

# FISC Bulletin Board

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IAAI Fire Investigation Standards Committee (FISC)

## FISC BULLETIN BOARD NATIONAL ACADEMY OF SCIENCES FORENSIC SCIENCE REPORT AND NFPA 1033

### **EFFORTS TO STRENGTHEN FORENSIC SCIENCE IN THE U.S. MAY IMPACT FIRE INVESTIGATORS**

In 2009, the National Academy of Sciences (“NAS”) published a report entitled *Strengthening Forensic Science in the United States*.<sup>1</sup> Below is a summary of the purpose and background of this report:<sup>2</sup>

In 2006, the National Institute of Justice (NIJ) issued a grant to the National Research Council (NRC) of the National Academies to establish a Forensic Science Committee to study the forensic sciences and their application throughout the Nation. The resulting analysis built upon prior NIJ studies in 1999 and 2004, as well as several other studies. In February of 2009, the NRC completed its work and issued a final report entitled *Strengthening Forensic Science in the United States: A Path Forward*. The report concluded that the scientific practices underlying many forensics disciplines are in many respects wanting. It provided a number of recommendations on how to improve the scientific foundations of the field, which are so important to its ongoing and future credibility.

Among the forensic science disciplines that the report addresses is the analysis of explosives evidence and fire debris. Following is the “Summary Assessment” the report contains respecting this discipline:<sup>3</sup>

By contrast, much more research is needed on the natural variability of burn patterns and damage characteristics and how they are affected by the presence of various accelerants. Despite the paucity of research, some arson investigators continue to make determinations about whether or

not a particular fire was set. However, according to testimony presented to the committee, many of the rules of thumb that are typically assumed to indicate that an accelerant was used (e.g., “alligatoring” of wood, specific char patterns) have been shown not to be true. Experiments should be designed to put arson investigations on a more solid scientific footing.

Because of the report, the Subcommittee on Forensic Science was established to “advise and assist . . . coordination bodies of the Executive Office of the President on policies, procedures, and plans related to forensic science in the national security, criminal justice, and medical examiner/coroner systems at the local, state, and federal levels . . .”<sup>4</sup> To achieve the goals set for the Subcommittee, it established five Inter-agency Working Groups (IWGs) to support its efforts. The work of these IWGs includes:<sup>5</sup>

- Identifying and prioritizing extant research, development, testing, and evaluation related to forensic science.
- Identifying existing standards/best practices/guidelines/protocols relating to identification, collection, preservation, analysis, evaluation, comparison, interpretation, terminology and reporting.
- Making recommendations for either improving existing standards and protocols or developing new ones where needed.
- Recommending a process for defining and standardizing forensic science terminology used in expert reports and testimony.
- Identifying non-accredited laboratories,

forensic science units, and crime scene units.

- Outreaching to and gaining input from forensic science and criminal justice organizations including state, local, and private practitioners, and other stakeholders.

The IWGs started their work in 2010 and their work is continuing. In the meantime, the NAS Report is having an impact in the legal world, as references to the Report that are relevant to *Daubert* hearings and other judicial proceedings are turning up in case decisions. For example, in *US. v. Hebshie*,<sup>6</sup> the district court judge quoted the NAS Report in his 127-page decision in which he vacated the defendant's conviction for arson and mail fraud. The court held that the defense counsel's performance was deficient in failing to move for *Daubert* hearings on expert testimony of the canine handler, the laboratory test, and the cause-and-origin testimony. Numerous legal publications are turning up as attorneys and law professors weigh in on changes that are needed to the legal system, both criminal and civil, to deal with problems of forensic science evidence in court. Some of these deal with problems in cause-and-origin expert testimony in both civil and criminal cases.

As the NAS Report and some of the publications that it has generated relate to the field of fire investigations, it would be prudent for IAAI members to track the publications concerning the NAS Report that are relevant to their fields as these issues may give rise to *Daubert* hearings or other challenges to expert testimony in fire cases.<sup>7</sup>

### **NFPA 1033 STANDARD FOR PROFESSIONAL QUALIFICATIONS FOR FIRE INVESTIGATOR ENTERS A REVISION CYCLE**

Below is an open letter to IAAI members from FISC member George Wendt, who is also the Chair of the NFPA 1033 Committee. Here is an opportunity for you to weigh in and submit a proposal to help make the NFPA 1033 standard even stronger.

Dear Members of IAAI:

NFPA 1033, Standard for Professional Qualifications for Fire Investigators, has entered the revision cycle and is now open for proposals. The NFPA encourages participation in the development of its codes and standards. Any interested party is permitted to submit specific written proposals to revise any portion of the document.

As a professional fire investigator, NFPA 1033 is very important to you. The document addresses the need for specific expertise in the area of fire investigation by establishing clear and concise job performance requirements for the job of fire investigator. These job performance requirements can be used to determine that an individual, when measured against the standard, possesses the skills and knowledge to perform the

job of fire investigator. These job performance requirements are designed to be applicable to both the public and private sector fire investigators.

Proposals for revisions to NFPA 1033 are now being accepted. The Proposal period is open from July 8, 2011 until November 25, 2011. Each proposal will be individually and specifically addressed by the committee during committee meetings to be held in early 2012. The committee's actions will then be published in the Report on Proposals, which is scheduled to be issued in the Spring of 2012.

I would encourage all members of the fire investigation community to take the time to read the document and to participate in the NFPA Standards Development process. This document is YOUR document. ALL proposals will be carefully considered and acted upon by the full committee. I have included a link to the *NFPA Technical Committee Document Proposal Form* for your convenience [available at [www.NFPA.org](http://www.NFPA.org), go to the Codes and Standards Page, and then click on the "Proposal form" link in the right column of the page].

If I can be of any assistance to you, or answer any questions regarding this process, please feel free to contact me. Please note, that any information provided will not be an official NFPA interpretation.

Thanks for your consideration.

*George A. Wendt, MIFireE, IAAI-CFI  
Committee Chairman  
Technical Committee on Fire Investigator  
Professional Qualifications*

Endnotes:

<sup>1</sup> Available at: [http://www.nap.edu/catalog.php?record\\_id=12589](http://www.nap.edu/catalog.php?record_id=12589) last visited August 19, 2011.

<sup>2</sup> Charter of the Subcommittee on Forensic Science Committee on Science, National Science and Technology Council, § B, available at <http://www.whitehouse.gov/sites/default/files/microsites/ostp/forensic-science-subcommittee-charter.pdf> (last visited August 19, 2011).

<sup>3</sup> COMMITTEE ON IDENTIFYING THE NEEDS OF THE FORENSIC SCIENCES COMMUNITY, STRENGTHENING FORENSIC SCIENCE IN THE UNITED STATES, NATIONAL RESEARCH COUNCIL: A PATH FORWARD 172-3 (2009) (footnotes omitted).

<sup>4</sup> Charter of the Subcommittee on Forensic Science Committee on Science, supra note 1, at § B.

<sup>5</sup> Excerpts from the Charters for each Inter-agency Working Group of the Subcommittee on Forensic Science, available at: <http://www.forensicscience.gov/iwg.html> (last visited August 19, 2011).

<sup>6</sup> 754 F.Supp.2d 89.

<sup>7</sup> For more information, contact Terry-Dawn Hewitt at [TDHewitt@McKennaHewitt.com](mailto:TDHewitt@McKennaHewitt.com).