

International Association for Identification



October, 2008 – IAI Monthly Update

FYI, this update is sent each month to all IAI board members, officers, committee chairs, regional representatives, division secretaries, certification board chairs and secretaries, division editors and IAI staff. This update contains information that is of particular interest to these groups. It is sent by e-mail to all those for whom I have an e-mail address and by regular mail to the rest. **If you receive this by regular mail but have an e-mail account**, please let me know and I will add your e-mail address to the distribution list. It is much more efficient and cost effective to send it that way.

Hello again from the IAI office.

IAI Website

A new “Members’ Area” button has been added to the buttons on the Home Page of the IAI’s website. Located in that area are the archived copies of the Monthly Update, the IAI’s Operations Manual and the Certification Program Operations Manual. That section of the site is password protected. To access this Members’ Area, please follow these instructions:

User Name: iaimember or update (case sensitive)

Password: 357cww

Other items of interest to IAI members will be placed on that section of the site in the future.

Note from Technical Support Working Group (TSWG)

A while ago I received this note from Shira Simon at TSWG regarding a Physical Match research project that conducted in Israel. State, local and federal fingerprint folks **in the United States ONLY** are invited to evaluate this software. If interested, Shira’s contact information is listed below.

In conjunction with NIJ, we have received a final report on our Physical Match project with Israel. This report goes hand-in-hand with software that they developed to assist examiners in performing physical matches and to relate associated probabilities to these matches. If you (or someone you pass this to – US GOVT only) is interested in evaluating a copy of the software, please let me know as my copies should be arriving any day.

Thanks,

Shira R. Simon
Program Manager
Technical Support Working Group
Investigative Support & Forensics Subgroup

(703) 604-0085; (703) 604-0180 (fax)
simons@tswg.gov

FBI BioSpecs Documents – Peter Komarinski

The following information was recently received from Peter Komarinski, Chair of the IAI's AFIS Committee:

As many of you already know, the FBI has established the BioSpecs website at <http://www.fbibiospecs.org/fbibioimetric/biospecs.html>. You will find a lot of information as well as links to some of the current CJIS biometric projects, including the Scars, Marks and Tattoos (SMT) paper. CJIS is looking for input as to how useful it would be to the law enforcement community to have not just text descriptors but actual SMT images. To this end CJIS is soliciting comments which can be entered on the BioSpecs page. SMT images could be a valuable addition to the Next Generation Identification (NGI). Please take a moment to look at the website and the SMT page.

2009 IAI Membership Dues

Within the next couple of weeks invoices for 2009 IAI membership dues will be mailed to all IAI members. Dues for US members are \$70 per year; dues for non-US members are \$60 USD per year and dues for US student members are \$35 per year while dues for students outside the US are \$30 USD per year.

AFIS Interoperability Meeting

On September 30 and October 1 the second meeting of the AFIS Interoperability Working Group was held in Alexandria, Virginia. That project is managed by Melissa Taylor at NIST but funded by NIJ. Real progress was made during this two day meeting attended by representatives of local, state and federal agencies. Three action items were endorsed by the group and will be accomplished in the next month or so.

- A letter to all regional working groups of the FBI's Advisory Policy Board (APB) recommending that access to IAFIS be significantly streamlined and simplified so that more practitioners in the latent fingerprint community might have direct access to IAFIS
- A letter to all regional working groups of the FBI's Advisory Policy Board (APB) and/or the FBI directly recommending that the FBI eliminate the current state daily quota system for IAFIS searches.
- Establish a committee to develop a model procurement specification for inclusion in RFP's for agencies that either are purchasing a new AFIS or upgrading a current AFIS.

Each of these recommendations will have a significant impact on the latent fingerprint community. One of the most significant impediments to IAFIS access at the local level is the requirement to access IAFIS through either Law Enforcement On-Line (LEO) or the CJIS Wide Area Network (WAN). Problems too numerous to discuss here exist with each of those access methods. It is felt that a new or greatly simplified method, perhaps Internet based, would significantly increase the use of IAFIS at the local level.

It is also felt that if a boiler-plate procurement specification to enable AFIS interoperability was available, agencies would include that in their specs for new or upgraded equipment. To that end, a model specification will be developed and publicized. It is hoped that over time, that specification will be tied to funding so, for example, any AFIS purchased entirely or partially

with federal funding assistance will be required to incorporate this interoperability component/language into their procurement documents.

More on this topic as things move forward. This is a very complex problem that will take a number of years to correct but the overwhelming sentiment of the community is that it needs to be done and it has to start somewhere. This is the place.

Marshall University Forensic Science Center Forensic Assistance Program

The following e-mail from Marshall University was recently received in the IAI office. There was an attachment to this e-mail that is not included in the *Monthly Update* but if anyone is interested in this program, please contact Dr. Pamela J. Staton of the Marshall University Forensic Science Center at the phone and e-mail address shown below.

Subject: NIJ-MU DNA Crime Lab Technical Assistance Program Invitation

Dear Colleagues,

The Marshall University Forensic Science Center, in cooperation with its FEPAC-accredited M.S. Forensic Science Graduate Program and the National Institute of Justice, is providing no-cost technical assistance to crime laboratories determined to have DNA validation needs.

Attached are two documents. One is the Technical Assistance Program (NIJ-TAP) description and its accompanying NIJ-TAP Crime Lab Survey.

For those considering participation, please complete the survey so we may begin the process of determining how best to meet your needs. Please note that while a technical assistant may be assigned to your project now or in the near future, they will remain here for training from August through April with an expected arrival in your lab mid-May 2009.

Once completed, the Survey may be emailed to staton1@marshall.edu, faxed to 304-690-4371, or snail-mailed. This information may also be found on our website at <http://forensics.marshall.edu>, Special Projects, Technical Assistance Program.

If you have questions, please do not hesitate to contact me.

Thank you.

Respectfully,

Dr. Pamela J. Staton
Marshall University Forensic Science Center
1401 Forensic Science Drive
Huntington, WV 25701
304-690-4363, ext 202 (office)
304-634-5263 (cell)
304-690-4371 (fax)

Fingerprint Article

This interesting article was recently brought to my attention. FYI.

***A Way to Find Hidden Fingerprints
Scientists Have Developed Better Way to Identify Fingerprints on Bullets and Fragments of
Explosives***
By BRITTANY SAUSER

Sept. 6, 2008

Fingerprints are crucial evidence in many criminal investigations because they can tie a suspect to the scene of a crime with almost indisputable accuracy. Now crime-scene investigators have a new technique for finding fingerprints left on metals, like the cartridge from a spent bullet or fragments of an improvised explosive device, even if the perpetrator tries to wash the evidence clean.

Forensic scientist John Bond of the Northamptonshire Police, in the United Kingdom, developed the technique after discovering that certain metals, including copper and brass, corrode very slightly when touched, leaving behind a faint but indelible fingerprint. Already, the technique has been used to provide fingerprints in a nine-year-old double-homicide case in Kingsland, GA, after conventional fingerprinting methods were unable to identify any prints on a shell casing, says Bond.

Traditional fingerprinting techniques involve triggering a physical or chemical reaction with the deposits left behind by a finger to make a print visible. If these deposits are removed, the techniques will fail. This seriously limits what forensic scientists can do to identify fingerprints in spent cartridge cases and at arson scenes where normal prints have been removed, says Hazel Johnson, a specialist advisor at the Forensic Science Service, based in Birmingham, in the U.K. "We will look at the metals under a laser for potential fingerprints, but rarely is the technique able to spot the print," she says.

The new technique makes use of a physical change that occurs to metal when a person touches it. This is due to the salt in human sweat: ionic salt molecules present in the fingerprint residue corrode the metal surface to produce an image that can only be removed by abrasive cleaning of the metal. Bond, also a fellow at the University of Leicester, in the U.K., found that the fingerprint can be made visible by applying a voltage to the metal and coating it in a metallic powder.

"The advantage of the new technique is its permanence," says Ron Singer, crime-laboratory director for the Tarrant County Medical Examiner Crime Lab, in Fort Worth, TX. "It is looking for the minute amount of etching that takes place in the metal--the physical change that has occurred to the surface." Singer says that the technique could prove more resilient than conventional methods. "If you don't get it right the first time, you can do it again," he adds.

Once the University of Leicester scientists knew that fingerprints could corrode metal, they applied a very large electrical charge--2,500 volts--to the corroded area. They then applied to the metal a very fine, black conducting powder similar to photocopier toner, which adhered to the areas of corrosion. "You could see the outline of the fingerprint in the black powder, thereby rendering the fingerprint visible," says Bond.

Johnson thinks that the technique is exciting but warns that the surface area of cartridges is so small that the entire print may not be obtained. "One of the major issues in fingerprint analysis is how much of the print is necessary before you can reliably say it is someone's fingerprint," says Singer. In general, though, Singer is impressed with Bond's research. "The more methods we have to develop invisible fingerprints, the better off we are."

Bond says that the technique has been extensively tested in the lab and will be applied in more cases in both the United States and the United Kingdom. Furthermore, he has been in contact with the U.S. military, which is eager to use the technology for roadside bombs or improvised explosive devices. "Traditional bomb-making metals are ones like copper, which we know corrode with fingerprints," says Bond. "The fingerprint on metal from an exploded bomb should work the same way it does on a bullet with a fingerprint."

2008 Membership Directory

We have begun preparation for the 2008 Membership Directory and in that regard, if any members have a change of information such as title, address, phone or fax numbers, e-mail address etc., please submit those changes to this office as soon as possible. During the next month we will begin to compile the data lists for the directory. All directory information will be submitted to the printer around the first of November so any changes received after that date will not be reflected in the 2008 Directory.

Thanks for your assistance.

Joe Polski