POSITION TITLE: AFIS Technician, Forensic Identification Services  
DEPT/DIV.: Investigative Services  
REPORTS TO: Sergeants & Staff Sergeant, Forensic Identification  
BRANCH: Forensic Identification  
ASSOCIATION: Civilian  
LOCATION: Headquarters  
GRADE LEVEL: F  
DATE DEVELOPED: Aug 2005  
HOURS OF WORK: 35 hrs/wk Rotating Shifts (Days & Afternoons, including Weekends)

GENERAL PURPOSE:
To analyze, compare, evaluate, identify and verify friction ridge detail as a Latent Fingerprint Examiner and store digital evidential images using enhancement techniques. Processes images digitally using vendor supplied software, Adobe Photoshop and More Hits software to remove background patterns and noise from images. Assumes the role of site manager of the Automated Fingerprint Identification System (AFIS), LiveScan systems for the Police Regionalized Information Data Entry (PRIDE) police services and the management of digital images on the Tarabyte server for the police service. Produces photographs by sending digital images to a photographic processing laboratory.

MAJOR RESPONSIBILITIES:

Operator, AFIS

Adds, modifies, deletes and queries electronic latent fingerprint data in the local data and RCMP databases. Analyzes latent crime scene friction ridge submissions for the purpose of establishing anatomical origin and suitability for entry onto the Automated Fingerprint Identification System (AFIS). Enters, classifies and encodes suitable latent fingerprints onto AFIS in accordance with system guidelines and policies established by the RCMP. Scans and photographs latent prints into the AFIS workstation.

Performs quality analysis on criminal fingerprint forms and applicant fingerprint forms for the purpose of ensuring that the appropriate fingers were properly oriented. Reviews LiveScan and inked/rolled ten-print entries for accuracy and completeness; takes fingerprint impressions, assists in preparation of photo line-ups as needed.

Determines appropriate demographic and geographic filters prior to searching fingerprints. Enters, classifies and encodes latent impressions onto the AFIS system in accordance with guidelines established by the RCMP. Analyzes the print to determine print classification, its core and delta if the print has them, and then encodes all visible minutiae. Sends search over the network. Manually compares the finger and palm prints of known suspects to the friction ridge detail.
detail found or developed in relation to crime scenes. Verifies the findings of other identification officers.

Conducts AFIS entries and searches on ten-prints; reviews and responds to inquiries from police personnel and other agencies on matters pertaining to the general fingerprint files and all matters of criminal identification.

Processes latent impressions captured in digital format using vendor supplied software such as Adobe Photoshop and More Hits – Pattern Removal Filter, Image Calibration Utility: chromatic Fast Fourier Transfer Filter software to process an image using subtraction, pattern removal, filters, channels, levels, contract, colour replacement, equalization, RGB, CMQK and lab colour modes, 8 & 16 bit channel colour graphics and high pass filters and embossing filters techniques.

Examines and compares inked and electronically (LiveScan) submitted fingerprints to determine quality and acceptability of fingerprints and palm prints for inclusion in the fingerprint database(s).

Notifies WRPS booking personnel of data discrepancies or poor quality fingerprints in order to maintain the integrity and accuracy of the fingerprint database. Instructs others in a classroom setting regarding fingerprint classification methods and AFIS operations.

Monitors performance of computer systems. Provides training and/or operational guidance to others using the system. Monitors, records and compiles statistical data pertaining to the use of the system.

Provides assistance and training to Forensic Identification Services personnel. Ensures the proper deletion of electronic fingerprint data from the database(s) according to relevant records retention regulations.

Assists in the maintenance of criminal records and records pertaining to identification of individuals; submits reports internally and to the RCMP. Cooperates with law enforcement and other agencies concerning identity. Releases information to authorized parties according to established guidelines.

Makes requests for electronic and hard copy fingerprint data. Performs quality analysis on criminal fingerprint forms (C216) and applicant fingerprint forms (C216C) for the purpose of ensuring that the appropriate fingerprints and palm prints were properly oriented.

Maintains contact with the representatives from the vendors regarding procedural problems, equipment concerns, servicing of equipment and workflow.
Duties Unique to the Position of Operator, Digital Processing, Tarabyte Server

Manages the storage of evidential images that are submitted by investigators for easy retrieval, while protecting image integrity of originals for court.

Adds, processes, deletes and queries electronic imaging data. Transfers images to the Niche RMS System in the proper format to be attached to the incident report.

Verifies the input of electronic images submitted by staff members.

Processes requests for hardcopy photographs. Receives photographs from other Forensic Identification staff and photographs any other evidence and/or exhibits as required by supervisors.

Ensures the proper deletion of electronic imaging data from the database according to relevant records retention regulations.

Court Related Duties

Prepares for court and expert testimony as required. Testifies in court as a witness regarding fingerprint classification, AFIS operations, the storage of digital images and to the integrity of images as required.

Office Related Duties

Photocopies documents, files, sends faxes and e-mails. Submits documents for court disclosure.

Answers telephones as required; takes messages and forwards calls as directed.

Dictates reports to record findings.

Education

Attends AFIS conferences as hosted by vendors or user groups to maintain credentials as a specialist. Maintains current knowledge of digital imaging techniques.

Performs other related duties as assigned.

RESPONSIBILITIES FOR MATERIAL/FINANCIAL RESOURCES:

Ensures that personal computers, digital imaging servers, and the Automated Fingerprint Identification System systems used for own work are maintained in good working condition. Manages the storage of evidential images that are submitted by investigators for easy retrieval, while protecting image integrity of originals for court.
NATURE & IMPACT OF ERROR:

Failure to enter, classify and encode suitable latent fingerprints onto AFIS in accordance with system guidelines and policies established by the RCMP may result in inaccurate searches.

Errors such as mishandling of evidence may impact on personal credibility as an expert witness and may result in trial acquittals. Errors in search data and input may cause serious breakdown in the operational aspect of systems, both within the police service and associated partners.

Failure to recognize that AFIS may plot new submissions significantly different than earlier ones and you may in fact plot a new search differently or set new search parameters and be more successful.

RESPONSIBILITY FOR SUPERVISION OF STAFF & OTHERS:

The incumbent has no formal responsibilities for supervision of staff and others, but provides technical guidance to others and shares experiences. Provides assistance and training to Forensic Identification Services personnel. Provides instructional guidance to booking staff on issues such as quality of the fingerprint images, rolling procedures, orientation of prints. May facilitate Basic Computer Skills, Basic Digital Imaging, Applications of Adobe Photoshop in Forensic Identification, Digital Photography and Digital Standard Operating Procedures.

Assists in coordinating Digital Imaging Programs with training and ongoing support.

CONTACTS & HUMAN RELATIONS:

Internal:

Receives daily direction and guidance from the Sergeants and Staff Sergeant of Forensic Identification. Has daily contact with immediate co-workers within the branch to clarify submitted data, discuss difficult finger/palm identifications and training initiatives. Discusses with booking staff in the cell block areas concerns regarding the quality of prints and accuracy of demographic information. Has regular contact with staff from all areas of the police service in person, by phone, fax, Intranet, CAD and e-mail to obtain, provide and clarify information.

External:

Has weekly contact with the RCMP and other police and government agencies, both within and outside Canada, to seek assistance, to respond to inquiries and requests for assistance, and to obtain, provide and clarify information. Has monthly contact with crown attorneys by phone or in person in order to provide investigative information pertaining to fingerprints, disseminate fingerprint files, and when testifying in court. Has contact with AFIS vendors by phone and in person twice annually regarding upgrades to equipment and software.
EFFORT (Mental/Physical):

Follows clear instructions regarding the specific requirements of the CPIC Rules, Regulations and Policies Reference Manual and accesses relevant sections of guidelines established by RCMP regulations to enter, classify and encode impressions onto the AFIS system and to ensure that the appropriate fingers were properly oriented. Maintains the integrity of data systems so data can be searched. Follows strict guidelines to process evidence. Follows clearly defined standard operating procedures for digital imaging.

Receives work assignments from the Sergeant and Staff Sergeant of Forensic Identification. Analyses, compares, evaluates, identifies and verifies friction ridge detail as latent crime scene friction ridge submissions are received.

Researches and shares any case law or relevant digital imaging issues as they apply to law enforcement and forensic identification and brings to the attention of the supervisor. Refers non routine queries to supervisor. Assesses the quality of fingerprint images, orientation of prints, rolling procedures and demographic information.

Sufficiently good eyesight to perceive minute differences in fingerprints and to stand the strain of continual close work. Incumbent deals with minute details, which may cause acute eyestrain. Periods of prolonged sitting, sustained mental concentration, manual dexterity and exceptional attention to detail are required for analysis, evaluation and comparison of fingerprints, and when entering, classifying and encoding suitable latent fingerprints onto AFIS. Sits for approximately 95% of the day. Occasional physical effort required in carrying and maintaining files.

WORKING CONDITIONS:

Work is performed in a standard open concept office, subject to occasional interruptions from staff and other police services requesting information.

Contacts are occasionally impatient and unreasonable, requiring the incumbent to be polite and tactful as well as informative.

Due to the nature of work, incumbent has daily exposure to chemicals and fingerprint powders. Incumbent has access to safety clothing and devices.

Works independently with other AFIS Technician on overlapping shifts to process fingerprints as received to meet submission deadlines.
SKILL:

a) **Knowledge:**

Entry Requirements: Knowledge of scientific methodology, enhanced knowledge of computer science, digital imaging, and a comprehensive understanding of the science of identification through fingerprints, normally acquired through the attainment of:

Bachelor’s degree in Computer Science or Science from an accredited college or university, plus one year job-related experience, **OR**

Community College graduation in computer science, science, plus two years job-related experience, **OR** High School Diploma.

plus four years job-related experience in forensic laboratory processing of exhibits, forensic photography and ten-print experience.

Job related experience in AFIS ten-print/latent work is an asset.

Knowledge and skill in applying digital methods of fingerprint identification and classification is an asset. Expert ability to compare fingerprint and identification data accurately. Conversant with the day-to-day operation of an AFIS system.

Ability to possess or achieve Certification by the RCMP in order to retain crime scene fingerprints on the RCMP AFIS database. Ability to maintain current knowledge of digital imaging and enhancement techniques. Ability to successfully complete relevant required fingerprint identification courses and certification within one year, with spatial and shape retention ability. Ability to complete required mandatory courses in photography, darkroom processing, Adobe Photoshop Techniques, printing and scanning, Digital Imaging for Evidentiary Photography, Forensic Identification and other specialized courses required for the position.

Thorough knowledge of all processes, procedures and software utilized by a Forensic Identification Branch, including latent fingerprint file management.

Comprehensive knowledge of photography, forensic digital imaging enhancement, and courtroom testimony. Knowledge of the processing of evidence.

Comprehensive knowledge of and the ability to conduct computerized file searches using various linked databases and directories.

Analytical skills to establish anatomical origin of latent crime scene friction ridge submissions and suitability for entry onto the AFIS System. Ability to decipher and compare individual characteristics of multiple forensic fingerprints to determine suitable hits and to encode all visible minutiae.

Knowledge of legislation concerning the authorized use of fingerprints and standard operating procedures regarding digital imaging. Ability to reference procedures of the Identification of
Criminals Act, the Sexual Offender Registration Procedure, the Criminal Code, the Youth Criminal Justice Act, the Controlled Products Regulation, the Occupational Health and Safety Act WHMIS requirements concerning the use of authorized use of fingerprints and the principles of fingerprint classification; to consistently perform task functions and to comply with the Records Retention Schedule and the Freedom of Information & Protection of Privacy Act and disclosure protocol.

Basic skills in keyboarding, data entry and standardized filing. Ability to operate a fax machine, photocopier, scanner CD writer and other related office equipment.

Skill in the operation of a personal computer and knowledge of software programs such as Microsoft Word, Excel, Outlook and Adobe Photoshop Suite (Adobe Photoshop and Adobe Illustrator).

Acquired knowledge of the Niche Police Regionalized Information Data Entry system (PRIDE) Regionalized Management System (RMS), the Niche Digitalized Mugshot System, and police computer networks and systems such as CAD, PARIS, and the Intranet to perform queries, locate information and send messages. Acquired knowledge of police service criminal records file systems.

Acquired basic understanding of police records file keeping, storage and query methods, the judicial system and related paper flow processes, court related terminology and processes and police related agencies. Acquired knowledge of WRPS organizational structure, chain of command, branch functions and related police paper flow processes and procedures.

Communication skills required to obtain information as required; to provide assistance to others; to draft faxes; and to represent the police service in a positive, professional manner.

Ability to work independently with limited supervision.

A valid Class “G” Ontario Driver’s Licence with no more than six demerit points required to travel within and outside the region to travel to a surrounding police service to receive training for a period of time of one year. Knowledge of regional streets and ability to read maps to locate addresses. Ability to drive police vehicle in inclement weather conditions, while operating radio equipment and monitoring traffic conditions.

Ability to meet police security clearance requirements and to maintain confidentiality.

Ability to participate as an effective team member and to support and project values compatible with the organization.

Ability to meet testing requirements for the position.
b) **Language Communication (Written & Verbal):**

Ability to verbally respond to inquiries in person and by telephone to provide information in a polite and courteous manner.

Proficient in spelling, grammar and composition to send routine messages by fax and e-mail and to submit reports internally and to the RCMP or other police agencies.

Ability to read and comprehend police and court related documentation including warrants and suspensions, RMS reports, CPIC and criminal name index (CNI) reports.