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NIS BULLETIN

CONTENTS

ESPIONAGE - INNOVATION, IMAGINATION, IMPLEMENTATION 3

CASTING - SHOE AND TIRE IMPRESSIONS 5 **OBTAINING EXEMPLARS FOR EVIDENTIARY PURPOSES....16**

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THIS BULLETIN IS INTENDED FOR THE USE AND PROFESSIONAL ENHANCEMENT OF ALL MILITARY AND CIVILIAN SUPERVISORY PERSON-NEL, SPECIAL AGENTS AND COUNTERINTELLIGENCE ANALYSTS ASSIGNED TO NIS WORLD-WIDE.

FIELD COMPONENTS ARE ENCOURAGED TO SUBMIT ITEMS FOR PUB-LICATION ON A CONTINUING BASIS. AN ARTICLE IN THE APRIL, 72 ISSUE OF THE NIS NEWSLETTER DISCUSSES THE DETAILS RE-GARDING SUBMISSIONS TO THIS BULLETIN.



In March, 1957, the ONI Newsletter was inaugurated. Its express purpose was "... to provide information of general interest to all persons concerned primarily with matters relating to the Security Division of Naval Intelligence." In the past decade, as indicated in the NIS Newsletter of April, 1972, this publication has varied from its intended aim. As a result of this diversity and the lack of any firm, well-defined policies regarding the acceptance and ultimate publication of submitted material, it became increasingly difficult to strike a meaningful balance between items of general interest vis-a-vis purely professional topics. Moreover, with the implementation of a more proficient management system and a high speed communications network there was no longer a need for inclusion in the NIS Newsletter of such originally conceived items as the notification of Special Agent vacancies, information concerning training courses, discussions of purely administrative and/or equipment problems, etc.

Over the past three years, primarily due to our reduction in personnel and the non-availability of funds, there has been a significant reduction in our formal training program. Therefore, we can ill afford to fail to capitalize on every opportunity to inform, educate and refresh our personnel regarding the various tools, skills and changing

methodology germane to the profession. One manner by which this can be accomplished is by effective utilization of this publication, now more appropriately entitled, the NIS Bulletin. The articles included in this edition are representative of the type of material that will appear in future issues. I want each of you to feel that this is your bulletin and encourage your participation in submitting material for publication.

An abiding goal of all NIS personnel is the enhancement of professionalism. The <u>NIS Bulletin</u>, I believe, is one step in that direction.

J.a. Edwards

ESPIONAGE - INNOVATION, IMAGINATION, IMPLEMENTATION By Special Agent C. R. LANNOM

In investigative endeavor, one accepted measure of proficiency is the ratio of resolution achieved. Applying such a proficiency criterion to all categories of investigation indicates that we have experienced a less than satisfactory resolution rate in the conduct of espionage investigations. An analysis of past espionage investigations has surfaced several factors which are considered to represent the crux of the problem. These include indecisiveness, investigative compromise, inappropriate investigative approach and a reluctance to utilize imaginative and innovative investigative techniques.

Field elements have evidenced a degree of hesitancy to take immediate and positive steps upon receipt of information indicative of espionage involvement. Often the information is submitted in an Information Report transferring the onus of reaction to the Headquarters. This procedure can seriously jeopardize any future investigative effort that may be directed by a NISO or by NISHQ.

During the initial stages of the espionage investigation, there has been a marked tendency to apprise too many people within command of the details surrounding the existence of NIS interest in an individual. This procedure greatly increases the possibility of investigative compromise and serves no substantive purpose. It should be axiomatic in the conduct of espionage investigations that the matter is highly sensi-

tive and should be known to only those with an absolute need to know.

One of the more frequent counterproductive procedures discovered during the analysis of espionage cases is the tendency to conduct the investigation as though it were a background inquiry. The investigation is often routinely pursued through the conduct of duty station and neighborhood inquiries and interviews of social and professional acquaintances. These techniques virtually assure investigative compromise and are inherently designed to surface more indicators rather than to develop meaningful evidence of espionage involvement. The use of pretext interviews in limited instances is a necessity; however, the security of such inquiries is at best tenuous and their utilization should be greatly restricted.

An unimpressive resolution rate relative to espionage investigations is certainly not unique to the Naval Investigative Service. The problem is so widespread throughout the Government that in 1970 the Administration assembled a committee of intelligence experts to discuss ways of coping with the situation. As quoted in *Time Magazine*, the ultimate offering of the committee was a suggested "sweeping expansion of federal intelligence work - specifically, the wider use of wiretapping, mail covers, surreptitious entries and bag jobs." The committee was obviously stating a rationale that has long been concurred in, but unfortunately not often applied - to play the game we have to be in the same ballpark as our opponent. The tools available to the espionage investigator, i. e., searches, surveillances, informants, technical devices, polygraph, etc., are not unique to this sub-category; however, the manner and timeliness of their application is often both unique and crucial.

It is considered that a more aggressive utilization of imaginative and innovative investigative protocols would enhance the probability of resolution in the conduct of espionage investigations. Conversely, the accelerated implementation of such techniques could, on occasion, expose NIS to public criticism. This fact will not dissuade the dedicated investigator, but should be taken as a cautionary note to proceed with such endeavors only after careful planning, coordination and supervisory consultation. Common sense and good judgment must prevail. The conduct of espionage investigations poses the keenest challenge to the Special Agent and has offered the greatest reward to those few who, with initiative and resourcefulness, have met that challenge.

CASTING - SHOE AND TIRE IMPRESSIONS

One step in our Major Crime Scene Investigation procedures is the reproducing or casting of shoe and tire impressions. This function is most important in the crime scene investigation process so it is essential that the investigator or technician be well versed in its application and limitations.

INTRODUCTION

Footwear and tire impression identification evidence has, in the past few years, progressed forward from an investigative aid position up to a recognized and accepted laboratory procedure. Generally included in the same category as firearms and latent fingerprint examinations, this evidence often provides positive proof that a particular shoe or tire was present at the scene of a crime.

Similar to the lands and grooves of gun barrels, tread surfaces of shoes and tires are constantly changing with use. From the moment an individual departs from the crime scene area, either by walking or running, his footwear is becoming altered from those impressions left at the original scene. These alterations occur not only by the wearing, but also by the surfaces or terrain the shoes or tires come in contact with. For instance, a suspect walking across a gravel road or through areas where broken glass has accumulated will usually cause depressions and lacerations which will greatly deface the wearing surface. Therefore, it is essential that if a suspect's footwear is to be positively identified and utilized as evidence, only a short period of time between the commission of the crime and examination of the suspected shoes may elapse. This rule also applies to tire tread surfaces, for the same general changes are taking place, but to a far lesser degree due to the elasticity of the material.

PLASTER CASTING - Dust, Dirt, Soil, Sand

A number of materials can be applied to the reproduction of shoe and tire impressions, but experience has shown that Plaster of Paris and the recently introduced silicone rubber are the two most applicable under all conditions. Although their preparation is fairly simple, they provide us with durable casts capable of duplicating very fine details for identification purposes. As Plaster of Paris is the least expensive and most widely used by law enforcement officers, we shall employ this material for making our first cast.

PREPARATION

Previously, when discussing the processing of physical evidence, it was determined that prior to actual handling of any evidence, we should, whenever possible, photograph it in its original environment. This rule especially applies to footwear and tire impressions. These photographs should be taken from several angles, including close-ups, with and without ruler, so as to record all significant detail. Once photographed, measurements of the impression should be taken and recorded. These measurements should include the length of the entire impression, width of the heel or sole, width of the tire tread design, and distance from some related immovable object.

EQUIPMENT

The following is a list of materials and equipment that could be utilized in the making of plaster casts: l Spray Applicator Can of plastic spray or clear lacquer Can of machine oil Metal or Wooden Adjustable Casting Frame Mixing Bowl or Mixing Container Water Plaster of Paris Metal or Plastic Spatula Mixing Spoon or Stick Reinforcing Wire Portable Hair Dryer

APPLICATION

After the photographing and measuring is completed, the area surrounding the impression should be inspected for its rigidity by the investigator, placing his own impressions in the surface and determining exactly which procedure he should follow. If the surface containing the print consists of dust or sand, he should first apply a clear plastic or lacquer coating as a fixative using a spray applicator. This spray should be directed against a piece of wood or cardboard and permitted to filter down over the impression. While the plastic or lacquer is drying we should be building the metal adjustable casting frame around the entire impression for damming purposes. If a frame is not available, take whatever is at hand such as bricks, pieces of wood, rocks, venetian blind slats, or even soil, and build a restricting dam around the impression to hold the plaster. Once the print is isolated, measure out estimated amounts of Plaster of Paris and water to produce a one-inch thick cast and put the water into a mixing bowl or container. The plaster

is then added to the water by sprinkling it, a little at a time, evenly, and stirring thoroughly with a mixing spoon until the mixture reaches the consistency of a heavy cream. Additional plaster or water may be added until the proper consistency is achieved. When the mixture is ready for pouring and the plastic or lacquer crust has completely dried, a thin layer of machine oil should be sprayed over the impression to aid in separating the cast from the fixative. Once the oil has been applied, pour a small amount of the mixed plaster lightly over the impression using the spatula to break the fall from the bowl. When a depth of about one-half inch is achieved, the pouring should be discontinued while the cast is reinforced by placing wire mesh, or another similar material, on top of the already poured plaster. (Note: Wire coat hangers which are straightened out and cut into lengths of about ten inches each are also excellent for reinforcing casts.) The remainder of mixed plaster is then poured over the first layer and allowed to set for approximately thirty to forty-five minutes. The drying process, especially in cold weather, may be expedited by utilizing a portable hair dryer and blowing warm air over the cast. Prior to the complete hardening of the plaster, the investigator should mark the cast with his initials, time and date for future identification. When the cast has firmly set, the frame or dam should be very carefully removed, the cast lifted up from the impression area, and placed in wrapping paper or bag with all clinging material. (Note: It is not the duty of a crime scene investigator, but a function of an expert in the laboratory to clean all casts submitted to him for examination. When casts are brushed off or cleaned in the field, there is always the possibility that valuable material may be lost or left at the scene.) The cast is then placed in a sturdy box containing some type of cushioning material for transportation to a secure area where it is allowed to dry upside down on a piece of paper over night. When the cast has completely hardened, it is ready for transportation or shipment to the laboratory along with a written statement of facts concerning the cause under investigation.

SNOW IMPRESSIONS-Usually impressions made in snow, either by shoes or tire treads, will maintain excellent amounts of detail which can be reproduced by plaster casting if the investigator is extremely careful and knowledgeable of successful techniques. After photographing and measuring, the first step would be the making of a test impression and casting same whenever climatic conditions permit. After successfully casting the impression and acquainting yourself with the receiving surface, you are now ready to proceed with the actual evidence casting. Shake or dust lightly a thin layer of talc over the impressions area, followed by a layer of shellac or clear lacquer. This step is repeated a minimum of three times, allowing several minutes between each application. The purpose of these two procedures is that a crust must be developed which will prevent the plaster mix from seeping through the melting snow. Once the base is dry, shake or dust three thin layers of dry plaster, alternating with a water spray over the original crust. Let these two mixtures set for about ten minutes and proceed with mixing additional plaster and the coldest water possible in a mixing bowl stirring to the consistency of molasses. Apply this thick plaster mix on top of the base crust and dry plaster very gently by utilizing a large spoon. Once again, reinforce the cast with wire mesh or wire coat hangers, let stand for about one hour or until firmly set, initial, and remove very gently. The cast should again be permitted to thoroughly dry in a heated room overnight prior to submission to the laboratory.

IMPRESSIONS IN MUD OR COVERED BY WATER-Often the investigator finds himself confronted with impressions in mud puddles or creek beds covered by standing or flowing water. Both of these situations can create problems, but if the technician or investigator possesses basic knowledge and experience in casting, he will be capable of obtaining identifiable reproductions.

In making a cast located in mud with water, care must be taken not to disturb any of the sediment which creates the detail. The first step should be the draining or siphoning off of as much water as possible, without disturbing the impression. This can best be accomplished by utilizing a water pump, syringe, or hydrometer, with all the air squeezed out prior to immersing in the water. If the air is not forced out before immersing, rushing air would exit and churn up the sediment and disturb or destroy the detail. Once a majority of the water has been removed from the impression, the casting frame should be set in place or a restricting dam constructed to isolate the print. As plaster is heavier than water and will settle to the bottom when applied and set evenly, our next step would be the sprinkling of dry plaster over the impression. Once the base has been established and all remaining water within the impression absorbed, additional plaster and water should be mixed in the mixing bowl, stirring to a very thick consistency. This mixture should be spooned very gently into one end of the impression and allowed to spread over the entire area. Of course, as stated before, we would still place our reinforcing wire for strength after the original base is about one-half inch thick, then apply the remaining portion of mixed plaster. The cast should be permitted to set for at least one to one and a half hours after which the investigator would initial for identification purposes. (Note: Here again, a portable hair dryer could be utilized to speed up the drying process by blowing warm air over the impression. Once the cast if firm, it should be lifted up very gently and placed in a sturdy box or container for transportation to an indoor area and allowed to dry upside down overnight.

In instances where impressions are located in creeks or swamps, with standing or running water, the same general principles would apply, except for the equipment and process used to isolate the area. These cases require a special metal cylinder, or metal square, approximately two feet in diameter, open at both ends, and when stood vertically, should measure about two feet in height. The cylinder, or square, is then forced into the mud or gravel very firmly, or held in an upright position, until all the water covering the impression is removed by either pumping or syphoning. After the impressions have had a majority of the water removed, proceed with the same techniques as for casting in mud.

SILICONE RUBBER CASTING

A few years ago, because of the need to develop all the minute details found within small impressions, like jimmy and tool marks which were often unobtainable with plaster, a substance called Moulage came into being. Moulage and Posmoulage are two hard plastic materials which, when placed in a doubleboiler and heated, melt into a liquid form. This hot liquid would then be poured into impression areas and allowed to cool and set firmly. Once the plastic cooled, and the cast was removed, we found that we could obtain casts of finer quality than with plaster. But, because of the numerous problems in obtaining and utilizing heating elements and cooking utensils in the field, and the time required for heating the plastic, the process became impractical and too cumbersome for modern crime scene investigation. Once again a search was instituted to find an alternate material capable of reproducing fine details without burdensome preparation. Subsequently liquid silicone rubber was introduced and utilized by the police profession. Since its introduction, silicone rubber has been used in making reproductions of tool and jimmy marks, shoe and tire tread impressions, firearms, etc., with a greater degree of accuracy than ever before. In addition, since rubber has a great deal of elasticity and is almost indestructible, transporting and storing casts is no longer a real concern to the investigator.

EQUIPMENT

The following is a list of materials and equipment necessary for silicone rubber casting: Talc

9

Spray can of clear plastic or clear lacquer Spray Applicator Light Machine Oil Liquid Silicone Rubber Catalyst or Hardening Agent Thinner Adjustable Metal Casting Frame Mixing Spoon (Metal or Plastic) Flexible Mixing Bowl Paint Thinner

PREPARATION

All impressions, wherever possible, shall be photographed and measurements taken prior to any attempt at casting. First, place the metal casting frame or construct a restricting dam around the impression area. Prepare the receiving surface for the rubber compound by applying talc and clear plastic or lacquer in alternating layers over the print whenever casts are to be made of impressions in sand, dust, or soft soil. Allow each layer to set for about five minutes, then spray a very

fine mist of machine oil over the talc and lacquer crust to act as a releasing agent.

APPLICATION

Pour an ample amount of the silicone rubber into a flexible rubber or synthetic mixing bowl. Generally this liquid rubber, in its original packaged form, is very thick and its consistency must be lowered by adding a thinner. The thinner and inert silicone fluid is added in an amount equal to 10% or one-tenth of the silicone rubber. The addition of more than 10% thinner could result in a longer drying time. Once the thinner has been mixed thoroughly with the rubber, using a mixing spoon, add one part of the catalyst or hardening agent to two hundred parts of the silicone rubber base compound. This catalyst is used to catalyze or set up the rubber compound and must be handled with care as it may be harmful to the skin. Once again, stir the entire mixture thoroughly, and after all initial preparations have bben completed, we are now ready to make our actual cast.

Pour the silicone rubber mixture (rubber, thinner and catalyst), into the impression very gently until the entire area is covered and filled. Allowing about fifteen to twenty minutes for the cast to harden completely, mark for identification with a ball point pen, felt marker, or identification tag and remove from the frame or dam. The cast is then placed in wrapping paper or a plastic bag and transported to the laboratory or office to be cleaned and examined by an expert.

In this article I have attempted to explain and illustrate the vast importance of casting shoe and tire impressions, along with a few techniques for obtaining acceptable casts for examination and comparison purposes. The best method for widening one's knowledge and ability in casting is by actual practice and association with professional laboratory examiners.

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VOICEPRINT CAPABILITY WITHIN NIS

The technique of speech analysis and comparison known as "Voiceprint" will soon become another investigative aid available through the Technical Services Division. The following introduction to Voiceprint is presented to assist the investigator in assessing its potential values and limitations for various types of situations.

The basic concept underlying the use of voice spectrography for personal identification is the theory of invariant speech which attributes a unique voice pattern to every individual based upon differences, however subtle, in the organic structure of the vocal apparatus as well as learned differences relating to regional, social and cultural factors. This aspect of individual differences in speech production can be considered as inter-speaker variability. The theory of invariant speech also considers the concept of intra-speaker variability. An individual's laryngeal and respiratory activity is never exactly the same from one vocalization to the next; these factors in conjunction with speech rate, differential emphasis, and speaker mood all combine to produce intra-speaker variability.

Speaker identification is dependent upon, and the theory of invariant speech assumes, a margin of difference between inter- and intra-speaker variability. In other words, while an individual's voice may change from one utterance to the next, the change will never be enough to overlap inter-speaker variance and become identical to another person's voice.

The manner in which the sound spectrograph produces a permanent visual record of a speech signal is an interesting process somewhat analogous to facsimile production. The instrument is composed of four major components: (1) a magnetic tape recording device, (2) a variable electronic filter, (3) a facsimile paper carrying kymograph, and (4) an electric stylus which marks the paper as the kymograph revolves. In operation, a short segment of sound or speech is recorded either directly or from another magnetic tape onto a loop of magnetic recording tape. This loop is then repeatedly scanned at high speed in order to analyze its spectral contents, gradually building up a display much like a television raster. For each scan of the tape loop the variable electronic filter passes only a limited band of frequencies and the energy from this frequency band activates the electric stylus so that a straight line of varying

darkness is produced on the facsimile paper.

The end product of the spectrograph, a spectrogram (or the proprietary term "voiceprint") reflects three main parameters of speech. With each scan of the tape loop a corresponding

trace is burned onto the facsimile paper. As mentioned above, each scan represents a sampling of limited frequency, becoming progressively higher with each pass. The completed vertical axis (approximately four inches high) therefore represents the frequency domain to 8 kHz. Time is displayed on the horizontal axis. The spectrograph's circuitry amplifies the low dc signal from the detector and uses it as a variable dc source for a free-running power oscillator. The output of this oscillator is linerarly proportional to signal voltage and creates a corresponding degree of density on the paper. In other words,

signal amplitude is related to the darkness of the trace.

The complexity of instrumentation, however, is miniscule in comparison to the confounding mix of opinions, technical and legal, which have plagued Voiceprint's respectability since its inception. Professional (e.g., the Acoustical Society of America) reservations regarding the validity of Voiceprints seemed to have centered around which voice parameters are most appropriate for identification as well as the concern of some speech scientists over the use of spectrographic evidence in court before the method has been validated by controlled experimentation.

The reticence on the part of the speech science community to endorse the validity of the voice print identification technique played a significant role in limiting the admissibility of this evidence into courts. Out of the case of Frye v. <u>United States</u> (Frye v. U.S., 293 F. 1013, 34 A.L.R. 145 (1923)) came the finding that, "while the courts will go a long way in admitting expert testimony deduced from a well recognized scientific principle or discovery, the thing from which the deduction is made must be sufficiently established to have gained general acceptance in the particular field in which it belongs."

In addition to the Frye Rule, legal consideration must also be given to voiceprint as it relates to the constitutional protections afforded by the Fourth, Fifth, and Sixth Amendments of the U.S. Constitution. The Fourth Amendment has been judged to protect people, not places from illegal search and seizure. Before this right is forfeited by the taking and comparison of a voice exemplar, it must be known that admissible evidence is a potential result. Due to the once untested nature of voiceprint this point of law was used in at least one case (<u>New Jersey v. Cary, Criminal Law Reporter</u>, (Feb 26, 1928), 2486) to control the ruling - in this instance refusing to compel the defendant to submit to a recording of his voice. With voiceprint's meeting of the Frye Rule, the Fourth Amendment should pose no impediment to its acceptance as evidence.

S/A GIVEN, NISHQ, COMPARING TWO SPECTROGRAMS. IN THE BACKGROUND IS THE SOUND SPECTROGRAPH OR VOICE PRINT MACHINE.

Precedents have also been established that evidence obtained from a person's body falls in the category of non-testimonial physical evidence and is not protected by the self-incrimination clause of the Fifth Amendment. Just as with fingerprints, the voice itself does not represent testimonial evidence.

To assure the maintenance of an individual's right to assistance of counsel under the Sixth Amendment, it has been suggested by some authorities that assistance of counsel is recommended whenever a voice sample is taken for voiceprint identification. If for no other reason, a lawyer could explain to a defendant why his voice is not protected by the Fifth Amendment's right to silence.

In light of the above mentioned limitations, it is evident that reliable scientific experimentation was an absolute necessity to gain general acceptance for voiceprint from the scientific community and the courts. To achieve this goal a two-year comprehensive experiment was planned through the cooperative efforts of Michigan State University and the Michigan State Police. The

13 .

program was supported by a grant from the U. S. Department of Justice under the Law Enforcement Assistance Act. The overall conclusions reached by this project support the thesis that spectrographic analysis has a definite usefulness in the investigation of crime. Given a sufficient quantity and quality of known and unknown voice recordings to work with, a qualified voice identification examiner can arrive at opinions that have an accuracy level comparable to other types of subjective examinations now made in forensic laboratories. The successful use of this method in forensic cases and in court is not exclusively a factor of instrumentation but depends upon the reliability of the trained and experienced examiner.

Subsequent to the release of this study, very well known adversaries of voiceprint have stated in court that this new experimentation has changed their minds with respect to the present feasibility of using this technique as legal evidence. At this point it would be profitable to review the more recent reactions of the court to voiceprint.

United States v. Wright (1969) was a case decided by a military court, and the conviction of Wright was upheld by a military court of appeals. In this case the court reasoned that the testimony of experts has been consistently recognized in areas in which there is neither infallibility of result nor unanimity of opinion as to the existence of a particular fact or condition. Three examples were cited. First, the difference of opinion among psychiatrists as to the mental condition of a particular defendant was cited. Second, handwriting analysis of a questioned document was specified. Third, the admissibility of aural identification of a person's voice was cited. Voiceprint identification has been accepted in a Philadelphia Criminal Court as evidence. The Minnesota Supreme Court, on an appeal, has ruled that sound spectrographs can be used in criminal evidence United States District Court Judge Oliver Gasch has admitted Voiceprint as evidence in a case involving a Washington, D. C., police officer. As of January 1972, the Michigan State Police have presented Voiceprints as evidence in several courts in five states and the District of Columbia.

The investigator is encouraged to consider the capabilities of this technique in areas of investigation other than voice analysis. Other already accepted uses for this instrument in other areas include clinical evaluation of auscultatory diagnosis, speech therapy, and evaluation of aircraft performance and disasters through cockpit recordings. It would be interesting to consider the use of the sound spectrograph for signature cataloging of such sounds as automobile engines, typewriters, and firearms. Often a garbled or distorted tape recording can be "deciphered" through the use of this instrument. At present NIS cannot provide an in-house expert qualified to testify before a court. Proficient examinations and qualified opinions will, however, be available by August, 1972. Inquiries and requests for service should be addressed to the Technical Services Division, NISHQ.

HANDY HINTS FOR INVESTIGATORS

Forgers are generally people who are likeable and attractive persons who can easily ingratiate themselves, and have a good grasp of the methods of convincing others according to the Sep - Oct 53 Journal of Criminal Law, Criminology and Police Science. It's something to look for in suspects, and a consideration during an interrogation.

The Public Relations section of the Automobile Manufacturers Association (AMA), 320 New Center Building, Detroit, Michigan 48202, produces the "AMA Automobile Identification Manual." The manual illustrates cars from 1959 forward and produces annual supplements. A "mug book" of cars could be

of use in child molestation cases, rapes, kidnappings, etc.

During a presentation by the Criminal Investigation Laboratory at Fort Gordon, one of the experts remarked that he knows of three times in the last four years in which burned paper matches left at arson scenes were matched with a book of matches. A suspect had the book in his possession in each case. This, then, is not a rare occurrence. The same person mentioned that lines left by a paint brush when paint is applied can be used to match dried pieces of paint, for instance paint in a suspect's trouser cuff with paint on a window sill. During the same presentation eight uses of questioned documents were noted. These include counterfeiting, drug, homosexual, arson, fraud, suicide, blackmarket and larceny cases.

People of Spanish origin may have two last names. Jose Antonio Torres Lopez is an example. Torres Lopez may also appear as Torres-Lopez or Torres y Lopez. Of the entire name, Torres (the first surname), is considered the most important. Lopez (the second surname) comes next in importance, then the first, and middle names. Torres is Jose's father's first surname. Lopez is his mother's.

Simple so far, right? Now if Jose Antonio Torres-Lopez marries Maria Gonzales-Martinez, she becomes Maria Gonzales de Torres (in Spanish) or Mrs. Jose Torres-Lopez (in English). The full name of their son, Miguel Louis, will be Miguel Louis Torres-Gonzales.

There's much more on this in the June 62 FBI Law Enforcement Bulletin. Some have had trouble with this type name, particularly when deciding on how to address the person. Perhaps you have too. It might be a valuable aid in establishing rapport with a suspect of Spanish origin. Calling Torres-Gonzales "Gonzales" may be something like addressing subject John M. (for Mildred) Stone, as "Mildred."

(Reprinted with permission from the Military Police Journal, May 1972)

OBTAINING EXEMPLARS FOR EVIDENTIARY PURPOSES

Identification of documents having significant relation to investigative matters is likely to arise from time to time in the course of various investigations conducted by NIS. To insure that document examiners are successful in their technical role in investigations, the individual investigator must pay particular attention to detail and carefully prepare all pertinent documents to insure their legal admissibility. There are some cases in which documents are of investigative interest where no criminal prosecution is envisioned, e.g., espionage. In that the majority of investigations conducted by NIS are focused on providing the essential elements necessary for prosecutive action on the part of USN/USMC commands, this article is intended essentially to relate to documents handled as evidence.

Quite often, an essential ingredient in fraud and forgery investigations is the examination of "questioned" documents. This term is not exclusive to formal documents such as personnel records, payroll money lists, or property records, but applies to all material upon which handwriting, handprinting and typewriting appears. Such documents as forged personal checks, telegraph message drafts, cashiers and treasury checks, letters, lottery tickets, hotel registrations, and military passes are among those items which lend themselves to document examination. Nor are fraud investigations unique in their requirement for document examination; this technique has been

applied in suicides, homicides, anonymous letters, stolen property, and, of course, blackmail cases.

The examination of handwriting and handprinting is conducted to determine the personal characteristics of the writing in relation to the individual writing habits of the author of a certain document. Such specifics as letter spacing, writing alignments, relative size of letters, writing speed, skill and the disconnections among others are used in the comparison.

These peculiarities could reveal whether the specimen was executed by one or more persons, whether additions or deletions were made at a different time and, perhaps, the writer's nationality. In addition to a known specimen, charred, burned, altered, or obliterated documents can oftentimes be restored or deciphered.

A successful document comparison with a known sample depends on many factors and starts in the field with the investigator. Basic to good investigative technique is the collection of

correct and proper handwriting "exemplars" or "standards." By these terms is meant a writing known to be the genuine writing of a particular individual, which will form the foundation for the comparison. Special care must be exercised to properly identify the exemplars by initialing and dating so that upon trial or court martial, the investigator can positively testify to the origin of the specimen. The same standards of evidence are applied to handwriting testimony as is to other real evidence.

To be admissible, the specimen must conform to one or more of the following:

- a. Acknowledged by the writer as being his
- b. Identified as having been written by a particular individual or someone who witnessed the actual writing
- c. Identification rendered by someone familiar with the writings of a particular individual
- d. Requesting the suspect to execute duplicate writings of questioned material for comparison purposes.

It is absolutely essential that all precautions be taken by the investigator to insure the legal acceptability of the exemplars. These include the requirements for proper warning in accordance with Article 31, Uniform Code of Military Justice, and the establishment and maintenance of a chain-of-custody.

The auspicious time for collecting an exemplar will best be determined by the investigator handling the case. However, proper consideration must be given to the suspect's probable request for legal counsel. A delay in obtaining the specimen may very well preclude a subsequent request if, after first waiving his rights and authorizing interrogation, the suspect feels he is rapidly becoming the prime and perhaps only suspect, and exercises his right to remain silent or requests legal counsel.

In actually obtaining a handwriting exemplar, certain advance preparations must be made. Such items as providing the suspect with the identical type paper or pen used on the questioned document or a check form, if that is the prime subject of the comparison. Paramount to the specimen is the

use of the same words, letter combinations, and numerals appearing in the questioned document. Whenever possible, the exemplars should be accompanied by a supplemental document provided by the suspect, be it a letter or document taken from the suspects personnel file, to check consistency or efforts to disguise.

Additional sources of exemplars can be found in correspondence, unit records, property receipts, unit sign-out books, hotel registrations, forms, passes, vital statistics records, hospital records, rent receipts, educational records, applications for loans, bank records, fraternal organizational records, public utility records, and other public and/or governmental files. In addition, documents may be procured from friends, co-workers, family or neighbors of the suspect. Care must be exercised to obtain an original document for examination. If it can be avoided, a photostat or photograph <u>should not</u> be submitted. The reason for this is that an original allows for more extensive examination of form, spacing, and alignment as well as such seemingly small items as pen pressure, pen lift, and connecting strokes.

Should the questioned writing be a purported signature such as appears on a check, and this alleged signature is reported to be that of an existing individual, exemplars of this person's true signature should be obtained and forwarded to the examining laboratory together with the exemplar writing of the suspect. Under no circumstances should the suspect be permitted to see the questioned writing. He should make each exemplar separately which then should be removed as completed, allowing a few moments to elapse before another sample is prepared. The exemplars should be produced under conditions approximating as close as possible those existing at the time and place the original was made. This should be extended to such details as having the suspect stand or sit in a particular position when executing a specimen as appropriate, to recreate the conditions under which the questioned document was produced. If there is any doubt as to which hand was used by the maker of the document, then the suspect should provide samples produced by using his right and then his left hand. The same type script as the original writing should also be used in the sample. It should be remembered that although a guilty suspect may attempt to disquise his writing, a nervous suspect may very well exhibit tremors in handwriting not normal in his regular writing. Consequently, any questioning that is to be done in connection with the investigation should be held in abeyance until after

properly written exemplars have been obtained. If this is impossible, sufficient time should be allowed between the interview and taking of the exemplars to allow the suspect to settle down emotionally.

The object of taking exemplars is to provide a specimen which illustrates fairly and completely the author's personal handwriting habits for comparison with the disputed document. It is self-evident that these exemplars are not secured only to indicate the guilt of the suspect but to obtain a true and accurate sample of the suspects writing habits and charac-

teristics so that the true authorship of the questioned writing can be ascertained.

In conclusion, agents working cases which lend themselves to laboratory analyses of certain writings should remember the following "do's" and "don'ts" as basic rules covering the subject of questioned writings and exemplars. These rules are set forth below.

DO'S

- 1. Advise the suspect of his right to refuse to furnish exemplars under Article 31, UCMJ.
- 2. Maintain a proper chain-of-custody for evidence.
- 3. Be prepared to prove the origin of the exemplars.
- 4. Submit originals rather than duplicates if procurable.
- 5. Take exemplars as soon as possible after the suspect has been identified.
- 6. Furnish the suspect the same type of writing materials as that utilized in the preparation of the questioned document.
- 7. Get sufficient exemplars written under the same conditions as the questioned document.
- 8. Attempt to acquire known standards such as letters or military records to supplement the requested exemplars.

9. Obtain exemplars of the true signature of the person whose purported signature is shown on the questioned document, if such a person exists.

DON'TS

1. Wait until the end of the investigation before attempting to obtain handwriting exemplars for comparison purposes.

- 2. Send photostats, photographs, or other reproductions when the originals are available.
- 3. Send collected exemplars that are not provable as having been executed by the suspect.
- 4. Let the suspect see the questioned writing prior to obtaining exemplars.
- 5. Obtain exemplars consisting merely of a page of names written in series one below the other.
- 6. Get only handwriting exemplars if the questioned writing consists of handprinting.
- 7. Fail to obtain exemplars identical in wording and content to the questioned document.
- Be satisfied to send as few exemplars as possible. 8.

COR GEORGE T. LONG - ASST. DIRECTOR, SEC

Commander George T. LONG, USN, is the Assistant Director, Sabotage, Espionage, and Countersubversion Department (SEC). Commander LONG, a native of Martinsville, Virginia, graduated from Duke University with a Degree of Bachelor of Science in Engineering in 1958. He was commissioned an Ensign in the U.S. Navy upon graduation. Commander LONG has had a variety of operational assignments in his naval career. He has served as a Communications Officer ' and Main Propulsion Assistant in the USS MALOY (EDE-791), Supply, Photo Officer, and Engineer in the USS BARRACUDA (SST-3), Weapons Officer in the USS LAFAYETTE (SSBN-616), and Operations Officer and Navigator in the USS SIRAGO (SS-485) where he was designated "Qualified for Command of Submarines."

In June 1969 his designator was changed to an Intelligence Officer (1630). In the field of intelligence, Commander LONG attended the Defense Intelligence School for an academic year during 1965-1966. His penultimate assignment was as Assistant Intelligence Officer and Electronic Warfare Officer on the Staff of Commander in Chief, Atlantic.

Despite the brevity of his tour at NISHQ, Commander LONG has already established himself as a "do-er" and one who sees his department as serving the Navy in areas heretofore unexplored. He has streamlined his organization to allow equal attentiveness to both "brush-fires" and long range research and production. One typical example of new programs initiated by Commander LONG is the SEC Department participation in the Shipboard Intelligence Briefing Program in which NIS provides predeployment intelligence briefings to naval units departing CONUS ports for deployment in overseas waters. He is a stalwart disciple of the "service to command" principle. His leadership, drive and intuitiveness has focused the searchlight of visibility to an ever increasing degree on this organization and its counterintelligence capacities. The absence of a 1630 officer as head of the SEC Department for the past decade has been highlighted by the vigor and penetrating knowledge of Commander LONG.

Commander LONG resides in the Mount Vernon area of Virginia with his wife, Cindy, and two children, Ashley and Elise. His minimal leisure sees him active as a Lay Reader and Choir Member in his church.

PROMOTIONS & TRANSFERS

PROMOTIONS TO GS-13

WALL, Robert C.

NIS Polygraph Program Coordinator

PROMOTIONS TO GS-11

KAZLAUSKAS, John S. MAXWELL, George L. ODOM, John C.

NISRA Pittsburgh NISRA Washington NISRA Subic Bay

TRANSFERS BECK, Lloyd G.	FROM NISO Philippines	TO NISO Boston
KERR, David J.	NISO San Francisco	NISO Philippines
GUEDALIA, Jack "I"	NISO Boston	NISO Charleston
ALLRED, Ben E.	NISRA Charleston	NISRA Yokosuka
CHILDS, Richard E.	NISRA Cleveland	NISHQ
CRAWFORD, Wayne L.	NISRA Hong Kong	NISRA Alameda
DEAHL, Albert F.	NISRA Albuquerque	NISRA Okinawa

MILLER, Leland M. NISRA Iwakuni NISRA New London NEWMAN, Arthur D. NISRA Buffalo NISHQ NICHOLSON, Willard B. NISRA Kenitra NISHQ PENDER, James P. NISRA Rota NISRA Kenitra SNYDER, W. Gordon NISRA Pearl Harbor NISRA Alameda STEPHENSON, Thomas E. NISRA Yokosuka NISRA Norfolk STEVENS, John M. NISRA Portland NISSU Barbers Pt. TARDIFF, Byron L. NISRA Mare Island NISRA Iwakuni

CAUBLE, Charles T.	NISO Vietnam	NISRA Alameda
GERETY, Dermod G.	NISRA Utica	NISRA Miami
LACEY, Robert L.	NISRA Subic Bay	NISRA New Orleans
RICHTER, Charles E.	NISRA Okinawa	NISRA Annapolis
WARD, Virgil J.	NISRA Subic Bay	NISRA Meridian