

SUPERIOR COURT OF ARIZONA
MARICOPA COUNTY

LC2012-111593-001 DT

02/26/2013

THE HON. CRANE MCCLENNEN

CLERK OF THE COURT
J. Eaton
Deputy

STATE OF ARIZONA

ANDREA L KEVER

v.

RICHARD DANIEL JOHNSON (001)

RICHARD D COFFINGER

DESERT RIDGE JUSTICE COURT
REMAND DESK-LCA-CCC

RECORD APPEAL RULING / REMAND

Lower Court Case Number TR 2012–111593.

Defendant-Appellant Richard Daniel Johnson (Defendant) was convicted in the Desert Ridge Justice Court of exceeding 85 m.p.h. Defendant contends the trial court erred in admitting testimony about his speed based on LIDAR and VASCAR readings. For the following reasons, this Court affirms the judgment and sentence imposed.

I. FACTUAL BACKGROUND.

On February 14, 2012, Defendant was cited for exceeding 85 m.p.h., A.R.S. § 28–701.02(A)(3). At the trial in this matter, Officer Chad Johnson testified he had been employed by the Arizona Department of Public Safety for 11½ years, and was certified in VASCAR (Visual Average Speed Computer and Recorder) and LIDAR (Light Detection and Ranging). (R.T. of Jun. 13, 2012, at 7–8.) He was on duty on February 14, 2012, and was on the 64th Street overpass over State Route 101 at about 12:45 when he saw a vehicle traveling at a high rate of speed. (*Id.* at 8–10.) He used his LIDAR unit and determined the vehicle’s speed was 90 miles per hour. (*Id.* at 10.) He drove onto the freeway and used his VASCAR unit. (*Id.*) Defendant’s attorney then made the following objection:

[Defendant’s attorney]: Excuse me, Your Honor. I’m going to object to the reading without foundation as to the operational condition of the instrument as well as its general acceptance under 702, Arizona Rules of Evidence.

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(R.T. of Jun. 13, 2012, at 10.) The trial court sustained that objection, and the prosecutor then questioned Officer Johnson about the calibration and working condition of the VASCAR unit. (*Id.* at 10–11.) Defendant’s attorney again objected, contending the State had not established the technology for VASCAR and LIDAR was generally accepted in the scientific community. (*Id.* at 11–13.) The trial court allowed the State to present testimony on those issues. (*Id.* at 12, 13.) Officer Johnson then described his training on, and the use of, the VASCAR unit. (*Id.* at 13–16.) Based on that testimony, the trial court found the technology for VASCAR was generally accepted in the scientific community. (*Id.* at 17, 20.) Officer Johnson then testified he measured the speed of the vehicle over a distance of .56 miles, the speed reading on the VASCAR unit was 92.1 miles per hour, and the posted speed limit was 65 miles per hour. (*Id.* at 20.)

On cross-examination and re-direct, Officer Johnson again discussed the use of the VASCAR and LIDAR units. (R.T. of Jun. 13, 2012, at 21–25, 26–27.) The trial court then asked its own questions about these units. (*Id.* at 27–29.)

Defendant then testified and stated he told Officer Johnson he did not deserve a ticket because he was speeding up to get around another vehicle. (R.T. of Jun. 13, 2012, at 31–32.) After hearing arguments from the attorneys, the trial court found Defendant guilty of the charge. (*Id.* at 37–38.) The trial court then imposed sentence. (*Id.* at 38–39.) On that same day, Defendant filed a timely notice of appeal. This Court has jurisdiction pursuant to ARIZONA CONSTITUTION Art. 6, § 16, and A.R.S. § 12–124(A).

II. ISSUE: DID THE TRIAL COURT ABUSE ITS DISCRETION IN ACCEPTING TESTIMONY BASED
ON READINGS FROM THE VASCAR AND LIDAR UNITS.

Defendant contends the trial court erred in finding the technology for VASCAR and LIDAR was generally accepted in the scientific community, and thus abused its discretion in accepting testimony based on readings from the VASCAR and LIDAR units.

A. *The VASCAR unit.*

In determining whether a particular scientific theory is generally accepted in the scientific community, this Court will look at whether other courts have allowed such testimony. A Westlaw search of Arizona cases for “VASCAR” produced only one case, a memorandum decision in *State v. Zetina*, 2009 WL 4726599 (Ariz. Ct. App., Dec. 10, 2009) (mem.). In that case, an officer had used a VASCAR unit to determine the defendant’s vehicle was traveling at a speed that placed it within ½ second of the vehicle ahead of it, so he stopped the vehicle. *Zetina* at ¶ 3. The court held that distance between vehicles gave the officer reasonable suspicion to stop the defendant’s vehicle. *Zetina* at ¶¶ 9–10. The case never addressed the scientific reliability of the VASCAR unit; and even if the court had held VASCAR technology was generally accepted in the scientific community, this Court could not cite that case as authority because it was only a memorandum decision. This Court cites *Zetina* only to show the trial court in that case allowed testimony based on VASCAR technology.

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Opinions from other jurisdictions have addressed whether VASCAR technology was generally accepted in the scientific community. In *People v. Persons*, 60 Misc. 2d 803, 303 N.Y.S. 728 (Ct. Sp. Sess. 1969), the court stated it was the first test case in New York dealing with the accuracy and reliability of VASCAR. It discussed how the machine worked: The unit is attached to the vehicle's odometer cable, and when the distance switch is activated, it records the distance until the switch is turned off. Time is measured once the time switch is activated until that switch is turned off. A computer then divides the distance by the time and gives a reading in miles-per-hour. Based on that, the court found "the machine is an accurate and proper instrument for detecting speed violations on our highways if properly tested and used." 303 N.Y.S. at 730. *But see People v. Leatherbarrow*, 69 Misc. 2d 563, 330 N.Y.S. 676 (Cty. Ct. 1972) (although VASCAR was "a relatively simple and undoubtedly accurate mechanism for determining vehicular speed," court reversed conviction because state presented no evidence of operation and accuracy of unit).

In *State v. Schmiede*, 118 N.J. Super. 576, 289 A.2d 281 (Cty. Ct. 1972), the court noted VASCAR was first used in Indiana in 1966, and as of 1972, there were 6,500 units in use throughout the United States. The court held as follows:

. . . [T]his court is of the opinion that the Vascar device is essentially a simple computer type calculator which scientifically measures speed through the measurement of time and distance based on the formula of speed equals distance divided by time. Its accuracy is qualified only by its proper calibration, the proper training of an operator and the proper operation in the particular case.

289 A.2d at 283. Following that case, the court in *State v. Finkle*, 128 N.J. Super. 199, 319 A.2d 733 (App. Div. 1974), noted VASCAR was invented prior to 1960 and was used by 43 states as of 1971. Based on the authorities presented, the court held courts in future cases should take judicial notice of the scientific accuracy of VASCAR. 319 A.2d at 737; *accord, State v. Salup*, 128 N.J. Super. 209, 319 A.2d 739, 740 (App. Div. 1974); *see also State v. Kalafat*, 134 N.J. Super. 297, 340 A.2d 671 (App. Div. 1975).

In *People v. Johnson*, 29 Cal. App. 3d Supp. 1, 105 Cal. Rptr. 212 (App. Dep. 1972), the court discussed how VASCAR merely measured a distance and a time, and then a computer calculated speed by dividing distance by time. The court held, however, testimony based on a VASCAR measurement was precluded by California's speed trap law. 105 Cal. Rptr. at 216. In *State v. Costarella*, 107 Wis. 2d 746, 322 N.W.2d 699 (Ct. App. 1982) (mem.), the court held:

This court holds that VASCAR is similarly entitled to a prima facie presumption of accuracy. The principle underlying VASCAR is no more complex than the use of stopwatch measurements and calculations. It is not necessary for the prosecutor to introduce evidence of the scientific principles underlying VASCAR in every case. Instead, the VASCAR device is presumed to be an accurate device for measuring and calculating speed. The defendant may seek to attack the accuracy of VASCAR or its accuracy as it was employed in the particular case. Such an attack goes to the weight, not the admissibility, of the VASCAR results.

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322 N.W.2d 699 at *3. In *Commonwealth v. Muldoon*, 2 Pa. D. & C. 4th 244 (Pa. Ct. Com. Pl. 1989), the court noted the Pennsylvania Department of Transportation had classified the VASCAR-Plus device as an authorized device for measuring speed, and declined to impose a requirement that an officer follow a vehicle for any specified distance when using the VASCAR-Plus device to determine the speed of a vehicle. 2 Pa. D. & C. 4th at 247.

Based on the above authorities, this Court concludes a VASCAR unit does not rely on any new or novel scientific theory, and instead merely measures a distance, as does any odometer in a vehicle, and measures time, as does any stopwatch, and divides the distance by the time, as would any pocket calculator. As such, the trial court did not abuse its discretion in admitting the testimony of Officer Johnson of Defendant's speed, based on his use of the VASCAR unit.

B. The LIDAR unit.

Defendant contends the State failed to provide evidence to show the use of LIDAR technology to measure speed was generally accepted in the scientific community. In September 2008, NASA used LIDAR (Light Detection and Ranging) technology on its Phoenix Mars Lander to detect conditions on the Planet Mars. WIKIPEDIA (PHYSICS AND ASTRONOMY), <http://en.wikipedia.org/wiki/LIDAR>. It thus appears LIDAR technology is generally accepted in the scientific community of NASA scientists. In addition, other states have accepted testimony and results from LIDAR technology. *Van Nort v. State*, 250 Ga. App. 7, 7–8, 550 S.E.2d 111, 112–13 (2001); *State v. Stoa*, 112 Hawaii 260, 265–68, 145 P.3d 803, 808–11 (Ct. App. 2006); *State v. Williamson*, 144 Idaho 597, 599–600, 166 P.3d 387, 389–90 (Ct. App. 2007); *People v. Mann*, 397 Ill. App. 3d 767, 771–72, 922 N.E.2d 533, 537–38 (2010); *Goldstein v. State*, 339 Md. 563, 576–77, 664 A.2d 375, 381 (Ct. App. 1995); *State v. Ali*, 679 N.W.2d 359, 364 (Minn. Ct. App. 2004); *State v. Abeskaron*, 326 N.J. Super 110, 118, 740 A.2d 690, 694 (App. Div. 1999); *In re LTI Marksman 20–20*, 314 N.J. Super 233, 252, 714 A.2d 381, 391 (1998); *People v. Deep*, 12 Misc. 3d 1137, 1139, 821 N.Y.S.2d 381, 383 (Ithaca City Ct. 2006); *State v. Thompson*, 2012 WL 1364996, *1 (Ohio Mun. Ct. Apr. 11, 2012); *State v. Jaffe*, 244 Ore. App. 453, 454, 258 P.3d 1293, 1293 (2011); *State v. de Macedo Soares*, 26 A.3d 37, 39–40 (Vt. 2011); *Jury v. State Dept. Lic.*, 114 Wash. App. 726, 735–37, 60 P.3d 615, 619 (2002). It thus appears LIDAR technology is generally accepted in the scientific community and that courts of other jurisdictions have accepted LIDAR technology as sufficiently reliable for the results to be admitted in court. As such, the trial court did not abuse its discretion in admitting the testimony of Officer Johnson of Defendant's speed, based on his use of the LIDAR unit.

III. CONCLUSION.

Based on the foregoing, this Court concludes the trial court did not abuse its discretion in admitting the testimony of Officer Johnson of Defendant's speed, based on his use of the LIDAR and VASCAR units.

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IT IS THEREFORE ORDERED affirming the judgment and sentence of the Desert Ridge Justice Court.

IT IS FURTHER ORDERED remanding this matter to the Desert Ridge Justice Court for all further appropriate proceedings.

IT IS FURTHER ORDERED signing this minute entry as a formal Order of the Court.

/s/ Crane McClennen

THE HON. CRANE MCCLENNEN
JUDGE OF THE SUPERIOR COURT

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