LP SOP-08 Glossary

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A. Purpose:

To define certain words and acronyms utilized by the Latent Print Section.

B. Responsibility:

Latent Print Examiners

C. Glossary:

ACE-V The acronym for the methodology utilized during friction ridge examinations:

Analysis, Comparison, Evaluation and Verification.

AFIS The acronym for Automated Fingerprint Identification System - A computer-

based system for reading, cataloging, searching, matching and storing

fingerprints and related data.

Analysis The first step of the ACE-V methodology. The assessment of an impression to

determine suitability for comparison.

Anchor Point An anchor point is a concrete group of friction ridge features that allow the

examiner the ability to focus in on a section of an impression for the purposes of making an identification or to eliminate a known impression from a questioned impression. Examples of anchor points are clearly defined major creases,

distinctive ridge flow, deltas, cores, triradius, loops, whorls and pattern vestigia.

Anchor points in many instances can help the examiner determine the anatomical location or orientation of a partial latent impression.

Arch – Plain A fingerprint pattern in which the friction ridges enter on one side of the

impression and flow, or tend to flow, out the other side with a rise or wave in the

center.

Arch – Tented A type of fingerprint pattern that possesses either an angle, an upthrust, or two

of the three basic characteristics of the loop.

Bench Notes Handwritten notations made by the examiner during the examination of the

submitted items of evidence.

Bifurcation The point at which one friction ridge divides into two friction ridges.

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Bridge A connecting friction ridge between, and generally at right angles to, parallel

running friction ridges.

Characteristics Features of the friction ridges. Commonly referred to as Galton details,

minutiae, points, ridge endings, dots and bifurcations.

Classification The alpha numeric formula of finger and palm print patterns used as a for filing

and searching.

Comparison The second step of the ACE-V methodology. The observation of two or more

impressions to determine the existence of discrepancies, dissimilarities, or

similarities.

Comparison Value References a poor quality friction ridge impression in which the examiner does

not feel it would be proper to dismiss the impression as totally worthless.

Impressions that fall into this category may be able to be identified to its source.

In some instances after further review the impression may ultimately be

reclassified as of no value.

Complete Friction

Ridge Exemplars Also known as major case prints. A systematic recording of all friction ridge

detail appearing on the palmar sides of the hands. This includes the extreme

sides of the palms; and joints (phalanges), tips, and sides of the fingers.

Core The approximate center of a pattern.

Court Charts Photographic or digital enlargements in a side-by-side relationship of latent

print/inked print. Identifying characteristics are plotted in such a manner as to assist the examiner in demonstrating the method of identification to members of

a court during legal proceedings.

Discrepancy The presence of friction ridge detail in one impression that does not exist in the

corresponding area of another impression.

Dissimilarity A difference in appearance between two friction ridge impressions.

Dissociated Ridges 1. Disrupted, rather than continuous, friction ridges.

2. An area of friction ridges units that did not form into friction ridges.

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Distal 1. Farthest away from the center point of attachment.

2. The direction away from the body.

Distortion Variances in the reproduction of friction ridge skin detail caused by pressure,

movement, force, contact surface, and so forth.

Dot An isolated friction ridge unit whose length approximates its width in size.

Edgeoscopy The study of the morphological characteristics of the contour or shape of the

edges of friction ridge skin and their resulting impressions.

Electronic Imaging Capturing an image digitally. Once digitized, the image can be processed,

saved for future use and/or printed.

Elimination Prints Exemplars of friction ridge skin detail of persons known to have had legitimate

access to an item.

Enclosure A single friction ridge that bifurcates and rejoins after a short course and

continues as a single friction ridge.

Ending Ridge A single friction ridge that terminates within the friction ridge structure.

Evaluation The third step of the ACE-V methodology. At this step an examiner assesses

the value of the details observed during the analysis and comparison steps and

thereby results in a conclusion.

Exclusion The determination by an examiner that there is sufficient quality and quantity of

detail in disagreement to conclude that two areas of friction ridge impressions

did not originate from the same source.

Exemplar The known prints of an individual, recorded electronically, photographically, by

ink, or by another medium.

Fingerprint An impression of the friction ridges of all or any part of the finger.

Focal Points 1. In classification, those areas that are enclosed within the pattern area of loops

and whorls. They are also known as the core and the delta.

2. In ACE-V, the areas selected for comparison purposes (see Anchor Point and

Target Area).

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Friction Ridge A raised portion of the epidermis on the palmar or plantar skin, consisting of one

or more connected ridge units.

Friction Ridge Detail An area comprised of the combination of ridge flow, ridge characteristics, and

ridge structure.

Friction Ridge Unit A single section of ridge containing one pore.

Furrows Valleys or depressions between friction ridges.

Galton Details see "characteristics"

Henry Classification A system of fingerprint classification named for Sir Edward Richard Henry

(1850 - 1931).

Hyperhidrosis Excessive sweating the hands and feet.

Hypothenar Meaty portion of the palm below the little finger extending to the wrist.

IAFIS The acronym for Integrated Automated Fingerprint Identification System, the

FBI's national fingerprint database. IAFIS has been replaced by NGI.

Impression Number The unique case specific number or number/letter combination which indicates a

particular friction ridge impression for bench note referencing and reporting

purposes. (see index below).

Index Index, Indexed or Indexing refers to the unique case specific number or

number/letter combination which indicates a particular friction ridge impression for bench note referencing and reporting purposes. Index is also synonymous

with impression number.

Identification 1. See Individualization.

2. In some forensic disciplines, this term denotes the similarity of class

characteristics.

Identification Value References a friction ridge impression in which the examiner has no doubt that

if given the proper exemplars, the impression can be identified.

Incipient Ridge A friction ridge not fully developed that may appear shorter and thinner than

fully developed friction ridges.

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Inconclusive During Evaluation, the conclusion reached that neither sufficient agreement

exists to individualize nor sufficient disagreement exists to exclude.

Individualization The determination of an examiner that there is sufficient quality and quantity of

detail in agreement to conclude that two friction ridge impressions originated

from the same source.

Inked print A deliberate and intentional recording of the friction ridge details present on the

fingers, hands, and feet for the purpose of comparison to latent prints or for personal identification records. This recording is normally accomplished by applying a substance such as black printers ink to the friction ridge area and then bringing it in contact with a suitable receiving surface such as a fingerprint

card or piece of white paper.

Known Print (Finger, Palm, Foot) A recording of an individual's friction ridges with black

ink, electronic imaging, photography, or other medium on a contrasting

background. See inked print.

Latent print 1. Transferred impression of friction ridge detail not readily visible.

2. Generic term used for questioned friction ridge detail.

Lateral Reversal A mirror image.

Level 1 Detail Friction ridge flow and general morphological information.

Level 2 Detail Individual friction ridge paths and friction ridge events (e.g., bifurcations,

ending ridges, and dots).

Level 3 Detail Friction ridge dimensional attributes (e.g., width, edge shapes, and pores).

Lift or Lifter An adhesive or other medium on which recovered friction ridge detail is

preserved.

Matrix The substance that is deposited or removed from friction ridge skin when

leaving an impression.

NGI Next Generation Identification; the FBI biometric database which replaced

IAFIS.

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No Value References a friction ridge impression that is not suitable for identification or

comparison.

Target Group Is a group of level two friction ridge detail which can be associated with an

anchor point in an effort to effect a conclusion Level three detail may also be utilized in conjunction with level two detail (but only when in both impressions

it is clear and distinct).

Thenar Meaty portion of the palm below the thumb.

Tonal Reversal Pertaining to friction ridge analysis it is the inversion of shading and color tone.

Polydactlyism The presence of supernumerary digits (one or more extra fingers or toes).

Preservation A method by which a latent print is recovered for comparison with known inked

prints. Preservation can be accomplished by proper handling, photography,

lifting or any other acceptable method.

Verification The fourth step of the ACE-V methodology. The independent opinion of an

examiner as to the conclusion effected by another qualified examiner.