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ONE ENGINEER'S OPINION
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THE CASE AGAINST "CREATIVITY"

From time to time, an attorney for whom I am working says something to me along the lines of "Now I'd like you to be a little creative on this one..." When that happens, it tends to put me on edge. Somehow, I don't see that as my role. Furthermore, in most cases, the subtext seems to be more like, "Now I'd like you take a few liberties here...."

To me, the case against such "creativity" begins with the reality that the scenarios that I propose and the opinions that I arrive at must comply with the laws of physics. Unlike man-made laws, the laws of physics don't vary from state to state. Nor do they change from time to time. Furthermore, they don't conflict with each other. The laws of physics serve as an ultimate arbiter of an engineer's work and of his or her opinions.

A second constraint on "creativity" is that I must deal with the available evidence in any given case. Primarily, I rely on physical evidence. Sometimes, however, testimonial evidence plays a part as well. While interpretations of the evidence (of both forms) must often be made, the body of evidence often imposes substantial constraints on the opinions that can be obtained. In extreme cases, lack of evidence

or conflict in the available evidence makes it impossible to arrive at any opinions at all.

A third constraint is the need for a reasonable degree of certainty in my opinions. This of course is a legal construct, but the basic premise is clear. My opinions must deal not with what is "possible" or even what is "generally consistent" with the available evidence. My opinions must be solid. This sometimes involves fine and difficult judgments as to how much evidence is necessary to make something reasonably certain. I have found that experience helps a great deal. With respect to "reasonable certainty" it may be best to defer to Justice Potter Stewart in his assessment of pornography, "I may not be able to define it, but I know it when I see it."

The end result of a healthy respect for the laws of physics, physical evidence and the necessary degree of certainty is, ultimately, credibility. This, in my opinion, is the crucial factor in any courtroom appearance. Taking a longer view, engineers and other experts who lose their credibility might just as well retire or find some other line of work. I'll take credibility over "creativity" any day of the week.