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Best Practice Recommendation for Limited Friction Ridge Examinations

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This document was revised, prepared, and finalized as a standard by the Friction Ridge Consensus Body of the AAFS Standards Board. The draft of this standard was developed by the Friction Ridge subcommittee of the Organization of Scientific Area Committees (OSAC) for Forensic Science.

Questions, comments, and suggestions for the improvement of this document can be sent to AAFS-ASB Secretariat, asb@aaafs.org or 401410 N 21st Street, Colorado Springs, CO 80904.

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Best Practice Recommendation for Limited Friction Ridge Examinations

1 Scope

This document provides best practice recommendations for policies and procedures regarding limited examinations of latent friction ridge impression evidence, and proper documentation for these examinations. Limited exams are partial analyses, comparisons, and/or processing that do not fully utilize the capabilities of a Forensic Service Provider (FSP).

2 Normative References

There are no normative references.

3 Terms and Definitions

For purposes of this document, the following terms and definitions apply.

3.1

examiner (friction ridge)

An individual ~~who has successfully completed their FSP's training program, and is~~ authorized to conduct independent friction ridge examinations for the ~~forensic service provider~~FSP by observing and interpreting data, making decisions, forming conclusions and opinions, issuing reports and/or providing testimony.

NOTE Use of the term "examiner" in these documents refers to a "~~competent~~friction ridge examiner" and not a "trainee."

3.13.2

Forensic Service Provider FSP

Organization or individual that conducts and/or supplies forensic services.
ISO 21043-1¹

3.3

friction ridge detail

(synonym of friction ridge features)

See 3.4 friction ridge features.

3.23.4

friction ridge features (synonym of friction ridge detail)

The combination of ridge flow, ridge characteristics, and ridge structure of friction ridge skin, as reproduced and observed in an impression. The observed data used to compare and interpret similarity or dissimilarity between impressions.

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3.3.3.5

limited examinations

~~Examinations of latent friction ridge evidence~~Limited examinations are partial analyses, comparisons, and/or processing that are ~~do not complete as defined by Standard Operating Procedures (SOPs).~~fully utilize the capabilities of a Forensic Service Provider (FSP).

3.4.3.6

minutia

The point where a friction ridge terminates, or splits into two or more ridges. A subset of the friction ridge detail/features traditionally consisting of ridge endings, bifurcations, and dots, or any combination thereof, used to compare and interpret similarity and dissimilarity between two impressions.

4 Recommendations

4.1 Administrative

4.1.1 Each FSP should decide whether they will perform limited examinations or not. The FSP shall have a written policy regarding if it performs limited examinations, as well as how to carry out limited examinations should they be performed.

NOTE 1 This document does not state nor imply that performing limited examinations is best practice, nor does it take position on whether limited examinations should be performed.

NOTE 2 Limited examinations are an operational process. The decision to perform a limited examination is based on operational, non-scientific reasons~~—~~.

4.1.2 The FSP should assess the risks when deciding to implement a limited examination policy, including published or internal research on potentially missed data.

4.1.3 Examiners and FSPs should apply tools to identify potential biasing information and to minimize the effects of bias.

~~**4.1.4** Limited examinations shall not be performed through random sampling.~~

4.1.4 The FSP should communicate with the requesting stakeholder the existence of a policy allowing for limited examinations and the applicable risks that were assessed in section 4.1.2.

4.2 Evidence Processing

4.2.1 When deciding which evidence to process first, if evidence is identified by the relevant stakeholder as probative, the FSP should take that recommendation into consideration.

4.2.2 The FSP should consider risk factors if choosing to limit the extent to which particular items in a case will be processed. Factors to consider may include offense type, success rate of the item surface, and success rate of the processing ~~technique~~technique(s).

4.2.2.4.2.3 When selecting limited processing techniques, the FSP should consider the potential of a given technique for negatively impacting subsequent processing, selecting specific processing techniques with higher sensitivity versus conducting full sequential processing. At a minimum, any

friction ridge detail of potential value that has been developed shall be photographed and/or retained and the integrity of the item shall be maintained for potential future examination.

4.2.34.2.4 Conducting limited processing of evidence for latent prints should not be done in such a way as to inhibit or jeopardize additional processing techniques from being applied in the future. ~~The FSP shall notify the requesting stakeholder shall be notified~~ prior to employing limited processing techniques that may negate ~~further~~additional processing techniques in the future.

4.3 Friction Ridge Examinations

4.3.1 If evidence is identified by the stakeholder as probative, the FSP should take that recommendation into consideration if choosing to analyze, search ~~and/~~ or compare certain friction ridge impressions first as part of a limited ~~comparison examination~~. The FSP may take into consideration the investigative needs of the stakeholder if choosing to discontinue ~~searches or comparisons~~. ~~The FSP shall preserve and retain all suitable friction ridge impressions. Evidence shall be maintained so that future examinations can be conducted.~~ analysis, searches or comparisons.

4.3.2 The FSP should search all ABIS quality friction ridge impressions. ABIS searches may be conducted and reported prior to conducting manual comparisons to named persons.

4.3.3 ~~When an examiner performs an auto-extracted minutiae ABIS search first and no source identifications are made, the examiner should perform a second search by using manually encoded minutiae or 'cleaning up' the auto-extracted minutiae.~~

4.3.4 FSP policy should address which ABIS databases are searched and how many candidates are requested, if being utilized as part of a limited examination.

4.3.5 ~~The FSP should communicate with the requesting stakeholder the existence of~~ have a written policy allowing for limited examinations. The FSP shall communicate with the requesting stakeholder prior to limiting any portion of the friction ridge examination(s) or ABIS search(es).

4.3.64.3.5 ~~If the FSP chooses to defer anyone when manual comparisons (to requested can be deferred (e.g. source identifications to multiple individuals or to candidates from an ABIS search); they may do so only once each, or source identifications to one individual has been identified on a particular surface or item(s); or once multiple source identifications have been made to the same individual on multiple surfaces or items).~~

4.3.6 The FSP should not cease manual comparisons when only one source identification has been made to one individual, nor when multiple source identifications have been made to one individual but on only one particular surface or item, if there are additional suitable friction ridge impressions in the case. If manual comparisons are ceased before completed, all suitable friction ridge impressions and evidence shall be maintained so that future examinations can be conducted.

4.4 Documentation and Reporting

4.4.1 The written report should state ~~what that~~ additional processing or examinations could be conducted (within the bounds of FSP capabilities at the time) in the future. The extent of the limited examination shall be documented in the case ~~file and outlined in the written report record~~, including any evidence that was not processed and/or any friction ridge impressions that were of potential value that were not analyzed or compared.

4.4.2 Any request from a stakeholder to discontinue/stop work as part of a limited examination should be fully documented in the case ~~file~~record and report (if applicable). Any pertinent communication with a stakeholder regarding how the examination was limited should be documented in the case record.

~~Any pertinent communication with the stakeholder regarding how the examination was limited should be documented in the case file.~~

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