Session II

STANDARDIZED FIELD SOBRIETY TESTING REVIEW

# SESSION II     Standardized Field Sobriety Testing Update and Review

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

1. Understand the results of selected SFST validation studies.

2. Define and describe the Standardized Field Sobriety Tests (SFSTs).

3. Define nystagmus and distinguish between the different types.

4. Describe and properly administer the three SFSTs.

5. Recognize, document and articulate the indicators and clues of the three SFSTs.

6. Identify the limitations of the three SFSTs

| Content Segments | Learning Activities |
| --- | --- |
| SFST Validation Studies | Instructor-Led Presentation |
| Overview of Selected Types of Nystagmus | Instructor-Led Presentation |
| Standardized Field Sobriety Tests<br>    Horizontal Gaze Nystagmus | Instructor-Led Presentation<br>    & Demonstration |
| Practice HGN | Student Practice Session |
| Walk-and-Turn | Instructor-Led Presentation<br>    & Demonstration |
| Practice Walk-and-Turn | Student Practice Session |
| One-Leg Stand | Instructor-Led Presentation<br>    & Demonstration |
| Practice One-Leg Stand | Student Practice Session |

**I. STANDARDIZED FIELD SOBRIETY TESTING REVIEW**

Slide 2

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

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2. Define and describe the Standardized Field Sobriety Tests (SFSTs)

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5. Recognize, document and articulate the indicators and clues of the three SFSTs

6. Identify the limitations of the three SFSTs

B. Overview of the SFST Validation Studies

For many years law enforcement officers have utilized field sobriety tests to:

- Determine a subject's impairment due to alcohol.

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| | The performance of the subject on those field sobriety tests was used by the officer to develop probable cause for arrest and as evidence in court. | This may not seem important, but officers are seeing this in court as a defense strategy. |
| | A wide variety of field sobriety tests being used by officers throughout the country. | |
| | There was a need to develop a battery of standardized, validated tests. | |
| | Study conducted in 1975, | |
| | Sponsored by NHTSA through a contract with the Southern California Research Institute (SCRI) | |
| Slide 3 | SCRI conducted several research projects and published the following three reports: | |
| | • California; 1977 (Lab) | |
| | • California; 1981 (Lab and Field) | |
| | • Maryland, DC, VA, NC; 1983 (Field) | |
| | • Primary distinction (Validated at 0.10 BAC) | |

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The recommended battery included the following SFSTs:

- Horizontal Gaze Nystagmus (HGN)

- Walk-and-Turn (WAT)

- One-Leg Stand (OLS)

SCRI analyzed the laboratory test data and determined that:

- HGN, alone, was 77% accurate

- WAT, alone, was 68% accurate

- OLS, alone, was 65% accurate

- Combination of HGN and WAT yield an accuracy rate of 80%

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Additional research studies conducted to validate the 3-test battery at 0.08 BAC.

Three SFST validation studies were:

- Colorado (1995)

- Florida (1997)

- San Diego (1998)

The Colorado SFST validation study was the first full field study that utilized law enforcement personnel experienced in the administration of SFSTs.

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Keep in mind when these studies were conducted not all states had 0.08 BAC as their Per Se limit.

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The results of this study indicated that correct arrests decisions were made:

- 93% of the time based on the 3-test battery (HGN, WAT, OLS)

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

The San Diego SFST validation field study was undertaken because of the nationwide trend towards lowering the BAC limits to 0.08.

The research was done to investigate how well the SFSTs discriminate at BACs below 0.10. Based on the revised arrest and release criteria:

- The officers in the study made correct decisions 91% of the time based on the 3-test battery (HGN, WAT, OLS) at the 0.08 BAC level and above

In order to understand the results of the research studies discussed in this course, it is important to define what is meant by a correct arrest decision.

A correct arrest decision is made when an officer, after completing the third phase of the detection process:

The chart and arrest decision data is from the Colorado study.

- Decides to arrest an individual and that individual tested above the illegal per se limit.

- The officer decides to release an individual who is below the illegal per se limit.

There are four quadrants, each representing a different decision.

The quadrants (I & IV), shaded in gray, represent a correct arrest decision.

The remaining individuals, incorrect arrest decisions, fall into two other categories.

The first group was not arrested, but tested above the illegal per se limit.

The reason for no arrest decision:

- (Approximately 33%) of these individuals were considered alcohol-tolerant and performed well on the SFSTs even though their BACs were above the illegal per se limit.

The members of second group were arrested, but their BAC was below the illegal per se limit.

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Many states stipulate in their statute that a driver is considered DWI if they are:

- Above the illegal per se limit.

- Lost the normal use of their mental or physical faculties.

Even though the arrests in quadrant III may be legally justifiable according to an individual state's statute, these decisions are recorded as errors in the research based on the procedures outlined in the study.

*It is important for the officer who is trained in SFST to prepare themselves to understand and explain these statistics in layman terms in order to effectively articulate them to a jury in a courtroom.*

**Practical Exercise:**

**Ask the following question:**

**"According to the original validation studies, is it true that 77 percent of the time HGN is accurate"?**

*Instructors should invoke questions on how this information can be an issue when improperly presented in a court setting. (Exercise)*

**Let student answer.**

**Then that means that 23 percent of the time the test is incorrect and you are arresting subjects that should not be arrested.**

**HGN Introduction Slide**

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**II. OVERVIEW OF SELECTED TYPES OF NYSTAGMUS**

**A. Nystagmus**

- Is the involuntary jerking of the eyes and is normal and occurs naturally.

This nystagmus can not be seen without the aid of specialized instrumentation.

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Horizontal Gaze Nystagmus is defined as the involuntary jerky of the eyes, as the eyes gaze to the side.

There are over 40 different types of nystagmus, but during this course we will focus on two types of nystagmus:

- Horizontal gaze nystagmus (HGN)

- Vertical gaze nystagmus (VGN)

The ability to recognize horizontal and vertical gaze nystagmus are important tools in impaired driving enforcement.

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Alcohol and certain other drugs have been shown, through research, to cause horizontal and vertical gaze nystagmus, which is visible without the aide of specialized instrumentation.

**B.  Categories of Nystagmus**

Vestibular Nystagmus

Caused by movement or action to the vestibular system that can occur when an individual is spun around and the fluid in the inner ear is disturbed or there is a change in the fluid (temperature, foreign substance, etc.).

Pathological Nystagmus

Caused by the presence of specific pathological disorder, which include brain tumors, other brain damage, or some diseases of the inner ear.

Neural Nystagmus

Caused by some disturbance to the neural system

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In this course we will only be concerned with gazed invoked neural nystagmus.

This type of nystagmus occurs when the eye focuses on an object as they gaze towards the side.

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Alcohol and/or specific types of drugs can cause these three types of nystagmus to be visible to the officer during the proper administration of the HGN and VGN tests.

**C. Gaze Nystagmus**

*Horizontal Gaze Nystagmus*

Is defined as:

- The involuntary jerking of the eyes as they gaze toward the side.

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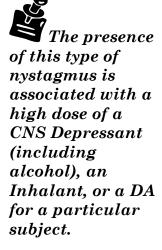As defined in the current revision of the SFST curriculum.

Although this type of nystagmus is useful in determining alcohol influence, its presence may also indicate use of Dissociative Anesthetics, Inhalants, and other CNS Depressants.

These are known as DID drugs.

*Vertical Gaze Nystagmus*

Is defined as:

- The involuntary jerking of the eyes (up and down), which occurs when the eyes gaze upward at maximum elevation.

***The presence of this type of nystagmus is associated with a high dose of a CNS Depressant (including alcohol), an Inhalant, or a DA for a particular subject.***

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*VGN will not be present without HGN.*

*If VGN is present and HGN is not, it could indicate a medical condition.*

*Resting Nystagmus*

Is defined as:

The involuntary jerking of the eyes as they gaze straight ahead.

This condition is not frequently observed. Its presence may indicate Dissociative Anesthetic usage, high levels of an impairing substance for that individual or some other medical problem.

If detected, take precautions. As always, exercise sound officer safety techniques and consider calling for medical aid.

## III. HORIZONATL GAZE NYSTAGMUS

HGN becomes may be observable when a subject is:

- Impaired by alcohol

- As the subject's BAC increases.

- Jerking will appear sooner.

HGN is also visible:

- When an individual is impaired by DID.

In administering the HGN test:

- Subject must focus on stimulus

This stimulus can be:

- Tip of a pen

- Or similar object

- Contrasts with background.

A. Initiating the HGN Test

Subject should:

- Be turned away from emergency lights

- Take care as to not interfere with subject's ability to focus on stimulus

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Ask class to give examples of a good stimulus.

Make sure you remind the officer to follow their local policy or recommendations when selecting a stimulus.

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*The instructor should give examples of why this situation would occur.*

*The ultimate reason for repositioning the suspect is for officer safety, second is to obtain the best possible position to observe the HGN Clues.*

- The individual should not be wearing glasses.

Give the subject the following verbal instructions:

1. "I am going to check your eyes."

2. "Keep your head still and follow the stimulus with your eyes only."

3. "Keep your eyes on the stimulus until I tell you to stop."

4. Position the stimulus approximately 12 to 15 inches from the face in front of the suspect's nose and hold it slightly above eye level.

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Check both eyes for equal pupil size and resting nystagmus.

- Both pupils should be of equal size and there should not be any noticeable nystagmus.

- If the pupils are noticeably unequal in size or there is noticeable nystagmus at rest. This could indicate a medical condition or a head injury.

Check both eyes for equal tracking

- This is done by making a rapid horizontal pass across both eyes.

- The movement should go from center, across the left eye, across the face to the person's right eye, and back to center (total time approximately 2 seconds).

- Both eyes should track the stimulus together.

- If the eyes fail to track together, discontinue the test. This could be the indication of a possible medical disorder, injury or blindness.

B. Administration of the HGN.

1. Lack of smooth pursuit

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| | • When the eyes jerk or bounce as they follow a smoothly moving stimulus. | |
| | • Check the subject's left eye first. | |
| | • Move the stimulus smoothly, at a speed that requires about two seconds to bring the subject's eye as far to the side as it can go. | |
| | • Carefully watch the subject's left eye and determine if it is able to pursue smoothly. | |
| | • Move the stimulus all the way to the left, back across the subject's face and check the right eye at the same speed. | |
| | • Movement of the stimulus should take approximately two seconds to move from the center of the subject's face to the shoulder on the left side. | |
| | • Approximately two seconds to get back to the center then. | |
| | • Approximately two seconds to move from the center of the subject's face to the shoulder on the right side. | |

- Then approximately two seconds to return to the center of the subject's face to end the first pass.

- Repeat the procedure until each eye has been checked twice.

The stimulus should be moved in a smooth manner to best observe the eyes in motion.

The two-second timing is provided based on how the eye should follow the stimulus if the individual is not impaired by alcohol and/or other drugs.

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- Reference PowerPoint graphic illustration

Slide 18

- Reference PowerPoint video demonstration

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2. Distinct and Sustained Nystagmus at Maximum Deviation

At extreme lateral gaze, also known as the endpoint or maximum deviation, the nystagmus is obvious and sustained when the stimulus is held for a minimum of 4 seconds.

- Start again with the individual's left eye.

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| | • Move the stimulus to the individual's left side until there is no more white of the eye visible. | |
| | • The eye should not be able to move any further on the horizontal plane. | |
| | • Hold the left eye in that position for a minimum of four (4) seconds and not more than 30 seconds. | |
| | • Observe the eye for distinct and sustained nystagmus while being held in this position. | |
| | • Move the stimulus all the way to the left, back across the individual's face and check the right eye. | |
| | • Repeat the procedure until each eye has been checked twice. | |
| Slide 20 | • Reference PowerPoint video presentation | |
| Slide 21 | 3. Onset of Nystagmus prior to 45 degrees. | |
| | • Start again with the individual's left eye | |
| | • Move the stimulus at a speed that would take at least four seconds to reach the 45 degree angle. | |

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- Watch the eye carefully for any sign of jerking.

- If jerking is observed, hold the stimulus at that position and verify the nystagmus is distinct and sustained.

- Move the stimulus all the way to the left, back across the individual's face and check the right eye.

- Repeat the procedure until each eye has been checked twice.

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- Reference PowerPoint video demonstration

- Onset of nystagmus prior to 45 degrees

- 45 Degree Template

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- HGN Test Criterion

4. Vertical Nystagmus

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- Start with the stimulus approximately 12-15 inches from the face in front of the nose.

- Elevate the stimulus up until the eyes can not elevate further.

- Hold the stimulus in that position for a minimum 4 seconds, but no longer than 30 seconds.

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- If vertical nystagmus is present it must be distinct and sustained.

- Reference PowerPoint video demonstration

**PRACTICAL EXERCISE**

*The scoring handout should be disseminated at his time. Located in the Administrative Guide.*

5. Test Interpretation

   There are:

   - Three clues in each eye.

   - Six total clues.

   1) Lack of Smooth Pursuit.

   - Present

   - Not Present.

   - If present, it accounts for 2 clues, one in each eye.

   2) Distinct and sustained Nystagmus at Maximum Deviation.

At this point the instructor should have the Dry Lab workshop tapes Cued to the beginning of tests for one subject. This subject should be used to demonstrate the tests throughout this section.

It is important to hold the eye in this position for at minimum of four (4) seconds.

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This jerking must be distinct and sustained.

3) Onset of Nystagmus Prior to 45 Degrees.
   The more impaired a person becomes the sooner the onset of nystagmus is observed.

The angle at which the onset of nystagmus occurs.

This jerking will be distinct and sustained.

6. Documenting the HGN Clues

   The HGN test has been researched and found to be a reliable indicator of impairment with subjects at or above 0.08 BAC.

   If two or three clues are observed, it is likely that the subject's BAC is at or above 0.04 but under 0.08.

   When applicable you should always document the clues of impairment as you are conducting the roadside tests.

   Make sure that you keep officer safety in mind when documenting these clues.

   Each jurisdiction has come up with techniques and forms to record the results. As long as these forms follow the NHTSA/IACP manuals, they may be used. Listed in your manual is only one example that could be used.

Remind students to accurately document everything associated with the DWI arrest, from

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the time of observation through the post arrest processing.

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**IV. WALK AND TURN TEST**

The Walk-and-Turn (WAT) test is divided into two stages:

1. Instruction Stage
2. Walking Stage.

Instruction Stage

1. Stand heel-to-toe with arms at their sides.

2. Divided attention, listening to and remembering instructions.

Walking Stage

1. Balancing, walking heel-to-toe, and turning,

2. Small muscle control, counting out loud, and short-term memory, recalling the number of steps required, turning as instructed, and counting correctly.

1. Officer safety precautions

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   a. Keep suspect on your left during demonstration

   b. Never turn your back on a suspect

   c. Be aware of surroundings

Left handed officers should demonstrate a test at more than arms length.

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Instruction Stage:

1. "Place your left foot on the line" (real or imaginary).

2. "Place your right foot on the line ahead of the left foot, with heel of right foot against toe of left foot".

3. "Place your arms down at your sides".

4. "Maintain this position until I have completed the instructions. Do not start to walk until told to do so."

5. "Do you understand the instructions so far?"

Walking Stage

1. "When I tell you to start, take nine heel-to-toe steps, turn, and take nine heel-to-toe steps back."

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2. "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."

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3. "While you are walking, keep your arms at your sides, watch your feet at all times, and count your steps out loud."

Demonstrate.

Demonstrate.

Demonstrate

Make sure subject verbally acknowledges understanding.

Demonstrate 3 heel-to-toe steps.

Demonstrate

4. "Once you start walking, don't stop until you have completed the test."

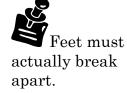5. "Do you understand the instructions?" (Make sure the individual understands.)

**2. Test Evaluation**

Look for the following clues each time the Walk-and-Turn test is administered.

1. Cannot keep balance while listening to the instructions.

   • Record this clue if the individual does not maintain the heel-to-toe position throughout the instructions.

   • Do not record this clue if the suspect sways or uses the arms to balance but maintains the heel-to-toe position.

2. Starts before the instructions are finished.

   • Since you specifically instructed the suspect not to start walking "until I tell you to begin," record this clue if the individual does not wait.

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Make sure subject verbally acknowledges understanding.

Feet must actually break apart.

3.  Stops while walking.

    •   The individual pauses for several seconds. Do not record this clue if the individual is merely walking slowly.

4.  Does not touch heel-to-toe. The individual leaves a space of more than one-half inch between the heel and toe on any step.

5.  Steps off the line. The individual steps so that one foot is entirely off the line.

6.  Uses arms to balance. The individual raises one or both arms more than 6 inches from the sides in order to maintain balance.

7.  Improper turn. The individual removes the front foot from the line while turning. Also record this clue if the individual has not followed directions as demonstrated, i.e., spins or pivots around.

8.  Incorrect number of steps. Record if the individual takes more or fewer than nine steps in either direction.

**If a subject is unable to complete the test he/she will be held accountable for only the clues that were demonstrated.** We no longer assess all eight clues for these subjects.

**3. Documenting the Walk and Turn Clues**

Each clue is noted by placing a slash in the appropriate place on the assessment form.
For example:

1. If the individual raised their arms twice and stepped off the line three times, they would be considered to have demonstrated "two" clues.

It is a good practice to use an assessment form that documents the administrative procedures.

**4. Considerations**

Walk-and-Turn test requires a designated straight line, and should be conducted on a reasonably dry, hard, level, non-slippery surface.

There should be sufficient room for individuals to complete nine heel-to-toe steps.

However, recent field validation studies have indicated that varying environmental conditions have not affected a subject's ability to perform this test.

The original research indicated that subjects over 65 years of age had difficulty performing this test.

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Individuals wearing heels more than 2 inches high should be given the opportunity to remove their shoes.

**PRACTICAL EXERCISE**

*The scoring handout should be disseminated at his time. Located in the Administrative Guide.*

At this point the instructor should have the Dry Lab workshop tapes Cued to the beginning of tests for one subject.  This subject should be used to demonstrate the tests throughout this section.

Show only the Walk and Turn Session of the video.  Stop the tape when the WAT is complete.

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- Walk-and-Turn Test Criterion
  - o  2 or more clues indicates a BAC at or above 0.10 – 68% accuracy (1977 Study)

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**V. ONE-LEG STAND**

The One-Leg Stand (OLS) test is divided into two stages:

    1. Instruction stage
    2. Balancing and counting

Instruction Stage:

    1. Balancing

    2. Listening to instructions

The Balancing Stage:

    1. Balancing

    2. Short-term memory

1. Administrative Procedures


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2. Initial Positioning and Verbal Instructions

3. "Stand with your feet together and your arms down at your sides."

4. "Remain in this position and do not begin until I tell you to do so."

5. "Do you understand the instructions so far?"

 Make sure subject verbally acknowledges understanding.


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3. Instructions for the Balancing and Counting Stage

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1.  "When I tell you to start, raise one leg, either leg, approximately six inches off the ground, keep your raised foot parallel to the ground."

2.  "Keep both legs straight, arms at your side."

3.  "While holding that position, count out loud in the following manner: "one thousand one, one thousand two, one thousand three, and so on until told to stop."

4.  "While performing this test, keep your arms at your sides at all times and keep watching the raised foot."

5.  "Do you understand?"

Make sure subject verbally acknowledges understanding.

6.  "Go ahead and begin the test."

You should always time for 30 seconds, at which time discontinue the test.

If the subject puts their foot down, instruct the subject to pick the foot up again and continue counting from the point at which the foot touched the ground.

If the subject counts very slowly, terminate the test after 30 seconds.

If the subject counts quickly, have them continue counting until told to stop.

4. Test Evaluation

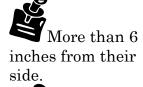Look for the following clues each time the One-Leg Stand test is administered:

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   1.  Puts foot down.

                      Explain if necessary.

   2.  Uses arms for balance.

                      More than 6 inches from their side.

   3.  Sways while balancing.

                      Side to side, back to front, or circular motion.
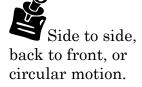
   4.  Hopping

**Documentation**

Each clue is noted by placing a slash in the appropriate place on the assessment form.

For example, if the individual used their arms twice and swayed three times, they would be considered to have demonstrated "two" clues. It is a good practice to use an assessment form that documents the administrative procedures.

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**Considerations**

Some people may have difficulty with the one leg stand test even when not impaired. Persons with injuries to their legs and/or hips or inner ear disorders may have difficulty with this test.

Individuals wearing shoes more than 2 inches high should be given the opportunity to remove them.

- One-Leg Stand test criterion

        2 or more clues indicates a BAC at or above 0.10 – 65% accuracy (Burns,1977)

**\*\*PRACTICAL EXERCISE\*\***

***The scoring handout should be disseminated at his time. Located in the Administrative Guide.***

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The original research indicated that individuals over 65 years of age or 50 pounds or more overweight had difficulty performing this test.

At this point the instructor should have the Dry Lab workshop tapes Cued to the beginning of tests for one subject. This subject should be used to demonstrate the tests throughout this section.