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**Best Practice Recommendation for Limited Friction
Ridge Examinations**

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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@aafs.org or 401 N 21st Street, Colorado Springs, CO 80904.

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Keywords: *limited examinations, friction ridge processing, friction ridge examination*

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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 authorized to conduct independent friction ridge examinations for the forensic service provider by observing and interpreting data, making decisions, forming conclusions and opinions, issuing reports and/or providing testimony. Use of the term “examiner” in these documents refers to a “*competent friction ridge examiner*” and not a “*trainee*.”

3.2

Forensic Service Provider

FSP

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

3.3

friction ridge detail

friction ridge features

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.

3.4

limited examinations

Examinations of latent friction ridge evidence that are not complete as defined by Standard Operating Procedures (SOPs).

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3.5 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 and there is no scientific basis to support performing them or not.

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.

4.2 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 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 techniques(s). 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.

4.2.3 The FSP should communicate with the requesting stakeholder prior to limiting a processing examination, if limiting the examination will prohibit or jeopardize future additional processing.

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 search and/or compare certain friction ridge impressions first as part of a limited comparison. The FSP may take into consideration the

investigative needs of the stakeholder if choosing to discontinue searches or comparisons. Evidence shall be maintained so that future examinations can be conducted.

4.3.2 The FSP should develop and retain all suitable friction ridge impressions. Should the FSP choose to defer any manual comparisons, they may do so only once each named person of interest has been identified on a particular surface or item(s); or once multiple source identifications have been made to the same individual.

4.3.3 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.

4.3.4 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.

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

4.3.6 The FSP should communicate with the requesting stakeholder prior to limiting any portion of the friction ridge examination(s) or ABIS search(es).

4.4 Documentation and Reporting

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

4.4.2 Any discontinuation/stoppage of work requested by a stakeholder should be fully documented in the case file and report (if applicable).

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