IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

UNITED STATES OF AMERICA,	)	
	)	
Plaintiff,	)	
	)	
v.	)	
	)	
GREGORY CHESTER,	)	No. 13 CR 00774
ARNOLD COUNCIL,	)	
PARIS POE,	)	Judge John J. Tharp, Jr.
GABRIEL BUSH,	)	
WILLIAM FORD, and	)	
DERRICK VAUGHN,	)	
	)	
Defendants.	)	

ORDER

For the reasons stated below, defendants' second joint renewed motion to exclude expert testimony regarding firearm toolmark analysis [838] is denied. The related motion in limine [837] is also denied.

STATEMENT

I. Renewed *Daubert* Motion [838]

Defendants renew their motions to exclude toolmark analysis[1] in light of the September 20, 2016 release of the President's Council of Advisors on Science and Technology's ("PCAST") report entitled "Forensic Science in Criminal Courts: Ensuring Scientific Validity of Feature Comparison Methods." Def. Mot. 2, ECF No. 838. The report "discusses the role of scientific validity within the legal system; explains the criteria by which the scientific validity of forensic feature-comparison methods can be judged; applies those criteria to six such methods in detail . . . and offers recommendations on Federal actions that could be taken to strengthen forensic science and promote its more rigorous use in the courtroom." Ex. A. at 2.[2] Firearm toolmark analysis, which the government's experts used, is one of the six methods discussed in the report. The report is clear that "[j]udges' decisions about the admissibility of scientific evidence rest solely on legal standards; they are exclusively the province of the courts and PCAST does not opine on them." *Id*. at 4. Rather, the report provides foundational scientific background and recommendations for further study.

[1] See Motions to Exclude, ECF Nos. 333, 699; Orders, ECF Nos. 464, 781.

[2] Page numbers refer to the internal numbering of the pages of the report, not ECF page numbers.

As such, the report does not dispute the accuracy or acceptance of firearm toolmark analysis within the courts. Rather, the report laments the lack of scientifically rigorous "black-box" studies needed to demonstrate the reproducibility of results, which is critical to cementing the accuracy of the method. *Id.* at 11. The report gives detailed explanations of how such studies should be conducted in the future, and the Court hopes researchers will in fact conduct such studies. *See id.* at 106. However, PCAST did find one scientific study that met its requirements (in addition to a number of other studies with less predictive power as a result of their designs). That study, the "Ames Laboratory study," found that toolmark analysis has a false positive rate between 1 in 66 and 1 in 46. *Id.* at 110. The next most reliable study, the "Miami-Dade Study" found a false positive rate between 1 in 49 and 1 in 21. Thus, the defendants' submission places the error rate at roughly 2%.[3] The Court finds that this is a sufficiently low error rate to weigh in favor of allowing expert testimony. *See Daubert v. Merrell Dow Pharms.*, 509 U.S. 579, 594 (1993) ("the court ordinarily should consider the known or potential rate of error"); *United States v. Ashburn*, 88 F. Supp. 3d 239, 246 (E.D.N.Y. 2015) (finding error rates between 0.9 and 1.5% to favor admission of expert testimony); *United States v. Otero*, 849 F. Supp. 2d 425, 434 (D.N.J. 2012) (error rate that "hovered around 1 to 2%" was "low" and supported admitting expert testimony). The other factors remain unchanged from this Court's earlier ruling on toolmark analysis. *See* ECF No. 781.

This order does not, of course, prevent the defendants from cross-examining the government's experts regarding the error rate of toolmark analysis, and the PCAST report may provide them with fodder for cross-examination. The defendants may, for example, inquire whether the government's experts have complied with other best practices for firearm and toolmark analysis described in the PCAST report, such as the expert having "undergone rigorous proficiency testing" and whether the examiner "was aware of any other facts of the case" when he or she performed the analysis. *See* Ex. A. at 113. For its part, the government may bring out other best practices its experts have engaged in, such as independent secondary review of the examiner's results. *See* Resp. at 2.

In short, the PCAST report does not undermine the general reliability of firearm toolmark analysis or require exclusion of the proffered opinions in this case. Questions about the strength of the inferences to be drawn from the analysis of the examiners presented by the government may be addressed on cross-examination. For these reasons, the defendants' renewed motion to exclude is denied.

II. Motion in Limine [837]

The ruling to allow expert testimony on firearm toolmark analysis necessitates consideration of the defendants' joint motion to exclude, pursuant to Fed. Rs. Evid. 402 and 403, evidence and testimony about a shooting that occurred on October 25, 2005. That shooting is not charged or referred to in the Superseding Indictment.

[3] Because the experts will testify as to the likelihood that rounds were fired from the same firearm, the relevant error rate in this case is the false positive rate (that is, the likelihood that an expert's testimony that two bullets were fired by the same source is in fact incorrect).

The government gave notice of its intent to introduce evidence that bullet casings recovered from the scene of the October 2005 shooting—both 9mm and .40 caliber—were fired from the same two guns as casings from shots fired during (1) the murder of Wilbert Moore in January 2006 (the .40 caliber); and (2) the shooting of Cordell Hampton and Antoine Brooks in April 2006 (the 9mm). In short, the government seeks to prove through expert testimony that one of the firearms from the October 25, 2005, shooting was used in the shooting of Moore and another was used in the shooting of Hampton and Brooks.

The defendants object that the October 25, 2005 shooting is not relevant because it is not probative of any fact needed to meet the government's burden, and further, that the probative value of the evidence is outweighed by a risk of juror confusion and unfair prejudice. As the to the relevance question, the defendants assert: "The government has never charged or otherwise alleged any of the defendants as being involved in the October 25, 2005." Mot. 2, ECF No. 837. They argue that the shooting is unrelated to "the government's larger case" in that it is apparently "a shooting unrelated to the Hobos." *Id*. Responding orally, the government argued that the evidence is relevant because it tends to show that firearms connected to two separate alleged Hobos shootings (those of Moore and of Hampton and Brooks) were used together in the same place just months earlier.

The evidence is relevant and the objection based on Rule 402 is not well-founded. The ballistics evidence establishes a connection between the separate shootings of Moore on the one hand and of Hampton and Brooks on the other. A connection between the two events is probative of the government's allegation that the Hobos enterprise operated with a purpose of "preserving and protecting the power, territory, operations, and proceeds of the enterprise through the use of threats, intimidation, destruction of property, and violence, including, but not limited to, acts of murder, attempted murder, assault with a dangerous weapon, and other acts of violence."[4] As the defendants have argued on numerous prior occasions, the government must prove an "agreement" and a "pattern" of racketeering activity; linking two murders by the weapons used is relevant evidence to meet that burden. It is also probative of an association-in-fact between the alleged perpetrators of the two 2006 shootings, whether or not the same individuals were also involved in the 2005 shooting.

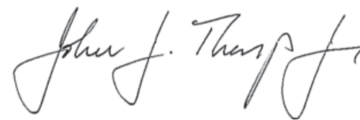
The government does not offer this ballistics evidence to prove anything about who participated in the October 25 shooting, or that it was a "Hobos shooting." The ballistics testimony at issue will be used for the sole purpose of supporting the proposition that two 2006 shootings are connected to each other by means of firearms that had a common history. The jury will not hear any testimony regarding the events of October 2005, including about the alleged

[4] Count One of the Superseding Indictment also alleges that the Hobos, as part of their illegal agreement, "committed illegal acts, including murder, solicitation to commit murder, attempted murder, aggravated battery, and assault with a dangerous weapon"; that they "obtained, used, carried, possessed, brandished, and discharged firearms in connection with enterprise's illegal activities; and that they "managed the procurement, transfer, use, concealment, and disposal of firearms and dangerous weapons within the enterprise."

perpetrators and alleged victims,[5] and therefore there is a minimal risk that it will be confused or misled by the mere reference to a shooting.

That is also the reason that this evidence is not unduly prejudicial under Rule 403. The only specific prejudice the defendants identify is the risk that "the October 2005 shooting may well be viewed by the jury as a Hobos-related shooting when there is no evidence to support that proposition." Mot. 2, ECF No. 837. But it is precisely because of this dearth of evidence about the October 2005 shooting that reference to the firearms used is not unfairly prejudicial (in addition to not being confusing, as noted above). The jury would have no basis for making the inference that the defendants fear, and the government has disavowed any intent to argue that inference (and will not be permitted to do so). Moreover, the evidence does not pertain to any particular defendant. It is dry forensic evidence that attempts to prove that the same firearms used in separate murders in 2006 had been used together on a previous occasion, by some unknown individuals. Of the many fertile areas for potential cross examination and argument on this point will be the lack of evidence that the guns were owned or possessed by the same individual(s) in October 2005 and 2006. Indeed, the fact that the guns were used in different shootings in 2006 could support the inference that ownership had changed hands since 2005.

The defendants' motion in limine is, therefore, denied.



Date: October 7, 2016

John J. Tharp, Jr.
United States District Judge

[5] To the extent the defendants seek to preclude any evidence or testimony about the October 25, 2005, shooting *other than* the ballistics match, which is relevant to linking two 2006 shootings, their motion is granted (or mooted because no such evidence is anticipated).