San Diego Police
Forensic Science Section

Latent Print Unit Policy Manual

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1.1 UNIT OVERVIEW

DESCRIPTION

The Latent Print Unit is located on the 6th floor (room 670) of the San Diego Police Department Headquarters building. The building address is 1401 Broadway, San Diego, CA 92101, Mail Station 725. The hours of operation are Monday through Friday, 0530 hours until 1630 hours.

The Latent Print Unit is composed of one supervisor,a staff of twelve examiners and one latent print aide.

LATENT PRINT UNIT FUNCTIONS

The Latent Print Unit is an integral part of the San Diego Police Department ASCLD-LAB accredited Crime Laboratory. The unit is charged with the responsibility of determining the identity of the friction ridge evidence recovered from crime scenes while maintaining evidence integrity.

SECURITY

The Latent Print Unit door will remain closed and locked during business hours. It is considered a secure evidence storage room. Only the electronic card key should be used to unlock the door.

Latent Print Examiners will maintain the security of their evidence casework in progress by doing the following:

- When leaving their desk for any reason during the day, examiners will insure case evidence left on their desk is not in an area where the evidence can be knocked off or fall into a trash/shred container.

- When an examiner will be on extended absence such as vacation, furlough, medical leave, etc., the case evidence will be packaged in the original envelope(s) and left on the examiners desk for access by the unit supervisor.

2.1 INCOMING EVIDENCE

A. Policy

Latent Print Unit personnel will retrieve latent print evidence (envelopes and exemplars) from the property room. All evidence must include a barcode.

Copies of the latent print evidence can be provided upon request or it can be viewed upon appointment.

Evidence from Harbor Police or any other outside agency having upper administration approval for the work to be done will be issued a San Diego Police Department incident #.

B. Procedure

1) Latent print envelopes retrieved from the Property Room

   a. The Latent Print Unit (LPU) personnel will retrieve all evidence.

   b. Unsealed evidence envelopes will be sealed by latent print unit personnel using a white "San Diego Police Department of Evidence Seal." The words "sealed by lab" will be written across the label.

   c. Each envelope and set of morgue prints must have a bar code.

   d. LPU personnel will scan the bar codes indicating that the evidence was received by the unit.

2) Evidence from CSU will be received from the Property Room. Property room personnel will scan the bar codes indicating that the evidence was released to the Latent Print Unit.

   a. LPU personnel will scan the bar codes indicating that the evidence was received by the unit.

3) Evidence received directly from the Property Room prior to 2010.

   a. Sign the Property Room check-out log and the back of the property tag to receive the evidence prior to 2010. 2010 and later will be tracked using the bar code system.

   b. Pawn slips and checks must be obtained and returned through the Property Room.

C. Problem Evidence

1) If any item needs to be repackaged (i.e., officer used wrong envelope, barcode was placed over case information or if the barcode was used as a seal), the original container will be kept inside the new envelope and the case information will be written on the new envelope.

2) Incorrect number of items and/or case numbers will be corrected by Latent Print Unit personnel.

3) The officer will be notified when latent lifts are received with incomplete information, such as incorrect labeling or information missing from the latent print evidence and non-latent print evidence, (i.e., shoe impression lifts, fabric impression evidence, etc.).

2.2 LATENT PRINT EXAMINATION REQUESTS

A. Policy

For examination work of known individuals to begin, a latent print examination request form (PD-299) is needed. Refer to the Work Requests section of the Quality Assurance Manual for exceptions to this policy.

No request is needed for ALPS proactive work, or for critical immediate priority rush work as approved by unit supervision.

Examiners will not self-assign casework or work requests to themselves.

B. Procedure

1) Requests are normally received and processed through the Clerical Unit.

2) All work requests will be reviewed by either the supervisor, OCA or ALPS team member, and initialed.

3) The supervisor will prioritize and assign all requests.

2.3 CASE MANAGEMENT COVER SHEET (COVER SHEET, CS)

A. Policy

The Coversheet (CS) is used by Latent Print Unit personnel to gather statistical data.

B. Procedure

1) Complete the case coversheet with the following guidelines in mind:

a. Date case requested: use date stamped on the 299 or type “Proactive” if the case is being worked proactively.

b. # of items examined: the number of surfaces examined.

c. Analyzed: the number of latent print cards and/or photos received.

d. Elim comp: the number of elimination comparisons performed.

e. ALPS: the number of ALPS prints searched.

f. Manual: the number of manual comparisons performed

g. Total: the total number adding together analyzed, elimination comparisons, ALPS and manual exams.

h. Verifier/TR: the examiner who performs the verification and/or tech review does not have to be the same person.

2) The examiner will forward the coversheet, report(s), notes pages and evidence for technical review.

3) The administrative reviewer will initial and date in the “AR” portion at the bottom of the coversheet. The coversheet will be retained by the supervisor.

2.4 RELEASING EVIDENCE

A. Policy

Latent print evidence may be released to the courts, officers, detectives or an independent examiner. If an independent examiner is to conduct an exam in the Latent Print Unit, the supervisor and crime laboratory manager must give approval prior to the exam taking place. The appropriate chain of custody will be completed.

B. Procedure

1) Court

a. When an examiner releases evidence from the latent print unit, the barcode will be scanned to document the transaction in FileOnQ. Additional comments will be added to specify who received the evidence.

b. When an examiner releases evidence that was retrieved from the Property Room, the following documentation is required:

1. a Court Evidence Receipt (PD-233) form must be completed to comply with Property Room evidence release procedures.
2. the Court Evidence Receipt must be signed by the court clerk to verify custody of evidence retained by the court.
3. the original (white) will be given to the Property Room while the copy can be placed into the case file as an administrative document.

c. Any officer, detective or district attorney investigator who requests the release of original evidence and/or known exemplars (i.e. for court or outside examination) must sign for the evidence prior to its release.

d. The court order (or request) will be placed in the case file.

2) In-house examination

a. a court order or the authorization by the assigned prosecutor to make available the original evidence for an in-house examination will require the completion of the following steps:

1. an inventory of the evidence prior to viewing.
2. a chain of custody entry, completed by the outside examiner is sufficient documentation for receiving the evidence.
3. the evidence must also be inventoried at the completion of the exam in the presence of the outside examiner.
4. the examiner receiving the evidence being returned will document receipt on the chain of custody.

3.1 OBTAINING AND MARKING EVIDENCE (ENVELOPES, CARDS, PHOTOGRAPHS, CDS, ETC.)

A. Policy

The contents of any envelope submitted will be referred to as an item.
All items must have case #, initials of analyst, and date.

Subsequent examinations by the initial examiner do not require re-marking (initials and date) of the evidence.

Numbering of individual items is not necessary with the exception of latent print cards either not previously numbered or incorrectly numbered by a submitting officer.

Morgue prints will normally be received packaged in clear plastic sleeves, sealed with clear tape and enclosed in a sealed, barcoded manila envelope. If an examiner needs to unseal a sleeve, it must be opened in the processing room of the Crime Scene Unit. The examiner will be responsible for the resealing of the sleeve.

When photo CDs are received, a printout will be made of the images as thumbnails, Identifying information for each image must appear on the thumbnail printouts. Any images determined to be suitable for further examination can be printed in a larger format and marked per unit policy. All printouts will be filed with the case notes. If an image is printed on photographic paper and it is smaller than the standard paper size, then it will be taped to an 8 ½ x 11 sheet of paper and marked as per QA policy 2.5

B. Procedure

1) Obtain evidence from unit files or Property Room.

2) Verify the correct case number is documented on each item and verify the information using CRMS

3) Assure that all cards taped together and photographs have the case number marked on them.

4) Sequential numbering of latent print cards taped together will be done by the examiner if not already numbered by the officer. Latent print cards will be marked as 1, 2, 3, etc. (not 1, 1a, 2, 2a). List or identify cards taped together in the case notes using the matrix or copy of the lift card(s).

5) Known print exemplars will be marked as 1 of 4, 2 of 4, etc.

6) The person retrieving known exemplars from the San Diego County Document Archive System or California DOJ Automated

Archive System will:

a. stamp the known exemplars with the local or DOJ stamp to designate which database they came from, sign and date the stamp.
b. known exemplars printed from the archive systems do not need a bar code.

c. receipt of copies of known exemplars received from the FBI will be documented in the case notes.

7) A barcode will be created for known finger and palm print exemplars not generated electronically. These cards are considered original evidence (i.e. inked finger or palm cards, or major case prints). Finger and palm prints generated by the San Diego County and Department of Justice archive systems are not considered evidence because they can be repeatedly reproduced electronically. These copies will be kept in the case notes. Crime Scene Unit personnel will barcode any morgue prints they receive.

8) Exemplars obtained by an examiner will be barcoded. The name of the individual and the case number must appear on each exemplar. Either one barcode can be created for each individual or a barcode can be placed on each exemplar. The barcode must state the total number of exemplars for each individual.

a. Exemplars for property or person crimes (non-homicides) will be placed in a blank envelope with an additional barcode placed on the outside of the envelope. These cases will be booked into Property.

b. Exemplars for barcoded homicide cases will be placed in a homicide envelope and an additional barcode will be placed on the outside of the envelope.

c. For exemplars for homicide cases booked into property using the paper property tags, the barcode is not placed on the outside of the envelope. For these older cases, the property tag number must be entered into FIleOnQ under “Paper Property Tag#.” These exemplars will be filed in the original homicide envelope.

3.2 LATENT PRINT EXAMINATION AND MARKING OF EXAMINED IMPRESSIONS

A. Policy

The comparison method is based upon the ACE-V methodology. ACE-V is an acronym for: analysis (A), comparison (C), evaluation (E), and verification (V).

All identifications and exclusions will be verified.

In an identification, the latent print card and exemplar will be documented by both the examiner and verifier. Refer to the following procedure.

B. Procedure

The following criteria is a quality assurance standard adopted to provide a minimum standard with which to evaluate the case examiner's determination of suitability for comparison.

1) Suitability for Comparison

A latent print will be determined to be suitable for comparison if it contains at least eight clear minutiae that are easily discernible in a finger print (including middle and lower joints), and at least twelve clear minutiae that are easily discernible in a palm or plantar print. These minutiae are located during the analysis, prior to comparison. In addition, the latent print must meet one or more of the following criteria:

a) Discernible source area
b) Discernible orientation
c) At least one focal point (e.g. core, delta, crease, scar)
d) At least one target area (a target area is the friction ridge detail in the latent print that has been selected for search to the known exemplar)

Latent Prints that do not meet the above listed criteria may be marked suitable for comparison at the discretion of the case examiner. The case examiner must document on a photograph/image, which data permitted them to determine the latent print was suitable for comparison and include a copy in their case notes.

2) Suitability for Exclusions

The following criteria is a quality assurance standard adopted to provide a minimum standard with which to evaluate the case examiner's determination of suitability for exclusion.

A latent print will be determined to be suitable for exclusion if it meets all of the following criteria:

a) Discernible source area
b) Discernible orientation
c) At least one focal point (e.g. core, delta, major crease, scar)
d) First and second level detail (second level detail around a focal point is required)
e) More than one target area (a target area is the friction ridge detail in the latent print that has been selected for search to the known exemplar)

Latent prints that do not meet the above listed criteria may be marked suitable for exclusion at the discretion of the case examiner. The case examiner must document on a photograph/image, which data permitted them to determine the latent print was suitable for the exclusion and include a copy in their case notes.

3) Visually examine the evidence.

a. If there are sufficient characteristics to perform a comparison, the impression will be marked using the following guidelines:

1. a red permanent marking pen will be used to mark the impression to be examined.
2. each impression (to be examined) will be assigned a subsequent alpha-character beginning with the letter "A" on each card corresponding with the matrix.
3. an arc over the top of the impression indicates a finger or fingertip.
4. an impression located between two lines indicates a lower (second or third) finger joint.
5. an impression which has been circled indicates that the anatomical orientation cannot be discerned.
6. partial palm or footprints will be marked with a line at the proximal position opposite the fingers or toes.

b. For any impression which is incidental to the lifting process, obtain the lifting officer's ten print exemplar and make a comparison.

4) Visually examine the known exemplars.

a. Is the area necessary for a comparison available in the known exemplar? If not, access the county or state finger or palm print archive systems for additional exemplars.

5) Analysis

a. The examiner conducts a thorough visual assessment of friction ridge detail determining if sufficient quality and quantity of detail are present. The examiner analyzes for:

1. first level detail

   Analysis of ridge flow/pattern type; includes core, delta location, ridge count, ridge flow and any ridge damage – scarring or genetic.

2. second level detail

   Analysis of the friction ridge path; includes ridge length ridge sequence, ridge type, lateral spatial relationship between ridges.

3. third level detail

   Analysis of ridge shape/thickness/thinness and relative pore location.

4. if the friction ridge impression is determined to be unidentifiable, the examiner documents their result. No further examination is performed.

6) Comparison

a. When the data in the ridge impression is determined to be sufficient for comparison, the examiner evaluates the ridge data for sufficiency to individualize. The examiner will:

   1. choose a target area of ridge detail to begin the comparison
   2. determine correspondence between the source impression and exemplar based on
      a. ridge flow data (Level 1)
      b. ridge path data (Level 2)
      c. ridge shape data (Level 3)

7) Evaluation

a. The examiner formulates a conclusion based upon the analysis and comparison of the source impression and exemplar standard. The evaluation is based upon the significance of agreement or disagreement between ridge data. Assessments are made regarding sufficient clarity and agreement of data to individualize the source impression.

8) Verification

a. A second examiner repeats the “ACE” process. The examiner performs an independent analysis (A), comparison (C), and evaluation (E) between the impression and exemplar.

b. In the event of a disagreement between examiner and verifier, refer to laboratory QA policy 2.9 Casework Review for resolution.

c. The verifier, if in agreement with the identification, will document the evidence.

C. Marking Procedure of Identified Impressions

1) The documentation will be placed as close to the identified impression as possible without disrupting or interfering with any other impression. The following information will be marked in red:

a. the name of the identified individual.

b. area of friction ridge skin identified.

1. finger number or palm (i.e., #1 RT, #1 right thumb, LP, Left palm). The description can be abbreviated or written out.

c. date the identification was established.

d. initials of the examiner making the identification.

2) the known exemplar used for the identification will require the following documentation in red ink:

a. date the identification was established

b. examiner initials

3) complete the identification information on the back of the envelope in the space provided.

4) The verifier, if in agreement, will document the evidence using red ink near the primary examiner's notation on the evidence and exemplar.

D. Latent to Latent Comparison/Documentation

If a latent to latent comparison is performed, and the conclusion is that they are from the same source, case notes must be documented on the evidence and/or in the case notes.

1) If you are documenting multiple lifts of the same impression, it can be shown by writing on the lift card or photograph. This can occur on the same or separate lift cards. Examples for writing this on the evidence would be:

- Impression A is the same lift as impression B (if both appear on the same card)
- Impression A on card 3 is the same lift as impression B on card 4

No side by side comparison sheet or verification is required.

2) If you are documenting a comparison of different latent prints, then a side by side comparison sheet is needed in addition to writing on the lift card of photograph. Examples for writing this on the evidence would be:

- Impression A is the same impression as A on card 3
- Same as impression A on card #3
- A and C are the same impression, etc.

A verification is required and the words “I agree” must be written by the verifier along with their initials and the date. A separate comparison sheet is not needed from the verifier. If the verifier feels a need for additional information, a note page can be added.

3.3 KNOWN TO KNOWN COMPARISONS

A. Policy

Known print to known print (K to K) comparisons are conducted when requested and if multiple cards were printed for the same subject and will be retained in the case notes. . All known to known comparisons must be verified and will only be conducted in the latent print unit. They will not be performed in a courtroom or in the District Attorney's Office.

B. Procedure

1) Compare exemplars.

2) If there is no identification, no further documentation is required other than the normal indication in the notes.

3) If there is an identification, document the exemplar with "K to K", date and initials. The verifier will document the identification in red near the primary examiner's documentation.

3.4 IDENTIFICATION IN DEATH CASES

A. Policy

The San Diego Police Department Records Division (Cal-ID) is responsible for the identification of unknown decedents. If the print quality is at issue, examiners can search prints again and include other databases.

When requested by a medical examiner, the Latent Print Unit will assist in the recovery of the ridge skin. This usually occurs when advanced decomposition hinders the routine identification process or when other circumstances require expertise from a latent print examiner.

The examiner will record:

1) finger and palm prints from the unknown decedent for identity purposes.

2) all friction ridge skin from the hand for elimination of crime scene print evidence, and

3) foot print impressions when the found body was recovered bare foot.

Only by request and Chief's approval will latent print examiners assist in the identification of deceased in major disasters.

Choices for recording friction ridge skin are as follows, and may not be limited to just one technique. Decide which procedure is best or required before starting with a recovery method:

1) Inked and morgue spoon method.

2) Powder "Kinderprint" method.

3) Tissue Builder Method.

4) Removing Fingers, palms, feet, or friction ridge Skin.

5) Silicone ("Mikrosil" or "Accutrans") casting material

6) Charred or Desiccated Hands

7) Re-hydration Technique for Mummified Fingers

B. Procedure

1) Inked Method

a. Examine hands to determine if all fingers are present. If any fingers, hands, toes or feet are missing, Medical Examiner personnel will determine if amputation or loss occurred during life or after death and the examiner will note this on the appropriate exemplar. The FBI would need to know this for a classification search.

b. Clean the fingers of all foreign matter such as dirt, grease blood, etc.

c. Dry the skin surface.

d. Fingers may be inked with a spatula or small “porelon” pad.

e. Fingers may be printed on card strips or squares cut from a fingerprint card.

f. Use a morgue spoon or place the card in your cupped hand.

g. Roll the inked fingers on the card

2) Powder “Kinderprint” Method: if the skin is intact, use the powder method on fingers and palms

a. Dust the skin surface with black fingerprint powder, wipe off the excess powder.

b. Apply opaque tape large enough to cover the skin surface.

c. Remove the tape and place it over a transparent sheet.

d. Prints can be viewed in the correct position by turning the transparent mount over

3) Tissue Builder Method: fingers are pliable and intact but wrinkles prevent adequate printing

a. Fill a hypodermic syringe with tissue builder.

b. Inject the needle below the distal crease of the finger up toward the tip, keeping the needle below the surface of the skin.

c. If needed, inject solution at the tip downward or side of the finger inward.

d. Inject solution until the finger bulb is free from wrinkles.

e. Allow tissue builder to solidify after a short time.

f. Ink and print the finger or apply the powder method.

4) Removing Fingers or Skin: only when authorized by a medical examiner

a. Severely decomposed bodies, amputation is best done at the wrist by a medical examiner to preserve the fingers and palm intact.

b. Transport the hands to the crime lab soaked in a preservative solution.

c. At the lab, examine the skin to determine the extent of decomposition of the epidermis. Natural separation of the epidermis from the dermis should occur.

d. A shallow cut around the wrist allows the entire epidermis to be peeled from the hand.

e. Fingers may be removed separately but maintain finger order.

f. Clean and thoroughly dry skin.

g. If possible, slip it over your gloved finger and print it as if taking your own fingerprints, or

h. Collect clean and mount the epidermis skin by placing the skin between glass slides.

i. Photograph slides using transmitted light: friction ridge skin will photograph in the positive form - black ridges

5) Silicone ("Mikrosil" or "Accutrans") casting material

a. Use when wrinkled or mummified fingers are encountered and removal of hand is not authorized by a medical examiner.

b. Mix ingredients per manufacture directions.

c. Spread silicone with a spatula over the friction skin.

d. Allow silicone to cure before removing.

e. Photograph to correct ridges that appear as furrows, and furrows that appear as ridges.

f. Mount silicon lifts on card stock with tape.

6) Charred or Desiccated Hands

a. A medical examiner may have to amputate charred hands.

b. Place hands or fingers in marked containers packed with cotton to minimize any further damage to the fingers.

c. Photograph ridge detail before proceeding with more intrusive techniques.

d. Use silicone material to cast ridge detail, if possible.

e. Remove the epidermal skin by carefully cutting it away.

f. Epidermal skin may be re-hydrated

7) Re-hydration Technique for Mummified Fingers

a. Remove the pattern area (epidermal skin) of the finger.

b. Place the cut away mummified epidermal skin in a plastic container.

c. Mixing two embalming fluids -- "Restorative," an anti-dehydration colloid, and "Metaflow," an arterial conditioner -- in equal parts. An alternative is “Permaflow V2” which, works equally well as Metaflow but less hazardous.

d. Soak mummified skin in the re-hydration solution.

e. Excess tissue on the underside of the epidermal skin may need to be scrapped away to allow solution to permeate the skin.

f. Watch for flesh color to restore, and the skin looks like living tissue.

g. Place the skin between two glass slides and photograph it using transmitted light.

h. For recovery, you can attempt to ink and print ridges or dust black fingerprint powder to lift or photograph.

8) AFIS Search

a. Enter and search the best quality fingerprint impressions utilizing a range of automated fingerprint databases (local, state, and IAFIS).

9) Request a Homeland Security or FBI Expedite fingerprint search

10) Latent Prints as Exemplars: known inked prints of the victim will not always be available for comparison purposes.

a. In this situation objects from the victim’s residence should be processed for latent finger and palm prints.

3.5 ALPS/AFIS

A. Policy

All ALPS quality impressions will be searched through the local database. The examiner will follow the ALPS criteria as a guide to determine which impressions are ALPS quality. If an impression meets the ALPS search criteria and does not result in a hit, the impression must be enrolled.

Examiners, at their discretion, can search any impression that does not meet the ALPS criteria and determine if such impression should be enrolled in the unsolved database.

If an impression has been labeled with a "P" or "PP" number and for any reason an examiner decides not to search it, the "P" number must be crossed out with a single line, dated and initialed.

A hard copy of the AFIS user's manual is located in the ALPS Section and on the desktop. Refer to the manual for detailed information on how to operate the system.

B. Procedure

Suitability for ALPS Search and Enrollment:

The following criteria are quality assurance standards adopted to provide a minimum standard with which to evaluate the case examiner's determination of suitability for ALPS search and enrollment.

FINGERS:

A latent finger print will be determined to be suitable for ALPS search and enrollment if it contains at least eight clear minutiae that are easily discernible, form a cluster and are not scattered throughout the print. These minutiae are located during the analysis. In addition, the latent print must meet one or more of the following criteria:

a) Discernible orientation
b) An approximate core location

Due to repeatability factors, if the following areas are searched, then the latent print must include at least twelve clear minutiae that are easily discernable, form a cluster, and are not scattered throughout the print:

a) Only the delta
b) Only the area below the pattern area
c) Only the area above the pattern area

PALMS:

A latent palm print will be determined to be suitable for ALPS search and enrollment if it contains at least twelve clear minutiae that are easily discernible, form a cluster and are not scattered throughout the print. These minutiae are located during the analysis. If you have a large palm print with an abundance of data, it is highly recommended that multiple searches in different areas of the palm print are performed.

Definitions:

- **CRMS** (Criminal Record Management System). CRMS is used to obtain crime related information and to gather Detective information. Because auto thefts do not appear in CRMS, the detective assigned to those cases can be found on the "Mail Stops for Area Stations/Units" list.

- **Roster.** The Roster is used to obtain employee information. It is used by the Latent Print Unit to obtain the Detective's unit assignment and mail station.

- **Marking fingers**: Each finger impression to be searched will be marked in red with an arc (to show orientation), a letter and a "P" number. If the orientation is unknown, circle the impression.

- **Marking palms**: Each palm impression to be searched will be marked with a red line at the base of the impression (to show orientation), a letter and a "PP" number. If the orientation is unknown, circle the impression.

- **Databases:** The available databases are Local, State, and FBI. All ALPS quality impressions will be searched through the local database. For property crimes, a local search is required. For person crimes, a local and FBI search is required. Currently, palm impressions can only be searched through the local database. An examiner can use their discretion for searching additional databases including datasets.

- **Candidates list:** The candidates list is displayed on the computer monitor showing an image of the latent impression searched and an image of the known fingerprint from the archive system. A list of twenty candidates will be produced for both the finger and palm systems.

- **Hit (Confirm Yes):** When a candidate cannot be eliminated on screen. The exemplar will be printed and compared to the original evidence.

- **No Hit (Confirm No):** When a candidate list is reviewed on screen and all candidates are eliminated.

- **Search Confirmation Page:** If the search results in a “Hit”, print this page to show the latent impression searched and the candidate. This page will become part of the case notes.

- **TLI (Tenprint to Latent Finger or Palm Inquiry):** When a candidate cannot be eliminated on screen. The exemplar will be printed and compared to the original evidence.

3.6 AFIX TRACKER/COMPARATOR

A. Policy

The use of AFIX Tracker is optional.

If AFIX Tracker is on a computer system, the system must be part of a quality control check documented in Latent Print Policy Document 6.2.

To use AFIX Tracker, an analyst must complete a competency test at the end of AFIX Tracker training.

Access to the database is gained with a controlled hard lock key available from the unit supervisor.

The database is maintained on the Department local area network. For casework purposes only Latent Print Unit personnel will access the database.

The examiner must complete comparisons on all friction ridge areas of the exemplars and not rely on the computerized candidate list.

If an examiner experiences technical problems while using the AFIX Tracker / Comparator program contact the software vendor:

AFIX TECHNOLOGIES, INC.
205 N. WALNUT/ PITTSBURG KS. 66762
1-877-438-2349
WWW.AFIX.NET

B. General

The AFIX Tracker software is designed to search individual crime cases or the entire database.

Tracker can perform searches on knowns to knowns, knowns to latents, latents to knowns, and latents to latents.

Evidence is scanned and displayed in high resolution (600 or better) for side-by side comparisons. A latent print examiner can, in addition to Tracker searches, use Comparator to perform manual comparisons similar in use to other computer program aids such as Adobe Photoshop software.

The procedures for entering/searching latent and known prints into the system are located under the “HELP” tab, which is built into the AFIX Tracker / Comparator program.

Instructions for the use of the tracker system can be found in the “AFIX Tracker Maintenance and Quality Control” book located in the unit supervisor’s office.

3.7 REWORKING CASES PREVIOUSLY EXAMINED

Policy

Additional work may be requested on cases previously worked by examiners no longer with the department. The supervisor will determine what work will be performed prior to assignment and will advise the new examiner. The examiner may be requested to perform additional work on the case, verify previous identifications and/or perform ALPS work depending on what the ALPS system capabilities were at the time.

If the new examiner does not agree with the conclusion of the previous examiner, they may consult with another examiner and notation(s) must be made in the notes. The supervisor and QA manager must be notified of any discrepancy, disagreement, or clerical error with the previous work.

The numbering and/or lettering system used at the time of the original request will be continued with the exception of the known exemplars. The name of the subject will be used instead of the "K#" (K number refers to known exemplars). In one system, Q#s were used. The "Q" stands for Questioned. The cards were documented as Q1-5, meaning envelope #1, card #5. In another system the envelopes were numbered sequentially. For example, if more than one envelope was received on a case, the first envelope would be labeled #1 (1-7), the next envelope would be #2 (8-20), etc.

The examiner only needs to complete the internal chain of custody form for the envelopes used for the new exam. All latent print cards, photos and known exemplars need to be dated and initialed.

Refer to 4.3 Latent Print Case Notes.

All reports issued by the new examiner will follow current reporting procedures. If Q#s were used in the original report, refer to Q#s in the current report.

If the previous examiner requested new exemplars on a subject, only those latent impressions need to be compared.

If a verification/technical review was not performed on the previous exclusions, the results of those exclusions must be verified by the new examiner.

For court testimony purposes, the District Attorney's Office will make the decision as to whether one or both examiners will be testifying.

4.1 REPORTS

A. Policy

All comparisons, computer searches, and identifications require a Unit report to be written after completion of the work and results obtained. One report may be issued to report the results of all individuals compared in a case or one report may be issued for each subject in a case.

All reports must comply with the general format presented in the Laboratory Quality Assurance Manual. The unit supervisor must review all reports prior to issuance. All reports must have an original signature.

The examiner who examines the evidence or the computer search results in the case will sign the report.

Under no circumstances will any suspect identification information be released without verification. If a Verifier is not available, the unit supervisor will be notified.

If elimination prints were received, the report must reflect that they were received and whether or not they were compared. It is at the discretion of the examiner to compare them or not.

B. Procedure

1) Complete a report based on the elements involved in the case:

   a. Manual and ALPS comparisons - use general latent formal report.

   b. Elimination identifications are reported on any report that meets the circumstances of the case.

2) PD-299 Form

   a. Upon completion of the case, the 299 will be kept as an Admin Doc

3) Correction to a report

   a. Refer to Quality Assurance Manual – Issuing Corrections policy.

4.2 EVIDENCE DISPOSITION

A. Policy

Envelopes will be sealed and initialed before being returned to the Property Room. Cases retrieved from the Property Room will be checked out and returned by unit personnel.

Document any evidence released to the court in FileOnQ or with a Court Evidence Receipt (PD-233) which will be returned to the Property Room.

An examiner may keep a case (such as homicides or a series cases related by suspect) in their possession for up to one year. If the examiner requests to retain the case longer, then both the supervisor and crime laboratory manager must approve the request.

B. Procedure

1) Seal and initial envelopes and place in the bin for return to the Property Room.

2) Retain electronic copies of known exemplars in the case notes.

3) Barcoded known exemplars will be returned to the Property Room.

4) Evidence obtained from the Property Room (latent prints, pawn slips, ect.) will be returned to the Property Room.

4.3 LATENT PRINT CASE NOTES

A. Policy

For all latent prints that are annotated, the case examiner must document their analysis on a photograph/image and include a copy in the case notes.

Notes must be taken to record the features used for comparison in the latent and known prints. The reason the conclusion was made must be included for each comparison.

The latent print internal chain of custody form will be used to document the evidence transfers between the examiner, verifier, and the technical reviewer.

All lift cards in which an analysis is performed must be copied and retained in the case notes. When working cases that include old worksheets or matrix/lift tables, a new set of case notes must be completed. Refer to section 3.7 for more information regarding cases previously worked.

The first page of all notes will be initialed and dated by the examiner performing the technical review.

The examination date (exam date) is the date that work begins on a case, and must be noted on the first page of the note packet.

The completed date is the date of the report. The completed date does not have to appear on any of the note pages.

The verifier will indicate their verification of identifications on a side-by-side screenshot. The screen shot produced by the verifier must have the word "verification" appear on that note page along with their initials and the date. If the verifier feels a need for additional information, a note page can be added.

For exclusions, handwrite in "I agree with all exclusions" on the matrix, or where the examiner has stated the conclusion. All statements of agreement need to be initialed.

B. Procedure

1) The note packet must contain the following information if applicable depending on the case circumstances (also refer to QA manual 2.6):

   a. latent print exhibits received.

   b. known print exhibits received including elimination prints.

   c. from where the evidence was received.

d. whether or not the evidence was sealed.

e. exam date.

f. barcode #.

g. copies of all latent print cards or photos (photocopy or scan, front and back).

h. results of analysis and comparison.

i. screenshot of identified latent and known print, side by side must be initialed by examiner.

j. supporting data for exclusions (i.e. screenshot, card annotation etc.).

k. ALPS information (impressions and databases searched, search results).

l. techniques used.

m. disposition of evidence: the report and notes must accurately reflect where the evidence is going.

n. chain of custody form.

2) Complete Worksheet 2 (WS2) reflecting any communications with persons associated with the case.

3) Examiner must write the case number on photographs or papers that are not standard letter size and attach them to a standard letter size (8½" x 11") blank piece of paper documented with the appropriate data.

4) Electronic copies of known exemplars will be documented with the appropriate data.

5) Each page of the case notes will contain the following information:

a. case or incident number.

b. page number.

c. Date.

d. Examiner's handwrittien initials.

6) The Latent Print Unit request form (PD-299) will be placed at the end of the note packet as an "ADMIN DOC."

5.1 LATENT PRINT UNIT EQUIPMENT LIST

ALPS COMPUTER TERMINAL

Use: For accessing data base(s) to search latent and/or known prints..

AFIX TRACKER SYSTEM

Use: To assist in the comparison of latent prints to known prints. Latent prints are entered into the system and compared to the known prints in the database. The system can be used to aid in the comparison of cases that have a large volume of latent print evidence against known subjects.

STEREOSCOPE

Use: To assist in examining fingerprint images for comparison purposes.

6.1 REVIEW PROCESS FOR LATENT PRINT CASEWORK

A. Policy

All cases (100%) will be technically reviewed.

The technical reviewer/verifier will determine if the conclusions reached were reasonable. All identifications and exclusions will be recompared and verified. All non identified/excluded latent print evidence will be technically evaluated to assure the original conclusions are reasonable. The technical reviewer will review all reports, notes, and evidence for errors and inconsistencies, and will ensure that the documentation of the evidence has been done properly and that unit policy and procedures were followed.

When discrepancies in the analysis or conclusion are discovered, the technical reviewer/verifier must address corrections or suggestions for change directly with the primary examiner. The technical reviewer cannot initial any paperwork until all corrections/changes have been made.

The examiner who performs the technical review does not have to be the verifier on the case.

Each examiner will maintain a log book showing the name of the examiner who performed the technical review.

B. Procedure

1) Technical Review

a. Refer to section 4.3A for requirements on documenting the review.

b. In the event of a disagreement between the primary examiner and reviewer, refer to laboratory QA policy 2.8 (Casework Review).

c. If an examiner changes an opinion based on the review, keep all original documentation and make the appropriate notations to document the new opinion.

6.2 AFIX TRACKER PERIODIC QUALITY CONTROL CHECK

A. Policy

A periodic quality control check will be performed during the every six months whether or not casework is entered and searched.

The supervisor will maintain possession of the QC log.

Documentation of the Periodic Quality Control Check must be listed on the AFIX Tracker Maintenance Log and Quality Control sheet.

If the AFIX Tracker program is re-installed a Quality Control Check will be done at that time.

If the AFIX Tracker QC check does not perform to expectations, no casework will be processed through the Tracker until the problem is resolved.

B. Procedure

The Periodic Quality Control Check is accomplished by searching known prints called Quality Control Check (QCC) prints against the Biographical database.

Typically, searches are made either against the fingerprint database or the palm print database or both that make up the Biographical database. In order to verify that searches are done correctly it will be necessary to enter and search the Quality Control Check (QCC) prints.

You will find the Quality Control Check fingerprint and partial palm prints mounted on 3x5 cards located in a sleeve in the AFIX Tracker maintenance log. These are the prints that you should enter and search. These items are not evidence but only reference material.

Standard control prints (stored in the Biographical database) consist of a ten-print card and a set of palm print cards. Standard control prints have been previously entered so there is no need to re-enter them. These items are not evidence but only reference material.

A Periodic Quality Control Check verifies that an accurate search was done and that the AFIX Tracker System is functioning properly.

If the results obtained from searching the QCC prints are non-ident, re-run the search again.

7.1 PROFICIENCY TEST PROGRAM

A. Policy

Latent Print Examiners who have completed training and are independently working cases will be required to participate in annual proficiency testing.

B. Procedure

Proficiency tests are to be worked like normal case work, following all unit policies and procedures.

If an examiner is unable to complete the proficiency test or part of the proficiency test due to poor quality photos, the examiner will confer with the supervisor to determine course of action.

If there are any other proficiency-related questions, refer to the Laboratory's proficiency test policies in the QA manual on the G drive, and to the ASCLD-LAB - Proficiency Review Program document located on the:

G-Drive/Latent Prints/ASCLD-LAB Proficiency Review Program

7.2 LATENT PRINT UNIT TRAINING PROGRAM

A. Policy

The unit supervisor is responsible for the administration of the training program.

The Latent Print Examiner training programs are approximately one year in duration.

Training outlines for each position are available in 7.2 and will be used to document the training process.

The trainer is responsible for the completion of the training and associated paperwork.

B. Procedure

Obtain the training documents from the supervisor.

Document start dates.

Have trainee initial the subject module.

Both the trainer and trainee will initial and date of completion.

Refer to QA policy 7.6 for additional information on training and testing requirements.

Module Training for Latent Print Examiner I

Module A

Part 1 – Discuss and Understand the History and Background of Friction Skin Identification

Part 2 – Discuss and Understand the Importance of Inked Print Exemplars

Part 3 – Discuss and Understand Friction Skin Fundamentals and Formation

Part 4 - Discuss and Understand Palmar Surfaces and the Major Creases

Module B

Discuss and Understand Analysis, Comparison and Philosophy of Friction Skin Identification

Module C

Discuss and Understand Documentation, Notes and Reports

Module D

Discuss and Understand Knowledge of the Cogent system and the Comparison of Elimination Prints

Module E

Part 1 – Discuss and Understand Latent Print Unit Function and File

Part 2 – Discuss and Understand Procedures for Receiving Latent Print Evidence. Part 3 – Discuss and Understand Procedures for Releasing Latent Print Evidence

Part 4 – Discuss Priorities for Service

Part 5 – Discuss and demonstrate Data Entry

Part 6 - Discuss and demonstrate Case Preparation

Module F

Part 1 - Discuss and Demonstrate the Use of AFIX Tracker/Comparator

Part 2 - Discuss and demonstrate the Use of Digital Imaging

Module G

Study and Discuss Deceased Identifications and Processing Human Skin for Latent Prints

Module H

Discuss and Understand Forgery and Fabrication

Module I

Discuss and Understand Quality Assurance and Accreditation

Module J

Part 1 – Demonstrate the use of Modules A-I in Casework

Part 2 – Discuss Preparation and History of Court Testimony

Part 3 – Discuss Negative Testimony

Part 4 – Discuss and Prepare Court Charts

Part 5 – Prepare Questions and Answers for Expert Testimony

Part 6 – Discuss and Demonstrate Expert Witness Testimony

Module Training for Latent Print Examiner II

Module A

Part 1 – Discuss and Understand Latent Print Unit Function and Files

Part 2 – Discuss and Understand Procedures for Receiving Latent Print Evidence

Part 3 - Discuss and Understand Procedures for Releasing Latent Print Evidence

Part 4 – Discuss Priorities for Service

Part 5 – Discuss and demonstrate Data Entry

Part 6 – Discuss and Demonstrate Case Preparation

Part 7 – Evaluation of Latent Print Cards (Info-Checks)

Module B

Discuss and Understand Quality Assurance and Accreditation

Module C

Part 1 - Discuss and Demonstrate the Use of AFIX Tracker/Comparator

Part 2 - Discuss and demonstrate the Use of Digital Imaging

Module D

Discuss and Understand Knowledge of COGENT and the Comparison of Elimination Prints

Module E

Part 1 – Demonstrate the use of Modules A-F in Casework

Part 2 - Discuss and Understand Documentation, Notes and Reports

Module F

Part 1 – Discuss and Prepare Court Charts

Part 2 – Prepare Questions and Answers for Expert Testimony

Part 3 – Discuss and Demonstrate Expert Witness Testimony

Module Training for Latent Print Examiner Aide

Module A

Discuss and understand quality assurance and accreditation:

( ) Location quality assurance manual on-line (G-Drive)

( ) Understand and discuss the unit and laboratory operations manuals.

( ) Administrative review.

( ) Technical review.

( ) Conflict resolution.

( ) Quality assurance manual.

( ) M.S.D.S. location and use.

Module B

Understand and demonstrate latent print unit files and organization:

( ) Discuss and demonstrate latent print unit function and organization.

( ) Review location of property crime, sexual assault, identification and homicide file envelopes and jackets.

( ) Review of Lab sequence file.

( ) Review and understand latent print unit clerical manual.

( ) Review of police officer known print file.

Module C

Discuss and demonstrate procedures for receiving and releasing evidence:

( ) Understand Chain of custody for latent print evidence.

( ) Understand opening and sealing of evidence.

( ) Understand and discuss purpose of feedback form.

( ) Understand temporary storage of request and evidence.

Module D

Discuss priorities for service:

( ) In custody cases

( ) Court date cases.

( ) Person crimes.

( ) Property crimes.

( ) Archive cases.

( ) Expedite cases.

( ) Backlog cases.

( ) Cases not assigned (XYZ / NAY)

Module E

Discuss and understand the history and background of friction ridge identification:

( ) An understanding of the earliest recorded awareness of fingerprints.

( ) An understanding of early anatomical observations.

( ) An understanding of the scientific observations and uses leading to modern fingerprint identification.

-Ashbaugh, Ridgeology (Chapter 11)

-Midlow and Cummins, (Part 1)

-Moensons, Fingerprint Techniques (Chapter 1)

Module F

Discuss and understand the importance of inked fingerprint exemplars:

( ) An understanding of the proper methods for recording inked fingerprints for criminal history and personal identification.

( ) An understanding of the proper method for using ink an roller to record fingerprints.

( ) An understanding of the proper method for recording major case prints.

( ) An understanding of the importance for elimination prints.

Pat Wertheim, JFI 49-5

FBI, The Science of Fingerprints (Chapter IX)

Cowger, Friction Ridge Skin (Chapter 11)

Moensons, Fingerprint Techniques (Chapter 5, pages 137-145)

FBI, Major Case Prints

Module G

Discuss and understand friction ridge fundamentals and formation;

( ) An understanding of the biological significance of friction ridge skin patterns and their formation.

( ) An understanding of the nature of individual ridge characteristics and the varying definitions assigned to those ridge characteristics.

( ) An understanding of the uniqueness of various individual ridge characteristics.

( ) An understanding of the uniqueness of various unit relationships in groups of individual ridge characteristics.

( ) An understanding of basic pattern types.

-Cowger, Friction Ridge Skin (Chapter 6)

-Ashbaugh, Qualitative and Quantitative Analysis, JFI 44-5, 42-6

-Olsen, JFI 41-3

-Saviers, Friction Ridge Characteristics

-Kasey Wertheim, Friction Ridge and Pattern Formation

-FBI, The Science of Fingerprints (Chapter 11)

-Pat Wertheim, JFI 46-2

Module H

Understand and discuss friction ridge identification, analysis, comparison and philosophy:

( ) An understanding of analysis, comparison, and evaluation of friction ridge detail.

( ) An understanding of quantitative and qualitative analysis.

( ) An understanding of the identification value of cumulative ridge characteristics in simultaneous latent fingerprints.

( ) An understanding of what is a valid identification and why no minimum number of matching ridge characteristics can be defined to effect an identification.

( ) An understanding of the evaluation criteria for determining the identification value of fragmentary latent prints.

( ) An understanding of the value of ridge flow configuration including scars, creases and

poroscopic ridge characteristics in latent print comparisons,

( ) An understanding of the value of incipient (nascent) ridge characteristics for use in latent print identification.

( ) An understanding of and ability to recognize, the appearance of latent fingerprints, palm prints and fragmentary impressions of value for identification.

( ) An understanding of the nature of tonal and lateral reversals in latent print comparisons.

( ) An understanding of the effects of pressure distortion, slippage, overlays, substrate artifacts and the ability to recognize and explain such distortions.

( ) An understanding of the difference between distortion and dissimilarity.

-Ashbaugh, Ridgeology (Chapters 4-5 and JFI 42-2)

-Cowger, Friction Ridge Skin (Chapter 7)

-Scotts, Fingerprint Mechanics (Sections 26-34)

-Vanderkolk, (JFI 49-3)

-W. Leo, (JFI 48-2)

-McRoberts, The Print, "What They Can and Can't Do"

-Wertheim, Scientific Comparison and Identification of Fingerprint Evidence (Fingerprint Whorld (Vol. 26 no 101)

-Stoney and Thornton (JFS 31-4)

Module I

Discuss and understand documentation of evidence:

( ) Understand and demonstrate the proper documentation of latent print lifts/photographs.

( ) Understand and discuss the purpose of master CD's/working copy CD's and the proper documentation of them.

( ) Understand and demonstrate the proper receipt/examination documentation of latent print evidence/envelopes and known prints.

Module J

Discuss and understand notes, reports and award notifications:

( ) Understand, discuss and demonstrate the use of PD-299 request/report.

( ) Understand and demonstrate the use of the case management coversheet.

( ) Understand and demonstrate the use of worksheets 1 and 2.

( ) Understand the numbering of note pages.

( ) Understand and demonstrate the use of latent print unit identification and homicide envelopes.

( ) Understand AFIS award notification.

Module K

( ) **Evaluation (info-checks) of latent print cards:** An understanding of the evaluation criteria for determining the comparison/identification value/worth of fragmentary latent prints.

Module L

( ) **Comparison of elimination prints:** An understanding of the criteria for determining the identification of Automated Latent Print (ALPS) quality fingerprints to elimination print exemplars by a qualitative - quantitative analysis.

Module M

Automated Fingerprint Identification System (AFIS 21/ALPS): An understanding and working knowledge of the Automated Latent Print System (ALPS) for entering, searching and registering latent prints.

( ) Understand and discuss the ALPS log book.

( ) Demonstrate log-on procedures.

( ) Understand and demonstrate direct entry of prints into the system.

( ) Demonstrate knowledge of core and axis placement.

( ) Understand and discuss information on the candidates list.

( ) Demonstrate an ability to recognize matching print pairs or eliminate prints by comparison to candidate prints.

( ) Demonstrate an ability to use related NEC photographic equipment.

( ) Understand, discuss and demonstrate the criteria for retrieving and reviewing Tenprint/Latent Inquiry (TLI's)

-Score

-Red*

-Key Number

Module N

Discuss and understand preparation and history:

( ) Wertheim (JFI 40-2)

( ) Olsen, Scott's Fingerprint Mechanics

( ) J.L.Redlich, Bye, Bye, Frye

( ) Daubert, U.S. vs. Mitchell

( ) Illsley/FBI, Juror Attitudes

Module O

( ) Discuss and demonstrate negative testimony

( ) Transfer conditions and substrates

-Review article

( ) Prepare questions and answers for expert court testimony:

-Wertheim, Qualifying as an Expert Fingerprint Witness

( ) Demonstrate expert testimony:

-Communication with prosecutors and defense attorneys.

-Court room etiquette.

( ) Audio/video recording of testimony / Discuss and review testimony.

( ) Moot court