

Deadline of Submission of Comments: 11-Nov-24
 Document Number: ANSI/ASB Std 124
 Document Title: Minimum Requirements and Recommendations for a Firearm and Toolmark Examiner Training Program

Comment #	Text Line # (s)	Document Section	Type of Comment	Current Document Wording	Proposed Revision	Revision Justification	Final Resolution
			E-Editorial T-Technical				
1		4.1.7.1	T	"Assessment tools for the various training topics may include, but are not limited to: 125 written tests, oral examinations, mock casework, practical exercises/examinations (comparisons), 126 presentations, and mock trials."	Because they do not say which type of comparison they use, I would suggest the following revision instead. Please add "open set" to the parenthetical "(open set comparisons)"	Closed-set comparisons have lower error rates on average because trainees can use the process of elimination to make matches and complete the examination. Open-set comparisons are more challenging and more closely replicate most case work.	Reject: Error rate estimates of open set vs closed set comparisons refer to black box research studies, not examiner training. Training is inherently required to contain both types of comparison, depending on the stage.
2		4.2.2.2	E/T	iii) extrusion;	Line 229: I am unaware of any barrels made by an extrusion process. The term is relevant but I think it should be elsewhere in the standard, not as a sub-category of barrels. I would recommend it being under 4.2.1.2 – general manufacturing and machining techniques	See recommendation	Accept. Moved to 4.2.1.2.c)
3		4.2.4.1	T	"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. Recommended articles and references for the subject areas in this section be located in the AFTE Training Manual."	ASB should provide a list of references that offer an alternative perspective on the limitations of firearm and toolmark examinations.	AFTE is invested in the success of and continuation of firearms and toolmark examination as a field. Therefore, the resources they choose demonstrate lower false positive rates due to methodological choices such as closed-set studies (vs. open-set studies) and finely-tuned sample sizes. CIFS is willing to provide a list of resources to supplement the AFTE resources on limitations. Continuing to ignore the published criticism and commentary from scientists outside the field of FATM examiners does a disservice to future examiners and provides evidence of bias in both the training being proposed and in the development process of the standards.	Reject with modification: The AFTE Training Manual includes a variety of references that are relevant to the scientific foundation of Firearm & Toolmark Examination. All available resources would be too numerous to list in this standard. Added to end of introductory paragraph "and other scientific publications that discuss the foundations of Firearm & Toolmark science" and add to 4.2.4.2.g).2.iv) "closed set vs open set validity studies."
4		4.2.4.2	T	"vii.) participant and sample selection"	"vii.) participant and sample selection (including attrition rates)"	We respect that attrition rates should be discussed in sections on repeatability/reproducibility, per the committee's reasoning for rejecting this suggestion by another commenter during previous rounds of revision. However, we would like to point out that attrition rates are significantly high when discussing FATM studies. These studies have attrition rates that can range from the expected 5% to extremes of 35%. Two identical studies with these vastly different attrition rates will produce very different results. This is what qualified examiners need to understand and thus, the learning objective should be specifically called out.	Accept (Bullet point changed to viii. due to a previous addition.)
5		4.2.5.2	E	4) mismatching and interchangeability of ammunition and firearm caliber	Line 334: Suggested rewording: "cartridge interchangeability"		Accept with modification: The standard wording seeks to convey the danger of mismatched ammunition as well as proper interchangeability of ammunition in certain firearms. Changed 4) to "4) mismatching of ammunition and firearm, 5) acceptable interchangeability of ammunition" and added the SAAMI reference Generally Accepted Firearms and Ammunition Interchangeability for point 5).
6		4.2.5.2	E	4) bullet shapes and designs,	Line 340: Suggested rewording: "bullet/projectile shapes and designs" to include other types of projectiles such as shot cartridges, saboted ammunition, etc.	To be more inclusive	Accept
7		4.2.6.2	E	Lines 363-379	This line needs rewording, I don't understand the categories/subcategories as displayed. Suggest reformatting it as follows: <ul style="list-style-type: none"> •Action types •Automatic •Blowback •Bolt •Break-open •Delayed blowback •Double •Falling block •Gas operated •Hinged frame •Hybrid •Lever •Martini •Pump •Recoil •Revolver •Rolling block •Semiautomatic •Single •Trap door •Cycle of fire •Striker and hammer fired <ul style="list-style-type: none"> •Bolt-action rifle •Gas operated semiautomatic rifle •Pump action shotgun 	See recommendation	Reject with modification: Additional terminology was added based on the content of the comment. (Added "3)falling block/rolling block/trap door". Moved down and modified "4) blowback/delayed blowback"); also added "15) new and emergent firearm technologies"
8		4.2.12	T	terminology throughout section (lines 468, 472, 488, 489, 494, 495, 496 cited)	Line 467: Section 4.2.12: throughout this whole section no differentiation is made between shotshells (unfired) and shotshell cases (fired). Needs to be updated throughout the section to either reference shotshell/shotshell cases or unfired/fired shotshells.	See recommendation	Accept with modification: Added "(fired/unfired)" after "Shotshell" in the section title (4.2.12), and in sections 4.2.12.2.a), 4.2.12.2.i), 4.2.12.2.j). Also added "cycled and/or" before fired in 4.2.12.1.
9		4.2.12	E	h) Evaluation and comparison of cycled cartridges and test fired cartridge cases/shotshells.	Line 494: Suggested rewording: "Evaluation and comparison of cycled cartridges/shotshells and test fired cartridge cases/shotshell cases."		Reject: Unfired shotshells are also referred to as "Cartridges" so the first part of the sentence "Cycled cartridges" includes both rifled firearm and shotgun ammunition. The second part includes "test fired" so that confirms it refers to fired cases both from rifled firearm and shotgun ammunition.
10		4.2.19.1	T	"The development of training topics covering court and other legal issues should include input from local attorneys or other legal experts."	"The development of training topics covering court and other legal issues shall be developed in collaboration with representatives of local defense and prosecution offices. Sources for collaboration and joint presentations include the institutional prosecuting authority, the institutional public defender office, the judiciary, and local law schools. Both the defense and prosecution perspective shall be represented."	This language ensures that both the defense and prosecution are involved in the production of training materials.	Reject: Current verbiage is inclusive of input from any side of the legal question and allows the FSSP to use resources available to them without being burdensome.

11		4.2.19.1	T	<p>"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."</p>	<p>A syllabus should be maintained and voted on by the Standards Board.</p>	<p>Because the AFTE Manual does not contain many unbiased sources, CIFS is willing to assist in the development of a syllabus composed of a balance of AFTE documentation, law reviews, and scientific, peer-reviewed literature. We ask that you help to move the field of FATM examination forward by incorporating peer-reviewed science and opposing opinions into the classroom, which will strengthen future examiners' fitness for the courtroom.</p>	<p>Reject with modification: The AFTE Training Manual includes a variety of references that are relevant to communication, legal issues and court testimony in Firearm & Toolmark Examination. The intention was not to exclude other resources that would be too numerous to list. Add "and other scientific publications that discuss legal issues in Firearm & Toolmark science." The Standards Board does not create or maintain training syllabi. It is the responsibility of the FSP to generate training syllabi and materials that meet the standards.</p>
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