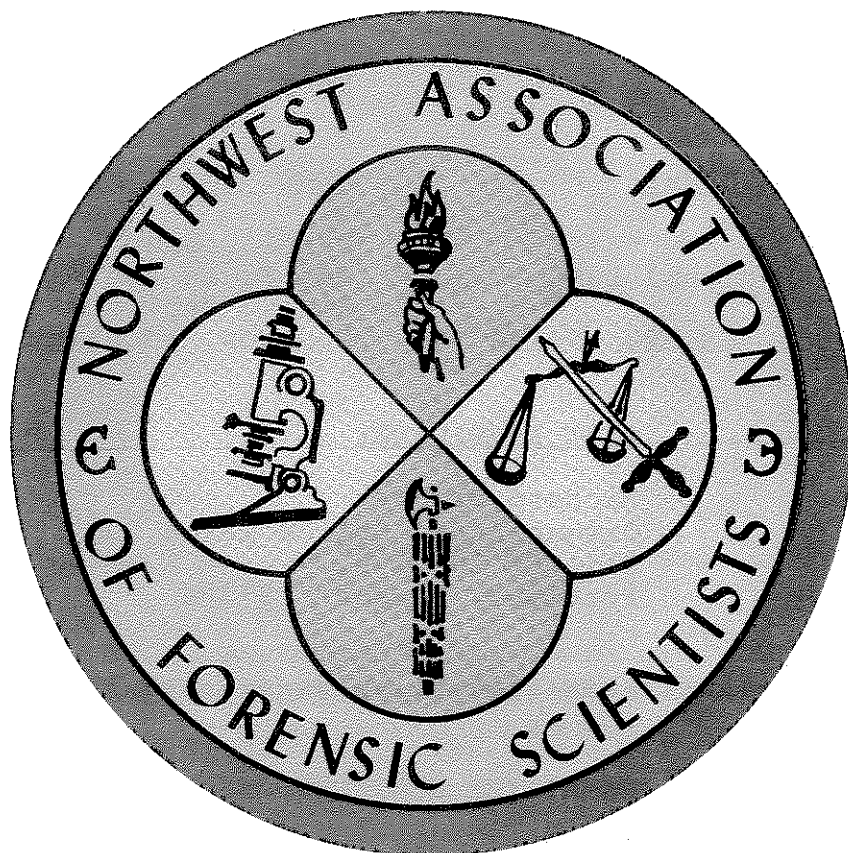


**THE  
NEWSLETTER  
of**



**JUNE 1986**

**VOL. XII, NO. 2**

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\* NORTHWEST ASSOCIATION OF FORENSIC SCIENTISTS \*  
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2200 Penitentiary Rd.  
Boise, Idaho 83702

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San Francisco, Calif. 94102

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Spokane, Washington 99201

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1111 SW 2nd Ave.  
Portland, Oregon 97204

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MEMBERSHIP

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 \* VOLUME 12 NUMBER 2 JUNE 1986 \*  
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## PRESIDENTS'S MESSAGE

Now that my head has cleared somewhat from my nightly flings in the hospitality room, I can report the meeting in Bend was a complete success. The accommodations, as well as the technical papers, were excellent. Many thanks to Mike Howard and his staff for all the hard work they put into planning a successful meeting.

Mike Scanlan and Rocky Mink should also give themselves a pat on the back for the informative session on firearms. It was a valuable learning experience for those of us who are relative neophytes.

As many of you know, the next meeting will be held in Boise. This will be an important meeting for a number of reasons. Not only will we be electing new officers and members, but we will be voting on proposed changes in our Bylaws, as well as voting on the location of our Fall 1987 meeting.

In addition, the Association will be picking up the tab to the American Academy meeting in San Diego for the individual presenting the best technical paper at the Spring and Fall meetings. Pam Server is the program chairgirl for the Boise meeting.

Currently, the NWAFS is planning to hold our Fall 1987 meeting in Vancouver, B.C. in conjunction with the International meeting. There has been some discussion about changing the site due to the high registration costs. However, when one considers the fees cover all papers and workshops for a full five-day meeting, the costs are not too outrageous.

In addition, Wayne Jeffery has indicated the members of his laboratory have graciously volunteered to "billet" the NWAFS people in their homes (in English, this means they will provide housing for us). The opportunity for our members to attend a meeting of this caliber may never present itself again.

Since the site of the Fall 1987 meeting will be decided at the Boise meeting, I would encourage everyone planning to attend to give this issue your full consideration.

Wally Baker  
President, NWAFS

**CANADIAN SOCIETY OF FORENSIC SCIENCE**

Date: September 15-19, 1986

Location: Sheraton Brock Hotel, Niagra Falls,  
Ontario

Theme: Environmental Risks and Forensic Science

**Contacts:**

Executive Secretary  
Canadian Society of Forensic Science  
2660 Southvale Crescent, Suite 215  
Ottawa, Ontario, Canada K1B 4W5

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UPCOMING MEETINGS

**SOUTHERN ASSOCIATION OF FORENSIC SCIENTISTS**

Date: Sept. 10-13, 1986

Location: Auburn Conference Center

**Contact:**

Carlos Raben  
Alabama Dept. of Forensic Sciences  
PO Box 231  
Auburn, AL 36831 (205) 887-7001

EMPLOYMENT OPPORTUNITIES

**NORTHWEST ASSOCIATION OF FORENSIC SCIENTISTS**

Date: Oct. 8-10, 1986

Location: Red Lion Riverside

**Contact:**

Pam Server  
Idaho State Crime Laboratory  
2200 Penitentiary Road  
Boise, ID 83712 (208) 334-2231

The Suffolk County Crime Lab has the following two positions available:

**FORENSIC SCIENTIST II (Serology)**

Requires a Bachelor's degree in a natural or forensic science plus four (4) years experience in forensic serology. A Master's degree may be substituted for one year of professional experience. Salary: \$38,041 per annum.

**CALIFORNIA ASSOCIATION OF CRIMINALISTS**

Date: Oct. 8-11, 1986

Location: Gene Autry Hotel

**Contact:**

Faye Springer  
CA Dept. of Justice  
PO Box 3679  
Riverside, CA 92519

**FORENSIC SCIENTIST I (Serology)**

Requires a Bachelor's degree in a natural or forensic science plus two (2) years experience in forensic serology. A Master's degree may be substituted for one year of professional experience. Salary: \$33,289 per annum.

**MIDWESTERN ASSOCIATION OF FORENSIC SCIENTISTS**

Date: Oct. 8-10, 1986

Location: Springfield, Illinois

**Contact:**

Ted Elzerman or John Klosterman  
Illinois Dept. of State Police  
Bureau of Forensic Sciences  
726 So. College St.  
Springfield, IL 62707 (217) 782-4649

For more information, contact:

Vincent Crispino, Chief  
Suffolk County Crime Laboratory  
Veterans Memorial Highway  
Hauppauge, NY 11788  
(516) 360-5587

The Fort Worth, Texas, Police Department Crime Laboratory is offering the following positions:

**INTERNATIONAL ASSOCIATION OF FORENSIC SCIENCES**

Date: Aug. 2-7, 1987

Location: Vancouver, B.C.

**Contact:**

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

**CRIMINALIST 1**

Requires a minimum of a Bachelor's degree in chemistry or criminalistics plus one (1) year of laboratory experience. A Master's degree may substitute for the one (1) year of experience requirement.

**CRIMINALIST 2**

Requires a minimum of a Bachelor's degree in chemistry or criminalistics plus three (3) year of laboratory experience. A Master's degree may substitute for the one (1) year of experience requirement.

Salary range: \$22,524 to 33,108 per annum [negotiable]

For more information, contact:

Frank Shiller, Director  
Police Department Crime Laboratory  
350 W. Belknap Street  
Fort Worth, TX 76102  
(817) 877-8084

The Nebraska State Patrol Crime Laboratory System is offering the two following positions:

**CRIME LABORATORY SUPERVISOR**

The Nebraska State Patrol is seeking an individual to supervise the State Crime Lab and its Staff, as well as conduct forensic examinations on evidence submitted to the Lab. Applicants must have a degree in natural science and experience in forensic laboratory analysis.

Salary: Based on qualifications

**DOCUMENTS EXAMINER**

The Nebraska State Patrol is seeking an individual to work in the State Crime Laboratory as a document examiner. This position requires four years of experience in document examination. Applicants must be court qualified as an expert providing testimony regarding all types of questioned documents problems. College degree is desirable.

Salary: Based on qualifications

For more information, contact:

Michael Mitchell, Personnel Manager  
Nebraska State Patrol  
PO Box 94907  
Lincoln, Nebraska 68509  
(402) 471-4545

The San Bernadino County, California, Sheriff's Department is offering the following position:

**CRIMINALIST**

Requires a Bachelor's of Science degree or equivalent in criminalistics, chemistry, biochemistry or related field. Position gathers, preserves, examines and reports on evidence. Must pass rigorous physical, background investigation and be citizens; will become sworn personnel.

Salary: \$2208 to 3268 per month

For more information, contact:

Dolores Harshman  
San Bernadino County Personnel  
157 W. 5th Street  
San Bernadino, CA 92415  
(714) 383-3598

The Ventura County, California, Sheriff's Department Crime Laboratory is offering the following position:

**SEROLOGIST**

Experience is preferred, but not required.

Salary: \$1948 to 2948 per month, depending on experience

For more information, contact:

A. Bergh, Director  
Ventura County Sheriff's Crime Laboratory  
800 S. Victoria Ave.  
Ventura, CA 93009  
(805) 654-2332

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FIRST CALL FOR PAPERS FOR THE FALL 1986 MEETING

The first call for technical papers has gone out from the Fall 1986 program chairperson, Pam Server of the Idaho State Crime Laboratory.

The meeting will be held October 8-10 in Boise at the Red Lion Riverside.

Rooms will be \$45 single or double occupancy, with a registration fee to be announced in the next newsletter.

Attached with this mailing is an abstracting form for your technical paper. This abstract form is required to present your paper.

For more information, contact Pam Server.

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MCCRONE MICROSCOPY COURSE A BIG SUCCESS

by  
Jonathan G. Spilker  
OSP Crime Lab, Pendleton  
and  
Beth Carpenter  
OSP Crime Lab, Portland

The McCrone Forensic Microscopy course was held at Camp Cascade during the fourth week of April.

Thom Hopen was the instructor of the course. Thom has a special interest and insight into the area of forensics having worked with the Alabama Crime Laboratories for 15 years.

The course acquainted the student with the techniques available for forensic applications of polarized light microscopy. A blend of practical and theoretical exercises led the participants through the basics of crystal morphology, polarization, dispersion staining and micro chemical tests.

The NWAFS sponsored 10 individuals to attend the class. They were:

Kathleen Ledford	Weber State Crime Lab
Ken Anderson	Montans State Crime Lab
Bart Reid	Northwest Forensic Lab
Kenn Meneely	OR State Police Crime Lab
Thomas Jenkins	OR State Police Crime Lab
John Brown	WA State Patrol Crime Lab
Chris Sewell	WA State Patrol Crime Lab
Ray Kusumi	WA State Patrol Crime Lab
Del Price	WA State Patrol Crime Lab
Cindi Jay	WA State Patrol Crime Lab

The Oregon State Police Crime Laboratory system kindly sponsored the course, and sent the following members from their system:

Steve Straus  
John Amish  
Robert Thompson  
Richard Klocko  
Larry Dickinson  
Rocky Mink  
Jon Spilker  
Terry Bekkedahl  
Rick Carter  
Dave Schmierbach

It seemed to be the consensus of those attending that the course was excellent.

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NWAFS-IAFS JOINT MEETING

Vancouver, B.C. August 2-7, 1987

by  
Wayne K. Jeffery, Continuing Education

As you are aware, the NWAFS will be holding a joint meeting with the International Association of Forensic Scientists in Vancouver, B.C.

Some concern has been voiced over the combined meeting due mainly to the cost:

1. If paid by Dec. 31, 1986 \$275 [US]
2. If paid after Jan. 1, 1987 \$325 [US]
3. Cost per day \$ 65 [US]

The cost of the conference can be lessened somewhat by using alternate accommodation at minimal or no cost. It is also possible some continuing education money may be used as a grant for those who attend.

The benefits of participating in a joint meeting are overwhelming:

1. The once in a life-time chance to attend a prestigious meeting, with 1400 delegates expected.
2. Five days of scientific meetings, seminars and workshops in all disciplines.

3. A chance to exchange ideas with scientists from all over the world who are the leaders in your field.

4. An excellent equipment show and demonstration.

The fall meeting of the NWAFFS is the most important meeting of the year, and we must have a strong representation in Vancouver otherwise the meeting may be moved.

The time to voice your preference of having a joint meeting with the International Society is during the Fall 1986 business meeting in Boise, Idaho. As provided for in the Bylaws, the site of the Fall 1987 meeting will be decided upon at that time.

If you have strong feelings in favor or against having the joint meeting with the International Society, contact President Wally Baker.

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#### BYLAWS ADDITION

The following addition in the Association's Bylaws is being proposed:

#### CHAPTER III Section 4

(F) The continuing education committee will maintain and distribute on request all education material which it has in its possession. The committee will also evaluate new material to be included in the continuing education library. The committee will also publish once a year a list of all the material in its possession.

Pursuant to ARTICLE VI of the Association Constitution, a vote of three-fourths (3/4) of the voting members present at the Fall 1986 business meeting in Boise will amend the Association Bylaws to include the above new section.

#### HIGHLIGHTS OF THE SPRING MEETING IN BEND

The beautiful surroundings of the Inn of the Seventh Mountain provided a peaceful backdrop to the Spring meeting.

The topic of firearms filled the day on Wednesday, while some of the group spent the day on the slopes of Mt. Bachelor partaking of some serious skiing.

The Wednesday morning portion of the program led off with a presentation by Bob Harper of the Alcohol, Tobacco and Firearms office in Portland.

Bob presented some interesting insight in the area of automatic weapons and their current relationship with clandestine methamphetamine laboratories. As a word of advice, Bob suggested that any law enforcement agency getting ready to take down a clandestine drug lab should contact their local ATF to determine if there is a concurrent weapons investigation being conducted on any of the suspects.

Part of the presentation on automatic weapons featured the viewing of a news special done on the manufacturers of the MAC machine guns and of the investigation of the Order, a neo-nazi extremist group responsible for numerous armored car robberies and suspected in the death of Denver talk show host, Allen Berg.

Bob was kind enough to bring several examples of automatic weapons his office has seized, including a clever rechargeable, battery-powered, rheostat controlled, motor-driven .22 caliber semiautomatic rifle that would fire automatically when an electrical button switch was depressed. Other weapons included a MAC-10, AR-15's and a Sten gun.

Bob also described the ATF's regional response team. This team includes a fully out-fitted van, a chemist and an explosives expert. The response team does not do render safe work. The team is available to any law enforcement agency when any one of the following occur in regards to arson or explosives:



1. There is a \$1 million loss
2. Involves a commercial establishment
3. Involves police or fireman injury

When the response of the van is justified, it will be on site within 24 hours. This service was recently used in Portland in a suspected arson fire at the Van Dyne Chocolate factory.

Bob also related some of the current legislation dealing with firearms and criminals, specifically the Armed Career Criminal Act. If an individual has three prior felony convictions (burglary or robbery, or a combination of both), possession of a firearm will give the suspect a minimum of 15 years to life in prison. The US Attorney cannot deal the charges, and the judge may not suspend, parole or reduce the term. So, the individual gets a minimum of 15 years.

Wednesday afternoon was organized and presented by members of the Oregon State Police Crime Laboratory. Rocky Mink gave a demonstration on the casting and swaging of lead bullets, allowing those interested to try their luck at bullet casting.

Mike Scanlan gave a demonstration of jacketing the lead bullets and forming a usable end product. This presentation led to much discussion by the group.

Through the courtesy of the Thompson Center Arms corporation, a video tape was viewed detailing the processes involved with the construction and machining of some of their weapons, in particular the Thompson Contender.

Rocky Mink gave a short presentation on the rendering of weapons for safe display in court. Many times when we testify in court on a firearms case, the weapon and ammunition are in close proximity to one another and could make a temptation for a desperate suspect. Rocky's demonstration of the use of fiber packaging tape on strategic surfaces of the weapon was interesting.

Dick Klocko of the OSP-Bend Laboratory gave a quick presentation on the history of Colt firearms development. Dick also shared a portion of his personal Colt firearm collection with the participants. An excellent talk, with many interesting side-bar facts thrown in.

We were especially fortunate to have Bill Lewis, Bullet Design Engineer for Nosler Bullet Company,

speaking to us on the design and uses of the Nosler bullet line. At the conclusion of the day, a tour was given of the bullet manufacturing process at Nosler in Bend. From the copper rod and lead pigs, we witnessed the creation of Nosler's famed "partition" bullet.

The evening was filled with technical discussions (and some not-so-technical) in the hospitality room while those who indulged in the skiing soaked their tired, sun-burned bodies in the Inn's hot tubs.

Thursday provided a day full of technical papers, and an especially interesting talk by Roger Liegrand of Hewlett Packard on the use of capillary and megabore capillary gas chromatography columns.

Several vendors did show up to display their wares - Gatan, Inc. provided literature on their automatic search gunshot residue program for SEM; Hewlett Packard showed their Mass Selective Detector software and terminal; Kinderprint displayed their many fine products, including Mikrosil (as one browsing criminalist asked the Ojens's, "What was life like before Mikrosil?"); and Federal Signal Corporation demonstrated their software based remote query system for the Intoxilyzer 5000. If I missed anyone in the mentions, it was strictly unintentional - my apologies.

A short business meeting ended the day with President Wally taking charge. Minutes of the meeting should be ready for the next newsletter.

An excellent banquet was enjoyed by all that evening, with the only complaint being the quality of the spoons provided by the Inn.

Friday saw more papers being given. Especially germane to the morning's topics was a brief geography lesson by Arnie Melnikoff for the benefit of Mike Howard on the location and physical size of Montana, Mongolia and Oregon.

An Internist's meeting next to ours brought out many pharmaceutical representatives and gimmicks that seemed to intrigue most of the people at our meeting. Pens, pencils, writing tablets, free samples of antihistamines, pen lights, coffee mugs and paper weights in the form of gigantic Dyazide capsules were seen being placed into the briefcases and pockets of some of us. From these observations, it would seem that our brethren have a distinct fetish for writing instruments and freebies.

The meeting closed with the last of a series of excellent meals provided by the Inn. Then, it was time to say good-bye to old and new friends, looking forward to the Fall meeting in Boise.

SPRING 1986 MEETING ABSTRACTS

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SPRING MEETING IN BEND A BIG SUCCESS

by  
Mike Howard, Program Chairman

The spring NWAFS meeting was held in Bend with the blessing of Central Oregon weather.

The first day was dedicated to firearms and ammunition. Mike Scanlan of the Oregon State Police Crime Laboratory in Medford put in many hours to make the displays and set up the demonstrations. Of course, he was not alone in working on this day's projects as various other people in several labs helped.

I would also like to acknowledge Rick Carter of the Pendleton Lab. Due to time problems, Rick's talk was cut off the program. As a program chairman, I know how hard it can be to get papers out of people, so it is a real shame to have to cut one that is ready to go. Thanks again, Rick.

Everyone seemed to find the day informative. This is the first full day of firearms I can remember at a NWAFS meeting and several people mentioned they would have liked more time. Future organizers take note.

We also ran into time problems on Thursday and had to cut the NOVA program on "The Frozen Addict." Bob Sager advised this was a good program, and lab people should really be aware of potential problems with meperidine "designer" drugs.

The rest of the meeting went fairly smoothly. We did slide in an extra paper by Gary Sorgen of the DEA Western Regional Laboratory on the identification of alpha-ethyltryptamine.

There was one other comment someone made that this was the first meeting they could remember where there wasn't a serology paper. Maybe its a new trend.

I think the only serology done was the in vivo preservation of enzymes by ethanol titration.

The following papers were given at the Spring 1986 NWAFS meeting in Bend, Oregon. If you would like more information concerning one of the papers given, please contact the author.

"High Voltage Transfer of Dust Prints to a Dark Plastic Film", Steve Ojana, Criminalist, Kinderprint Co., Inc., PO Box 16, Martinez, CA 94553

The application of a dark film over suspected dust prints on various surfaces, including the skin surface of an unembalmed and unrefrigerated cadaver, and the subsequent application of high voltage was discussed. The technique yields prints of suitable quality for identification for shoe and track prints. The possible use of the technique for the recovery of latent prints in dust was also discussed.

"Capillary Columns - Wide Bore Columns. Care and Feeding and How to Use Each", Roger Leibbrand, Hewlett Packard, 3003 Scott Blvd., Santa Clara, CA 95050, [408] 988-7406

This presentation is part of the Hewlett Packard seminar series and focussed on the history of capillary columns, the development of fused silica column technology, applications and future development of capillary columns.

"Gunshot Residue Detection in an Scanning Electron Microscope Using a Dedicated Automatic Search System", Barry T. Gray, Gatan Inc., 6678 Owens Drive, Pleasanton, CA 94566 [415] 463-0200

The use of an automated search system set to recognize particles of antimony, barium and lead with a SEM is presented. The system breaks the target disk into mechanical and beam sectors, and scans for the presence of GSR. If a particle is found, the location is recorded and the balance of the position is skipped, moving to the next quadrant. The operator may then have the instrument slew to the recorded position and personally verify the presence of the GSR.

**"Trombetta Samples: A Field Study of Blood-Breath Correlation",** Linton A. von Beroldingen and Lance Gima, Calif. DOJ-BFS, Santa Rosa Regional Laboratory, 7505 Sonoma Highway, Santa Rosa, CA 95405

A California Appellate Court Decision, *People v. Trombetta*, created the opportunity for analysis of nearly simultaneously collected blood and breath blood-alcohol samples. Blood alcohol determination was done by GC headspace or Modified Smith-Widmark [dichromate oxidation]. Breath testing was by the Intoxilyzer 4011A or AW. This study addresses the results obtained from 714 such pairs of samples from Marin and Contra Costa counties. Statistical analysis of the values obtained when the blood result is time-corrected for metabolic elimination of alcohol or when the time interval is less than 15 minutes between the two tests shows good correlation between the two techniques. In the case of times less than 15 minutes, no breath BA values exceeded the blood test results by more than 0.02% W/V.

**"Identification of Fentanyl Derivatives",** Andrew Allen, DEA Western Regional Laboratory, San Francisco, CA [415] 556-0951

The identification of the fentanyl derivatives and possible synthetic routes were presented.

**"ADAM Software System - Alcohol Data Acquisition Management",** Federal Signal Corporation

A software data acquisition program linking an Intoxilyzer 5000 to an IBM PC-XT with a 20 MB Iomega removal cartridge disk system was presented. The Intoxilyzer 5000 prompts for information such as sex, age, etc. of test subject and calibration information. The Intoxilyzer can hold approximately 65 tests in internal memory. The IBM PC-XT with software contacts the instrument via modem and downloads the information. Data can then be reduced to suit the operator's needs.

**"The Advantages of Using Selective Ion Monitoring to Generate Mass Chromatograms in the Analysis for Flammable Liquids in Arson Cases",** Arnold Meinkoff, Director, Montana State Crime Laboratory, 554 W. Broadway, 8th Floor, Missoula, MT, 59802, [406] 728-4970

The basic theory and rationale for the selection of 20 ions for selective ion monitoring on the GC/MS in arson cases was discussed. Examples of mass chromatograms for the specific ions were presented

for gasoline, kerosene, diesel #1 and diesel #2, as well as mass chromatograms for specific ions for partially burned wood, burned wood and gasoline mixtures. Also discussed were the results of the NWAFS arson proficiency obtained by the 20 ion selective ion monitoring technique on the GC/MS.

**"Forensic Analysis By Tandem Mass Spectrometry [MS/MS]",** Dr. Dean D. Fetterolf, FBI Laboratory, Forensic Science Research Unit, FBI Academy, Quantico, Virginia, 22135

The routine identification of drugs in physiological fluids by forensic laboratories typically involves a 2 step screening and confirmation procedure. Screening techniques such as thin-layer chromatography, radioimmunoassay or gas chromatography are generally followed by confirmation by gas chromatography/mass spectrometry [GC/MS]. Tandem mass spectrometry [MS/MS] combines these two stages of analysis in one instrument.

Tandem mass spectrometry is based upon a generation of instruments in which two or more mass analyzers are employed in sequence for both the separation and identification steps. MS/MS is analogous to GC/MS except that the sample is separated by its molecular weight rather than its chromatographic retention behavior. Since no chromatography is necessary, little sample preparation is required. Thus far, procedures for the determination of amphetamines, barbiturates and opiates at the nanogram level have been developed without the need for sample preparation.

The problems associated with the determination of cocaine and its major metabolite, benzoylecognine are well documented. Because of its rapid and extensive metabolism, detection and quantitation are difficult. The major metabolite, benzoylecognine, being amphoteric and very hydrophilic is not readily extractable. In addition, derivatization is necessary prior to chromatographic analysis. Using MS/MS we have developed a rapid method for the direct determination of cocaine and its metabolites in urine at the 10 ng/ml level in one minute without the need for lengthy sample preparation.

**"Solid State Extraction for Specific Drugs",** Gregory Smith, J.T. Baker Chemical Company, Western Regional Office, 995 Zephyr Ave., Hayward, CA 94544 [415] 471-6225

[No Abstract Provided]

IDAHO STATE CRIME LAB  
INSTRUMENT INVENTORY REDUCTION SALE

The State of Idaho Crime Laboratory has two pieces of equipment for sale:

1. Beckman Acta C III Ultraviolet-Visible Spectrophotometer.  
Circa: 1972  
Condition: Excellent  
Asking price: \$1,000
2. Perkin-Elmer Fluorescent Spectrophotometer MPF-2 with numerous attachments.  
Circa: 1972  
Condition: Excellent  
Asking price: \$2,500

The Idaho Crime Laboratory has simplified procedures for disposing of surplus equipment. If you are interested in either of these items, please contact Pam Server at (208) 334-2231.

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FIREARMS RIFLING DATA SOUGHT  
TO ESTABLISH DATABASE

During the Spring 1986 meeting in Bend, several interested parties gathered to discuss the feasibility of pooling the current firearms rifling information each lab has to establish a database for use by members of the Association.

The FBI filled a void in firearms examinations when they put the Crime Laboratory Information System (CLIS) firearms database on line in the late 1970's. However, the database was perplexing, at best, most of the time.

The emphasis of this database will be long arms weapons and weapons manufactured or custom barrelled in the northwest. However, all types of firearms data will be considered.

Initially, the information would be located at a single location on computer for ease of data maintenance. Hardcopy printouts of the database, similar to the CLIS system, would be provided.

The possibility exists to provide the database on disk to interested laboratories in the future. Many logistic and computer-orientated problems must first be worked out. This type of distribution represents an extension of the project at a much later date.

The database system to be used for the system is not set, however dBase II is strongly being considered due to its portability between CP/M and MS/DOS operating systems, and because it is the de facto standard of the industry.

We are seeking input from individuals interested in participating in this project.

We would first like to determine the level of interest and resources available; secondly, the format of data entry; and third, the manner in which the files will be updated and distributed.

If you are interested in such a project, or you would like to hear more contact Rocky Mink or Roger Ely.

\*\*\*\*\*

TECHNICAL TIPS

Well, as you can see, there aren't any technical tips to share with you this issue. In as much as the meeting in Bend would be highlighted, not only in this newsletter but in the minds of the participants, I opted to place this feature on hold for one issue.

However, TECHNICAL TIPS will return next issue!!! So, I would suggest that you start saving up your little tidbits of information because I will start calling you the end of July to begin assembling them.

I also hope to have the help of an assistant in making these calls.

Please contribute and share your ideas and techniques with others in the Association.

Contributions can be handwritten (legibly, please!), typed, scrawled on the back of a Snickers bar wrapper, etc. If you include IR, GC, UV charts, please make them 8 1/2 x 11 inches in size.

If you do submit spectra, please draw the spectra in red or black - do not use blue ink. If possible, please include original spectra or quality copies.

Send your contributions to:

Roger A. Ely, NWAFS Editor  
WSP Crime Lab  
PO Box 888  
Kelso, WA 98626  
[206] 577-2087

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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.

CALIFORNIA ASSOCIATION OF CRIMINALISTS  
NEWSLETTER

April 1986

"Blood Alcohol Analysis: Response to Criticism"  
Holmes, Kathryn Contra Costa County Sheriff's Crime Lab, 729 Castro Street, Martinez, CA 94553

A very well written response to an article in Analytical Chemistry concerning the current state of the art in blood alcohol analysis [Hume, David N. and Edward F. Fitzgerald, Anal. Chem., 57:877A-886A, 1985].

CALIFORNIA DEPARTMENT OF JUSTICE  
BUREAU OF FORENSIC SCIENCES  
TIELINE

Volume 11, Number 1  
Spring 1986

"Design of a Practical Mount for the Zero-One Rifle Holder", Frank H. Cassady, CA DOJ-BFS, Santa Barbara Regional Laboratory, 820 Frances Botello Road, Goleta, CA 93017

A mount for the Zero-One rifle holder using a Black and Decker folding Workmate is described. Detailed drawings of the mount are available from the author.

"Additions to the Computer Program for Analyzing Short-Range Bullet Trajectories", Frank H. Cassady, CA DOJ-BFS, Santa Barbara Regional Laboratory, 820 Frances Botello Road, Goleta, CA 93017

A revision of an earlier Commodore 64 program that calculates and tabulates incremental distances of the X,Y, Z, and muzzle distances for the corresponding distances of a short-range bullet trajectory. A copy of this program may be obtained from the author (or by the Editor of this Newsletter, by permission of the author) by sending a pre-formatted Commodore 64 disk and return postage.

"Alcohol Correlation Study Involving the Intoxilyzer 5000", Don Dunbar, CA DOJ-BFS, Salinas Regional Laboratory, 745 Airport Blvd., Salinas, CA 93901

The staff of the Salinas Laboratory were involved in one of a series of alcohol correlation studies. The purpose of the studies were two-fold:

1. To provide first-hand observations of impairment at measured blood alcohol levels;
2. To provide a means of comparing the results obtained from blood, breath and urine analysis.

"Intoxilyzer - Chewing Tobacco/Snuff Experiment", Stephen Cooper, CA DOJ-BFS, Salinas Regional Laboratory, 745 Airport Blvd., Salinas, CA 93901

Chewing tobacco, even when fresh and still in mouth, had no effect on the blood alcohol reading of an Intoxilyzer 4011AW. Fifteen minutes was sufficient time for the dissipation of measurable alcohol from a chewing tobacco/rum bolus.

"Preparation of Pseudoheroin and Pseudococaine", [no credit is given]

Recipes for the creation of pseudoheroin and pseudococaine for training dogs to sniff out secreted drug shipments is given.

"Parallel Coolant Flow Set-Up for Electrophoresis Systems", Frank H. Cassady, CA DOJ-BFS, Santa Barbara Regional Laboratory, 820 Frances Botello Road, Goleta, CA 93017

A schematic design for a parallel cooling system for electrophoresis systems is discussed. Includes bill of materials.

BULLET RECOVERY TANK PLANS

"Footprint Evidence", Jerry Chisum, CA DOJ-BFS, Modesto Regional Laboratory, 2213 Blue Gum Ave., Modesto, CA 95351

The Idaho State Crime Laboratory has provided a bill of materials and a simple schematic drawing of a bullet trap tank used by their firearms examiners.

A brief discussion of the making of exemplar shoe prints using black fingerprint powder and white paper according to a method described in Abbott's Footwear Evidence

Bill of Materials:

"Iodine Sensitized Paper Technique for Test Impressions", Bill Johnston, CA DOJ-BFS, Redding Regional Crime Laboratory, 1515 N. Old Oregon Trail, Redding, CA 96001

1/4 inch cold rolled steel:

Sheets of 8 1/2 x 14 inch paper are sensitized overnight in an iodine fuming chamber. The surface to be duplicated is moistened with water from a damp towel or misting bottle and pressed on the paper surface. The resultant impression is photographed.

2 ea	120 inch by 40 inch	
1 ea	120 inch by 30 inch	
2 ea	40 inch by 30 inch	
2 ea	120 inch by 15 inch	
1 ea	1/8 by 3/4 by 3/4 - 20 feet long angle	
1 ea	3 inch, 3/16 - 10 feet for center splash guard	
1 ea	4 inch ID by 10 inch black pipe nipple	
Total for steel		550.00

"Mettler Hot-Stage Calibration-Checking with Thermistors", Frank H. Cassady, CA DOJ-BFS, Santa Barbara Regional Laboratory, 820 Frances Botello Road, Goleta, CA 93017

2 ea	1/4 inch elec. solenoid valves	60.00
2 ea	Pneumatic cylinders and mounts [2" bore, 6" stroke]	300.00
1 ea	Pump, PVC pipe, fittings, filter	200.00
1.5 gal	Elastimer paint	70.00
1 ea	2 tube fluorescent fixture	30.00
1 ea	12" by 48" by 1/2" Lexan window control box and switches	30.00

Because of the space and size limitations of the access port of the hot stage, calibration and checking of the registered thermometer with conventional thermometers is impractical. The use of thermistors, or "thermal resistors", provide a feasible alternative.

Total cost of materials 1,270.00

"Crime Scene Reconstruction: A Case of Blood Stain Interpretation Five Years After the Crime Occurred", Gary V. Cortner, CA DOJ-BFS, Fresno Regional Laboratory, 6014 N. Cedar, Fresno, CA 93710

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INFRARED SPECTRA FOR METHAMPHETAMINE-PIT DERIVATIVE AND COCAINE-COBALT THIOCYANATE COMPLEX

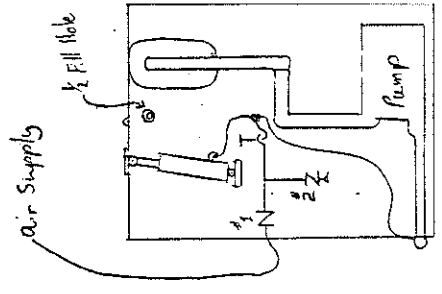
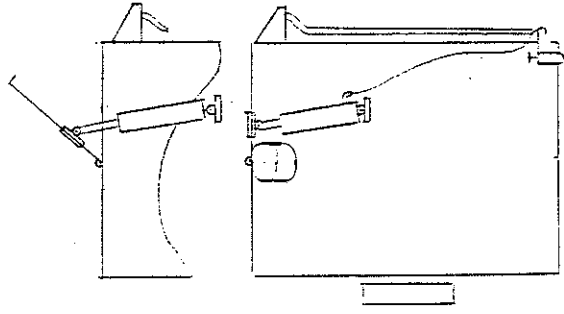
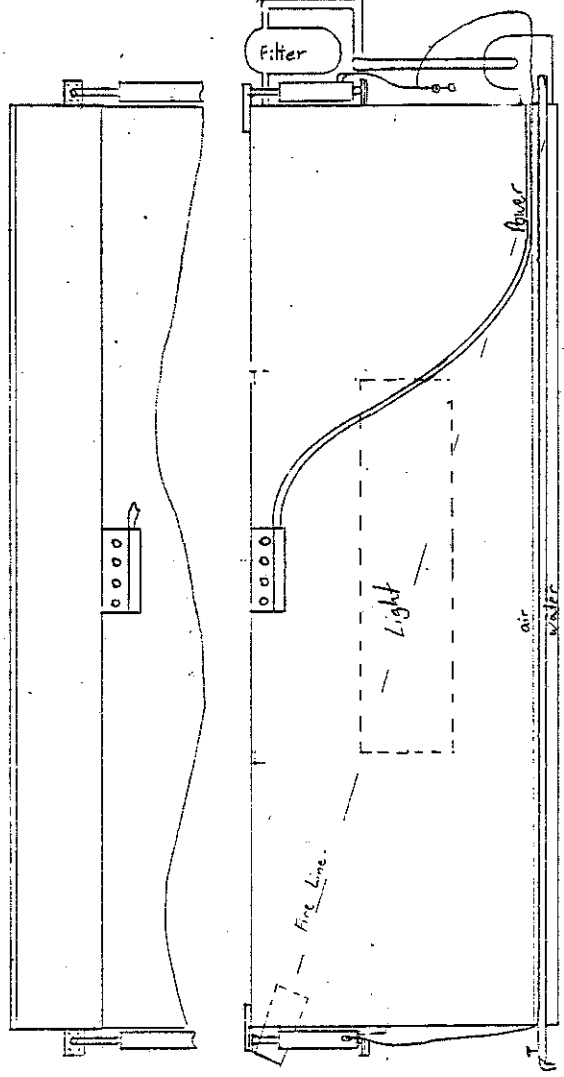
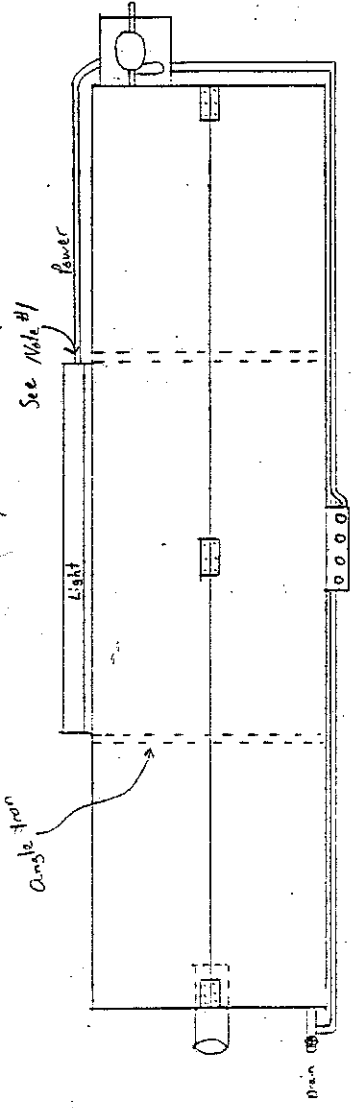
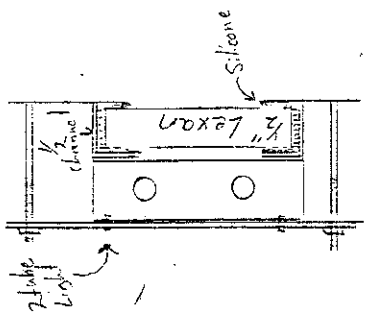
The reconstruction of a homicide by stabbing is described based on photographs taken during the initial investigation and visiting the crime scene. Experiments trying to reproduce the spatter patterns were conducted.

In the last issue of the NEWSLETTER, methods for forming a derivative with phenylisothiocyanate and methamphetamine, and complexing cocaine with cobalt thiocyanate were presented.

The author of both of those methods inadvertently forgot to include reference spectra.

Those spectra are included with this issue of the NEWSLETTER.

Note #1 Light Not scale



Bullet Trap  
 3/4" B.I. 1/2"  
 1/4 to 1" 3-28-86





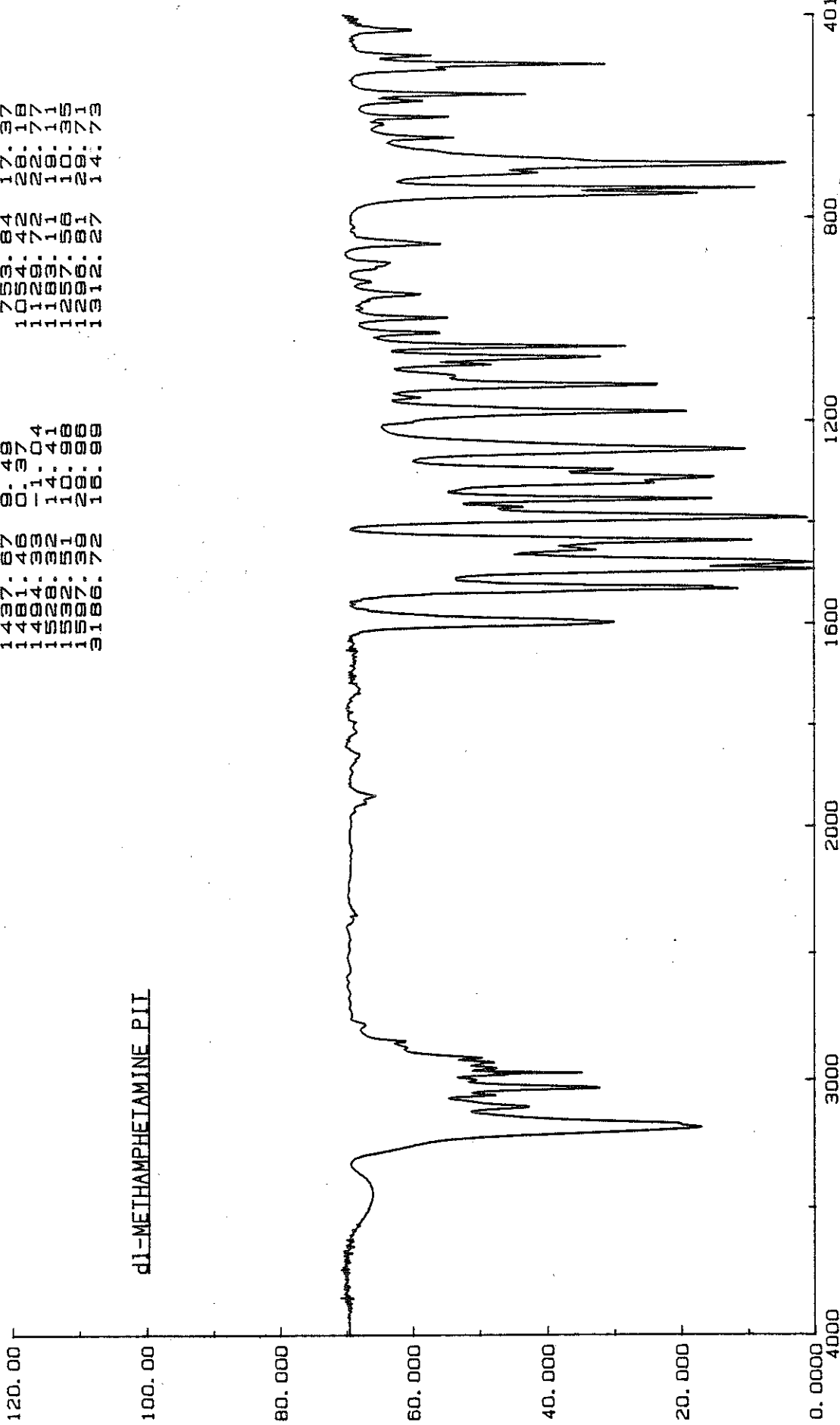
CM-1 XT CM-1 XT

CM-1	828	XT	18
4884	221	91.52	93
743	21	91.91	97
7534	422	17.97	122
10229	72	18.17	111
11297	11	10.15	151
1312	17	14.77	11

CM-1	40	XT	40
1325	34	23.34	21
1393	49	10.49	10
1437	41	90.41	1
1522	11	14.11	14
1597	99	10.99	10
181	11	12.11	1

CM-1	102	XT	102
1325	97	7.49	10
1393	43	57.43	10
1437	43	76.43	10
1522	32	32.10	10
1597	97	10.97	10
181	9	18.09	10

dl-METHAMPHETAMINE.PIT



FILE NAME :	GSL1081	GAIN :	2	ANALECT FX-6160	
#SCANS :	32	DET :	TGS	ORD :	XT
#BKG :	64	RES :	4 CM-1	ABSC :	WAVENUMBER
APOD :	HAPP-GENZEL	DATE :	01/20/86	TIME :	00:00:00
COMMENT :	DL-METHAMPHETAMINE PIT IN KBr				



D

CM-1 XT

CM-1 1718.41 20.09  
2070.26 2.52

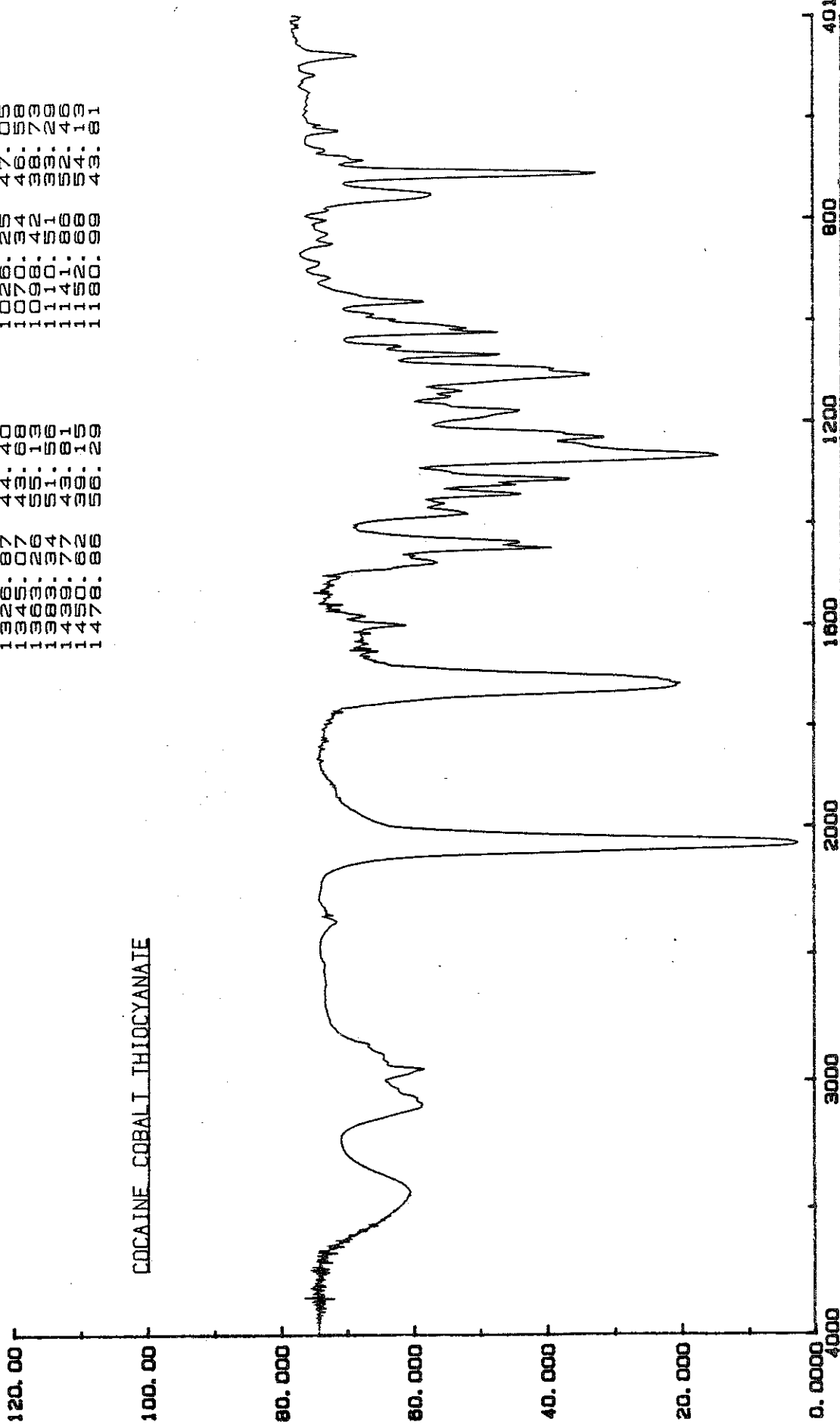
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10270.25  
11141.42  
11150.51  
11180.09

XT 14.22  
44.40  
45.15  
49.12

XT 92.92  
57.70  
51.70  
46.70  
52.41  
54.18

COCAINE\_COBALT\_THIOCYANATE



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 #BKG : 64  
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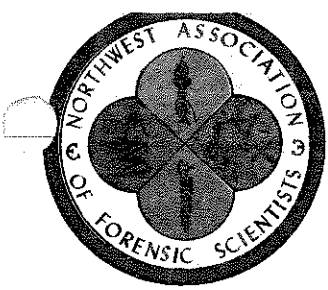
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 DET : TGS  
 RES : 4 CM-1  
 DATE : 01/17/86

ANALECT FX-8160  
 ORD : XT  
 ABSC. WAVENUMBER  
 TIME: 00:00:00

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Northwest Association of  
Forensic Scientists

FALL MEETING - BOISE, ID  
October 8-10, 1986

TITLE: \_\_\_\_\_

AUTHOR(S): \_\_\_\_\_

TO BE PRESENTED BY: \_\_\_\_\_

AMOUNT OF TIME FOR PRESENTATION: \_\_\_\_\_

ABSTRACT:

AUDIO VISUAL EQUIPMENT NEEDED: \_\_\_\_\_

PLEASE MAIL TO: Pamela Server  
State Crime Laboratory  
2220 Old Penitentiary Rd.  
Boise, ID 83712

(Abstracts are a requirement.)

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## 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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(206) 577-2087

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

**IN THIS ISSUE OF THE NEWSLETTER:**

- First call for papers for the Fall 1986 meeting in Boise
- McCrone microscopy course report
- Highlights of the Spring 1986 meeting in Bend
  - Abstracts of technical papers
  - Nutshell review of the proceedings
- Information on proposed joint meeting with IAFS
- Proposed addition to Association Bylaws
- Instruments for sale
- Abstracts from other newsletters
- Creation of rifling characteristics database explored
- IR spectra for drug derivatives
  
- PLUS A LOT MORE .....

**NORTHWEST ASSOCIATION OF FORENSIC SCIENTISTS**

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