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IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF CALIFORNIA

UNITED STATES OF AMERICA,
Plaintiff,
v.
IVAN CERNA, *et al.*
Defendants.

No. CR 08-0730 WHA

**ORDER DENYING
MOTIONS TO EXCLUDE
FIREARMS-RELATED
EXPERT TESTIMONY AND
LATENT FINGERPRINT ID
EXPERT TESTIMONY
WITHOUT PREJUDICE TO
FURTHER PROCEEDINGS**

INTRODUCTION

In this RICO/VICAR gang prosecution, defendants have filed a number of motions seeking to exclude expert testimony regarding latent fingerprint identification and firearm and toolmark identification. In the alternative, the motions request a pretrial *Daubert* evidentiary hearing. Specifically, defendant Luis Herrera moves to exclude expert testimony by Joanne Del Bene regarding latent fingerprint identification on the ground that the ACE-V method in general is unreliable under FRE 702 and *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993) (“*Daubert*”) (Dkt. No. 1851). Defendant Jonathan Cruz-Ramirez moves to exclude firearms-related expert testimony by firearm and toolmark identification experts John Sanchez, Mark Proia, and G. Andrew Smith (Dkt. No. 1837). Defendant Erick Lopez similarly moves to exclude firearms-related expert testimony from Mr. Proia (Dkt. No. 1853). Defendants seek to exclude the firearms-related expert testimony on the basis that the Association of Firearm and Toolmark Examiners theory of identification (“AFTE theory”) is generally unreliable under

1 *Daubert* and FRE 702.

2 In addition, defendant Luis Herrera moves to exclude the firearms-related testimony and
3 latent fingerprint identification testimony on the basis that the expert disclosures were
4 inadequate to determine whether the experts reliably applied the AFTE theory and the ACE-V
5 method (Dkt. No. 1850). Notably, defendants allege that they were not informed that Ms. Del
6 Bene employed the ACE-V method until the government filed its opposition to the instant
7 motions (Herrera Reply Br. 2).

8 For the reasons that follow below, defendants' generalized challenges are **DENIED**. This
9 order finds that the AFTE theory and the ACE-V method, if properly applied, are sufficiently
10 reliable under *Daubert*. At this juncture, the government's firearms and fingerprint experts will
11 not be excluded simply because they used the AFTE theory and the ACE-V method. There is no
12 need for a pretrial *Daubert* hearing on the reliability of either. Instead, the government will be
13 responsible for presenting a foundation for the reliability of the AFTE theory and the ACE-V
14 method during its case-in-chief at trial.

15 Defendants, however, do not have adequate documentation of the exact procedures used
16 by the firearms experts in applying the AFTE theory. Similarly, defendants only recently
17 received documentation of how Ms. Del Bene applied the ACE-V method to generate her
18 conclusions. Accordingly, defendants will be afforded another opportunity to file additional
19 motions challenging the experts and their specific application of the AFTE theory and the ACE-
20 V method. Even so, barring a serious pretrial challenge, the reliability of the AFTE theory as
21 applied and the ACE-V method as applied will be addressed during witness *voir dire* at trial. On
22 direct examination, the government will be required to show the reliability of the AFTE theory
23 and the ACE-V method, as well as the reliability of the way those methods were applied here.
24 The defense will be allowed to *voir dire* the witnesses to test the reliability of the methods and
25 the applications. These proceedings will be in the presence of the jury since the same evidence
26 will go to the weight and reliability of the opinions, subject to striking if the *Daubert* foundation
27 is not established.

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STATEMENT**1. FIREARMS-RELATED TESTIMONY.**

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3 In its FRCrP 16(a)(1)(G) expert disclosures to defendants, the government identified
4 three firearm and toolmark identification experts that it may call at trial — John Sanchez, Mark
5 Proia, and G. Andrew Smith. All three of these experts are criminalists employed by the San
6 Francisco Police Department. Mr. Smith also performs contract work for the San Mateo County
7 Sheriff’s Office.

8 According to the government’s expert disclosures, Mr. Proia examined a .380-caliber
9 handgun recovered from the home of defendant Marvin Carcamo, a .45-caliber handgun
10 recovered from defendant Erick Lopez, and a .380-caliber handgun recovered from a vehicle
11 driven by defendant Luis Herrera (EXPERT000248). Mr. Proia also examined “rounds/casings”
12 recovered from the scenes of the David Pollack, Ernad Joldic, Phillip Ng, and Moises Frias
13 homicides (*ibid.*). Mr. Proia will testify that the handguns recovered from defendants Erick
14 Lopez, Marvin Carcamo, and Luis Herrera were discharged in connection with the
15 aforementioned homicides, as well as the wounding of other victims (*ibid.*).

16 According to the government’s expert disclosures, Mr. Sanchez examined a 9 x 18 mm
17 Makarov handgun recovered from defendant Jonathan Cruz-Ramirez, as well as several .380-
18 caliber casings and bullets recovered from the scene of the Juan Rodriguez homicide and from
19 the scene of a shooting not charged in this case (EXPERT000263). Mr. Sanchez will testify that
20 several .380-caliber casings and bullets recovered from the scene of the Rodriguez homicide
21 were from the same gun (*ibid.*). He will also testify that the gun that was used in the Rodriguez
22 homicide was used in a separate homicide that is not charged in this case (*ibid.*).

23 According to the government’s expert disclosures, Mr. Smith examined a .22-caliber
24 handgun recovered on the same day that a .22-caliber bullet was recovered from the scene of a
25 shooting in South San Francisco (EXPERT000270). Mr. Smith will testify that the .22-caliber
26 handgun fired the .22-caliber bullet recovered from the scene of the South San Francisco
27 shooting (*ibid.*). Mr. Smith also examined 9mm and .380-caliber casings recovered from the
28 scene of the Moises Frias homicide (*ibid.*). Mr. Smith will testify that the “9mm rounds were

1 fired from the same weapon while the .380-caliber rounds were fired from the same weapon”
2 (*ibid.*). Finally, Mr. Smith examined and test-fired a 9mm handgun recovered on October 28,
3 2009, and compared the bullets and casings recovered from the scene of the Frias homicide
4 (*ibid.*). Mr. Smith will testify that the recovered 9mm handgun was one of the weapons
5 discharged at the scene of the homicide (*ibid.*).

6 Although the government’s expert disclosures did not specify that Mr. Smith, Mr. Proia,
7 and Mr. Sanchez used the AFTE theory or an AFTE-approved method, the government specified
8 in its opposition that the experts did in fact use methods approved by AFTE (Opp. 5). After the
9 August 4 hearing, an order requested that the government file declarations from Mr. Smith, Mr.
10 Proia, and Mr. Sanchez confirming, if true, this unsworn statement (Dkt. No. 2055). The
11 government filed declarations from Mr. Proia and Mr. Sanchez on August 13, 2010, and a
12 declaration from Mr. Smith on August 18, 2010 (Dkt. No. 2095, 2096, 2143). These
13 declarations stated that the experts employed the standard operating procedures of the SFPD
14 crime lab and the San Mateo County forensic lab, which are consistent with AFTE approved
15 methods (*ibid.*). At the undersigned’s request, the experts filed additional declarations on
16 August 23, 2010, further clarifying the procedures used in their analyses. In these declarations,
17 the experts specified that the AFTE procedures manual serves as the “backbone and template”
18 for the policy and procedure manuals utilized by the SFPD crime lab and the San Mateo County
19 forensic lab (Dkt. Nos. 2157, 2158). The declarations further specified that the manuals do not
20 contradict or include procedures that are new, novel, or not addressed by the AFTE manual
21 (*ibid.*).

22 2. LATENT FINGERPRINT IDENTIFICATION TESTIMONY.

23 The government’s FRCrP 16(a)(1)(G) expert disclosure identified Ms. Del Bene as an
24 expert in latent fingerprint identification. Ms. Del Bene is now retired but was a forensic
25 specialist employed by the San Mateo Sheriff’s Office when she performed her examination of
26 the fingerprints at issue (Dkt. No. 2094).

27 According to the government’s expert disclosure, Ms. Del Bene swabbed a .22-caliber
28 firearm for DNA samples and examined latent fingerprints found in a stolen Honda recovered on

1 February 20, 2009 (EXPERT000053). Ms. Del Bene will testify to her conclusion that latent
2 fingerprints left on two items in the stolen Honda were “made by the person whose fingerprints
3 appear on the copy of the fingerprint record bearing the name Luis E [sic] Herrera” (*ibid.*).

4 Although the government’s expert disclosure did not specify that Ms. Del Bene used the
5 ACE-V method, the government specified in its opposition that Ms. Del Bene did in fact use the
6 ACE-V method (Opp. 9). After the August 4 hearing, an order requested the government file a
7 declaration from Ms. Del Bene confirming, if true, the government’s unsworn statement that Ms.
8 Del Bene used the ACE-V method (Dkt. No. 2055). The order also specified that the declaration
9 must state whether Ms. Del Bene used any variations of the ACE-V method or deviated from the
10 ACE-V method (*ibid.*). The government filed a declaration from Ms. Del Bene on August 13,
11 2010 (Dkt. No. 2094). The declaration confirmed that Ms. Del Bene employed the ACE-V
12 method and did not deviate from it while analyzing and comparing the fingerprints in question
13 (*ibid.*).

14 At the August 4 hearing, the government represented that additional documents,
15 including bench notes, were sent to defense counsel on July 28, 2010, and that the government
16 produced everything it had received. After the hearing, defense counsel confirmed that the
17 defense received these additional disclosures on August 4 (Dkt. No. 2164 at 2).

18 On August 18, 2010, the undersigned requested additional briefing from the parties
19 regarding the record required for making a *Daubert* reliability determination regarding the
20 fingerprint and firearms experts (Dkt. No. 2148). The procedure to be followed below will, in
21 the Court’s judgment, satisfy those requirements.

22 ANALYSIS

23 Defendants move for exclusion of the firearms-related expert testimony and latent
24 fingerprint identification testimony on two general grounds: (1) the AFTE theory and the ACE-V
25 method are unreliable; and (2) the government’s expert disclosures are so inadequate defendants
26 cannot make fact-specific challenges to the experts’ specific application of the AFTE theory or
27 the ACE-V method.

28

1 **1. RELIABILITY OF THE AFTE THEORY IN GENERAL.**

2 The AFTE theory in general is sufficiently reliable under *Daubert* and FRE 702. In
3 February 2007, the undersigned ruled that the AFTE theory, as applied by the SFPD crime lab, is
4 sufficiently reliable under *Daubert*. *United States v. Diaz*, No. 05-0167, 2007 WL 485967 (N.D.
5 Cal. Feb. 12, 2007). No new developments since the *Diaz* ruling cast sufficient doubt on the
6 reliability of the AFTE theory such that expert testimony must be kept from the jury simply
7 because it is based on the AFTE theory.

8 The *Diaz* order followed a four-day *Daubert* hearing and an exhaustive review of
9 applicable literature (*ibid.*). The *Diaz* order concluded that although firearm and toolmark
10 identification involves some subjective judgment in discerning the extent of matching patterns,
11 there is a method and science behind firearm and toolmark identification (*id.* at *1, 13). The
12 *Diaz* order analyzed the AFTE theory under all five *Daubert* factors and found the AFTE theory
13 is testable, has been subject to peer review and publication, and has been generally accepted by
14 the firearms community (*id.* at *6–8, 11). The *Diaz* order also found that although the AFTE
15 theory itself does not have a specific protocol, there are sufficient standards to control the
16 analysis of firearms under the AFTE theory — such as those employed by the SFPD crime lab
17 (*id.* at *8–9). Additionally, although the *Diaz* order found that the AFTE theory does not have
18 one true error rate, it found it was reasonable to infer that error rates among trained examiners
19 were low and uncertainty regarding error rates did not bar admitting firearms-related testimony
20 (*id.* at *9). Accordingly, the *Diaz* order found the AFTE theory, as applied by the SFPD crime
21 lab, passed *Daubert* muster (*id.* at *14). The *Diaz* order, however, only allowed the experts to
22 testify that a particular bullet or cartridge case was fired from a particular firearm “to a
23 reasonable degree of certainty in the ballistics field,” rather than “to the exclusion of all other
24 firearms in the world” (*ibid.*).

25 Defense counsel are well aware of the *Diaz* ruling, as a number of counsel in the instant
26 case also served as defense counsel in *Diaz*. Thus, defendants argue that *new developments*
27 since the *Diaz* ruling require the undersigned to revisit whether firearm and toolmark
28 identification is sufficiently reliable under *Daubert* (Cruz-Ramirez Br. 3). Developments

1 subsequent to the *Diaz* ruling, however, have not undermined the reliability of the AFTE theory
2 such that the government’s firearms experts must be excluded at trial purely on the basis that
3 they relied on the AFTE theory. The AFTE theory remains sufficiently reliable to the extent that
4 the testifying expert qualifies any “match” to be “to a reasonable degree of certainty in the
5 ballistics field.”

6 A 2009 report from the National Research Council of the National Academy of Sciences
7 highlights weaknesses in the AFTE theory. *See* National Research Council, Committee on
8 Identifying the Needs of the Forensic Sciences Community, *Strengthening Forensic Science in*
9 *the United States: A Path Forward* (2009) (“NAS report”). These weaknesses, however, do not
10 require the automatic exclusion of any expert testimony based on the AFTE theory. The
11 weaknesses highlighted by the NAS report — subjectivity in a firearm examiner’s identification
12 of a “match” and the absence of a precise protocol — are concerns that speak more to an
13 individual expert’s specific procedures or application of the AFTE theory, rather than the
14 universal reliability of the theory itself. Indeed, the NAS report notes that although the “process
15 for toolmark and firearms comparisons lacks the specificity of the protocols for, say, 13 STR
16 DNA analysis . . . [t]his is not to say that toolmark analysis needs to be as objective as DNA
17 analysis in order to provide value” (*id.* at 155). Moreover, the general issues raised in the NAS
18 report were grappled with in the *Diaz* order — the order addressed criticism that the AFTE
19 theory involves subjectivity, the standards controlling the analysis of firearms identification can
20 be construed as vague, and there is no single, precise error rate. *Diaz*, 2007 WL 485967, at *1,
21 9–10.

22 Notably, the co-chair of the committee that issued the NAS report, Judge Harry T.
23 Edwards, has specifically noted that the NAS report is *not* a law reform proposal and that
24 “whether forensic evidence in a particular case is admissible under applicable law *is not*
25 *coterminous* with the question whether there are studies confirming the scientific validity and
26 reliability of a forensic science discipline.” *The Need to Strengthen Forensic Science in the*
27 *United States: The National Academy of Science’s Report on the Path Forward: Hearing Before*
28 *the S. Comm. on the Judiciary*, 111th Cong. 10 (2009) (statement of Judge Harry T. Edwards,

1 Co-Chair, Committee on Identifying the Needs of the Forensic Science Community) (emphasis
2 added). True, the NAS report has been cited by the Supreme Court. *See Melendez-Diaz v.*
3 *Massachusetts*, ___ U.S. __; 129 S. Ct. 2527, 2536 (2009). The NAS report was cited, however,
4 for the proposition that forensic evidence in general is manipulable (*ibid.*). This does not
5 undermine the proposition that the AFTE theory is sufficiently reliable to at least be presented to
6 a jury, subject to cross-examination. Accordingly, the NAS report does not necessitate exclusion
7 of expert testimony simply because an expert employed the AFTE theory. Instead, the NAS
8 report may be used for cross-examination or may offer guidance for fact-specific challenges.
9 The AFTE theory need not be perfect science to satisfy *Daubert* so long as it is sufficiently
10 reliable.

11 *United States v. Glynn*, 578 F. Supp. 2d 567 (S.D.N.Y. 2008), is not persuasive. *Glynn*
12 criticized the existence of subjectivity in firearm and toolmark analysis, but ultimately did not
13 exclude firearms-related testimony (*id.* at 575). Instead, the court only permitted the expert to
14 state that a bullet or shell casing “more likely than not” came from a particular firearm (*ibid.*).
15 This standard is not appropriate as it suggests that the expert is no more than 51% sure that there
16 was a “match.” Likewise, the proposed “practical certainty” standard, as articulated at the
17 hearing, is not preferable to the *Diaz* “reasonable degree of certainty in the ballistics field”
18 standard.

19 Instead, the standard previously used in *Diaz* — that a bullet or casing came from a
20 particular firearm to a “reasonable degree of certainty in the ballistics field” — will be used in
21 this case. Defendants may cross-examine the government’s experts, or present their own
22 experts, regarding the significance of “certainty in the ballistics field” and how much confidence
23 a juror should have in the ballistics field. No counsel or witness will be permitted to assert to the
24 jury that the undersigned judge has somehow vouched for the AFTE theory, at least without
25 previously obtaining court approval.

26 Defendants also argue that the reliability of the AFTE theory is called into even greater
27 question when the “suspect” firearm is never retrieved, as in the case of defendant Cruz-

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1 Ramirez. The validity of the AFTE theory does not require having the suspect weapon.¹
2 Although having the suspect weapon is better, if the suspect weapon is not recovered, the expert
3 may still be able to reliably compare markings on different bullets or casings and determine
4 whether these markings indicate bullets or casings were shot from the same weapon. The expert
5 may therefore be able to identify the type of firearm, firearm manufacturer, or even particular
6 batch of firearms, that the bullets or casings came from. Any challenges would thus go to the
7 weight of the evidence, the factual bases for the expert's opinions, or the way in which the
8 theory was applied to the evidence.

9 Finally, defendants point to recent scandals involving the SFPD crime lab (*see, e.g.*,
10 Lopez Br. 4). The government, however, made assurances at the hearing that these recent
11 scandals did not involve the firearms section of the SFPD crime lab. Additionally, any such
12 evidence would speak not to the AFTE theory's reliability in general, but to whether the experts
13 applied the AFTE theory reliably.

14 No pretrial evidentiary hearing regarding the AFTE theory in general is needed at this
15 time. Yes, the trial court serves as a gatekeeper, but this gatekeeping role is "not intended to
16 serve as a replacement for the adversary system." Fed. R. Evid. 702, Advisory Committee's
17 Note. Instead, "[v]igorous cross-examination, presentation of contrary evidence, and careful
18 instruction on the burden of proof are the traditional and appropriate means of attacking shaky
19 but admissible evidence." *Daubert*, 509 U.S. at 595 (citation omitted). Of course, there is a
20 benefit for counsel to have a "free shot" at the firearms experts prior to their testimony before the
21 jury. Nonetheless, this is not the normal procedure used in criminal cases. Cross-examinations
22 in criminal cases are almost always cold-cross examinations.

23 The Court raised the issue of what record would be adequate for the court of appeals to
24 sustain the government's view that the AFTE theory satisfies *Daubert*. The government's
25 response was that an adequate record already exists to make a pretrial finding that the AFTE
26 theory is reliable, but in any event, the government anticipates it will present an "adequate basis

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28 ¹ Although defendants pointed to *United States v. Taylor*, 663 F. Supp. 2d 1170 (D.N.M. 2009), during the hearing and in their reply brief, the *Taylor* decision does not opine on the admissibility of firearms-related expert testimony when the suspect firearm is not recovered.

1 of information while qualifying its experts to allow the Court to make the necessary gatekeeping
2 decisions” (Dkt. No. 2161 at 4). Thus, as part of its case-in-chief, the government will present
3 foundational evidence regarding the reliability of the AFTE theory and will further develop the
4 record. Based upon this representation, the government may proceed as it proposes — but the
5 government must be mindful that it must lay before the jury, and the Court, the evidence needed
6 to show that the AFTE theory passes *Daubert* muster. The firearms experts must explain at trial
7 why and how the AFTE theory comports with the *Daubert* reliability requirement. It will not be
8 enough for the firearms experts to simply opine that the AFTE theory is widely accepted. If the
9 government fails to make the required threshold showing, the jury will be instructed to disregard
10 the expert testimony. In the meantime, the plethora of court decisions across the country, of
11 which this order take judicial notice, are instructive in making a preliminary determination that
12 the AFTE theory is reliable. This finding is subject to revision if the government fails to follow
13 through with its representation that it will make the necessary showing.

14 2. RELIABILITY OF THE ACE-V METHOD IN GENERAL.

15 This order finds that the ACE-V method, if properly applied, is sufficiently reliable under
16 *Daubert*. Simplifying matters, the government and defendants agree that latent fingerprint
17 identification has been widely accepted by courts as satisfying *Daubert* and FRE 702 (Br. 2;
18 Opp. 8–9). Indeed, the ACE-V method specifically has undergone *Daubert* analysis by a
19 number of courts and has been repeatedly upheld as sufficiently reliable. *See, e.g., United States*
20 *v. Pena*, 586 F.3d 105, 110–111 (1st Cir. 2009); *United States v. Baines*, 573 F.3d 979, 989–992
21 (10th Cir. 2009); *United States v. Mitchell*, 365 F.3d 215, 235–241 (3d Cir. 2004). A pretrial
22 evidentiary hearing to re-plough ground already canvassed time and again is unnecessary,
23 although the government will be required to introduce reliability evidence at trial, as it has
24 committed to do.

25 Despite the widespread conclusion that the ACE-V method is sufficiently reliable under
26 *Daubert* and FRE 702, defendants contend that it is time for a sea-change. In support of this
27 contention, defendants proffer law review articles and judicial dissents to argue that the ACE-V
28 method is not a scientific method that is: (1) empirically tested through rigorous scientific

1 experimentation; (2) subject to exhaustively refined standards controlling its operation; (3)
2 subject to a fixed error rate; (4) generally accepted within the scientific community; and (5) peer-
3 reviewed and published in academic scientific journals.

4 A method, however, need not be perfect science, nor satisfy all of the factors articulated
5 in *Daubert*. A close review of findings by courts that have held the ACE-V method reliable
6 under *Daubert* and FRE 702 shows that while the ACE-V method does not satisfy all of the
7 *Daubert* factors with flying colors (although it is not required to), the method itself is reliable
8 enough that if properly applied, testimony based on the method would be probative enough for a
9 jury to consider.

10 Although the NAS report points out weaknesses in the ACE-V method, these weaknesses
11 do not automatically render the ACE-V theory unreliable under *Daubert*. Instead, the
12 weaknesses highlighted by the NAS report — the lack of specificity of the ACE-V framework
13 and its vulnerability to bias — speak more to an individual expert’s application of the ACE-V
14 method, rather than the universal reliability of the method. Moreover, the issues raised in the
15 NAS report are not new. For example, the concern that the ACE-V method involves subjective
16 judgment and does not have a stringent framework has previously been analyzed at length. *See*
17 *Mitchell*, 365 F.3d at 235–241 (concluding the ACE-V method is reliable after analyzing it under
18 each of the *Daubert* factors). Further, as previously noted, the NAS report is *not* a law reform
19 proposal and its findings are not coterminous with whether forensic evidence in a particular case
20 is admissible. Thus, while the NAS report may be fodder for cross-examination regarding the
21 reliability of the ACE-V method in general, or may enlighten fact-specific challenges to
22 particular applications of the method, it does not make a case for excluding testimony simply
23 because it is based on the ACE-V method.

24 Defendants challenge the degree of certainty that can be associated with the ACE-V
25 method. For the same reasons that the firearms experts are limited to stating their conclusions
26 are to a “reasonable degree of certainty in the ballistics field,” Ms. Del Bene will be limited to
27 stating that her conclusions are to a “reasonable degree of certainty in the latent print
28 examination field.” Ms. Del Bene will not be allowed to testify that her finding of a match is to

1 the exclusion of all other people in the world. If the government objects to this limitation, it
2 must notify the undersigned by **SEPTEMBER 17, 2010**, in which case the government will be
3 given an opportunity prior to trial to prove a stronger degree of certainty should be submitted to
4 the jury.

5 For the aforementioned reasons, a pretrial *Daubert* hearing on the ACE-V method in
6 general is unwarranted. Nonetheless, as discussed above, the government still must present the
7 necessary foundational evidence at trial as part of its case-in-chief to ensure an adequate record
8 regarding the reliability of the ACE-V method. Ms. Del Bene must explain at trial why and how
9 the ACE-V method is reliable under the *Daubert* factors. It will not be enough for Ms. Del Bene
10 to state that the ACE-V method is widely accepted. If the government fails to make an adequate
11 threshold showing regarding the ACE-V method, this order's preliminary finding that the ACE-
12 V method is reliable may be revisited.

13 **3. THE AFTE THEORY AND THE ACE-V METHOD AS APPLIED.**

14 As neither the latent fingerprint identification testimony nor the firearms-related
15 testimony will be excluded based on the reliability of the AFTE theory or the ACE-V method in
16 general, the only remaining questions are: (1) whether the experts' conclusions are based upon
17 sufficient facts or data; and (2) whether the AFTE theory or the ACE-V method, as applied by
18 the experts in this case, were sufficiently reliable. Fed. R. Evid. 702. Defendants, however,
19 either do not have, or only recently received, the foundational materials required to adequately
20 challenge the experts on these bases. Specifically, prior to the August 4 hearing, defendants had
21 not received worksheets, file notes, bench notes, standard operating procedures, and other
22 materials that document how each expert applied the AFTE theory or the ACE-V method to the
23 evidence.

24 At the hearing, the government represented that standard operating procedures followed
25 by the firearms-experts were sent to defendants on July 22, 2010, that the government had
26 requested the SFPD crime lab provide it with all remaining notes from the experts, and that the
27 government had produced everything it had received. The government also stated that it sent
28 defendants additional disclosures for Ms. Del Bene's testimony on July 28, 2010. Additionally,

1 at the hearing, the government promised to obtain and turn over reviewer notes and other
2 materials to allow defendants to determine whether the AFTE theory and the ACE-V method
3 were reliably applied to sufficient facts. Cooperation between the government and defendants to
4 resolve this matter is best, and AUSA Frentzen has given his word to do so. If, however, the
5 government fails to turn over any additional necessary materials, defendants are free to subpoena
6 these materials from the appropriate agency and may do so before trial.

7 If review of the recently obtained materials and any additional materials raises issues of
8 such magnitude that there is a serious challenge to the bases of an expert's opinions or the
9 expert's particular application of the AFTE theory or the ACE-V method, the undersigned will
10 hold a pretrial *Daubert* hearing, after proper motions are filed, on whether the testimony should
11 be allowed at all. But barring an issue of that magnitude being teed up by defense counsel
12 before trial, fact-specific challenges to an expert's application of the AFTE theory or the ACE-V
13 method will be left for *voir dire* of the expert at trial, in the presence of the jury.

14 A trial court need not make a reliability determination prior to trial to satisfy its
15 gatekeeping duties under *Daubert*. See *United States v. Alatorre*, 222 F.3d 1098, 1102 (9th Cir.
16 2000). During *voir dire* of the witness, the government will be required to show the reliability of
17 AFTE theory or the ACE-V method, as applied by its experts, subject to cross-examination and
18 defense expert testimony. If it turns out on *voir dire* that defense counsel is able to sufficiently
19 undermine the reliability of the firearms-related testimony, the jury will be told to disregard any
20 such testimony, if any of it gets into evidence in the first place. Such testimony is not so
21 inflammatory that a jury would not be able to disregard it if so instructed.

22 Finally, defendants argue that an expert's testimony about the results of tests that the
23 expert previously conducted constitutes testimonial hearsay and violates the accused's right to
24 confrontation (Cruz-Ramirez Br. 16). This argument is misplaced. Defendants rely on cases
25 wherein statements or conclusions made by out-of-court declarants not subject to cross-
26 examination were presented during trial. Here, the experts will be testifying in court regarding
27 their own expert analyses and conclusions, and the experts will be subject to cross-examination.
28 Such statements do not constitute testimonial hearsay.

1 **4. “NEGATIVE” FINGERPRINT TESTIMONY.**

2 In its opposition, the government argues that “negative fingerprint” testimony —
3 testimony that fingerprints were unable to be obtained from certain surfaces — is non-expert
4 testimony that may be introduced through crime scene investigators or trained law enforcement
5 officers (Opp. 10). Defendants reply that Ms. Del Bene should not be permitted to offer *expert*
6 opinion regarding negative fingerprint testimony because she has not been disclosed to offer
7 negative fingerprint testimony (Herrera Reply Br. 9). Defendants, however, do not object to Ms.
8 Del Bene testifying about her own ability or inability to obtain fingerprints from evidence in this
9 case (*ibid.*). Accordingly, it seems the government and defendants are in agreement and there is
10 no dispute on this issue.

11 **5. JOINDERS.**

12 Defendants have filed a number of motions to join the motions discussed herein.
13 Defendants Cesar Alvarado, Aristedes Carcamo, Castillo, Cerna, Cruz-Ramirez, Cruz-Zavala,
14 Flores, Guevara, Hernandez, Herrera, Lopez, Maldonado, Portillo, and Quinteros move to join in
15 Luis Herrera’s motion to exclude Ms. Del Bene’s testimony (Dkt. No. 1851). Defendants Cesar
16 Alvarado, Aristedes Carcamo, Castillo, Cerna, Chinchilla-Linar, Cruz-Zavala, Flores, Franco,
17 Guevara, Hernandez, Guillermo Herrera, Luis Herrera, Maldonado, Portillo, Quinteros, and
18 Velasquez move to join in Mr. Cruz Ramirez’s motion to exclude firearms-related expert
19 testimony (Dkt. No. 1837). Defendants Cesar Alvarado, Aristedes Carcamo, Castillo,
20 Chinchilla-Linar, Cruz-Ramirez, Cruz-Zavala, Flores, Guevara, Luis Herrera, Portillo, and
21 Quinteros move to join in Mr. Lopez’s motion to exclude Mr. Proia’s firearms-related testimony
22 (Dkt. No. 1853). Defendants Cesar Alvarado, Aristedes Carcamo, Castillo, Cerna, Chinchilla-
23 Linar, Cruz-Ramirez, Cruz-Zavala, Flores, Franco, Guevara, Hernandez, Guillermo Herrera,
24 Lopez, Maldonado, Portillo, and Quinteros move to join in Luis Herrera’s motion to exclude
25 government experts (Dkt. No. 1850). These joinder motions are **GRANTED**.

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1 **CONCLUSION**

2 For the foregoing reasons, defendants' motions to exclude the government's firearms and
3 latent fingerprint identification experts are **DENIED** without prejudice to further proceedings.
4 The AFTE theory and the ACE-V method, if properly applied, are sufficiently reliable under
5 *Daubert*. At this juncture, the government's firearms and fingerprint experts will not be
6 excluded simply because they used the AFTE theory and the ACE-V method. As stated herein,
7 however, as part of its case-in-chief at trial, the government must present foundational evidence
8 that the AFTE theory and the ACE-V method are reliable. If the government fails to make this
9 required threshold showing, the jury will be instructed to disregard the expert testimony.

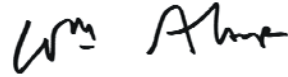
10 This order does not rule on AFTE theory or the ACE-V method as specifically applied in
11 the instant case. After reviewing additional records, defendants may submit motions, if
12 warranted, to exclude the testimony of Ms. Del Bene, Mr. Proia, Mr. Smith, or Mr. Sanchez on
13 the basis that he or she: (1) did not rely on sufficient facts or data in coming to his or her
14 conclusions; and/or (2) his or her particular application of the AFTE theory or the ACE-V
15 method was unreliable.

16 The government has promised to diligently seek to provide defendants with the necessary
17 foundational materials to determine whether the experts properly applied the AFTE theory or the
18 ACE-V method to the evidence and what specific procedures were used. To this end, if the
19 additional disclosures already provided to defense counsel are not sufficient, defense counsel
20 shall, by **SEPTEMBER 17, 2010**, submit requests to the government, in writing, for the materials
21 necessary to adequately determine whether the experts properly applied the AFTE theory or the
22 ACE-V method and whether the experts based their conclusions on sufficient facts or data. The
23 government must then produce the requested materials within 28 calendar days of any such
24 request. If the government fails to provide defendants with the necessary information, defense
25 counsel may then apply for subpoenas *duces tecum* to obtain the needed material from the
26 appropriate agency. To limit the burden on the agency, however, all defendants who have joined
27 the motion to exclude that particular expert's testimony should join in a single subpoena to the
28 appropriate agency.

1 Additionally, if the government objects to Ms. Del Bene being limited to stating that her
2 conclusions are to a “reasonable degree of certainty in the latent print examination field,” it must
3 notify the undersigned by **SEPTEMBER 17, 2010**.

4
5 **IT IS SO ORDERED.**

6
7 Dated: September 1, 2010.



8 WILLIAM ALSUP
9 UNITED STATES DISTRICT JUDGE