

Deadline of Submission of Comments: 8-Jul-24
Document Number: ANSI/ASB Std 124
Document Title: Minimum Requirements and Recommendations for a Firearm and Toolmark Examiner Training Program

Comment #	Document Section	Type of Comment	Current Document Wording	Proposed Revision	Revision Justification	Final Resolution
		E-Editorial T-Technical				
1	3.8, 3.9	T	no minimum educational requirements (other than continuing ed)	Describe, with specificity, the educational requirements for a trainee in this discipline. It is important that this standard articulate a minimum education requirement for trainees (e.g. STEM degree with coursework in physics, statistics, materials science...), particularly given the potential need to educate the jury about error rate studies, statistical concepts, etc.		Reject with modification: Added as a Normative Reference the standard that covers minimum educational requirements: <i>ANSI/ASB Standard 105 Minimum Education Requirements for Firearm and Toolmark Examiner Trainees</i>
2	4.1.1	T	Section 4.1.1's requirements for documentation do not go far enough. Specifically that section needs to require that the trainee's file include copies of all assessments and competency tests taken. If examiners are going to claim to be qualified because they completed a training program and successfully passed tests and assessments, then stakeholders have a right to assess the challenge level of said assessments. This means the opportunity to see the questions asked and even images of the samples used for KSS and KDS exercises (and if not images at least lists of the source of each kds and kss mark).	Specifically that section needs to require that the trainee's file include copies of all assessments and competency tests taken. If examiners are going to claim to be qualified because they completed a training program and successfully passed tests and assessments, then stakeholders have a right to assess the challenge level of said assessments. This means the opportunity to see the questions asked and even images of the samples used for KSS and KDS exercises (and if not images at least lists of the source of each kds and kss mark).		Reject with modification: Added as a Normative Reference the standard that covers minimum educational requirements: <i>ANSI/ASB Standard 105 Minimum Education Requirements for Firearm and Toolmark Examiner Trainees</i>
3	4.1.1	Ballot Comment	While I think this document is a vast improvement over existing guidance available to labs on the training of firearms and toolmark examiners a number of deficiencies nevertheless prevent me for supporting it at this time. Among those issues: Section 4.1.1's requirements for documentation do not go far enough. Specifically that section needs to require that the trainee's file include copies of all assessments and competency tests taken. If examiners are going to claim to be qualified because they completed a training program and successfully passed tests and assessments, then stakeholders have a right to assess the challenge level of said assessments. This means the opportunity to see the questions asked and even images of the samples used for KSS and KDS exercises (and if not images at least lists of the source of each kds and kss mark).			Reject: The requirements listed in 4.1.1 already include capture of all required elements. Required elements are listed throughout the document and include items listed in this comment.
4	4.1.5.3	T	Trainers have no attendant educational, proficiency or certification requirements. Trainers require expertise in a range of subject matter areas in order to design and administer a rigorous training program that serves the needs of the firearm and toolmark community.	Describe, with specificity, the expertise that the trainer (or outside experts retained by the trainer) must have. E.g. "The trainer (or outside experts that the trainer retains) must have expertise in topics ranging from experimental design, to human factors, to statistics."		Reject: The document requires the trainer to have subject matter expertise in the topic areas covered during training.
5	4.1.7.4	T	Section 4.1.7.4 admirably ensures that comparison exercises are part of training but it should further specify that they must cover the full range of difficulty the trainee is expected to face in casework.	Should further specify that they must cover the full range of difficulty the trainee is expected to face in casework.		Accept: 4.1.7.4 changed to "A competency test shall be successfully completed in each sub-discipline prior to assuming casework in that specific sub-discipline. Competency testing shall include a range of elements of varying difficulty that would reasonably be expected to be encountered in normal casework and shall include case notes, comparison examinations, and written reports."
6	4.1.7.4	Ballot Comment	Section 4.1.7.4 admirably ensures that comparison exercises are part of training but it should further specify that they must cover the full range of difficulty the trainee is expected to face in casework.			Accept: 4.1.7.4 changed to "A competency test shall be successfully completed in each sub-discipline prior to assuming casework in that specific sub-discipline. Competency testing shall include a range of elements of varying difficulty that would reasonably be expected to be encountered in normal casework and shall include case notes, comparison examinations, and written reports."
7	4.1.10	T	Over a five-year period, examiners shall complete a minimum of 100 hours of discipline-specific continuing education	Over a five-year period, examiners should complete a minimum of 100 hours of discipline-specific continuing education OR Over a five-year period, examiners shall complete a minimum of 100 hours of continuing education	100 hours of discipline specific CE, even if over 5 years, is a lot to demand of labs when taking into consideration budget restrictions, limited personnel, and CE requirements preexisting in current State Licensing requirements, AFTE certification requirements, and ANSI/ASTM STANDARD PRACTICE E2917-19a	Accept with modification: Added "Discipline-specific continuing education obtained to fulfill other requirements or certifications may be applied to the fulfillment of this document." to the end of the paragraph.
8	4.2.1.6	Ballot Comment	Section 4.2.1.6 should include some training on Brady/Giglio and discovery requirements			Note: This comment references section 4.2.19.2. Accept: 4.2.19.2.g was updated to read "Discovery and exculpatory evidence issues. Note: This topic should include discussions of Brady v Maryland, 373 U.S. 83 (1963) and United States v. Giglio, 405 U.S. 150 (1972)"

9	4.2.4.1	T	Should include in the description of theory and validity a complete understanding not only of the scientific foundations but of the "limitations" of the method as well.	Rewrite as "A complete understanding of the scientific foundation, and limits thereon, of firearm and toolmark examinations (theory, nomenclature, research, statistical methods, limitations on the method including sources of uncertainty, etc.) allows for the successful application of examination techniques and subsequent communication regarding the results of examination."		Accept with modification: Added "limitations." 4.2.4.1 A complete understanding of the scientific foundation of firearm and toolmark examinations (theory, nomenclature, research, statistical methods, limitations, etc.) allows for the successful application of examination techniques and subsequent communication regarding the results of examination.
10	4.2.4.2	T	Section 4.2.4.2 rightly asks that examiner's learn a good deal about validity testing. But one critical area of coverage it neglects is the blinding of tests to counter the Hawthorne effect. It also neglects issues like participant / materials sampling and attrition which have become major focuses of debate.	Add blinding of tests to counter the Hawthorne effect. Also add issues like participant / materials sampling and attrition which have become major focuses of debate.		Accept with modification: Added "vii) participant and sample selection, viii) the "Hawthorne" effect." Reference to "attrition" was not specifically added as it would be included in the study of repeatability and reproducibility as well as the outcomes of the studies.
11	4.2.4.2	Ballot Comment	Section 4.2.4.2 rightly asks that examiner's learn a good deal about validity testing. But one critical area of coverage it neglects is the blinding of tests to counter the Hawthorne effect. It also neglects issues like participant / materials sampling and attrition which have become major focuses of debate.			Accept with modification: Added "vii) participant and sample selection, viii) the "Hawthorne" effect." Reference to "attrition" was not specifically added as it would be included in the study of repeatability and reproducibility as well as the outcomes of the studies.
12	4.2.6.2A	T	Evolution of firearms designs	Break down into more specific categories: History of firearms (matchlock, flintlock, etc.) also History of Firearms ID	Other sections are far more specific- Evolution of firearm design is vague	Accept with modification: Added to 4.2.4.2 "a) History of the Firearm & Toolmark Examination discipline." Reworded 4.2.6.2A to read "a) Evolution and history of firearm designs."
13	4.2.7.2	T	Section 4.2.7.2 needs to cover the preservation of evidence and procedures to avoid contaminating and destroying evidence.	Add language covering the preservation of evidence and procedures to avoid contaminating and destroying evidence.		Accept with modification: Reworded 4.2.7.2.d to read "d) Documentation and preservation (when possible) of other discipline evidence".
14	4.2.7.2	Ballot Comment	Section 4.2.7.2 needs to cover the preservation of evidence and procedures to avoid contaminating and destroying evidence.			Accept with modification: Reworded 4.2.7.2.d to read "d) Documentation and preservation (when possible) of other discipline evidence".
15	4.2.16.2	T	Documentation section doesn't specify what forms of documentation are minimally required.	Note forms of documentation that are minimally required or best practice (e.g. photographs)		Reject: The FSSP and other specific standards will designate the requirements for specific forms of documentation.
16	4.2.18.4	T	200 Known Same Source Toolmark comparisons...		Does this mean both bullets and cartridge cases? Is this a combined total?	Reject: The standard states that the number is a combined total of all toolmarks. This includes bullets, cartridge cases, and non-firearm toolmarks.
17	4.2.18.4	T	Section 4.2.18.4 should ensure that KDS samples used also include examples of subclass characteristics.	Add language requiring that KDS samples used also include examples of subclass characteristics.		Accept: Reworded the last sentence to read "Some of the KDST comparisons shall include samples that show the potential effects of subclass characteristics, which could include consecutively manufactured tools/firearms."
18	4.2.18.4	Ballot Comment	Section 4.2.18.4 should ensure that KDS samples used also include examples of subclass characteristics.			Accept: Reworded the last sentence to read "Some of the KDST comparisons shall include samples that show the potential effects of subclass characteristics, which could include consecutively manufactured tools/firearms."
19	4.2.19.2	T	If legal training on discovery is going to be done by the lab, it should include training on Brady/Giglio and be more specific on what discovery requirements	Add "Brady/Giglio" and consult with LTG on legal training		Accept with modification: 4.2.19.1 was modified. The following statement was added: "The development of training topics covering court and other legal issues should include input from local attorneys or other legal experts." 4.2.19.2.g was modified to read "Discovery and exculpatory evidence issues." Note: This topic should include discussions of Brady v Maryland, 373 U.S. 83 (1963) and United States v. Giglio, 405 U.S. 150 (1972)"
20	4.2.19.2	Ballot Comment	I generally join previous comments but specifically believe that section 4.2.19.2 should include training on Brady/Giglio or more generally "exculpatory" evidence. If this section is already including legal principles such as admissibility and discovery, it stands to reason analysts would only benefit if their training included the basics of what may constitute Brady material. Based even on our conversations on the topic, many on the call felt they learned something new. And it is not otherwise expected that analysts would know this very important legal principle, given their role - all the more reason it should be a part of their training.			Accept: 4.2.19.2.g was updated to read "Discovery and exculpatory evidence issues." Note: This topic should include discussions of Brady v Maryland, 373 U.S. 83 (1963) and United States v. Giglio, 405 U.S. 150 (1972)"

21	4.2.19.2	Ballot Comment	<p>I join previous comments. When I broached adding Brady/Giglio to 4.2.19.2 on the last call I was able to join, there seemed to be general support for it.</p> <p>I'm also concerned about the second sentence in 4.2.19.1 and think it should be deleted ("Recommended articles and references for the subject areas in this section can be located in the AFTE Training Manual as well as the AFTE Admissibility Resource Kit located on the AFTE website."). A review of the legal portions of the training manual and the ARK (which, according to the ARK on AFTE's website, is the SWGGUN ARK, not AFTE's ARK) uncovers a LOT of outdated info, lack of critical updates (e.g. recent court opinions, recent amendments to Fed Rule 702), and a lot of purported legal articles that are published in forensic journals (vs. legal journals). The legal readings, which are almost exclusively focused on admissibility, seem to be largely skewed toward providing guidance on successfully opposing Daubert/Frye challenges, which is problematic.</p>			<p>Accept with modification: 4.2.19.1 was updated to remove "Recommended" from the statement "Recommended articles and references for the subject areas in this section can be located in the AFTE Training Manual and in the AFTE Admissibility Resource Kit located on the AFTE website" 4.2.19.2.g was updated to read "Discovery and exculpatory evidence issues.</p> <p>Note: This topic should include discussions of Brady v Maryland, 373 U.S. 83 (1963) and United States v. Giglio, 405 U.S. 150 (1972)."</p>
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