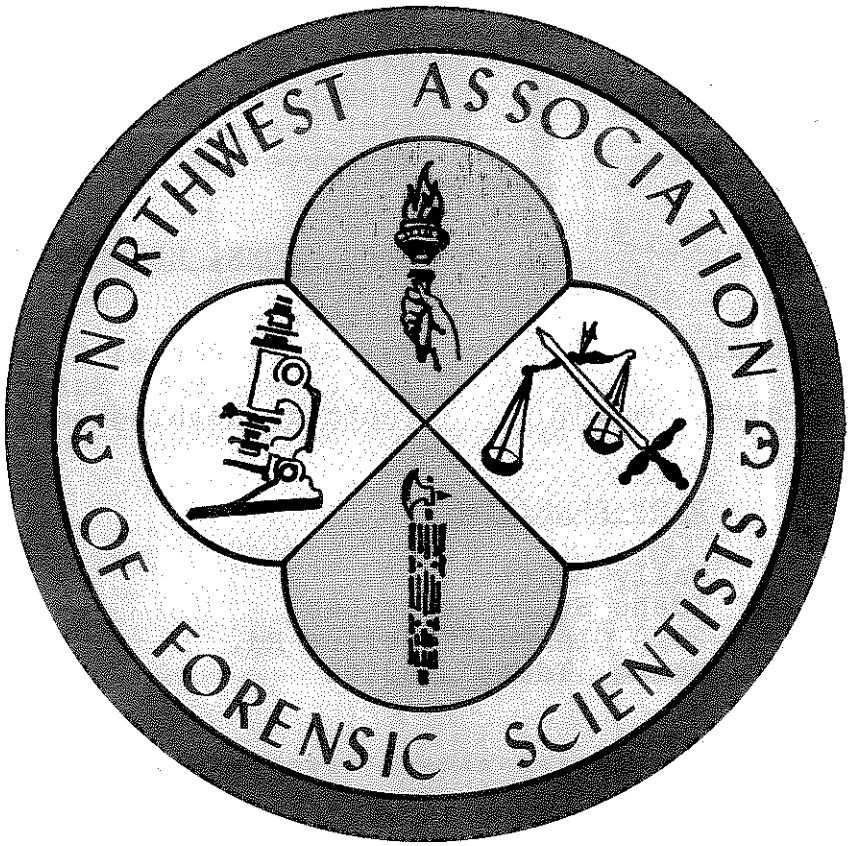
THE NEWSLETTER of



JUNE 1987 VOL. XIII, NO. 2

NORTHWEST ASSOCIATION OF FORENSIC SCIENTISTS

EXECUTIVE COMMITTEE

PRESIDENT:

Beth Carpenter
Oregon State Police Crime Lab
1111 SW 2nd Ave.
Portland, Oregon 97204

PRESIDENT ELECT:

Wayne Jeffrey
RCMP Forensic Lab
5201 Heather St.
Vancouver, BC Canada V5Z 3L7

SECRETARY-TREASURER:

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DEA Western Regional Lab
PO Box 36075
San Francisco, Calif. 94102

EXEC. COMM. MEMBER-AT-LARGE:

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Wa. State Patrol Crime Lab
2nd Floor, Pub. Safety Building
Seattle, Washington 98104

PAST PRESIDENT:

Wally Baker
Idaho State Crime Lab
2220 Old Penitentiary Rd.
Boise, Idaho 83702

COMMITTEE CHAIRPERSONS

MEMBERSHIP	.....	Robert Sager
PUBLICATION	.....	Roger A. Ely
HISTORICAL	.....	Brad Telyea
TECHNICAL ADVANCEMENT	.....	Rocky Mink
CONTINUING EDUCATION	.....	Arnold Melnikoff

IN THIS ISSUE OF THE NEWSLETTER

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PRESIDENTS'S MESSAGE

The combined NWAFS/CAC seminar was a success. Our thanks go to Enrico Togneri and the Washoe County Sheriff's Crime Laboratory Staff. The two day clandestine laboratory workshop contained more information than many of us were able to digest as it stimulated the memory banks from "Organic Chemistry 210". The technical papers had been shortened to two days instead of the projected two and one-half days. The time was shortened because fewer than expected papers were submitted early enough to be put on the program. All of use (including myself) need to realize that our casework and/or our techniques are worthy of dissemination at a meeting.

The next meeting will be in Vancouver, BC (look elsewhere in the newsletter for more information). Wayne Jeffrey is one of the organizers. He is very enthusiastic about getting as many NWAFS members to attend as possible. He is attempting to "billet" those who need it. (For those who don't speak the "Queen's English", billet means to house.) Contact him for more information. The Executive Committee voted to assist members with $25.00 towards the registration. The intention of these funds are for members whose expenses are not fully paid by their organization. Contact Wayne or myself for the funding.

More on money issues. Lab systems are and will always be short of training money and attendance at the meetings reflect this. To ease some of the strain, a roommate service will be part of the next registration forms. Those looking for a roommate can check a box and the program chairperson can connect the people. Also, there have been problems in the past with our presidents having to fund his/her own way to meetings for the years they are on the executive board. The Executive Committee voted to pay the room fee and waive the registration (for non-joint meetings) for the president when the employer is not funding the trip.

The Executive Committee decided, and the members at the business meeting concurred, that members not attending a meeting for three years will be demoted to Corresponding members. Once they attend a meeting they can be reinstated as a Regular member. The group also discussed nominations of the Executive board. The current process, as outlined in the constitution, is to be nominated through the membership committee or from the floor at the fall business meeting. A third method approved by the executive committee is by nomination and a second published in the newsletter preceding the fall meeting.

The location of the Spring 1988 meeting will be in Missoula, Montana. Arnie Melnikoff is the program chairman and, with persuasion, we may be able to convince him to time the meeting to correspond with spring skiing. Once again I'd like to remind all of us to think about presenting a paper. This organization is ours, and the quality of it is determined by our participation in committees and at the meetings.

Beth Carpenter
President

UPCOMING MEETINGS

ELECTOPHORESIS SOCIETY
AMERICA'S BRANCH ANNUAL MEETING

The annual meeting of the America's Branch of the Electrophoresis Society will be held in San Francisco, California, on June 23-26, 1987. There is a call for papers on electrophoresis and applications. Plenary sessions include: Nucleic Acids, Immunodetection, Forensics, Electroporation and Cell Fusion, Clinical Diagnosis and Agriculture.

For more information, contact:

Electrophoresis Society
PO Box 956
Mt. Pleasant, SC 29464

INTERNATIONAL ASSOCIATION OF FORENSIC TOXICOLOGISTS

The 8th Triennial meeting of the International Association of Forensic Toxicologists will be held in Banff, Alberta, Canada in July 1987.

For more information, contact:

N. Dunnett
Home Office Forensic Science Laboratory
Aldermston, Berkshire RG7 4PN U.K.

INTERNATIONAL ASSOCIATION OF FORENSIC SCIENCES
and
NORTHWEST ASSOCIATION OF FORENSIC SCIENTISTS
COMBINED MEETING

A combined meeting of the International Association of Forensic Sciences and the Northwest Association of Forensic Scientists will be held on August 2-7, 1987 in Vancouver, British Columbia, Canada.

For more information, contact:

Intn'l Assoc. of Forensic Sciences
801-750 Jervis St.
Vancouver, B.C., Canada V6E 2A9

THE THIRD INTERNATIONAL MEETING OF THE PAN AMERICAN ASSOCIATION OF FORENSIC SCIENCES

This meeting will be held at the Holiday Inn Plaza in Wichita, Kansas on August 10-14, 1987.

For more information, contact:

Dr. William G. Eckert
PO Box 8282
Wichita, KS 67208

CALIFORNIA ASSOCIATION OF CRIMINALISTS
FALL 1987 MEETING

This meeting will be held in October 1987 in Laguna Beach, California. Plans are in the works, and more information will be provided in a later newsletter.

40TH ANNUAL MEETING OF THE AMERICAN ACADEMY OF FORENSIC SCIENCES

This meeting will be held at the Wyndham Franklin Plaza in Philadelphia, Pennsylvania on February 15-20, 1988.

For more information, contact:

AAFS
225 So. Academy Blvd.
Colorado Springs, CO 80910
(303) 596-6006

10th AUSTRALIAN AND INTERNATIONAL FORENSIC SCIENCE SYMPOSIUM

The 10th Australian and International Forensic Science Symposium will be held at the Gateway Hotel, Brisbane, Australia from may 23-27, 1988.

The theme for the symposium is "Forensic Evidence in the Age of Technology" and it is anticipated 150 Australian and overseas delegates will attend.

The Symposium will include specialist sessions in most forensic science fields with 10 international keynote speakers being invited to attend. First announcements will be distributed in May 1987.

The Symposium coincides with World Expo 88 which is being held in Brisbane from April to October.

For further information, contact:

Miss Cheryl Mitchell
Symposium Secretariat
GPO Box 495
Brisbane Q 4001
Australia

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EMPLOYMENT OPPORTUNITIES

SEROLOGY/TRACE EVIDENCE EXAMINER
FORENSIC CHEMIST

The Kansas Bureau of Investigation is seeking an experienced examiner in serology/hair and fibers for its laboratory in Great Bend, Kansas.

The minimum requirements for this position include and BA/BS degree in a physical science or natural science and two years serology and/or hair and fiber experience in a crime laboratory.

An experienced examiner in chemistry is being sought for the Headquarters laboratory in Topeka, Kansas.

Minimum requirements include a BS/BA degree in a physical or natural science and two years experience in a crime laboratory.

Salary: $26,448 - 35,448 [starting salary is negotiable up to $27,768 based on evaluation of experience]

Contact:

Eileen Burnau [Serology/Trace Position]
Stan Heffley [Chemistry Position]

Kansas Bureau of Investigation
1620 SW Tyler
Topeka, Kansas 66612-1837
[913] 232-6000

CRIMINALIST I AND CRIMINALIST II

The city of Phoenix, Arizona, crime laboratory is offering the positions of Criminalist I and Criminalist II to qualified individuals.

Criminalist I duties include the comparative analysis of drugs and narcotics, and blood specimens for alcohol content. Duties also include the training of police officers in the use of alcohol-breath testing equipment and serving as an expert witness in court.

This position requires a Bachelor's degree in chemistry, criminalistics, or a related field. Any other combination of experience and education which provides the knowledge, skills and abilities to perform the work may be substituted.

Criminalist II duties include the ability to perform skilled tests and analyses in connection with identification and evaluation of physical evidence.

This position requires three years experience in a criminalistics laboratory and a Bachelor's degree in chemistry, criminalistics or a related field. The position also requires journeyman level experience in Forensic Serology and at least one other of the following areas: toxicology, arson investigation, polarized microscopy, firearms and toolmarks identification, hair and fiber identification, general comparative analysis, technical macrophotography and x-ray techniques. Any other combination of experience and education which provides the knowledge, skills and abilities to perform the work may be substituted.

Salary: $24,128 - 32,490 [Criminalist I]
$29,370 - 39,728 [Criminalist II]

Contact:

City of Phoenix
Personnel Department
300 W. Washington
Phoenix, AZ 85003

LATENT PRINT EXAMINER II

The city of Phoenix, Arizona, Police Department is offering five positions of Latent Print Examiner II.

The position is responsible for performing skilled technical level work in the latent fingerprint science for criminal investigation, evidence classification and police photography. The duties of the position involve the investigation of major crime scenes for physical evidence, performing

scientific and comparative analysis, chemical screening of evidence and forensic photography.

The Latent Print Examiner II operates a variety of laboratory equipment, lasers, computers and microscopes. The incumbent of this position must be qualified to appear in court as an expert witness.

Requirements for this position include three years of experience in work involving both inked and latent fingerprint classification work in a law enforcement environment supplemented by formal training in latent fingerprint, photography, and other police identification techniques plus an Associates degree or 60 accredited college semester hours in criminalistics or a related field.

Salary: $25,296 -34,176

Contact:

Robert Richardson
Phoenix City Police Department
620 W. Washington St.
Phoenix, AZ 85003-2187

CRIMINALIST, SENIOR CRIMINALIST

The state of Connecticut, Division of State Police, has several criminalist positions open. The areas of analysis include: hair and fiber, trace, blood or other biological fluids, document examination, material identification or other chemical identification and caomparison testing.

The minimum qualifications for Criminalist, including Document Examiner, is a Bachelor degree in forensic science or a related field and a minimum of two years experience in forensic analysis.

Additional requirement for Senior Criminalist is a minimum of three years experience in forensic analysis

Salary: $25,709 to 30,702 [Criminalist]
$30,425 to 37,041 [Senior Criminalist]

Salary range is negotiable depending upon experience and education.

Contact:

Send detailed resume, college transcripts and 3 references to:

Dr. Henry C. Lee, Director
Forensic Science Laboratory
Connecticut State Police
294 Colony Street
Meriden, CT 06450-2098

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ATF ANNOUNCES EXPLOSIVES CLASS

The Bureau of Alcohol, Tobacco and Firearms will conduct a course in the Systematic Analysis of Low Explosives in 1987 for state and local forensic chemists. The class is scheduled to September 21-25, 1987. Enrollment is limited to ten students.

The one week course, conducted at ATF's National Laboratory Center [NLC] in Rockville, Maryland, will emphasize practical skills in the recovery and identification of low explosives and their residues. Students will learn to examine a case from beginning to end. Material covered will include:

- recognizing low explosives based on blast damage and explosive effects
- gathering and documenting evidence at a bomb scene
- describing the chemical composition of low explosives and post-blast residues
- microscopically recognizing explosives in explosion debris
- analyzing bomb debris chemically [using extraction procedures, spot tests, organic and inorganic thin-layer chromatography, and infrared spectrophotometry]
- developing an appropriate chemical analysis scheme for many of the low explosives frequently encountered
- recognizing post-blast bomb components

This course is deigned for state and local forensic scientists who perform or who will be performing laboratory analyses of explosive debris. Since examiner experience varies widely each selected applicant will be sent a self-test and reading material on explosives and explosions. The self-

test will not be lengthy. It must be returned to the ATF National Laboratory Center by a specified date. Failure to return the test will result in the applicant forfeiting his or her class slot.

There will be no tuition, registration or course material fee. The ATF Laboratory will arrange a group rate [$66 per night, including tax] for all selected students at a hotel convenient to the NLC. All transportation, lodging and per diem costs must be borne by the local department or individual. The US Government per diem rate for the Washington, DC metropolitan area is $112/day. Attendees should budget accordingly.

Those persons interested in applying for the school can obtain an application by contacting Rick Tontarski or Rick Strobel at ATF NLC, 1401 Research Blvd., Rockville, MD 20850 [202] 294-0420.

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SUICIDE, ACCIDENT, OR HOMICIDE?

The following was obtained from the latest issue of the AAFS newsletter:

For those of you who were unable to attend the Awards Dinner during the Annual meeting in San Diego, you missed a tall tale of complex forensics presented by AAFS President Don Harper Mills in his opening remarks. The following is a recount of Dr. Mills' story ...

"On March 23 the medical examiner viewed the body of Ronald Opus and concluded that he died from a gunshot wound of the head caused by a shotgun. Investigation to that point had revealed that the decedent had jumped from the top of a ten story building with the intent to commit suicide [he left a note indicating his despondency]. As he passed the 9th floor on the way down, his life was interrupted by a shotgun blast through a window, killing him instantly. Neither the shooter nor the decedent was aware that a safety net had been erected on the 8th floor level to protect some window washers and that the decedent would not have been able to complete his intent to commit suicide because of this.

Ordinarily, a person who starts into motion the events with a suicide intent ultimately commits suicide even though the mechanism might not be what he intended. That he was shot on the way to certain death nine stories below would not change his mode of death from suicide to homicide. But the fact that his suicide intent would not have been achieved under any circumstance caused the medical examiner to feel that he had a homicide on his hands.

Further investigation led to the discovery that the room on the 9th floor from whence the shotgun blast emanated was occupied by an elderly man and his wife. He was threatening her with the shotgun because of an interspousal spat and became so upset that he could not hold the shotgun straight. Therefore, when he pulled the trigger, he completely missed his wife and the pellets went through the window striking the decedent.

When one intends to kill subject A, but kills subject B in the attempt, one is guilty of the murder of subject B. The old man was confronted with this conclusion, but both he and his wife were adamant in stating that neither knew the shotgun was loaded. It was the longtime habit of the old man to threaten his wife with an unloaded shotgun [?]. He had no intent to murder her; therefore, the killing of the decedent appeared then to be an accident. That is, the gun had been accidentally loaded.

But further investigation turned up a witness that their son was seen loading the shotgun approximately 6 weeks prior to the fatal accident. That investigation showed that the mother [the old lady] had cut off her son's financial support and her son, knowing the propensity of his father to use the shotgun threateningly, loaded the gun with the expectation that the father would shoot his mother. The case now becomes one of murder on the part of the son for the death of Ronald Opus.

Further investigation revealed that the son became increasingly despondent over the failure of his attempt to get his mother murdered. This led him to jump off the ten story building on March 23, only to be killed by shotgun blast through the 9th story window.

The medical examiner closed the case as a suicide."

FORENSIC COMPUTER BULLETIN BOARD ON-LINE

Mr. Peter Barnett of Forensic Science Associates in Emeryville, California is now running a computer bulletin board from his office.

The system, running on an AT clone and public domain software, is in the experimental stage to determine if there is sufficient interest and use to provide the board on a full-time basis.

Barnett recently hosted and organized a special computer section program for the American Academy of Forensic Sciences meeting in San Diego this past February. The session featured other forensic scientists describing and demonstrating their use of computers in their work. Topics included the review of ballistics programs, the use of CAD [Computer Aided Design] programs to diagram and reconstruct crime scenes, the use of a spreadsheet for microscopy and crime laboratory management by a database program.

Barnett is also the Editor of the California Association of Criminalist's Newsletter. One of the goals of the board is to allow the Association Editors from across the nation to access the board for information, and leave information for others to download and incorporate in their publications.

Should you like to try the board, please contact Barnett during normal working hours at [415] 653-3530 for clearance and a description of the system parameters.

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NEW ADDRESS FOR NEWSLETTER EDITOR

Please note that as of August 1, 1987, the Newsletter Editor can be contacted at the following address:

Roger A. Ely, Editor
Northwest Association of Forensic Scientists
DEA Western Regional Laboratory
PO Box 36075
San Francisco, CA 94102
[415] 556-0951

BOOK REVIEW

PRACTICAL FIRE AND ARSON INVESTIGATION
John J. O'Conner
Elsevier Science Publishing Co., Inc.
52 Vanderbilt Ave., New York, NY 10017
314 pages

This book is made up of fourteen chapters touching on almost all aspects of fire investigation including [but not limited to] motive and psychology of fire setters, chemistry of fire, origin and cause investigation, accidental fire causes, fatal fires and autopsies, interrogation techniques, surveillance and court testimony.

This book does provide a general overview of a diverse set of subject matter and may be a useful guide to someone who needs to know in general terms what problems are faced by a fire investigation team in order to complete successful investigation.

However, the author attempts to address too many topics in too short a space and, as a result, gives each topic only a cursory introduction. The book is generally vague and lacks the descriptive content necessary to be useful to the practicing fire investigator.

There is little in this book which related to the laboratory criminalist or his work. I do not feel that this book would be a practical addition to a forensic library.

- Dale Mann
Washington State Patrol Crime Lab - Seattle

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MEDIA RELATIONS SELF-DEFENSE COURSE

1. If you don't want it printed or broadcasted, don't say it.
2. Say it in 30 seconds.
3. Don't make smart comments.
4. Never say 'No Comment'.
5. Never wear dark glasses during a TV interview.
6. Don't be mislead by 'off the record'.
7. Never give reporters your personal opinion.
8. Avoid being outwardly hostile toward the media.

9. Always convey the impression to reporters that you are trying to help them.
10. Be organized -- be in charge.
11. If you don't have a media relations policy, draft one.
12. Avoid the appearance of cover-up.
13. Always get your story out first.
    * A good statement in the original story is worth half dozen letters to the editor later.
14. Record all sensitive interviews.
    * Assume all calls from reporters are being taped.
    * You don't have to respond immediately to a telephone call from a reporter.
15. Be wary of still photographers.
16. Be alert for the 'waiting' tactic.
    * Under pressure, the mouth speaks when the mind is disengaged.
    * If you have said all you need to say, shut up.
17. Be aware of newspaper deadlines.
    * Deadlines sometimes assume more importance than the need to gather complete information.
    * Don't get into fights with people who have ink delivered by the tank car.
18. Release bad news after the 6 PM news on Friday.
19. Don't let the media take over the headquarters building.
20. Try to be prepared for a media blitz.
21. Never change the ground rules in the middle of the game.
22. Don't assume the interview is over until the TV crew drives away.
23. Always maintain a good balance in your media relations account.
24. Always be 100% right in a confrontation with a newspaper.
25. Don't fight with people who have ink delivered by the tank car.
26. Never voluntarily submit to an interview with 60 Minutes or 20/20.
27. Don't screw-up on a slow news day.

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HIGHLIGHTS OF COMBINED MEETING IN RENO

The Spring 1987 meeting was held the week of May 11-15 in Reno, Nevada and was the second combined meeting of the NWAFS and the California Association of Criminalists.

The meeting, hosted by the Washoe County Crime Lab, was well attended by members of both Associations.

The meeting started off with a two day clandestine laboratory investigation workshop, sponsored by the DEA Western Regional Lab in San Francisco. The workshop was attended by approximately 50 people.

The workshop featured topics such as the types of reaction by-products one might find from the amalgam method of converting P-2-P to methamphetamine, the red phosphorus/hydriodic acid/ephedrine route to methamphetamine, a novel method of using lead acetate with phenylacetic acid to make P-2-P, methods of reducing in methamphetamine/amphetamine reactions, the synthesis of P-2-P via acetic anhydride/sodium acetate/phenylacetic acid, PCP reactions, different routes to MDA and the manufacture of controlled substances via exotic precursors.

The workshop covered a wealth of information, and was well received. A special thanks to Bob Sager, DEA San Francisco Lab, for his organization of the workshop.

The regular session featured numerous papers on a variety of topics. The abstracts to those papers appear elsewhere in this issue of the Newsletter.

The banquet, held on Friday night, was filled with awards presented by the California Association of Criminalists to some of their deserving members, certificates of appreciation to the presenters of the clandestine lab workshop, and a special award presented to Roger Ely, Newsletter Editor for the NWAFS by President-Elect Wayne Jeffrey.

This last award, the brainchild of the NWAFS Executive Committee and an article from the personal collection of Pamela [Server] Marcum, was the passing of the official 'organ' of the Association [less the 'C' cell batteries]. It was sheepishly [no pun intended, Arnie] accepted by Ely in the spirit in which it was given.

The exhibitor's room featured several companies presenting the newest in FTIR and GC/FTIR instrumentation. Nicolet kindly provided the wine for the tables at the banquet.

In addition to all this, there was the distraction of the gaming tables, excellent food and several top flight shows performing at the Nugget, Bally's and Harrah's.

In all, it was a very good meeting. Sorry most of you missed it.

CAC DRUG STUDY GROUP MEETING NOTES

One of the interesting highlights of the combined meeting was a CAC sponsored study group on drugs. An invitation was extended to the members of the NWAFS present at the meeting to join the group for a discussion of the current trends seen in each person's area.

The following is a report, prepared by the study group's chairman Ken Fujii of the Contra Costa Sheriff's Department Crime Lab, of the study group meeting:

On May 13, 1987, the Drug Study Group held a meeting at the CAC/NWAFS seminar in Sparks, Nevada. Representatives from seventeen laboratories attended including: NIS-San Diego, NIS-Hawaii, Orange County Sheriff-Coroner, Los Angeles County Sheriff, DOJ Fresno, DOJ Salinas, San Mateo County Sheriff, DEA-San Francisco, Contra Costa Sheriff-Coroner, Las Vegas Police Department, Oregon State Police - Portland, Oregon State Police - Pendelton, Washington State Patrol - Seattle, Washington State Patrol - Kelso, Montana State Crime Lab, South Dakota Forensic Lab and RCMP-Vancouver.

Each laboratory was asked to respond to the following questions:

1. Clandestine drug labs -
   - what is being manufactured?
   - by what routes?
2. Drug Analysis -
   - what drugs, combinations of drugs?
   - what cutters?
3. Analysis problems -
   - cocaine freebase cut with procaine or benzocaine
4. Has anyone recovered the costs of investigating a drug lab case?
5. Has anyone shared in asset seizure?
6. What new defense strategies or problems in court?

Its no surprise that the majority of clandestine drug labs are manufacturing methamphetamine. There are a few PCP labs and even fewer MDA. In Los Angeles there are reports of mobile labs. Southern California has the highest density of clandestine labs.

The most popular route is HI-Red Phosphorus. Further north, in Fresno, the labs are less frequent, but the synthesis routes include both P2P and HI, with more HI. Fresno also reports truck trailers full of mushrooms and the synthesis of P2P using CaO, phenylacetic acid and acetic acid. This method has also been reported in Santa Rosa.

DEA-SF reports many methamphetamine labs, including P2P via phenylacetoacetonitrile, hydrogenation of P2P-methylamine and cocaine freebasing in a Mr. Coffee pot. Northern California has fewer labs and most of them are using the P2P route, although labs using HI are found.

Washington and Oregon labs employ lead acetate to produce P2P. They also report isolated use of thionyl chloride and HI-Red Phosphorus and one MDA lab. There are fugitive cookers from California. One was caught making 3-5 pounds per week and shipping to California via UPS in heat sealed bags. The courts there are very lenient with drug cookers.

RCMP-Vancouver reports the use of the lead acetate to P2P route, MDA, mushrooms and hydroponic marihuana with 10-13% THC. Montana and South Dakota report little drug enforcement because of low population density. Hawaii reports no clandestine drug labs.

Drug casework generally consists of methamphetamine, cocaine, marihuana, tar heroin, PCP, LSD and mushrooms. Throughout most of California, cocaine freebase predominates of cocaine hydrochloride, Washington has about 50% freebase and 50% hydrochloride, and RCMP-Vancouver sees no freebase.

Marihuana predominates in Hawaii, cocaine next and they are just beginning to see crack. Maui is the cocaine capital of the Islands. In the military, methamphetamine is most prevalent with LSD second. Urine tests do not detect LSD.

Cutters are the same everywhere, sugar, starches, niacinamide (probably Vita-Blend) and uncontrolled caines. RCMP-Vancouver reports bulk heroin (6%) from SE Asia, also #4 white powder heroin greater than 70% and heroin freebase 30-40% for smoking, sold in decks (bindles).

DEA-SF has seen pure heroin sold as China White and MDMA. LA reports "Coco-Puffs" as cocaine hydrochloride in marihauna and kilos of cocaine in casting material wrapped with fiberglass tape.

Fentanyl seems to have vanished, except for 10-15 per month in San Diego, sold in balloons as heroin.

Various suggestions were offered for the analysis of cocaine cut with another caine including TLC in Clarke; perchlorate ion pair reported by John Hartman at CAC Seminar; use sulfuric acid and sodium bichlorate, extract with chloroform, 90% of the cocaine goes with the sulfuric acid; column chromatography 1M KNO3, 1N HNO3, celite column. TLTD or cobalt thiocyanate as a separation step, run IR on the resultant precipitate.

No one has recovered the costs of investigating a drug lab case.

Only a couple cases of asset seizure. A very sophisticated lab was busted in Stockton, California. The instruments seized included NMR, IR, etc. Another lab using the portable generator was seized as evidence.

In Los Angeles they are debating cocaine freebase and other salt forms.

We ran out of time but a lot of information was passed around.

Respectfully submitted,
Ken Fujii, Chairman
Northern Drug Study Group

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ABSTRACTS OF PAPERS PRESENTED AT THE SECOND COMBINED MEETING OF THE NORTHWEST ASSOCIATION OF FORENSIC SCIENTISTS AND THE CALIFORNIA ASSOCIATION OF CRIMINALISTS

The following are abstracts of technical papers given during the regular session of the combined meeting between the NWAFS and CAC held in Reno, Nevada on May 14-15, 1987.

Unfortunately, at press time the affiliations of the individuals presenting the papers had not been received. Should you desire to contact the authors of a technical paper, contact the Newsletter Editor for more information.

"Trace Evidence: On The Cutting Edge"
Marty Blake

During a sexual assault which occurred at the victim's residence, the assailant used a pair of scissors, belonging to the female victim, to cut off her clothing. The assailant fled with the scissors. Scissors recovered from the suspect's residence were submitted for trace evidence examination. Many fibers were found which were consistent with the victim's clothing sources.

"A Practical Assessment of the Occurrence and Forensic Significance Of Volatiles Other Than Alcohol in the Breath of DWI Arrestees"
Lucien C. Haag

Volatile compounds other than alcohol purportedly in the breath of some DWI arrestees have frequently been alleged to produce erroneous or elevated blood alcohol results on non-specific infrared breath analyzers. The gas chromatographic analysis of approximately 5000 retained breath samples from DWI suspects has provided a practical means of assessing the frequency of occurrent of such substances and their actual impact on the previously recorded test result.

Acetaldehyde occurs frequently in such samples but in concentrations far below that which could affect a result on an infrared breath testing device. The appearance of acetone in breath specimens is rare and sufficiently low so as to cause no significant error with current infrared analyzers. Several case examples showing the presence of other volatiles will also be presented. No case was found where any of these substances produced an erroneously high alcohol reading.

"A Survey of Currently Available Ballistics Programs For PC's: Capabilities and Applications to Forensic Problems"
Lucien Haag, Jon Kokanovich

There are a number of commercially available ballistics programs which offer the forensic scientist a powerful analytical tool in evaluating a number of exterior and terminal ballistic questions that can arise in shooting cases. Following a brief review of the basic parameters of interest in the flight of a projectile, the computational capabilities of the more common programs (Sierra, Proware, Pejsa, Load From A Disk) will be described. The presentation will conclude with several case

examples that will incorporate most of the issues of forensics importance.

"Fractal Dimensions of Striated Toolmarks"
John Thornton

A plot of log distance versus log stride length of a striated toolmark will deliver a linear relationship. The slope of this line represents the fractal dimension of the toolmark. This type of plot is frequently referred to as a Richardson Plot, and may assist in the development of an algorithim by which striated marks may be characterized.

"Applications of FTIR Microspectroscopy in Forensic Analysis"
J.P. Beauchaine, J.W. Peterman, and R.J. Rosenthal

Forensic analysis is an area of challenge and importance. The analysis of small, often minute samples taxes scientist and instrumentation alike. Materials collected from crime scenes nearly always require special handling. The forensic scientist is required to provide identifications and evaluations based on spectroscopic methods which will be upheld in courts of law. Confirmation of the identity of genesis of a powder, liquid, fiber or chip of paint required in some instances which is non-destructive. The infrared spectrum provides a unique signature for a given sample. Such spectra can be searched against a database and matched to known reference spectra.

Traditional methods of analysis for powdered drug samples involved mixing the sample in a diluent of KBr or nujol for the infrared analysis. Adequate data could be obtained, but valuable evidence would be lost in the sampling process. Fourier transformed infrared (FTIR) spectrometers, with their signal averaging capability combined with the sampling capabilities of an infrared microscope permits investigations of these types of samples. Optical microscopes have been employed for some time in the assessment of materials such as fibers, bullets, and paints. Advantage can be taken of cross polarization and other enhancements in distinguishing amongst different components of a complex powder or other mixtures.

"Techniques and 'Tricks' in FTIR Microspectroscopy"
S.T. Bijasiewicz, J.P. Beauchaine

need to identify extremely small particles such as individual polymer fibers, minute paint chips, characterization of multiple component drugs and other imperfections in industrial processes stimulate the development of Fourier Transform Infrared Microspectrometry. The advent of FTIR spectrometers, combined with powerful sampling accessories and special sample handling techniques, has enabled spectroscopists to routinely analyze sub-nanogram quantities of material.

With the increase in popularity of micro-FTIR, there is a greater necessity to devise methods of sample preparation and handling techniques. This paper will discuss the various infrared accessories, from microscope analysis to diffuse reflectance infrared spectrophotometry and demonstrate sampling techniques and 'tricks' used in FTIR microspectroscopy.

"Gas Chromatographic and GC/MS of Sugar-TMS Derivatives"
W.K. Jeffery, M.N. Clark, J. Leslie

This paper describes a simple derivitization procedure to identify diluents in illicit drug samples. It provides a gas chromatographic screening method using Kovat indicies as well as a mass spectrometry identification of all diluents. The mass spectrum of all diluents are provided.

"Gold Refining in Clandestine Drug Laboratories"
Jerry Massetti

Gold refining operations have been encountered in clandestine drug laboratory investigations. These present safety considerations to criminalists and investigators. Gold refining has also been used as an argument in court proceedings to suggest a legitimate use for stockpiled drug related chemicals.

"Usefulness of Immunoglobin Allotypes in the Analysis of Sexual Assault Evidence"
M.S. Schanfield, Ph.D. and E. Blake, D. Crim.

Human immunoglobin allotypes (Gm and Km) are polymorphic in all populations, with each population characterized by the presence of unique Gm 'alleles' or demonstrating marked variation in the 'allele' frequencies.

The literature reports mixed success at detecting immunoglobin allotypes in either liquid semen, or prepared stains. There is only one publication on the actual testing of semen stains from two sexual assault cases (Shaler, R.C.: J. For. Sci.

27:231[1982]]. With the availability of new reagents and new procedures for allotyping it was decided to evaluate the usefulness of immunoglobin allotyping in submitted case evidence.

A total of 28 pieces of evidence from 17 sexual assault cases were tested for one or more G1m, G3m and Km allotypes, with selected samples also tested for G2m n and A2m 1 and 2. Except for one liquid aspirate, all samples tested were extracts prepared by the authors. With one exception all evidence had been stored frozen from one to three years prior to testing. Approximately two-thirds were drainage site evidence [panties, panty-liners, clothing,sheets, or carpeting] while one-third were swabs [vaginal or introital].

Allotypes were detected in 89% of the evidence. In 42% of these, allotypes provided information on the type of the semen donor, an additional 15% were informative, if other information was added, thus 57% of the samples were potentially informative. A total of 69% of the drainage site evidence was informative, while only 37% of the swabs were. Victim allotypes were detected in 77% of typable stains, indicating that victim allotypes must be considered in the evaluation of results.

Acid phosphatase quantitation was available on a small number of specimens indicating that G3m allotypes are detectable at semen dilutions of 40 or less while G1m and Km allotypes are detectable at dilutions of 200-300. The results from the analysis of one case indicate that variation in the method of extraction may yield different detection rates. Allotypes of semen or vaginal origin not previously reported are G1m z, G1/3m g5, G2m n, G3m b0 and s, A23m 1 and 2 and Km 3.

In conclusion, immunoglobin allotypes provide evidence on the genetic type of the semen donor's in a significant proportion of sexual assault evidence.

"HTLV-III [AIDS] in the Forensic Laboratory"
Special Agent David Bigbee

Possible origin, manifestations, epidemiology, handling and sterilization of the HTLV-III [AIDS] virus, and the FBI Laboratory policy of evidence contaminated with the virus is presented.

"Identification of Drugs of Abuse by GC-IR-MS"
Wayne P. Duncan

The analysis of illicit drugs requires the very highest level of confidence in assigning structures. In particular, designer drugs pose an ever increasing problem for all levels of law enforcement. Clandestine laboratories are producing a broad range of substances which are closely related analogs of known drugs of abuse.

In some cases the designer drugs not only have the physiological activity of the parent drug, but also may have very serious and harmful side effects. It is essential in the successful prosecution of these cases that the very similar chemical structures be carefully and unambiguously identified. One particularly troublesome drug of abuse which is spawning a plethora of street substitutes is amphetamine.

A mixture of amphetamine and several of its isomers were analyzed by GC/FTIR/MS. Visual comparison of the mass spectra indicated that most of the isomers could be positively identified by the mass spectral data alone. However, a few of the isomers had very similar mass spectra and could not be positively identified visually or by a library search of a mass spectral data base.

On the other hand, the isomers with very similar mass spectra were readily confirmed by their unique infrared spectra. Several 'real world' samples involving designer drugs were also analyzed including a confiscated clandestine laboratory reaction pot mixture and biological fluid from a drugged race horse.

Mass spectral library search results were combined on the same work station with infrared library search results to provide a combined GC/IR/MS 'hit list'. The two dimensions of data resulted in unambiguous confirmation of each of the very closely related chemical structures. The likelihood of successful prosecution of designer drug cases in a court of law is greatly enhanced by two independent types of data demonstrated here.

"The Use of GC/FTIR in Controlled Substance Identification"
W.D. Perkins and M.A. Davis

Infrared spectroscopy is a well recognized technique for the identification of controlled substances, but positive identification is sometimes complicated by the presence of impurities. Gas chromatography, on the other hand, is an excellent separation technique but is considered by some to lack specificity. Combining the two techniques enables the analyst to

realize the strengths of both while minimizing the advantages of each. This paper will describe a simple-to-use GC/FTIR system and illustrate its application with case studies of the identification of controlled substances.

"Controlled Substances Information System [CSIS] Data Base"
Clyde R. Richardson

The CSIS data base is a DEA on-line data base containing approximately 1500 substance records. Substances can be searched by name [common, product, synonym, name fragment, or soundex], DEA substance code, CAS Registry Number, molecular formula, and Code of Federal Regulations number. Other search routines are DEA Microgram search and Probable Substance Search. There is also a Newsletter containing current items of interest to DEA employees such as new drugs of abuse, recent DEA drug control actions or significant seizures. Each substance record has data fields labeled [1] Toxicity, [2] Physical Properties, [3] Analytical Notes, [4] Synonyms, [5] Hazards, [6] Chemicals Required for Manufacture, [7] Substance Used for Synthesis of:, and [8] Other Regulations Pertaining Substance.

"Isolation and Identification of Cocaine From Smoking Devices"
Joseph P. Bono

With the increased number of improvised smoking devices containing cocaine submitted to forensic science laboratories, it is imperative that the forensic chemist be able to separate the cocaine from other residues which may be present.

The cocaine will usually appear to be a tar-like substance and will be combined with the other residual materials sometimes including marihuana. This paper presents an approach for the separation of the "charred" cocaine residue from the smoking device, and a clean-up procedure for isolating the cocaine for analysis by infrared spectrophotometry.

Also discussed will be situations which the forensic chemist may encounter in the future distinguishing Cocaine 'base' from Cocaine 'salt'. If cocaine base is rescheduled a Schedule I controlled substance while cocaine salt remains a Schedule II controlled substance, great care must be taken in the action procedure.

In the method presented here, the possibilities of conversion of the base to the salt or [more legally damaging] the conversion of the salt to the base are precluded. With impending legislation in California, the question of distinguishing cocaine hydrochloride from cocaine hydrobromide, cocaine hydriodide, and from other salts will be discussed but probably not resolved.

"Comparison of Axe Toolmarks"
Jon Spilker

Problem: Compare wooden poles to see if they were cut by the same axe. Method: Toolmarks were photographed with oblique light and time exposure enhancement [10-15 minutes at f/32]. Photographs were compared directly to toolmarks for identification.

"FTIR Drug Analysis With A Microscope"
Richard Smith

Due to the high energy throughput, good spectral resolution, high signal-to-noise ratio, rapid data collection, and the ability to perform digital processing on acquired data; methods not practical for dispersive IR become ideal for FTIR. With the ability to do an IR through a microscope attachment the possibilities are increased. Some of our present methods for drug analysis will be presented to show the increase in ease, efficiency and capability we have realized with FTIR.

"The Effects of Long-Term Frozen Storage On The Typability of Enzymes in Bloodstains"
Richard Berger, Maria Fassett

A total of thirty three bloodstains stored at -20F fro periods of time ranging from 3 1/2 to 7 years were reexamined for Group 1 and Group 2 enzyme activity using two different sets of methodologies.

After five years, typability ranged from 87% to 100% for the seven blood grouping systems examined; no major differences in typability between the two methodologies were observed. However, after seven years, significant typability decreases were observed most notably for PGM with either methodology and for Glo1 employing the BAS methodology.

In a total of 334 analyses, no typing discrepancies were noted in comparison to the original typings.

"An Evaluation of the Non-Equilibrium IEF System For EsD, AcP1, PGM1, AK, And ADA (Modification of Kuo)"
David Stockwell, Daniel J. Gregonis, Donald T. Jones

At the Fall 1986 CAC Seminar, S. Kuo reported on the expanded use of a non-equilibrium IEF system employing a chemical spacer (MOPS) to type common phenotypes of the EsD, PGM1 sub, AcP1, AK, and ADA enzyme systems. This 'multisystem' approach has the potential to minimize sample use, decrease casework analysis time, as well as offer a single system with a high probability of discrimination (combined PD - 0.96).

Kuo generally reported on the discrimination of common phenotypes; however, interpretation of results could be questioned if rare phenotypes are confused with common phenotypes. Literature sources indicate this possibility. The 'focus' of this paper is to determine the ability of a modification of Kuo's procedure (the use of MOPS and HEPES) to simultaneously type and discriminate common and rare phenotypes in all five systems, and to compare the results to those cited in the literature.

"ABH Blood Group Substances in Matched Body Fluid Stains: A Preliminary Investigation"
Theresa F. Spear, Sharon A. Binkley

Although there have been numerous studies which have examined the ABH blood group substances (BGS) levels in semen, studies reporting on the BGS levels in other body fluids (saliva, vaginal samples, urine and perspiration) are not frequently encountered in the literature.

This study was designed to examine the ABH BGS levels in matched body fluid stains (urine, semen or vaginal samples, and perspiration) from a limited number of secretor and non-secretor individuals using both the absorption-inhibition and absorption-elution techniques.

The purposes of this study were: 1) to determine if it is possible to detect BGS in urine and perspiration stains. This information would be useful in interpreting ABO result when typing mixed body fluids are encountered as evidence; 2) to determine if it is possible to detect ABO BGS in the body fluids of non-secretors; and 3) to compare the results obtained with typing body fluid stains by the absorption-inhibition technique with the results obtained with the absorption-elution technique.

Results from this study showed that semen stains from secretor donors displayed the highest levels of ABO BGS when compared to the other body fluids. Vaginal swabs from secretor donors showed the greatest variation in BGS levels. A and B BGS from type A and B secretors were detected in both urine and perspiration stains by both the inhibition and elution techniques.

H BGS was never detected in any of the urine or perspiration stains from any of the donors tested. In general, saliva and vaginal stain extracts displayed lower levels of BGS than semen stains but higher levels than urine or perspiration stains.

No clear, consistent trends were seen in the relative levels of BGS from a series of body fluid stains from any one individual. Thus, for example, relatively high levels of BGS in saliva would not guarantee that BGS would also be detected in the corresponding urine or perspiration stain. Body fluid stains from non-secretor individuals displayed BGS levels that were never detected by the inhibition technique and only rarely by the elution technique.

"Unusual Typewriter Identifications"
Lowell W. Bradford

In the examination of a will written in the Hindi language, the authorship of typing of the address of letters used as exemplars became an issue. Unusual ribbon performance was a major factor in a novel identification. The original objective was to determine authenticity of the holographic Will, but the typewriter problem emerged as an unexpected development. Classical methods of typeface examination with gauges and microscopy were employed and demonstrative photographic exhibits were prepared for trial.

"The California Criminalistics Institute"
Cecil Hider

(No abstract was submitted)

"Methods of Forensic DNA Typing"
Howard C. Coleman

Recently a great deal of excitement has been generated in the forensic community by the suggestion that examination of DNA can provide positive certain identification of the source of a blood, semen, hair root or other tissue specimen.

This excitement is justified because of the extreme individual variability present in genetic material.

Currently, two systems are under development that perform the DNA assays in slightly different ways. The first method performs the Southern blotting assay under low stringency conditions, and so many genetic loci are simultaneously detected. This method, known as 'DNA Fingerprinting', has a number of problems when applied to forensic analysis.

An alternative method is to perform the blotting under high stringency conditions in such a way that a series of highly polymorphic loci are examined individually. This method allows easier and more exact data interpretation, examination of a larger proportion of forensic samples and is more robust technically.

"The Identification of DNA RFLP's: Casework Applications For The Analysis Of Bloodstains, Semen Stains and Tissue Specimens"
Robert C. Shaler, Alan Giusti, Michael Baird

Since DNA forms the genetic basis of life, its potential as a comparative tool with unprecedented discriminatory power in forensic serology is gaining popularity. The identification of Restriction Fragment Length Polymorphisms [RFLP's] using specific DNA probes from restriction endonuclease digests provides the basis of a DNA comparative test with direct application to crimes of violence and disputes.

Several casework examples which have been examined for RFLP's will be discussed to illustrate the quality and stability of DNA available in actual casework specimens. Specific examples will be chosen to detail bloodstains, semen stains and tissue specimens.

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REFERENCE ABSTRACTS

The following abstracts were obtained from a variety of sources including the newsletters of various forensic associations, agency-sponsored "newsletters" and members of NWAFS. If you are interested in obtaining a copy of an article or paper abstracted in this section or you have a paper that would be of interest to the rest of the membership, please contact Roger Ely.

IDENTIFICATION NEWS
MARCH 1987

"Enhancement of Footwear Impressions on Glass"
Edward E. Hueske and Richard A. Erfert

The use of cyanoacrylate ester in the development of latent fingerprints has been widely recorded. The authors have developed a technique which uses the ester to visualize footwear impressions on glass. The methodology for the procedure is given.

"Auto-Flash Tip"
Don Duryee

The use of automatic photographic equipment, especially electronic flash, can be tricky at times. The author suggests manipulating the output of the flash manually to provide more suitable exposures.

MIDWESTERN ASSOCIATION OF FORENSIC SCIENTISTS
NEWSLETTER, APRIL 1987

"Microscopy and the Law"
Skip Palenik

Reprinted with the permission of the author, this paper is a general overview and brief history of the use of microscopy in the field of forensic science.

"Observations on the Use of Congealed Blood and Forensic Alcohol Determinations"
Michael L. Rehberg

Submissions to the laboratory of blood in congealed form for alcohol determination initiated a study of the effects of the congealing on the alcohol level. The congealing occurred when the blood sample was accidentally left in the officer's vehicle during the hot Iowa summer for 12-72 hours. The study found the congealing of the blood did not interfere with determining the alcohol level.

"Passive Inhalation of Marihuana Smoke"
Timothy Rohring

This is a bibliography of papers dealing with the subject of passive inhalation of marihuana smoke.

"Processing for Recovering Flooring with Latent Residue Prints from Crime Scenes"
John C. Cayton

A discussion of the removal, evaluation, documentation and collection of latent impression

evidence from flooring materials.

The following documents have been collected and reside in the Association's Continuing Education Committee materials. These materials have been collected by the Urine Drug Testing Committee, chaired by Anne Bradley, Idaho State Crime Lab - Boise.

"Draft Standards for Accreditation of Laboratories Engaged in Urine Drug Testing"
National Institute on Drug Abuse, January 1987

"Urinalysis Drug Testing Programs for Law Enforcement (Part II)"
Jeffrey Higginbotham, FBI Law Enforcement Bulletin, November 1986, pp. 25-30

"Urinalysis Drug Testing Programs for Law Enforcement (Conclusion)"
Jeffrey Higginbotham, FBI Law Enforcement Bulletin, January 1987, pp. 16-21

"Workplace Drug Testing: The Legal Issues"
Thomas J. Donegan, Jr. and Robert T. Angarola
Employee Testing and The Law, Vol. 1 No. 3, November 1986, pp. 1-3

"Urine Testing In The Workplace"
Lee I. Dogoloff and Robert T. Angarola
The American Council for Drug Education, 5820 Hubbard Drive, Rockville, Maryland 20852, (301) 984-5700, 1985, ISBN 942348-16-8

"Statements Adopted by the AFL-CIO Executive Council"
American Federation of Labor and Congress of Industrial Organizations, May 21-22, 1986, pp. 8-10

CRIME LABORATORY DIGEST
VOL. 14, NO. 1 JANUARY 1987

"Fire Investigation. Part II: Laboratory Investigation"
David T. Stafford

A review article on the topic of accelerant residue recovery, analytical characterizations, interpretation of data, and the reporting of findings. Paper has extensive bibliography.

"Cocaine Residue on Money"
Roger Aaron and Peyton Lewis

Several stacks of money where examined for the presence of cocaine. Each stack of bills was placed in a Kapac bag, and 'fluffed'. The money was removed, and the inside of the Kapac bag was washed with 10 ml of methanol. The bills were then washed in methanol and examined. No cocaine was found in the bag washes; however, cocaine was found in the direct washes of the money. This money, by the way, was selected randomly from the Federal Reserve, and was not associated directly with any drug transaction.

"HTLV-III and the Forensic Laboratory"
Paul D. Bigbee

An excellent article on AIDS and its impact on the crime laboratory. References are provided.

SOUTHWESTERN ASSOCIATION OF FORENSIC SCIENTISTS
JOURNAL MARCH 1987

"Does The Intoxilyzer 4011AS-A Conform with the Lambert-Beer Law?"
J. Mack Cowan, Jr.

(This paper was judged "Best Paper" at the 1986 Fall SWAFS meeting in El Paso, Texas)
Two Intoxilyzer 4011AS-A instruments, used to detect the alcohol concentration in the breath of persons arrested for driving while intoxicated, were tested to see if they obey the Lambert-Beer law. Both instruments showed excellent conformity with the law. A brief synopsis of the development of the Intoxilyzer 4011AS-A along with a short description of how the instrument operates is also discussed.

"A Correlation Study of Blood and Breath Alcohol Concentration Using the Intoxilyzer 4011AS-A"
Alvin Weathermon and Leslie Smith

A series of experiments were conducted to determine the correlation of alcohol concentration between alveolar breath samples and venous blood samples. Five male volunteers were administered three doses of an alcoholic beverage calculated to produce alcohol concentrations between 0.05 and 0.12 (alcohol concentration means either grams/100 ml of blood or grams/210 liters of breath.) Each subject's breath alcohol concentration was analyzed with an Intoxilyzer 4011AS-A, following the sample procedure normally used to test persons suspected in the offense of driving while intoxicated (DWI).

Venous blood specimens were collected within a few minutes of the alveolar breath alcohol analysis. The blood samples were analyzed using a headspace gas chromatography procedure. Results indicate that the alveolar breath alcohol analysis usually underestimates the venous blood alcohol concentration by the mean value of 0.012. The ratio calculated for the correlation of venous blood and alveolar breath alcohol concentrations determined in this study was 1:2417.

"Cast Films as an Alternative to Pellets for Solid Sample IR"
Don Christian

The forensic chemist uses infrared spectroscopy as a means to positively identify drugs and other organic compounds. This is done by comparing the adsorption spectrum of the suspect sample to the adsorption spectra of a known sample. The comparison is not only of peak size, but of peak size and position relative to other peaks in the spectrum. The identification is made through an overall spectrum comparison of the spectra, as opposed to a major peak identification.

The traditional method of solid sample preparation has been either alkali halide (KBr) pellets, or liquid solutions, e.g., carbon disulfide:chloroform. Both are very concentration dependent and can be very time consuming. The spectra finally obtained are adequate, but more information could be obtained.

Cast films, on an alkali halide (KBr) plate, provide a quick, clean method with which to prepare a purified solid sample for analysis by IR. Cast film spectra compare well with spectra obtained through the traditional pellet method. In some instances more information can be obtained by using cast film.

"Lip Print Identification"
Jon Tarsikes

The arrest of two suspected burglars brought about the occasion to examine the use of lip impressions as evidence of identification. The procedures used to recover exemplar lip prints and the comparisons made are presented.

"Thoughts on Bullet Comparisons and 'No Gun' Cases"
Richard F. Stengel

Some general thoughts on the identification of bullets using groove impressions rather than land impressions are presented.

"A Urine Screening Procedure For The Detection of 11-nor-9-carboxy-delta-9-THC by HPTLC and GC/MS (SIM)"
R. Rodriguez, J.C. Garriott and J.E. Bousser

A simple, sensitive and specific procedure for the analysis of 11-nor-9-carboxy-delta-9-THC (COOH-THC), the major urinary metabolite of delta-9-THC, is described.

"The Synthesis and Mass Spectral Characterization of PCC, PyCC and MCC"
James Timmons

There have been a plethora of papers concerning PCP and its phenyl and thienyl analogs. However, little information appears in the literature regarding the synthesis and mass spectral characterization of the intermediates PCC, PyCC and MCC.

"The Effects of A Recent Arizona Court of Appeals Decision on Serological Analyses"
Charles K. Dorsey

The purpose of this paper is to make all forensic science personnel aware of just how much a court decision can impact the day to day workings within a crime laboratory. While for years, California was the major state where such decisions occurred, a recent decision in Arizona has proven that all states are vulnerable to such occurrences. This paper will discuss the Arizona Court of Appeals decision and the short term and long term solutions to the problem developed by the Arizona Department of Public Safety Crime Laboratory.

ABOUT THE NEWSLETTER

The NEWSLETTER of the NORTHWEST ASSOCIATION OF FORENSIC SCIENTISTS is published quarterly and is dedicated to the following goals:

1. To encourage the exchange of ideas and information within the field of Forensic Science through improving contacts between persons and laboratories engaged in the Forensic Sciences.

2. To stimulate research and the development of new and/or improved techniques in the area of Forensic Science.

3. To promote the improvement of professional expertise of persons working in the field of Forensic Science.

SUGGESTIONS FOR CONTRIBUTORS

The NEWSLETTER seeks contributions for publication from its membership in the following areas:

1. Correspondence and inquiries
2. Methodological notes
3. Abstracts of papers presented at NWAFS meetings
4. Short technical papers
5. Case reports
6. Employment announcements
7. News of meetings, schools, workshops, training announcements
8. Legal news
9. Editorials

Contributions should be titled, including author credits and pertinent references. The contributions may be typed, single spaced on plain white paper or contributions may be prepared by word processor and sent to the editor on 5 1/4 inch floppy disk in one of the following formats:

a. Kaypro 2 b. Kaypro 4 c. IBM PC

Communications with the NEWSLETTER Editor may be made by telephone during normal business hours, US Mail or modem (1200 baud preferred) by appointment:

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Deadlines for contributions are Feb. 1, May 1, Aug. 1 and Nov. 1

IN THIS ISSUE OF THE NEWSLETTER:

- Abstracts from the combined meeting in Reno
- Report on Spring meeting in Reno
- Reference Abstracts
- ATF announces explosives class
- Forensic computer bulletin board up and running
- Book review of "Practical Fire and Arson Investigation"
- Abstracts from other newsletters
- Tips on media relations

- PLUS A LOT MORE .....

NORTHWEST ASSOCIATION OF FORENSIC SCIENTISTS
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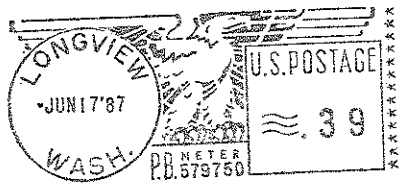

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