

Electronic Monitoring Data: Evidentiary Standards, Court Admissibility, and the Burden of Proof

By Lisa Kennedy, J.D.*

Editor's Note: The criminal courts engage with offender monitoring technology each and every day in two principal ways. First, courts have the discretion to order a defendant or convicted offender to be monitored as a condition of bail or sentencing—for example, remote alcohol testing and ignition interlock for DUI/DWI offenses, GPS monitoring for domestic violence restraining orders or as a condition of release into the community for a probationer or parolee. These orders may be imposed at the discretion of a judge, or they may be enabled and in some cases mandated by statute. Generally, court-ordered monitoring is intended to prevent re-offending; the presence of a device that records an offender's activities or whereabouts and reports back to a supervising agency is often sufficient to discourage an offender from driving drunk or getting too close to a person or place a court has ruled off limits. When an offender does re-offend while under electronic monitoring, the device records the data and record of the violation is sent to the supervising authority. Such violations usually trigger penalties, up to and including revocation of probation or parole, and incarceration. When this occurs, the courts engage with monitoring technology a second time—no longer as a tool of pre-trial release and sentencing, but as part of an evidentiary record. This article examines this second type of legal encounter—what happens when the transdermal alcohol measurements from a remote alcohol monitoring device is challenged by a defense attorney whose client faces a jail term?

When an individual is accused of violating the terms of his or her monitoring—no matter the type of monitoring involved—the State has an obligation to address the noncompliance in the pursuit of public safety and justice. Clearly the defendant and his attorney are motivated to refute the allegations in an effort to

prevent further sanctions. In the event of a contested hearing, both parties have the right to present evidence to a court, but that right is not absolute, and not all evidence is admissible. To understand this legal process, it is helpful to first conduct an overview of the burden of proof involved in these instances, followed by a discussion of the key cases and standards that have shaped the admissibility of evidence. Examples will include cases specifically related to

absolute and the rules of evidence are usually relaxed. As a result, evidence that is traditionally rejected by the courts during a criminal trial, such as hearsay testimony and unauthenticated documents, may be admissible in probation revocation proceedings. Therefore, when it comes to proving violations of electronic monitoring conditions, the state's witnesses may present evidence of the violation through reports, affidavits, or other materials. Ultimately, it is for the court to

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SCRAM Continuous Alcohol Monitoring® (or SCRAM CAM®).

Burden of Proof

Proceedings to revoke probation are generally considered to be informal or summary rather than a criminal prosecution or trial. Therefore, while the burden of proof in criminal trials requires “proof beyond a reasonable doubt,” that same high standard does not apply to probation revocation proceedings. Proof beyond a reasonable doubt means that there is no other reasonable explanation that can be gleaned from the evidence. However, when a probationer is accused of violating the terms of his probation, the state usually has the burden of proving the violation by a different standard—a preponderance of evidence. This simply means proving that it is more likely than not that the violation occurred, or 51% or greater likelihood of validity of the accusation. Furthermore, while probationers have the right to present evidence and cross-examine witnesses, that right is not

decide if the evidence present by both prosecution and probationer is relevant and reliable enough to be admissible, and then give it the proper weight in reaching a decision.

In criminal cases, prior to trial the judge must decide whether to detain a defendant, release a defendant on personal recognizance or bond, or release a defendant on a condition or combination of conditions. While state and federal statutes dictate many of the conditions of release, electronic monitoring has become commonplace to enforce restrictions on individual movement, contact with others, and prohibitions on drugs and alcohol. It's not even unusual for courts to impose multiple forms of electronic monitoring simultaneously during pre-trial release, depending on the nature of the crime. Any alleged violations of these conditions will require the prosecution to present evidence of the violation to the court. As with probation violations, most jurisdictions require that

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prosecutors prove these violations by a preponderance of the evidence. However, given that an individual's liberty is at stake without having been convicted of a crime, some jurisdictions require that proof meet a higher burden, the "clear and convincing standard." The clear and convincing standard means that the evidence is substantially more probable to be true than untrue. It's a higher standard to meet than preponderance of the evidence but less rigorous than proof beyond a reasonable doubt. Again,

device, reports documenting non-compliance are usually accepted by the court as business records, an exception to the hearsay rule. Witness testimony may include a statement of how SCRAM CAM technology works, indication that it was working properly at the time of the alleged events, and a basic interpretation of the data upon which the conclusion was made. While it is wholly unnecessary for a toxicologist, engineer, or other expert to testify to this type of data, it is optimal that the witness have sufficient knowledge of the SCRAM CAM technology and confirmation process to bolster

proffering party seeks to establish "general acceptance" through the testimony of an expert witness who can articulate that the scientific method behind the evidence is valid and that it is widely accepted by the relevant scientific community. Additionally, the presentation of peer reviewed published studies supporting the particular science or technology will strengthen the notion of "general acceptance." Although still used in some states, the Frye standard has been abandoned by many states and the federal courts in favor of the Daubert standard.

Daubert v. Merrell Dow Pharmaceuticals Inc., 509 U.S. 579 (1993): The Daubert standard is currently used in federal courts and the majority of state courts, although not all state courts have adopted it in its pure form. Under Daubert's more flexible approach, the "general acceptance" criteria mandated by Frye is one of several factors the court may consider to determine admissibility. The four other factors include (1) whether the theory or technique in question can be and has been tested; (2) whether it has been subjected to peer review and publication; (3) its known or potential error rate; (4) the existence and maintenance of standards controlling its operation. None of these factors by itself is dispositive and not all factors need to be present for a court to find the evidence reliable and admissible.

Offender monitoring tools like GPS and breathalyzers faced these admissibility challenges when they were introduced to the market. However, with the pervasive use of these technologies in the twenty-first century, we generally accept that as a class they are reliable technologies. That does not mean that a particular brand or unit, or even the monitoring results for a particular offender, are immune to challenges; in fact, challenges are expected when a defendant's liberty is at stake. Like alternative offender monitoring technology, continuous alcohol monitoring devices like SCRAM CAM faced Frye and Daubert challenges early on, but after almost two decades of use worldwide, these challenges have also subsided.

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during a contested hearing on the violation, the rules of evidence are relaxed but the evidence must still be reliable to be admissible, and the court may determine whether any hearsay evidence is (substantially) reliable and then give that evidence the appropriate weight in reaching a determination as to whether the violation has been proven.

Whether as a condition of pre-trial release or probation, a small number of offenders monitored by SCRAM CAM end up in court responding to allegations of alcohol consumption or device tampering. When this occurs, the state will need to establish that the defendant has consumed alcohol or tampered with the device by either burden of proof discussed above. For many courts with a history of SCRAM CAM monitoring, a detailed report documenting the alleged violation may serve as a persuasive indicium of reliability that the violation occurred. However, when witness testimony is required, a representative from the local monitoring company or probation department will usually be called by the state to appear in court to explain the data generated from the device. Although the data is analyzed and interpreted by the manufacturer of the SCRAM CAM

the reliability of the report and conclusions in order to ensure admissibility and proper weight is given to the evidence.

Frye and Daubert Standards

In the case of offender monitoring technology, the introduction of novel technology—such as when SCRAM Continuous Alcohol Monitoring was first introduced—compels specific legal scrutiny to ascertain reliability. Typically, this kind of new technology will be challenged by one party, and it is incumbent upon trial courts to prevent the admission of unreliable or "junk science" from being heard by the judge or jury. When courts are tasked with determining the admissibility of novel scientific evidence (or technology), a specific standard of review is applied—the *Frye* standard or the *Daubert* standard, depending on the jurisdiction.

Frye v. United States, 293 F. 1013 (D.C. Cir. 1923): A court applying the Frye standard must determine whether or not the method by which the evidence was obtained was generally accepted by experts in the particular field in which it belongs. While this standard has received criticism for being somewhat vague, the

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Court Admissibility

SCRAM Continuous Alcohol Monitoring is often referred to as “a breathalyzer for the ankle.” Like many preliminary breath test devices and evidential breathalyzers, the SCRAM CAM bracelet measures ingested alcohol using an electrochemical fuel cell that is stationed inside the device. Whereas a breathalyzer tests a sample of the user’s breath for alcohol, the SCRAM CAM device is worn on the ankle and tests the insensible perspiration coming from the wearer’s skin. Insensible perspiration is the water vapor that escapes through the skin throughout the day, and when the water in the skin contains alcohol, the insensible perspiration above the skin also contains alcohol vapor. In either case, if alcohol is present in the sample, the fuel cell’s signal output will increase in proportion to the amount of alcohol and a Breath Alcohol Concentration (BrAC) and Transdermal Alcohol Concentration (TAC) are calculated, respectively.

Nationwide, SCRAM Continuous Alcohol Monitoring has been adopted as an offender management tool that is typically used as a condition of pre-trial release or probation. In addition to DUI offenders, domestic violence offenders and others with alcohol-related offenses may find themselves court-ordered to SCRAM CAM. Defense attorneys may even find themselves recommending SCRAM CAM to their clients before trial, in order to provide evidence of their sobriety to the court, thus encouraging a more favorable outcome when compliance can be demonstrated.

Soon after SCRAM CAM went to market in 2003 and courts began to adopt it as an offender management tool, the first challenge to the admissibility of SCRAM CAM arose in a bond revocation hearing in Michigan in 2004 (*State of Michigan v. Lisa Glaza, 2004 Case No 04-003877-FY*). This proved to be SCRAM System’s first and only unfavorable *Daubert* ruling. Given the absence of peer-reviewed research at the time, the court was unable to conclude that evidence from the SCRAM CAM device

was sufficiently reliable to consider at the hearing. Since then, the device has been the subject of over 30 peer reviewed studies and ongoing research regarding SCRAM CAM’s utility in many facets of the criminal justice system, including reducing DUI recidivism and clinical treatment.

Almost five years after *Glaza*, a South Dakota probationer subject to SCRAM CAM monitoring challenged the admissibility of the state’s expert testimony and the information relayed from the device (*South Dakota v. Neal J. Lemler, 774N.W.2d272, 2009 SD 86 S.D, 2009*). The defendant denied consuming alcohol, indicating that the graphite lubricant and

publication, and potential error rates (under the evidence presented) are lower than some other accepted methods of measuring alcohol consumption.” Therefore, the court was unpersuaded by defendant’s argument that the SCRAM CAM device lacked the scientific certainty necessary to satisfy *Daubert*. Thus, the evidence was admissible and the court held that the lower court did not err in concluding that Lemler violated his probation.

That same year, the Appellate Court of Indiana reviewed a probationer’s challenge to the results of two alcohol-positive SCRAM CAM events (*Jennifer L. Mogg v. State of Indiana, 918 N.E.2d750,*

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starter fluid he used in the course of his work caused the alcohol detections. The defendant’s expert witness, Dr. Michael P. Hlastala, challenged the positive SCRAM CAM results, indicating that the device’s fuel cell is not specific to ethanol and therefore non-consumable alcohols (interferants) can produce alcohol curves that can be confused for consumed alcohol (ethanol). However, Dr. Hlastala did not dispute the science of transdermal alcohol transport and confirmed that “the SCRAM device [fuel cell technology] can measure whether there is alcohol in the person’s system.” Pointing to peer reviewed research, internal testing, and the conservative confirmation criteria for alcohol detections, SCRAM CAM inventor Jeffrey Hawthorne testified for the State, and established that consumed alcohol curves are in fact distinguishable from non-consumable alcohol curves.

Reviewing the admissibility of the SCRAM CAM data under the *Daubert* standard, the Supreme Court of South Dakota acknowledged that, “there was evidence that the underlying scientific process was widely accepted, the theories and techniques in question either had been or could be tested, the process has been subjected to some review and

Ind.App.2009). The defendant had been court-ordered to abstain from alcohol consumption as a condition of her probation after pleading guilty to operating a vehicle while intoxicated and was placed on the SCRAM CAM device to monitor her for alcohol consumption. At the probation revocation hearing, the defendant denied drinking, but did not present any expert testimony to rebut the state’s evidence. Instead, she relied on an affidavit of a friend who denied that defendant drank alcohol, and an article from a 2006 *Michigan Bar Journal* authored by Michigan trial judge Dennis N. Powers, who had presided over the *Glaza* case, and his law clerk. The trial court found the defendant’s argument unpersuasive, and her probation was revoked when the trial court found that she consumed alcohol based on data collected from the SCRAM CAM device.

The appellate court considered testimony from the State’s witness, inventor of the SCRAM CAM device, Jeffrey Hawthorne. Relying on the factors set forth in *Daubert*, the appellate court affirmed the lower court’s decision finding Hawthorne to be an expert witness, his

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testimony admissible, and the SCRAM CAM results reliable under the scrutiny of Daubert. Specifically, the Court pointed to the fact that SCRAM CAM had been the subject of three studies, one internal study by the SCRAM CAM manufacturer, and two by independent institutions. The two independent studies were peer reviewed, and all three studies established that SCRAM CAM has been tested and error rates were identified. Therefore, the Court confirmed the evidence pertaining to SCRAM CAM met the Daubert standard and the trial courts' decision to revoke the defendant's probation pursuant to a confirmed violation.

Subsequent Frye and Daubert challenges to SCRAM CAM evidence have yielded the same outcome as *Lemler* and *Mogg*. In fact, since *Glaza*, the SCRAM CAM device has been the subject of over 35 Frye and Daubert rulings, and in every case the courts have upheld the reliability of the SCRAM CAM device and the admissibility of the associated data and results.

Conclusion

In the two decades since its launch, courts and law enforcement have

embraced SCRAM CAM for its essential role in criminal justice systems across all 50 United States and in 7 countries worldwide. Furthermore, the technology has been proven and upheld in court cases across the United States. With a long, unbroken string of favorable court decisions, challenges to the validity of SCRAM CAM have less and less likelihood of success. This is the typical pattern for technological and forensic innovations: every new advance, from fingerprinting to DNA traces to GPS location tracks, will be disputed by one side or the other, and found to be reliable or not. Once the science and engineering underlying a technology is accepted by the courts, defense attorneys can no longer argue its validity per se (although fact-based challenges on the basis of improper application, error, or contamination remain available).

The high costs of incarceration, prison overcrowding, and a political push for criminal justice reform have all contributed toward a policy shift in many jurisdictions. Communities across the country are implementing alternatives to incarceration and reserving imprisonment for the most dangerous criminals. Many jurisdictions incorporate electronic monitoring into their work release programs, alternative sentencing options,

and intermediate sanctions in lieu of incarceration.

As new technologies emerge, challenges from probationers and other offenders will also inevitably arise. When the stakes are so high—up to and including potential jail time—offenders' attorneys will continue to challenge monitoring devices of all kinds in an effort to defend a client. Undoubtedly, electronic monitoring options like SCRAM CAM will continue to prove essential as we shift towards bail reform platforms that encourage alternatives to incarceration.

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