



Whyte Hirschboeck Dudek S.C.

Challenging. Redefining. Advancing.

ASTM Standards and *Daubert*



Presented by

Dan La Fave

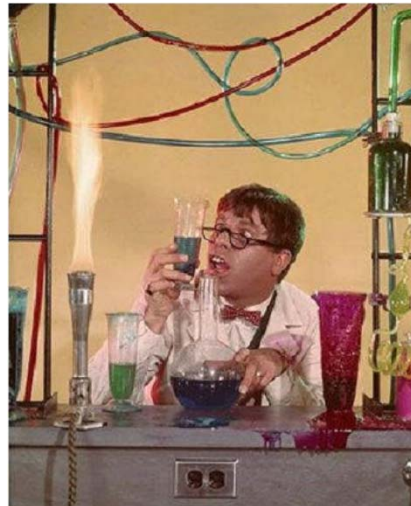
dlafave@whdlaw.com

January 11, 2012



Whyte Hirschboeck Dudek S.C.

Ever run into one of these?...




Whyte Hirschboeck Dudek SC

...and lament the seeming lack of established standards to combat such "nutty professors"?




Whyte Hirschboeck Dudek SC

Leading “Nutty Professor” Offenses

1. Failing to engage in any independent analysis (b/k/a “spoon fed” by sponsoring attorney), including, but not limited to:
 - (a) “assuming” nonsensical fact(s)
 - (b) ignoring inconsistent physical facts
 - (c) failing to address material points (e.g., fault of injured party)
2. Failing to consider testimony of all witnesses
3. Failing to consider documents produced in discovery, and/or other relevant evidence
4. Failing to conduct any tests
5. Failing to provide written report containing opinions and setting forth expert’s reasoning
6. Failing to consider critical opinions of other experts (a/k/a existing in echo chamber)



At Last, a Potential “Antidote” for Nutty Professors Has Arrived:

“Effective February 1, 2011, the legislature amended [Wis. Stat. § 907.02](#) to adopt the [Daubert v. Merrell Dow Pharmaceuticals, Inc.](#), 509 U.S. 579 (1993), reliability standard as stated in [Federal Rule of Evidence 702](#). See 2011 Wis. Act. 2, §§ 34m, 45(5); [State v. Kandutsch](#), 2011 WI 78, ¶1 26 n.7, 336 Wis.2d 478, 799 N.W.2d 865. The instant case was brought on June 22, 2005, and is therefore governed by the then-existing standard for admitting expert testimony.”

260 North 12th Street, LLC v. State of Wisconsin Dept. of Transportation, 2011 WI 103, ¶10 n. 10, 2011 WL 6413849 (Dec. 22, 2011)



In the absence of WI case law, what target should we be shooting at?

SUMNER v. JA-RU, INC. (S.D.Ill. 9-17-2010)

Daubert requires District Courts to perform a gate-keeping function as to evidence offered by expert witnesses, to "ensure the reliability and relevancy of expert testimony." *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 152 (1999). A District Court should consider certain criteria in deciding whether testimony satisfies **Daubert**, including these five nonexclusive guideposts: (1) whether the proffered testimony (or the theoretical framework or technique underlying it) is subject to verification through testing, (2) whether

Page 4

the testimony/technique has been subjected to peer review and publication, (3) what its known or potential rate of error is, (4) whether there are standards controlling its application, and (5) whether it is generally accepted within the relevant expert community. *Mihailovich v. Laatsch*, 359 F.3d 892, 918-19 (7th Cir.), cert. denied, 543 U.S. 926 (2004); *Deimer*, 58 F.3d at 344.

Whyte Hirschboeck Dudek SC

Coffey v. Dowling Mfg., Inc., 187 F. Supp.2d 958 (M.D. Tenn. 2002), *aff'd*, 89 Fed. Appx. 927 (6th Cir. 2003)

"Dr. Kinser's testimony shows that Dr. Wilson failed to comply with various American Society for Testing and Materials (ASTM) standards. Dr. Wilson is a member of ASTM, and recognized the authoritative nature of the ASTM standards. **His failure to comply with ASTM standards belies Dr. Wilson's claim that his theories are generally accepted.**"

187 F.Supp.2d at 978 (footnote omitted) (emphasis added)

Whyte Hirschboeck Dudek SC

The Omitted Footnote:

“Dr. Kinser testified that Dr. Wilson failed to comply with, for example, **ASTM E 1188-95** (Standard Practice for Collection and Preservation of Information and Physical Items by a Technical Advisor. Paragraph 4.1 counsels the expert to “obtain and preserve physical items as early as possible.”), **860-97** (“Standard Practice for Examining and Testing Items that are or may become Involved in Litigation), and **678-98** (Standard Practice for Evaluation of Technical Data”). 1/25/01 Trans., at p. 27.”

Coffey, 187 F. Supp.2d at 978 n. 11.



ASTM Committees With Generally Applicable Arrows for *Daubert* Quiver

- ASTM Committee E30 on Forensic Sciences
- and “maybe” ASTM Committee E58 on Forensic Engineering



The E30 Arsenal

1. **E620-11** Standard Practice for Reporting Opinions of Scientific or Technical Experts
2. **E678-07** Standard Practice for Evaluation of Technical Data
3. **E820-07** Practice for Evaluating and Testing Items that Are or May Become Involved in Litigation
4. **E1020-96(2006)** Practice for Reporting Incidents
5. **E1188-05** Practice for Collection and Preservation of Information and Physical Items by a Technical Investigator
6. **E2332-04** Standard Practice for Investigation and Analysis of Physical Failures



Designation: E620 – 11

Standard Practice for Reporting Opinions of Scientific or Technical Experts¹

- 3.1 – Significance and Use
 - “This practice establishes those elements of the expert’s opinion report which will make the report understandable to the intended recipient **and focus on the technical aspects** germane to the purpose for which the opinion is rendered.”
- 4.1 – No format specified
- 4.2 – Pertinent Facts
 - ALL facts pertinent to opinions to be included (4.2.1)
 - Evaluate facts and data per E678 (4.2.2)
- 4.3 – Opinions and Conclusions
 - ALL opinions related to expert’s retention to be included (4.3.1)
 - Report to contain expert’s “logic and reasoning”





Designation: E678 – 07

Standard Practice for Evaluation of Scientific or Technical Data¹

- 3.1 – “Persons engaged in forensic investigations are responsible for identifying significant data.”
- 5.1 – “The evaluation process is based on the information collected and is intended to determine the most logical and reasonable explanation of the incident, accounting for all significant data.”
- 6.1 – “Opinions or conclusions must account for all known relevant facts related to the incident and be consistent with accepted scientific and logical principles.”



Designation: E860 – 07

Standard Practice for Examining And Preparing Items That Are Or May Become Involved In Criminal or Civil Litigation¹

- 1.1 – Standard comes into play when examination or testing of evidence is required and **likely** to change its nature, state or condition
- 5.1 – Guidelines for examining evidence include:
 - 1) document nature, state and condition of evidence
 - 2) attempt to ID and document any post-incident alterations
- 5.2 – Action required before evidence altered includes:
 - 1) notify client
 - 2) recommend client notify interesting parties and give them opportunity to participate in testing/examination
 - 3) if compelling reasons exist for proceeding without third parties, document reason and





Designation: E1020 – 96 (Reapproved 2006)

Standard Practice for Reporting Incidents that May Involve Criminal or Civil Litigation¹

- 4.2 – “The data documented by the report shall be **factual** and not contain opinions, hypotheses, judgments, or conclusions, nor should this report fix blame.”
- 5 – Content. Incident report *should* contain:
 - 5.1.1 – Detailed chronological narrative
 - 5.1.2 – Photographs
 - 5.1.3 & .4 – ID of items and persons involved
 - 5.1.5 – Description of condition of items and any alterations
 - 5.1.6 – Info relative to evidence removed or intentionally left in place to preserve
 - 5.1.7 – Any additional info deemed “pertinent”
 - 5.1.8 – Data re writer of report, date report generated, etc.



Designation: E1100 – 06

Standard Practice for Collection and Preservation of Information and Physical Items by a Technical Investigator¹

- 4.1 – *Documentary Evidence:*
 - “Make a broad search . . .”
 - “Obtain statements as early as feasible from all individuals associated with the incident and recovery activity.”
- 4.3 – *Photographic Documentation:*
 - “Commence . . . as soon as possible after the incident.”
- 4.4 & 4.5 – Authentication and Chain of Custody Provisions





Designation: E2332 – 04

Standard Practice for
Investigation and Analysis of Physical Component Failures¹

- 1.1 & 4.1 – Standard addresses collection and analysis of all information and physical evidence related to component failure
- 5.3 – Analysis of Test Data
 - 5.3.1 – Evaluate technical data per E678 to facilitate:
 - 5.3.1.3 – “Identification/ Determination of component failure **primary cause(s) and significant contributing factors.**”



Whyte Hirschboeck Dudek S.C.

Introductory E58 Standard on “Forensic Engineering”

- A primer on the history behind the new E58 committee
 - “Because every incident is unique and because clues can lurk anywhere, forensic engineers rely on their experience, expertise and judgment as well as their ability to make credible sense of complex material, rather than a step-by-step prescriptive and procedural approach to determining causality.”
 - A. Bassett, *Forensic Engineering – Making the Case for a New Main Committee*, January/February 2009
http://www.astm.org/SNEWS/JF_2009/bassett_jf09.html
 - Formerly a sub-committee under Committee E30
- E2713-11 Standard Guide to Forensic Engineering
 - Approved in November of 2011 and published in December of 2011



Whyte Hirschboeck Dudek S.C.



Designation: E2713 – 11

Standard Guide to Forensic Engineering¹

5.2.1 The preliminary scope of an investigation is agreed upon by the engineer and court or client, and the scope may evolve as the investigation progresses. Legal issues may significantly affect the investigative scope. Regardless, engineers are not advocates for any particular party or outcome in a claim or legal action. The guiding principle is to use the knowledge imparted by their education, training and experience to conduct an investigation that results in considered, reasonable, defensible, and logically based opinions on the specifics of the incident.


Whyte Hirschboeck Dudek SC

E58 – A “standards” fig leaf for purported experts to hide behind?

5.2.4.1 *Breadth*—Knowledge of engineering principles forms the basis for effectively determining key issues to be analyzed and methods for analysis—in the context of the investigative scope of the case. Physical systems may have different elements that could be analyzed in a particular investigation; experience would show that analysis of many of these elements would provide information not relevant to the investigation. This is revealed in the prescriptive standardized analysis procedures of certain scientific and technical disciplines, which attempt to focus on relevant elements of predictably-behaving systems, and to analyze them in a consistent manner. When appropriate standardized procedures do not exist, engineers rely on their education, training, and experience to craft an investigative plan, sometimes under unique, transitory, or potentially adverse incident site conditions that may preclude testing and peer review


Whyte Hirschboeck Dudek SC

Sample Examination:
10/27/11 Deposition of Opposing Liability Expert in *Eschman v. 4Front Engineered Solutions, Inc.* (Mason Co. Michigan Cir. Ct.)

- Q We've talked about a number of standards, and one of the standards that we haven't talked about is, is there any standard that you attempted to comply with in doing your analysis on the case?
- A I generally try to comply with the -- there is a standard, you probably have got it in your hands, an ASTM standard for opinions of --
- Q Technical experts.
- A -- technical experts.
- Q And there is a related one for the standard practice for evaluation of scientific or technical data that is a companion to that, too, correct?
- A And there's also one for reports.
- Q Right. So let's mark those two.
(Exhibit No. 162 was.)
- BY MR. LAFAVE:
- Q Exhibit 162 is **E 620-11**. Is that one of the standards you were just referring to, Mr. Pacheco?
- A This is for reporting opinions, yes.



Sample Examination (Continued)

- Q Okay.
(Exhibit No. 163 was marked.) [E678-07]
- BY MR. LAFAVE:
- Q And what I've marked as Exhibit 163, is also tied in with that. In fact, there's a cross-reference to it. It talks about evaluating data as part of your analysis as a technical expert, correct?
- A Yes.
- Q If you flip to the second page of that, there's a section, and I've highlighted a portion of that. It's in Section 6. Quote, Opinions or conclusions must account for all known relevant facts related to the incident and be consistent with accepted scientific and logical principles, close quote. Correct?
- A Yes.
- Q That's something you try to do?
- A I do.



Don't forget to fill your *Daubert* quiver with other ASTM standards!

See, e.g., *Steinman v. Spinal Concepts, Inc.* (WDNY 9-22-2011) (available on Lois Law)

2. Ronald Parrington, P.E.

To support Steinman's contention that the product was defective, Steinman relies on the testimony of Ronald Parrington, a materials engineer specializing in failure analysis. Based on an examination of the metallurgical properties, and the frequency and spacing of stress marks in the screws, Parrington found that the screws withstood about 105,000 cycles, [fn7] or stresses, before failure. (Parrington Declaration ¶¶ 28-46; Docket 70.) Comparing this number to standards set out by the American Society for Testing and Materials ("ASTM"), he concluded that the screws suffered a premature failure.

Spinal Concepts does not dispute Parrington's qualifications regarding his expertise

Page 6

in materials engineering, rather it asserts that he is not qualified to present his opinion on this matter because he has no background in medical science.



Whyte Hirschboeck Dudek S.C.

War Story -

Wright v. Case Corp., 2006 U.S. Dist. LEXIS 7683 (N.D. Ga. 2006)

"There is no evidence that Jones was involved in any publications or in-depth studies involving loaders or similar machinery. In fact, Jones was not at all familiar with the mechanics of the loader until he became involved in this lawsuit. [n. 4] (*Id.* at 133.)

[n. 4] Jones has spent a significant part of his career operating a company that manufactured custom stairs and acting as a professional expert witness. (Jones Dep. at 43, 49, 63, 88.)"



Whyte Hirschboeck Dudek S.C.

War Story (continued)

Wright v. Case Corp., 2006 U.S. Dist. LEXIS 7683 (N.D. Ga. 2006)

[*10] Nor has Jones made a serious effort to gain expertise since plaintiff retained him as an expert. Even now, Jones' experience with loaders is limited to looking at the particular machine that plaintiff was using at the time of the accident. (Jones Dep. at 94.) Jones has not compared different loader designs or different manufacturers' products. (Id. at 94, 134.) Although he reviewed a prior accident report involving the Model 1835B Case loader, Jones does not know whether the Model 1835B is substantially similar to the Model 1840 at issue in this case. (Id. at 101.) He does not remember how much time he spent reviewing standards applicable to this particular machine, but he concedes that he is not aware of the most current version of those standards. (Id. at 173, 189, 190.)

As is apparent from his deposition testimony, Jones' engineering degree does not provide the knowledge that would enable him to competently provide expert testimony about the machinery at issue in this case. Given his lack of experience-or even familiarity-with the type of machine involved in plaintiff's accident, Jones is not qualified as an expert, and defendant's motion to exclude his testimony should [*11] be granted.



Questions?

