DRIVEN

to successfully prosecute DUI cases in Mississippi

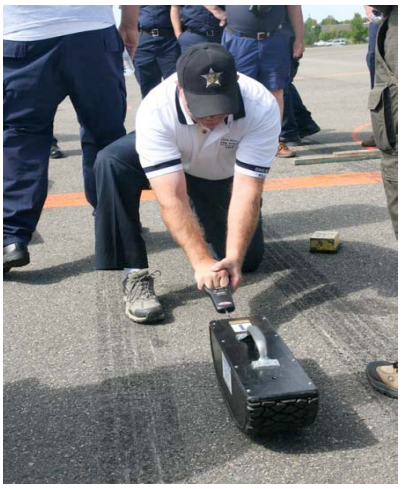
Volume 9, Issue 1 Spring 2012

CRASH RECONSTRUCTION: THE DRAG FACTOR

By John Kwasnoski, Professor Emeritus

Any reconstructionist will acknowledge that the drag factor, a measure of road friction, is an integral part of most reconstruction analyses, and that changing the drag factor value may result in significant changes in the resulting calculations. It is certainly not uncommon for the police at the scene to measure the drag factor, and for a defense expert to later make a measurement with a different instrument or device and report a smaller drag factor that lowers the speed estimate for the defendant's vehicle. Frequently, the expert may use an electronic device called an accelerometer, sold under the trade names Vericom VC-2000 or G-Analyst, and claim it to be more accurate than the drag sled used by police investigators. In one case in which the Iowa State Patrol measured road friction with a drag sled there was testimony at trial by two engineers that "measuring pavement friction with a drag sled has not been accepted by the engineering community." Such a declaration can be challenged by published field testing in which the two devices are compared by making measurements on the same road surface. In one such test[1] on three different roads the results were:

ROAD SURFACE	ACCELEROMETER	DRAG SLED -20 LB
dry asphalt	.809, .801	.800
dry asphalt	.850, .851	.800
crossgrooved concrete	.839, .859, .826, .889	.825, .825



Clearly, the value measured by the drag sled is slightly less than the accelerometer measurement, and if at all, would lower speed estimates and favor the defendant if the police had used the drag sled at the scene. In reference to this same Iowa case, Jerry Hall, a retired engineering professor from Iowa State University said, "A drag sled is a very common, acceptable way to do it (measure drag factor)."

In another evaluation of the accuracy of drag sleds, fifty tests were performed at the World Reconstruction Exposition 2000 meeting with an average drag factor measurement of .807. This value was then compared to a measurement of the same road surface made with a sophisticated ASTM (American Society of Testing and Materials) skid trailer that developed .81 - .82 on the same surface. Still another drag sled evaluation was made in Maryland as part of a 1998 reconstruction conference with a D.O.T. skid trailer developing a drag factor of .83 and the average of measurements made with 20 drag sleds equal to .805. In skid tests done by the au-

Additional Resources:

National Highway Traffic Safety Administration
http://www.nhtsa.gov

Sobriety Trained Officers Representing Mississippi—STORM
http://www.msstorm.net

MS Department of Public Safety
http://www.dps.state.ms.us

thor as part of a senior engineering project, the drag factor value measured with a sled used in conjunction with the longest skid mark still underestimated vehicle speed in every test. The bottom line is that when used correctly the drag factor value measured with a drag sled is as accurate as that measured with the more sophisticated accelerometer. The measurement can be strengthened by making multiple measurements at each location on the road, making measurements at multiple locations in the tire mark pattern, including a drawing showing the locations of drag sled measurements:

A. Being certain that scale readings are made only when any initial "jerking" has ceased having the calibration of the drag sled scale checked regularly;
B. Having someone witness the tests to verify the scale readings;
C. Videotaping or photographing the measurement;
D. Using the lowest measured value to give every benefit to the defendant;
E. Conducting periodic training on the proper use of the sled.

Of course the prosecutor should be aware of potential misuse of an accelerometer in such a way as to produce an intentionally lower drag factor measurement. This will be addressed in a future article, so that prosecutors can attack any such misuse that would introduce misleading information into the reconstruction calculations.

in this issue…

[1] Wakefield, Cothern, Sellers, and Carver, "Roadway Drag Factor Determination, Dynamic v. Static", N.A.T.A.R.I., Fourth Quarter, 1995

[2] Badger, "Drag Sleds and Drag Factors", SOARce, Summer 2001

[3] Kwasnoski, "Drag Sled Measurements Yield Valid Minimum Speed Estimates", N.A.T.A.R.I., Third Quarter, 1998

John B. Kwasnoski is Professor Emeritus of Forensic Physics at Western New England College, Springfield, MA after 31 years on the faculty. He is a certified police trainer in more than 20 states. He is the crash reconstructionist on the "Lethal Weapon - DUI Homicide" team formed by the National Traffic Law Center to teach prosecutors how to utilize expert witness testimony and cross examine adverse expert witnesses. He is the author of "Investigation and Prosecution of DWI and Vehicular Homicide." Prof. Kwasnoski has reconstructed over 650 crashes.

Distracted Driving AWARENESS

What is distracted driving? There are three main types of distraction:

Visual -– taking your eyes off the road
Manual – taking your hands of the wheel
Cognitive – taking your mind off what you're doing

Distracted driving is any non-driving activity a person engages in while operating a motor vehicle. Such activities have the potential to distract the person from the primary task of driving and increase the risk of crashing.

Frequently asked questions

Is talking on a cell phone any worse than having a conversation with someone in the car?

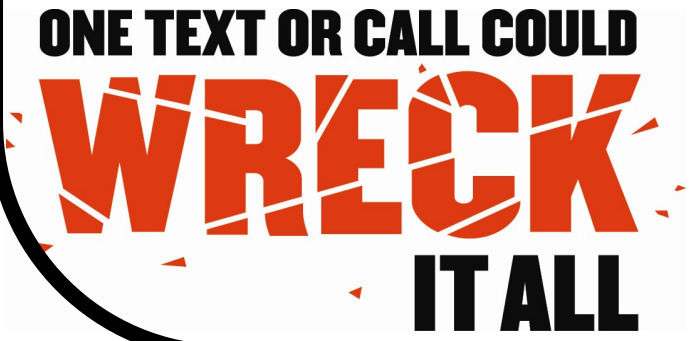
Some research findings show both activities to be equally risky, while others show cell phone use to be more risky. A significant difference between the two is the fact that a passenger can monitor the driving situation along with the driver and pause for, or alert the driver to, potential hazards, whereas a person on the other end of the phone line is unaware of the roadway situation. However, when two or more teens are in the vehicle, crash risk is increased. And while we can't say for sure this is attributable to distraction, we are confident that distraction plays a role.

Is it safe to use hands-free (headset, speakerphone, or other device) cell phones while driving?

The available research indicates that cell phone use while driving, whether it is a hands-free or hand-held device, degrades a driver's performance. The driver is more likely to miss key visual and audio cues needed to avoid a crash. Hand-held devices may be slightly worse, but hands-free devices are not risk-free.

What do the studies say about the relative risk of cell phone use when compared to other tasks like drinking or eating?

Most crashes involve a relatively unique set of circumstances that make precise calculations of risk for engaging in different behaviors very difficult. Thus, the available research does not provide a definitive answer as to which behavior is riskier. Different studies and analyses have arrived at different relative risk estimates for different tasks. However, they all show elevated risk (or poorer driving performance) when the driver is distracted. It is also important to keep in mind that some activities are carried out more frequently and for longer periods of time and may result in greater risk.



APRIL 2012

CASELAW UPDATE

Bonds v. State

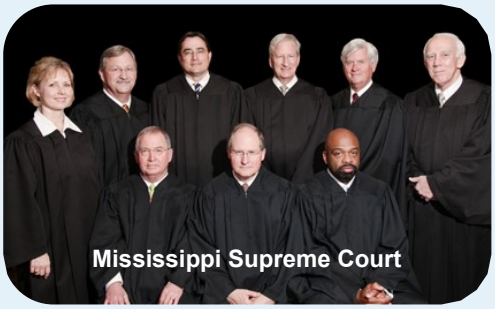
72 So. 3d 533 (Miss. Ct. App. 2011)

Defendant encountered Officer White and failed to dim his headlights early on New Year's Day 2009. Officer followed him and witnessed him weaving and initiated a traffic stop. Officer noted the defendant was unsteady, had slurred speech, red bloodshot eyes, and his breath smelled of an alcoholic beverage. When the officer asked defendant where he had been and if he had been drinking, he stated he had been at *Bushwacker's* and had approx. 5-6 drinks. PBT showed positive presence of alcohol. Defendant was cited for a seatbelt violation, careless driving, failure to dim headlights, improper tag, and DUI 1st offense. Defendant agreed to a breath test, which revealed a BAC of .12%. Defendant was released on bond at approximately 7:30 am on January 1, 2010.

Defendant was convicted of DUI 1st offense in Prentiss County Justice Court. He appealed to circuit court, where he moved to have his DUI dismissed based on an invalid affidavit because the citation was not timely filed. Circuit judge denied the motion and found him guilty. Defendant appealed his conviction.

Defendant argued on appeal (1) whether the State proved that the alleged offense occurred in Prentiss County, and (2) whether the citation conformed to the requirements of the Uniform Traffic Ticket Law in order to be a sworn affidavit.

All citations listed Prentiss County as the county in which the offense occurred. Other evidence, including testimony of the officer—who had been transferred to Prentiss County to work and the fact that the hearing that day was held in Prentiss County also showed Prentiss County to be the proper venue. The night of the arrest defendant traveled southbound on US Hwy. 45 in Prentiss County and was taken to the Prentiss County Jail. The Court held this was sufficient to prove venue in Prentiss County.


Mississippi Supreme Court

As to the officer's failure to timely file the DUI citation, the Court held that did not warrant reversal of the case. Miss. Code Ann. § 63-9-21(6) requires the ticket be filed no later than 5:00 pm the next business day. Here, the filing occurred on January 4, 2010; however, the defendant bonded out of jail approx. 3 hours after his arrest. Thus, the Court found he was not prejudiced by the late filing. Furthermore, the Court held there was no authority for the proposition that a timely filing was jurisdictional.

Affirmed.

Bondegard v. State

No. 2010-KM-01727-COA

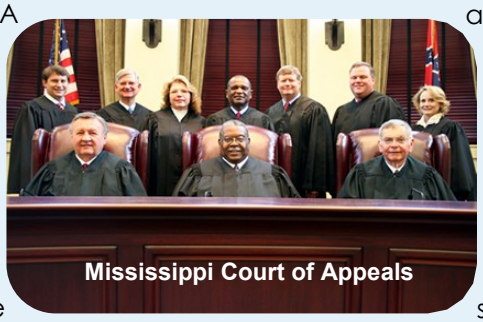
(Miss. Ct. App. Nov. 22, 2011)

On October 14, 2009, an officer was inside a store and saw the defendant enter the store and purchase a 12 pack of beer. The officer noticed defendant smelled of alcohol. Defendant's demeanor changed and he became "extremely nervous and fidgety" upon seeing the officer. Defendant made several phone calls, left his truck parked at the gas pump, and got into the passenger side of a friend's car. After the two left, the officer conducted a traffic stop in a nearby parking lot. The officer then observed the same car drop defendant off at his truck, and defendant pulled away from the store. As defendant drove away, he missed the entrance and drove into a ditch. The officer pursued the defendant. Officer lost site of him, but then found defendant's truck in the friend's driveway. As the officer approached the home, defendant ran into the house. Defendant stated he was home and was not leaving. The officer tried to grab him and the defendant jerked away. The defendant was eventually subdued and placed in handcuffs. Defendant refused to submit to a breath test.

Defendant was convicted of DUI 1st offense in justice court. He appealed to circuit court, which affirmed the conviction. On appeal, defendant argued the officer did not have probable cause to arrest him. Defendant claimed the arrest was illegal because there was no evidence that he was operating his truck on a public road, and that the officer may have had probable cause for an arrest by the smell of alcohol at the gas station, or even when the officer observed his erratic driving, but lacked probable

cause to arrest him at his friend's house.

The Court found that since the defendant failed to raise the "operating" issue at trial, it was procedurally barred. Further, the Court remarked that the defendant's selective recitation of the facts involved a complete omission of everything that happened *after* the defendant's friend drove the defendant back to the store. It was then that the officer saw the defendant drive erratically while leaving the store. A warrantless arrest is lawful if "at the moment the arrest was made, the officers had probable cause to make it—if at the moment the facts and circumstances within their knowledge and of which they had reasonably trustworthy information were sufficient to warrant a prudent man in believing that the petitioner had committed or was committing an offense." *United States v. Johnson*, 445 F.3d 793, 796 (5th Cir. 2006)(quoting *Beck v. Ohio*, 379 U.S. 89,91 (1964).


Mississippi Court of Appeals

Here, the officer clearly articulated facts (smell, nervous, fumbled with credit card, impaired speech, bloodshot eyes, erratic driving) that would cause a reasonably prudent person to believe that the defendant was DUI. The Court held that just because the officer did not arrest the defendant after the 1st encounter did not mean the officer forfeited the right to arrest the defendant for additional events that occurred 15 minutes later. The officer did not lose probable cause to arrest the defendant simply because the officer had to find him. The Court reasoned that if that were the case. "an offender could escape prosecution simply by leaving a law-enforcement officer's sight."

Affirmed.

Reynolds v. City of Water Valley

No. 2010-KM-00900-COA

(Miss. Ct. App. Dec. 6, 2011)

Officer Blair was patrolling around 4:30 am when he noticed the defendant's car stopped approx. six car lengths behind him at a red light. After making a routine security check, the officer again noticed the same car traveling well below the speed limit of 25 mph. The officer observed two males in the car, and the passenger was drinking from a white cup. The passenger pointed at the officer and the defendant slowed to approximately 5-8 mph. The officer followed the defendant and called in the license plate which came back negative for a stolen vehicle. The officer observed the defendant's vehicle turn and head towards the elementary school. The officer decided to stop the vehicle because he believed it was suspicious since it was going towards the school at 4:30 am and he was concerned about previous break-ins.

Once stopped, defendant was observed to have slurred speech, unsteady on his feet, glazed and bloodshot eyes, and smelled of an alcoholic beverage. Defendant was arrested and transported to jail, where the officer attempted to administer the Intoxilyzer. Defendant blew into the machine, but stopped before an accurate sample could be gathered. The Intoxilyzer printed a refusal. Defendant was convicted in municipal court, and appealed to circuit court. Defendant's motions for both a directed verdict and a motion to dismiss on the ground that there were insufficient probable cause for a traffic stop were denied, and the defendant was convicted again.

On appeal, defendant argued the officer lacked probable cause to initiate a traffic stop, stating the officer failed to articulate any illegal activity or traffic violation that gave sufficient probable cause or reasonable suspicion to initiate a traffic stop.

The Court held that the investigatory stop was not based on specific and articulable facts that a crime had occurred or was imminent. Mere hunches or looking suspicious are insufficient to establish reasonable suspicion for an investigatory stop. *Qualls v. State*, 947 So.2d 365, 371 (Miss. Ct. App. 2007). The Court held there was simply no evidence the defendant had committed any criminal offense or was about to engage in criminal activity. Since the officer lacked the proper reasonable suspicion to initiate a *Terry* stop, any evidence found as a result of the stop was considered fruit of the poisonous tree and should have been suppressed.

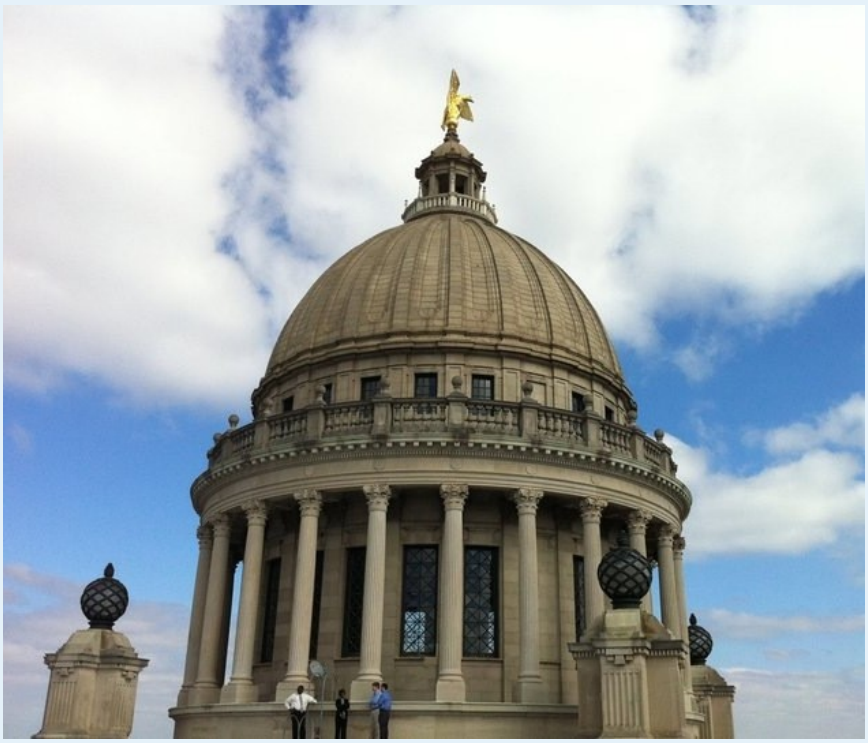
Reversed and Rendered.

NOTE: Judge Carlton dissented, finding the proper standard of review when a suppression motion is not filed is abuse of discretion, not a *de novo* review. "...I find no abuse of discretion in the circuit judge's finding to introduce evidence of the stop and finding that sufficient reasonable suspicion existed in this case supporting Officer Blair's investigatory ***Terry*** stop of Reynolds." She believed Officer Blair's testimony provided sufficient reasonable suspicion that Reynolds was suspected of engaging or suspected of about to be engaged in criminal activity.

MISSISSIPPI LEGISLATIVE UPDATE

Legislative season has been in full swing at the Capital. This legislative session, both the House of Representatives and the Senate introduced numerous bills to combat driving under the influence of alcohol. Several of the bills are discussed below.

Each house has presented a bill on DUI Child Endangerment. The House's provision (HB 681), introduced by Andy Gipson (R – District 77, Rankin, Simpson, Smith Counties), would amend §63-11-30 of the Mississippi Code to create the offense of dui child endangerment for transporting a child under the age of 16 while under the influence of alcohol or other substance. Senate Bill 2590, introduced by Chris McDaniel (R – District 42, Jones County), is very close to the House bill; however, it applies and protects children under the age of 14 and creates a charge for persons who transport children under this age while under the influence of alcohol or other substance.

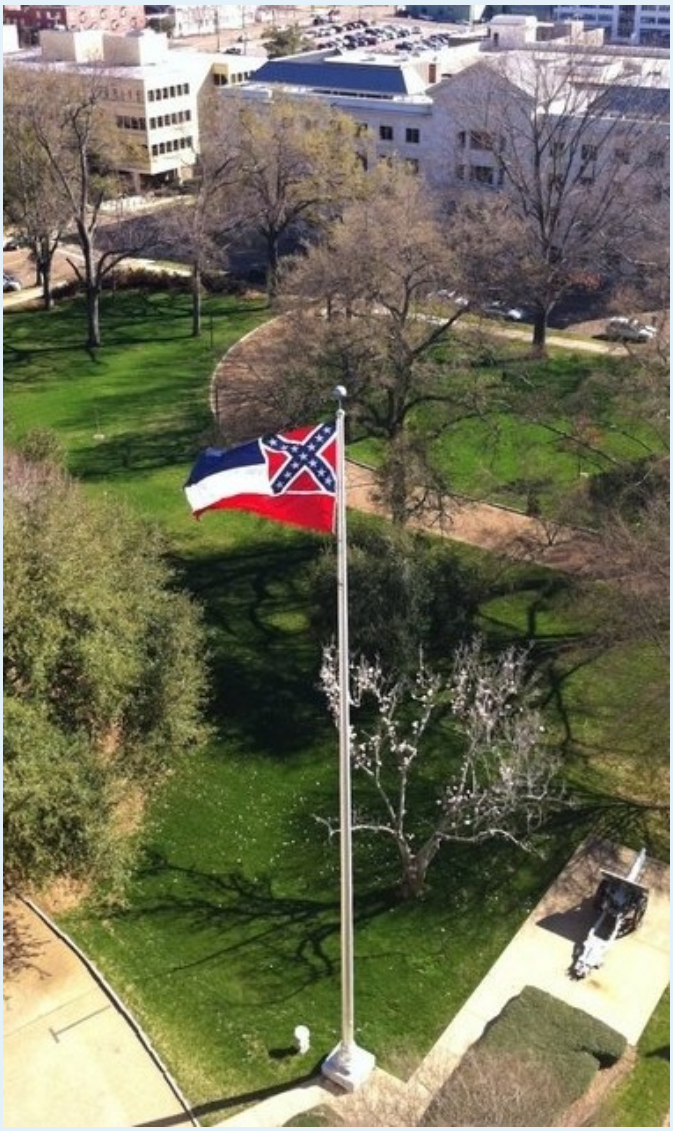


The penalties also closely mirror each other. A first conviction that does not result in death or serious injury of a child will constitute a misdemeanor, a fine of not more than $1,000 fine or imprisonment for not more than 12 months or both. A second conviction that does not result in death or serious injury of a child is also a misdemeanor resulting in a fine of not less than $1,000 fine and not more than $5,000, imprisoned for 1 year or both. A third conviction that does not result in death or serious injury of a child is a felony resulting in a fine of not less than $10,000, not less than 1 year nor more than 5 years imprisonment or both. If a person in violation of this section results in the death or serious injury of a child without regard to whether the offense was a first, second, or third, it will constitute a felony resulting in not less than a $10,000 fine, not less than 5 years imprisonment nor more than 25 years imprisonment.

Another hot topic this session was ignition interlocks. House Bill 586, introduced by Speaker of the House Phillip Gunn, (R – District 56 – Hinds, Madison, Warren, Yazoo Counties), is an act to amend §63-11-30, to provide that persons convicted of DUI will only be allowed to operate a vehicle equipped with an ignition interlock device. The ignition interlock device will not allow a motor vehicle to start when the user registers an alcohol concentration of a certain amount. Regrettably, at the time of publication, this bill had died on the calendar.

Intoxilyzer calibration has been a requirement of Miss. Code Ann. § 63-11-19. This statute was put in place when older models of the Intoxilyz-

er machine required a person to actually perform the calibration. However, the most recent model, the Intoxilyzer 8000, self-calibrates two times every time a breath test is given; thus, making the statute no longer necessary. As such, both the house and senate have introduced bills to remove the crime lab's responsibility to calibrate Intoxilyzers and other such devices. Senate Bill 2257, introduced by Gray Tollison (R – District 9 – Lafayette, Tallahatchie, Yalobusha Counties), is an act to amend §63-11-19, to remove the crime lab's responsibility to calibrate the methods, machines, or devices used in making chemical analysis of a person's breath. The State Crime Lab and Commissioner of Public Safety are authorized to approve techniques or methods, to ascertain the qualification and competence of individuals to conduct a breath or blood analyses and will issue permits which shall be subject to termination or revocation. House Bill 767, introduced by Charles Jim Beckett (R – District 23 – Calhoun, Clay, Oktibbeha, Webster), is an act to amend §63-11-19, to delete the requirement that methods, machines or devices used in chemical analysis be tested and certified periodically. Regrettably, the House bill died early on and the Senate bill died in committee in early April.



Senate Bill 2802, introduced by Senator Chris McDaniel (R – District 42 – Jones County), would allow electronic filing of DUI tickets and House Bill 929, introduced by Andy Gipson (R – District 77, Rankin, Simpson, Smith Counties), is the House version to allow the electronic submission of citations for violation of the Mississippi Implied Consent Law. These bills amend Miss. Code Ann. §63-9-21 to allow for such submission.

House Bill 1156, introduced by Lester Carpenter (R – District 1 – Alcorn, Tishomingo Counties), provides a procedure regarding misdemeanor appearance for crime lab personnel. The bill states that an accused person or the accused person's attorney may request, by notifying the prosecuting attorney, in writing, at least five (5) days before the trial of a misdemeanor criminal offense, that the person who performed the laboratory analysis and/or prepared a blood sample report testify in person at the trial on behalf of the state. If notification was not given, the defendant would have waived his right to object to the introduction of the certificate of analysis. If notification is given to require the testimony, and if the person is convicted or pleads guilty, the accused shall be assessed the full costs of the attendance of the witness, including but not limited to the costs of transportation. This bill was drafted in response to the recent US Supreme Court cases of *Melendez-Diaz* and *Bullcoming*. Unfortunately, this bill also died on the House calendar.

Upcoming Training & Conferences

April 2012

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

Spring Prosecutor's Conference, Biloxi MS

May 2012

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

STORM Conference

Gulfport, SFST Class

McComb, SFST Class

Oxford, SFST Class

SFST = Standardized Field Sobriety Testing
STORM = Sobriety Trained Officers Representing Mississippi

Future Dates:
Week of June 25th, 2012:
MS Municipal League Conference

Jim Hood, Attorney General

Molly Miller
Special Assistant Attorney General
Traffic Safety Resource Prosecutor
550 High Street
P.O. Box 220
Jackson, Mississippi 39205
Phone 601.359.4265 · Fax 601.359.4254
mmill@ago.state.ms.us
www.ago.state.ms.us/divisions/prosecutors