[1] Georgia Court of Appeals

[2] A98A2475.

[3] 236 Ga.App. 282, 511 S.E.2d 625, 1999.GA.42178

[4] February 05, 1999

[5] IZERv.THE STATE.

[6] Johnson, C. J., Smith and Barnes, JJ.

[7] The opinion of the court was delivered by: Johnson, Chief Judge.

[8] In the Court of Appeals of Georgia

[9] JO-116C

[10] After a bench trial, David Izer was found guilty of speeding. He appeals from the conviction, claiming that evidence obtained from a laser speed detection device should not have been admitted because the state failed to introduce any evidence establishing the reliability of laser-based speed measuring techniques. We agree.

[11] "In Harper v. State, 249 Ga. 519, 525 (292 SE2d 389) (1982), the Supreme Court held that the test for admissibility of novel scientific evidence is whether the procedure or technique has reached a scientific stage of verifiable certainty, or . . . whether the procedure rests on the laws of nature. The court went on to say that once a procedure has been recognized in a substantial number of courts, a trial Judge may judicially notice, without receiving evidence, that the procedure has been established with verifiable certainty, or that it rests upon the laws of nature." (Citations and punctuation omitted.) Hubbard v. State, 207 Ga. App. 703, 704 (429 SE2d 123) (1993). "The trial court may make this determination from evidence presented to it at trial by the parties; in this regard expert testimony may be of value. Or the trial court may base its determination on exhibits, treatises or the rationale of cases in other jurisdictions." (Citations and punctuation omitted.) Smith v. State, 250 Ga. 438, 440 (4) (298 SE2d 482) (1983); Manley v. State, 206 Ga. App. 281 (424 SE2d 818) (1992).

[12] At trial, the arresting officer testified that he was certified to operate the device, that the particular unit was approved by the Department of Public Safety, and that the device had been tested and was working properly on the date in question. However, the state did not introduce any expert testimony to establish that the technique of using laser-based devices to measure vehicle speed has reached a scientific stage of verifiable certainty. See generally Caldwell v. State, 260 Ga. 278, 286 (1) (b) (393 SE2d 436) (1990). Nor did the state bring to the trial court's attention any exhibits, treatises or cases from other jurisdictions establishing the reliability of the technique.

[13] Of course, as noted above, once a procedure or technology has been recognized in a substantial number of courts, or has been utilized for a significant period of time and expert testimony has been received thereon in case after case, a trial court may take judicial notice of the device's reliability and acceptance. See Hawkins v. State, 223 Ga. App. 34, 36 (1) (476 SE2d 803) (1996). The trial court does not have to keep reinventing the wheel; a once novel technology can and does become commonplace. Id.

[14] Surprisingly, we have not yet reached that stage regarding laser technology. While the use of radar as a technique for measuring speed and its admissibility as scientific evidence is widely accepted in Georgia and other states, see Discussion in Lattarulo v. State, 261 Ga. 124, 126 (3) (401 SE2d 516) (1991), the use and admissibility of laser evidence has apparently not been explored by the appellate courts of this state. The state has not shown the two techniques to be the same.

[15] Only a few courts in other jurisdictions have published opinions discussing the issue of the scientific acceptability or reliability of laser-based speed detection devices. See In the Matter of the Admissibility of Motor Vehicle Speed Readings Produced by the LTI Marksman 20-20 Laser Speed Detection System, 314 N.J.Super. 233 (714 A.2d 381) (1998) (use of lasers to calculate vehicle speed is generally accepted in the scientific community, is valid and reasonably reliable, and should be received as evidence of speed; no expert testimony is required); People v. Clemens, 642 N.Y.S.2d 760 (168 Misc.2d 56) (1995) (scientific expert proved the reliability and acceptance within scientific community of laser gun as accurate means of measuring speed); People v. Depass, 629 N.Y.S.2d 367 (165 Misc.2d 217) (1995) (use of laser device was based upon well-accepted scientific principles and could be accepted in court as accurate method of measuring vehicle speed; expert testimony was also presented); Goldstein v. State, 664 A.2d 375 (339 Md. 563) (1995) (laser evidence admissible where statute so provides or state proves technique is generally accepted in scientific community; parties stipulated that the use of lasers to measure speed was generally accepted in scientific community and trial court made extensive investigation into the reliability of laser speed measurements). Although these courts have accepted laser evidence, in some cases only with expert testimony, it cannot be said that a substantial number of courts have recognized the technique. See generally Hawkins, supra. Considering the dearth of authority showing the scientific certainty of the technique, as well as the absence of expert testimony on the subject, the trial court erred in admitting the evidence. See generally Gentry v. State, 213 Ga. App. 24, 25 (2) (443 SE2d 667) (1994); compare Allison v. State, 179 Ga. App. 303, 306-308 (1) (346 SE2d 380) (1986), rev'd on other grounds, 256 Ga. 851 (353 SE2d 805) (1987).

[16] The state argues that laser evidence must be admitted because the legislature has included in its definition of acceptable methods for detecting speed any speed-measuring device based upon "the speed timing principle of laser." See OCGA § 40-14-1 (4). That the legislature included laser-based devices in the definition of "[s]peed detection device[s]" does not mean that evidence obtained from laser-based devices is not, at the same time, "novel scientific evidence." Novel scientific evidence is not admissible in court until it has reached a scientific stage of verifiable certainty. See Gentry, supra. Indeed, the admissibility provisions of the statute at issue concern whether a particular device is in good working order, which officers may use the device, and under what circumstances it may be used. The statute does not concern the threshold issue of whether the novel scientific principles upon which the device is based are verifiably certain or rest upon the laws of nature. See OCGA § 40-14-1 (4); § 40-14-4; § 40-14-5; § 40-14-6.

[17] In Georgia, statutes are to be construed in harmony with existing law; their meaning and effect will be determined in connection with, among other things, the common law and the decisions of the courts. Hillman v. State, 232 Ga. App. 741, 743 (1) (b) (SE2d) (1998). We will not presume that the legislature intended to effect a greater change in existing law than is clearly apparent. Id. We hold that the inclusion of laser-based devices in the definition of "[s]peed detection device[s]," without more, does not vitiate the state's burden of satisfying the requirements applicable to "novel scientific evidence."

[18] The state's reliance on Wiggins v. State, 249 Ga. 302 (290 SE2d 427) (1982), is misplaced. The challenge there was to the admission of radar evidence on the grounds of hearsay and lack of authentication of documents. Id. at 304-305 (2) (a), (b). This case involves laser, not radar; radar has long been accepted as reliable. See Lattarulo, supra. Moreover, this case does not concern hearsay or authenticity issues but, as noted above, the reliability and acceptance of the scientific principles involved. The trial court erred in admitting the readings obtained from the lased-based speed detection device. See Hubbard, supra. That being the only evidence supporting Izer's conviction, the judgment of conviction must be reversed.

[19] Judgment reversed. Smith and Barnes, JJ., concur.