

Guide for Minimum Qualifications and Training for a Forensic Footwear and/or Tire Tread Examiner (03/2006)

1. Scope

1.1 This Guide describes the minimum qualifications and training for a forensic footwear and/or tire tread examiner.

1.2 This Guide may not cover all aspects of training for every topic or for unusual or uncommon examinations.

1.3 This Guide does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this Guide to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

2. Terminology

3. Significance and Use

3.1 The procedures outlined here are grounded in the generally accepted body of knowledge and experience in the field of forensic footwear and tire tread examination. By following these requirements and procedures an appropriate trainee can acquire the scientific, technical, and other specialized knowledge, skill, and experience required to reliably perform the work of the forensic footwear and/or tire tread examiner.

4. Interferences

5. Equipment and Requirements

5.1 Training materials and equipment

5.1.1 Access to texts and periodicals, papers, and other professional literature

5.1.2 Access to equipment appropriate to each topic

5.2 Requirements for the trainee candidate

5.2.1 Bachelor's degree from an accredited college or university; or associate's degree or sixty college semester hours, plus two years job-related forensic experience; or high school diploma or equivalent, plus four years job-related forensic experience.

Note: A bachelor's degree in physical or natural science from an accredited college or university is recommended to be the minimum education required for a forensic footwear/tire tread examiner.

5.3 Requirements for the trainers

5.3.1 The principal trainer shall have successfully completed the equivalent of an extended formal course of training in the forensic examination of footwear/tire tread evidence that includes classroom lecture, practical exercises, and supervised case work as recommended in the *International Association for Identification (IAI) Recommended Course of Study for Footwear and Tire Track Examiners*.

5.3.2 The principal trainer shall have been trained in the topics of instruction included in 6.2.

5.3.3 The principal trainer shall be an IAI Certified Footwear Examiner and/or have considerable experience as a forensic footwear and tire tread examiner and should be able to document same.

Note: While attending meetings and listening to presentations is useful, it is not the equivalent of training as meant in this section.

5.3.4 The qualifications of any other trainers shall be approved by the principal trainer.

6. Procedures

6.1 The training program shall be the equivalent of a training program as described in the *IAI Recommended Course of Study for Footwear and Tire Track Examiners* under the supervision of a principal trainer.

6.1.1 Each area of instruction will have an objective(s) established by the principal trainer. Examination(s) (e.g., written tests, oral tests, and practical exercises) will be administered in order to measure the trainee's knowledge.

6.1.2 A training record for each trainee will be maintained and will document the following in each topic area:

- A bibliography of relevant literature study
- Examination(s) (e.g., written tests, oral tests, and practical exercises)
- Case statistics (e.g., number, type, items, reports)

- Outside training, technical visits, courses, conferences, or work shops attended
- Research conducted

6.2 The formal written training program will include specific topics of instruction. The order in which they are administered is discretionary; however, the amount of time must be adequate to insure competency in all topic areas. The minimum specific topics are as follows:

6.2.1 Introduction to forensic footwear and tire tread examination

- History
- Value of footwear and tire tread evidence

6.2.2 Terminology

6.2.3 Evidence handling procedures

- Procedures and protocol
- Relationship of forensic footwear and tire tread evidence to other forensic disciplines
- Collection and preservation
- Marking and documentation
- Chain of custody

6.2.4 Examination of impressions

- Protocols
- Theory of individualization
- Case organization
- Note taking
- Evidence evaluation and comparison
- Conclusions and findings
- Report writing

6.2.5 Laboratory instrumentation and equipment

- Procedures and protocol
- Photographic equipment
- Measuring devices
- Light sources

- Computers and peripherals
- Other relevant laboratory equipment

6.2.6 Photography

- Theory of photography
- Basic camera operation
- General crime scene photography
- Examination quality photography
- Two- and three-dimensional impressions
- Various lighting techniques
- Filters

6.2.7 Recovery by lifting

- Electrostatic lifting
- Gelatin, adhesive and other lifting materials

6.2.8 Recovery by casting

- Dental stone
- Fixatives and release agents
- Snow casting

6.2.9 Detection of impressions

- Visible impressions
- Specialized lighting
- Electrostatic lifting
- Physical and chemical methods

6.2.10 Tire evidence

- Documentation
- Measurement
- Direction of travel
- Reference materials

6.2.11 Enhancement

- Photographic

- Chemical
- Physical
- Imaging software

6.2.12 Manufacturing

- Footwear
- Tire

6.2.13 Preparation of test impressions

- Footwear
- Tire

6.2.14 Court testimony and legal issues

- Expert witness qualifications
- Legal decisions
- Preparation of exhibits
- Moot court

6.2.15 Supervised casework

7. Report

8. Bibliography

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