## Document: ASB Standard 157, Required Components for a Proficiency Testing Program in Bloodstain Pattern Analysis 6/21/2021

#	Section	Type of Comment (E-Editorial, T Technical)	Comments	Proposed Resolution	Final Resolution
9	Foreword	E	NCFS, along with a host of other bodies, have recommended that proficiency testing of all examiners employed by forensic service providers be mandatory regardless of accreditation status. Yet this document never makes that simply assertion. Because of the importance of proficiency testing to quality assurance and assessments of competence / expertise that oversight is unacceptable.	Include language in this foreword or elsewhere in the document making it mandatory for all bloodstain pattern analysts actively performing forensic work to undergo, at minimum, annual proficiency testing.	Accept with modification: clarification added to scope: This standard establishes required components of a proficiency testing program for forensic science practitioners conducting bloodstain pattern analysis
1	Table of Contents	E	I noticed on review that there are no page numbers in the table of contents for this document. I assume that will be fixed prior to publication of the document, but I thought I would point it out just in case no one else has noticed this.	Add page numbers to table of contents.	Accept: Will be added prior to publication.
2	3.2	Т	The definition used here for Forensic Science Agency is not consistent with the current trend to use the term Forensic Science Service Provider, as in ASB 158, for example.	Change the term and definitoin for Forensic Science agency to the term and definition for Forensic Science Service Provider as in ASB 158. Change all references throughout the standard from Forensic Science agency to Forensic Science Service Provider or FSSP, if you use that acronym as well.	Accept, all occurrences and definition changed to FSSP
10	3.2	E	This document repeatedly uses the term Forensic Science Agency. To conform to other OSAC / ASB standards it should make use of the more standard term forensic service provider.	Change references to "forensic service agency" and "FSA" to "forensic service provider" and "fsp."	Accept, all occurrences and definition changed to FSSP
17	3.2	Т	The term Forensic Science Agency differs from similar terms already published by ASB and in use by OSAC.	Change term to that used in already published documents for consistency.  Reference ASB standard 017: Standard Practices for Measurement  Traceability in Forensic Toxicology. They define the term as Forensic Science  Service Provider (3.10)	Accept, all occurrences and definition changed to FSSP
18	3.3	Т	The term Proficiency testing is defined in ISO/IEC 17043 and matches the first half of the definition in this document. The second half of the definition presented can be a part of the goal/objective of this standard, but cannot be added to the definition.	Remove this definition as it is already included under the Normative References for ISO/IEC 17043. The additional wording is not appropriate under the definition section.	Accept with modification: Definition modified to match the definition in ISO/IEC 17043:2010
3	4.1.1	E	In Section 4.1.1 the text "details the" has a strikethrough font where it should have a regular font.	Change the font from strikethrough to regular.	Accept.
11	4.1.1	E	This standard expresses a preference for obtaining proficiency tests form a third party provider as opposed to developing these tests in house. While that may generally be admirable, this standard should also caution FSPs about the quality of existing third party tests. For example, the most widely utilized provider, Collaborative Testing Services, has been repeatedly and consistently criticized for developing tests that in no way mirror casework and do not challenge examiners in the least. Worse: (1) the CEO of that company admitted to NCFS that it produces easy tests in order to make a profit given the preference for simplistic exams on the part of FSPs, (2) researchers have shown that CTS tests in the latent print realm are far less complex than casework, and lawyers have actually managed to complete CTSD tests without committing misidentifications. See Koertner & Swofford, "Comparison of latent print proficiency tests with latent prints obtained in routine casework using automated and objective quality metrics," 68 JFI 379 (2018); Max et al., "Assessing Latent Print Proficiency Tests: Lofty Aims, Straightforward Samples, and the Implications of Nonexpert Performance," 69 JFI 281 (2019).	This section should include a warning that ISO accreditation is a minimum requirement for third party tests but in no way guarantees that such tests satisfy other minimum requirements for acceptable proficiency tests.	Reject: This would be out of scope for this document, citing ISO 17043 for proficiency testing is appropriate.
12	4.1.2	E	At present this standard leaves to laboratory discretion who must undergo proficiency testing. But, as mentioned earlier, NCFS and other bodies mandate that proficiency testing be mandatory for all examiners. Labs should therefore not be able to decide who must be tested. Instead, all bloodstain pattern analysts performing casework or offering testimony should undergo mandatory, annual proficiency testing.	Amend Section 4.1.2 to require, at minimum, mandatory annual proficiency testing of all analysts performing casework or providing testimony.	Reject, this is covered in section 4.2.4: "Proficiency testing shall, unless otherwise documented for non-compliance, be conducted on an annual basis for each qualified bloodstain pattern analyst."

4	4.1.4	E	The sentence, "The proficiency test shall assess the bloodstain pattern analyst's knowledge, skills, and abilities necessary to fulfill their responsibilities." reads a bit	Reword this sentence so it reads, "The proficiency test shall assess the knowledge, skills, and abilities necessary for the bloodstain pattern analyst	Accept.
13	4.1.5	E	awkwardly.  Blind proficiency testing provides a number of benefits over informed proficiency testing, among others: (1) it potentially allows for the calculation of realistic and laboratory / analyst specific error rates, and (2) eliminates bias associated with the Hawthorne effect. While administering such exams may also be more difficult and costly, labs like the one in Houston are proving that it is far from impossible. This document should therefore express some kind of preference for blind proficiency testing.	to fulfill their responsibilities."  Require at minimum that laboratories conduct some percentage of their proficiency tests blind as opposed to informed. If a lab is incapable of doing so it should be require to perform, document, and retain a risk assessment explaining its decision to make use of a less rigorous proficiency testing regime.	Reject. This is agency driven.
5	4.1.5 a)	E	The wording in this section would sound better if slightly reworded and would also be more parallel to the wording of 4.1.5 b).	Reword this section so it reads, "Informed (or non-blinded) - The bloodstain pattern analyst is aware of the test during administration."	Accept.
14	4.3.2	E	It is not enough for a proficiency test to merely mimic casework, instead, to demonstrate where methods break and act as a true quality assurance measure proficiency tests must mirror the full range of difficulty in casework. Without dealing with a range of difficulty from simplistic to complex cases a fsp has no way to vet whether its procedures and analysts and methods actually perform as intended across that range.	Amend the section to require that proficiency tests mirror casework as closely as possible including the full range of difficulty and complexity encountered in casework.	Reject. Current wording is appropriate for the needed proficiency testing.
15	4.4.1	E	The extent of validation for proficiency tests required by this document is grossly insufficient. Similar levels of validation have not prevented providers from creating tests that offer essentially no challenge or utility. And such minimal validation does not accord with the vetting for assessment instruments recommended by the field of psychometrics and implemented in other disciplines. See Max et al., "Assessing Latent Print Proficiency Tests: Lofty Aims, Straightforward Samples, and the Implications of Nonexpert Performance," 69 JFI 281 (2019). The Human Factors Working Group for latent prints ha already recommended seeking guidance from the psychometrics fields when developing competency and proficiency tests. This standard should follow suit.	This standard should draw from Bayesian irt and psychometrics frameworks to ensure that proficiency tests are validated more rigorously. At minimum this standard should require that validation address whether proficiency tests can (1) discriminate between experts and novices, and (2) include samples that under an irt framework display a variety of challenge levels.	Reject: The proficiency test providers are governed by ISO 17043 regarding validation of examinations and it it out of scope for this document.
6	5.2	Т	Some guidelines when selecting an evaluator to determine the results of a PT should be specified to avoid conflict of interest, or the appearance of a conflict of interest. For example, it wouldn't seem wise to have two BPA analysts who normally work together at an FSSP evaluate informed PT results for one another since calling out an inconsistency might have social ramifications that the analysts would like to avoid if at all possible. Similarly, having a BPA analyst evaluate PT results for their supervisor could be problematic. Another way to reduce some effects arising from conflict of interest is to ensure that blind evaluation of PT results. This would be analogous to a blind review process used when reviewing scienctific papers for publication.	One solution might be to change the end of the first paragraph of this section to read, "When selecting PT evaluators, the FSSP shall appoint well qualified evaluators whose selection minimizes potential for conflict of interest, or the appearance of conflict of interest. Evaluation of proficiency test results should be carried out so that neither the evaluator nor test participants know who the other partyinvolved in the evaluation process is. When evaluating proficiency test results, evaluator(s) should consider the following:  Note: the text up to "When evaluating proficiency test results, evaluator(s) should consider the following:" could be moved up into Section 5.1 instead of appearing in Section 5.2.	Accept with modification. Section moved to 5.1 and modified to read: An FSSP shall consider any issues which affect the objectivity of the evaluator to minimize bias or conflicts of interest. Evaluation of proficiency test results should be carried out so that neither the evaluator nor test participants know who the other party involved in the evaluation process. The evaluator(s) should consider the following:
7	5.3	E	Missing word in the text, "If an inconsistency is identified, FSA shall"	Change text to read, "If an inconsistency is identified, the FSA shall" Of course, FSA may be changed to FSSP as mentioned above.	Accept.
8	5.5	т	This section mentions that results from the PT should be conveyed to "bloodstain pattern analyst and any other relevant individuals." I think at least a little more guidance as to who else is considered a relevant individuals is needed. For example, For example, I would say the list of relevant individuals must inlcude someone in the FSSP management chain to ensure that the FSSP can take appropriate corrective actions such as retraining, case review, etc.	Add language to require each FSSP to designate a BPA PT Administrator who is in a management role in the FSSP. This person should have the ability to ensure that corrective action will be assigned and carried out when needed. Then reword the sentence in question to read, "The proficiency test program shall have a procedure that ensures the proficiency test results are conveyed to the bloodstain pattern analyst, the BPA proficiency test administrator, and any other relevant individuals, such as first line supervisors, those assigning case work to analysts, or quality assurance managers."	Reject: "other relevant individuals" covers this appropriately.

16 6	E	This standard appropriately acknowledges that fsps must maintain documentation of corrective actions and proficiency test performance. But documenting and maintaining inconsistencies does not go far enough. Brady v. Maryland and the due process clause of the US constitution place an affirmative duty to disclose potentially exculpatory or impeaching information to the defense. That clearly requires inconsistent results on proficiency tests. But prosecutors may be unaware, as may be defense lawyers, about the existence of inconsistencies. They may not understand, in other words, to request the documentation required by this section.		Reject: this is a part of discovery and is a forensic science wide issue and is not to be mandated by FSSPs conducting BPA.
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