REPORTER'S RECORD
VOLUME 1 of 1 VOLUME
Trial Court Cause No. MB04-56275-G
THE STATE OF TEXAS

VS.

DEFENDANT

IN THE COUNTY CRIMINAL : COURT NUMBER 6: DALLAS COUNTY, TEXAS

TESTIMONY OF DR. JAMES BOOKER FROM TRIAL BEFORE JURY

On the 3rd day of January, 2006,
the following proceedings came on to be heard in the above-entitled and numbered cause before the Honorable Phil Barker, Judge (presiding, held in Dallas, Dallas County, Texas:

Proceedings reported by computerized stenotype machine; Reporter's Record produced by computer-assisted transcription.

MS. GOODMAN: Call Dr. James Booker

THE COURT: Raise your right hand, please. (Witness sworn.)

THE COURT: Give the court reporter your full name, and spell your last name, please

THE WITNESS: My name is James Booker, B-O-O-K-E-R.

DR. JAMES BOOKER, having been first duly sworn, testified as follows:

DIRECT EXAMINATION BY MS. GOODMAN

Q. Good afternoon, Dr. Booker.
A. Hi

Q. State your full name for the record, please.
A. My name is James Booker, B-O-O-K-E-R.

Q. And Dr. Booker, how are you employed? What is your profession?
A. I am self-employed. I operate a business out of Eddy, Texas called Central Texas Analytical Consultants. I provide consulting services to attorneys, particularly in the field of toxicology, the effects of alcohol and drugs on the human body.

Q. Where is Eddy, Texas in relation to Dallas?
A. About 100 miles south of here. If you go to Waco, just a little past there on I-35, you'll hit Eddy.

Q. Okay. And what is it, about a couple hour drive for you?
A. If I come up here, it's about two hours. If I catch Dallas traffic, it's three and a half.

Q. What is your educational background?

A. I have a bachelor degree from Texas Tech in 1963 in chemistry. Masters degree in inorganic chemistry from Texas Tech in 1965. Ph.D. in analytical chemistry from the University of Washington in Seattle, Washington in 1970. And post-doctoral fellowship with the Aerospace Research Laboratory, United States Air Force in 1970.

Q. Okay. After you obtained your Ph.D., Dr. Booker, can you tell the jury what your primary job experiences have been?
A. I post-docted with the Aerospace Research Laboratories. At that time they had just flown Apollo 11 and 12 and 13, although they didn't bring samples back from 13. And I was involved in developing analytical method for the lunar samples that were being returned. I finished that post-doctoral fellowship and then went to California as assistant professor of chemistry at one of the state colleges, Stanislaus State College. And after a couple of years, I went (to work for the state crime laboratory in Sacramento, California.

The first thing I did there was to go through a program called the Forensic Alcohol Supervisors Program. It's roughly the equivalent of Texas Technical Supervisor's Training program, difference being that we had to work with all body (fluids, urine, blood, as well as breath samples. And I worked in the crime laboratory there until I went to Wyoming. I worked in a crime laboratory there, started the laboratory. I was its first director. Worked in the laboratory there and left in 1980. Went to work for Industry and stayed in Industry for about ten years, moving back to Texas during that time. And in 1994, with a partner, we started Central Texas Analytical Consultants. And she dropped out about a year later. She was diabetic, and the stress was not good for her. So I took it solo and then went back to my first interest, which was forensic work in criminal courts, as opposed to civil cases, and moved away from the type work I had been doing back into what I'm doing today.
Q. Let me just ask you, are you paid for your services?
A. Yes. This case is a retained case, and a flat case fee is at last years' rate, which is $1500 for the case fee.

Q. And let me ask you, your practice is primarily limited to criminal cases at this point?
A. No. About half of my work is civil cases. In the criminal work -- about half my cases are criminal work and half of them are civil cases. In civil cases, I work with both plaintiff and defense attorneys. In criminal work, my clients are exclusively defense attorneys.

Q. Let me ask you this: Do you accept every criminal case that presents itself to you?
A. No. I turn down about half of them. In fact, this week I've turned down two and accepted one new case; but overall, between half and two thirds of them I either can't help the attorney, I don't want to work with them, or it's a case where for other reasons I don't want to be involved in it.

Q. Okay. Let me just ask you whether you have performed any specific -- participated in any studies for specific tests regarding field sobriety tests.
A. Yes. I've conducted a number of field sobriety tests for purposes of publication. In, I believe it was 1997, I sent one of my employees to the course that the state police officers take. We knew what the course was because we had the literature on it, but I wanted her to go and come back and be able to tell me whether they were actually teaching in the State of Texas what they were supposed to be teaching. And on the basis of that, we set up a series of experiments and published a number of papers that had to do with field sobriety testing.

The most recent two that are in publication are in the international peer review Scientific Journal, and those are specifically directed toward the field of field sobriety testing. And I have another one that's been in the hands of the editor for almost a year, and it will probably be published this year. There was a delay because we rechartered our society, and the journals were put back about six months on their normal publications.

Q. Let me ask you: Can you tell me, you've written two, it appears, very significant articles with regard to the horizontal gaze nystagmus test; is that correct?
A. That's correct.

Q. And can you tell me the titles of those articles and the journals in which you publish those articles?
A. Both of them are published in the journal of Forensic Science Society, which is called Science of Justice. It's the official journal of my organization. I belong to the Forensic Science Society. It's also the official journal of the California Association of Criminalists. One of them had to do with the -- one element of the horizontal gaze nystagmus test, what the police officers call nystagmus at maximum deviation, problems that are associated with that test, with that particular part of the test and therefore reflect on the entire test's integrity. And the other had to do with the promotion of that test among police officers and prosecutors, and that had to do with fraudulent representation of it that had been made by the people who developed it and were promoting it.

Q. Okay. Let me just ask you generally. So you have substantial exposure and experience with and done extensive research in what we call the three standardized field sobriety tests; is that correct?
A. That's correct.

Q. And can you tell the jury what the three standardized field sobriety tests are and how are those tests developed? What was the evolution of those standardized field sobriety tests?
A. The three tests that are used now are the one leg stand, the walk and turn test and the horizontal gaze nystagmus test. That's the battery of three tests that are being taught to police officers here in Texas and throughout the United States. The development of them started in the early 1970's. The government had formed, under the Department of Transportation, an organization called NHTSA, National Highway Transportation Safety Administration, and its task was to improve traffic safety. One of the things they wanted to do was to develop a method for police officers to use at the side of the road to identify intoxicated drivers and therefore reduce the number of impaired and intoxicated drivers on the roads. And to do that, they contracted with an organization in California called Southern California Research Institute.

They started a series of investigations to determine if simple tests could be used reliably on the side of the road. And in their first report, one that was published in 1979, they concluded that it was possible but needed more development. So the government extended the contract -- or gave them a new one. I'm not sure exactly which -- but they contracted with them to develop a series of tests. And based on that original study, they came out with the three tests that you would recognize now, certainly by name if not necessarily by the way they are administered. And they developed a method for police officers to evaluate intoxication at the roadside, and that involved putting together some of the clues from what they call the divided attention tests, one leg stand and walk and turn with some clues from HGN, and forming an opinion.

Two years later, NHTSA threw that conclusion out and developed a series of estimates of reliability of the individual tests and a composite method of putting walk and turn and HGN test clues together. And that's what was taught from 1983 until actually 1997, but officially in the manuals until 2000. And at that point, they threw out the composite method of combining HGN and walk and turn clues and came up with the national training standard, the revised manual. They revised again in 2002, and the current version in 2004. In Texas -- in here in Texas, the administrative agency, the agency that puts it what's called the Texas Engineering Extension Service. It's administered -- it's not part of Texas A&M University, the academic university, but it is administered through that agency to handle the funding. It is engineering extension services' task to train blue collar workers, sewage workers, fireman, policeman, that type of thing, and they teach those courses here in the State of Texas using federal literature. And also the state developed its own literature and incorporated different interpretations from what the federal government used. So Texas is somewhat unique in the way it teaches and applies the training methods.

Q. Okay. Let me just ask you this: What is the substance of your criticism of the three standardized field sobriety tests?
A. Twofold. First of all, as they are used, they overestimate intoxication. That's clear from their studies that they run. They simply -- police officers find people who are not intoxicated and estimate them to be intoxicated. That's overestimation. Normally when you think of somebody who is intoxicated and you overestimate it, it

doesn't make any difference; they are intoxicated. But taking people across that line upward and assuming they are intoxicated when they are not is a problem. And there is not really a counterproblem going down. They very rarely underestimate intoxication. So these tests are designed and used in such a way that people that are not intoxicated are penalized by taking the test. That's the first criticism. That's practical criticism.

Q. Let me ask you. Are there any studies that back up your observation?
A. Yes, there are. NHTSA commissioned two studies that were done. One of them was done in the State of Florida and generally we call it the Florida study. For example, it shows that of 33 people who were not intoxicated that were given a walk and turn test, the police officers would have arrested 23 of them based on the results. They overestimated intoxication more than two-thirds of the time. Another study was done in California called San Diego study. Same thing, the walk and turn test there they overestimated and would arrest about 60 percent on the basis of that one test. So the tests are not reliable, especially at low levels and especially for people not intoxicated. So that's part of it. The other part has been much more technical in the sense that these represent themselves as science, and yet they keep secret many of the things that they did in their developmental work and science. Scientists see secrecy as part of a process -- in fact, it's unethical. It's considered not professional, to be unethical to do, to use secret processes and then bring it into court.

For example, just so you understand that I'm not nitpicking at this. In the San Diego study, which Texas relies on heavily, they state that they were able to form certain opinions based on procedures that were printed on the cards that were given police officers who did the study, that those procedures are not written on that card, and even until last year were unavailable to anybody working in the field until another researcher named Dr. Hlastala, H-L-A-S-T-A-L-A, from the the University of Washington Medical School, got them under Freedom of Information Act. And we discovered that the tests they were using in the San Diego study were not the tests that police officers used in the State of Texas, although they were being applied here. So there have been a number of problems like that, bad experimental science, hidden secret methods that I criticize more.

And then probably the other thing that is probably the most offensive is there are documented instances where claims were made for the test that the tests were verified or validated by medical testing, and that was just simply lying. It wasn't in the literature where it was supposed to be, and so they were oversold. Claims were made that they were reliable and seemed to be reliable by medical authorities who, in fact, had never even looked at these tests. So there are a number of criticisms on the test.

Q. Have you watched the videotape that was made of the defendant?
A. I did.

Q. Okay. And as you can tell, none of the standard field sobriety tests were administered on the videotape?
A. That's correct.

Q. And let me just ask you this: Did you see anything on the videotape that indicated to you that the defendant did not have the normal use of either his mental or physical faculties?
A. No, quite contrary. Everything on the videotape indicated that he had full use of his mental and physical faculties in the station room where he was being tested, and that that there was no indication that those were being masked, there was no impairment being masked by his actions, deliberate or accidental.

Q. Discuss the concepts of tolerance and masking, and how can you tell whether somebody is trying to mask intoxication.
A. Masking is a layman's word for tolerance. Tolerance is something that is associated with drugs. And you can define it two ways, and it's exactly the same definition. If you start taking a drug and you take that drug at the same dosage over a period of time, eventually you'll see that the effects of the drug lessen. For example, let's say you have chronic arthritis and you take Naproxen. I take Naproxen. Then over a period of time, the effects of that Naproxen dosage will be reduced.

The other way of looking at it is that in order to get the same effect, you have to increase the dose of drug over a period of time. And that concept is tolerance. But tolerance is your body is getting used to a drug and not being affected by it any more. So there are really two ways to look at tolerance. Actually if I were getting into very technical terms, I would tell you more than two ways. But basically, one is your body simply develops the chemical means of losing its sensitivity to the drug. And with alcohol, that doesn't happen. It's unique among drugs that a novice drinker and a long-time drinker, long-time alcoholic, the amount of alcohol it takes to kill you, for example, which is one criteria, is the same. It doesn't change over a lifetime and habits of drinking, whereas you might start taking heroin or Vicodin; and if you use it regularly over a year, you might be taking ten times the dose a year from now. What would have killed you today would be just giving you a minor effect today than at that time. So those drugs are different from alcohol.

But the other things that we have in the way of tolerance is your body when you use alcohol and you are impaired by it, your central nervous system is impaired. Your brain is not working properly, really, because of that impairment. Over a period of time, that becomes a disability to you, very much like a physical disability. Like, for example, I'm right handed. If you broke my right hand, I would eventually learn how to write with my left hand because it's an impairment. Well, with alcohol, it's the same thing. You lose certain abilities, and you compensate for those by acquiring certain ways of walking, of sitting, of bending, of reading, of doing things. And when you do that, that becomes fairly evident to a person who looks at people who have acquired this type of tolerance, this accommodation, over a period of time. And so accommodation is what I refer to it and what police officers generally call masking, the layman's term for it. And that is acquired after a long period of time of heavy use of alcohol. And, again, when you -- even if you have it, what might appear normal just to a casual viewer, a person who works with, for example, people in rehab centers, medical doctors who deal with it, instantly apparent that the person has acquired this type of tolerance.

Q. Did you look for accommodation in the defendants' videotape?
A. I look for it in all videotapes, and I turn down every case where I see it.

Q. What's the first thing, Dr. Booker, affected by alcohol?
A. Judgment. Your judgment is the first thing to go. It's a mental faculty, your ability to judge your circumstances and to evaluate. And generally the term that is used that comes into that is one called choice reaction time where your -- as applied to driving. That's where you're driving down and a number of things are assailing your senses. On the one hand, you have a car coming up behind you and trucks on both sides, and you're coming up on a traffic light and you have to decide, Do I want to stop here? Do I want to start stopping now? Do I want to wait and get up there? Do I want to go through the yellow light? All of these are decisions you have to make, and they change rapidly in a driving situation, many driving situations. And that's a choice that you're constantly making. And when you're impaired by alcohol, you make wrong choices. And those choices can, of course, lead to accidents and problems. So that's why you have alcohol involved sometimes at very low levels because choice reaction time is gone. People just simply choose to go through a yellow light and not notice that there is a truck coming through at the same time. So that's the first thing that goes.

Q. Well, let me give you a short hypothetical then. You have a driver who rolls through a stop sign, turns -- going in one direction and makes a turn to the left after rolling through the stop sign. Immediately thereafter is signaled by a police officer to stop. The lights come on, and the person immediately stops promptly and safely. Impaired judgment?
A. No, that's normal judgment. You have to -- in fact, you've made it complicated by putting a turn into it. But normally, the first think you see is the lights of the police officer behind you, and you have to decide is he signaling for me? Should I pull over here? Should I go to the Texaco parking lot down the street? Is it going to be safe -- and you see. I see on videotapes -- and I turn these down -- where people make bad choices. But a safe stop under those circumstances indicates full use of mental faculties at that point.

Q. Are you familiar with the DWI Detection Standardized Field Sobriety Testing Manual published by NHTSA?
A. I'm familiar with one you're holding, but I can't see whether that's a 2002 or 2004.

Q. The 2004 manual.
A. I'm familiar with it.

Q. Are you familiar with that manual?
A. Uh-huh.

Q. Are you familiar with Chapter Five where there are a number of visual clues officers are trained to ask for?
A. Yes, that's been in the manuals ever since the first training manuals came out.

Q. Is rolling through a stop sign one of those?
A. No.

Q. Do any of those criteria even address that kind of situation?
A. No. In this case, no, they don't. They have to do with things that are indicative of alcohol intoxication and speeding, for example, or driving through a -- missing a signal are not indicators per se of alcohol intoxication.

Q. Let me ask you a few questions specifically with regard to the horizontal gaze nystagmus test. According to the training manual and even certain studies, is it possible to induce nystagmus by administering the test too quickly?
A. It's possible to induce a condition that looks like nystagmus to the police officer. They train people and say they are inducing is when they move the stylus, what they call the stimulus, when they move it too rapidly, they see a breakdown of smooth tracking. And if that's not what they are actually looking for, they will call that onset of nystagmus. And so they say they are inducing it by moving it too quickly. What they are really looking at is a different affect. To answer your question, practical answer is yes; technical answer is well, not really.

Q. Why should one not rely on results of the horizontal gaze nystagmus test, in a nutshell, to interpret whether someone is or to draw the conclusion that someone is intoxicated?
A. Too many problems.

Q. Why can't we do that?
A. Too many problems associated with it. First of all, there are too many natural conditions that create nystagmus that have nothing to do with drugs or alcohol. And so -- in fact, the people who developed the test, found that about half the time people had some nystagmus at imposition or maximum deviation. Secondly, it's not what we call -- it doesn't have a dose response. In dealing with drugs, as I started to tell you a while ago with drugs, when you take a drug, you get an effect. If you take more of that drug, you get more effect. If you take more of it, you get even more effect. That should be predictable. If you take the drug -- and this is how doctors prescribe it.

They take your sex, your size into account, and they give you a dosage of a drug to deal with a condition. If they want more of an effect for it, they will give you more of that drug. So they can predict, knowing your physiology, how much drug to give you. At the same time, you should be able to take that from the other side, take the response to that drug and estimate how much of a drug you've taken. That's what field sobriety tests do. That's what the whole idea behind of any kind of test like that is. And the field sobriety tests don't follow dose response.

If you take a person who has started drinking, if I were to start you drinking right now, dose you up, and I stopped you -- let's say you get up to about a .05, .08, something like that, and I looked at your eyes, had anybody look at them for that nystagmus at maximum deviation, it may very well be that you don't have that because you're going up in alcohol concentrations, continue up take you up to .15 or 20, bring you back down to the same level, .08, same person, same drinking conditions, look at you at .08, and now you have nystagmus. And that means that the same dose of alcohol, same concentration, I've gotten two different results. Didn't obey those response. And I did a study and published it, and that's one of them that you have there that says it doesn't obey dose response. So that's a major problem with this test.

The other test is that things like fatigue cause nystagmus. And if a person is just tired late at night, they are more likely to have nystagmus occurring naturally. And so the problem is that you have the police officer looking at it, and he sees nystagmus and that to him is a clue, and it may very well be due to fatigue. The biggest problem though, the one that was known about, even when those tests were developed is that if you've been drinking and you go up in alcohol concentration, you come down and there is no alcohol left in your body, no effect, can't have an effect from a drug not there. No alcohol left in your body, and yet you still you have a nystagmus present. And so now we have the worst of all worlds, not only is it is not dose responsed, but it's a completely false indicator of intoxication, so it's a bad test.

Q. Would you go so far as to call the HGN test junk science?
A. It is junk science.

Q. Let me ask you about a second standard field sobriety test in the State of Texas, the walk and turn test. What exposure to or experience have you had or studies have you performed on the walk and turn test?
A. Well, anytime I did studies with HGN tests, I went ahead and did one leg stand, walk and turn, the other tests (that are considered standardized tests, because I had subjects, and I already had them dosed. But that test is not reliable. In fact, that is the least reliable of three tests. And as I indicated earlier, even experienced police officers, instructors, people who were the best they could find, would arrest two thirds of the people who weren't intoxicated on the basis of that test. And, again, we know it doesn't follow dose response because a police officer is trained, once a person starts that test, don't ever give it to them again because now they've learned how to do it. You're not measuring the effects of alcohol, you're measuring a learning curve. And so if you run it on them first time, they fail it, you give it to them again, they'll pass it. So it's a bad test from this standpoint. No dose response. That's a clue of a bad test.

Q. Can you be a little more precise about how that works, how someone learns how to perform the test with regard to the instructions they are given, maybe, and how that test is actually administered?
A. Let me just pick out one point so I don't belabor this whole issue. When an officer runs the test, he has the person stand with his left foot on the line and put the right foot immediately in front of it touching it. So they are standing with their feet heel to toe, right foot in front. And the officer says, Go ahead, I want you stand in that position as he goes through instruction and then a demonstration. And at the beginning, he will tell the person or he should tell the person, Don't start until I tell you. And when he gets through with that, after several minutes of instruction, he will simply (say, now, do you understand in such a way that the person immediately starts walking. Well, that's a clue of intoxication because he didn't specifically say -

Q. Because the officer says I didn't tell you to start?
A. But there is the voice and the implication, and so I see that a lot. But, again, that officer has seen him start, and so that's a clue that he has to consider. And that's probably why it's such a bad test, why they read so many clues into it. Through their own actions, they created clues like that.

Q. And then if they were asked to ask the person to repeat the test again, and they get it right because they had already been told what they had done wrong and what constituted a clue. So where the instructions might have

been somewhat misleading when they do the test, they were told what they did wrong and then they do it wrong?
A. You only do it on a person once. You don't start it over again because now they've learned. They've seen what the mistake is, and that's the -- then at that point you get a different result because the person has -- you're measuring a learning curve.

Q. You're not measuring --

MS. HARRISON: Objection, Your Honor, she's testifying.

THE COURT: Yeah, let him finish when he's talking. She can only take one at a time.

MS. GOODMAN: Got it.

Q. (By Ms. Goodman) Let me ask you about and tell me if you think you've already addressed this, the one leg stand test. Same principles apply to that?
A. Generally so. Men generally fair more badly on it than women do, all things being considered because of the way a man steps onto one foot to -- and lifts that other foot. When a man steps onto one foot and lifts his leg out and holds the foot six inches up and starts the test, he naturally has to shift his weight over the foot supporting him, put the center of gravity over that foot. And the man does it by shifting his shoulders over, and so he sways. You instantly see him sway. A woman gets in that position by shifting her hips over it, and you don't see that sway at the shoulder and head level, so she doesn't get the clue.

Q. And, again, is any one of these three tests a reliable indication as to whether somebody is intoxicated?
A. No, they are not re -- for two reasons. They are not reliable to determine whether a person has consumed alcohol at all. There are other reasons for having bad results on those tests. And secondly, they are not at all reliable for determining whether a person is intoxicated, even if you knew they had taken on the alcohol.

Q. And were they ever really designed for that purpose?
A. They were designed to be used in the field basically as a way of getting people in to do chemical testing on them.

Q. Would you notice some sort of impairment, obvious impairment, at a level .12?
A. I think you would. You might have -- if you were looking at a person at a .12, anytime you view a person to determine some kind of impairment or whether they have normal use of mental or physical faculties as referred to in the legal system, the first thing you have to do is say, Could I do it any better? And if you look at it and say it can't be done any better and there is no masking or anything of that type, then that is the issue. There is no impairment. If you say, I could do it better. I hear something in the voice that sounds wrong. It might be like my wife who is from Oklahoma. Forty years we've been married. She's from Oklahoma, and she still sounds like it's not right. She has that thick Oklahoma accent. Or it might be a person who can't walk right. Maybe they have a leg injury. Then you have to look and find excuses for it. And if they are not there, then you say the person is not normal, but if they look good at the beginning when you see them first on videotape, then you can stop there. Your question is answered.

Q. Okay. What things have you reviewed in this case?
A. What have I reviewed?

Q. Yes.
A. I reviewed the videotape. That's the most -- I did that before I accepted the case. I have reviewed the officer's reports on what happened. I have reviewed the intoxilyzer records, both the maintenance and subject test logs on the subject. And then there was an ALR hearing that I had some information. And what I tried to review and

have had no great success at was trying to put a time line together because of confusion about various times. So I've got conflicting information there and can't go any further until that is set right. But I've reviewed everything available to me, in this and in most of my own cases.

Q. Okay. And the breath test print-out as well?
A. Breath test is part of the intoxilyzer records I reviewed.

Q. Have you seen anything in this case, Dr. Booker, that would indicate to you that the defendant could not safely operate a motor vehicle?
A. No.

Q. Have you seen anything that would indicate that he was intoxicated?
A. No.

Q. Let me ask you what your experience has been with the intoxilyzer instrument.
A. Okay.

Q. Have you published --

MS. HARRISON: Objection, Your Honor. May we approach?

THE COURT: Yeah.

(Discussion held at bench outside the hearing of the jury, the witness, the defendant and the court reporter.)

THE WITNESS: I'm sorry. I'm just getting a cough drop.

Q. (By Ms. Goodman) Do you need some water?
A. No, thank you. My eyes have been red and watery, and my throat has been scratchy ever since I came up here today.

Q. If you could just outline for the jurors what your experience and expertise is with regard to the intoxilyzer instrument.
A. I started working with the intoxilyzer instruments in 1972. The intoxilyzer was -- the original first model of intoxilyzer called the Omicron Intoxilyzer was adopted in California as the breath test instrument replacing the breathilyzers that were in use at that time. Being part of the state crime laboratory and being a forensic alcohol supervisor, I had to go through and study to use the intoxilyzer. Teach it to people, what it was, how it worked. After that, I followed it through a number of changes. The intoxilyzer has evolved over the years, and it's gone through a lot of internal changes. I could describe them for you, but I won't, again, unless you really want to hear about them. Until I've gotten now -- I use three intoxilyzers.

I have three of them that I use in doing research, various reasons. Two of them are older models that have been discontinued or not used in the State of Texas any more. They are called 66's. And the third one is a model that is a little advanced, a newer model than what was used in this case called the Intoxilyzer EN. And this one is called -- what has been called a 68 series, and you can see by the serial number that it's a 68 but not an EN. And this instrument was manufactured probably in January of 1999, somewhere around then, based on the serial number. And so I've worked with all these models. I understand the underlying principles of them.

Q. Do you feel qualified in testifying with regard to the underlying scientific principles of the intoxilyzer instrument?

A. Yes, Intoxilyzer 5000. I've published one paper. Now, it's not in a scientific journal. It was in a journal called Voice for the Defense, and that's the journal of the Texas Criminal Defense Lawyers Association, and that had to do with the underlying principles of the intoxilyzer, basically the patent, how the patent was written and what they had to say about it.

Q. Let me just ask you to address what you consider to be the flaws inherent in the Intoxilyzer 5000 instrument.
A. It's not so much in the instrument. It's in the way it's used. The Intoxilyzer 5000 is a machine. That's all it is. It's like a wrist watch or your automobile speedometer. It's a machine. If you accept the uncertainties that are inherent, potential errors, I have no problem with using -- I use it in my research, but not for putting my publications on. I never take the values, but I use it when I'm testing people as they are going up in concentration to determine when to take a blood test, which is a reliable method of determining alcohol concentration. But if you accept it for that, that's not a problem. The problem with the intoxilyzer used in the State of -

MS. HARRISON: Objection, Your Honor. May we approach again?

THE COURT: No, ma'am. He's qualified as an expert now.

THE WITNESS: May I continue?

Q. (By Ms. Goodman) You may.

A. The problem is that in a Texas courtroom, the instruments that are used are intoxilyzers that are operated under the auspices of the Scientific Director of the Texas Breath Alcohol Testing Program. The scientific director causes a book to be published called a Breath Test Operator Manual, and that's taught to the operator, and it's relied on by the technical supervisors. And the book contains protocol, a testing method, what people do and why they do it and how they do it about maintaining and operating the instrument. It has some information about the reliability of it.

The problem with an intoxilyzer in Texas is this, at low levels. In Texas, the state abandoned the basic protection for the results. In analytical testing, the most important thing is the reliability of the result. Is this accurate? Does it really mean what it says? Well, that was thrown out in 1990 and replaced with another procedure that makes sure that people don't contaminate the instrument by blowing into it. So the instrument has a higher degree of potential uncertainty.

Q. Let me make sure I'm -- what was the safeguard that was in place that was discarded?
A. The manufacturer recommended --

Q. Is the manufacturer CMI?
A. CMI Corporation of Owensboro, Kentucky. The manufacturer recommended, and when the State adopted the 5000, it incorporated in its training manuals and in the use of 5000 in the State of Texas the manufacturer's recommendation, which is standard among people who do breath testing.

Q. And is it still the manufacturer's recommendation?
A. It still is the manufacturer's recommendation. They incorporated that you must do a direct observation of the person you're about to test, observe them for 15 to 20 minutes.

Q. What do they mean by direct observation?
A. Direct observation means literally that you are close enough to stare at them. And with men, where there is a good prominent Adam's apple, you look at their throat, and if they're belching or burping, if you see that bob up

and down, that's considered a possibility of bringing alcohol up from the stomach. With women, well, you look more at their mouth than the throat because they don't have the prominent Adam's apple. But, anyway, you look at them very carefully to make sure they don't belch or burp; they don't put anything in their mouth; they don't eat; they don't smoke, anything like that; that's obvious -- in order to make sure that there is no alcohol in the mouth. And then you run the test.

In Texas, they don't that that. What has been done in the State of Texas is you simply stay in the presence and take reasonable care to make sure there is nothing in the mouth that could be blown into the instrument that could contaminate it and require you to pull it out of service. And so the protection of the results isn't foremost. The protection of the instrument and convenience is. And so that's the big thing. And because that change was made, then in the (State of Texas there is a higher potential of error on the Intoxilyzer 5000 than if you simply drive across the border to Shreveport, for example, where they still require the breath test to be proceeded by that direct observation.

Q. Okay. Any other problems with regard to the protocol in which the test is administered in the State of Texas?
A. I can quibble, but the answer to that is really no. The substantial errors associated with the problems associated with it but not having direct observation. But Texas has done some good things, too, in their instruments. For example, their instrument will not subtract -- even though it's designed to -- will not subtract an interferent and present a number. The Texas instrument shuts down and says "interferent," go get a blood test. So Texas has done some things right, but they did some terribly wrong.

Q. If a person agrees to take a breath test and then immediately gives a blood test, would the results be the same?
A. If the breath test is conducted properly, they will be identical. First of all, you don't want a double standard of breath is better than blood because you're more likely to be innocent or more likely be guilty. That's irrelevant. It should be the same. And secondly, breath test devices, including intoxilyzers, are certified by the federal government. The Code of Federal Regulations has a section that talks about breath testing instruments. And based on that, the numbers should be the same.

In fact, you can take the intoxilyzer and calibrate it by having a person breathe into it and getting a result and take a blood sample, and using the blood sample to put the correct number in. And the other thing is that the manufacturer on this particular instrument, when it comes out in the manual that comes with it, they tell you that the number that is presented here is -- can be either read as the amount of alcohol in 210 liters of breath or in 100 milliliters of blood. So the manufacturer thinks that number is exactly the same. There is no difference. It's not intended and it doesn't exist if the tests are run competent.

Q. So if someone were to say that the breath actually underestimates the amount of blood alcohol concentration, that would be improper?
A. If you say that it does it as a matter of routine, that it always does that, it would be a problem because the intoxilyzer can read an answer high. It can read as much as about 20 to 25 percent high in normal circumstances. It can read it right, or it can read it low. And you don't know where it is. So that number that you see there could be too high, too low or be exactly right.

Q. And can you explain that? Why is that?
A. It has to do with the time you blow into the instrument and the breath temperature that goes into it, not counting into affect the possibility of alcohol in the mouth from other sources. The instrument is built around the premise -- and this is in their training manual. I have a copy if you want to see it. But it's built around the premise that the breath temperature that goes in is 93.2 degrees Fahrenheit. Your breath, yours, his, hers, hers, mine, everybody here has 93.2 degree Fahrenheit breath. Our body temperature is 98.6 degrees. Core

temperature, the air in your deep lungs is your core temperature. So if you blow and that first air coming out, regardless of temperature, if you bring up that deep lung air -- which is, by the way, a requirement in the State of Texas.

The breath test must be essentially alveolar or deep lung. And when you bring that up, you also bring that breath air, that higher temperature. So the longer you blow, the deeper the lung air comes up, the more closely it mimics the body temperature. And if you hit 98.6 degrees on the breath sample that you're looking at, then the answer that you see will be about 20 to 25 percent higher than if you took the 34 degrees centigrade or 93.2 degree centigrade air. And then if you take a really short blow, you may not have even reached that temperature, and so it might be low. So you can be low, you can be right, you can be high. But you can't know.

Q. And I guess you touched upon the next question. Does the value increase the longer one blows?
A. Yes. In fact, if you could see this test being run -- in the Texas evidential instruments, this is disabled. But if you were to run it on an instrument that it were working or if the technical supervisor were to demonstrate, there is a screen in front of the instrument. And on that screen, you can have it display what the breath concentration in the sample tube is. And that number continuously goes up. The longer you blow, the more that number goes up. And as long as you're blowing, that will be going up. It goes up very rapidly at first. It goes from 000 up to whatever, and then it continues upward until you finally exhaust all your breath and can't breathe, and that will be the top value you get, but that will

Q. Let me ask you about a slope detector. What is that?
A. Slope detector is not a thing. It's a part of the computer programming in the intoxilyzer. If you plotted when you start to blow into the intoxilyzer, the instrument has been purged, and it's reading alcohol concentration of 0 before you blow into it, and that would be displayed. In fact, on this, you can see where it says air blank it says 0.000. There is no alcohol in the instrument. When you start to blow, that number starts to go up as alcohol, first from your mouth and then from your lungs, then from your deep lungs, goes into the instrument. And if you took -- let's say at the end of five seconds you took the exact number that was reading on that display that I talked about, and you wrote down the number and you made a plot like just typical graph, and then you came back a second later and you put one second and you took the next number, then you drew a line between them, that line would slope upwards. And it's a measurement of the amount of slope that is being taken between these two samples. And this does it more often than a second. But what it does is it continuously measures the slope between the sample that was taken before and the sample that's being taken now, and it continuously updates that.

The slope detector -- and this is a requirement of the Texas instrument. It says the slope detector, one of three things must be satisfied. And what that means is, if the sample is rising, concentration is rising too fast, you're still down on that low curve. You're still just starting up with that air from the mouth and the throat but not in the deep lung, and it won't accept the result. It won't let you stop blowing. You can stop, but it will say "Please blow," and you will have to start over again. If there is alcohol in the mouth that it detects -- and this is the problem. The detector is not a very good device for this. The manufacturer doesn't even believe it. But if it drops too fast, then it interprets that as being alcohol in the mouth and shuts the test down. And if it continuously rises but it rises very slowly or it drops very slowly, then it will accept it as being essentially level. And at that point, it's satisfied -- talk about it as though it's human -- it's satisfied that you've reached deep lung. And at that point, it will allow the test to stop. And that's what a slope detector does. It simply measures mathematical -- what it does is it plots time versus voltage and measures a number.

Q. Can a person have residual mouth alcohol from any source, candy, snuff, giving a false high reading?
A. Pardon me?

Q. Can somebody have residual alcohol in his mouth for whatever reason, a piece of candy or something in the mouth, and then get as a result of that, as a consequence of that, get a false high reading on the breath test?
A. Yes. If you have alcohol in the mouth that the instrument doesn't -- the slope detector doesn't detect, then that alcohol in the mouth will be added to what's coming from the deep lung, and that will be a false high reading, yes.

Q. Did you see anything in this videotape to show that the defendant rinsed his mouth out to remove any residual alcohol, that any steps were taken to make sure that he did not have anything in his mouth, any kind of residual alcohol?
A. No, nothing was done to assure that. There was no observation here to make sure there was no alcohol in his mouth at the time of the test.

Q. Have you done any studies on the effects of residual mouth alcohol on giving a false reading, false high reading?
A. I have. I've never published it. It's one of those things that -- the reason I don't publish that is that everyone in the industry of breath testing, except the State of Texas, knows you have to do direct observation. So you can't come along and put into a legitimate journal that there is a problem and here is the answer to it when everybody already knows the answer. But I've done the studies and seen how much alcohol can affect the reading and how much potential error is associated with it in the State of Texas.

Q. And in your own studies, how much have you seen results vary in the administration of a breath test when you have alcohol in the mouth?
A. From the alcohol alone, just the residual alcohol? Any case in the State of Texas using an evidential instrument under breath test regulations you can subtract .03 just for alcohol. And I've seen it go -

Q. Let me just ask you, is that because there is no observation period?
A. No observation period. And as much as .07 in those specific instances where you actually can take a person out and have them eat what they ate and drink what they drank and do the test exactly as it had been done before. I've seen results as much as .07 higher than the equivalent blood at that time.

Q. Just if there is any alcohol or potential for any alcohol to be in the mouth?
A. If you have alcohol in your stomach at the time you're tested, then there is potential, and that has to be eliminated either by direct observation or by knowing that there is no alcohol in the stomach. Otherwise, these tests have to be discounted potentially.

Q. And minimally at least a .03 should be subtracted?
A. .03 before you ever start, and that's just from the alcohol.

Q. Let me ask you. If one's position is that one could never blow a result higher than one's actual blood alcohol concentration, is that true? Is it true that one could never blow higher than one's true blood alcohol?
A. No. I give you three very good reasons for that. First of all, if you go back to a college textbook, physical chemistry, third-year college chemistry, you can start with first principles and know that the differences between breath temperature and body temperature would cause that to be higher, as I said, about 20, 25 percent. Secondly, it's in the literature, scientific literature that it goes that high, and I've done this many times as experiment, and I've seen it. So you can blow high. And, again, caps out about 20, 25 percent high above your actual blood alcohol concentration. And that's not taking into account any alcohol. We're talking about a test run properly, temperature being normal.

Q. So it's important then, as I understand it from what you're saying, Dr. Booker, that you must take actual breath temperature into account?
A. If you want to know the actual blood equivalent, yes, you have to be able to take that into account.

Q. Has Alabama or any other state that you're aware of to your knowledge ceased to use the intoxilyzer because of the inability to take into consideration the calculation of breath temperature?
A. Alabama abandoned the intoxilyzer -- at least that's my understanding -- and went to another instrument that takes that into account. It actually measures breath temperature and then does the calculation to bring that down to the appropriate value.

Q. Was there another intoxilyzer instrument called a Data Master approved by the State of Texas which would have taken breath temperature into account?
A. It's not an intoxilyzer instrument. It works on much the same principle. But, yes, Texas as the 66's and 68's started to get old -- or 66's started to get old, they looked at the possibility of going to another instrument and checked out and approved the Data Master, a Data Master instrument in 1999. So it's an approved instrument, although it's never been used. So there is no training manuals or literature for it.

Q. So breath temperature then is crucial for accuracy; is that correct?
A. It's one of the factors you have to take into account.

Q. And the whole reason we're here is accuracy?
A. In this case, it's really critical. If you were dealing with a very high value, let's say .25, .26, it would be irrelevant. We would be just spinning our wheels because there is enough error in the machine, potential error, to bring that down to a .08. But when you're in this gray area that we're in, yes, that's what we're talking about and what those errors apply to.

Q. So let me just cut to the chase then. Can we have confidence -- based on everything you know about the facts of this case, can we have confidence in that result?
A. Within the limits of uncertainty associated with the instrument, you can. I mean, as I said, it's an instrument. If you take into account the potential for breath alcohol being present. If you take into account that it's an intoxilyzer, it has plus or minus .01, before you walk in the room and turn the lights on that you can take off or add to it, there are a few other -- breath temperature and another things that you have to take into account. So if you take those into account, this is where you start. But you now have to take that number and then it can go up a little bit, and it can go down a lot based on the assumptions you make. And some of those are realistic assumptions and some of them are pretty far-fetched.

Q. Is it your opinion then that the defendant could have had a blood alcohol concentration of below a .08 at the time he was driving?
A. Oh, absolutely. Based on the facts in this case and the fact that this is a Texas instrument -- I'm not saying it's malfunctioning. I'm assuming it's working. It's an evidential instrument working properly under the regulations, that the test was conducted properly under the Texas regulations. But that doesn't indicate to any degree of certainty that he was above .08 at the time he was stopped.

Q. In fact, you can't say whether he was --

MS. HARRISON: Objection, Your Honor, leading.

THE COURT: I can't tell you that until I hear the whole question.

Q. (By Ms. Goodman) You can't say, can you, Dr. Booker, what the defendants' blood alcohol concentration was at the time he was driving based on what you know?

A. No, I can't.

Q. Could he have been below a .08?
A. It could.

Q. Okay. And is that a distant theoretical possibility or an abstract possibility or is that a very real possibility?
A. That's not when we're begging you to hunt for the number at the bottom end. That's a real possibility based on the facts of the case and the likelihood there was alcohol in his stomach at the time he was stopped, which would then be absorbed and push that number upwards. You have to take that into account. And the other possibility is that there was alcohol in his mouth at the time he was tested, and that, of course, puts it even higher.

Q. So we don't know whether he was -- he could have been below a .08, which is a real possibility. He could have been at a .08 at the time of driving, or could have been higher?
A. Could have been any one of them, and there is no evidence in this case that addresses it. I can't tell you.

Q. And the fact just -- the multiple facts and factors you need to know to make that type of determination just simply aren't available?
A. They don't exist, at least I have not been given them, didn't find them in the documents that I reviewed from the information I have.

Q. Do your observations in the videotape call into question the accuracy of the breath test result in this case?
A. To this degree, yes, that a person at a .12, you should see some signs of intoxication, and I didn't see any. In other words, and when there is a conflict, I believe what I see rather than what I see on the instrument, because I can explain away a number. I don't mean explain it away like I'm here to throw it out, take my word for it, but there are potential errors on this. And what you see on that videotape, there are no potential errors. That's a clear videotape.

Q. Is the HGN test a medical test? Has it been approved by any kind of medical society to your knowledge, Doctor?
A. Absolutely not. HGN is not a medical test. HGN is a test that was devised for police officers, and it's promoted only to police officers and prosecutors. It has no medical use whatsoever. Not only medical use, it's not used by rehabilitation people, people that have to deal with addicts and alcoholics. It's not used in any kind of emergency setting. Another way you would want to determine, it's not used for enforcement of, let's say, drug compliance laws by employment for drug screening or anything. This test has one purpose and one purpose only, and that's the side of the road by a police officer.

Q. Are you aware of a language change in the 2004 training manual from the other training manuals with regard to nystagmus? Did they go -- what is that change?
A. Yes, in fact, it was basically the only difference between 2002, 2004 version. And the 2002 says that a police (officer should deviate the eye looking for maximum -- nystagmus at maximum deviation, should deviate the eye and hold it for a minimum of four seconds and look for distinct nystagmus. In the 2004 version, they clarified that and made it clear that this is distinct and sustained nystagmus. Because when you bring that eye around and you hold it, you probably will see some nystagmus beginning, a few beats of nystagmus. But at three or four seconds, by that time, that will be gone. And if it continues and it's sustained beyond four seconds, then that would be the clue to a police officer, and they clarified that by putting in that phrase "and sustained."

Q. Let me ask you about a field sobriety test you saw on the videotape, what they describe as a stationary Rhomberg test. Is that test truly the Rhomberg test? Are you familiar with what the original Rhomberg test is?
A. I know what a Rhomberg test is. That's not a Rhomberg test.

Q. What is a Rhomberg test?
A. Rhomberg test is a test that is used for inner ear disorders. And what you do is simply have a person stand. And I have a problem like that. Close your eyes, and you see the person start to sway. And it has nothing to do with tilting heads back or counting. That's -- I have no idea why they call (that the Rhomberg test. It's not. It's generally referred to as a head tilt test. And what it's looking for -- it's not a test that has any reliability. When they originally developed the field sobriety tests, they tried that out as a possibility and abandoned it as one of the tests.

Q. And why is that?
A. Not a very reliable test. Too many things, men especially, adult men, have a problem. I have it. I had it this morning, that if I throw my head back like that and close my eyes, I have a condition known as positional -- benign positional vertigo, and I'll start to spin around, and my eyes literally you can see the nystagmus in them. It's better now than it was earlier. But men, particularly, are sensitive to that. So in this test, all you're doing is checking to see whether essentially you've got a man over 40.

Q. What was that test originally to test for?
A. The Rhomberg test or the test -- the head tilt test?

Q. Well, the Rhomberg test, the original Rhomberg test?
A. It's designed to look and see -- to determine whether there are problems with the inner ear and where those problems exist. You can tell by the way a person sways, which direction they lean. In my case, when I walk, I walk almost crab fashion when I'm having an attack, and whether it's my left foot, if it tends to lead or my right foot, you can tell which ear it's in. That's what the original test was devised for.

MS. GOODMAN: May I have just a moment, Your Honor, please?

(Pause in proceedings.)

MS. GOODMAN: Pass the witness.

THE WITNESS: Excuse me, could I have a little bit of your water before you start? Thank you.

MS. HARRISON: May I proceed, Your Honor?

CROSS-EXAMINATION BY MS. HARRISON:
Q. Mr. Booker, do you personally own an Intoxilyzer 5000 68 series?
A. I own part of one, or I'm part owner of one 68 EN series.

Q. And this is your personal instrument or with a co-owner?
A. It's a personal instrument of a group of people who contributed to it.

Q. And where is that stored?
A. Here in Dallas.

Q. And is that in whose office?
A. It's stored over on Yale Boulevard, and I don't know that it's in anybody's office right now. I think it's upstairs in one of the empty offices.

Q. Okay. And are you certified as an intoxilyzer operator?
A. No.

Q. Have you ever taken the course to become certified as an intoxilyzer operator?
A. No.

Q. Have you ever been certified as a technical supervisor for an Intoxilyzer 5000 machine?
A. No.

Q. Have you ever taken the course to become certified for that?
A. No.

Q. Are you qualified to calibrate the machine?
A. Yes.

Q. You've taken courses on how to calibrate an Intoxilyzer 5000 68 series machine?
A. No.

Q. You haven't. How did you become qualified to calibrate one of these?
A. Well, calibration is -- because I know how it's calibrated. There is a technical manual that I've had access to, and I have a Ph.D. in analytical chemistry. It's a fairly simple matter. If I had that manual, I can open the top and calibrate the instrument for you.

Q. And have you had personal access to this particular intoxilyzer machine before?
A. No.

Q. Can you testify honestly that this machine was or was not working properly on July 3rd of 2004?
A. No, I assume that it was, but I can't testify for a fact. It may have been working improperly at that time.

Q. Can you testify that it was working improperly at that time?
A. As I said, I don't know if it was working properly or improperly. My assumption was it was working properly, but that may have been an erroneous assumption. It may not have been working properly.

Q. And can you testify that any of the possible factors that you discussed, extra breath alcohol in the mouth or belching, anything like that, candy, occurred in this case?
A. I can't say that they occurred. They are just potentials, and until you know -- and there is no way of knowing whether they happened or not.

Q. So you can't testify that that happened this night on this test?
A. No.

Q. Can you testify that the results we see in the test on this particular defendant are inaccurate in any way? Can you tell us that those are inaccurate, in fact?

A. No, you can't tell whether they are accurate or inaccurate based on that report slip alone. There is not enough information to know that.

Q. So all you can testify to is the possibility to what might have happened?
A. I can testify to the potential error but not actually what happened. Yes, that's correct.

Q. Mr. Booker, are you aware of a resolution that was adopted by the American Optometric Association adopting the HGN resolution as a qualified valid scientific test to show intoxication?
A. I am familiar with it, and I think that overstates it a little bit; but, yes, I'm familiar with the resolution.

Q. And has this resolution been abandoned by the American Optometric Association?
A. I have no idea whether they've updated it, abandoned it or left it like it was originally.

Q. And to your knowledge, is this resolution still valid that the American Optometric Association is saying?
A. I don't know. It's not a resolution that has anything to do with the tests themselves, so I really don't know. I've seen it in the original form. And whether it's still valid or not, I don't know.

MS. HARRISON: May I approach, Your Honor?

THE COURT: Uh-huh.

Q. (By Ms. Harrison) Mr. Booker, I'm handing you what's been labeled State's Exhibit Number 5. Do you recognize that?
A. Yes, and this is the one that I saw. This is an older or 1993, uh-huh.

Q. And is that the HGN resolution test that you believe that the American Optometric Association adopted in 1993?
A. That's correct.

MS. HARRISON: Your Honor, at this time we move to enter State's Exhibit Number 5 into evidence.

MS. GOODMAN: Can I take the witness on voir dire?

THE COURT: Yeah.

VOIR DIRE EXAMINATION BY MS. GOODMAN:

Q. When did you see this resolution, and what do you know about the resolution?
A. I can't tell you when I first saw it. I have a copy of it in my files in my office, but it's been around. It's from 1993. So I've certainly had it in my files for at least ten years.

Q. Okay. And this is one you said you don't knowwhether it's even valid any more?
A. I think they actually updated that recently. Someone told me that they had, maybe last year, redone the resolution. I don't know. As I said, it has nothing to do with my opinion. So I know that it exists. It's not based on any -- it's a feel-good resolution, but it's not based on any testing that they did. So what can I say about it beyond that?

MS. GOODMAN: I would object to it, Judge, on the basis that it has no scientific basis or validity.

THE COURT: That objection is overruled. Admitted.

Q. (By Ms. Harrison) Mr. Booker, have you met the defendant before today?
A. No, I haven't.

Q. So you've never seen him other than in his current physical state this afternoon?
A. I saw him on the videotape that was taken at the time he was arrested and brought into the Sterrett center for testing.

Q. But you've never personally been in his presence until just now, correct?
A. I met him I think when you broke for lunch was when I met him the first time.

Q. And you were not present the night of July 3rd, 2004 when he was arrested; is that true?
A. That's true.

Q. And you did not make any physical observations of the the defendant at the time he was arrested, did you not?
A. No, I wasn't there at the time. The only physical observations I can make are those that were illustrated on videotape.

Q. And that's the same videotape that's been already introduced into evidence and the jury has seen today; is that correct?
A. I assume it is. It's the one that was made at the Sterrett center.

Q. So you did not see the officer conduct the HGN test with this defendant, correct?
A. No, I didn't.

Q. And you did not see the defendant perform the walk and turn or the one leg stand in this particular instance, correct?
A. No.

Q. And you did not see the initial traffic violation that occurred in this instance, correct?
A. That's correct.

Q. In fact, the only thing you can testify to is what you saw on the video, the same video that the jury has seen, and possible things that could have happened that night, correct?
A. Yes.

MS. HARRISON: I'll pass the witness, Your Honor. At this time, Your Honor, we would like to publish State's Exhibit Number 5 to the jury.
THE COURT: Okay

REDIRECT EXAMINATION BY MS. GOODMAN:
Q. Dr. Booker, you testified that you are not certified to be an intoxilyzer operator, and are there any reasons why you are not certified to operate any of that equipment?
A. Well, several of them. First of all, the intoxilyzer -- I started working with the intoxilyzer, as I indicated earlier, when the first models came out. And I've continuously worked with them. I have them. I've pulled them apart, adjusted them, used them in my research. So going to a 40-hour course, even if it were available to me, to study a book that I've read thoroughly, and then to blow into the machine with no alcohol on my breath would add nothing to it. If it added anything to my knowledge, I would have taken the course, but it doesn't. It would have been a waste of time. And, remember, there is an ethical component to this.

For me to walk in to take any kind of course, go to any kind of school that doesn't add to my knowledge, merely for the purpose of coming into court and trying to convince people that it expands my qualifications is unethical in my profession, and that's why I don't go to the schools and buy the certificates. Every one of these certificates is available to me for purchase, and I've had clients that offered to buy them for me, so it wouldn't cost me anything. But it's just a matter of choice. The jury knows my credentials. You know them, and you have to judge on my education, my training, my experience and not on store-bought credentials that that mean nothing.

Q. The prosecutor asked a series of questions trying to ascertain whether you thought the machine was working properly or not. Is that really a missed point? I mean, you're making your assumptions and basing your testimony today on the premise that the machine is working accurately?

MS. HARRISON: Objection, Your Honor, testifying.

THE COURT: Yeah, you're leading. Sustain the objection.

Q. (By Ms. Goodman) Let me just ask you, when you give your opinions in court today before the jury, are you basing your opinions on the premise that the machine is working properly or is not working properly?
A. My testimony has all been based on the assumption that this instrument, the Intoxilyzer 68-002487, on the date and time indicated on that report slip that it was working appropriately and properly under the regulations of the State of Texas as an evidential instrument, that the breath test operator complied with the regulations, although he didn't expand on them, and that anything that has to do with that instrument can be explained and studied out of the breath test regulations in the State of Texas.

Q. One other questions, Dr. Booker. Is the CMI software program proprietary?
A. It is.

Q. To CMI?
A. Pardon me?

Q. To CMI?
A. It's proprietary to CMI, and even in the State of Texas the technical supervisor is not allowed to see the program. In other words, this is a black box, in many ways, to the technical supervisor and to me. We don't know how it's programmed to operate. We can make assumptions. We might even be right on the assumptions. We can do tests on it, and I have done some work on mine to back engineer to try to figure out what they have done. But the reality is that software program is entirely proprietary to them.

Q. As a scientist, does that trouble you that you don't have access to the proprietary software?
A. Not so much to the coded software but to the idea of how this instrument works. I was asked a while ago about calibrating the instrument, if I were qualified to calibrate it. This instrument uses -- these instruments use calibration or they are set in there. The calibrations are set by running known solutions at various concentrations and the instrument then adjusting it to get -- and then this is where the question is. Do you get a calibration curve? Do you get a series of straight lines? Do you take all of those and add them up and get what we call the response factor? And that information is proprietary, and that bothers me.

MS. GOODMAN: Pass the witness.

MS. HARRISON: Your Honor, we have no further questions for this witness.

THE COURT: May he be excused?

MS. HARRISON: No objection.

THE COURT: You're free to leave.

THE WITNESS: Thank you, Your Honor.

(End of requested proceedings.)

THE STATE OF TEXAS: (COUNTY OF DALLAS: (
I, Trisha L. Phillips, Official Court Reporter in and for the County Criminal Court Number 6 of Dallas County, State of Texas, do hereby certify that the above and foregoing contains a true and correct transcription of all portions of evidence and other proceedings requested in writing by counsel for the parties to be included in this volume of the Reporter's Record, in the above-styled and numbered cause, all of which occurred in open court or in chambers and were reported by me.I further certify that this Reporter's Record of the proceedings truly and correctly reflects the exhibits, if any, admitted by the respective parties.

I further certify that the total cost for the preparation of this Reporter's Record is $263.00 and will be paid by Mr. David Burrows. (WITNESS MY OFFICIAL HAND this the 8th day of February, 2006. (
_____ (TRISHA L. PHILLIPS, Texas CSR# 3953 Expiration Date: 12/31/07 (Official Court Reporter, CCC #6 (Dallas County, Texas (133 N. Industrial, LB 20 (Dallas, TX 75207 ((214) 653-5656 (