

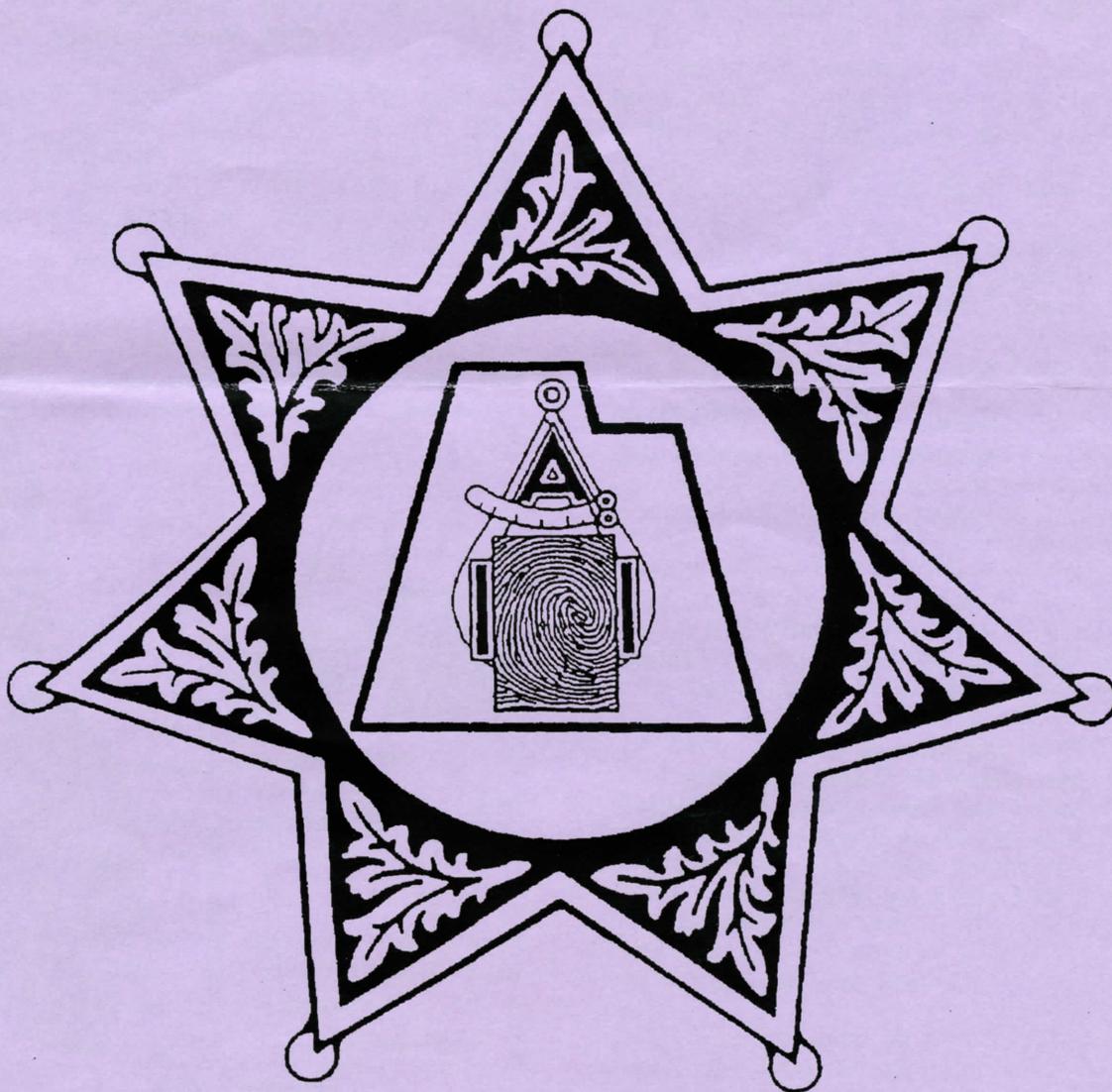
The International Association For Identification
Utah Division of I.A.I.

Chartered 1989

NEWSLETTER

Vol. VII; No. 2 SUMMER EDITION

1996



Richard L. Wright
1996 President

Jon T. Stimac
1996 Vice-President

Deborah Herrera-Parkin
1996 Treasurer

Darren B. Jewkes
1996 Secretary

The Utah Division of The International Association for Identification (I.A.I.) is a chartered division of The International Association for Identification since 1989.

The Utah Division of I.A.I. Newsletter is published four times a year during the Spring, Summer, Fall, and Winter. The information contained within the newsletter is either in the form of submitted articles, information from other investigative publications, or reported information.

The Utah Division of I.A.I. Newsletter will accept any article or information of those wishing to submit to the editor. It is requested the submitted articles or information be in typewritten form or on 3.5" disks using Wordperfect 6.0 or lower.

Please send items to be published to the editor:

Scott R. Spjut
Editor, Utah I.A.I.
State Crime Lab
4501 So. 2700 W.
Salt Lake City, UT 84119

The Utah Division of I.A.I. Newsletter reserves the right to reject or modify any submitted articles deemed to be slanderous, derogatory, or inappropriate for the members of the association.

The annual membership dues to the Utah Division of I.A.I. are currently \$10.00 per membership, or \$200.00 for a lifetime membership. Dues can be mailed to:

Utah Division of I.A.I.
Ms. Deborah Herrera-Parkin
Salt Lake County Sheriff's Office
Identification Section
437 South 200 East
Salt Lake City, UT 84111

**Utah Division of I.A.I.
 Insignia Items**

The Utah Division of I.A.I. has baseball hats, t-shirts and Lapel Pins with the Division Insignia embossed on them. These items are available for a minimal charge and look great! The prices for these items are as follow:

- Hats \$5.00**
- T-Shirts \$8.00 (any size)**
- Lapel Pins \$3.00 Members**
\$5.00 Non-members

Contact 1996 President, Richard L. Wright at (801) 965-4501 or Editor, Scott R. Spjut at (801) 965-4501 for further information or to purchase these items. Likewise, we have these items available at the Division Semi-Annual Meetings.



"My client prefers not to incur the stigma of being called insane, Your Honor. With the court's permission, he wishes to enter a plea of stupidity."

President's Message

The time is now close at hand for our Fall Training Meeting & Seminar. This is an important meeting because there will be many traditional aspects as in past meetings. We will have a business meeting, lunch, door prizes, but most important excellent training. The guest speaker is Agent Carl Keener, with the Federal Bureau of Investigation. Agent Keener is from the F.B.I. Academy in Quantico, Virginia. Agent Keener's topic will be developing latent prints on human skin, taking inked prints from dead bodies in the various stages of decomposition, and developing latent prints on the adhesive side of tape. There will be "hands-on" exercises as well as the lecture demonstration. We will also elect the officers of this Division for the coming calendar year. In addition, we will be voting on increasing the annual membership dues to assist with growing costs within the Division. It seems we have expenses that crop up about once a year that we do not have sufficient balance to cover.

I anticipate each of you to attend this vital training, which can be used by every law enforcement agency in our organization. Likewise, to have each of you cast your vote for the 1997 officers.

I have been honored to be President of the Utah Division of the International Association for Identification during the 1996 year. After two years as Vice-President, it has been very gratifying to work with many of the past and present Officers including Alice Erickson, Scott Spjut, Jeff Itami, Art Terkelson, Debbie Herrera-Parkin, and many other un-named members who are striving to keep this Division a growing, vibrant, progressive organization. It is truly a privilege to be a member of the Utah Division of I.A.I.

Thank you all for the past year. I have been very proud to act as your President for the 1996 year.

Richard L. Wright
1996 President

1996 Fall Semi-Annual Meeting

The 1996 Fall Semi-Annual Meeting for the Utah Division of the International Association for Identification is scheduled for Thursday, September 26, 1996. The meeting will be from 9:00am to 5:00pm. The meeting will be held at:

**Weber State University
Dee Events Center
South Side Floor Entrance
Ogden, Utah**

There will be signs directing as to the specific location once you find the south parking area. Lunch is still in the process. We are trying to make available a reasonably price lunch to be delivered to the training room.

The training speaker is F.B.I. Special Agent Carl Keener from Quantico, Virginia. Agent Keener will be speaking on latent print development on human skin, post-mortem fingerprinting methods, and adhesive tape processing. In addition to the lecture, there will be "hands-on" training as well.

Please make arrangements to attend this meeting. We look forward to everyone's attendance!

News From The International Association for Identification

The 81st Annual Educational Seminar of the International Association for Identification was held July 21-27, 1996 in Greensboro, North Carolina. Several of the Utah Division members were in attendance including members from West Valley Police Department, Salt Lake County Sheriff's Office, and the State Crime Lab. The training was exceptional, with many of the latest technologies within crime scene investigations discussed. In addition, there were several evenings of great food, social gatherings, and camaraderie.

With this past meeting in mind, it should be noted the Utah Division of I.A.I. is being considered to host the parent body of the International Association for Identification Annual Educational Seminar during July 1999. This would be a great privilege and

honor as the 1999 President of the International Association will be Sergeant Charles Illsley with West Valley Police Department. This meeting not only would include nationwide attendance, but worldwide as well. Keep in mind this is only a possibility at this time, but it is seriously being considered.

Newsletter Article

This article was originally written by Joel Geller, Latent Print Examiner for the U.S. Army Criminal Investigation Laboratories - Pacific Area. The article has been condensed by the editor.

The Bane of Heat Sealed Bags

Drug evidence must be secured from pilferage by evidence handlers, and there must also be assured that each item of evidence could positively be identified as being autonomous. Heat-sealed bags were introduced a few years ago to secure evidence and to assure the integrity of fungible evidence. As time passed, heat-sealed bags were used for both fungible and nonfungible evidence.

It was recognized that it is easier to use heat-sealed bags for nonfungible evidence as it saves time and effort in inventorying, marking, and handling the evidence. What was not recognized however, is that using heat-sealed bags for evidence results in the loss of latent prints. This is particularly regrettable because using heat-sealed bags for nonfungible evidence is unnecessary, requires additional lab examiner time, and fosters a false sense of security that the nonfungible evidence will be properly protected during handling.

The U.S. Army Criminal Investigation Command's laboratories have stated for years that plastic (including plastic bags), metal, and glass objects should NEVER be placed in heat-sealed or other plastic bags, and that doing so causes loss of latent prints. Merely placing evidence in a heat-sealed bag does not ensure protection from pressure, abrasion, atmospheric conditions, and physical damage. In short, heat-sealed bags do not adequately protect the surface of the evidence; alternate methods must be used.

To demonstrate this we conducted the following controlled experiment to show one of the main causes of losing latent prints on nonfungible evidence placed in heat-sealed bags: cooking-off by elevated temperature. The losses in this experiment were caused by temperature variance alone; losses through erasure by movement of the bags were not even considered, although this certainly happens when nonfungible evidence is transported in heat-sealed bags.

The Method

More than one hundred plastic bags were filled with cut and dried grass and liberally handled to ensure that latent prints were present. These bags of pseudo-evidence were then placed in heat-sealed bags. Thirty heat-sealed bags each were then put in a refrigerator, in an oven, and on a shelf within the laboratory.

Over a period of 30 days, one bag was removed each day, processed with cyanoacrylate ester and the latents present counted. By using a random method to prepare and handle the hundred samples we guaranteed an average number of latents.

Based on the samples kept at the ambient temperature of the lab, we should expect 5.5 latents per bag. There is a significant difference in the number of latents on these like samples caused by temperature alone. Most notable is the high temperature effect. Eighty degrees Fahrenheit is not unusual for summertime conditions, especially when evidence is stored in evidence vaults that are not air conditioned and shipped by various modes to the crime lab. Yet, this temperature when coupled with heat-sealed bags will wipe out latents. It is not the mark of a good investigator to ignore this fact.

Temperature / Amount of Latents

Days	Cooler	Oven	Shelf	Total
1	41/3	90/0	60/7	10
5	40/3	80/0	60/6	9
10	35/5	85/0	45/3	8
15	35/4	80/1	60/4	9
20	35/3	80/0	60/6	9
25	35/4	80/1	60/7	12
30	35/5	80/0	60/6	11
Total	22	2	33	57

A final note here is to remind the investigator that the loss of prints in the experiment was solely to temperature. It does not account for the additional high loss that occurs from mechanical reasons. For example, by rubbing the inner evidence against the outer heat-sealed wrapper.

The best procedure for forwarding plastic (all types), metal, and glass objects to the laboratory is to isolate the item by suspending it in a box. This may be time consuming, but provides better laboratory results. Drug evidence, for accountability purposes can be placed in paper bags. The paper bags should be marked accordingly and then isolated, immobilized, or suspended in a box for shipment to the laboratory. All items should be isolated to avoid contact with other evidence to include packing material.

Remember, the best rule for shipment of evidence to the laboratory is to preserve and protect the evidence. Legal authorities in the respective jurisdictions can be contacted for permission to use alternative methods of shipping fungible and nonfungible evidence to the laboratory.

EDITOR'S NOTE:

There have been numerous items of evidence submitted to the State of Utah Crime Lab which are packaged in plastic or heat-sealed plastic bags. Through our experience, this does indeed have a negative influence in the amount of latent prints successfully processed as opposed to evidence packaged in paper. Often times the examiner can actually see latent smudges develop where the plastic packaging material had rubbed against the surface of the evidence. It is frustrating when the examiner uses all of the newest techniques to develop latent prints when they have accidentally been damaged through ignorant packaging. In other words, when in doubt, ALWAYS USE PAPER FOR EVIDENCE PACKAGING!

Announcement for the
Fall 1996 Meeting of the
Northwest Association of
Forensic Scientists
Co-Hosted by
The Utah Forensic Science
Association
Sept. 30 - Oct. 4, 1996

This meeting is not directly involved with the Utah Division of the International Association for Identification. However with the need for advanced training and professional associations, we agreed to advertise for this important and informative forensic meeting.

You are cordially invited to attend the Fall Joint Meeting between the Northwest Association of Forensic Scientists and the Utah Forensic Science Association at the Quality Inn City Center in Salt Lake City, Utah. A registration fee of \$95.00 includes 2 continental breakfasts, 1 lunch and the banquet dinner on Thursday evening

The meeting will include several breakout workshops along with group lectures. The individual workshops each have an accompanying fee for attendance.

Workshops include the following:

Recovery of Buried Bodies	(12 Hours)
Collection/Casting of Footwear	(6 Hours)
Documentation of Bloodstain Patterns	(6 Hours)
Toxicology Workshop	(8 Hours)
Chromatograms in Arson Analysis	(8 Hours)
Investigation of Street Weapons	(8 Hours)
Identification of Altered Firearms	(8 Hours)
Mass Spectral Interpretation	(8 Hours)
NIR FT-RAMAN for Forensics	(8 Hours)
Microcolumn Separation Techniques	(4 Hours)
Population Genetics	(8 Hours)
Advanced DNA Methods	(8 Hours)
DNA Interpretation Workshop	(4 Hours)

For further information or registration applications contact:

Jay Henry, Criminalist
NWAFS/UFSA 1996 MEETING
Utah State Crime Laboratory
4501 South 2700 West
Salt Lake City, Utah 84119
Phone (801) 965-3870
FAX (801) 964-4544



UTAH FORENSIC
SCIENCE ASSOCIATION

NORTHWEST ASSOCIATION
OF FORENSIC SCIENTISTS



FORENSIC SCIENCES FALL SEMINAR

SEPTEMBER 30-OCTOBER 4, 1996
SALT LAKE CITY, UTAH

REGISTRATION FORM

PERSONAL INFORMATION

Name: _____
 Title: _____
 Agency: _____
 Address: _____

 Telephone: (work) _____
 (home) _____
 (fax) _____

I am a member of the: NWAFS (Y/N) _____
 UFSA (Y/N) _____

FULL REGISTRATION THURSDAY AND FRIDAY OCTOBER 3 AND 4	BEFORE SEPT.10		AFTER SEPT. 10		FUNDS
	Member	Nonmember	Member	Nonmember	
SCIENTIFIC AND BUSINESS MEETINGS (Includes 2 continental breakfasts, lunch, breaks, and evening banquet).	\$95	\$105	\$110	\$120	
WORKSHOPS					
Crime Scene Technologies Symposium A. Recovery of Buried Bodies -Sept. 30 B. Collection and Preservation of Footwear Impressions Through Casting -Oct. 1 C. Identification and Documentation Of Bloodstain Patterns-Oct. 2	\$155	\$185	\$165	\$195	
Toxicology Workshop A. Toxicology workshop -Sept. 30 Monday	\$50	\$60	\$60	\$70	
Arson Workshop Interpretation of Chromatograms in Arson Analysis-Sept. 30	\$55	\$65	\$65	\$75	
Firearms Investigation Symposium. A. Investigation of Street Weapons-Oct. 1 B. Identification of altered weapons-Oct. 2	\$175	\$185	\$185	\$205	
Chemistry Symposium A. Mass Spectroscopy Interpretation-Oct 1	\$50	\$60	\$60	\$70	
B. NIR FT-RAMAN for forensics-Oct.2	\$35	\$45	\$45	\$55	
C. Microcolumn separation of drugs-Oct. 2	\$30	\$35	\$40	\$45	
Forensic Biology Symposium A. Population genetics and Forensic Statistics/issues Workshop-Sept. 30 B. Advanced DNA Methods Training-Oct. 1 C. DNA Interpretation Workshop-Oct. 2	\$150	\$175	\$160	\$185	

**FALL 1996 MEETING
NORTHWEST ASSOCIATION OF FORENSIC SCIENTISTS
CO-HOSTED WITH UTAH FORENSIC SCIENCE ASSOCIATION
SEPTEMBER 30- OCTOBER 4, 1996**

You are cordially invited to attend the Fall Joint Meeting between the Northwest Association of Forensic Scientists and the Utah Forensic Science Association at the Quality Inn City Center in Salt Lake City, Utah.

A registration fee of \$95.00 includes 2 continental breakfasts, 1 lunch and the banquet dinner on Thursday evening, October 3rd.

The scientific paper session is scheduled for Thursday, October 3, and the morning of Friday, October 4. Please use the enclosed form or contact Jay Henry with your title and abstract by September 10, 1996.

The Utah Forensic Science Association is excited about hosting this meeting. To our knowledge, this is the first time that NWAFFS meeting has been held in Salt Lake City. We have a variety of workshops and social events planned and have attempted to keep the fees to a minimum. We think you'll find them very reasonable. We hope to see you this fall!

Workshops

Crime Scene Technologies Symposium:

A. Recovery of Buried bodies. September 30 (12 hrs)

Lt. Gary Knowles of the Oregon State Patrol Crime Laboratory, Medford, provides hands on training involving buried plastic skeletons, search methods, grave detection, evidence recovery, and documentation necessary for the successful prosecution of a murder case. Includes continental breakfast, lunch, and pm break.

B. Collection and Preservation of Footwear Impressions Through Casting. October 1 (6 hrs)

This workshop is designed to assist and provide pertinent information and training to the crime scene investigator with proper casting techniques of footwear/tire track impression evidence. The class will guide the student through: 1) a historical background of casting techniques, 2) How the casting material is made, 3) Why casting is necessary, 4) Various casting materials and techniques and 5) cleaning procedures. Includes continental breakfast, lunch and pm break. This class is taught by Dwane Hilderbrand of the Scottsdale Police Department Crime Laboratory.

C. Identification and Documentation of Bloodstain Patterns. October 2 (6 hrs)

This class is designed to familiarize forensic scientists and crime scene personnel with the different patterns produced when blood is shed during a crime. This recognition of various bloodstain patterns will help guide each participant in the discovery of items that may or may not be relevant. In addition to the identification of bloodstain patterns, each individual will be taught how to properly document this evidence so that it may be used later for reconstruction purposes and court room exhibits. Includes continental breakfast, lunch and pm break. This class is taught by Kevin Patrick of the Utah State Crime Laboratory. **Note: Each student should bring his/her own 35mm camera, flash and tripod. Film and development will be provided.**

Toxicology Workshop: September 30 (8 hrs)

Stephen Heishman, National Institute of Drug Abuse, will present results of a study, Laboratory Evaluation of Drug Evaluation and Classification Program: Ethanol, Cocaine, and Marijuana. The study was used to determine the validity of the Drug Evaluation and Classification (DEC) program used by police agencies, and also to determine the accuracy of trained police Drug Recognition Experts (DRE) in detecting whether subjects had been dosed with ethanol, cocaine or marijuana. Dennis Crouch, Center for Human Toxicology, University of Utah, will present plasma pharmacokinetic data obtained from the DEC study described above. Paul Hiatt, Utah Highway Patrol, and program coordinator for Utah's DRE officers, will discuss the DRE program especially as it is used in Utah. William Stonebraker, section chief, and Wayne Pierce, bureau director, toxicology will discuss Drugs and Driving information and coordination with the DRE officers and legal disposition of drugs and driving cases in Utah. Includes continental breakfast, lunch, pm break. Workshop is limited to 30 students.

Arson workshop:

A. Interpretation of Chromatograms in Arson Analysis. September 30 (8 hrs)

David Schmierbach, Oregon State Police Forensic Laboratory, Portland, will teach this workshop. Focus will be on interpretation of chromatograms in arson analysis. ASTM methods E1387-95 and E1618-94 will be reviewed. From these examples of products in the classification system, common substrates for fire debris, pyrolysis biproducts and maybe a few head scratchers will be looked at. This will involve both GC and GC/MS. Bring chromatograms you want to discuss with you. Includes continental breakfast, lunch and pm break.

Firearms Investigation Symposium

A. Investigation of Street Weapons. October 1 (8hrs)

This training session will expose the forensic scientist to many of the clandestinely fabricated firearms that are present on the street. The student will also be exposed to both legitimately and clandestinely manufactured firearms suppressors. Class size is limited to 20 students. Please note that due to limited availability of space and training materials, attendees are limited to one per laboratory and three per multi-lab system. In the event the workshop is not filled, attendance will be on a first filled basis. **Note: This workshop is restricted to public or private sector forensic scientists and /or individuals currently employed by a law enforcement agency.**