

# Document #14

# Standard for the Application of Blind Verification of Friction Ridge Examinations

# (Latent/Tenprint)

# 1. Preamble

- 1.1. SWGFAST recognizes the importance and significance of establishing quality assurance (QA) protocols and procedures for friction ridge examination. Blind verification may be implemented as part of these QA protocols and procedures.
- **1.2.** As used in friction ridge examination, blind verification is the independent examination of one or more friction ridge impressions by another competent examiner (hereafter referred to as the blind verifier). The blind verifier is provided with no, or limited, contextual information, and has no expectation or knowledge of the determinations or conclusions of the original examiner. Blind verification can be used at any step of the Analysis, Comparison, and Evaluation (ACE) process.
- **1.3.** The aim of incorporating a blind verification process into a QA system is to test the reproducibility of the determinations or conclusions made at any step during Analysis, Comparison, Evaluation, and Verification (ACE-V). This is accomplished by performing another examination in an environment that minimizes the influences of any context information that might lead to invalid results.

# 2. Scope

Should an agency decide to implement a blind verification policy, this document states how it shall be conducted.

# 3. Applications for Blind Verification

- **3.1.** Required use of blind verification in situations involving:
  - **3.1.1.** Strong contextual influence.
  - **3.1.2.** Complex examinations, for example:
    - **3.1.2.1.** The existence of high distortion.
    - **3.1.2.2.** Low number of features, features with low quality, or features that are not discriminative, especially for low-quality AFIS searches resulting in individualizations.
    - **3.1.2.3.** The possibility of simultaneity [1].

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#### **3.1.3.** Conflicts among examiners

- **3.2.** Suggested use of blind verification in situations involving:
  - **3.2.1.** Large disparity in the examiner and the verifier's levels of experience.
  - **3.2.2.** A print recovered from a highly probative location (e.g., on the trigger of a murder weapon).
  - **3.2.3.** A single print generating a conclusion (individualization, exclusion, or inconclusive) to an individual in a case.
  - **3.2.4.** Uncertainty in the decision of the anatomical origin (e.g., finger, palm, or toe) of the print.
  - **3.2.5.** Other circumstances at the discretion of the examiner.
  - **3.2.6.** Quality control based on a random case selection (e.g., any 10%, 25 cases a year per examiner, or at agency discretion).

### 4. Responsibilities

- 4.1. Agencies are responsible for:
  - **4.1.1.** Implementing their blind verification policy and process.
  - **4.1.2.** Developing policies for differing and conflicting conclusions.
  - **4.1.3.** Developing collaborative policies between the requesting and the supporting agencies when relying on an external agency for the blind verification policy.
  - **4.1.4.** Determining which information is provided to the blind verifier in addition to copies of the images of the friction ridge impressions.
  - **4.1.5.** Designating the coordinator of the blind verification process. The coordinator will select the blind verifier, compare the results, and initiate the conflict resolution process if needed.
  - **4.1.6.** Ensuring that the blind verification process, the outcome of blind verification, and conflict resolution (if applicable) are properly documented in the case file. Examination notes will be as described in the SWGFAST *Standard for Documentation of Analysis, Comparison, Evaluation, and Verification* (ACE-V) [2].

#### 5. Blind Verifier

- **5.1.** The blind verifier shall:
  - **5.1.1.** Be trained to competency.
  - **5.1.2.** Be selected by the coordinator of the blind verification process.
  - **5.1.3.** Not be made aware who performed the first examination.
  - **5.1.4.** Not have previously worked or been consulted on the case.
  - **5.1.5.** Not consult with examiners previously involved in the case.

#### 6. Overview of the Blind Verification Process

- **6.1.** Blind verification can be performed at any phase of the ACE-V process.
- 6.2. Analysis

Blind verification can be used to test the reproducibility of value or no value determinations. Blind verification can also focus on tonal reversal, anatomical aspects, orientation, presence or absence of features, effect of the substrate, distortion effects, and assessment of the quality of the latent print.

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#### 6.3. Comparison

Blind verification can be used to test the reproducibility of the correspondence of friction ridge features between two prints. When blind verification is performed to test the outcome of the comparison phase, it is expected that blind verification be performed on the analysis phase as well.

#### 6.4. Evaluation

Blind verification can be used to test the reproducibility of the conclusion (individualization, inconclusive, or exclusion) reached by an examiner after performing the evaluation phase.

#### 6.5. Verification

Blind verification can be used to test the reproducibility of the conclusion reached by one examiner and verified by another one.

#### 7. Implementation of the Blind Verification Process

- **7.1.** For any given case, the examiner, the verifier, the technical reviewer, the coordinator of the blind verification process, or the supervisor may advise whether blind verification is appropriate (i.e., whether the conditions enumerated in Section 3 apply).
- **7.2.** The coordinator will provide images of the friction ridge impressions to the blind verifier(s). The images will be the same, or of the same quality, as the original and will be presented with no markings or annotations related to the impression.
- **7.3.** The material provided to the blind verifier(s) will contain the images of the friction ridge impressions and may contain additional information such as substrate, matrix, and development technique.
- **7.4.** The blind verifier(s) will use the applicable portions of the examination process (e.g., analysis, comparison, or evaluation) to obtain a determination or conclusion.
- **7.5.** The coordinator will compare the determination or conclusion from both examinations and review its reproducibility.
- **7.6.** Any differences will be handled according to the conflict resolution policy of the agency.
- 7.7. Blind verified determinations or conclusions are documented and reported according to agency policy.

# 8. References

[1] SWGFAST, Standard for Simultaneous Impression Examination, 11/17/12, ver 2.0.

[2] SWGFAST, Standard for the Documentation of Analysis, Comparison, Evaluation, and Verification (ACE-V) (Latent), 9/11/12, ver. 2.0.

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# 9. Revision Table

Version	Effective Start	Effective End	Posted	Archived	Change
1.0	02/11/11	11/14/12	03/15/11	11/14/12	Original issue
2.0	11/14/12	N/A	11/24/12	N/A	No change to content Reformatted (start of new version number)

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