### **Technical Procedure for the SAFIS/AFIT**

Version 1

Effective Date: 09/17/2012

- **1.0 Purpose** This procedure describes how to operate the State Automated Fingerprint Identification System/Advanced Fingerprint Identification Technology (SAFIS/AFIT).
- **2.0 Scope** This procedure applies to latent finger and palmprints that are to be searched through the SAFIS/AFIT. The State Automated Fingerprint Identification System (SAFIS) and the Advanced Fingerprint Identification Technology (AFIT) are designed to search unidentified latent fingerprints and palmprints which may be left on items of evidence or recovered at crime scenes. The SAFIS is also designed to search unknown deceased fingerprints as well as known inked ten prints.
- **3.0 Definitions** N/A
- 4.0 Equipment, Materials, and Reagents
  - 4.1 Equipment and Materials
    - SAFIS/AFIT Computer station
    - SAFIS/AFIT printers
  - 4.2 Reagents N/A
- 5.0 Procedure
  - 5.1 Sign On/Sign Off SAFIS/AFIT Computer Terminal
    - **5.1.1** Sign on to the system using assigned user name and password.
    - **5.1.2** Select LATENT on the right hand side menu and LATENT STATION.
    - **5.1.3** The main menu screen will appear and the latent information may be entered.
    - **5.1.4** To sign off the system, simply click the open door on the bottom right corner and the system will return to the initial status.
  - 5.2 Latent fingerprint/palmprint SAFIS entries
    - **5.2.1** Assign a case ID (case ID is the Laboratory case number assigned) and click Create.
    - **5.2.2** Scan, photograph or select latent image file to be encoded.
    - **5.2.3** Capture the latent fingerprint/palmprint on the computer monitor.
    - **5.2.4** Assign the appropriate descriptors (fingerprint/palmprint, pattern type, finger/palm, location).
    - **5.2.5** Plot minutiae using auto plotting and manual plotting techniques.
    - **5.2.6** Assign search parameters and descriptors, if necessary.
    - 5.2.7 Click on SAVE AND SEARCH.

## 5.3 Verification of SAFIS searches

- **5.3.1** Select appropriate search from LATENT HOMEPAGE, LATENT tab.
- **5.3.2** Manually verify the respondents from the packet.
  - If results are negative, disposition the case as a non-Ident.
  - If results are positive, disposition the case as an Ident.

#### 5.4 Ten Print Card Retrieval

- **5.4.1** Go to FIND, FIND TEN PRINT screen on the SAFIS.
- **5.4.2** Type in the search information (SID, Incident Number, or Name) and click on search.
- **5.4.3** Select the correct candidate.
- **5.4.4** Select PRINT TEN PRINT. Choose SBI PALMPRINT as type of card and RALEIGH, TRIAD or WESTERN LATENT as location to print.

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# **5.5 Printing SAFIS Match Reports**

- **5.5.1** Display Match Report on SAFIS Verification Screen.
- **5.5.2** Click on PRINT button.
- **5.5.3** Choose "PRINT TO PDF" or select a designated SAFIS printer from the printer drop-down box.

#### 5.6 AFIT Procedure

- **5.6.1** Sign on and case record creation is the same as for SAFIS entries.
- **5.6.2** Follow SAFIS procedures for image retrieval, capture and encoding. For AFIT searches do not plot CORE or DELTA.
- **5.6.3** Assign search parameters using AFIT database.
- **5.6.4** Create the search using SAVE AND SUBMIT. The ULW AFIT program will automatically launch.

# 5.7 Running the ULW Software

- **5.7.1** Click on Transaction Data (Top left of screen).
- **5.7.2** Click on DESIGNATION AGENCY ID and choose WVIAFIS0ZIAFIS from the pick-list.
- **5.7.3** Click on CASE INFORMATION and change the CASE PRIORITY using the pick-list.
- **5.7.4** Ensure file penetration is below 30 % by using descriptors according to FBI requirements.

- 5.7.5 Click on FINGERPRINT IMAGE.
- **5.7.6** Click on one of the purple spider web lines.
- **5.7.7** Manually check all ridge counts according to FBI requirements (count cannot be 0).

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- **5.7.8** Click on EDIT FEATURES.
- **5.7.9** Click on FILE and then SAVE AS [ULW. LFFS].
- **5.7.10** Exit ULW and Case Management. Search shall now be sent to the FBI.

## 5.8 Verification of AFIT Searches

- **5.8.1** Open Latent Homepage, click on LATENT tab and look for unique case ID.
- **5.8.2** When search has completed, the line will be in bold type. Close Homepage.
- **5.8.3** Click on ULW Latent queue icon on desktop.
- **5.8.4** Shrink ULW screen and minimize.
- **5.8.5** Open Latent Case Management.
- **5.8.6** Load the designated case.
- **5.8.7** Click on ULW tab at the bottom of the screen.
- **5.8.8** Use Latent Station image to compare to AFIT search respondents (screens may be sized so that both may be viewed simultaneously).
- **5.8.9** Double click on all SRL files with the designated ID. Latent image should appear and comparison may be conducted.

#### **5.9 Printing AFIT Match Reports**

- 5.9.1 Click FILE and then SUMMARY OUTPUT
- **5.9.2** Click on PRINT button.
- **5.9.3** Choose "PRINT TO PDF" or select a designated SAFIS printer from the printer drop-down box.
- 5.10 Standards and Controls N/A
- **5.11** Calibration SAFIS/AFIT is maintained by the SBI Criminal Information and Identification Section (CIIS).
- 5.12 Sampling N/A
- 5.13 Calculations N/A

## **5.14** Uncertainty of Measurement – N/A

- **6.0 Limitations** The State Automated Fingerprint Identification System (SAFIS) has the capability to search latent fingerprints and palmprints from arresting agencies throughout North Carolina and other states. This database is maintained, and updated as necessary, by the Criminal Information and Identification Section (CIIS).
  - **6.1** The system is designed in a Microsoft Windows format and is efficient with respect to entries and verification packets. For further instructions, please refer to the Operations Manuals.

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- **6.2** AFIT is only capable of searching latent fingerprints.
- 6.3 SAFIS hits or identifications shall be recorded with the SAFIS printer to be included in the case notes or on the Image Processing System and within the SAFIS Hit log. (Refer to the Section Image Processing Procedure)
- 7.0 Safety N/A

### 8.0 References

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King, B.W. "Automated Fingerprint Identification System Operation in Canada." *International Symposium on the Forensic Aspects of Latent Prints.* (May 1993): 69-76.

Stock, R.M. "An Historical Overview of Automated Fingerprint Identification Systems." *International Forensic Symposium on Latent Prints.* (July 1987): 51-60.

Williams, N. "Canada Moves toward a Nationwide Automated Fingerprint I.D. System." *Advanced Imaging*. (April 1989): 54-59; 75.

- 9.0 Records N/A
- **10.0** Attachments N/A

Revision History		
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09/17/2012	1	Original Document

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