	State of North Carolina	Approved Classification:	
	Office of State Personnel Position Description Form (PD-102R-92)	Effective Date: Analyst:	
		(This S _I	pace for Personnel Department Use Only)
1.	Present Classification Title of Position Forensics Documents Analyst Supervisor	7.	Pres. 15 Digit Pos. #/Prop. 15 Digit Pos. #
2.	Usual Working Title of Position Special Agent in Charge		Department, University, Commission, or Agency Department of Justice
3.	Requested Classification of Position Grade 76		Institution & Division N.C. State Bureau of Investigation
4.	Name of Immediate Supervisor	-	Section and Unit Documents & Digital Evidence Section
5.	Supervisor s Position Title and Position Number		Street Address, City and County 121 E. Tryon Rd, Raleigh, Wake
6.	Name of Employee		Location of Workplace, Bldg., and Room Number SBI Crime Laboratory, 1 st Floor

1. A. Primary Purpose of Organizational Unit

To enforce the Laws of the State of North Carolina by investigating crimes, assisting state and local law enforcement agencies in the analysis of computer related evidence, identifying and apprehending criminals and developing new investigative techniques and technologies in cooperation with fellow members of the law enforcement community.

The Documents & Digital Evidence Section is a section in the Computer Crime Investigations Unit and is a part of the N. C. State Bureau of Investigation located in the SBI Crime Laboratory. Forensic analysis of evidence is conducted in the following disciplines: Questioned Documents, Computer Forensics, Computer Crime Investigations, Digital Evidence, Photography and Graphic Arts. Examination and identification of evidential items involved in alleged violations of laws on a state and nationwide basis are conducted daily. Forensic document examinations involving numerous scientifically accepted methods to determine authenticity of a document and identify the writer or origin of the document are performed in this section. Examinations of digital evidence from computers, PDA=s, cameras, etc. for evidence of criminal activity are also conducted in this section. The section also provides photographic and graphic arts services for federal, state and local law enforcement agencies. Technical field support is provided to law enforcement agencies, such as crime scene searches, writing and executing search warrants, as well as providing expert witness testimony in state, federal and military courts. The Section provides support in training to other agents within the Bureau, as well as other law enforcement agencies.

The Computer Crime Investigations Unit is a very specialized investigative unit which is being created to provide a cohesive and concerted effort in a very technical area using the jurisdiction, responsibilities and resources of the SBI.

The Digital Evidence Unit of the Documents and Digital Evidence Section is to provide law enforcement and criminal justice agencies laboratory services for the recovery and analysis of computer digital evidence, especially as it relates to crimes involving children, including responses to requests for field assistance associated with the recovery of digital evidence pursuant to official criminal investigations. These examinations are not limited to personal computers. Personal digital assistants (PDA=s), floppy and other removable media, digital cameras, tapes and other storage media found at crime scenes may contain vital evidence that can be retrieved, examined and retained by the examiners in this unit.

Many times files that were thought to be deleted by the suspect may actually still exist on the hard drive of a computer or in memory on a digital type electronic device. These files may be recoverable when properly analyzed and preserved by the computer forensics personnel. These Aerased files@ may provide information relevant to the investigation, thus providing the investigator with additional leads. Other times these files provide the evidence in and of themselves that a crime was committed, such as cases involving child pornography.

The investigations assigned to this Unit are sensitive and unique, requiring experienced and specifically trained agents. Generally, agents with 8 to 10 years experience will require another one or two years experience and training to learn how to conduct complex computer crime investigations assigned to this Unit. They also require a unified policy and consistent interpretation of regulations, statutes and standards of practice in business.

This position conducts and also provides case oversight and administrative support to the Section. Agents assist local, state and federal law enforcement in the investigation of computer and computer related crimes, as well as providing the State Bureau of Investigation (SBI) with the expertise to investigate, analyze, and prepare for trial, complex and technical computer and computer related crimes and evidence, including child pornography, using a computer to solicit a minor to commit unlawful sex acts, computer fraud, communicated threats using the Internet, unauthorized access into a computer, computer hacking, and other computer and computer related crimes. To provide case management to agents in assisting local, state and federal task forces identifying suspects and their location using information obtained from IP addresses or other Internet routing information associated with their Internet activities, as well as determining the jurisdiction in which the crime occurred. The position is totally responsible for case oversight for all SBI and Unit investigations and/or analysis of evidence and is required to present and defend his/her own results of each as an expert witness in court. Evaluation of subordinate agents courtroom testimony is also required of this position.

2. Primary Purpose of Position

This position serves as Section Manager over all of the above mentioned forensic disciplines. This includes planning, directing, managing and controlling the daily operations of the section. Also, overseeing the research and examination programs, Quality Control and Quality Assurance of forensic examinations, budget, personnel and career development. This position answers to the Assistant Director of the Crime Laboratory Division of the SBI.

The Special Agent in Charge is responsible for overseeing the most complex computer and computer related crimes, and must operate in a complex laboratory environment

maintaining communications with subordinate agents on critical issues. The Special Agent in Charge will oversee advanced computer analysis involving Internet communications and transactions in which the suspect or his/her location are unknown. The agent must employ his/her training to identify those sources and to recreate and trace Internet communications through the various Internet Service Providers (ISP) to identify the location and identify of the suspect. The Special Agent in Charge must have commensurate training, knowledge and experience to handle advanced computer analysis. The position will also be required to conduct and manage subordinate agents in advanced detailed examinations and analyses of computer evidence involved in criminal cases. These examinations are highly technical procedures requiring specialized knowledge and training in the use of sophisticated hardware and software designed specifically for the forensic examination of digitally stored data. Computer forensics cases often involve very large amounts of data and can be stored on several different types of media.

The Special Agent in Charge in this position will be responsible for the supervision of agents with the Documents and Digital Evidence Section and agents assigned to forensic examinations in the Computer Crime Investigations Unit. This position has statewide responsibilities and must supervise subordinate agents assigned to a statewide geographical area.

3. Work Schedule

Normal office hours are 8:00 a.m. to 5:30 p.m. However, this position works in excess of 42.5 hours per week due to crime scenes, court, special assignments and availability to section employees. This is a sworn position and is on call 24 hours a day seven (7) day a week throughout the entire state. Agents are required to work 160 hours per work period.

4. Change in Responsibilities or Organizational Relationship

This position originally was responsible for the Questioned Documents Section. In March of 2000, the Photo Lab and Graphic Arts Unit were placed under this position=s supervision. In August of 2000, the Computer Forensics Unit was being developed and was also assigned under this position=s supervision. The Section was renamed the Documents & Digital Evidence Section in July, 2001. The unit Special Agent in Charge will report to the Assistant Director of the Crime Laboratory.

II A. DESCRIPTION OF RESPONSIBILITIES AND DUTIES

This position is responsible for setting the direction of the Section by instituting programs and operations that will best meet the future needs of the Bureau. Goals and objectives are set by utilizing input from top management and subordinates as well as staying abreast of criminal trends and advancements in technology. This position maintains a five (5) year plan for goals and objectives.

Completion of the SBI Academy and extensive management training is required for this position. The Special Agent in Charge assigned to the position has progressed through the Field Training Program and has received extensive training in the areas of microcomputer search and seizure, basic computer hardware and operating systems, network communications, Internet communications, and forensic examination of computers and computer related storage media to conduct computer crime investigations

and must possess the knowledge and skills necessary to provide case development and guidance to the agents assigned to the Unit. In addition, the Special Agent in Charge in this position has received advanced specialized training and case management in crimes involving online child exploitation, computer hacking, Internet communications, and other Ahigh-tech@ crimes. In addition, the Special Agent in Charge in this position must have the training and experience necessary to manage all case development in agents cases which they are required to track unidentified suspects through various computer systems using the knowledge and resources gained through their training and experience to identify the computer used to commit the crime and the identity of the individual responsible. The Special Agent in Charge will receive management training in SAC/AD in-service training throughout the year and additional specialized training when available.

70% Unit Management

Responsible for the management of time and directs the activities of three (3) Forensic Documents Examiners, one (1) Forensic Documents Assistant, two (2) Photographers, one (1) Photo Lab Technician, one (1) Graphics Artist, three (3) Forensic Computer Analysts, one (1) Computer Forensic Technician and one (1) Secretary. This includes the review of weekly reports, personnel reviews, training, leave schedules and personnel problems. The position will also be required to conduct and manage subordinate agents in advanced detailed examinations and analyses of computer evidence involved in criminal cases. These examinations are highly technical procedures requiring specialized knowledge and training in the use of sophisticated hardware and software designed specifically for the forensic examination of digitally stored data. Computer forensics cases often involve very large amounts of data and can be stored on several different types of media.

The position of the Special Agent in Charge is a professional administrative management position in the Department of Justice using the authority, jurisdiction, and resources of the SBI to assist local, state, federal law enforcement agencies, and District Special Agents in Charge and judicial officials and to exercise the statutory original jurisdiction of the agency.

The Special Agent in Charge in this position has a responsibility to assume complete administrative and operational control and supervision of all SBI personnel assigned to the Unit and to provide the employees with the positive leadership to enhance the development of the employee to his/her greatest potential.

This position is responsible for coaching the agents to improve or excel in their job performance. To provide counseling sessions with agents who have failed to achieve the desired (required) degree of efficiency/motivation due to physical or emotional problems of the agent or a lack of a job interest which inhibits the employee from obtaining his/her highest degree of proficiency and when necessary to take the appropriate disciplinary actions as may be required. To conduct or participate in inquiries relating to allegations of misconduct of agents assigned to the office as directed by the Director, Assistant Director in charge of the SBI Crime Laboratory.

This position must ensure that the agents receive proper in-service training as afforded by the Bureau in special schools, seminars and training sessions. This position guides and counsels employees in their career development and procures the necessary training to elevate the employee in the career development program established by the Bureau.

This position must ensure the agents receive the proper specialized training required for conducting the investigations assigned to this Unit. The training needs of this unit are unique. This position must conduct some of the training and constantly evaluate the training available and the performance of the agents. This position develops and provides

training programs for the Unit and other agencies. This includes developing outlines, course description, writing the lesson plans, designing visual aids and providing the actual instruction. This training is given to agencies in North Carolina, state law enforcement agencies in other states and federal agencies. The training includes investigative techniques and strategies and the application of computers to criminal investigations.

In addition to the supervision of employees and administrative duties of the office this position is responsible for establishing and maintaining close liaison with federal, other state and local law enforcement agencies, and SBI District Special Agents in Charge, providing both technical and investigative assistance to law enforcement agencies upon request. To answer numerous inquiries concerning the SBI=s role in law enforcement and investigative work.

This position monitors overtime for Unit agents and conducts time management review for each pay cycle. This position also conducts case management and prioritizes requests for assistance that are made by other agencies and organization.

The Special Agent in Charge will also be required to conduct advanced detailed examinations and analyses of computer evidence involved in criminal cases. These examinations are highly technical procedures requiring specialized knowledge and training in the use of sophisticated hardware and software designed specifically for the forensic examination of digitally stored data. Computer forensics cases often involve very large amounts of data and can be stored on several different types of media.

15% Forensic Science Examinations - Technical

During the computer forensics examination, the agent is required to:

- 1. Conduct forensic examinations on the most complex cases involving computers and media generated by computers to develop evidence.
- Independently plan, organize and supervise subordinate agents in the approach necessary to obtain useful forensic information from the evidence submitted, in accordance with agency regulations, state and federal laws.
- C. Use experience and knowledge of a wide variety of advanced computer technologies and theories to supervise Unit agents in conducting analysis of submitted evidence and when necessary develop, modify, established procedures, and develop new techniques, approaches, and methods.
- D. Evaluate scientific results presented by subordinate agents which may be conflicting or incomplete, to determine their validity and determine whether the information has forensic significance.
- 5. Coordinate with other forensic disciplines within and outside the crime laboratory in order to develop optimal information.

- 6. Prepare formal written investigative or laboratory reports suitable for legal presentation which state results, interpretation and professional opinions and conclusions, being directly responsible for the accuracy and adequacy of the forensic examinations performed.
- 7. Provide on-site expert forensic computer investigative techniques at crime scenes and provide guidance on same to subordinate agents.
- 8. Appear in state and federal court to provide investigative findings and expert testimony.
- 1. Maintain state-of-the-art knowledge and technical proficiency in computer science, to include the successful participation in a proficiency program which requires annual testing.
- Inspect and inventory the evidence of subordinate agents physical evidence obtained for forensic examination.
- 11. Review and provide investigative guidance of possible criminal offenses and/or requests from subordinate agents to determine the type of examination required. Exercise independent judgement while conducting advanced investigations and reviewing evidence to determine the proper approach and sequence of examinations. Determine if any additional information is needed by subordinate agents to comply with investigative requirements and obtain it by researching technical references, coordinating with other forensic computer agents, experts, technicians and manufacturers.
- 12. Determine the most appropriate method of protecting original evidence and recovering deleted, erased, hidden and encrypted data.
- 13. Use state of the art or developed hardware and software programs to recover data, including fragmented files from damaged or altered storage devices, and when necessary modify systems, hardware, software and diagnostic tools.
- 14. When appropriate, use education and references to re-construct damaged or non functioning hardware by using off the shelf components or items developed by the analyst to meet original equipment specifications, to include obsolete systems for which components may not be commercially available.
- 15. Use, as appropriate, a variety of equipment, instruments, investigative techniques, and aids of the type normally found in a forensic analysis.
- 16. Comply with the SBI Policy and Procedure Manual and analytical practices as required in the Documents and Digital Evidence Section Quality Assurance Manual and the Computer Forensics Unit Procedure Manual.

Additional Casework

In addition to maintaining a working knowledge of each area of expertise in the section, the person in this position must maintain a personal expertise in several areas in order to work cases. This position is currently doing cases submitted to the laboratory involving handwriting, hand printing, copy machine, typewriting, inks, charred documents, indented writing, obliterated writing, paper, rubber stamps and seals.

This casework requires an operational knowledge of all of the instrumentation in the Questioned Documents Unit. Conduct examinations of the highest complexity in all areas

of questioned document examinations and serve as the state=s chief forensic documents examiner.

5% Case Review

Reviews, re-examines and evaluates the results of subordinate forensic science analyst in all areas of Questioned Documents. Reviews and evaluates results for Administrative purposes in the Computer Forensics Unit. All laboratory reports which are submitted by members of the section are reviewed for accuracy and content. The notes are examined to determine if the results are supported by accepted scientific procedures. The final responsibility is defined conclusions, each case must be judged to determine if the results are consistent with the standards of the laboratory.

2% Case Assignment and Work Planning

This position is responsible for the development of a plan of case load assignment such that each person carries their fair share of the work load of the section. This involves the constant evaluation of the cases coming in and going out of the section. Other assignments must also be made involving training to be presented by the section. Requests are often received for work to be done outside the laboratory at crime scenes. These requests must be evaluated and the proper analyst assigned to the case.

1% Research

Directs research activity and maintenance of a data reference library aimed at developing improved laboratory examination methods.

2% Training

Designs training programs and assists in the training all new analysts in the section in all areas of Questioned Documents Examinations, Photography, Graphic Arts and Computer Forensics. Coordinates additional training with other agencies, both state and federal.

Develops, trains and coordinates training in all areas of the Documents and Digital Evidence Section for the SBI Academy, Basic Law Enforcement Training, Police Departments, Sheriff=s Departments, etc. throughout the state.

The Special Agent in Charge will be required to develop and oversee all new forensic procedures, technology and training related to forensic computer area. The position will also be required to supervise the training of and conduct assessments on the ASAC and subordinate agents assigned to the Computer Crime Investigations Unit. In addition , the Special Agent in Charge will be required to:

Attend and participate in relevant advanced schools, seminars, professional societies, and training programs applicable to the position and make recommendations for subordinate agents.

Keep current with scientific, trade and current event literature as well as other documents designed to enhance professional and personal growth in forensic computer analysis.

Continue to develop and enhance the quality control procedures of the Computer Forensics and Computer Crime Investigations Units.

Conduct advanced seminars and provide information the ASAC, subordinate agents and law enforcement personnel from around the state of the capabilities and submission criteria of the Computer Forensics and Computer Crime Investigations Units.

1% Programs

Directs and coordinates programs to enhance the effectiveness of laboratory operations. Ensures the protection and security of evidence items. Due to the highly technical nature of the evidence examined, this position must work extensively with specialized equipment. In regard to the calibration of this equipment, the duties of the Special Agent in Charge include oversight of:

Ensuring validation of any equipment used by the ASAC and subordinate agents.

Studying data generated during each subordinates examination to ensure that the equipment is functioning properly during that examination and not giving erroneous results.

Keeping abreast with all changes in the computer industry in order to be able to effectively examine and teach the application of new hardware and software which may be submitted to the ASAC and subordinate agents.

Ensure the ASAC keeps both the specialized hardware and software used in the computer forensics towers in top working order.

1% Proficiency Testing

The supervisor must constantly be aware of the proficiency of the persons in his section through proficiency testing and evaluation of the work performed by each analyst. This evaluation also involves the monitoring of court testimony from time to time. If the work and standards are not monitored constantly, mistakes could result in the wrong person being convicted of a serious crime.

1% Career Planning

The talents and abilities of each analyst must be constantly monitored. All analysts must be constantly motivated to improve their capabilities so that the laboratory can grow and develop.

1% Evidence Collection

Provides guidance to law enforcement officers throughout the state in the development and collection of criminal evidence. This position will be required to review and approve all search warrants prepared by the ASAC and Unit agents. The position is required to know and train others in the proper procedures for seizing computer equipment and examining the equipment on site without damaging the integrity of the evidence.

The position provides technical guidance and assistance to the ASAC and other Unit agents involved in investigations as to the proper procedures to follow when seizing computers and computer related media.

The Special Agent in Charge in this position must develop and maintain a close working relationship with other senior level supervisory law enforcement agencies, and court officials. The Special Agent in Charge must exhibit leadership direction, and professional skills in establishing a team concept in working with other members of the law enforcement and criminal justice communities.

1% Court Attendance

The person in this position must appear in court to present expert testimony in cases which were personally worked.

The person in this position evaluates each subordinate forensic science analyst court testimony at least once a year.

As a result of any investigation/analyses performed, the position will be required to testify as an expert witness and present a competent and unbiased court presentation to explain and defend his/her investigation/findings. This involves:

- A. Being qualified each time as an expert witness based on knowledge, experience, and current proficiency;
- B. Providing direct testimony which, as an expert witness, means providing the courts with an opinion based on the individual=s proven forensic judgement;
- C. Securing the credibility of this testimony under cross examination, which may involve the use of opposing Aexperts@;
- D. Related travel, preparation of court exhibits, and the review of casework.

II. B. OTHER POSITION CHARACTERISTICS

Accuracy Required in Work

The work of this agent requires precision, exactness, and accuracy in all phases of criminal investigations and evidence analysis. Accuracy is required both in written reports, oral statements, and testimony. A lack of precision, exactness or accuracy may result in failure to bring an investigation to a successful conclusion and may result in civil liability.

Consequences of Error

The consequences of error by the agent may result in harm to the reputation of the SBI, the ASAC, a subordinate agent, or injury or death to a law enforcement officer or citizen. An error by this agent may result in civil liability of the agent, the SBI, North Carolina Department of Justice (DOJ), and the State of North Carolina. An error by this agent may harm the development of other law enforcement officers for whom this agent is responsible for providing guidance and advice. The work of the agent has a direct effect on all persons involved in or affected by the investigation, including victims, suspects, witnesses, and other law enforcement officers. An SBI agent has a direct affect on the reputation and integrity of DOJ and the State of North Carolina.

Instructions Provided to Employee

Special Agents in Charge receives both written and verbal instruction from the Assistant Director. The instruction begins with investigation initiation instructions or Unit/case

assignment, insuring that the SAC understands the investigation parameters. The instruction given also involves the ongoing monitoring of case development.

Guides, Regulations, Policies, and References Used by Employee

Agent refers to the North Carolina General Statutes, North Carolina Criminal Procedures Act, SBI Policy and Procedure Manual, SBI Electronic Surveillance Manual, State Policy Manual, Rules of Evidence, and U.S. Criminal Statutes. The Federal Privacy Protection Act, and Electronic Communication Privacy Act, and other statutes covering computers, and digital communications are of utmost importance to this agent. The Special Agent in Charge is also guided by legal updates obtained in briefings, SBI training classes, from Appellate Court decisions as contained in the Advance Sheets and through conference with prosecuting attorneys. Investigative guidance is received by Assistant Director during the course of Unit investigations.

Supervision Received by Employee

The work of the Special Agent in Charge is reviewed by the Assistant Director upon receipt and examination. The work is reviewed for compliance with SBI reporting and laboratory guidelines to ensure and document a thorough and appropriate investigation. Additionally, this position is evaluated by the Assistant Director on his/her ability to provide investigative and administrative oversight of the ASAC and subordinate agents case development.

Variety and Purpose of Personal Contacts

This position has daily contact with senior SBI management, other SBI agents, local, state, and federal law enforcement officers as well as judicial officials. The Special Agent in Charge will have daily contact with the general public, and will include witnesses, record custodians, technical professionals, and other individuals who may be sources of information providing information needed during an investigation.

Physical Effort

The physical effort expended by this position varies with the task at hand during an investigation and/or analysis, office duties, or while engaged in training. On occasion, much effort is required such as in chasing a suspect, or while engaged in a difficult arrest where the suspect resists. Surveillance is usually conducted in cramped and confining quarters where the agent is required to stay alert for extended hours and require the agent to be in good physical condition. During a search warrant execution, the position may be required to lift objects weighing in excess of 50 lbs. Training exercises require intense physical effort. The Special Agent in Charge is required to maintain a physical condition sufficient to respond to the demands of any law enforcement situation and to set a positive example for others in the Unit. This position is required to comply with SBI medical guidelines as developed by the SBI Director.

Work Environment and Conditions

The work environment of this position will range from an office to the hectic, tense and potentially violent situations encountered in criminal investigations and their oversight. This position may be exposed to hazardous chemicals, infectious diseases, extreme weather conditions or other situations where the agent may be in jeopardy. The Special Agent in Charge will spend considerable time in an assigned motor vehicle or office setting during the course of the day.

Machines, Tools, Instruments, Equipment, and Materials Used

This Special Agent in Charge will operate a State owned motor vehicle. The vehicle is used for transportation, surveillance, transporting evidence, as well as a place to conduct interviews. It is also used to store the equipment issued to the agent. The Special Agent in Charge is issued firearms, (handgun, shotgun, and in some circumstances a rifle), and is required to be proficient in the use of each. The Special Agent in Charge is issued and uses cameras and other photographic equipment. This Special Agent in Charge is issued binoculars and is trained in the use of video, audio and other electronic surveillance equipment. The Special Agent in Charge will operate a two-way radio, installed in the assigned motor vehicle on a daily basis. The agent will use portable radio equipment on special assignments. The agent is assigned and uses audio recorders to dictate reports. The Special Agent in Charge is trained to operate computer terminals located in SBI district offices or laboratory, and is certified by DOJ Division of Criminal Information as a terminal operator. The position is trained and assigned forensic computer equipment and software to use in conducting forensic examinations of computers and computer related media. The agent is trained to use personal protection equipment such as gas mask. respirators, and body armor. The position uses office equipment such as telephones, personal computers, and other supplies and equipment associated with office work.

Visual Attention, Mental Concentration, and Manipulative Skills

Due to the nature of the work, close visual attention is required in all phases of employment. However, especially close visual attention is required in conducting the analysis of evidence, crime scene searches, surveillance, firearms training, in-service training, and report writing. Visual attention as well as mental concentration must be used while in an undercover capacity or in protective surveillance of an undercover officer. Significant mental concentration is required in all aspects of the agent=s work. Courtroom testimony requires intense mental concentration and preparation. Interviewing suspects requires concentration in order to accomplish the objectives while complying with proper procedure. Report writing requires a high degree of mental concentration in order to accurately set out the details of an investigation. Undercover work requires extremely intense mental concentration.

Safety for Others

This position uses care in safeguarding others, particularly in any situation which has the potential for use of a firearm. Such situations include arrests, particularly Abuy/bust@ or controlled delivery operations in which the suspect is arrested upon delivery of contraband to, or from an undercover officer. Extreme care must be used to prevent accidental harm to another agent, officer, suspect, or to the general public. Care must be used while operating the State owned motor vehicle, especially in densely populated areas and in those situations involving high speeds and felony vehicle stops. The product of the SBI agent=s work is information. The Special Agent in Charge must be extremely careful, and considerable responsibility is placed upon the agent to safeguard the people of the State of North Carolina through proper gathering, reporting, and dissemination of information on a daily basis.

Dynamics of Work

The primary responsibility of an SBI agent as established in 1937 has not changed in that the agent is a State Law enforcement officer who conducts criminal investigations.

Knowledge, skills and abilities to perform as a Special Agent in Charge specialized in computer crime investigations in the laboratory are as follows:

A combination of knowledge, experience and special qualifications necessary to conduct supervise and oversee computer crime investigations primarily involving computers, computer networks, and digital communications, are covered by a wide spectrum of the North Carolina General Statutes, whether the statutes address the computer, or the crime involves a computer either as a tool used in the commission of the crime, or as a simple repository for evidence related to the crime. These crimes are addressed in the following priorities: Internet crimes against children, threats made against public groups, violent crimes against people, financial crimes, and computer hacking.

The Special Agent in Charge must have the ability to oversee the analysis of computer information such as email headers to determine what steps to take, and what resources are needed to identify the location and identity of a suspect. He/she must have the ability to ensure subordinate agents have the ability to accurately examine computers and computer media to extract evidence that may be stored, hidden, and/or encrypted. He/she must have a working knowledge of hardware and various software programs and operating systems to understand how information is stored on the computer hard drive or other media, as well as how to extract the information for analysis and presentation.

The Special Agent in Charge should have broad knowledge of computer networks, and the various network operating systems. He/She must understand how the Internet works, how information is routed from the source to the destination computer, and how to trace the information back to its source. He/She must understand what information an ISP can provide, and how the information is used to identify the location and identity of the suspect.

It is important the Special Agent in Charge has a strong knowledge of computers, operating systems, computer networks, and the Internet in order to conduct an effective interview with a suspect who is being evasive in his or her answers. The Special Agent in Charge must be well trained and a skillful communicator to deal with educated, successful and sophisticated business owners, ISP administrators, technical support persons, suspects and victims alike.

The Special Agent in Charge must have a working knowledge of computer security, how operating systems record date and time stamps, and how various software applications handle information to fully understand what is reported by a victim, and to determine if a suspect is telling the truth about what happen in a particular case.

The Special Agent in Charge must ensure agents have the ability to quickly assess a crime scene to determine what is happening with the computer. If the computer is running at the time a search warrant is executed, he/she must evaluate the correct method of seizure to assure the evidence residing in the memory is collected, and the data stored on the hard drive is not destroyed.

The Special Agent in Charge must have the ability to interpret and apply criminal laws of the State of North Carolina, and the United States of America, in computer and computer related investigation. He/She specifically must understand the impact the Privacy Protection Act, and the Electronic Communications Privacy Act have on computer crime investigations. Such knowledge is necessary to make arrests, prepare comprehensive and detailed reports, including supporting documents such as email header information, connection logs, and computer audit trails, and link the various documents together in a cohesive package which the prosecutor can follow and present to a jury. The Special Agent in Charge must be able to present effective court testimony and apply the

principles, techniques and procedures of modern criminal investigation as it relates to computer crimes and ensure all subordinates have the same ability.

Some of the knowledge, skills and abilities to perform as a Documents & Digital Evidence Supervisor are as follows:

- X Management skills and the ability to direct and distribute assignments to the section personnel.
- X Thorough knowledge of SBI Policy and Procedures
- X Thorough knowledge of ASCLD-LAB procedures and criteria
- X Thorough knowledge of questioned document examinations
- X Thorough knowledge of photographic techniques and photographic equipment
- X Through knowledge of graphic arts
- X Knowledge of the terminology, principals and analytical techniques used in the analysis of physical evidence as it applies to the forensic laboratory in all units under my supervision (Questioned Documents, Photo Lab, Graphics and Computer Forensics)
- X Knowledge of computers, computer systems, software and data recovery
- X Ensure that the Quality Assurance and Quality Control is maintained within section.
- X A working knowledge of the methods, procedures and practices used in the investigation of criminal offenses, and of the principles of securing and identifying a variety of crime related evidence.
- X The ability to investigate a variety of criminal cases, to interpret and apply criminal laws of North Carolina in investigations, to make arrests, prepare search warrants and non-testimonial ID orders, to prepare comprehensive and detailed reports pertaining to individual cases, to present effective expert testimony, and to apply the principles, techniques and procedures of modern criminal investigation.
- X The ability to establish and maintain favorable working relationships with other law enforcement agencies and officers.
- X The Documents & Digital Evidence Supervisor must be in and maintain a physical condition which permits certification by the North Carolina Justice Standards Commission or law enforcement officers.

2. Required Minimum Training

Bachelor=s degree with at least 12 hours in Computer Science, Engineering, or related discipline; MBA, MS, CISA, CISSP desirable, equivalent experience acceptable, or:

The agent must possess the following knowledge, skills and abilities:

Knowledge of the characteristics of a wide variety of microcomputer systems, including the characteristics of computer equipment, internal computer processes, operating systems, applications software, utility programs, and magnetic media storage devices.

Knowledge of programing and computer language.

Ability to evaluate information and to make judgements/decisions.

\$ Knowledge of security disciplines: identification, authentication, authorization, access control, administration and audit.

Understanding of LAN/WAN technologies and architecture. Unix, NT and Novell Netware skills. Knowledge of TCP/IP, Internet/intranet security issues and technologies.

Familiarity with various technologies, products and standards in the marketplace such as MVS, RACF, encryption, smartcards, card readers, biometrics, propriety tokens, passwords, virus management, PKI, Kerberos, DEC, singles sign-on, firewalls and monitors.

Technical proficiency in security-related hardware and software; ability to functions as a consultant to other IT groups on security matters as a recognized technical expert.

Ability to relate business requirements and risks to technology implementation for security-related issues.

Knowledge of risk assessment procedures, policy formation, role-based authorization methodologies, authentication technologies, incident management and security attack pathologies.

Strong communications and public-speaking abilities.

Proven ability to work under stress in emergencies with flexibility to handle pressure coming from all directions at one time.

Strong analytical and problem-solving skills.

Strong customer focus and ability to manage client expectations.

Solid project management skills. Confidence and leadership as a member of project teams in a cross-functional environment.

Strong team -oriented interpersonal skills= ability to effectively interface with a wide variety of people.

Two (2) years apprenticeship in the examination of questioned documents.

Complete the United States Secret Service School.

Complete the Federal Bureau of Investigation Academy on Questioned Documents.

Complete an internship with the United States Postal Service Crime Laboratory.

Successful completion of the North Carolina State Bureau of Investigation Academy.

Have qualified in criminal court as an expert in the field of questioned documents.

Have well developed human relations and communication skills.

Ability to present facts clearly both verbally and in writing in a convincing manner and to maintain a professional demeanor while undergoing cross-examination.

Management training.

Ability to distinguish shades of color and to perceive minute differences in similar graphic forms.

Very extensive experience in document examinations with specialized laboratory equipment and procedures including microscopy, digital imaging involving IR and UV examinations, ink analysis (thin-layer chromotography and IR), reconstruction of charred documents and extensive knowledge of printing techniques.

Hand gun qualification.

Equivalent Training and Experience:

Basic computer forensic training to include EnCase, the forensic software used by agents in forensic examinations of computers.

Three (3) years of management experience or forensic analysis experience and/or computer professional such as Network Administrator, hardware / software technician, computer help desk, etc.

Additional Training/Experience

Agents in this position will continue to receive and conduct advanced management training as well as training prescribed by SBI policy and training necessary to meet annual certification as a Certified Fraud Examiner, Certified Forensic Examiner, or professional computer consultant. The following is also required:

Bachelor=s degree with at least 12 hours in Computer Science, Engineering, or related discipline; MBA, MS, CISA, CISSP desirable; equivalent experience acceptable, or

Graduation from a two-year college with a degree in computer science or a related discipline, and eight years equivalent experience; and

Eight (10) to Ten (12) years of experience in IT, with a broad range of exposure to all aspects of business planning, systems analysis, and application development; or

Six or more years of experience with information security; or

Six or more years of relevant business environment experience; or

Experience in data administration and security methods; or

Familiarity with multi-platform environments and their operational/security considerations.

Experience performing security audits as an IT auditor is highly valuable.

The following qualities or experiences are desirable:

Demonstrated competency in strategic thinking with abilities in relationship management.

Successfully implemented new technology.

Demonstrated competency in project management in a cross-functional environment and experience in managing resources to meet goals on multiple projects.

Demonstrated competency in developing effective solutions to diverse and complex business problems.

Demonstrate leadership and management skills necessary to provide day to day direction to Unit agents and to provide investigative advise and direction to same.

2. <u>License or Certification Required by Statute or Regulation</u>

A certification by the North Carolina Justice Standards Commission is required of this and any other sworn law enforcement officer.

IV <u>CERTIFICATION</u> Signatures indicate agreement with all information provided, including designation of essential functions.

Supervisor=s Certification: I certify that (a) I am the immediate supervisor of this position, that (b) I have provided a complete and accurate description or responsibilities and duties, and (c) I have verified (as reconciled as needed) its accuracy and completeness with the employee.

Signature:	Title:	
Date:		
	ertify that I have reviewed this position description a my responsibilities and duties.	nd that it is a complete
Signature:Date:	Title:	
Section or Division Manager named immediate superviso	r=s Certification: I certify that this position description or, is complete and accurate.	ı, completed by the above
Signature:	Title:	
Department Head or Authori position description of the su	ized Representative=s Certification: I certify that this ubject position.	is an authorized, official
Signature:	Title:	

State of North Carolina Office of State Personnel Position Description Form (PD-102R-92)	Approved Classification: Effective Date: Analyst: (This Space for Personnel Department Use Only)
Present Classification Title of Position Forensic Documents Analyst I	7. Pres. 15 Digit Pos. # /Prop. 15 Digit Pos. # 3613-0000-0003-055
Usual Working Title of Position Forensic Documents Analyst I	8. Dept., University, Commission or Agency Department of Justice
3. Requested Classification of Position Pay Grade 72	9. Institution and Division NC State Bureau of Investigation
4. Name of Supervisor	10. Section and Unit Documents & Digital Evidence Section
5. Supervisor's Position Title & Position #	11. Street Address, City and County 121 E. Tryon Road, Raleigh, Wake
10. Name of Employee	12. Location of Workplace, Bldg. and Room No. SBI Crime Laboratory, 1 st Floor

I. A. PRIMARY PURPOSE OF ORGANIZATIONAL UNIT:

The primary purpose of the SBI Questioned Documents Section is to provide forensic analysis of evidence to all law enforcement agencies within the State. The forensic services provided include in-lab analyses, technical field assistance, and expert witness testimony in areas concerning the identification of handwriting, hand printing, machine writing stamped impressions, carbon acetate fiber impressions/physical match, ink analysis, paper analysis, alterations, simulations, counterfeiting, interlineations, indented writing, photocopiers, printers, toners, videotape enhancement and any other form of questioned written communication.

B. PRIMARY PURPOSE OF POSITION:

The primary purpose of this position is to perform all levels of analyses (from journey to advanced] of evidence related to determining the author or authenticity of a questioned document. Cases range from routine to complex and, in addition, the position must make independent judgements related to the casework; and also testify in court as necessary to explain and defend the results of analysis. This position operates with a great deal of autonomy and is held accountable for the continuing smooth flow of assigned casework.

C. WORK SCHEDULE:

Regular work hours are from 8:00 AM to 5:00 PM; but after hours work is often necessary and is expected. This position is on call 24 hours a day, 7 days a week.

D. CHANGE IN RESPONSIBILITIES OR ORGANIZATIONAL RELATIONSHIP:

Analyst I position is now performing the following analyses:

Computerized electromagnetic infrared spectral analysis

Analyses utilizing computerized video camera systems, which allows interpolation of gating of digitized images in the visible

Infrared and ultraviolet spectrum

Infrared spectrometry of inks and photocopier toner particles

Scanning electron microscopy of photocopier toner particles.

II. A. DESCRIPTION OF RESPONSIBILITIES AND DUTIES:

Method used (Check One): Order of Importance: [X]
Sequential Order: []

Place an asterisk (*) next to each essential function.

* 1. CASEWORK - 65%

The primary responsibility of this task is to analyze evidence for the purpose of determining authorship and / or source of authenticity. The analyst must be able to conduct these analyses using all methods approved by the SBI Questioned Documents Quality Assurance Manual, The American Board of Forensic Documents Examiners, and The American Society of Questioned Documents Examiners.

The evidence originates from a number of sources:

- a. Evidence collected from crime scenes and submitted directly to the analyst by local, state, and federal law enforcement agencies; including the SBI's own Crime Scene Search Specialists; or
- b. Evidence needing this type of analysis that was previously analyzed in other disciplines [i.e. sections] at the crime laboratory; or
- c. Evidence collected and preserved at a crime scene by the analyst himself/herself.

In each case, the analyst must first review the items of evidence in order to make an independent decision as to what type of analysis is required. The decision is based on the types of documents that are present and the methods of analysis presently approved for use by the analyst. Failure to make the proper decision will result in the loss of valuable evidence.

The present methods of analysis available to the analyst include the following list. The list will vary due to the continued researching and/or development of new methods and the replacement of outdated methods with newer technology.

ANALYSES PRESENTLY APPROVED FOR USE:

- 1. Identification of handwriting and hand printing
- 2. Identification of typewriters, photocopiers, and printers
- 3. Identification of inks as to their manufacturer and date of production using thin layer chromatography.
- 4. Indented writing / ESDA analysis
- 5. Paper analysis
- 6. Physical match
- 7. Overwriting / Retouching
- 8. Photocopier identification
- 9. Obliterated writing / Charred documents
- 10. Altered documents
- 11. Counterfeit documents
- 12. Watermarks
- 13. Check writer /stamp plate identification
- 14. Computerized electromagnetic infrared spectral analysis
- 15. Computerized interfaced video camera systems allowing interpolation and gating of images in the visible, infrared, and ultraviolet spectrum
- 16. Video cassette recorded tape computerized enhancement
- 17. Interlineation
- 18. Printer systems (dot matrix, ink jet, laser)
- 19. Stamped impressions
- 20. Infrared spectrometry of inks and toner particles
- 21. Scanning electron microscopy (Analyst III Level 76)

In addition, the analyst will utilize a variety of computer software programs, computerized electromagnetic filtration systems, specialized and highly sensitive video-imaging instruments in the analysis of questioned documents.

In cases involving writings of marginal quality, the analyst will utilize image enhancement techniques in an effort to bring the analysis to a successful conclusion. These cameras are interfaced with several computer systems that allow for interpolation, resolution, configuration, enhancement, gating and enlargement.

Based on the analyst's experience, expertise, the condition of the evidence, and the analyst's knowledge of the reactions of the various methods, he/she must apply these methods in an attempt to obtain conclusive results.

The decision of what methods to utilize is an independent decision made by the analyst. This decision is based on the analyst=s level of training, skill, and expertise.

As previously stated, failure to utilize the most appropriate method, or inadvertently using the wrong sequence of methods, can render the evidence useless. The responsibility for safeguarding against this loss lies solely with the analyst.

The analyst must be totally aware during all phases of the analysis of the potential to have the evidence examined in another discipline (i.e.: Serology, Trace Evidence, Latent Evidence, or Drugs). The analyst has total responsibility for ensuring that his/her analysis will not adversely effect other attempts at analysis.

The analyst is responsible for making recommendations to requesting officers when a decision must be made regarding the potential loss of other forms of evidence during the chemical analysis.

The task of analysis is further carried out by conducting detailed examinations of the writings on the questioned and known documents using magnification or optical comparators.

The analyst must be capable of conducting both manual and automated examinations of known and questioned documents in an attempt to determine whether or not the writings could have had a common origin (i.e.: the same author).

In each case, the analyst must conduct a detailed microscopic / macroscopic examination of each writing to make an independent decision regarding the comparison value of the writing. Failure to render the correct opinion at this stage will result in the loss of this evidence which could have been used to successfully prosecute a criminal offender. Failure to evaluate the evidence with 100% accuracy could also delay the apprehension of a criminal offender, allowing other crimes to be committed. This is strictly an independent decision made on the part of the analyst based on his/her expertise.

In most cases, the analyst must conduct detailed manual examinations and comparisons to determine if the questioned writing and any of the known writing of the suspect or victim had a common origin. Known standards usually originate from the hard copy files located in this agency or outside agencies, and are submitted directly to the analyst. Occasionally the analyst will be required to collect the known standards from the suspect(s) or victim(s).

Failure to identify questioned writing with known standards will result in the problems previously discussed. More importantly, are the results of incorrectly identifying questioned writings with known standards when, in fact, they are not of common origin (erroneous identification). This error has the potential to result in an innocent person being incarcerated and perhaps prosecuted for an offense he/she did not commit.

For these reasons stated above, 100% accuracy is required in all phases of the analyst's work.

In the event that the manual examination does not result in an identification, the analyst must be capable of rendering and substantiating a qualified conclusion.

This requires an in-depth knowledge of all of the approved scientific methods of examination and analyses in this field since failure to follow such prescribed methods, will result in a missed identification or an erroneous identification.

The analyst is provided with a number of known standards. The standards are in the form of known handwriting, hand printing and machine printing / impressions.

Following the initial examination / analysis of the questioned and known documents the analyst uses the set(s) of known standards to conduct a microscopic comparison with the questioned writing. Each writing must be meticulously scrutinized to allow the analyst to make an independent decision as to whether or not the questioned writing and any of the known standards had a common origin.

The results of all analyses performed are incorporated into written reports which form a portion of the basis for some legal proceedings. The results of the examination are returned to the investigator(s) and the appropriate District Attorney.

Peripheral casework includes the evidence custody requirement of marking, cataloging, and receipting items of evidence being examined and maintaining accurate records of analyses performed.

* 2. COURT TESTIMONY - 15%

The responsibility of this task is to provide expert testimony to courts of law as to the results of the examinations performed and the conclusions drawn from them. This involves:

- a. Being qualified each time as an expert witness based upon knowledge, experience, and current proficiency;
- b. Providing direct testimony which, as an expert witness, means providing the courts with an opinion based upon the individual's proven forensic judgement;
- Securing the credibility of this testimony under cross examination, which may involve the use of opposing "experts:"
- Related travel and preparation of court exhibits and the review of casework.

3. ADVANCED TRAINING ASSIGNMENTS - 10%

During the period of time the analyst functions as a Forensic Documents Analyst I, he/she will continue to develop advanced skills/abilities in this area of Questioned Documents analysis. This may be accomplished in-house with a senior analyst, at a Questioned Documents Workshop, or one-on-one training at a federal laboratory (example: involving the identification of handwriting, machine writing, and paper composition).

4. TECHNICAL FIELD ASSISTANCE - 3%

The analyst may be called upon to render assistance in the processing of major crime scenes for questioned documents evidence. This will usually involve the utilization of techniques not available to the normal field units. All evidence that cannot be analyzed at the scene is brought back to the laboratory where it can be examined under controlled conditions utilizing techniques that are impossible to use - or prohibited - at crime scenes. Following the analysis, a written report describing in detail what occurred at the scene must be submitted. This report is in addition to any report dealing with the evidence analysis.

5. OTHER - 2%

Conferences with the Section Supervisor are a necessary part of this position. Often, the analyst is required to provide input into the budget preparation, instrument purchases, ordering of supplies, and instrument repair. Other related duties are performed as required.

II. B. OTHER POSITION CHARACTERISTICS:

1. ACCURACY REQUIRED IN WORK

The need for precision, accuracy, and exactness are 100% and cannot be over-emphasized. Each case and each examination can determine the fate of an individual or the successful investigation of a serious crime.

2. CONSEQUENCE OF ERROR

An incorrect identification, missed identification or a judgment with too low a level of confidence can convict an innocent person or set a guilty suspect free. Failing to accurately identify a guilty suspect can lead to additional crimes and, in worst cases, to the loss of life of an additional victim(s).

3. INSTRUCTION PROVIDED TO EMPLOYEE

An analyst working at this level receives no regular instructions for daily work performed. Rather, he/she is expected to possess and apply a thorough working knowledge of the scientific principles/practices/procedures related to the area of expertise.

4. GUIDES, REGULATIONS, POLICIES AND REFERENCES USED BY EMPLOYEE

Preparation and application guidelines for most technical procedures are outlined in lab manuals. Other guidelines may include instrument handbooks, agency policy, laws and regulations, and other reference files.

5. SUPERVISION RECEIVED BY EMPLOYEE

The position is responsible for planning his/her own daily and weekly work within the parameters established by agency and section policy. Ordinarily, unless a problem develops, the position works with little or no technical supervision.

All conclusions and results of analyses are reviewed and verified.

6. VARIETY AND PURPOSE OF PERSONAL CONTACT

The position is routinely in contact with persons both inside and outside of state government. Sources of contact include:

- a. Other SBI personnel
- b. Other state level law enforcement officers
- c. State court officials (including District Attorneys)
- d. State Medical Examiner's Office staff
- e. City and county law enforcement officers
- f. Federal court officials
- g. Professionals in academic and scientific organizations
- h. Defense attorneys/opposing experts
- I. Victims/Witnesses
- j. Business professionals (vendors, etc.)

7. PHYSICAL EFFORT

With the exception of crime scene activities, physical effort is generally minimal.

8. WORK ENVIRONMENT AND CONDITIONS

Working conditions are usually a laboratory or office setting but will include court rooms and crime scenes of all types.

The employee is subject to irritant and hazardous chemicals, eye strain, and occasionally exposure to biological hazards at crime scenes, when identifying deceased individuals and also when examining bloody evidence.

9. MACHINES, TOOLS, INSTRUMENTS, EQUIPMENT, AND MATERIALS USED

- a. Optical Magnifier
- b. Optical Comparator
- c. Stereo microscope (6x-50x)
- d. 4 x 5 camera attachment for microscope
- e. High resolution infrared video cameras
- f. High resolution frame -grabber video tape player and recorder
- g. Digital Image Enhancement System /computers and software
- h. Chemical fume hood
- Computerized filters for the infrared and ultraviolet spectra
- j. Electrostatic detection apparatus (ESDA)
- k. Crimescope
- I. Crime scene investigative equipment
- I. Materials/Supplies related to the above

10. VISUAL ATTENTION, MENTAL CONCENTRATION AND MANIPULATIVE SKILLS

75 - 80% of the analyst's work each day requires close visual attention. Each examination may take from several minutes to several hours depending upon the quality of the evidence submitted.

Intense mental concentration is necessary when comparing the questioned evidence to the known standards. Periods of intense concentration occur daily for several hours.

11. SAFETY FOR OTHERS

Care must be taken to appropriately re-package potentially contaminated evidence to keep from exposing others to disease causing factors.

Use of instrumentation, toxic/volatile chemicals, and known or suspected carcinogens must be closely controlled to safeguard against injury to self or others.

12. DYNAMICS OF WORK

The analyst has no control over the amount of casework submitted and periods of heavy workload and mounting deadlines exist routinely. The employee must maintain a constant awareness of these changes.

III. KNOWLEDGE, SKILLS & ABILITIES AND TRAINING & EXPERIENCE REQUIREMENTS

A. KNOWLEDGE, SKILLS AND ABILITIES

Thorough knowledge of the principles, concepts, theories, reference sources and laboratory practices involved with the forensic examination and analyses of Questioned Documents.

Working knowledge of criminal law and of the rules and regulations regarding evidence gathering and handling.

Working knowledge of scientific methodology and of laboratory safety practices.

Ability to compare very detailed and minute differences in handwriting using magnification, enhancement and infrared / ultraviolet light systems.

Ability to conduct routine chemical procedures, analyze results, interpret methodology and to solve theoretical problems.

Ability to express technical information clearly both orally and in writing. To perceive colors normally. Make olfactory distinctions, and to establish and maintain effective working relationships.

B. 1. REQUIRED MINIMUM TRAINING

Graduation from a four-year college or university with a major in forensic science, forensic studies, biology or chemistry.

Two years of progressive experience in the forensic examination and analysis of questioned documents; including proof of satisfactory completion of a recognized and organized "questioned documents" training program.

2. ADDITIONAL TRAINING/EXPERIENCE

Satisfactory completion of the SBI Academy including state mandated BLET - or equivalent to meet state certification standards.

3. EQUIVALENT TRAINING AND EXPERIENCE

Maybe considered.

C. LICENSE OR CERTIFICATION REQUIRED BY STATUTE OR REGULATION:

None.

IV.	CERTIFICATION:	ignatures indicate agreement with all information provided, including designation of ssential functions.		nation of
Supervisor's Certification: I certify that:				
a. b. c.	b. I have provided a complete and accurate description of responsibilities and duties; and			
Signat	ure:	Title: Forensic Docur	nents Analysts Supervisor Date:	
Employee's Certification: I certify that I have reviewed this position description and that it is a complete and accurate description of my responsibilities and duties.				
Signat	ure:	Title: Forensic Docur	ments Analyst I Date:	
Section or Division Manager's Certification: I certify that this position description, completed by the above named immediate supervisor, is complete and accurate.				
Signat	ure:	Title: Asst. Director	of Crime Laboratory Services Date	:
Department Head or Authorized Representative's Certification: I certify that this is an authorized, official position description of the subject position.				
Signat	ure:	Title:	Date:	

State of North Carolina Office of State Personnel Position Description Form (PD-102R-92)	Approved Classification: Effective Date: Analyst: (This Space for Personnel Department Use Only)
Present Classification Title of Position Forensic Documents Analyst II	7. Pres. 15 Digit Pos. # /Prop. 15 Digit Pos. # 3613-0000-0002-135
Usual Working Title of Position Forensic Documents Analyst II	8. Dept., University, Commission or Agency Department of Justice
Requested Classification of Position Pay Grade 74	Institution and Division NC State Bureau of Investigation
4. Name of Supervisor	10. Section and Unit Documents & Digital Evidence Section
5. Supervisor's Position Title & Position #	11. Street Address, City and County 121 E. Tryon Road, Raleigh, Wake
10. Name of Employee	12. Location of Workplace, Bldg. and Room No. SBI Crime Laboratory, 1 st Floor

I. A. PRIMARY PURPOSE OF ORGANIZATIONAL UNIT:

The primary purpose of the SBI Questioned Documents Unit is to provide forensic analysis of evidence to all law enforcement agencies within the State. The forensic services provided include lab analyses, technical field assistance, and expert witness testimony in areas concerning the identification of handwriting, hand printing, machine writing stamped impressions, carbon acetate fiber impressions / physical match, ink analysis, paper analysis, alterations, simulations, counterfeiting, interlineations, indented writing, photocopiers, printers, toners, videotape enhancement and any other form of questioned written communication.

B. PRIMARY PURPOSE OF POSITION:

The primary purpose of this position is to perform all levels of analyses (from journey to advanced] of evidence related to determining the author or authenticity of a questioned document. Cases range from routine to complex and, in addition, the position must make independent judgements related to the casework; and also testify in court as necessary to explain and defend the results of analysis. This position operates with a great deal of autonomy and is held accountable for the continuing smooth flow of assigned casework.

C. WORK SCHEDULE:

Regular work hours are from 8:00 AM to 5:00 PM; but after hours work is often necessary and is expected. This position is on call 24 hours a day, 7 days a week.

D. CHANGE IN RESPONSIBILITIES OR ORGANIZATIONAL RELATIONSHIP:

Analyst II position is now performing the following analyses:

Computerized electromagnetic infrared spectral analysis;

Analyses utilizing computerized video camera systems which allows interpolation of gating of digitized images in the visible, infrared and ultraviolet spectrum;

Infrared spectrometry of inks and photocopier toner particles.

Scanning electron microscopy of photocopier toner particles.

II. A. DESCRIPTION OF RESPONSIBILITIES AND DUTIES:

Method used (Check One): Order of Importance: [X] Sequential Order: []

Place an asterisk (*) next to each essential function.

1. CASEWORK - 65%

The primary responsibility of this task is to analyze evidence for the purpose of determining authorship and / or source of authenticity. The analyst must be able to conduct these analyses using all methods approved by the SBI Questioned Documents Unit, The American Board Of Forensic Documents Examiners, and The American Society Of Questioned Documents Examiners.

The evidence originates from a number of sources:

- a. Evidence collected from crime scenes and submitted directly to the analyst by local, state, and federal law enforcement agencies; including the SBI's own Crime Scene Search Specialists; OR
- b. Evidence needing this type of analysis that was previously analyzed in other disciplines [i.e. sections] at the crime laboratory; OR
- c. Evidence collected and preserved at a crime scene by the analyst himself/herself.

In each case, the analyst must first review the items of evidence in order to make an independent decision about what type of analysis is required. The decision is based on the types of documents

that are present and the methods of analysis presently approved for use by the analyst. Failure to make the proper decision will result in the loss of valuable evidence.

The present methods of analysis available to the analyst include the following list. The list will vary due to the continued researching and/or development of new methods and the replacement of outdated methods with newer technology.

ANALYSES PRESENTLY APPROVED FOR USE:

- 1. Identification of handwriting and hand printing
- 2. Identification of typewriters, photocopiers, and printers
- Identification of inks as to their manufacturer and date of production using thin layer chromatography.
- 4. Indented writing / ESDA analysis
- 5. Paper analysis
- 6. Physical match
- 7. Overwriting / Retouching
- 8. Photocopier identification
- 9. Obliterated writing / Charred documents
- 10. Altered documents
- 11. Counterfeit documents
- 12. Watermarks
- 13. Check writer /stamp plate identification
- 14. Computerized electromagnetic infrared spectral analysis
- 15. Computerized interfaced video camera systems allowing interpolation and gating of images in the visible, infrared, and ultraviolet spectrum
- 16. Video cassette recorded tape computerized enhancement
- 17. interlineations
- 18. Printer systems (dot matrix, ink jet, laser)
- 19. Stamped impressions
- 20. Infrared spectrometry of inks and toner particles

In addition, the analyst will utilize a variety of computer software programs, computerized electromagnetic filtration systems, specialized and highly sensitive video-imaging instruments in the analysis of questioned documents.

In cases involving writings of marginal quality, the analyst will utilize image enhancement techniques in an effort to bring the analysis to a successful conclusion. These cameras are interfaced with several computer systems that allow for interpolation, resolution, configuration, enhancement, gating and enlargement.

Based on the analyst's experience, expertise, the condition of the evidence, and the analyst's knowledge of the reactions of the various methods, he/she must apply these methods in an attempt to obtain conclusive results.

The decision of what methods to utilize is an independent decision made by the analyst. This decision is based on the analyst=s level of training, skill, and expertise.

As previously stated, failure to utilize the most appropriate method, or inadvertently using the wrong sequence of methods, can render the evidence useless. The responsibility for safeguarding against this loss lies solely with the analyst.

The analyst must be totally aware during all phases of the analysis of the potential to have the evidence examined in another discipline (i.e.: Serology, Trace Evidence, Latent Evidence, or Drugs). The analyst has total responsibility for ensuring that his/her analysis will not adversely effect other attempts at analysis.

The analyst is responsible for making recommendations to requesting officers when a decision must be made regarding the potential loss of other forms of evidence during the chemical analysis.

The task of analysis is further carried out by conducting detailed examinations of the writings on the questioned and known documents using magnification or optical comparators.

Questioned documents originate from a variety of sources:

- a. Questioned documents recovered by the analyst from evidence submitted to the laboratory; OR
- b. Collected from crime scenes by the analyst; AND/OR
- c. Submitted directly to the analyst by local, state, or federal law enforcement agencies.

The analyst must be capable of conducting both manual and automated examinations of known and questioned documents in an attempt to determine whether or not the writings could have had a common origin (i.e.: the same author).

In each case, the analyst must conduct a detailed microscopic / macroscopic examination of each writing to make an independent decision regarding the comparison value of the writing. Failure to render the correct opinion at this stage will result in the loss of this evidence which could have been used to successfully prosecute a criminal offender. Failure to evaluate the evidence with 100% accuracy could also delay the apprehension of a criminal offender, allowing other crimes to be committed. This is strictly an independent decision made on the part of the analyst based on his/her expertise.

In most cases, the analyst must conduct detailed manual examinations and comparisons to determine if the questioned writing and any of the known writing of the suspect or victim had a common origin. Known standards usually originate from the hard copy files located in this agency or outside agencies, and are submitted directly to the analyst. Occasionally the analyst will be required to collect the known standards from the suspect(s) or victim(s).

Failure to identify questioned writing with known standards will result in the problems previously discussed. More importantly, are the results of incorrectly identifying questioned writings with known standards when, in fact, they are not of common origin (erroneous identification). This error has the potential to result in an innocent person being incarcerated and perhaps prosecuted for an offense he/she did not commit.

For the reasons stated above, 100% accuracy is required in all phases of the analyst's work.

In the event that the manual examination does not result in an identification, the analyst must be capable of rendering and substantiating a qualified conclusion.

This requires an in-depth knowledge of all of the approved scientific methods of examination and analyses in this field since failure to follow such prescribed methods, will result in a missed identification or an erroneous identification.

The analyst is provided with a number of known standards. The standards are in the form of known handwriting, hand printing and machine printing / impressions.

Following the initial examination / analysis of the questioned and known documents the analyst uses the set(s) of known standards to conduct a microscopic comparison with the questioned writing. Each writing must be meticulously scrutinized to allow the analyst to make an independent decision as to whether or not the questioned writing and any of the known standards had a common origin.

The results of all analyses performed are incorporated into written reports which form a portion of the basis for some legal proceedings. The results of the examination are returned to the investigator(s) and the appropriate District Attorney.

Peripheral casework includes the evidence custody requirement of marking, cataloging, and receipting items of evidence being examined and maintaining accurate records of analyses performed.

2. COURT TESTIMONY - 15%

The responsibility of this task is to provide expert testimony to courts of law as to the results of the examinations performed and the conclusions drawn from them. This involves:

- a. Being qualified each time as an expert witness based upon knowledge, experience, and current proficiency;
- b. Providing direct testimony which, as an expert witness, means providing the courts with an opinion based upon the individual's proven forensic judgement;
- c. Securing the credibility of this testimony under cross examination, which may involve the use of opposing "experts;"
- d. Related travel and preparation of court exhibits and the review of casework.

3. ADVANCED TRAINING ASSIGNMENTS - 10%

During the period of time the analyst functions as a Forensic Documents Analyst II, he/she will continue to develop advanced skills/abilities in this area of Questioned Documents analysis. This

may be accomplished in-house with a senior analyst, at a Questioned Documents Workshop, or one-on-one training at a federal laboratory (i.e. Ink analysis and paper analysis).

4. TECHNICAL FIELD ASSISTANCE - 3%

The analyst may be called upon to render assistance in the processing of major crime scenes for questioned documents evidence. This will usually involve the utilization of techniques not available to the normal field units. All evidence that cannot be analyzed at the scene is brought back to the laboratory where it can be examined under controlled conditions utilizing techniques that are impossible to use - or prohibited - at crime scenes. Following the analysis, a written report describing in detail what occurred at the scene must be submitted. This report is in addition to any report dealing with the evidence analysis.

5. OTHER - 2%

Conferences with the Section Supervisor are a necessary part of this position. Often, the analyst is required to provide input into the budget preparation, instrument purchases, ordering of supplies, and instrument repair. Other related duties are performed as required.

II. B. OTHER POSITION CHARACTERISTICS:

1. ACCURACY REQUIRED IN WORK

The need for precision, accuracy, and exactness are 100% and can not be over-emphasized. Each case and each examination can determine the fate of an individual or the successful investigation of a serious crime.

2. CONSEQUENCE OF ERROR

An incorrect identification, missed identification or a judgment with too low a level of confidence can convict an innocent person or set a guilty suspect free. Failing to accurately identify a guilty suspect can lead to additional crimes and, in worst cases, to the loss of life of an additional victim(s).

3. INSTRUCTION PROVIDED TO EMPLOYEE

An analyst working at this level receives no regular instructions for daily work performed. Rather, he/she is expected to possess and apply a thorough working knowledge of the scientific principles/practices/procedures related to the area of expertise.

4. GUIDES, REGULATIONS, POLICIES AND REFERENCES USED BY EMPLOYEE

Preparation and application guidelines for most technical procedures are outlined in lab manuals. Other guidelines may include instrument handbooks, agency policy, laws and regulations, and other reference files.

5. SUPERVISION RECEIVED BY EMPLOYEE

The position is responsible for planning his/her own daily and weekly work within the parameters established by agency and section policy. Ordinarily, unless a problem develops, the position works with little or no technical supervision.

All conclusions and results of analyses are reviewed and verified.

6. VARIETY AND PURPOSE OF PERSONAL CONTACT

The position is routinely in contact with persons both inside and outside of state government. Sources of contact include:

- a. Other SBI personnel
- b. Other state level law enforcement officers
- c. State court officials (including District Attorneys)
- d. State Medical Examiner's Office staff
- e. City and county law enforcement officers
- f. Federal court officials
- g. Professionals in academic and scientific organizations
- h. Defense attorneys/opposing experts
- I. Victims/Witnesses
- j. Business professionals (vendors, etc.)
- k. Military investigative agencies / courts

7. PHYSICAL EFFORT

With the exception of crime scene activities, physical effort is generally minimal.

8. WORK ENVIRONMENT AND CONDITIONS

Working conditions are usually a laboratory or office setting but will include court rooms and crime scenes of all types.

The employee is subject to irritant and hazardous chemicals, eye strain, and occasionally exposure to biological hazards at crime scenes, when identifying deceased individuals and also when examining bloody evidence.

9. MACHINES, TOOLS, INSTRUMENTS, EQUIPMENT, AND MATERIALS USED

- a. Optical Magnifier
- b. Optical Comparator
- c. Stereo microscope (6x-50x)
- d. 4 x 5 camera attachment for microscope
- e. High resolution infrared video cameras
- f. High resolution frame -grabber video tape player and recorder
- g. Digital Image Enhancement System /computers and software
- h. Chemical fume hood
- I. Computerized filters for the infrared and ultraviolet spectra
- j. Electrostatic detection apparatus (ESDA)
- k. Crimescope
- I. Crime scene investigative equipment
- I. Materials/Supplies related to the above

10. VISUAL ATTENTION, MENTAL CONCENTRATION AND MANIPULATIVE SKILLS

75 - 80% of the analyst's work each day requires close visual attention. Each examination may take from several minutes to several hours depending upon the quality of the evidence submitted.

Intense mental concentration is necessary when comparing the questioned evidence to the known standards. Periods of intense concentration are required for several hours in some cases involving a large volume of questioned document

11. SAFETY FOR OTHERS

Care must be taken to appropriately re-package potentially contaminated evidence to keep from exposing others to disease causing factors.

Use of instrumentation, toxic/volatile chemicals, and known or suspected carcinogens must be closely controlled to safeguard against injury to self or others.

12. DYNAMICS OF WORK

The analyst has no control over the amount of casework submitted and periods of heavy workload and mounting deadlines exist routinely. In addition, the methodology and technology related to latent print analysis are changing constantly. The employee must maintain a constant awareness of these changes.

III. KNOWLEDGE, SKILLS & ABILITIES AND TRAINING & EXPERIENCE REQUIREMENTS

A. KNOWLEDGE, SKILLS AND ABILITIES

Thorough knowledge of the principles, concepts, theories, reference sources and laboratory practices involved with the forensic examination and analyses of Questioned Documents.

Working knowledge of criminal law and of the rules and regulations regarding evidence gathering and handling.

Working knowledge of scientific methodology and of laboratory safety practices.

Ability to compare very detailed and minute differences in handwriting using magnification, enhancement and infrared / ultraviolet light systems.

Ability to conduct routine chemical procedures, analyze results, interpret methodology and to solve theoretical problems.

Ability to express technical information clearly both orally and in writing. To perceive colors normally. Make olfactory distinctions, and to establish and maintain effective working relationships.

B. 1. REQUIRED MINIMUM TRAINING

Graduation from a four-year college or university with an emphasis in forensic science, forensic studies, biology or chemistry.

Two years of progressive experience in the forensic examination and analysis of questioned documents, including proof of satisfactory completion of a recognized and organized "questioned documents" training program.

2. ADDITIONAL TRAINING/EXPERIENCE

Satisfactory completion of the SBI Academy including state mandated BLET - or equivalent to meet state certification standards.

3. EQUIVALENT TRAINING AND EXPERIENCE

May be considered.

C. LICENSE OR CERTIFICATION REQUIRED BY STATUTE OR REGULATION:

None.

4)	CERTIFICATION: functions.	Signatures indicate agreement with all information provided, i	including designation of essential
Super	visor's Certification: I	certify that:	
a. b. c.	I am the Immediate Supervisor of this position; that I have provided a complete and accurate description of responsibilities and duties; and I have verified (and reconciled as needed) its accuracy and completeness with the employee.		
Signat	ure:	Title: Forensic Documents Analysts Super	rvisor_Date:
	yee's Certification: I cotion of my responsib	ertify that I have reviewed this position description and that it is lities and duties.	s a complete and accurate
Signat	ure:	Title: Forensic Documents Analyst II	Date:
	n or Division Manage visor, is complete and	's Certification: I certify that this position description, completed accurate.	d by the above named immediate
Signat	ure:	Title: Asst. Director of Crime Laboratory S	<u>Services</u> Date:
	tment Head or Author subject position.	ized Representative's Certification: I certify that this is an auth	orized, official position description
Signat	ure:	Title:	Date:

State of North Carolina Office of State Personnel Position Description Form (PD-102R-92)	Approved Classification: Effective Date: Analyst: (This Space for Personnel Department Use Only)
Present Classification Title of Position Forensic Documents Assistant	7. Pres. 15 Digit Pos. # /Prop. 15 Digit Pos. # 3613-0000-0002-145
Usual Working Title of Position Forensic Documents Assistant	Dept., University, Commission or Agency Department of Justice
Requested Classification of Position Pay Grade 64	Institution and Division NC State Bureau of Investigation
4. Name of Supervisor	10. Section and Unit Documents & Digital Evidence Section
5. Supervisor's Position Title & Position #	11. Street Address, City and County 121 E. Tryon Road, Raleigh, Wake
10. Name of Employee	12. Location of Workplace, Bldg. and Room No. SBI Crime Laboratory, 1 st Floor

I. A. PRIMARY PURPOSE OF ORGANIZATIONAL UNIT:

The primary purpose of the SBI Questioned Documents Section is to provide forensic analysis of evidence to all law enforcement agencies within the State. The forensic services provided include in-lab analyses, technical field assistance, and expert witness testimony in areas concerning the identification of handwriting, hand printing, machine writing, stamped impressions, carbon acetate fiber impressions / physical match, ink analysis, paper analysis, alterations, simulations, counterfeiting, inter-lineation, indented writing, photocopiers, printers, toners, videotape enhancement and any other form of questioned written communication.

B. PRIMARY PURPOSE OF POSITION:

The Forensic Documents Assistant is an important position requiring a high level of proficiency in several different technical areas such as digital imaging systems, computer operations, and photo microscopy. The primary purpose of this position is to assist the Questioned Documents Examiners in receiving, preparing, examining, imaging and researching of evidence submitted in questioned documents cases.

C. WORK SCHEDULE:

Regular work hours are 8:00 a.m. until 5:00 p.m., Monday thru Friday. Preparations of court exhibits or evidence analysis in Arush@ situations may necessitate overtime work.

D. CHANGE IN RESPONSIBILITIES OR ORGANIZATIONAL RELATIONSHIP:

Since computer digital imaging, the Documents Assistant position has become much more technical requiring a high level of skill in both computer operations and the use of imaging software. Currently he is directly responsible for the day to day operations of our digital enhancement room. The computer equipment used on a daily basis consists of two 486 Pentium computers with three hard drives, one tape drive and a rewritable optical disk drive used to store the digital images. Images are captured using a DAGE-MTI Model 81 Infrared 1600 line camera, an Hewlett Packard flatbed scanner, a Panasonic Digital 5000 Video Camera or two Panasonic 7150 Video Cassette Recorder-Players with Prime Image TBC Freeze II Afreeze-frame@ equipment. Some of the imaging software used on a daily basis are Image Pro Plus, Ibis, Photo-Styler and PhotoShop. All these operations are used to enhance image quality in order to assist the Document Examiner with his/her option and to produce clear, sharp images for court displays. This Acutting edge technology@ requires a great deal of mental focus and though in order to use the best technical solution using a combination of both the software and hardware in producing quality results.

II. A. DESCRIPTION OF RESPONSIBILITIES AND DUTIES: (Order of importance.)

Office 40%

Identification of Evidence.

Providing handwriting exemplars and instructions materials to local law enforcement agencies.

Answering questions by phone concerning the submission and analysis of evidence.

Lab 60%

Digital computer imaging and enhancement

Processing evidence for indented writing

Infrared detection of alterations and obliterated writing

Ultraviolet detection of watermarks and obliterations

Infrared analysis of charred documents

Preparing chemical solutions for film development

Developing and printing infrared, ultraviolet black and white and color films

Preparing court exhibits

The Documents Assistant comes in contact with hazardous chemicals an average of one hour per day. These chemicals are used on a routine basis for processing photographic materials. These chemicals are methanol, pyridine, acetone, ethanol, ethyl acetate, silver nitrate, sodium thiosulphate and sulfuric acid.

Other Responsibilities:

- Computer digital imaging
- 2. Assist the Questioned Document Examiner in maintaining the proper chain of custody and proper identification of evidence, thus expediting the turnaround time of cases.
- 3. Maintain and research the data in the anonymous letter file.
- 4. Maintain a computer data base and reference file on periodicals, publications, papers, books etc. on Questioned Documents examinations, digital imaging, specialized photography, dating and identification of inks, indented writing, photocopy machines and paper making technics.
- 5. Obtain standards from typewriters, check writers, photocopy machines, and paper makers.
- 6. Examine evidence using specialized digital imaging and specialized electronic equipment to view infrared fluorescence and luminescence, ultraviolet viewing equipment, oblique lighting, high contrast, infrared and scientific photography.
- 7. Give assistance to law enforcement officers across the state in the preparation of non-testimonial court orders, the drawing of search warrants used for obtaining questioned documents form suspects, and obtaining known handwriting standards.
- 8. Provides handwriting exemplars and instructional materials to all law enforcement agencies across the state concerning the submission of evidence for a document case.
- 9. Prepare technical graphic displays to aid the Examiner in his court testimony and to better illustrate his conclusion to the jury.
- 10. Process evidence for indented writing.
- 11. Process and photograph charred documents.
- IV Enhancement of video tapes using computer image enhancement.
- 13. Process evidence containing obliterations or alterations for the detections of underwriting using established technical laboratory procedures and improvise the procedures to obtain the best possible results.
- 14. Write and develop the technical procedures for all the digital image enhancement work.
- 15. Label and identify items of evidence for examination by the Document Examiner.

II. B. Other Position Characteristics:

1. Accuracy Required in Work:

Precision and accuracy are important factors in the preparation and examination of evidence. Measurement of machine writing is accurate to .001 of an inch. Measurement of chemicals is accurate to one millimeter. Infrared and ultraviolet filters are measured in nanometers. The evidence must be properly labeled and identified to ensure that the right person is identified as the author of the questioned document and that all of the evidence that was submitted is returned to the submitting agency.

2. Consequence of Error:

The work ultimately affects the outcome of the case and the Examiner=s ability to accurately examine and compare the evidence in that case. A person=s guilt or innocence is determined by the evidence that is submitted for comparison. Improper labeling and analysis of evidence may result in the wrong person being prosecuted or convicted, and damage the credibility of the Documents Assistant and his section.

3. Instructions Provided to Employee:

All evidence and assignments originate from the Supervisor of the Section or other Forensic Documents Examiners. The Documents Assistant is given the evidence and instructions about what needs to be done. It is the responsibility of the Documents Assistant to determine what analyses and instrumentation are necessary to perform the task. The charred documents and video image enhancement cases are worked independently by the Documents Assistant.

4. Guides, Regulations, Policies and References Used by Employee:

NCSBI Policies and Procedures Manual
Questioned Documents - Albert Osborn
Suspect Documents - Wilson R. Harrison
Evidential Documents - James Conway
NCSBI Questioned Documents Training Manual
NCSBI Questioned Documents Procedures and Reference Manual
Scientific Examination of Documents - Ordway Hilton
Analysis of Paper - B. L. Browning
Forged, Anonymous and Suspect Documents - A. J. Quirke
Methods of Forensic Science - Frank Lundquist
North Carolina Crimes - Stevens H. Clark, Michael R. Smith,
James C. Drennan and Michael Crowell
N. C. Criminal Law and Procedures - Michie Co.

Basic Law Enforcement Manual - N.C. Justice Academy

5. Supervision Received by Employee:

Much of the work generated by the Documents Assistant is reviewed by the Examiner and the Supervisor once the work is completed.

6. Variety and Purpose of Personal Contacts:

Due to the technical nature of this work, professional organizations and contacts are very important. The Documents Assistant currently belongs to the North Carolina and the International Association of Identification. He also has a working relationship with representative of both the Imaging and computer software fields.

7. Physical Effort:

The physical effort involving this job includes the preparation of chemical solutions and maintenance of technical equipment on a weekly basis. Also much of the lighting and computer hardware has to be moved around and reconfigured for each case.

8. Work Environment and Conditions:

The Documents Assistant normally works in an office and laboratory environment, although he has been called out to provide assistance occasionally at crime scenes.

9. Machines, Tools, Instruments, Equipment and Materials Used:

Approximately 60% of the Documents Assistants time is spent on instrumentation and the use of materials. The following percentages reflect the time spent on each piece of equipment/materials.

Digital Imaging Computer Systems	25%
Doya and MTI Infrared Systems	
Ultraviolet Systems	
Electrostatic Detection Apparatus	
Visual Graphics (Pos I)	

10. Visual Attention, Mental Concentration and Manipulative Skills:

A. The areas requiring close visual attention are as follows:

- 1. Specialized digital imaging and photographic techniques which are necessary for detecting altered or obliterated writing, enhancement of illegible writing and preparation of exhibits on large display board for court.
- 2. Labeling evidence for the Documents Examiner to ensure proper identification and accountability of documents to be compared.
- 3. Examination of evidence for indentions, alterations or obliterations using electrostatic detection, digital imaging computer equipment, infrared or ultraviolet lighting instrumentation.
- 4. Microscopic examinations and comparisons of machine writing using the comparison and stereo microscopes.
- 5. Imaging charred documents, due to how very fragile they are.

B. The following areas require the most intense mental concentration:

- 1. Labeling and identifying evidence to be compared by the Examiner.
- 2. Obtaining sufficient known handwriting and machine writing standards for the comparison with the questioned documents. Insufficient standards prevent the Examiner from rendering a definite opinion.
- 3. Discussions by telephone concerning case evidence, items to be submitted, quality and quantity of known standards.

- 4. Specialized digital imaging using different software packages in order to obtain precise technical results from the documents submitted.
- 5. Using specialized photography to photograph evidence, which requires precise calculations for various exposures and films, temperature monitoring and the preparation of chemical solutions.

11. Safety for Others:

Preparation of chemical solutions and the use of the Electrostatic Detection Apparatus. The appropriate safety protocol is used for protection.

12. Dynamics of work:

III. KNOWLEDGE, SKILLS & ABILITIES AND TRAINING & EXPERIENCE REQUIREMENTS:

A. Knowledge, Skills and Abilities:

- 1. Computer operations skills as well as knowledge of digital imaging software are required in order to process the evidence and maintain a database of this information.
- 2. Graphics skills and systematic concepts are needed in the drafting and preparation of court exhibits and maintenance of reference files.
- 3. Able to prepare evidence in an accountable manner for the Examiner. (Example: The questioned document must be properly identified. Documents must be separated if there are various authors.
- 4. Knowledge of infrared, ultraviolet, high contrast and technical photography and darkroom procedures (developing film and printing pictures)
- 5. Skills in communication and human relations.
- 6. Experience with laboratory related equipment.

B. 1. Required Minimum Training:

- a. Four (4) year degree with a background in computers, software applications, physics and photography. Must be able to understand and train other personal in the use of complex computer software programs.
- b. Computer/Laboratory/Photographic experience.

2. Additional Training/Experience:

- a. The Federal Bureau of Investigation Photography School
- b. The International Association of Identification training classes
- IV Trade shows and seminars.

Date:

3. Equivalent Training and Experience	3.	Equivalent	Training and	Experience
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N/A

C. License or Certification Required by Statute of Regulation:

The International Association of Identification is currently working on an imaging certification program.

IV. CERTIFICATION: Signatures indicate agreement with all information provided, including designation of essential functions.

Supervisor's Certification: I certify that:

Signature:

a. b. c.	I have provided a complete and accurate description of responsibilities and duties; and		
Signa	ture:	Title: Forensic Documents Analysts Supervisor	Date:

Employee's Certification: I certify that I have reviewed this position description and that it is a complete and accurate description of my responsibilities and duties.

Title: Forensic Documents Assistant

Section or Division Manager's Certification: I certify that this position description,	completed by the above named
immediate supervisor, is complete and accurate.	•

Signature:	Title: Asst. Director of Crime Laboratory Services	Date:
		

Department Head or Authorized Representative's Certification: I certify that this is an authorized, official position description of the subject position.

Signature:	Title:	Date
g::-a::a::a::		

PD-102R-92

	State of North Carolina Office of State Personnel Position Description Form (PD-OSS-93) OFFICE SUPPORT SERVICES OCCUPATIONAL GROUP	Approved Classification Effective Date: Analyst: (This Space for Personnel Department Use Only)	
1.	Present Classification Title of Position	7. Pres. 15 Digit Pos. # /Prop. 15 Digit Pos. #	
	Office Assistant IV	3613-0000-0002-181	
2.	Usual Working Title of Position	8. Dept., University, Commission or Agency	
	Office Assistant IV	Department of Justice	
3.	Requested Classification of Position Pay Grade 59	9. Institution and Division	
-		State Bureau of Investigation	
4.	Name of Supervisor	10. Section and Unit	
		Documents & Digital Evidence Section	
5.	Supervisor's Position Title / Position #	11. Street Address, City and County	
		121 E. Tryon Rd, Raleigh, Wake	
10.	Name of Employee	12. Location of Workplace, Bldg. and Room # Crime Laboratory Division, 1 st Floor	

SECTION I

IV GENERAL INFORMATION:

This position is assigned to the Documents & Digital Evidence Section, NC State Bureau of Investigation, SBI Crime Laboratory Division. This section consists of the following units: Questioned Documents Unit, Computer Forensics Unit, Photography Unit and Graphic Arts Unit.

- B. Fifty (50) percent of work assignments are received from the section supervisor. The remaining work requests are made by the other section employees and SBI Administration. Major duties performed for these individuals include processing memorandums, letters, making telephone contacts, following up with scheduled court subpoenas, copying documents and special projects.
- C. The major purpose of this position is to provide secretarial support to the administrative operation of the Documents & Digital Evidence Section. Incumbent works full-time performing this responsibility.

- D. The most significant changes that have occurred in this position are the capabilities to process data and generate special reports. Obtaining training and proficiency in the use of the personal computer has been necessary. The position is responsible for preparing various special reports from section data.
- E. Work is generally constant without frequent periods of urgency.

SECTION II: DUTIES AND RESPONSIBILITIES

A. PUBLIC CONTACT:

This position routinely talks with governmental officials, law enforcement personnel, court officials, sworn and non-sworn Bureau employees and the public. Each day this position is responsible for screening telephone calls for the section supervisor and intercepting calls in the absence of all the Examiners. All calls must be answered in a timely manner and messages delivered accurately. This position answers many questions and handles matters to save time for the laboratory personnel. Questions are answered on case status, section policy, Bureau policy and various related matters.

Telephone inquiries are received from law enforcement personnel and court officials reference the status of laboratory case results. Information is obtained by inquiring into the Laboratory Information Management System (LIMS), criminal Information computer files and/or pulling the case file folder. This allows each Examiner additional time for analysis and the section supervisor additional time for evaluation of the Examiner=s results.

This position maintains appointment calendars for the supervisor, five (5) sworn employees and three (3) non-sworn employees. The position has the responsibility to inform the court calendar coordinator of any scheduled appointments, conferences, scheduled schools, or approved leave time.

B. RECORDS AND REPORTS

This position maintains records of weekly activity time summaries, annual/sick leave summaries, and overtime reports for each Examiner within the section. Computer records on vehicle mileage and usage are also maintained. Each handwritten summary is reviewed for incorrect calculations and coding. The information is entered into the computer files and forwarded to the supervisor or assistant supervisor for final approval. Activity summaries are calculated and entered into the computer on a weekly basis. A monthly overtime status report is generated according to a reporting period set by DOJ. The overtime report is verified for accuracy and forwarded to the Budget Section of the Department of Justice at the end of each overtime cycle.

Annual/sick leave summaries are generated each month and are verified for accuracy before closing out the month in the computer files. An annual leave verification report for each employee is generated at the end of each year. Each employee signs a verification of the leave taken during that year and verification of current balances.

This position is responsible for ordering all clerical supplies and scientific supplies for the section through the Bureauwide computer system (MAPPER). Also, the person in this position has the responsibility of preparing all purchase orders for scientific supplies, general supplies not maintained in-house, and equipment. Due to the work performed, any incorrect information could affect the Bureau and Judicial System, therefore, assuming the responsibility for the accuracy and completeness of this work is imperative for this person. Mathematical errors can cause additional work and headaches for the Budget Department and payroll.

DCI COMPUTER SYSTEM

The person in this position must possess a limited certification. Certification is obtained through the Division of Criminal Information. This system consists of information from the National Crime Information Center, North Carolina Criminal Files and SBI files. The person in this position also sends switch messages and retrieves daily reports from the eight district offices.

FILES

Files are maintained alphabetically and according to subject. Activity summaries, overtime reports and requests, leave reports, expense accounts, training records and any written correspondence are maintained for each Examiner on computer files. If questions should occur about computer files, handwritten documentation is obtained within the section for comparison.

Individual personnel files, training records, evaluations, commendations, etc. are maintained on each section employee.

C. COMPOSITION

This position is responsible for the composition of correspondence on many subjects with only general instructions to administrative personnel, law enforcement personnel, and court officials. Letters, memorandums, and most Bureau correspondence are usually given to the person in this position by the supervisor or Examiners in rough draft form or brief notes. To compose such correspondence, incumbent must be knowledgeable of laboratory and Bureau policy and operations. This person must have a thorough knowledge of grammar, spelling, punctuation, chemical terms and terminology used in the criminal justice system. It is imperative that they format the correspondence correctly.

D. OFFICE EQUIPMENT & SOFTWARE OPERATION

- 1. Compaq computer using Windows 98 to run applications, Hewlett Packard LaserJet 4000 printer, Hewlett Packard DeskJet 895, Hewlett Packard large scale printer (36" in width), wall mount board to cut display boards to proper size, dry mount press (50" x 50") for mounting paper displays to the mounting board by use of mounting tissue, a heat laminator, fax machine, calculator, copy machine, Alpha-Mate paging system, color copier, and multi-line telephone system supporting entire section. Software programs include Omnixx Force, Novell GroupWise, WordPerfect 8.0, LIMS, Excel, Mapper, Harvard Graphics, Crime Zone, Adobe PhotoShop 7.0, Internet Explorer, Adobe Acrobat, Microsoft Office, Corel Gallery, Corel Print House, and Quicken.
- 2. This position uses a variety of materials to complete many various projects. This individual uses Bureau letterheads and memorandums, and composes charts on the personal computer. Information is received in handwritten, typed or rough copies for composition using the personal computer.
- 3. The computer, which uses WordPerfect 8.0 for Windows also requires a working knowledge of the software that is used for most of memorandums, letters, and reports. They are printed on the Hewlett Packard LaserJet 4000 printer in both landscape and portrait style. The typewriter is used for small projects. A multi-line telephone system is used to answer calls. The person in this position is also required to monitor a Companion Phone when they are away from their desk. The Companion Phone assures the section of phone coverage at all times. The person in this position must be familiar with the telephone system when answering and forwarding calls. Copier machine knowledge should include knowing how to load paper, make copies, collate papers, reducing and enlarging documents, and correcting problems that might arise.
- 4. Prepare correspondence and projects on the computer using a word processing package, database, or spreadsheets. This employee must determine the most time effective method to complete the work assignment.
- 5. Minimal review by the supervisor or Examiner is required of the work generated by this position.

E. FILES

Previously mentioned correspondence and files are kept in alphabetical and chronological order according to subject matter. A section file is established for the various forms needed for daily work within this division of the Bureau. Administrative files containing memorandums, letters and other correspondence from the various units and personnel within the Bureau concerning matters such as budget materials, correspondence files, and grants are filed alphabetically.

F. MAIL

Incoming correspondence is received twice daily and is distributed to the appropriate person. Section mail and the supervisor=s mail are received from the mail clerk. The mail is screened, stamped and forwarded as appropriate. Matters that do not need to be forwarded are handled by the person in this position or filed when appropriate.

Outgoing written correspondence is distributed to Bureau personnel, district attorneys and various law enforcement officials.

G. SUPERVISION EXERCISED

N/A

H. OTHER

Special work assignments are made by the section supervisor on a periodic basis. The person in this position is expected to work independently using good judgement in interpreting written and oral instructions and using guidelines set forth within the section. Any incorrect information could adversely affect the Bureau and Judicial system, therefore, it is imperative for this person to assume the responsibility for accuracy and completeness of all work.

Whenever the laboratory=s report processing section gets behind, the person in this position will assist in typing laboratory reports for other sections. It is necessary that this person use skills and good judgement in formatting the material correctly from the Examiner=s handwritten notes before the laboratory report can be forwarded to the requesting official. A thorough working knowledge of grammar, punctuation, spelling, scientific terms, medical terminology, chemical terms and the terminology used in the criminal justice system must be used to perform this duty.

SECTION III: PERCENTAGES OF TIME AND ORDER OF IMPORTANCE BY FUNCTIONAL AREA

Functional Area	Percentage Based on All Functions	Rank of Importance
Public Contact	15%	3
Records & Reports	15%	2
Files	25%	1
Composition	10%	4
Office Equipment	10%	6
Mail	3%	7
Special Projects	20%	5
Other	2%	8
Supervision	N/A	

SECTION IV: ADDITIONAL CONSIDERATIONS

A. SUPERVISION RECEIVED

- 1. Expected to work independently with very little supervision. Must be accurate, organized, professional, detail oriented and work with a minimum amount of review.
- 2. N/A

B. RESOURCE AND GUIDELINE AVAILABILITY

1. Work assignments are met by being familiar with the SBI Policy Manual, Crime Laboratory Procedures Manual, Section Policy and Procedures, Section Quality Assurance and Quality Control Manuals, Crime Laboratory Evidence Manual, Department of Justice Safety and Health Manual, SBI Administrative Orders Manual, State Personnel Manual, On-line DCI Procedures Menu, secretarial reference books, dictionary and thesaurus, computer software manuals, and information from various files and reports.

This position requires a thorough knowledge of office practices, procedures, grammar and punctuation rules. Must communicate competently and sufficiently by telephone, DCI terminal, and in person. Must be self-sufficient and self-supporting in exercising sound judgement. Must be discreet in working with confidential personnel matters and information from laboratory case files.

SECTION V: QUALIFICATIONS REQUIRED

- A. 1. Complete knowledge of SBI policies and procedures, state personnel procedures and general office operations.
 - 2. It is imperative that this person know terminology used in the criminal justice system.
 - 3. Ability to understand both written and oral instructions, can perform duties with minimum instruction and supervision.
 - 4. Mental concentration is required 100% of the time in studying, analyzing, researching, entering, filing, and copying. All the work requires close visual attention, whether entering information on the computer, filing, distributing completed work, or the production of documents.
 - 5. The Division of Criminal Information must re-certify the person in this position every two years to operate the DCI terminal.
 - High School and computer courses.
- B. Needs at least one year clerical experience. Requires a high school education and a thorough knowledge of office procedures and practices, ability to enter accurately and rapidly, and ability to execute highly confidential rush work using judgement with respect to importance.
- C. Requires one-year training.

Assistant Director, Crime

Laboratory Services

Date:

Title:

Signature: