



D20 Ethics in Forensic Engineering: Examples of Malpractice

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Learning Overview: The goal of this presentation is to address some of the issues detailed by the 2009 NAS Report, as well discuss as improvements in the state of forensic engineering.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by highlighting examples of ethical lapses in the field and discuss the benefits and efficacy of various mechanisms to enforce and encourage ethical behavior.

Unsupported claims, selective choice of evidence, wild allegations, untested conclusions, and confrontational language are often encountered in our legal system. These are usually disseminated by parties to a lawsuit or their legal advocates. In an ideal world, experts are brought into these cases to be an independent and disinterested arbiter of these disputes. Their conclusions should be based on facts and sound science. Sometimes the world proves less than ideal, as forensic experts have been known to engage in some of the worst behaviors of their clients. These behaviors represent serious ethical breaches that are largely unenforced and untested in the forensic engineering community.

Several cases will be presented that highlight examples of unethical behavior by forensic engineers. The motivations are frequently derived from a quest for money. Contingency is expressly prohibited by the canons of ethics promulgated by professional engineering organizations. Still, the certainty of a large windfall, or the promise of future work, can entice an expert to push the boundaries. Those that pass up long-term dependability for short-term gain often find no longevity in forensic engineering. Still, there are those that maintain credibility based on their name or connections. As the examples will show, their ethics (or lack thereof) is not in question. However, what actions, if any, should be taken about it?

One school of thought is that the “free market will mete it out” and that “the cream will rise to the top.” Clichés notwithstanding, there is truth to this viewpoint. Attorneys, clients, and members of a jury may not be experts in matters pertinent to engineering, but many have a considerable basis of knowledge. These laymen serve as bulwarks against experts that engage in sophistry. Our legal system is based on the idea that each party can present its case to a judge or jury. Certainly, an honest and competent expert should be able to present a better case than an unethical competitor. In this world view, no additional enforcement actions would be needed.

Another viewpoint is that unethical behavior by one is a stain on all. While it may be entertaining or satisfying to malign poor performance and blatant deceit by a competitor, the profession, as a whole, suffers when forensic engineers are seen as advocates. Standards, professional organizations, and licensing boards provide some layer of protection. However, groups charged with writing standards have largely been rendered incapable of recommending best practices, much less enforcing ethical behaviors. In fact, there has been a concerted effort by certain groups to evade and disrupt the development of standards in forensic engineering. Politics and personal relationships may limit the efficacy of complaints to a licensing board. Some engineering licensing boards have begun to mandate courses in ethics as a part of the renewal process. Within the legal system, *Daubert* challenges and their offsprings may protect a jury against unethical opinions that violate scientific principles.

Twenty-five years after *Daubert*, the state of forensic engineering and science has not sufficiently improved. The adversarial nature of the legal system in the United states promulgates the misuse of the role of experts. Ten years after the NAS Report, we have seen no significant improvement in forensic engineering. It is time for change, which requires the assistance from the legal community and the court system in the United States.

Ethics, Forensic Engineering, NAS Report