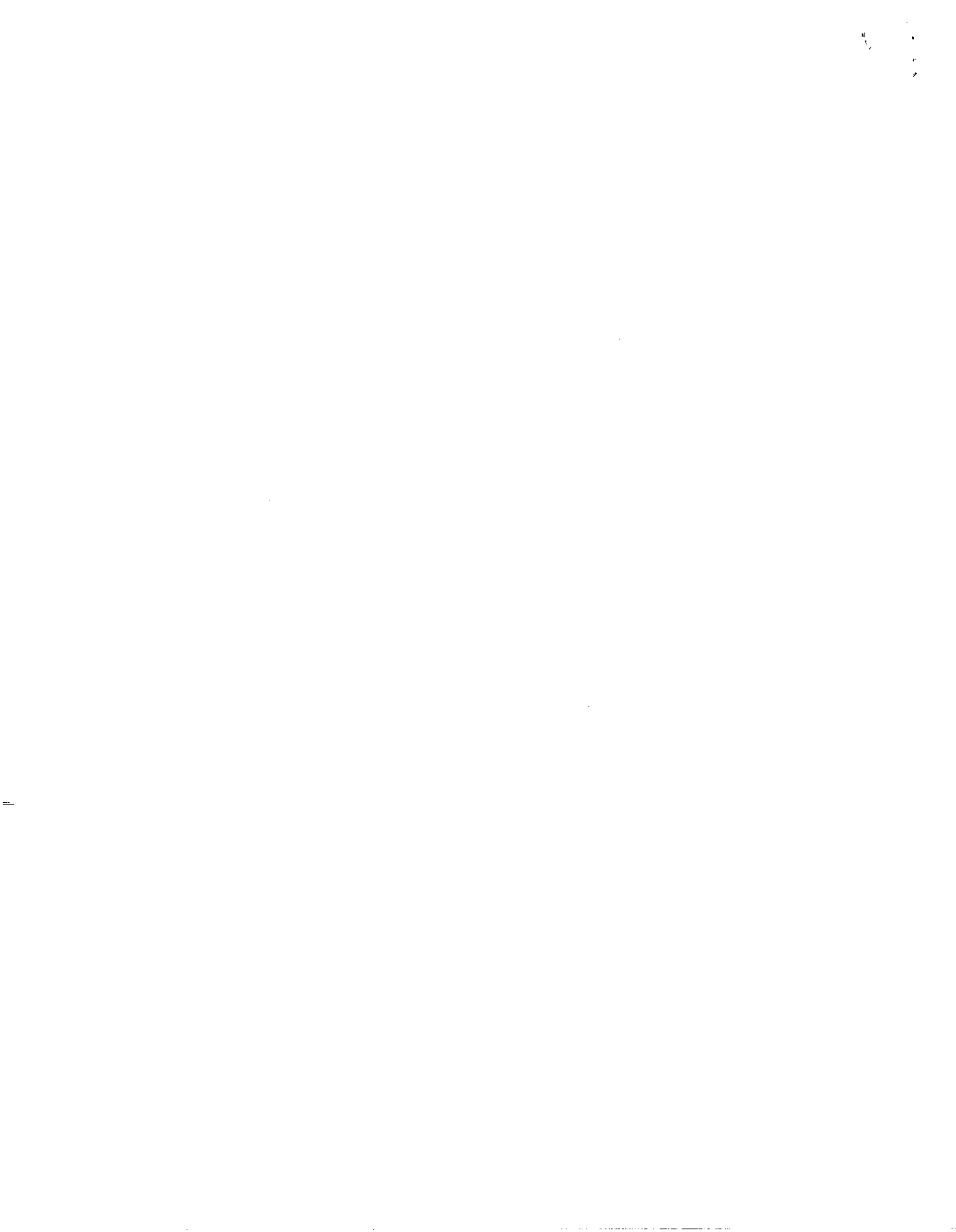
A PBT offers several important advantages for BUI detection. It may:

- corroborate other evidence by demonstrating that the suspicion of alcohol influence is consistent with the officer's observations of the suspect's mental and physical impairment.
- confirm the officer's own judgment and help give confidence in evaluating alcohol impairment accurately, based on observations and psychophysical tests. (Many officers experienced in BUI enforcement find that they rely less and less on the PBT as their confidence in their own powers of detection increases.)
- disclose the possibility of medical complications or impairment due to drugs other than alcohol. (The PBT can confirm or deny that alcohol is the cause of the observed impairment. For example, observed psychophysical impairment coupled with a PBT result showing a very low BAC indicates an immediate need to investigate the possibility that the suspect has ingested a drug other than alcohol or suffers from a medical problem.)
- help to establish probable cause for a BUI arrest. (The role of the PBT in establishing probable cause may be affected by the evidentiary value of PBT results in your state. Refer to Unit 4, Part 4 for more information. Consult your specific PBT law, your supervisor, or the local prosecutor for clarification, if necessary.)

### LIMITATIONS OF PBT

SLIDE  
7 - 11

Preliminary breath testing may have both evidentiary and accuracy limitations. Evidentiary limitations vary with specific laws. In some states PBT results are admissible as evidence; in other states they are not admissible. Where the results are admissible, there may be differences in the weight of value they are given. Consult your state PBT law, your supervisor or your local prosecutor, as necessary, for clarification.



1  
2  
3

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PBT instruments have accuracy limitations. Although all PBT instruments currently used by law enforcement are reasonably accurate, they are subject to the possibility of error, especially if they are not used properly. Factors that can affect the accuracy of preliminary breath testing devices may produce "high" test results or "low" results.

Two common factors that tend to produce high results on a PBT:

- Residual mouth alcohol: After a person takes a drink, some of the alcohol will remain in the mouth tissues. If the person exhales soon after drinking, the breath sample will pick up some of this leftover mouth alcohol. In this case, the breath sample will contain an additional amount of alcohol and the test result will be higher than the true BAC.
  - It takes approximately 15 minutes for the residual alcohol to evaporate from the mouth. Evaporation cannot be sped up significantly by having the suspect gargle with water or in any other way.
  - The only sure way to eliminate this factor is to make sure the suspect does not take any alcohol for at least 15 to 20 minutes before conducting a breath test. Remember, too, that most mouthwashes, breath sprays, cough syrups, etc., contain alcohol and will produce residual mouth alcohol. Therefore, it is always best not to permit the suspect to put anything in his or her mouth for at least 15 to 20 minutes prior to testing.
- Breath Contaminants: Some types of preliminary breath tests might react to certain substances other than alcohol. For example, ether, chloroform, acetone, acetaldehyde and cigarette smoke conceivably could produce a positive reaction on certain devices. If so, the test would be contaminated and its result would be higher than the true BAC. Normal characteristics of breath samples, such as halitosis, food odors, etc., do not affect accuracy.

Two common factors that tend to produce low PBT results:

- Cooling of the breath sample: If the captured breath sample is allowed to cool before it is analyzed, some of the alcohol vapor in the breath may turn to liquid and precipitate out of the sample. If that happens, the subsequent analysis of the breath sample will produce a low BAC result.

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- The composition of the breath sample: Breath composition means the mixture of the tidal breath and alveolar breath. Tidal breath is breath from the upper part of the lungs and the mouth. Alveolar breath is deep lung breath. Breath testing should be conducted on a sample of alveolar breath, obtained by having the subject blow into the PBT instrument until all air is expelled from the lungs.

### THE ARREST DECISION

SLIDE  
7 - 12

Your arrest/no arrest decision is the culmination of the BUI detection process. Your decision is based on all the evidence you have accumulated during each detection phase.

#### PHASE ONE:

- Initial observation of vessel in motion
- Observation of the stop

#### PHASE TWO:

- Face-to-face observation and interview
- Observation of the exit

#### PHASE THREE:

- Standardized Field Sobriety Tests
- Preliminary breath tests

Your decision involves a careful review of each of the observations you have made. Conduct a "mental summary" of the evidence collected during vessel in motion, personal contact and pre-arrest screening. If all of the evidence, taken together, establishes probable cause to believe that BUI has been committed, you should affect physical arrest of the suspect for BUI.

Under no circumstances should you charge the suspect with a lesser offense instead of BUI if there is probable cause to believe that BUI has been committed. Any reduction of BUI to a lesser charge is the responsibility of the prosecutor or judge.

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**TEST YOUR KNOWLEDGE**

INSTRUCTIONS: Complete the following sentences.

1. The two major evidence gathering tasks of Phase Three are \_\_\_\_\_

---

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---

2. The major decision in Phase Three is \_\_\_\_\_

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---

---

3. The entire BUI detection process culminates in \_\_\_\_\_

---

---

---

4. Divided-attention tests require the subject to \_\_\_\_\_

---

---

---

5. Among the mental and physical capabilities a person needs to operate safely are these four:

- a.
- b.
- c.
- d.

6. The purpose of PBT is \_\_\_\_\_

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7. Two factors that can produce high results on a PBT are:

a.

b.

8. Two factors that can produce low results on a PBT are:

a.

b.

**SESSION 8**

**Afloat Standardized Field Sobriety Tests**

# National Association of State Boating Law Administrators

## SESSION 8

### AFLOAT STANDARDIZED FIELD SOBRIETY TESTS

SLIDES  
8 – 1,2

Upon successfully completing this session, the student will be able to:

- Discuss and properly administer the afloat standardized field sobriety tests.
- Discuss and recognize the indicators of the afloat standardized field sobriety tests.
- Describe in a clear and convincing fashion and properly record the results of the afloat standardized field sobriety tests on a standard note-taking guide.
- Discuss the limiting factors of the afloat standardized field sobriety tests.

#### CONTENT SEGMENTS

A. Live Classroom Demonstrations

#### LEARNING ACTIVITIES

- o Instructor-Led Demonstration
- o Student Demonstration

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SLIDE  
8 - 3

### Benefits of the Afloat FSTs

- ▶ Allow officers to evaluate individuals with certain medical impairments or age/weight issues
  
- ▶ Allows the administration of additional field sobriety tests when appropriate surfaces for Walk and Turn or One Leg Stand tests are not available
  
- ▶ Provides officers with tools to make a more thorough evaluation of the suspect's impairment before having to take them to shore

SLIDE  
8 - 4

**An Experimental Evaluation of a Field Sobriety Test Battery in the  
Marine Environment**

(E. Donald Sussman, Ann Needelman and Peter H. Mengert,  
MAR 1987-FEB 1990)

ABSTRACT

The report describes an investigation of the accuracy of a FST (Field Sobriety Test) battery used in the marine environment. FST's rely on the observation and measurement of the effect of alcohol intoxication on coordination, visual tracking and balance. The purpose of the study was to determine if there was any decrease in the accuracy of the tests when used under recreational boating conditions.

In the study, 97 volunteers were dosed with alcohol (four drinks over 3 1/2 hours) in a recreational boating setting. The subjects BAC was estimated through FST procedures by marine law enforcement agents experienced in the use of such procedures.

The officers correctly identified the subjects who would be legally intoxicated (BACs equal to or greater than 0.10) in 82% of all cases.

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The overall correlation of the officers' FST based estimates with BACs obtained using breath tests was approximately .70. This level is consistent with similarly obtained correlations in highway studies.

Calculation of indices of the officers' arrest-release performances revealed that tests used on the water can result in the arrest of significantly more intoxicated boaters while maintaining a very low level of false arrests.

It was concluded that the accuracy of the field sobriety tests are not degraded in the marine environment.

### **CONCLUSIONS**

The objectives of this study were to determine if field sobriety tests were invalidated by the exposure of the individuals tested to the marine environment and to develop estimates of the effectiveness of a field sobriety test battery in aiding the marine law enforcement officer in identifying intoxicated boat operators. The data indicate that:

- A. The accuracy of the field sobriety tests, when used on subjects exposed to recreational boating conditions, was as good as the accuracy of such tests evaluated under highway conditions.

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- B. The administration of the entire test battery improved the accuracy of the officers' estimation of BAC over estimates based on the observation of and conversation with the suspect. As noted below, even the on-board Horizontal Gaze Nystagmus (HGN) test resulted in a substantial improvement in accuracy over observation and conversation.
  
- C. The HGN procedure appeared to provide the raters with the most accurate information of any single test. The major improvement in accuracy (of the combined estimates of all raters) occurred after the fourth BAC estimate which was based on boat testing using the HGN test.
  
- D. No significant difference in the accuracy of the combined estimates of all raters was found as a result of on land testing subsequent to the on boat testing (though two of the six individual raters demonstrated small but statistically significant improvements in the accuracy of their BAC estimates as a result of on land testing).

### **RECOMMENDATIONS**

**The following recommendations cover the use of Training, Chemical Testing, On-Boat Field Sobriety Testing, On-Land Field Sobriety Testing and the Two Stage testing process.**

#### **Training**

- It is recommended that the marine law enforcement officers be thoroughly trained in the use of field sobriety tests and in the use of portable breath testing equipment, especially in the use of these tests on the water.

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- Officers using FSTs should undergo a training course and in the states which have a certification process be certified for use of the HGN. Once the officers have been trained they must have the opportunity to practice use of the test in the field to keep the skill current.
  
- Formal training in the use of portable breath testing equipment is also necessary. Such training is required not only to ensure accurate testing but also to ensure that the officer adheres to the procedures that result in obtaining admissible evidence.

### **Chemical Testing**

- In states where permitted, preliminary breath testing (PBT) units should be used to confirm the presence or absence of alcohol and officer's observations that the subject's performance on FSTs were attributable to alcohol impairment for a competent arrest/release decision supported by other chemical testing. PBT's also provide a quick and reliable reading of BAC during boating accident investigations.
  
- If chemical testing is to be used to establish evidence of alcohol influence, time is critical. The suspect's BAC level decreases as alcohol is eliminated from the suspect's system. It is imperative that once the officer is confident that the person is impaired (based on observations and afloat testing), that the officer makes every effort to follow established procedures in obtaining the suspect's consent for an evidentiary chemical test and ensure that the test is performed as soon as possible.

### **Field Sobriety Testing**

- In those jurisdictions where chemical or breath testing to determine BAC is not possible, on-boat field sobriety testing provides critical aid to the officer in making arrest/release decisions. Even in cases where chemical tests are used to support boating intoxication convictions, field sobriety testing can substantially help the officer in making arrest /release decisions.



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### On-Boat FST

- The on-boat FST procedure should include the use of HGN. As noted above this provides the officer with the most accurate information of any on-boat procedure.
- It is recommended that the marine law enforcement officers using the FST procedures, where possible, use the methods of interview, and observation, as well as HGN testing. Each method can provide additional information on the suspect's level of intoxication.
- The observation portion of the FST should include the use of a checklist similar to that used in this study to refresh the officer's memory regarding points of observation. Through a structured interrogation the officer gains important information on any impairment of the suspect's speech and logic.
- If the officer suspects that the person is under the influence, the officer can proceed to the performance tests, such as the alphabet recital, hand pat, finger to nose, and finger count as identified in this study. The most essential element in performance testing is that they provide a standardized and structured situation in which the officer can evaluate a defined behavior with standardized criterion.
- Although as noted the HGN appeared to be the most useful procedure, because this study assessed the effectiveness of the entire test battery it can not be proven that the administration of the HGN alone would result in the same accuracy as the administration of all the on boat tests.
  - As a practical matter it would be highly unusual for an officer to approach a suspect and immediately administer the HGN. Interview and observation is always the first step in a criminal investigation.

### On-Land FST

- If "Two-Stage Testing" (see below) is to be employed it does not appear necessary for the officer to administer the HGN a second time, i.e., on-land. This study did not find significant differences between the scores obtained with the on-boat HGN and the on-land HGN.

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- On-land testing is time consuming (ten to fifteen minutes) and can be left to the discretion of the officer and departmental procedures. The officer may wish to administer the HGN on land to confirm the evaluation observed on the boat because of more controlled environments.
- Although the use of the One-Leg Stand and Walk and Turn did not result in a significant improvement in the accuracy of the combined BAC estimate of all officers, two of six officers did show small but significant improvements in accuracy. These tests may provide additional information to some officers.

### Two Stage Testing

- In addition to using on-land testing in order to confirm the results of on-boat testing and to further substantiate the arrest/release decision, on-land testing can be used to supplement on boat testing through the two stage decision strategy mentioned in section 4.0.
  - Where possible a two stage procedure is recommended, for example: If after testing on the boat the officer is reasonably convinced that the suspect's BAC level exceeds the legal BAC statutory criteria of the state (in a state which has a per se law) and/or the tests indicate impairment which may pose a danger (in states with no per se law) the officer would bring the subject to shore and use the on-land testing for confirmation.

SLIDE  
8 - 5

### AFLOAT TEST BATTERY

Consists of the following tests:

Horizontal Gaze Nystagmus (either seated or standing)  
Alphabet Test  
Backwards Count  
Finger Count  
Palm Pat  
Finger to Nose

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SLIDE  
8 - 6

### Alphabet Test

This is a test for pronunciation and the ability to remember a simple part of everyday life.

#### 1. Test considerations

Persons with speech impediments or local or foreign accents may have trouble with correct pronunciation. Foreign alphabets may also have different letters and pronunciation.

#### 2. Instructions for the test

The standard instructions for the Alphabet Test are:

- Recite the alphabet without singing.
- Do you understand?
- Begin the test.

#### 3. Possible indicators of impairment

SLIDE  
8 - 7

Below is a list of possible indicators of impairment:

- Sang
- Letters missed
- Letters repeated
- Hesitation
- Refused test

### Backwards Count

SLIDE  
8 - 8

This is a test for pronunciation and the ability to remember a simple part of everyday life.

#### 1. Test considerations

Persons with speech impediments or local or foreign accents may have trouble with correct pronunciation. Foreign numerals may also have different pronunciations.

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### 2. Instructions for the test

The standard instructions for the Backwards Count test are:

- Count backwards from 25 to 1.
- Do you understand?
- Begin the test.

SLIDE  
8 - 9

### 3. Possible indicators of impairment

Below is a list of possible indicators of impairment:

- Numbers missed
- Numbers repeated
- Hesitation
- Refused test

### Finger Count Test

SLIDE  
8 - 10

#### 1. Introduction to the test

This will test the subject's ability to coordinate simple finger movement with speech and to focus on an object correctly.

#### 2. Test considerations

People with arthritic conditions or injuries to the hands or finger joints may have difficulty with this test. Cold weather may affect the ability to properly perform this test.

#### 3. Instructions for the test

The standard instructions for the Finger Count test are:

- Extend out your hand.
- Do not start until told.
- Count each of your fingers with the tip of your thumb.
- Start with your index finger, like this. (Demonstrate)
- Count out loud "1,2,3,4," then back "4,3,2,1." (Demonstrate)
- Speed up as you go, and do not stop until told.
- Do you understand?
- Begin the test. (Observe at least 4 sets)
- You can stop.

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SLIDE  
8 - 11

### 4. Possible indicators of impairment

Below is a list of possible indicators of impairment

- Miscounted fingers
- Sliding of fingers
- Did not speed up
- Improper finger touch
- Improper finger count

### Palm Pat Test

SLIDE  
8 - 12

### 1. Introduction to the test

This will test the subject's ability to coordinate simple hand movements with speech and follow simple directions.

### 2. Test considerations

People with injuries to the hands may have difficulty with this test.

### 3. Instructions for the test

The standard instructions for the Palm Pat Test are:

- Place your hands together palm to palm like this. (Demonstrate)
- Do not start until told.
- When I tell you to begin, turn the top hand over and count "1, 2, 1, 2," like this. (Demonstrate)
- Speed up as you go, and do not stop until told.
- Do you understand?
- Begin the test. (Observe at least 5 sets)
- You can stop.

SLIDE  
8 - 13

### 4. Possible indicators of impairment

Below is a list of possible indicators of impairment

- Did not speed up
- Unable to complete
- Sliding of hand
- Improper count
- Hesitation

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### Finger To Nose Test

SLIDE  
8 - 14

#### 1. Introduction to the test

This will test for the ability maintain balance, coordinate movement, and follow simple directions.

#### 2. Test considerations

The subject must be seated to administer this test onboard a vessel.

#### 3. Instructions for the test

The standard instructions for the Finger to Nose Test are:

- (Have subject seated if onboard a vessel)
- Place your hands down to your sides and extend your index fingers out.
- On my command, touch the tip of your nose with the tip of your index finger of the hand I tell you and return it to your side like this.  
(Demonstrate)
- Do you understand?
- Tilt your head back slightly and close your eyes. Keep your eyes closed during the test.
- Do you understand?
- Left, right, left, right, right, left.
- Open your eyes.

SLIDE  
8 - 15

#### 4. Possible indicators of impairment

Below is a list of possible indicators of impairment

- Missed Nose
- Searching pattern
- Opened eyes
- Not using proper finger
- Hesitation

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**TEST YOUR KNOWLEDGE**

**INSTRUCTIONS:** Complete the following sentences.

1. There are \_\_\_\_\_ tests in the Afloat Standardized Field Sobriety test battery.
2. A suspect performing the HGN test can either be standing or \_\_\_\_\_.
3. During both the Palm Pat and Finger Count tests, the suspect is required to \_\_\_\_\_ up while counting.
4. A suspect performing the Finger to Nose test must be \_\_\_\_\_ if in a boat.
5. During the Palm Pat test, the officer should observe at least \_\_\_\_\_ sets.
6. During the Finger Count test, the officer should observe at least \_\_\_\_\_ sets.
7. Possible indicators of impairment for the Backwards Count test include:

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## **SESSION IX**

**Concepts and Principles of the  
National Highway Traffic Safety Administration (NHTSA)  
Standardized Field Sobriety Tests**



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### SESSION IX

#### CONCEPTS AND PRINCIPLES OF THE NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION (NHTSA) STANDARDIZED FIELD SOBRIETY TESTS

SLIDES  
IX-1,2

Upon successfully completing this session, the student will be able to:

- Discuss the development and validity of the research and the standardized elements, clues and interpretation of the three standardized field sobriety tests.
- Discuss the different types of nystagmus and their effects on the horizontal gaze nystagmus test.
- Discuss and properly administer the NHTSA standardized field sobriety tests.

SLIDE  
IX - 3

- Discuss and recognize the clues of the NHTSA standardized field sobriety tests.
- Describe in a clear and convincing fashion and properly record the results of the validated field sobriety tests on a standard field sobriety test evaluation worksheet.
- Discuss the limiting factors of the NHTSA standardized field sobriety tests.

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## CONTENTS SEGMENTS

- A. Overview: Development and Validation
- B. SFST Field Validation Studies
- C. Horizontal Gaze Nystagmus
- D. Vertical Gaze Nystagmus
- E. Walk-and-Turn
- ~~F. Combining the Clues of the Horizontal  
Gaze Nystagmus and Walk and Turn~~
- G. One-Leg Stand
- H. Limitations of the Three Tests
- I. Taking Field Notes on the Standardized  
Field Sobriety Tests

## LEARNING ACTIVITIES

- o Instructor-Led Presentation
- o Instructor-Led Demonstration
- o Student Practice Session &  
Demonstration

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## OVERVIEW OF SFST RESEARCH AND DEVELOPMENT

1. For many years law enforcement officers have utilized field sobriety tests to determine the impairment of a person's driving due to alcohol influence. The performance of the person on those field sobriety tests was used to support probable cause for arrest and as evidence in court. A wide variety of field sobriety tests existed and there was a need to develop a battery of standardized valid tests.

SLIDES  
IX-4,5

2. Beginning in late 1975, extensive scientific research studies were sponsored by NHTSA through a contract with the Southern California Research Institute (SCRI) to determine which roadside field sobriety tests were the most alcohol sensitive. NHTSA published the following three reports:

- California, 1977 (lab)
- California, 1981 (lab and field)
- Maryland, DC, VA, NC, 1983 (field)

SLIDE  
IX-6

3. SCRI traveled to law enforcement agencies throughout the United States to select the most commonly used field sobriety tests. Six tests were used in the initial stages of this study.

4. Laboratory research indicated that three of these tests, when administered in a standardized manner, were a highly accurate and reliable battery of tests for distinguishing BACs above 0.10:

- Horizontal Gaze Nystagmus (HGN)
- Walk - and -Turn (WAT)
- One - Leg Stand (OLS)

SLIDE  
IX-7

5. SCRI analyzed the laboratory test data and found:

- HGN, by itself, was 77% accurate
- WAT, by itself, was 68% accurate
- OLS, by itself, was 65% accurate
- By combining HGN and WAT an 80% accuracy was achieved

SLIDES  
IX-8,9

6. The final phase of this study was conducted as a field validation.

- Standardized, practical and effective procedures were developed
- The tests were determined to discriminate in the field, as well as in the laboratory.

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SLIDE  
IX-10

7. The three standardized tests were found to be highly reliable in identifying subjects whose BACs were above 0.10. The result of the study unmistakably validated the SFSTs.

### SFST VALIDATION STUDIES

SLIDE  
IX-11

1. Three SFST validation studies were undertaken between 1995 and 1997, because of the nation-wide trend towards lowering the illegal per se BAC limits to 0.08. The question to be answered was, "Do SFST discriminate at BACs below 0.10?"

- Colorado 1995
- Florida 1997
- California 1998

SLIDE  
IX-12

2. The Colorado SFST validation study was the first full field study that utilized law enforcement personnel experienced in the use of SFSTs. The initial study utilized only a few experienced officers in DWI enforcement in both a laboratory setting and a field setting

- Correct arrest decisions were made 93% of the time based on the 3-test battery (HGN, WAT, OLS). Substantially higher than the initial study results.

SLIDE  
IX-13

3. The Florida SFST field validation study was undertaken in order to answer the question of whether SFSTs are valid and reliable indicators of a threshold amount of alcohol when used under present day traffic and law enforcement conditions.

- Correct arrest decisions were made 95% of the time based on the 3-test battery (HGN, WAT, OLS).

SLIDE  
IX-14

4. In 1998, the California SFST field validation study was published by NHTSA and provided clear evidence of the validity of the SFST battery that was repeatable across the country.

- Correct arrest decisions were made 91% of the time based on the 3-test battery (HGN, WAT, OLS).
- In 2002, a study was sponsored by NHTSA to examine the validity of HGN with slight administrative variables including the seated and prone positions. The results of this study demonstrated that minor procedural variations do not compromise the validity of HGN evaluations.
- The results of these studies provide a clear evidence of the validity of the 3-test battery. To support arrest decisions at above or below 0.08, it strongly suggests that the SFSTs also accurately discriminate BACs at 0.04 and above.

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## OVERVIEW OF HORIZONTAL GAZE NYSTAGMUS

### Definition

SLIDE  
IX-15

Nystagmus is the involuntary jerking of the eyes, occurring as the eyes gaze toward the side. Also, nystagmus is a natural, normal phenomenon. Alcohol and certain other drugs do not cause this phenomenon, they merely exaggerate or magnify it.

### Categories of Nystagmus

SLIDE  
IX-16

Nystagmus of several different origins may be seen. There are three general categories of nystagmus:

1. Vestibular Nystagmus is caused by movement or disturbance to the vestibular system (fluid in the inner ear).

A. Types of vestibular nystagmus:

- Rotational Nystagmus occurs when the person is spun around or rotated rapidly, causing the fluid in the inner ear to be disturbed. If it were possible to observe the eyes of a rotating person, they would be seen to jerk noticeably.
- Post Rotational Nystagmus is closely related to rotational nystagmus: when the person stops spinning, the fluid in the inner ear remains disturbed for a short period of time, and the eyes continue to jerk.
- Caloric Nystagmus occurs when fluid motion in the canals of the vestibular system is stimulated by temperature such as putting warm water in one ear and cold in the other.
- Positional Alcohol Nystagmus (PAN) occurs when a foreign fluid, such as alcohol, that alters the specific gravity of the blood is in unequal concentrations in the blood and the vestibular system, while the head is turned to the side. This causes the vestibular system to respond to gravity in certain positions, resulting in nystagmus.

PAN I occurs when the alcohol concentration in the blood is greater than in the inner ear fluid. PAN I occurs while BAC is increasing.

PAN II occurs when the alcohol concentration in the inner ear fluid is greater than in the blood stream. This occurs while BAC is decreasing.

2. Nystagmus can also result directly from neural activity:

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- Optokinetic Nystagmus occurs when the eyes fixate on an object that suddenly moves out of sight, or when the eyes watch sharply contrasting moving images.

Examples of optokinetic nystagmus include watching scenery while looking out the window of a moving train or watching a rapidly spinning wheel that has alternating white and black spokes. The horizontal gaze nystagmus test will not be influenced by optokinetic nystagmus if administered properly.

- Physiological Nystagmus is a natural nystagmus that keeps the sensory cells of the eye from tiring. It is the most common type of nystagmus. It happens to all of us, all the time. This type of nystagmus produces extremely minor tremors or jerks of the eyes. These tremors are generally too small to be seen with the naked eye. Physiological nystagmus will have no impact on our standardized field sobriety tests because its tremors are generally invisible.
- Gaze Nystagmus occurs as the eyes move from the center position. Gaze nystagmus is separated into three types:

SLIDE  
IX-17

(1) Horizontal Gaze Nystagmus occurs as the eyes move to the side. It is the observation of horizontal gaze nystagmus in the eyes that provides the first and most reliable test in the standardized field sobriety testing battery. Although this type of nystagmus is most accurate for determining alcohol influence, its presence may also indicate use of central nervous system depressants, inhalants and PCP, collectively called "DIP" drugs.

(2) Vertical Gaze Nystagmus occurs when the eyes gaze upward at their maximum elevation. The presence of this type of nystagmus is associated with PCP. High doses for the individual of CNS depressants (including alcohol) and inhalants may also cause this to occur. The drugs that produce vertical nystagmus are the same ones that produce horizontal gaze nystagmus.

Note: All drugs that induce horizontal gaze nystagmus may also induce vertical nystagmus if enough of the drug is taken. There is no drug that will cause vertical nystagmus that does not cause horizontal nystagmus. If vertical nystagmus is present and horizontal nystagmus is not, it could be a medical condition.

(3) Resting Nystagmus is referred to as jerking as the eyes look straight ahead. This condition is not frequently seen. Its presence usually indicates a pathological disorder or a high dose of PCP. If detected, take precautions. **(OFFICER SAFETY.)**

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3. Nystagmus may also be caused by certain pathological disorders. They include brain tumors and other brain damage or some diseases of the inner ear. These pathological disorders occur in very few people and in even fewer drivers.

### 4. Medical Impairment.

A. The examinations that you can conduct to assess possible medical impairment include:

- Pupil size  
Note: If suspect has an obvious abnormal eye disorder or an artificial eye, HGN should not be administered.
- Resting Nystagmus
- Tracking ability

### Procedures to Assess Possible Medical Impairment

Prior to administration of HGN, the eyes are checked for equal pupil size, resting nystagmus, and equal tracking (can they follow an object together). If the eyes do not track together or if the pupils are noticeably unequal in size, the chance of medical disorders or injuries causing the nystagmus is present.

### Procedures of Horizontal Gaze Nystagmus Testing: The Three Clues

The test you will use either afloat or ashore is "Horizontal Gaze Nystagmus" – an involuntary jerking of the eyes occurring as the eyes gaze toward the side. Many eyes will show some jerking if moved far enough to the side. Under the influence alcohol and certain other drugs, any of three signs often will be observed:

1. The Lack of Smooth Pursuit (Clue Number One) - The eyes can be observed to jerk or "bounce" as they follow a smoothly moving stimulus, such as a pencil or penlight. The eyes of an unimpaired person will follow smoothly, i.e., a marble rolling across a smooth pane of glass or windshield wipers moving across a wet windshield.

2. Distinct and Sustained Nystagmus at Maximum Deviation (Clue Number Two) - Distinct and sustained nystagmus will be evident when the eye is held at maximum deviation for a minimum of four seconds. People exhibit slight jerking of the eye at maximum deviation, even when sober, but this will not be evident or sustained for more than a few seconds. When impaired by alcohol, the jerking will be larger, more pronounced, sustained for more than four seconds, and easily observable.

3. Onset of Nystagmus Prior to 45 Degrees (Clue Number Three) - The point at which the eye is first seen jerking. If the jerking begins prior to 45 degrees it is evident that the person has a BAC above 0.08, as shown by recent research.

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The higher the degree of impairment, the earlier the nystagmus will be observable.

### Estimating a 45-Degree Angle

It is important to know how to estimate a 45 degree angle. How far you position the stimulus from the suspect's nose is a critical factor in estimating the 45 degree angle. (i.e., if the stimulus is held 12" in front of the suspect's nose, it should be moved 12" to the side to reach 45 degrees. Likewise, if the stimulus is held 15" in front of the suspect's nose, it should be moved 15" to the side to reach 45 degrees.)

For practice, a 45-degree template can be prepared by making a 15"-square cardboard and connecting its opposite corners with a diagonal line.

To use this device, hold it up so that the person's nose is above the diagonal line. Be certain that one edge of the template is centered on the nose and perpendicular to (or at right angles to) the face. Have the person you are examining follow a penlight or some other object until suspect is looking down the 45-degree diagonal. Note the position of the eye. With practice, you should be able to recognize this angle without using the template.

### Specific Procedures

SLIDE  
IX-18

Begin by asking "are you wearing contact lenses" and note whether or not the suspect is wearing contacts before starting the test.

If the suspect is wearing eyeglasses, have them removed.

Give the suspect the following instructions from a bladed, interview position (FOR OFFICER SAFETY KEEP YOUR WEAPON AWAY FROM THE SUSPECT):

- "I am going to check your eyes."
- "Keep your head still and follow this stimulus with your eyes only."
- "Keep following the stimulus with your eyes until I tell you to stop."
- "Do you understand?"

Position the stimulus approximately 12-15 inches from the suspect's nose and slightly above eye level. Check to see that both pupils are equal in size. If they are not, this may indicate a head injury or an artificial eye. You may observe Resting Nystagmus at this time, then check the suspect's eyes for the ability to track together. Move the stimulus smoothly across the suspect's entire field of vision. Check to see if the eyes track the stimulus together or one lags behind the other. If the eyes don't track together it could indicate a possible medical disorder, injury, or blindness.

SLIDES  
IX-19,20,21

Check the suspect's left eye by moving the stimulus to your right. Move the stimulus smoothly at a speed that requires about two



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seconds to bring the suspect's eye as far to the side as it can go. While moving the stimulus, look at the suspect's eye and determine whether it is able to pursue smoothly. Now, move the stimulus all the way to the left, back across suspect's face checking if the right eye pursues smoothly. Movement of the stimulus should take approximately two seconds from center to outside for each eye. Repeat the procedure to check each eye twice.

SLIDE  
IX-22

After you have checked both eyes for lack of smooth pursuit, check the eyes for distinct and sustained nystagmus at maximum deviation beginning with the suspect's left eye. Simply move the object to the suspect's left side until the eye has gone as far to the side as possible. Usually, no white will be showing in the corner of the eye at maximum deviation. Hold the eye at that position for at least four seconds and observe the eye for distinct and sustained nystagmus. Move the stimulus all the way across the suspect's face to check the right eye holding that position for at least four seconds. Repeat the procedure.

**Note:** Fatigue Nystagmus. This type of nystagmus may begin if a subject's eyes are held at maximum deviation for more than 30 seconds.

SLIDES  
IX-23,24

Next check for onset of nystagmus prior to 45 degrees. Starting in the center, move the stimulus towards the right (suspect's left eye) at a speed that would take about four seconds for the stimulus to reach the edge of the suspect's shoulder. Watch the eye carefully for any sign of jerking. When you see any jerking begin, stop and verify that the jerking continues. Now move the stimulus to the left (suspect's right eye) at a speed that would take about four seconds for the stimulus to reach the edge of the suspect's shoulder. Watch the eye carefully for any sign of jerking. When you see any jerking begin, stop and verify that the jerking continues. Repeat the procedure.

**NOTE:** It is important to use the full four seconds when checking for onset of nystagmus. If you move the stimulus too fast, you may go past the point of onset or miss it altogether.

If the suspect's eyes start jerking before they reach 45 degrees, check to see that some white of the eye is still showing on the side closest to the ear. If no white of the eye is showing, you either have taken the eye too far to the side (that is more than 45 degrees) or the person has unusual eyes that will not deviate very far to the side.

### ADMINISTRATIVE PROCEDURES

1. REMOVE EYEGASSES/CHECK FOR CONTACTS
2. GIVE VERBAL INSTRUCTIONS
3. POSITION STIMULUS (12 TO 15 INCHES)
4. CHECK EQUAL PUPIL SIZE AND RESTING NYSTAGMUS
5. CHECK EQUAL TRACKING
6. CHECK FOR LACK OF SMOOTH PURSUIT

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**NOTE:** Nystagmus may be due to causes other than alcohol. These other causes include seizure medications and some other drugs. A large disparity between the performance of the right and left eye may indicate a medical condition.

### Test Interpretation

SLIDE  
IX-25

You should look for three clues of nystagmus in each eye.

1. The eye cannot follow a moving object smoothly.
2. Nystagmus is distinct and sustained when the eye is held at maximum deviation.
3. The angle of onset of nystagmus is prior to 45 degrees.

Based on the original research, if you observe four or more clues, it is likely that the suspect's BAC is above 0.08. Using this criterion you will be able to assess 88% of your suspects accurately. This was determined during the most conservative field testing conducted in California in 1998, and gives you confidence in the results of HGN and your arrest decision.

### Vertical Gaze Nystagmus

SLIDE  
IX-26

The Vertical Gaze Nystagmus test is very simple to administer. During the Vertical Gaze Nystagmus test, look for jerking as the eyes move up and are held for approximately four seconds at maximum elevation.

1. Position the stimulus horizontally about 12-15 inches front of the suspect's nose.
2. Instruct the suspect to hold the head still, and follow the object with the eyes only.
3. Raise the object until the suspect's eyes are elevated as far as possible.
4. Hold for at least four seconds.
5. Watch closely for evidence of jerking.

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Horizontal and Vertical Gaze Nystagmus can be observed directly and do not require special equipment. You will need a contrasting stimulus for the suspect to follow with the eyes, and this can be as simple as the tip of your index finger, a penlight, or a pen. The stimulus used should be held slightly above eye level so the eyes are wide open when they look directly at it. It should be held about 12-15 inches in front of the nose. Remain aware of your position in relation to the suspect at all times. **OFFICER SAFETY IS THE NUMBER ONE PRIORITY!**

### PROCEDURES FOR WALK-AND-TURN TESTING

SLIDES  
IX-27,28

#### 1. Instructions Stage: Initial Positioning and Verbal Instructions

For standardization in the performance of this test, have the suspect assume the heel-to-toe stance by giving the following verbal instructions accompanied by demonstrations:

- "Place your left foot on the line." (real or imaginary) Demonstrate.
- "Place your right foot on the line ahead of the left foot, with heel of right foot against toe of left foot." Demonstrate.
- "Place your arms down at your sides." Demonstrate.
- "Maintain this position until I have completed the instructions. Do not start to walk until I tell you to do so."
- "Do you understand the instructions so far?" (Make sure suspect indicates understanding.)

#### 2. Demonstrations and Instructions for the Walking Stage

SLIDE  
IX-29

Explain the test requirements using the following verbal instructions accompanied by demonstrations:

- "When I tell you to start, take nine heel-to-toe steps, turn, and take nine heel-to-toe steps back." (Demonstrate 3 heel-to-toe steps.)
- "When you turn, keep the front foot on the line, and turn by taking a series of small steps with the other foot, like this." (Demonstrate).
- "While you are walking, keep your arms at your sides, watch your feet at all times, and count your steps out loud."
- "Once you start walking, don't stop until you have completed the test."
- "Do you understand the instructions?" (Make sure suspect understands.)

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- "Begin"

### 3. Test Interpretation

SLIDE  
IX-30

You may observe a number of different behaviors when a suspect performs this test. The re-validated research demonstrated that the behaviors listed below are the likely to be observed in someone with a BAC above 0.08. Look for the following clues each time this test is given:

- A. Cannot keep balance while listening to instructions. Two tasks are required at the beginning of this test. The suspect must balance heel-to-toe on the line while listening carefully to the instructions. Typically, the person who is impaired can do only one of these things. The suspect may listen to the instructions but not keep balance. Record this clue if the suspect does not maintain the heel-to-toe position throughout the instructions. (Feet must actually break apart.) Do not record this clue if the suspect sways or uses the arms to balance but maintains the heel-to-toe position.
- B. Starts before the instructions are finished. The impaired person may also keep balance but not listen to the instructions. Since you specifically instructed the suspect not to start walking "until I tell you to begin," record this clue if the suspect does not wait.
- C. Stops while walking. The suspect pauses for several seconds. Do not record this clue if the suspect is merely walking slowly.
- D. Does not touch heel-to-toe. The suspect leaves a space of one-half inch or more between the heel and toe on any step.
- E. Steps off the line. The suspect steps so that one foot is entirely off the line.
- F. Uses arms to balance. The suspect raises one or both arms more than 6 inches from the sides in order to maintain balance.
- G. Improper turn. The suspect removes the front foot from the line while turning. Also record this clue if the suspect has not followed directions as demonstrated, i.e., spins or pivots around.
- H. Incorrect number of steps. Record this clue if the suspect takes more or fewer than nine steps in either direction.

Note: If suspect cannot do test, note any clues observed and document the reason for not completing the test, e.g. suspect's safety.

Should the suspect have difficulty with this test (for example, steps off the line), allow the test to continue from that point, not from the beginning. This test may lose its sensitivity if it is repeated several times.

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Observe the suspect from a safe distance and limit your movement which may distract the subject. **Always consider officer safety.**

SLIDE  
IX-31

Based on the most recent research, if the suspect exhibits two or more distinct clues on this test or fails to complete it, there is a high probability the suspect's BAC is above 0.08. Using this criterion, you will be able to correctly evaluate about 79% of your suspects using the walk-and-turn test alone.

### 4. Test Conditions

Walk-and-Turn test requires a designated straight line and should ideally be conducted on a reasonably dry, hard, level, non-slippery surface. There should be sufficient room for suspects to complete nine heel-to-toe steps. Note: Recent field validation studies have indicated that varying environmental conditions have not affected a suspect's ability to perform this test.

The original research indicated that individuals over 65 years of age and those with back, leg or inner ear problems had difficulty performing this test. Individuals wearing heels more than 2 inches high should be given the opportunity to remove their shoes.

\*DELETE SECTION\* "Combined Interpretation of Horizontal Gaze Nystagmus and Walk-and-Turn Tests"

### PROCEDURES FOR ONE-LEG STAND TESTING

SLIDES  
IX-32,33

#### 1. Instructions Stage: Initial Positioning and Verbal Testing

Initiate the test by giving the following verbal instructions accompanied by demonstrations.

- "Please stand with your feet together and your arms down at the sides, like this." (Demonstrate)
- "Do not start to perform the test until I tell you to do so."
- "Do you understand the instructions so far?" (Make sure suspect indicates understanding.)

SLIDE  
IX-34

#### 2. Demonstrations and Instructions for the Balance and Counting Stage

Explain the test requirements using the following verbal instructions accompanied by demonstrations:

- "When I tell you to start, raise one leg, either leg, approximately six inches off the ground, keeping your raised foot parallel to the ground." (Demonstrate one leg stance.)

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- "You must keep both legs straight, arms at your side."
- "While holding that position, count out loud in the following manner: "one thousand and one, one thousand and two, one thousand and three and so on until told to stop." (Demonstrate a count, as follows: "one thousand and one, one thousand and two, one thousand and three, etc." Officer should not look at his or her foot when conducting the demonstration - **OFFICER SAFETY.**)
- "Keep your arms at your sides at all times and keep watching the raised foot."
- "Do you understand?" (Make sure suspect indicates understanding.)
- "Go ahead and perform the test." (Officer should always time the 30 seconds. Test should be discontinued after 30 seconds.)

Observe the suspect from a safe distance. If the suspect puts the foot down, give instructions to pick the foot up again and continue counting from the point at which the foot touched the ground. If the suspect counts very slowly, terminate the test after 30 seconds.

### 3. Test Interpretation

SLIDE  
IX-35

You may observe a number of different behaviors when a suspect performs this test. The most recent research found the behaviors listed below are the most likely to be observed in someone with a BAC at or above 0.08. Look for the following clues each time the One-Leg Stand test is administered.

- The suspect sways while balancing. This refers to side-to-side or back-and-forth motion while the suspect maintains the one-leg stand position.
- Uses arms for balance. Suspect moves arms 6 or more inches from the side of the body in order to keep balance.
- Hopping. Suspect is able to keep one foot off the ground, but resorts to hopping in order to maintain balance.
- Puts foot down. The suspect is not able to maintain the one-leg stand position, putting the foot down one or more times during the 30-second count.

Note: If suspect cannot perform the test, record all clues observed and document the reason for not completing the test, e.g. suspect's safety.

Remember that time is critical in this test. The original research has shown a person with a BAC above 0.08 can often maintain balance for up to 25 seconds but seldom as long as 30.

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SLIDE  
IX-36

Based on the most recent research, if an individual shows two or more clues or fails to complete the One-Leg Stand, there is a high probability their BAC is above 0.08. Using that criterion, you will accurately evaluate about 83% of the people you test as to whether their BAC is above 0.08.

Observe the suspect from several feet away and remain as motionless as possible during the test so as not to interfere. If the suspect puts the foot down, give instructions to pick the foot up again and continue counting from the point at which the foot touched the ground. If the suspect counts very slowly, terminate the test after 30 seconds. If the suspect is counting quickly, have the suspect continue counting until 30 seconds have elapsed.

#### 4. Test Conditions

The One-Leg Stand requires a reasonably dry, hard, level and non-slippery surface. Suspect's safety should be considered at all times.

The original research indicated that certain individuals over 65 years of age, those with back, leg or middle ear problems, or people who are overweight by 50 or more pounds had difficulty performing this test. Individuals wearing heels more than 2 inches high should be given the opportunity to remove shoes.

#### 5. Taking Field Notes on Suspects' Performance of Field Sobriety Tests

For purposes of the arrest report and courtroom testimony, it is simply not enough to record the total number of clues on the three tests. The number of clues is important to the police officer in the field because it helps determine whether there is probable cause to arrest. But to secure a conviction, much more descriptive evidence is needed.

The officer must be able to describe how the suspect performed on the test and exactly what the suspect did.

The standard field sobriety test evaluation worksheet provided in this manual is designed to help you develop a clear description of the suspect's performance on the tests.

#### 6. Taking Field Notes on Horizontal Gaze Nystagmus Testing

SLIDE  
IX-37

The section on the Horizontal Gaze Nystagmus test appears on the bottom of the guide's front side.

First, have the suspect remove eyeglasses or make sure that you inquire whether the suspect is wearing contact lenses. Check the "No" or "Yes" box to record the suspect's response.





1  
2  
3

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Make a note of equal tracking, pupil size, and resting nystagmus evidence.

Complete the entire test for both eyes, writing either "yes" or "no" or placing an appropriate check mark beside each nystagmus clue.

- Write "yes" if the clue is present;
- Write "no" if the clue is not present.

Examples of additional evidence of alcohol impairment emerging during nystagmus test:

- suspect unable to keep head still;
- suspect swaying noticeably;
- suspect utters incriminating statements.

Examples of conditions that may interfere with suspect's performance of the horizontal gaze nystagmus test:

- bright sunlight, wind, dust, etc. irritating suspect's eyes;
- visual or other distractions impeding the test (always face suspect away from rotating lights, strobe lights and traffic passing in close proximity).

### 7. Taking Field Notes on Walk-and-Turn Testing

SLIDE  
IX-38

The first two clues, "cannot keep balance" and "starts too soon" apply only during the instructions stage of the test. Record the number of times each of those clues appear.

For example, if the suspect's feet "break apart" from the heel-to-toe stance twice during the instructions stage, write "2" in the box alongside the "cannot keep balance" clue. Similarly, if the suspect "starts too soon," check that box. Note: Actual steps taken is for scoring purposes only. Wrong number of steps is the validated clue.

Don't leave boxes blank. If a particular clue never shows up, write "0" in the corresponding box.

Record the next five clues separately for the walk down the line and then up the line.

A. If a suspect stop walking, check this box and record how many times this happens.

B. If suspect fails to touch heel-to-toe, check this box and record how many times this happens.

C. If suspect steps off the line while walking, check this box and record how

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many times this happens.

D. If suspect uses arms to balance, give some indication of how often or how long this happens.

Example: suspect raised arms from sides three times; place a check for each occurrence in appropriate box or just the number "3"

Example: suspect held arms away from sides during 3 through 7; place a check for each occurrence in appropriate box.

Example: suspect "flapped" arms continuously; make a note.

E. If suspect takes more or less than nine, record the actual number of steps taken by suspect in each direction.

F. If the turn is improper, check the box and describe the turn.

If you note that the suspect "cannot perform test." indicate explicitly why you did so.

Examples: "off line three times" or "Staggered six steps to right, nearly fell"  
At end of the test, examine each factor and determine how many distinct clues have been recorded. Remember, each clue may appear several times, but still only constitutes one distinct clue.

In the section labeled "other," record any facts, circumstances, conditions or observations that may be relevant to this test.

Examples of additional evidence of impairment during the Walk-and-Turn test:

- suspect verbally miscounts steps;
- suspect utters incriminating statements.

Examples of conditions that may interfere with suspect's performance of the Walk-and-Turn test:

- wind/weather conditions;
- suspect's age, weight;
- suspect's footwear.

### 8. Taking Field Notes on One-Leg Stand Test

SLIDE  
IX-39

The section on the One-Leg Stand test appears midway down the page.

By recording when things happen as well as what happens, you will be able to prepare a more descriptive arrest report.

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You will place check marks in or near the small boxes to indicate how many times you observed each of the clues. If the suspect puts the foot down during the test, you will record when it happened (write the count on the note guide). For example, when standing on the left leg the suspect lowered the right foot at a count of "one thousand and thirteen," and again at "one thousand and twenty." You must also pay attention to the suspect's general appearance and behavior while the test is being performed.

At end of the test, examine each factor and determine how many distinct clues have appeared. Remember, each clue may appear several times but still only constitutes one distinct clue.

### **IT IS NECESSARY TO EMPHASIZE THIS VALIDATION APPLIES ONLY WHEN:**

- **THE TESTS ARE ADMINISTERED IN THE PRESCRIBED, STANDARDIZED MANNER**
- **THE STANDARDIZED CLUES ARE USED TO ASSESS THE SUSPECT'S PERFORMANCE**
- **THE STANDARDIZED CRITERIA ARE EMPLOYED TO INTERPRET THAT PERFORMANCE**

**IF ANY ONE OF THE STANDARDIZED FIELD SOBRIETY TEST ELEMENTS IS CHANGED, THE VALIDITY MAY BE COMPROMISED.**

These procedures describe how the standardized field sobriety tests are to be administered under ideal conditions. Even when administered under less than ideal conditions, they will serve as useful indicators of impairment. Slight variations from the ideal, i.e., the inability to find a perfectly smooth surface at roadside, may have some affect on the evidentiary weight given to the results. However, this does not necessarily make the SFSTs invalid.

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### TEST YOUR KNOWLEDGE

INSTRUCTIONS: Complete the following sentences.

1. What are the three tests contained in the NHTSA Test Battery?

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2. Walk-and-Turn requires a real or imaginary line and \_\_\_\_\_

---

3. During the \_\_\_\_\_ stage of the Walk-and-Turn test, the suspect is required to count out loud.

4. When properly administered, the Walk-and-Turn can determine whether a suspect's BAC is above or below 0.08 \_\_\_\_\_ percent of the time.

5. During the Walk-and-Turn test, a suspect who steps off the line during the first 9 steps, once again during the second 9 steps, and who raises arms for balance twice during the second nine steps has produced \_\_\_\_\_ distinct clue(s).

6. The Walk-and-Turn may not be valid when administered to persons who are over \_\_\_\_\_ years of age.

7. During the \_\_\_\_\_ stage of the One-Leg Stand test, the suspect must raise one foot and maintain balance.

8. The One-Leg Stand test requires that the suspect keep the foot elevated for \_\_\_\_\_ seconds.

9. When properly administered, the One-Leg Stand can determine whether a suspect's BAC is above or below 0.08 \_\_\_\_\_ percent of the time.

10. In the One-Leg Stand test, a suspect who sways has exhibited \_\_\_\_\_ distinct clue(s).

11. In the One-Leg Stand test, a suspect who raises arms, hops, and puts foot down has exhibited \_\_\_\_\_ distinct clue(s).

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12. The maximum number of clues for the Horizontal Gaze Nystagmus test that can appear in one eye is \_\_\_\_\_.
13. When properly administered, the HGN test can determine whether a suspect's BAC is above or below 0.08 \_\_\_\_\_ percent of the time.
14. The third clue of HGN is onset of nystagmus prior to a \_\_\_\_\_ degree angle.

**SESSION 10**

**Ashore Battery Standardized Field Sobriety Tests**

## National Association of State Boating Law Administrators

### SESSION 10

#### Ashore Battery Standardized Field Sobriety Tests

SLIDES  
10 – 1,2

Upon successfully completing this session, the student will be able to:

- Demonstrate the appropriate administrative procedures for the NHTSA Standardized Field Sobriety Tests.

#### CONTENT SEGMENTS

A. Live Classroom Demonstrations

#### LEARNING ACTIVITIES

- o Instructor-Led Demonstration
- o Student Demonstration



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### **ASHORE BATTERY STANDARDIZED FIELD SOBRIETY TESTS**

In this session, you will have the opportunity to observe several demonstrations of the standardized field sobriety tests. Your instructors will conduct some of these demonstrations. Other demonstrations will be provided on videotape.

**SESSION XI**

**“Dry Run” Practice Session – Afloat and Ashore Batteries**

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## SESSION XI

### "DRY RUN" PRACTICE SESSION

SLIDE  
XI-1,2

Upon successfully completing this session, the student will be able to:

- Demonstrate the proper administration of the afloat and the standardized ashore batteries of field sobriety tests.

#### CONTENT SEGMENTS

- A. Procedures and Group Assignments
- B. Hands-On Practice

#### LEARNING ACTIVITIES

- o Instructor-Led Presentation
- o Student Practice Session

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### "DRY RUN" PRACTICE SESSION

In this session, you will work with other students, taking turns administering the afloat battery of field sobriety tests and standardized ashore field sobriety tests to each other. When you are not administering a test or serving as the test subject, you will be expected to observe the test administrator and subsequently help critique his or her performance.

#### Performance Expectations:

Using the field sobriety test evaluation worksheet as a guide, each student will gain proficiency in administering the afloat and ashore field sobriety tests.

#### Afloat Field Sobriety Tests:

- Horizontal Gaze Nystagmus
- Alphabet Recital
- Backwards Count
- Finger Count
- Palm Pat
- Finger to Nose

#### Ashore Field Sobriety Tests:

- Walk and Turn
- One Leg Stand

**SESSION 12**

**"Testing Subjects" Practice**  
**First Session / Second Session**

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## SESSION 12

### "TESTING SUBJECTS" PRACTICE: FIRST SESSION

SLIDES  
12 - 1,2

Upon successfully completing this session, the student will be able to:

- properly administer the SFSTs;
- properly observe and record subject's performance utilizing the standard note-taking guide;
- properly interpret the subject's performance;
- properly use and maintain the SFST Field Arrest Log.  
*(The use of the log is recommended, but not required.)*

#### CONTENT SEGMENTS

A. Procedures

B. Hands-on Practice

C. Use and Maintenance of SFST  
Field Arrest Log

D. Session Wrap-Up

#### LEARNING ACTIVITIES

o Instructor-Led Presentation

o Student Practice Session

o Instructor-Led Presentation

o Instructor-Led Discussion

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### "TESTING SUBJECTS" PRACTICE: FIRST SESSION

SLIDE  
12 - 3

During this session, you will work with several other students to administer standardized field sobriety tests to volunteers who have consumed alcoholic beverages. Some of these volunteers will have BACs above 0.08. Others will be below that level. You will carefully note and record the volunteers' performance and attempt to distinguish those "0.08 and above" from those "below 0.08."

You will also learn to record your observations on an SFST Field Arrest Log.

NOTE: You can use the optional video segment to meet the requirements of this objective.

### "TESTING SUBJECTS" PRACTICE: SECOND SESSION

During this session, you will work with several other students to administer standardized field sobriety tests to volunteers who have consumed alcoholic beverages. Some of these volunteers will have BACs above 0.08. Others will be below that level. You will carefully note and record the volunteers' performance and attempt to distinguish those "0.08 and above" from those "below 0.08."

You will be recording your observations on the SFST Field Arrest Log sheet.

NOTE: You can use the optional video segment to meet the requirements of this objective.





## **SESSION 13**

Processing the Arrested Suspect  
and  
Preparing For Trial

**SESSION 13**

**PROCESSING THE ARRESTED SUSPECT AND PREPARATION FOR TRIAL**

SLIDES  
13 – 1,2

Upon successfully completing this session, the student will be able to:

- discuss the importance of correct processing and report-writing procedures in BUI arrests;
- discuss the correct sequence of BUI suspect processing procedures;
- discuss the essential elements of the BUI arrest report;
- discuss the importance of pre-trial conferences and presentation of evidence in the BUI trial.

<b>CONTENT SEGMENTS</b>	<b>LEARNING ACTIVITIES</b>
A. The Processing Phase	⊙ Instructor-Led Presentations
B. Preparing the BUI Arrest Report: Documenting the Evidence	⊙ Videotape Presentations
C. Narrative BUI Arrest Report	⊙ Interactive Discussion
D. Case Preparation and Pre-trial Conference	
E. Guide for Direct Testimony	

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SLIDE  
13 - 3

### PROCESSING THE ARRESTED SUSPECT AND PREPARATION FOR TRIAL

The successful prosecution of a BUI case depends upon the officer's ability to organize and present all relevant evidence of each element of the BUI violation. The officer must keep in mind that virtually all of this evidence must be compiled during the three phases of detection -- vessel in motion, personal contact and pre-arrest screening. The officer must be able to establish the level of impairment at the time that the violation occurred; therefore, observations are of critical importance. Subsequent evidence of impairment, such as the evidential chemical test result(s) and/or the evidence gathered during a drug evaluation, will be admissible only when a proper arrest has been made. The efforts expended in detecting, apprehending, investigating and testing/evaluating the BUI violator will be of little value if there is insufficient evidence to prove every element of the violation.

Accordingly, if the evidence is not presented clearly and convincingly in court, the case may be lost no matter how good that evidence may be. Therefore, it is essential that officers develop the ability to write a clear and concise report describing their observations and results of their investigation for presentation to the prosecutor.

What is evidence? Evidence is any means by which some alleged fact that has been submitted to investigation may either be established or disproved. Evidence of a BUI violation may be of various types:

- a. Physical (or real) evidence: something tangible, visible, audible (e.g. a blood sample or a partially empty can of beer).
- b. Well-established facts (e.g., judicial notice of accuracy of the breath test device when proper procedures are followed).
- c. Demonstrative evidence: demonstrations performed in courtroom (e.g., field sobriety tests).
- d. Written matter of documentation (e.g., the citation, the alcohol influence report, the drug evaluation report, evidential chemical test results, etc.)
- e. Testimony (the officer's verbal description of what was seen, heard, smelled, etc.)

SLIDE  
13 - 4

The prosecutor must be able to establish that the defendant was operating a vessel on a waterway within the state while under the influence of alcohol or drugs. The prosecutor also must establish that the following procedures were followed:

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- a. That there were reasonable grounds for arrest.
  1. That the accused was the operator or in physical control of the vessel.
  2. That there were grounds for stopping/contacting the accused.
  3. That there was probable cause to believe that the accused was under the influence or impaired.
- b. That proper arrest procedures were followed.
- c. That proper and due regard was given to suspect's rights.
- d. That subsequent observation and interrogation of the suspect provided additional evidence relevant to the alleged offense.
- e. That there was a proper request for the suspect to submit to the chemical test.
- f. If drugs other than alcohol are involved, the prosecutor also must establish that there were grounds to request a drug evaluation and:
  1. That the evaluation was properly administered.
  2. That the results establish the cause of impairment was a drug or drugs other than alcohol or in combination with alcohol.
  3. That there was a proper request for the suspect to submit to an additional evidential chemical test.

The prosecutor's case will largely be based upon the officer's investigation and, in particular, on the arrest report.

While it is true that many items that are critical to the prosecution are documented on special forms, the officer must keep in mind that the prosecutor may not have the time to search out relevant facts. The decision may be made to amend, reduce or even dismiss the case on the basis of the arrest report alone.

It is, therefore, essential that the report clearly and accurately describes the total sequence of events from the point the subject was first observed, through the arrest, the drug evaluation (if conducted), and subsequent release or incarceration.

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### Guidelines for Note-Taking

One of the most critical tasks in the BUI enforcement process is the recognition and retention of facts that establish probable cause to stop, investigate and subsequently arrest persons suspected of driving or operating a vessel while under the influence of alcohol and/or drugs. The evidence gathered during the detection process must establish the elements of the violation and must be documented to support successful prosecution of the violator. This evidence is largely sensory (see-smell-hear) in nature, and therefore is extremely short-lived.

Police officers must be able to recognize and act on facts and circumstances with which they are confronted. But the officer must also be able to recall those observations and describe them clearly and convincingly to secure a conviction. The officer is inundated with evidence of BUI (sights, sounds, smells, etc.) The officer must be able to recognize it because he or she bases the decision to stop, investigate and arrest on these observations.

Since evidence of a BUI violation is short-lived, police officers need a system and tools for recording field notes at scenes of BUI investigations. Technological advances have made it possible to use audio tape recorders and videotape recorders in the field. These devices provide an excellent means of documenting this short-lived evidence. However, the vast majority of officers must rely on their own field notes.

One way of improving the effectiveness of field notes is to use a structured note-taking guide. This type of form makes it very easy to record brief "notes" on each step of the detection process and ensures that vital evidence is documented. The field notes provide the information necessary for completion of required BUI report forms and assist the officer in preparing a written account of the incident. The field notes will also be useful if the officer is required to provide oral testimony, since they can be used to refresh the officer's memory.

### The Processing Phase

The Processing Phase of a BUI enforcement incident is the bridge between arrest and conviction of a BUI offender. Processing involves the assembly and organization of all of the evidence obtained during the detection phase to ensure that the evidence will be available and admissible in court. Processing also involves obtaining additional evidence such as a scientific chemical test or tests of the suspect's breath, blood, etc.

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Typically, the processing phase may involve the following tasks:

- Inform the offender that he or she is under arrest.
- "Pat-down" or frisk the offender.
- Handcuff the offender.
- Secure the offender in the patrol vessel.
- Secure the offender's vessel, passengers and property.
- Transport the offender to an appropriate facility.
- Arrange for videotaping, if applicable.
- Advise offender of obligations under the implied consent law.
- Administer the evidential chemical test(s).
- Advise offender of Constitutional Rights (Miranda Admonition).
- Interview the offender.
- Incarcerate or release the offender.
- Complete the required reports.

### Guidelines for Writing the Narrative Report

SLIDE  
13 - 5

Report writing is an essential skill for a police officer. Good report writing becomes second nature with practice. While there is no one best way to write an arrest report, it is helpful to follow a simple format. Departmental policies and/or special instructions of requirements of the prosecutor provide some guidance.

### Detection and Arrest

During the detection phase of the BUI arrest process, the arresting officer must mentally note relevant facts to support the decision to arrest.

These facts are then recorded in the form of field notes and are used to refresh the officer's memory when the formal arrest report is prepared.

The following block outline format identifies some of the essential ingredients in a BUI offense (arrest) report:

- Initial Observations - Describe your first observations of the subject's actions and reason for the stop. What drew your attention to the vessel? Your first observations are important. Be sure to record the time and location of the first event.
- Vessel Stop - Record any unusual actions taken by the subject. How did the subject react to the emergency light and/or siren? Was it a normal stop? Be specific.

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- Operator Contact - Record your observations of the subject's personal appearance, condition of the eyes, speech, etc. Record the name and number of passengers in the vessel and where they sat. Describe any unusual actions taken by the subject.
- Operating or Actual Physical Control - In some cases, you may not use the subject's operating behavior as the basis for the contact. Your first contact could result from an accident investigation or from an assistance type of contact. Your observations and documentation must establish that the subject was operating and in actual physical control of the vessel. You must be able to justify the "seizure."
- Field Sobriety Tests - Describe the subject's actions when you administered the field sobriety tests. Be specific.
- Arrest - Document the arrest decision and ensure that all elements of the violation have been accurately described.
- Disposition/Location of Vessel and Keys - Indicate where the vessel was secured or towed and the location of the keys. If the vessel was released to another party or was driven by a backup officer, record that fact.
- Disposition of Passenger and/or Property - Indicate how passengers and property were properly cared for.
- Transportation - Describe where the subject was transported for evidential testing. Document time of departure and arrival (This information can be obtained from the radio log). Note any spontaneous comments made by the suspect.

SLIDE  
13 - 6

- Evidential Test - Document which test(s) were administered and by whom. Be sure to include the evidential test(s).
- Implied Consent/Miranda Warning - Document that the admonishments were given at the appropriate point in the investigation.
- Witness Statements - List all witnesses and attach copies of their statements.
- Notification of Offender's Attorney or Other Party - Document the time and result of subject's telephone call to an attorney or other party.
- Citation/Complaint - Document that the citation/complaint was issued at the appropriate time, if applicable.

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- Incarceration or Release - Document the time and place of incarceration or the name and address of the responsible party to whom the offender was released. Be sure to record the time.
- Additional Chemical Test - If the subject is authorized to request additional chemical tests and does so, record the type of test, time administered, location, and party administering the test.

The preceding list is not intended to be all-inclusive. In many cases, several points will not be needed. For persons who are dead, unconscious or otherwise unable to give consent to a chemical test, a search warrant may be required.

The narrative does not have to be lengthy, but it must be accurate and detailed. Remember, successful prosecution depends on your ability to describe the events you observe. Often a trial can be avoided (i.e., an offender may plead guilty) when you do a good job in preparing your arrest report.

A sample report providing an example of the block outline format is attached.

### Case Preparation and Pre-trial Conference

Case preparation begins with your first observation and contact with the suspect. It is essential that all relevant facts and evidence are mentally noted and later documented in field notes or other official forms.

### Guidelines for Case Preparation

- Use field notes to document evidence.
- Accurately note statements and other observations.
- Review the case with other officers who witnessed the arrest or otherwise assisted you and write down relevant facts.
- Collect and preserve all physical evidence.
- Prepare all required documents and a narrative report.
- Make sure your resume is up-to-date.

Remember, it is essential that all reports be consistent. If differences occur, be sure to explain them adequately. The defense will try to impeach your testimony by pointing out seemingly minor inconsistencies.



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### Preparation for Trial

Upon receipt of a subpoena or other notification of a trial date, review all records and reports to refresh your memory. If appropriate, revisit the scene of the arrest. Compare notes with assisting officers to ensure that all facts are clear.

During discovery, list all evidence and properly document it. Remember, evidence may be excluded if proper procedures are not followed.

Attention to detail is very important.

### Pretrial Conference

Successful prosecution is dependent upon the prosecutor's ability to present a clear and convincing case based on your testimony, physical evidence, and supporting evidence/testimony from other witnesses and experts.

If possible, arrange a pretrial conference with the prosecutor. Review with the prosecutor all evidence and your conclusions. If there are weak points in your case, bring them to the prosecutor's attention. Ask the prosecutor to review the questions to be asked on the witness stand. Point out when you do not know the answer to a question. Ask the prosecutor to review questions and tactics the defense attorney may use. Make sure your resume is current. Review your credentials and qualifications with the prosecutor.

If you cannot have a pretrial conference, try to identify the main points about the case and be sure to discuss these with the prosecutor before the trial.

### Guidelines for Direct Testimony

Your basic task is to establish the facts of the case: that the suspect was operating or in actual physical control of a vessel, on a waterway or other specified location, within the court's jurisdiction, and was under the influence of alcohol or drugs or some combination thereof. In other words, present evidence to establish probable cause for the arrest and conclusive evidence that the violation in fact was committed.

Describe in a clear and convincing manner all relevant observations during the three detection phases and those subsequent to the arrest. When you testify about the suspect's performance of the standardized field sobriety tests, do not use the terms "pass" or "fail." Also, do not refer to the suspect's "score" on the test or the number of "points" produced. Instead, describe clearly and explicitly how the suspect performed (e.g., "stepped off the line twice, raised the arms three times, etc.") By presenting your observations clearly and convincingly, you will allow the facts relating to the suspect's impairment to speak for themselves.

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Always keep in mind that juries typically focus on the officer's demeanor as much or more than on the content of the testimony. Strive to maintain your professionalism and impartiality. Be clear in your testimony; explain technical terms in common terms; don't use jargon, abbreviations, acronyms, etc. Be polite and courteous. Do not become agitated in response to questions by the defense. Above all, if you don't know the answer to a question, say so. Don't guess at answers or compromise your honesty in any way. Be professional and present evidence in a fair and impartial manner.

### Typical Defense Tactics

In many cases, you will be the key witness for the prosecution. Therefore, the defense will try very hard to cast doubt on your testimony.

The defense may ask some questions to challenge your observations and interpretations. For example, you may be asked whether the signs, symptoms and behaviors you observed in the suspect could have been caused by an injury or illness or by something other than the alcohol/drugs you concluded were present. You may also be asked questions whose purpose is to make it appear as if you weren't certain that you actually saw what you say you saw. Answer these questions honestly, but carefully. If your observations are not consistent with what an illness or injury would produce, explain why not. Make it clear that your conclusions about alcohol/drug influence are based on interpretation of the observed facts.

The defense may also attempt to challenge your credentials by asking questions to cast doubt on the formal training you have had. There may also be an attempt to ask questions to "trip you up" on technical or scientific issues and make it appear that you are less knowledgeable than you should be or claim to be. Stick to absolute honesty. Answer all questions about your training fully and accurately, but don't embellish. Don't try to make the training appear to have been more elaborate or extensive than it really was. Answer scientific or technical questions only if you know the answer. Otherwise, admit that you don't know. Don't try to fake or guess the answers.

The defense may ask questions to challenge your credibility. You may be asked several very similar questions in the hope that your answers will be inconsistent. You may be asked questions whose purpose is to show that you had already formed your opinion well before the suspect completed the field sobriety tests. And you may be asked questions that try to suggest that you eliminated portions of the tests or only gave incomplete or confusing instructions. Guard against these kinds of defense challenges by performing complete, standardized field sobriety tests, exactly as you have been taught. Standardization will ensure both consistency and credibility.

**BUI INCIDENT REPORT**

#16347

Defendant: Mary Katherine Webster  
Age: 24  
Date of Arrest: 4-14-XX  
Time of Arrest: 4:00 p.m.

**Initial Observation:**

On April 14, XXXX at approximately 3:56 p.m. Marine Officers Tower and Pang were on routine boat patrol. The defendant, Mary Webster, a white female, was observed operating a 22' runabout boat on West Lake Okoboji in Smith's Bay.

Along with Miss Webster there were two male occupants and two female occupants in the vessel. There were one male and one female in the bow of the boat and a male next to Miss Webster on the port side with the other female sitting behind Miss Webster. The occupants were very loud and boisterous and the radio was playing loudly.

Smith's Bay, on West Lake Okoboji, is zoned as a No-Wake speed area. This is due to the heavy boating traffic, which converges into Smith's Bay and exits Smith's Bay. The bay narrows down to a two-boat width as you pass through the HWY. 71 bridge, which allows boats to cross into East Lake Okoboji from West Lake Okoboji. This portion of the lake is one of the heaviest traveled portions of the lakes area.

Officers Tower and Pang observed the 22' runabout come through the HWY 71 bridge and enter into the no-wake zone at a speed greater than is acceptable for a no-wake zone. The boating traffic was very heavy in the no-wake zone so Officers Tower and Pang began to work in behind the 22' runabout. As they were moving closer to the vessel they observed the male subject next to the female operator throw a can out of the vessel. This can was later recovered and turned out to be a beer can.

The 22' runabout began to accelerate to over 10 miles per hour while still in the no-wake zone and by the time the vessel left the no-wake zone it was traveling over 10 miles per hour. This speed was estimated by the attitude of the boat and the wake being produced by the vessel. The vessel was now on a full plane and heading west on the lake.

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### Vessel Stop:

Officers Tower and Pang began to pursue the 22' runabout with the intent to stop the vessel. Officer Tower turned on the blue emergency lights of the patrol boat and the patrol boat came in behind the vessel on the starboard side. Officer Tower turned on the emergency siren on to get the 22' runabout to stop. The patrol boat was now pursuing the vessel just starboard of the female operator. The female operator then saw the patrol boat and cut the power to the vessel rapidly and jumped into the seat occupied by the male subject next to her and the male subject got into the operator's seat. The sudden cutting of the power to the vessel caused the vessel's attitude to change rapidly, causing a large wake to come over the transom of the vessel and putting water into the 22' runabout. Officer's Tower and Pang observed the other two female occupants and one male occupant holding open beer cans, and when the patrol boat was observed they tried to hide the beer cans.

### Contact With Operator:

Officer Tower came along side the vessel on the starboard side and instructed the now male operator to pull alongside the patrol boat. The male operator demonstrated difficulty in operating the vessel and Officer Tower asked the male operator if he wanted him to pull alongside their vessel. The male operator answered "yes." Officer Tower pulled alongside the 22' runabout, stern to bow. Officer Pang held the two boats at the stern and Officer Tower instructed the male occupant in the bow of the 22' runabout to hold the two boats at the bow.

Officer Tower directed his attention to the female operator and asked her to come over to the starboard side of the boat. The water conditions were calm with little boat chop. The female operator demonstrated difficulty in maintaining her balance. Officer Tower informed her of the reason for the stop and that he had observed her as the operator of the vessel and observed her changing positions with the male operator. Officer Tower asked the operator to produce both picture ID and the vessel registration. The operator produced both documents but appeared nervous and uneasy. She was identified as Mary K. Webster from her operator's license. The vessel was registered to Robert Webster, Ms. Webster's father. Officer Tower asked Ms. Webster a series of questions:

1. What is your middle name? A = Katherine
2. Without looking at your watch, what time is it? A = 4:30 (Actual time approximately 4:00)
3. Can you tell me your date of birth? The month and the day? A = 7-8-24.

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Sgt. Tower then demonstrated and asked her to perform simple dexterity tests.

1. Finger count with thumb touching fingers on same hand 1-2-3-4, 4-3 (hesitated) 2-1.
2. Alphabet E-P, correctly done.
3. Count backwards 67-54. She stopped at 60 to tell the occupants of the 22' runabout to "shut up." She seemed confused on where to start again after being asked to start again. Officer Tower instructed her on where she left off and she completed the count.

Officer Tower asked Ms. Webster if she had been drinking. She responded "YES." During this interview, Officer Tower detected a moderate odor of an alcoholic beverage on her breath, and her eyes were bloodshot. She continued to appear nervous and unsure of herself. Officer Tower observed numerous empty beer cans on the floor of the vessel and a cooler next to the motor cover of the vessel.

The passengers were rowdy and abusive throughout the contact. The operator asked them to be quiet several times and at one point she told them to "shut up."

Officer Tower then asked Ms. Webster to produce the required safety equipment for the 22' runabout. Officer Tower asked to see an approved wearable PFD for each person on board, an approved fire extinguisher, and demonstrate that her sound-producing device was working properly. Ms. Webster was unclear as to the location of the PFDs and the fire extinguisher. With assistance from Officer Tower, the appropriate number of PFDs was located; the fire extinguisher was charged properly and placed in a holder underneath the operator's console. The sound-producing device worked properly.

### **Field Sobriety Tests:**

Officer Tower then asked Ms. Webster if she would be willing to perform a series of field sobriety tests to help Officer Tower establish the amount of impairment to Ms. Webster from the alcoholic beverage she had consumed. Ms. Webster agreed to the series of tests. Officer Tower first administered the Horizontal Gaze Nystagmus test. Officer Tower observed a lack of smooth pursuit, distinct jerkiness at maximum deviation, and an onset of nystagmus prior to reaching 45 degrees in both eyes.

Officer Tower then administered the PBT to Ms. Webster and the test registered .230 BAC. Officer Tower informed Ms. Webster that he would like to perform two other tests but that it would be necessary to perform these tests on shore. Officer Tower asked if there was anyone on the vessel who had not consumed any, or very little, alcohol that day. The female occupant sitting in the bow of the 22'

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runabout informed Officer Tower that she had only consumed a portion of one beer that day. Officer Tower verified that with a PBT test which only registered .004 BAC. Officer Tower asked the female Mary Jones if she was comfortable operating the vessel and she felt okay with that. Officer Tower asked Ms. Webster if she would mind Ms. Jones operating the vessel and she was okay with that.

Officer Tower instructed Ms. Jones to follow them to the state dock. Both boats were safely moored to the state dock. Officer Tower instructed Ms. Webster to step out of the boat and Officer Pang stayed with the 22' runabout observing the four occupants. Officer Tower allowed 15 minutes to pass for Ms. Webster to regain her land legs.

The Walk-and-Turn test was demonstrated and administered by Officer Tower on the sidewalk behind the state dock. Ms. Webster was asked to walk in a straight line parallel to the curb. On the first nine steps she stepped out of the straight line walk on the 3rd step, raised her arms for balance on the 3rd and 5th step, missed heel to toe by 4" on the 7th and 9th steps, and took 10 steps before turning. She also turned by swiveling in one motion rather than as directed. On the 2nd nine steps, she stepped off the straight line, raised her arms for balance, and stopped to look behind her on the 2nd step. She missed heel to toe by approximately 3" on the 7th step.

Officer Tower then demonstrated and administered the One-Leg Stand test. Ms. Webster elected to stand on her right leg. On the count from 1014-1015, she jumbled the count. On 1017, she swayed noticeably, raised both arms for balance and hopped briefly. On 1025, she swayed noticeably again.

Based on all the evidence gathered by Officer Tower in the investigation it was his opinion that in fact Ms. Webster was operating the 22' runabout and was operating under the influence of an alcoholic beverage in a careless and reckless manner. Officer Tower placed Ms. Webster under arrest for BUI.

### **Disposition of Vessel/Passengers:**

The vessel was placed on a trailer and taken to Ron's Shell Station, 1022 Western Avenue, Rockville at Ms. Webster's request.

The passengers, Sam Johnson, Mary Jones and Mark Anderson were transported to the Rockville Barrack by Trooper Smith and were subsequently picked up at 5:00 p.m. by John Johnson, Sam's father. Officer Pang charged Sam Johnson with littering the waters with the beer cans.

Ms. Webster was transported to the Rockville Barrack by Officers Tower and Pang. She made no statements during the trip. Officer Tower departed the scene at 4:20 p.m. and arrived at the Rockville Barrack at 4:25 p.m.

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### **Admonishments:**

Officer Tower administered the implied consent warning at 4:30 p.m. and the Miranda warning at 4:35 p.m. Both admonishments were noted and witnessed on the appropriate forms.

### **Evidential Chemical Tests:**

Trooper Jim Williams administered an Intoxilizer test at 5:00 p.m. The test result was 0.290 BAC.

### **Notifications:**

Ms. Webster called her mother, Joan Webster, at 5:15 p.m. and asked her to come to the Barrack to pick her up. She stated she would arrive at approximately 6:30 p.m.

### **Incarceration/Release**

Ms. Webster was held in the Barrack detention cell until her mother arrived. She was released to her mother's custody at 6:40 p.m.

**SESSION 14**

**Logistical Preparation for BUI Enforcement**



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## SESSION 14

### LOGISTICAL PREPARATION FOR BUI ENFORCEMENT

SLIDES  
14 – 1,2

Upon successfully completing this session, the student will be able to:

- Describe the importance of prior planning for BUI enforcement
- Identify steps that can be taken to improve efficiency of BUI enforcement efforts
- Discuss alternatives to vessel impoundment

#### CONTENT SEGMENTS

#### LEARNING ACTIVITIES

- |                              |                             |
|------------------------------|-----------------------------|
| A. Need for Prior Planning   | ◦ Instructor-Led Discussion |
| B. Prior Planning Topics     |                             |
| C. Vessel Impoundment Issues |                             |

## National Association of State Boating Law Administrators

### SESSION 14

#### LOGISTICAL PREPARATION FOR BUI ENFORCEMENT

##### Specialized Training

Officers experienced in BUI enforcement agree that a BUI arrest is a major case. The specific tasks involved in detecting violators and identifying BUI evidence are quite taxing, especially for those officers who are inexperienced or lack the appropriate training.

Specific BUI enforcement training, such as the information contained in this course, is a critical link in the overall BUI enforcement effort nationwide. Training is required to ensure that officers have the ability to notice subtle signs of impairment in order to better detect those violating the BUI laws. The Standardized Field Sobriety Tests (SFSTs) are very regimented and require that officers know the details of proper administration of the exercises.

Making the case is really just the beginning. A BUI case that is poorly documented, even though all of the evidence was available at the time of arrest to obtain a conviction, is very unlikely to be successful at the time of prosecution. Officers must be consistent and thorough in their documentation of elements of the crime and personal observations. Proper documentation of the facts in an arrest report must then be combined with skillful courtroom testimony.

##### Unique Challenges in BUI Enforcement

SLIDE  
14 - 3

Officers enforcing the BUI laws face several very unique challenges. As evidence of impairment becomes more obvious during a vessel stop, officers must be prepared to meet these challenges pretty fast. At the conclusion of Phase Two, Personal Contact, an officer may be faced with locating a suitable location for the administration of SFSTs, especially the ashore battery including Walk-and Turn and One-Leg Stand.

Often just getting to an appropriate location requires the ability to either take the suspect's vessel in tow or arrange for towing. Should the suspect eventually be arrested for the BUI violation, the officer has a responsibility to ensure that the suspect's vessel is properly secured. In many instances a friend or family member can be located to assist with taking charge of the vessel, but there are occasions where waiting for a commercial towing company is the only option.

Officers must keep in mind the fact that the evidence of BUI diminishes rather quickly. A suspect who has just recently consumed their last drink of alcoholic beverage may still have their BAC rising for a short period of time, but soon their BAC will begin to drop. Although there is no reason to "race" to a breath testing

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facility to get a breath sample, it is important to remember that time is probably in the suspect's favor.

Just getting the suspect to a breath test facility may be a challenge. On many occasions, an officer who initiated a BUI case as a result of a vessel stop will face the challenge of having to secure their patrol vessel and use a vehicle for prisoner transport. Once at the jail or breath testing facility, there are specific requirements in each state pertaining to processing an impaired suspect.

All of these challenges cumulate to give defense attorneys more areas in which to attack an officer's actions and decisions. Although most officers report that only approximately one in ten BUI arrests will result in actual trial, those that end up in trial often put an officer's courtroom skills to the test.

### Prepare Ahead of Time

SLIDE  
14-4

There are many things an officer can do to better prepare for making a BUI arrest. Even if BUI arrests are not very common in an officer's area of responsibility, maintaining proficiency in the administration of SFSTs is very important. This can be done by practicing with fellow officers or a family member. Occasionally reading the verbal instructions out loud will help ensure that the procedures are smooth and easy to follow when facing an impaired operator with a boatload of friends.

Some other prior-planning tips include:

1. Stay familiar with the BUI SFST sheet and other related forms.
2. Make sure that you know the location of all nearby breath testing facilities and are familiar with their procedures for processing a suspect.
3. Keep the phone numbers for local vessel towing services handy.
4. Maintain a supply of all forms required to process a BUI suspect.
5. Stay abreast of any peculiarities of your local court, such as case rulings that may affect your case. Occasionally talk to the State Attorney's Office to find out if there are any issues you should be aware of.

To become effective at addressing the BUI problem on our waterways, officers should become pro-active in their enforcement efforts. We can improve our efficiency when we:

1. Coordinate with other local officers to develop an enforcement plan.
2. Consider annual high-use time periods and areas where specific targeted enforcement details may be appropriate.
3. Try to utilize multiple officer patrols during peak periods. Reserve/Auxiliary Officers are especially helpful here.

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4. Consider which boat ramp may be the best strategic location for launching patrol vessels in order to make prisoner transport as smooth as possible.
5. Look for potential sites where SFSTs could be administered near the water. It is often best to only take a suspect a very short distance to a suitable location in order to finalize the arrest/release decision.
6. Place a mobile breath testing unit in a suitable location near a high-use boat ramp when possible. This will also serve as a deterrent for potential violators.
7. Maintain appropriate towing gear in preparation for towing a suspect's vessel.
8. Make sure your vessel is equipped with at least one Type II life preserver. Prisoners being transported on a patrol vessel should always wear a life jacket, and placing a Type II on a handcuffed suspect is much easier.
9. Make sure you know what other officers are on the water nearby in case you need assistance. Offering assistance to other officers will help ensure that they will be available to assist you when necessary.

### Release or Impound the Suspect's Vessel?

As previously mentioned, many BUI arrest situations will allow that the suspect's vessel be turned over to another responsible, sober person. It is important, though, to be thoroughly familiar with your agency policy regarding releasing a vessel. When an officer is authorized to release the vessel to another person, there are some factors that should be considered.

1. Check to see that the new operator is sober by administering SFSTs (at least HGN) if in doubt.
2. Make sure that the suspect approves of releasing the vessel.
3. Ensure that the new operator is comfortable with operating the boat and finding their way back to shore.
4. Consider the current weather conditions.
5. Be careful to always use good judgment and discretion.

Keep in mind that even when you have planned to the very best of your ability and are prepared in every aspect, your plan is subject to fail on occasion. Marine and conservation officers are some of the best at improvising when the situation dictates, and BUI cases should not be the exception. Keeping an open mind, using proper judgment and discretion, and always considering your safety and that of others around you will help ensure that you will succeed against all odds.

**SESSION 15**

**Review and Proficiency Examinations**

# National Association of State Boating Law Administrators

## SESSION 15

### REVIEW AND PROFICIENCY EXAMINATIONS

SLIDES  
15 - 1,2

Upon successfully completing this session, the student will be able to:

- demonstrate knowledge and proficiency in administering the standardized field sobriety testing battery.

#### CONTENT SEGMENTS

- A. Review of course
- B. Proficiency Exam

#### LEARNING ACTIVITIES

- o Instructor-Led Presentation
- o Instructor-Led Demonstration
- o Student-Led Demonstration
- o Student Proficiency Examination

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### **REVIEW AND PROFICIENCY EXAMINATIONS**

During this session, you will review the administrative procedures for the standardized field sobriety tests.

Near the end of this session, you will be examined to determine proficiency in administering the tests. Study the Student's Performance Checklist. You must perform each administrative step perfectly to pass the proficiency examination.

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**STUDENT PERFORMANCE CHECKLIST  
STANDARDIZED FIELD SOBRIETY TESTING**

Student Name: \_\_\_\_\_ Date: \_\_\_\_\_

**I. HORIZONTAL GAZE NYSTAGMUS**

- \_\_\_\_\_ 1. Asks if subject is wearing contact lenses (or has them remove glasses).
- \_\_\_\_\_ 2. Holds object in proper position (12"-15" from nose, just above eye level).
- \_\_\_\_\_ 3. Checks equal tracking.
- \_\_\_\_\_ 4. Checks pupil size.
- \_\_\_\_\_ 5. Moves object smoothly from center of subject's nose to maximum deviation in 2 seconds and then back across subject's face to maximum deviation in right eye, then back to center. Checks left eye then right eye. (Repeats.)
- \_\_\_\_\_ 6. Holds object so that eye remains at maximum deviation for four seconds (no white showing). Checks left eye, then right eye. (Repeats.)
- \_\_\_\_\_ 7. Moves object so subject's eye moves slowly (4 sec.) from center to 45-degree angle. Checks left eye, then right eye. (Repeats.)
- \_\_\_\_\_ 8. Checks for vertical nystagmus. (Repeats.)

**II. ALPHABET TEST**

- \_\_\_\_\_ 1. Gives proper instructions.
- \_\_\_\_\_ 2. Checks for understanding.
- \_\_\_\_\_ 3. Properly documents results.



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### III. BACKWARDS COUNT

- \_\_\_\_\_ 1. Gives proper instructions.
- \_\_\_\_\_ 2. Checks for understanding.
- \_\_\_\_\_ 3. Properly documents results.

### IV. FINGER COUNT

- \_\_\_\_\_ 1. Tells subject to place hand out-stretched.
- \_\_\_\_\_ 2. Informs subject not to begin until told.
- \_\_\_\_\_ 3. Properly demonstrates touching fingers with tip of the thumb.
- \_\_\_\_\_ 4. Properly demonstrates count.
- \_\_\_\_\_ 5. Explains to speed up and not to stop until told.
- \_\_\_\_\_ 6. Checks for understanding.
- \_\_\_\_\_ 7. Observes at least 4 sets and stops subject.
- \_\_\_\_\_ 8. Properly documents results.

### V. PALM PAT

- \_\_\_\_\_ 1. Tells subject to place hands palm to palm and demonstrates.
- \_\_\_\_\_ 2. Informs subject not to begin until told.
- \_\_\_\_\_ 3. Properly demonstrates palm pat procedure and count.
- \_\_\_\_\_ 4. Explains to speed up and not to stop until told.
- \_\_\_\_\_ 5. Checks for understanding.
- \_\_\_\_\_ 6. Observes at least 5 sets and stops subject.
- \_\_\_\_\_ 7. Properly documents results.

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### VI. FINGER TO NOSE

- \_\_\_\_\_ 1. Tells subject to place hands at side with index fingers extended out.
- \_\_\_\_\_ 2. Explains proper procedure and demonstrates touching tip of finger to tip of nose and returning hand to side.
- \_\_\_\_\_ 3. Checks for understanding.
- \_\_\_\_\_ 4. Explains to tilt head slightly and close eyes, keeping them closed until the test is complete.
- \_\_\_\_\_ 5. Checks for understanding.
- \_\_\_\_\_ 6. Properly administers test.
- \_\_\_\_\_ 7. Properly documents results.

### VII. WALK-AND-TURN

- \_\_\_\_\_ 1. Gives instructions from a safe position.
- \_\_\_\_\_ 2. Tells subject to place feet on line in heel-to-toe manner (left foot behind right foot) with arms at sides and gives demonstration.
- \_\_\_\_\_ 3. Tells subject not to begin test until instructed to do so and asks if subject understands.
- \_\_\_\_\_ 4. Tells subject to take nine heel-to-toe steps and demonstrates.
- \_\_\_\_\_ 5. Explains and demonstrates turning procedure.
- \_\_\_\_\_ 6. Tells subject to return with nine heel-to-toe steps.
- \_\_\_\_\_ 7. Tells subject to count steps out loud.
- \_\_\_\_\_ 8. Tells subject to look at feet while counting.
- \_\_\_\_\_ 9. Tells subject not to raise arms from sides.
- \_\_\_\_\_ 10. Tells subject not to stop once he or she begins.
- \_\_\_\_\_ 11. Asks subject if all instructions are understood.

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### VIII. ONE-LEG STAND

- \_\_\_\_\_ 1. Gives instructions from a safe position.
- \_\_\_\_\_ 2. Tells subject to stand straight, place feet together, and hold arms at sides.
- \_\_\_\_\_ 3. Tells subject not to begin test until instructed to do so and asked if subject understands.
- \_\_\_\_\_ 4. Tells subject to raise one leg, either leg, approximately 6" from the ground, keeping raised foot pointed out, and gives demonstration.
- \_\_\_\_\_ 5. Tells subject to keep both legs straight and to look at elevated foot.
- \_\_\_\_\_ 6. Tells subject to count for 30 seconds by thousands in the following manner: "one thousand and one, one thousand and two, and so on until told to stop," and gives demonstration.
- \_\_\_\_\_ 7. Checks actual time subject holds leg up.

Instructor: \_\_\_\_\_

**SESSION 16**

Written Examination and Program Conclusion

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## SESSION 16

### WRITTEN EXAMINATION AND PROGRAM CONCLUSION

SLIDES  
16 - 1,2

Upon successfully completing this session, the student will:

- pass a written examination; and
- provide comments and suggestions for improving the course.

#### CONTENT SEGMENTS

- A. Post Test
- B. Critique
- C. Review of Post Test
- D. Concluding Remarks
- E. Certificates and Dismissal

#### LEARNING ACTIVITIES

- o Written Student Examination
- o Written Student Critique
- o Instructor-Led Presentation

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SLIDE  
16 - 3

During this session, you will complete the final exam for this course of instruction. You will also be asked to complete a critique form anonymously. The instructors need your comments and suggestions to help make future course improvements.

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12. The maximum number of clues for the Horizontal Gaze Nystagmus test that can appear in one eye is \_\_\_\_\_.
13. When properly administered, the HGN test can determine whether a suspect's BAC is above or below 0.08 \_\_\_\_\_ percent of the time.
14. The third clue of HGN is onset of nystagmus prior to a \_\_\_\_\_ degree angle.

