

Chair's Comments

CHECK OUT OUR ASK THE EXPERTS WEBINARS

BY CHRISTOPHER WILSON



Since the publishing of our last issue, the Alliance of IEEE Consultants' Networks Coordinating Committee (AICNCC) has held two *Ask the Experts* webinars. Between both webinars, more than 1,500 members have viewed these presentations. If you have not done so, take a moment to check them out. In these webinars, six experts give their opinions on a variety of topics related to consulting and

entrepreneurship. These presentations are great resources, and worth a listen.

In addition to those webinars, the AICNCC also presented, *What Do the Best Consultants Do To Get Clients*. Our friend, Laura Burford, gave a great presentation on different methods consultants can employ to find clients. She will be returning to IEEE-USA in the fall to do another webinar, on how consultants set their fees. Check out the [IEEE-USA Webinar page](#) to register for that presentation. ■



BEWARE THE RISKS OF RECORDED CONVERSATIONS

BY JAMES R. JACOBSEN

As an IEEE member, you have access to the IEEE Member Group Insurance Program, administered by Mercer. For consultants who need both personal and professional types of coverage, the Program offers the advantages of group insurance rates and the convenience of many online, policyholder services. Whether you are beginning the life of a sole practitioner, or have an established practice, you want the peace of mind that comes from the support of reliable insurance brokers, subject matter experts and top-notch insurance products.

In 2021, Mercer is sponsoring quarterly articles for AICN that review facets of risk management for a professional practice. "Beware the Risks of Recorded Conversations," by Colleen M. Palmer, Esq., is the second article in the series. Palmer is at Beazley, one of the professional liability insurance carriers providing coverage in the IEEE Member Group Insurance Program. Her article is chock full of best practices and insight from three attorneys, all with extensive experience representing design professionals.

Some of the key insights include the following:

- Advanced communication platforms allow consultants to conduct business, while maintaining appropriate social distancing.

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- Much like written documents, professionals should be mindful that the recordings of meetings are discoverable in a litigation situation, so they should weigh the risk with the desired reward of recording the session.
- Privacy issues may pose a challenge, and may arise when recording meetings.
- In recent discussions with three attorneys with extensive experience representing design professionals,

the attorneys unanimously agreed that recording meetings and conversations poses significant risk.

- The numerous communication tools available to design professionals should be used carefully. While technology is valuable in facilitating communication in an era where in-person meetings are not possible, or are impractical, design professionals should proceed cautiously. ■

>> [Read the full article](#)

>> [Learn more about professional liability insurance](#)



AICNCC WELCOMES NEW AFFINITY GROUP IN PHOENIX

The Alliance of IEEE Consultants Networks Coordinating Committee (AICNCC) congratulates Michael Andrews, on forming the IEEE Phoenix Section Consultants Network Affinity Group. The new Phoenix Consultants Network became official on 14 June 2021. To give a personal welcome to any new network, check out the consultants page on IEEE-USA's website for contact information. IEEE-USA also offers step-by-step

instructions about how to start a formal network. We encourage new consultants networks to register as Affinity Groups. After a group forms a network, it can take advantage of IEEE's branding and resources, and qualify for funding through IEEE Section rebates. If you don't see your consultants network's contact information listed on the IEEE-USA website, contact Daryll Griffin at d.r.griffin@ieee.org. ■



PRO ACT REMAINS IN SENATE

BY RUSSELL HARRISON

Three months after passing the House of Representatives, S. 420, the *PRO Act*, has not come up for debate. In fact, it does not appear that the Senate has done any work on the bill at all. However, that could change quickly. Senate Majority Leader Chuck Schumer (N.Y.) has promised a vote on the bill as soon as all 50 Senate democrats sign on as cosponsors. As of early June, 47 have done so.

It is not clear if the *PRO Act* can pass the Senate, even if it comes up for a vote. Senate filibuster rules would require 60 votes for the bill to pass. No Republican has publicly expressed support for the bill, although a few Republicans did vote for the Act in the House.

Still, the *PRO Act* is of concern, as long as it is alive in the Senate. S. 420 is, primarily, a union bill. It is focused on making it easier for unions to organize workforces, including a repeal of right-to-work laws across the country. IEEE-USA has no position on these provisions.

IEEE-USA does have concerns about the ABC Test. Used to determine if a given person is an independent contractor, or an employee, the ABC Test has caused problems for IEEE members in California, and other states where it is used. Because the test is too narrow, it has incorrectly defined technology consultants as employees, resulting in companies refusing to hire technology consultants. Some software companies in California, for example, have stopped hiring independent programmers in the United States. Those companies have, instead, moved that work to India, which has no ABC Test.

The primary problem is the “B” part of the ABC Test (although “C” is also a concern.) The “B” criteria say to qualify as a consultant, an individual must do work that is “outside of the usual course of the hiring entity’s business.” In other words, if a consultant is doing work that is like work being done by an employee, then the consultant is really an employee.

Further, it means that companies employing programmers cannot hire consultants to produce computer programs, because programming is part of the companies’ usual course of business.

In each of the 13 states that use a version of the ABC Test, additional rules granting exemptions from the law to certain classes of consultants accompany the test. For example, many states exempt business from the ABC Test, even if the business is just one person. In these states, incorporating or building some other legal shell around your consulting work would be sufficient to get around the limitations of the ABC Test.

The *PRO Act* has no exemptions. Based on numerous discussions between IEEE-USA staff and congressional staff, it appears as though Senate leaders are unwilling to consider amending the bill to add exemptions. Their fear is that, if amendments are granted to help one type of consultant, all the other consultants will want their own exemptions, leading to a mess. This situation is more or less what happened in California, after it adopted the ABC Test in 2018. The House of Representatives refused attempts to amend the bill earlier this year.

Should the *PRO Act* pass as written, technology consultants would be subject to the full ABC Test in all 50 states. It is unclear exactly how many technology consultants the Act would affect. However, based on the experiences of IEEE members in California, it is likely that a sizable percentage of current technology consultants in the United States would no longer be able to be independent, under the law.

IEEE-USA will continue to work with congressional leaders to fix the *PRO Act* and we will continue to monitor the bill should it start to move. Direct your questions about the *PRO Act* to IEEE-USA’s Director of Government Relations, Russell Harrison, at r.t.harrison@ieee.org. ■



WAR STORIES #9: CAN YOU BE AN EXPERT WITNESS?

BY LARRY G. NELSON, P.E.

If you are a subject matter expert, you may want to look at doing expert witness work. Consultants have many opportunities to do expert witness work. The most familiar opportunity involves working with legal professionals, as a subject matter expert. I have done this type of work; and in some cases, it can result in doing depositions, even testimony, in court. In many cases, once you examine all the evidence, you can present a theory on what happened. Then, the lawyers hold settlement talks, often closing the case early.

Insurance Investigations

Various insurance companies have retained me to examine damaged electronics, to determine repair strategies versus replacement. In some cases, damaged equipment was old and no longer made, which resulted in evaluating alternatives. How can the problem be solved today with currently available equipment, instead of repairing or replacing the custom-built equipment from 10 years ago?

The insurance company needed an expert to determine the root cause of the equipment failure damage claims; then, work with them to recover damages from the equipment manufacturer. These types of cases can involve a wide variety of equipment needing a wide variety of expertise. I have been involved in cases involving freezers, dehumidifiers, battery chargers, computers, fish tank heaters, temperature controllers, coating machines, wheelchairs, church organs, and store displays — to name just a few. These cases also can involve injuries, property damage, business losses, or a combination of any of these situations.

Estimating Damages

Sometimes, I have had to investigate equipment that was exposed to smoke or water in a fire. The expert can help the insurance company decide what can be repaired and what should be replaced. For older equipment — can current equipment replace it; or would that be more expensive than buying older equipment from surplus equipment dealers?

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I even experienced one company that piled everything in the lab together, claiming it all needed to be replaced. In that case, they piled two cases of expensive thermal paper with everything else; however, during my investigation, I found out they had discarded the thermal printer months earlier, when it failed — but never discarded the paper.

In one particular case of a custom test system, technology had progressed such that the company could now buy an off-the-shelf test system cheaper, and with more capabilities, than the original system a fire had destroyed.

Determining Suitability of a Design or Implementation

In some circumstances, a design is not suitable for use. It may be designed without sufficient margins; or not properly using the components to insure their proper functions. Or the design may simply be poor. Sometimes the results are unsafe and should never be used.

An expert may determine a design is adequate, but the implementation is bad. Cases of poor workmanship in assembling electronics boards results in product failure over time. In one case, a power supply was not as labeled or presented, and it was not safe for use in the intended application. In addition, the workmanship was so poor, I found solder balls on the circuit board large enough to short between the IC pins — possibly resulting in a fire or explosion.

I have also seen instances where the testing process will not ensure the product was built properly, or even functional. These failures often occur in consumer products, where the testing is done on only a few samples from the product lot. While this process can be acceptable, it must be implemented properly

to be effective. The manufacturing process needs consistency and repeatability for sample testing to make any sense.

P.E. Licenses

Do you have a Professional Engineer (P.E.) license? The P.E. credential is great, when it is time to prove you are a credible expert. It is not required to serve as an expert, but will go a long way in making sure you are not disqualified. In one case, the trial judge asked me if I had a P.E. license. I replied I was licensed in Massachusetts. Then, he asked me if I felt qualified to render an opinion on the matters before the court. I replied I believed I was; and he said that was good enough for him. In previous cases, prior to being licensed I had to spend an hour reviewing my education and experience before being deemed acceptable.

Conclusion

Doing expert witness work can be very rewarding, and a great addition to your practice. I do suggest you do not allow it to become the sole arm of your consulting business; rather, use it as a diversification. It works best this way, because you are less likely to give the perception of being a “hired gun” expert. It shows you are continuously learning and practicing in your field, and serving as an expert when called upon. Remember: As an expert, while you were hired by one side, you are presenting the facts and your conclusions based on scientific principles. Sometimes you will have conclusions that are not what your client is looking for. You must always be truthful. Never change your opinion — unless the facts support the conclusion. People/companies are not paying you to testify — but you are being paid for your time, to analyze the facts, and provide your opinions. ■

IEEE ENTREPRENEURSHIP

From the IEEE-USA AICNCC's first *Ask the Experts* webinar in March, we have received many questions that are entrepreneurial in nature. For consultants wanting to pursue entrepreneurial goals, we want to let you know IEEE offers additional resources. The [IEEE Entrepreneurship](#) mission is to provide resources and services to foster entrepreneurial engineering and technological innovation, for the benefit of humanity. You may [subscribe to their newsletter](#) and join the [IEEE Collabratec Entrepreneurship Exchange](#). ■

