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Mr. Bloch is the author of over 300 technical papers or similar publications. His 14 comprehensive books and a searchable CD-ROM on practical machinery management include texts on failure analysis, failure avoidance, compressors, steam turbines, oil mist lubrication and practical lubrication for industrial facilities. These groundbreaking books have been used for reliability improvement lectures and maintenance cost reduction consulting worldwide. In addition, Mr. Bloch holds five U.S. and many international patents relating to high-speed machinery improvements.

Mr. Bloch graduated from the New Jersey Institute of Technology with B.S. and M.S. degrees (Cum Laude) in Mechanical Engineering. He was elected to three National Honor Societies, is an ASME Fellow, and maintains registration as a Professional Engineer in New Jersey and Texas. Mr. Bloch is the Reliability/ Equipment Editor of the monthly publication Hydrocarbon Processing.

Unreliability, Engineers, and Lawyers

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Unreliability, Engineers, and Lawyers

On a number of occasions, I have engaged in litigation support. To me, litigation support is a term that conveys that we might occasionally choose to work for law firms that pay engineers to relate how and why machines function and/or malfunction. While that's my obligation, it's fair to assume the obligation of a law firm is to serve its clients and to make money for the firm. Just to be clear, I consider it my obligation to be only an advocate of the truth and not to be turned into an advocate of either litigant.

Generally speaking, 50% of the lawyers make one claim, the other 50% make some other claim. That's the basis of the adversarial legal system and it's not my place to critique it here. Unfortunately, engineering "experts" sometimes become advocates, and that's not good. Don't get me wrong, I like to get paid for my work, but I decline getting involved with someone who doesn't want me to say it as I see it, or who argues about the validity of the basic laws of physics.

Let's suppose you, too, agreed not to compromise your integrity. You accepted work from the side that allows you to be truthful and to divulge your expertise in a forthright and candid fashion. Well, you might still have to sit across from the opposing side during a deposition. To be deposed no longer has the same meaning it had in the original English where the term meant that someone was sent into exile. Today, being deposed means that one is asked to give answers under oath. The folks that question you may have an agenda that we can't even allude to without risk being sued for slander.

An opposing attorney may want to establish the inadequacies of your work background or performance. Specific questions relating to the expert's education, experience, publications, experience, lectures, prior involvement with law firms, compensation and the like. Even a person's accent was brought in on one occasion.

The questioning attorney will try to freeze the expert into certain positions on all relevant facets of a case and then explore the adequacies or inadequacies of the experts investigations, the correctness of assumptions, the titles of books and articles consulted, and so forth. Much time is spent on obtaining concessions from the expert and if he's ever trapped in a contradiction, the questioning attorney may ask to have him impeached---dismissed from the case.

Surviving a deposition

I really don't want to get into the utterly absurd statements that I've heard while sitting in on engineers giving depositions. Suffice it to say that I've seen more than one engineering "expert" come up with absurd claims; one even signed an affidavit that simply didn't represent the facts of the case. When his naivety was quickly exposed by opposing counsel, the embarrassed engineer squirmed. All present in the room perceived the ethics of the engineering profession to have moved down another notch. On that day I decided to jot down my thoughts on how engineers can survive a deposition without compromising their integrity.

- 1. Stick to the truth. Your attorney knows your findings and your sentiments. If he does not like them, he should not have you sitting there being deposed.
- 2. Listen to the question. Make sure that you understand it. When in doubt, ask the court reporter to read it back to you.
- 3. Again, listen to the question! Occasionally, there may be a bit of trickiness or a potential trap in the questioner's phrasing. Ask the attorney to rephrase the question, but do not let him/her use questions to rephrase your answer.
- 4. Answer the question. If need be, slow down, think it through. Always listen to the question in full before

- giving your answer.
- 5. Do not volunteer information and do not be "routinely helpful". By the same token, do not allow inad vertent misconceptions to prevail if these would affect your integrity and professionalism.
- 6. If you would like to take a break, ask for one. Do not talk with the opposing counsel during coffee breaks. You also cannot confer with your attorney during breaks.
- 7. It is quite proper to answer "I do not know," assuming, of course, that is the truth. If indeed you do not remember, say so without any reluctance.
- 8. Listen to your attorney's objections. They could serve one or more of the following purposes: (1) he/she could be making a legal point; (2) he/she could be "sending you a signal" (body language, perhaps); or (3) he/she may want to break the questioner's stride.
- 9. Realize that the questioning attorney's statement "non-responsive" generally means that he or she did not like your answer, no more, no less.
- 10. Include themes or underlying thoughts in your answer if you have to redirect the deposition toward important points which the prevailing line of questioning might not allow you to make otherwise. Make you answer "unreadable at trial" by inserting your expert knowledge in this fashion.
- 11. If you are being interrupted, complete your answer. Remember that you have the right to fully answer the question and that you are never restricted to "yes" or "no" replies if doing so would put a spin on the truth.
- 12. Answer repetitive questions consistently and truthfully.
- 13. Remember the real purpose of the deposition is to allow you to clearly state your expert opinion with in the basic framework of the question and answer format deemed appropriate by our legal system. The purpose is not to let you give this opinion without structure, or to convince lawyers, or to score points, or to vent frustration.
- 14. Avoid mistakes and inconsistencies which could damage your credibility at trial and your reputation overall.
- 15. Display proper posture and positive voice.
- 16. Do not let past questions worry you. Perfection is impossible. Your goal should be excellence.
- 17. Do not be concerned with upcoming questions.
- 18. Do not proffer a guess. Only tell what you know, no more, no less.
- 19. When shown a document, read the entire document.
- 20. Tell the truth. Stick to the truth.

The human factor

Remember that machines fail for a reason. Without a single exception, the reasons are always traceable to decisions, commissions, omissions or whatever prompted a worker, manager, supervisor or chief executive officer to

xercise judgment or to perhaps decline the use of judgment. For your part, resolve to get involved in litiga upport only in causes and subjects that you have mastered. Above all, be convinced that sticking to the truth ever fail you, but becoming an advocate of anything other than the truth may cause serious grief.	ation 1 will