DATE FILED: August 12, 2018 2:26 PM
CASE NUMBER: 2016CR7798

DISTRICT COURT CITY & COUNTY OF DENVER, COLORADO 1437 Bannock Street Denver, Colorado 80202	
THE PEOPLE OF THE STATE OF COLORADO Plaintiff v. **MAKHAIL PURPERA** Defendant	▲ **COURT USE ONLY** ▲ Case Number: **2016CR7798** Courtroom: 4H

RULINGS ON MOTIONS

THIS MATTER comes before the Court on several motions filed by the Defendant on June 29, 2018, August 8, 2018, and August 9, 2018. The Court, having reviewed the related pleadings, having considered the testimony, evidence, and argument presented at hearings on August 6 and 9, 2018, and having reviewed its file and relevant case law, finds and rules as follows:

The parties are proceeding to trial within a few days, and it is important that a ruling on the issues raised at the recent hearing enters so that the parties can prepare for trial. Accordingly, as discussed following the hearing, this is an expedited ruling that is less formal and, in some areas less thorough, than most written rulings would be.

Motion to Preclude Proposed Expert Testimony, or in the Alternative to Conduct a *Shreck* Hearing Relating to Prosecution Witness Charles Reno [D-10]

The standard for admitting scientific evidence in Colorado is set forth by *People v. Shreck*, 22 P.3d 68 (Colo. 2001). More specifically, pursuant to *Shreck*, the determination whether to admit such evidence is governed by CRE 702 and 403. *Id.* at 77. The focus of the

inquiry under CRE 702 is whether the evidence is reliable and relevant. *Id.* In making that determination, a court should consider whether the scientific principles are reasonably reliable, and whether the witness testifying about them is qualified to opine on such matters. *Id.* In determining whether the evidence is relevant, a court should consider whether the testimony would be useful to the jury. *Id.*

Ultimately, the methodology used by the People's firearms comparison expert, Charles Reno, is found to be reliable. Mr. Reno discussed not only his own proficiency in matching bullets and cartridges to particular firearms but also a controlled study in which multiple examiners conducted comparisons of hundreds of cartridges with an exceptionally low error rate. Importantly, in that study, almost all the errors were attributable to five particular examiners. Although the defense argues that the level of expertise and experience of those five examiners is unknown, the reasonable conclusion to be drawn from the circumstantial evidence is that those particular examiners were less skilled and less qualified than the examiners who were virtually flawless in their ability to match cartridges to particular firearms. Therefore, the broader conclusion to be drawn from the study is that sufficiently skilled examiners can match fired bullets and spent cartridges with a high degree of accuracy. In turn, this indicates that the methodology, when employed by a sufficiently skilled examiner, is very reliable. Even the 2016 report by the President's Counsel of Advisors on Science and Technology (the "PCAST Report") relied upon by the defense[1] references a study in which there were only two false positive identifications after over 10,000 comparisons. In fact, the most negative study referenced by the

[1] For the reasons discussed below, to the extent the PCAST report is considered, it is given limited weight in certain areas.

PCAST Report involved 22 false positive identifications after almost 2,200 comparisons. Although this is just over a 1% error rate, "reasonably reliable" is not synonymous with "flawless" or "without error."

Since the methodology, when employed by a sufficiently skilled examiner, is reasonably reliable, the next question is whether Mr. Reno is qualified to opine that a particular bullet or cartridge matches to a particular firearm. In this regard, he has almost 20 years of experience and has examined almost 2,000 fired bullets and over 4,000 spent cartridges. Every year during that time he undertook a proficiency examination conducted by an outside firm, and he always passed that examination. Also, his determinations that a bullet or cartridge matches a particular firearm is always verified by a second examiner. He has extensive training going back to the year 2000, he has been certified by the Association of Firearm and Tool Mark Examiners ("AFTE") since 2012, and he has received notable awards from the ATF and the International Association of Chiefs of Police for his work at the Denver Crime Gun Intelligence Center. As such, he is clearly qualified.

Much of the defense opposition to the methodology employed by Mr. Reno results from the fact that, although the underlying basis of firearms examination is founded on objective principles, the determination of a match is subjective. This circumstance, however, is true of a substantial number of expert opinions, such as fingerprint analysis; handwriting analysis; medical and psychological diagnosis;[2] determination of the manner, means, or time of death;

[2] In this regard, the Court disagrees with the suggestion that medical and psychological diagnoses are based upon strictly objective criteria with no application of the judgment and experience of the doctor or psychologist. If this were the case, all doctors and psychologists should reach the same diagnosis for a given patient. *See also United States v. Glynn*, 578 F.Supp.2d 567, 573 (S.D.N.Y. 2008) (exercising a considerable degree of subjective judgment is true of many kinds of accepted expertise)—a case cited and relied upon by the Defendant.

blood spatter interpretation; or property valuation. Engineers, scientists, doctors, and diagnosticians often have to interpret data or test results, which necessarily involves a subjective interpretation based upon the individuals skill and experience. Along these lines, CRE 702 permits qualification of an expert based upon experience, not just education or training. The fact that a firearms examiner's criteria, and therefore his accuracy, will improve as he compares more and more bullets and cartridges is wholly consistent with the concept that experts can opine based upon their knowledge acquired through experience.

The defense also contrasts ballistics comparison with DNA evidence, however, the nature of STR DNA analysis is fundamentally different, and it involves statistical assertions that are simply not found, if even possible, in any other areas in forensic science. If opinion testimony had to include this same type of objectively verifiable percentage for every opinion, almost no other expert conclusions outside the field of DNA analysis would be admissible.

The defense argues that Mr. Reno should be required to phrase his conclusion in such a way as to include the AFTE criteria for a match. This is an issue that is better handled by cross examination. In fact, as noted in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 596 (1993), if the Defendant believes there are weaknesses in the foundations of the evidence, vigorous cross examination, presentation of contrary evidence, and careful instruction on the burden of proof are appropriate means of attacking it. In this regard, the cross examination of Mr. Reno at the motions hearing[3] effectively and clearly demonstrated the Defendant's concerns in ways that would easily be understood by the jurors in this case.

[3] Some of the cross examination at the hearing related to the PCAST Report. Mr. Reno did not take the position that the PCAST was a reliable authority on firearms identification, and it does not appear to fall under CRE 803(18). The report may fall under the provisions of CRE 703, but that seems unlikely based on the hearing testimony. Accordingly, some of the specific cross examination questions used at the hearing may not be available at trial. This

With regard to the PCAST Report relied upon by the defense, part of the purpose of an evidentiary hearing is to present information on a contested issue so that it may be explored and potentially challenged. The PCAST Report is hearsay not subject to an exception, including CRE 803(18). While its attachment to the Motion to Preclude established that there was a factual issue to be resolved at a hearing, attaching an exhibit to a motion does not make it the equivalent of an admitted exhibit or otherwise circumvent rules of evidence. Although some of the information in the report is used in the analysis above, that is because the information was discussed by Mr. Reno at the hearing without objection. In addition to the fact that the report is hearsay, it is a report to the federal executive branch, not to the judicial branch, and it was written with the stated purpose of trying to find things that could be improved in the forensic sciences. Goal driven efforts to find things to criticize tend to present an unbalanced picture and tend to disregard, sometimes inadvertently, contrary evidence.[4] In this regard, Mr. Reno was critical of many of the report's conclusions regarding firearms analysis and noted that none of the authors of the report had experience in that field. With regard to the Gianelli article, *Ballistics Evidence Under Fire*, attached to the motion, it is also hearsay. Further, it was not discussed by Mr. Reno at the hearing, and it presents, at best, inadmissible legal opinions.

---

fact notwithstanding, Mr. Reno acknowledged much of the same information, such as study results, presented by the PCAST Report. An expert witness can certainly testify to his own knowledge of the field in which he has expertise. In other words, even if the PCAST Report itself and the opinions of its authors may not be admissible, Mr. Reno can likely testify to the underlying information.

[4] In other words, people often find what they are looking for because they want to find it.

The Defendant also cites to a number of federal cases. First, it is of note that most of the cases cited by the defense regarding firearms analysis are opinions by federal trial courts.[5] Even opinions by federal circuit courts of appeal are not binding on this Court and are only potentially persuasive authority. Further, the cases are the same as those discussed in the Gianelli article. That article, revealingly entitled *Ballistics Evidence Under Fire*, has a clear, one-sided aim of showing that some courts have recently become more critical of firearms evidence and it presents only cases supporting that premise.[6] Nevertheless, of the cases cited by the Defendant, portions of *United States v. Monteiro*, 407 F. Supp. 2d 351 (D. Mass. 2006) are persuasive. In *Monteiro*, the federal trial judge held a six day hearing on the issue and found that the underlying scientific principles of firearm identification are valid. *Id.* at 355. That judge went on to decide that, because of the subjective nature of the determination whether a spent cartridge matches to a particular gun, a firearms examiner has to be qualified through training, experience, or proficiency testing to provide expert testimony. *Id.* These conclusions are consistent with the information presented in the present case, and Mr. Reno has demonstrated more than sufficient qualifications arising from training, experience, *and* proficiency training. The judge in *Monteiro*, however, ultimately precluded the testimony in that case, not due to any concerns with the reliability of the methodology of firearms analysis, but because the expert did not document his reasons for concluding there was a match and did not subject his determination to review by

[5] The one appellate decision, *United States v. Williams*, 506 F.3d 151 (2d Cir. 2007), actually upheld that the firearms evidence at issue was reliable and admissible. Although the opinion does state that the Second Circuit was not taking the position that "any proffered ballistic expert should be routinely admitted," *id.* at 161, there is nothing in the opinion expressing concern regarding the methodology of firearms identification.

[6] Most of the opinions, with the exception of *Williams* have been either rejected, limited, or distinguished by other federal and state opinions.

another trained examiner in the laboratory. In the present case, Mr. Reno did have a second, certified examiner review the bullets and cartridges who also determined they matched. It is the Court's recollection that Mr. Reno indicated that he took photographs, although that testimony may have instead related to the ability to take photographs. In any event, however, the testimony at the hearing in this case made clear that even photographs do not fully capture the detail that can be perceived by the examiner's eye. Although it may be AFTE practice (the Court does not recall that such evidence was presented at the hearing), documentation in the form of photographs, sketches, or notes, does not impact whether the methodology is reasonably reliable or whether the examiner is sufficiently qualified to make a reliable comparison. Moreover, the bullets, spent cartridges, and the firearm were all retained and subject to examination and retesting if necessary. As such, the Court disagrees with the decision of the judge in *Monteiro* that an examiner must necessarily keep photographs, sketches, or notes in order for his identification to be admissible.

Lastly, with regard to CRE 403, the probative value of the evidence is overwhelming. If believed by the jury, the evidence establishes that the handgun recovered in the possession of the Defendant was the one used to shoot the victim in this case, which is a central issue in this case. The reliability of the methodology used to match bullets and casings with particular firearms substantially reduces the risk of unfair prejudice. More importantly, the principles upon which firearms identification is founded and the fact that the determination involves a subjective analysis based upon the experience of the examiner are easily understandable and can be effectively presented through direct and cross examination such that there is little risk of the jury uncritically adopting Mr. Reno's opinions without due consideration of these issues.

Accordingly, any risk of unfair prejudice or confusion of the issues does not outweigh the probative value of the evidence.

For the above reasons, the Motion to Preclude is denied.

Motion to Preclude Improper Expert Testimony [D-13]

If a police officer presents expert opinion testimony at trial, a contemporaneous objection must be made.

Motion to Suppress Evidence Acquired During Illegal Searches of Cell Phone [D-14]

Issues presented in a motion to suppress are resolved by a preponderance of the evidence standard. *See People v. Delage*, 2018 CO 45. The proponent of a motion to suppress has the burden of establishing that his own Fourth Amendment rights were violated by the challenged search or seizure. *People v. Spies*, 615 P.2d 710, 711 (Colo. 1980). For a defendant to have standing to seek suppression of the fruits of a search, government officials must have violated a legitimate expectation of privacy held by the defendant. *Id.* at 714. Such a determination is appropriately based upon the totality of the circumstances in the case. *Id.*

The challenged search of the cell phone does not involve any information stored in the cell phone by the Defendant. Instead, the search of the SIM card revealed the phone number programmed into the SIM card. In order for the Defendant to have a legitimate expectation of privacy in the phone number or the contents of the SIM card, he must at least have had some valid and recognizable proprietary or possessory interest in the information. The only evidence proposed by the Defendant[7] that he had any interest related to the cell phone is that he was in

[7] For the reasons discussed below, the Defendant's request for an evidentiary hearing is denied. Instead, the Motion to Suppress is being evaluated based upon the factual assertions made in the Motion and the information otherwise presented at previous hearings in this action.

possession of it and had used it in the days preceding his arrest, and that he had tucked the phone away in his backpack. None of those facts establish a *legitimate* proprietary or possessory interest related to the phone unless the Defendant owned the phone or was given permission from its owner to use and possess it. The fact that phone number establishes that the phone belonged to a person who had been shot and killed less than two weeks before the Defendant was found to be in possession of the phone, and the absence of any evidence that the Defendant had any relationship with that person—aside from the assertion by witness Miles Davis that the Defendant claimed to have shot and killed a man and left his body in the location where the person's body was later found—would be evidence that makes it more likely true than not that the Defendant did not own the phone and was not given permission by its owner to use or possess the phone.[8]

The defense analogy of a cell phone that is possessed and used by a college student but paid for by the student's parents is rejected. The analogy involves a situation in which the person using the phone has been given authority to use and possess it by another, which is inapplicable to the circumstances in this case.

The fact that the cell phone was found tucked away in the Defendant's backpack could be evidence that the Defendant was taking measures to maintain its privacy, although it could be the result of other factors. Nevertheless, assuming the former to be true, the situation shows that the Defendant did not want others to know that he had the cell phone, not that he was taking efforts to keep the phone number of the cell phone private. More importantly, the situation is akin to

[8] Although such a finding should not strictly be necessary, the proposed evidence would also make it more likely true than not that, at a minimum, the Defendant stole the phone.

that in *Rakas v. Illinois*, 439 U.S. 128 (1978), and the mere fact that a person was exercising control over an item does not establish that he has a legitimate expectation of privacy in its contents. In this case, physically hiding another person's cell phone does not grant the person hiding it a legitimate expectation of privacy in the phone's number.

The Defendant's argument to the effect that he must be presumed to have an expectation in privacy in the cell phone because he is presumed to be innocent in this case misapplies the standards for resolving a motion to suppress. As noted above, it is the Defendant's burden to show that he has standing to challenge a search. Considering the totality of the circumstances, regardless of whether the Defendant killed the victim in either case, the cell phone belonged to Mr. Murphy and the Defendant had no legitimate expectation of privacy in the contents of the SIM card.

The Defendant's request for a hearing is denied. Trial begins on Tuesday and there is not a realistic opportunity to conduct a hearing on the Motion to Suppress, which was filed on August 8. The identical motion was filed in the Defendant's Arapahoe County case 2017CR1461 on July 31, which was a week before the recent motions hearing in this case held on August 6. Had the Motion been filed in this action on July 31, a hearing likely could have been arranged. Additionally, this action was filed in November 2016, it is on its third trial setting, and the motions filing deadline was originally May 1, 2017, then was extended to September 22, 2017. Although subsequent motions have been filed without leave of court and have been addressed, filing a motion days before trial, and after a different last-minute hearing has been completed, carries with it the risk that another evidentiary hearing cannot be accommodated. The Defendant asserts that the ruling on the People's 404(b) motion was not issued until July 20, however, the

People's motion was not a request to permit the evidence—it was notice under CRE 404 that they intended to introduce the evidence. At that point the Defendant was on notice that the information might be admitted at trial. Although the Defendant objected and sought preclusion of the CRE 404(b) evidence, such an objection does not serve to bar the evidence unless and until the objection is sustained. Even if that were not the case, the decision overruling the Defendant's objection was still made prior to the filing of the identical Motion to Suppress in Arapahoe County and was prior to the last-minute hearing on regarding the Motion to Preclude. Finally, even setting all of the above aside, the purpose of an evidentiary hearing is to resolve disputed issues of fact. Presuming the factual assertions in the Motion to Suppress to be true, there is still no indication that the Defendant had a recognizable interest in the cell phone or the information in the SIM card, and the Defendant did not have a legitimate expectation of privacy in the contents of the SIM card. As such, an evidentiary hearing was not necessary even if there was an opportunity to conduct one.

For the reasons discussed above, the Defendant lacks standing to challenge the search of the SIM card and the Motion to Suppress is denied.

Motion Requesting Preclusion of Testimony of Unendorsed Prosecution Witnesses [D-15]

The Motion was resolved at the hearing on August 9.

Motion to Preclude Improper Opinion Testimony

As ruled at the hearing on August 9, whether the arm wound to Patrick Murphy, the victim in the Arapahoe County case, was defensive is irrelevant to the purposes for which information related to the killing of Mr. Murphy is being allowed in this case. Accordingly, Detective Taylor may not testify that the wound was defensive.

Motion for Jury Questionnaire and Expanded Voir Dire [D-19]

In limited situations, such as when questionnaires can be distributed prior to the day of trial, jury questionnaires can assist attorneys with *voir dire* without delaying the start of the trial. Even in those situations, however, the use of questionnaires rarely, if ever, shortens the time spent then questioning the panel. In this case, the *voir dire* will likely take the morning and part of the afternoon to complete. Adding time for jurors to fill out questionnaires, for the questionnaires to be copied and collated, and for the attorneys to meaningfully review the information for a hundred potential jurors, will likely extend jury selection into the second day of trial. Additionally, the proposed case specific questions regard illicit drug use, violence committed with a firearm, and violence against homeless persons. These are topics that potential jurors should be willing to freely discuss during *voir dire* and their answers are not likely to somehow taint the beliefs of other jurors. Accordingly, the request to use questionnaires is denied.

On the other hand, so long as the questioning in *voir dire* is truly designed to assist in identifying jurors on whom to exercise peremptory challenges or challenges for cause and is consistent with the related provisions of the Trial Procedures Order,[9] the parties are granted 60

[9] The Jury Selection section of the Trial Procedures Order states:

> The purpose of *voir dire* is to enable the attorneys to determine whether any prospective jurors have beliefs that would cause them to be biased such that they would not be fair and impartial. In fact, it has been held in Colorado that the only proper purpose of *voir dire* is to determine the bias or prejudice of a potential juror. *People v. Shipman*, 747 P.2d 1, 3 (Colo. App. 1987). Accordingly, *voir dire* may not be used to advocate or persuade jurors in support of a party's theory of the case. Additionally, *voir dire* may not be used to determine how potential jurors would decide specific, contested issues in the case (as opposed to attempting to identify beliefs or biases). Finally, although *voir dire* may be used to determine whether jurors can impartially and conscientiously apply the law, it may not be used to instruct them on the law.

minutes per side to conduct *voir dire*. If a party uses part of its *voir dire* to advocate, instruct, or persuade jurors, the time will be reduced to 45 minutes for that party.

Dated this 12th day of August, 2018

BY THE COURT:

John W. Madden, IV
District Court Judge

Objections to questions or statements during voir dire that serve to advocate or educate rather than identify jurors upon which to exercise challenges are likely to be sustained. Moreover, it is the intent and effect of the questioning in voir dire that is of consequence. As such, questions that are creatively phrased to superficially discuss jurors' beliefs, but which actually serve to educate or advocate, are still subject to being precluded.