

Technical Procedure for Obtaining Known Inked Impressions and Major Case Inked Impressions

1.0 Purpose - This procedure outlines the steps to obtain Known Inked Impressions and Major Case Inked Impressions.

2.0 Scope - This procedure applies to all Forensic Scientists working in the latent evidence discipline in the Digital/Latent Evidence Section. It outlines the proper procedure for obtaining Known Inked Impressions and Major Case Inked Impressions.

3.0 Definitions

- **Known Inked Impressions (KII)** - Recording of the friction ridge detail present on the distal joint of the fingers and palms.
- **Major Case Inked Impressions (MCII)** - Recording of all the friction ridge detail present on hands to include the extreme tips, sides, and joints of all fingers and the entire palmar surface.

4.0 Equipment, Materials and Reagents

4.1 Equipment and Materials

- Printer's ink
- Ink roller
- Ink plate (for receiving ink)
- Cardboard tube
- Tape or elastic bands
- 10-print fingerprint card
- White copy paper
- Handiprint
- Magnetic fingerprint powder
- Acetate sheet

4.2 Reagents

- Ridge builder (if necessary)
- Tissue builder (if necessary)

5.0 Procedure

5.1 Known Inked Impressions

- 5.1.1** Assemble all necessary supplies, including printer's ink, ink roller, ink plate, 10-print fingerprint card(s).
- 5.1.2** Apply several drops of printer's ink to the ink plate (two (2) to three (3) dots of ink is usually sufficient). Using an ink roller, roll the ink so that it covers the entire surface of the ink plate. Caution shall be taken so as not to apply too much ink to the ink plate.
- 5.1.3** Place a clean 10-print card adjacent to the ink plate for ease of fingerprint impression rolling.
- 5.1.4** Ensure that the fingers and palms to be printed are clean and dry.

- 5.1.5 Instruct the individual to look away from the fingerprint device and to relax. Grasp the individual's right hand at the base of the thumb with your right hand. Cup your hand over the individual's fingers, tucking under those fingers not being printed. Guide the finger being printed with your left hand.
- 5.1.6 Roll the finger on the inking plate or pad so the entire fingerprint pattern area is evenly covered with ink. The ink should cover from one edge of the nail to the other and from the crease of the first joint to the tip of the finger. Using the correct amount of ink is vital.
- 5.1.7 When taking the rolled impression, the side of the finger bulb is placed upon the card. The finger is then rolled to the other side until it faces the opposite direction. Care shall be exercised so the bulb of each finger, from tip to below the first joint, is rolled evenly. Generally, the weight of the finger is the maximum pressure needed to clearly record a fingerprint. In order to take advantage of the natural movement of the forearm, the hand should be rotated from the more difficult position to the easiest position. This requires the thumbs to be rolled toward, and the fingers away from, the center of the individual's body. Roll each finger from nail to nail in the appropriate space, taking care to lift each finger up after rolling to avoid smudging.
- 5.1.8 Plain impressions are typically the last prints recorded on the front of the fingerprint card. The individual taking the prints simultaneously presses the individual's four fingers (of the right hand), keeping the fingers together on the surface of the card (at a 45 degree angle) to capture all four fingers in the allotted space. Repeat this process for the left hand and then print both thumbs. Care shall be taken to capture all fingers in the allotted space. Repeat this process for the left hand and then print both thumbs simultaneously.
- 5.1.9 When the ink has been allowed to dry on the front of the card, flip the card over so that palmprints may be taken.
- 5.1.10 Ink the entire surface of the right palm using the ink roller, and record the palm impression in the appropriate box. Mild, downward pressure in the middle of the back of the hand will help to ensure the entire palmar surface is recorded. Repeat the same process for the left palm.
- 5.1.11 Complete all required fields when known. Annotate on the card "AMP" or "Scar" if an individual is an amputee or has a scar in the area that is being recorded with ink.

5.2 Major Case Inked Impressions

- 5.2.1 Roll a set of finger and palm prints on a standard fingerprint card as instructed above.
- 5.2.2 On white copy paper, record rolled impressions of the fingers and thumbs, from the proximal joint to the finger tips, and planar impressions of the entire surface of all fingers and both thumbs. Planar impressions shall include impressions of the extreme tips and sides of the fingers as well as the joints. The impressions shall be recorded so that a planar impression is present with the extreme sides of the finger on each side of the planar impression and the tip impression above.
 - 5.2.2.1 The best method to capture the finger and joints is to apply ink to the entire length of the digit and then transfer the impression to the copy paper.
- 5.2.3 Using a cardboard tube covered by a sheet of copy paper, roll the entire hand surface to include palms, joints of the fingers and the fingertips.

5.2.3.1 Place the cardboard tube on a flat surface with the overlap seam of the copy paper on top. Ensure that, when rolled, the impression will not cross the seam. Place the wrist just above the seam and roll the entire hand in one motion.

5.2.4 It is important to indicate the source of the impression. Also label the impressions with the subject's name, the date and the name of the individual collecting the impressions.

5.3 Standards and Controls - N/A

5.4 Calibration - N/A

5.5 Sampling - N/A

5.6 Calculations - N/A

5.7 Uncertainty of Measurement - N/A

6.0 Limitations - N/A

7.0 Safety - N/A

8.0 References

“Proper Procedures for Taking Major Case Prints.” *FBI Law Enforcement Bulletin* (July 1976).

9.0 Records - N/A

10.0 Attachments - N/A

Revision History		
Effective Date	Version Number	Reason
09/17/2012	1	Original Document