

## New Chair of the AICNCC

# CHRISTOPHER WILSON TAKES THE REINS OF THE ALLIANCE OF IEEE CONSULTANTS' NETWORKS COORDINATING COMMITTEE (AICNCC); MENTORING'S AT THE TOP OF HIS AGENDA



Educating young people that consulting is a career option is a top priority for the new chair of the Alliance of IEEE Consultants' Networks Coordinating Committee (AICNCC), Christopher Wilson. "This is a new type of outreach for this committee, but with some creative thinking, this

committee can play a part in providing young engineers a perspective on a career in consulting," said Wilson.

Wilson is an expert in automotive sensors, safety systems, information processing, and accident causation and analysis. He

has been consulting for the past eight years. Wilson is also the current chair of the [IEEE Consultants Network of Silicon Valley](#), so he will be pulling double duty, leading both groups.

In addition, to mentoring for young professionals, Wilson wants to continue the work of past chairs, to help revitalize dormant consultants' networks. He would also like to focus efforts in urban areas, such as Atlanta and St. Louis. Wilson also wants to let consultants know that services, such as our quarterly newsletter, and annual Consultants Fee Survey Report will continue to be a reliable asset for IEEE consultant members. ■



## RISK MANAGEMENT TIPS

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 a reliable insurance broker, 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. "[New Year Risk Management Refresher](#)," by Colleen M. Palmer, Esq. kicks off the series. Ms. 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 she has gleaned from her experience with technologists' contracts and claims. Some of her key insights include the following:

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◀ “Risk Management Tips” Continued from previous page

- State your scope of services with detail and clarity: Your scope of services should be well defined and clearly detail what services constitute basic, additional, and (to the extent known) excluded services.
- Give news to the client timely: Keep the client informed of the progress of the project and, at a minimum, comply with contractual obligations to provide status reports.
- Establish and follow a document retention policy: Have a formal, written policy that addresses how long to keep each type of document, including electronic documents. A well-documented project file may help avoid claims and provide legal defenses in the event of a claim situation.
- Examine your insurance policy: Have the types and limits of insurance required by law and your professional

services agreement. Pay careful attention to how long your contract requires you to maintain the policies and if you are required to maintain the full limits of insurance, even if a claim impacts the amount of insurance available. Professional liability insurance is a depleting limits policy; therefore, if a claim unrelated to the project diminishes the available insurance, but your contract requires you to maintain full limits, you would be required to purchase additional insurance to satisfy your contract. Require any consultants you retain to have appropriate insurance policies in place, including professional liability insurance.

**Read the full article below.**

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



## NEW YEAR RISK MANAGEMENT REFRESHER

BY COLLEEN M. PALMER, ESQ.

Happy New Year! It's time to get your risk management house in order, and ensure your firm is embracing sound risk management practices. With that in mind, we offer some key tips to help you manage risk on projects.

Stress the importance of risk management in your firm culture: successful engineering firms that consistently have superior

claims history, as compared to their peers, have robust risk management programs that all employees embrace. Corporate leaders embed an effective program into the company culture, and emphasize risk management as a priority. Successful firms are not necessarily completely risk averse, but they carefully assess the risks vs. reward balances for all their projects and clients.

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**Evaluate clients and projects carefully:** Despite the excitement and potential associated with new projects, it is critical to assess the clients and the projects objectively. Some project types (e.g., residential and, specifically, condominiums) and some clients (e.g., developers, private owners and public entities that often refuse to modify their contracts) are inherently risky or difficult. Use a formalized “go/no-go” process to evaluate the potential risk and reward for each project.

**Assure your firm is prepared:** Before you proceed with any project, confirm you have the proper skill set and necessary manpower. Problems may arise, if your staff is stretched too thin to devote the appropriate resources, or if inexperienced staff takes on services without the necessary knowledge and experience. Insufficient time to dedicate to a project, and/or lack of knowledge, increase the chances of technical errors--which, in turn, increases the chances of claims. If you anticipate the need to retain consultants, discuss the plan with your client. Ensure your contract allows you to retain them, as necessary.

**State your scope of services with detail and clarity:** You should well define your scope of services. It should clearly detail what services constitute basic, additional and (to the extent known) excluded services. Do not incorporate the client’s request for proposal, or your proposal. It will help avoid the possibility of conflicting language that could lead to disagreement regarding your required scope.

**Offer and seek mentoring opportunities:** Have a formalized process to ensure junior staff is receiving guidance from senior practitioners. The best mentoring is a two-way street: junior staff should take the initiative to seek input from senior staff, when necessary; and senior staff should carve out time to regularly consult and discuss issues. Mentoring reinforces firm processes and culture. It helps new professionals develop the “soft skills” necessary to communicate with clients, design team and construction team members.

**Negotiate your contract:** Have a written, executed agreement prior to performing services on every project. In addition to defining the parties’ responsibilities and rights, the negotiation process lets you assess and manage the client’s expectations—as well as educate the client regarding your customary role and value of services.

**Scrutinize lender documents:** With greater frequency, design professionals are being asked to sign lender documents, such

as consent to assign your contract and certifications. Such documents vary widely, but the key point is you should not give the lending institution greater rights than your client had; or assume obligations that you did not have, in your contract. Pay particular attention to language granting broad rights to the lender to own and use your work product; and requests for you to certify your services comply with all laws, or the contractor’s guarantee work.

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## **Give news to the client in a timely manner: Keep the client informed of the project’s progress.**

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**Give news to the client in a timely manner:** Keep the client informed of the project’s progress. At a minimum, comply with contractual obligations to provide status reports. If you must deliver a disappointing update, offer recommendations and discuss client concerns. A proactive design professional, armed with a possible solution, can help avoid client disappointment--and manage client expectations going forward.

**Report claims:** Contact your professional liability insurance broker as soon as you are aware of a claim, or issues that may lead to a claim. Failing to report a claim or circumstance as soon as possible, could affect available coverage under your policy. Err on the side of caution, if there is any doubt as to whether you should report an issue.

**Establish and follow a document retention policy:** Have a formal, written policy that addresses how long to keep each type of document, including electronic documents. A well-documented project file may help avoid claims, and provide legal defenses, in the event of a claim situation. Generally, you should retain documents not kept permanently for the longer of 10 years after substantial project completion; or the applicable Statute of Repose, or any longer period specified in your professional services agreement.

**Examine your insurance policy:** Have the types and limits of insurance required by law and your professional services agreement. Pay careful attention to how long your contract requires

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you to maintain the policies; and if you are required to maintain the full limits of insurance, even if a claim affects the amount of insurance available. Professional liability insurance is a depleting limits policy; therefore, if a claim unrelated to the project diminishes the available insurance—but your contract requires you to maintain full limits—you would be required to purchase additional insurance to satisfy your contract. Require any consultants you retain to have appropriate insurance policies in place, including professional liability insurance.

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## **Trust your instincts: Far too often, design professionals involved in a claim “knew they shouldn’t have taken the project”; but they decided to proceed, despite their reservations.**

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Trust your instincts: Far too often, design professionals involved in a claim “knew they shouldn’t have taken the project”; but they decided to proceed, despite their reservations. Do not ignore your instincts. If your research of a potential project or client gives you a bad “gut feeling,” carefully consider whether to proceed—or walk away. If you take the project, ensure you have negotiated your contract appropriately, with protections (such as limitation of liability and waiver of consequential damages provisions), and that you vigorously document the project.

Investigate your jurisdiction: Have an understanding of the jurisdictions in which you practice. States vary as to how they treat various contract provisions (e.g., the enforceability of limitation of liability provisions and indemnity obligations). In addition to contractual issues, the location may present unique issues, with respect to sub-surface conditions; or climate that may be regulated by applicable codes and regulations, of which you must be aware.

Never admit liability to your client: Even if it is obvious you made a mistake on a project, do not admit liability. Mistakes do not

necessarily equate to legal liability; and admissions may resurface in litigation, as evidence against you. Under common law (and hopefully in an appropriately drafted standard of care provision in your contract), you are required only to perform in a manner consistent with the generally accepted professional standard of care ordinarily exercised by reasonably prudent professionals. Since you are not required to perform perfectly, the existence of an error or omission in your services does not necessarily mean you breached the standard of care. Rather than conceding liability, tell the client you will investigate the issue, report the matter to the appropriate person in your firm, and contact your professional liability insurance broker to develop a plan to further handle the matter.

Give back, but do so wisely: If your firm provides pro-bono services, employ the same client and project selection evaluation as you would when considering for-profit projects. Have a written, executed contract that clearly details your scope of services and includes appropriate standard of care language and protections, such as a broad indemnity in your favor, limitation of liability, and waiver of consequential damages.

Stay out of jobsite safety issues: Design professionals are not responsible for jobsite safety. Delete any contract language suggesting otherwise; add language explicitly disclaiming responsibility for jobsite safety programs and precautions, since such responsibility lies solely with the contractor. If you see an obvious and dangerous condition that threatens life safety, alert the person in charge of the jobsite about the condition, but stick to the facts. Do not provide any recommendation regarding remedying the condition. Follow up with written communication reporting your observation; but do not make any recommendations, and do not check to see if the condition has been corrected.

You can access all issues of the *Beazley A&E Reporter* on its A&E Risk Management website at <http://www.beazley.com/aeriskinfo>. The Beazley Group prepares and edits the *Beazley A&E Reporter*. The opinions of the authors are solely those of the authors. The Beazley Group publishes and distributes the *Beazley A&E Reporter* with the understanding that neither it, nor the editors or authors, is responsible for inaccurate information. The information set forth in the *Beazley A&E Reporter* should not be construed or relied upon as legal advice; and it is not intended as a substitute for consultation with counsel. ■

## START A LOCAL IEEE CONSULTANTS NETWORK IN YOUR SECTION

In 2020, the [Alliance of IEEE Consultants' Network Coordinating Committee \(AICNCC\)](#) prioritized the effort to start new local consultants networks. To jump-start this effort, the AICNCC created a series of webinars that members can use, as a roadmap to start a local network. The webinars provide content and resources for networks just starting out.

The first webinar in this special new series, "[How to Start a Local IEEE Consultants Network](#)," is by Gary Blank, 2015 IEEE-USA President. The title speaks for itself. This webinar provides a roadmap for members on how to start a local network in their Sections. In addition, the AICNCC also offers, "[Guide to Starting a Local Consultants Network](#)," on the [IEEE-USA website](#).

The second webinar, "[Life of a Consultant](#)," is by long-time AICNCC member, Larry Nelson. Healthy local networks need a good mix of experienced consultants, and consultants just starting out. This webinar is designed to bring in younger consultants, by outlining what independent consultants need to know to be successful.

The third webinar is, "[Professional & Forensic Engineering and Expert Witness Career Progression](#)," by Robert Peruzzi a recently new AICNCC member. This webinar serves to provide content to more experienced consultants, who may be looking to expand their practices by adding expert witnessing to their portfolios.



This special series closed with a webinar that would interest all consultants. In, "[Highlights from the 2020 IEEE-USA Consultants Fee Survey Report](#)," the author presents key findings from the report. The most important feature of this annual IEEE-USA report is always the average hourly rate for consultants—and the author does discuss that topic in this presentation.

Now the AICNCC needs you! We need consultant champions, in Sections without local consultants networks, to take on this challenge—and spearhead this effort to continue starting local consultants networks. We want these champions to use this virtual environment to kick off your network. And after the pandemic—when things return to normal—your new network will have an established group, ready and in place for in-person networking. ■

## SHOULD CONSULTANTS CONSIDER ADDING A TRAINING COMPONENT TO THEIR CONSULTING PRACTICES?

Daryl Gerke, member of the Alliance of IEEE Consultants' Networks Coordinating Committee (AICNCC), and a consultant with his own consulting information website, "[Jump to Consulting](#)," addresses this issue in one of his most recent blog posts. In "[How We made 15+ Million by Adding Training to Consulting...](#)," he starts by saying: "**For over 25 years, training was an important part of our consulting business.** Financially rewarding, too. But I must confess we didn't plan it that way..." To read the rest of Daryl's story, plus almost 300 other blog postings addressing the consulting profession, go to his [website](#). ■

## 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](#)

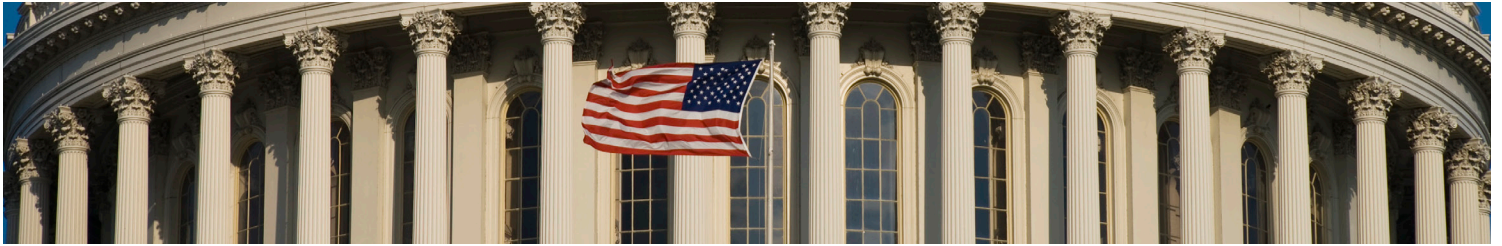
>> [Learn more about professional liability insurance](#)



## 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](mailto: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](mailto: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](#). ■



## Chair's Comments

# ON THE ROAD AGAIN

BY CHRISTOPHER WILSON



On 23 October, the Alliance of IEEE Consultants' Networks Coordinating Committee (AICNCC) hit the road — to do an in-person training at the University of Minnesota in Minneapolis! The AICNCC partnered with the IEEE Twin Cities Consultant's Network on this successful half-day event. If there

are other local consultant networks looking to partner with the AICNCC on a half or full-day workshop please contact Daryll Griffin, [d.r.griffin@ieee.org](mailto:d.r.griffin@ieee.org).

Additionally, we've recently released our [2021 IEEE-USA Consultants Fee Survey Report](#). IEEE-USA produces this annual report to provide a basic profile of an IEEE independent consultant. For 2021, the Report had 1,329 respondents who participated in the survey (response rate = 10%). All findings in this report represent only those respondents who were identified as self-employed consultants—defined as the 595 individuals who indicated that 50%, or more, of their personal earned income in the

calendar year 2020 came from fee-based consulting. The report provides information on where consultants are finding clients, top business areas for consultants and median hourly rate for consultants. If you didn't participate and are not receiving a free copy — please consider purchasing the report. It can be a vital resource for your consulting practice.

Last but not least, I want to encourage those subscribers to the [IEEE Consultants Network Membership Premium](#) (i.e., subscribers to the IEEE-USA Consultant Finder) to renew their subscription today. IEEE-USA has provided this resource to IEEE members for more than 10 years; and we believe it is vital in helping clients find you. There are an abundance of free resources to market yourself; however, people will go to this resource, when looking for specific electrical engineering expertise. Plus, you want to be listed in all places where clients go to look for consultants. So again, subscribers, please renew your subscription. And consultants who have not subscribed to this vital service please [subscribe](#) during this membership renewal cycle. ■

## IEEE-USA CONSULTANTS FEE SURVEY REPORT - 2021 EDITION NOW AVAILABLE

All findings in this report represent only those IEEE members who identified themselves as self-employed consultants. For purposes of this survey, such participants are defined as the 595 individuals who indicated 50 percent, or more, of their consulting income came from working independently, with partners, or incorporated. The information provided is critical for consultants' success — such as a general profile of an IEEE consultant; top areas of consultant services; and most importantly, the median hourly rate consultants charge. This Report is one of a kind, and we believe each annual publication should be in the library of all IEEE independent consultants. Purchase the *IEEE-USA Consultants Fee Survey Report - 2021 Edition* today! Available now from the IEEE-USA Shop: <https://ieeeusa.org/shop/careers/compensation/ieee-usa-consultants-fee-survey-report-2021-edition/>



For questions, comments or submissions please contact Daryll Griffin at +1 202 530 8337 or [d.r.griffin@ieee.org](mailto:d.r.griffin@ieee.org).  
<https://ieeeusa.org/careers/consultants/>

**IEEE★USA**

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## NEW PHOENIX CHAPTER APPROVED!

It's official! IEEE has approved the formation of the AICN–Phoenix Chapter.

AICN-Phoenix currently has more than 60 members representing a significant cross-section of IEEE fields of interest. We have had one formation meeting. Our current immediate plans include:

Formalizing our chapter vision and goals

1. Aligning the AICN Chapter goals with individual members' aspirations
2. Selecting Chapter leadership
3. Developing an Action Plan that includes:
  - a. Leadership meeting plan
  - b. An Outreach plan that includes integrated messaging through a web site and social media channels
  - c. Overall work and roll-out activities
  - d. Relationships with other Phoenix chapters (TEMS, SSIT, YP, WIE, etc.)

- e. Leveraging other IEEE resources that will make the Chapter a destination point for other members

Currently, we are working with the Technology and Engineering Management Society (TEMS) – Phoenix Chapter to include our members in the TEMS meetings. AICN-Phoenix members have attended presentations by John Treichler, Chief Technical Officer at Applied Signal Technology, Raytheon Applied Signal Technology; Cherif Amirat, Chief Information Officer, IEEE; and Dan Schweiker, CEO, Elite Restaurants, and co-Founder, China Mist Brands.

On 20 September, we were invited to a presentation titled “Talk the Talk,” by Phil Bautista, Sr. Information Technology Consultant, Bull Creek Data Corporation and Terence Yeoh, Leadership and Management Affiliate, NASA – JPL. The presentation will focus on improving skills related to interacting with high profile leaders.

Please contact Michael Andrews, [michael@andrews-associates.com](mailto:michael@andrews-associates.com) for additional information. ■

## THE RISK TECHNOLOGY PROFESSIONALS FACE

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 a reliable insurance broker, 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. “[How Exposed Are You to Professional Risk?](#)” is the third article in the series.

The article addresses the following common risks that technology professionals face today:

- Documentation of communications
- Mobile technology resources
- Intellectual property issues
- Drone mishaps
- Quality control management
- Licensing and compliance safeguards

To assess your own exposure to these potential risks, read the article and take our [quiz](#).

- [Additional Resources](#)
- [Learn about Professional Liability insurance](#)

## UPWORK REPORT FINDS MANY AMERICANS TURNING TO FREELANCING

Upwork Inc., in August, released a new research report, *The Great Resignation: From Full Time to Freelance*, which explores why American professionals are leaving their current full-time roles. Utilizing survey data from 4,000 Americans, the report finds that 20 percent, or 10 million Americans, are considering freelancing — to work remotely and gain more job flexibility.



As some businesses return to the office, the report finds that many professionals are not willing to sacrifice the ability to work remotely. Seventeen percent of professionals, or approximately 9 million employees, who worked remotely during the pandemic — will consider looking for another job, if they have to go back to the office. With this rising interest in a more flexible work arrangement outside the office, professionals are not only considering other full-time jobs to stay remote but are freelancing, as well. Among those who are definitely planning on quitting, 52 percent are considering freelancing.

“Many professionals are not happy about the prospects of returning to the office after the pandemic, and are looking for more remote and flexible options,” says Upwork Chief Economist, Adam Ozimek. “Freelancing has always been a career path that provides these benefits more than traditional full-time jobs. Our report indicates that this heightened interest in freelancing is likely to expand the size of the freelance workforce.”

Key findings from the report include:

- Offices are reopening: Of those who were mostly remote during the pandemic, 25% are already back at the office; and another 38% will return at some point.
- Professionals are not excited to go back: 34% of workers who were remote are not excited about returning to the office, compared to 24% who are.

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- Remote work has become highly valued for some: Among those who are not excited about returning to the office, 24% would be willing to take a pay cut to work remotely; and 35% would consider it.
- The return to the office is fueling some of The Great Resignation: 17% of professionals working remotely during the pandemic would probably, or definitely, consider looking for another job, if they have to go back to the office. This percentage represents nine million workers.
- Many are turning to freelancing: The Great Resignation isn't just about workers moving from

one full-time job to another; 20%, or 10 million Americans, are considering freelancing. Among those, 73% cite the ability to work remotely and gain more job flexibility, as a reason why.

- Growth in the freelance workforce: The 10 million people considering freelancing would represent a significant percentage increase — 17% — in the total freelance workforce, which had 57 million freelancers total, and 16 million full-time freelancers in 2019.

To read the full research report, visit: <https://www.upwork.com/research/the-great-resignation>. ■



## RENEW YOUR SUBSCRIPTION TO THE IEEE-USA CONSULTANT FINDER

You still have time to renew your subscription for the IEEE-USA Consultant Finder. In the fall of 2018, IEEE-USA introduced the [IEEE-USA Consultant Finder](#), powered by IEEE Collabratec, to IEEE members. This redesigned service's key features include:

- Simple and advanced search features
- An assignment placement portal
- A full consultant profile for paid subscribers

In addition, the IEEE-USA Consultant Finder's visual design makes it easy to use. It also has web crawlers, so even more potential clients will be able to find this new website — and the individual consultant profiles. Lastly, the Finder has opened this service fully to international independent consultants (those outside of North America) to post their profiles and market their services. Since Collaboratec powers this service, all IEEE members have access to the Finder. Moreover, clients, project managers and HR professionals can search for consultants to hire — for free!

All IEEE members considering, or jumping into, the world of the gig economy should check out the IEEE-USA Consultant Finder for marketing their services. The IEEE membership renewal period is the best and easiest time to get started. When you renew your IEEE membership, just add the [IEEE Consultants Network Membership Premium](#) to your cart. This step allows your IEEE Collabratec profile to be listed in the [IEEE-USA Consultant Finder](#).

The visual upgrade makes the Finder easier to use; and it will attract even more clients, project managers and HR professionals to search for a consultant; or post a consulting, or contract assignment. IEEE-USA is also actively trying to promote this service to professionals through Google ad words, as well as constantly updating Search Engine Optimization (SEO) tags.

We look forward to your continued support of this product with your renewed subscription. IEEE-USA knows this service will benefit all IEEE independent consultant members and their consultant practices.

Please note: Current Membership Premium subscribers — it is now a great time to review your consultant profile. Log in via IEEE Collabratec (or the IEEE Collabratec App) — and consider adding, or updating, your photo; reviewing your biography; and updating your desired salary, or hourly rate.

You can also review the IEEE-USA webinar, [All You Ever Wanted To Know about the New IEEE-USA Consultant Finder](#). This webinar outlines the new features of this service. Again, welcome to the IEEE-USA Consultant Finder. And thank you to those that have already subscribed to this great service. We hope you like the new look and upgrades. For IEEE members who have not yet subscribed, be sure to take a closer look — don't miss this great opportunity! ■



## HOW TO START YOUR CONSULTING BUSINESS

Over the years, the Alliance of IEEE Consultants' Networks Coordinating Committee (AICNCC) has provided numerous resources to members looking to becoming independent consultants. The AICNCC's [very first newsletter](#) contained four articles, written by four different independent consultants, outlining their recommendations for members wanting to start a consultant practice.

In addition, we've held [numerous webinars](#) on how new consultants can get started. Some of those include *The Life of a Consultant, So You Want to Be a Consultant*, *Consulting 101* and *Functioning as a Professional Consultant*. In addition, we'll be holding future *Ask the*

*Expert* webinars — so new consultants can ask our expert questions on best practices for running their businesses.

Still, it is always good to share resources others have provided to help new consultants. We Work published [Eight Questions to Ask before Starting a Consulting Business](#) — a great supplement to all the resources AICNCC has already provided to consultants wanting to start their practices.

Also, don't forget to check out IEEE-USA's eBook, [Consulting for Geeks](#), another great resource for members looking to start consulting practices. ■

## IEEE-USA CONSULTANTS FEE SURVEY REPORT - 2021 EDITION NOW AVAILABLE

All findings in this report represent only those IEEE members who identified themselves as self-employed consultants. For purposes of this survey, such participants are defined as the 595 individuals who indicated 50 percent, or more, of their consulting income came from working independently, with partners, or incorporated. The information provided is critical for consultants' success — such as a general profile of an IEEE consultant; top areas of consultant services; and most importantly, the median hourly rate consultants charge. This Report is one of a kind, and we believe each annual publication should be in the library of all IEEE independent consultants. Purchase the *IEEE-USA Consultants Fee Survey Report - 2021 Edition* today! Available now from the IEEE-USA Shop: <https://ieeusa.org/product/ieee-usa-consultants-fee-survey-report-2021-edition/>





## RESPOND TO POTENTIAL NEW RISKS IN YOUR CONSULTING PRACTICE

As technology changes, so do the potential risks in business. Simply making a change about how you communicate with clients could create a new exposure, for example. Here are just a few, potential risks to consider:

**Cyber breaches and malicious software.** Cyber-attacks and malware incidents are at an all-time high. If you keep client data and project work online, and often use mobile technology, you're at an increased risk of having cyber thieves compromise your information.

**Intellectual property issues.** If you provide proprietary services that include copyrights, trademarks, trade secrets, or patents to your clients — you could be at risk of lawsuits that question who owns the work, and how it's used.

**Drone mishaps.** If you use drones to survey land, inspect sites, monitor projects from afar, or other business services — an accident or breach of privacy could occur — subjecting you to increased lawsuit risks.

**Web services.** Providing IT services in today's world can be a challenge, especially if networks and servers go down; or other malfunctions that could lead to disruptions regarding clients' work, or loss of revenue.

**Negligence.** Everyone can make a mistake. As diligent and detailed as you are, a design spec could be off; material may be flawed; documents could be misplaced; informal advice may be misunderstood; a team member could miss something during inspection; and so on, increasing business risks.

If a claim is filed for any of these or other situations — and even if it is unfounded — the cost to defend yourself, your business, and your work could be costly. On average, a contract dispute suit will cost business owners approximately \$91,000 (Source: countstatistics.org).

Risk management is a process that touches all stages of the project, as do the risk management benefits of the IEEE Members' Choice Professional Liability Program. The Program includes these risk management features to support your business, at no additional cost:

- Contract reviews
- Pre-claim assistance
- Live quarterly web-based seminars
- Toll-free claim hotline
- *And, coming soon, the IEEE Risk Management Hub, containing many new, educational resources*





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## 2021 IEEE-USA CvVD Message Briefing

# STRATEGIC INVESTMENTS IN TECHNOLOGY: THE PRO ACT

## THE BILL

The PRO Act was introduced in the last Congress, passed the House and then died in the Senate. A virtually identical bill was introduced again this past February. It also passed the House and is now sitting in the Senate. The PRO Act is, primarily, a union organizing bill. It changes a host of laws to make it easier for unions to form, recruit new members, and negotiate with businesses. IEEE-USA has no position on any of this.

However, the PRO Act includes a test for determining if a worker is an independent contractor or an employee of a given company. The test, called the ABC Test, has three parts. An individual must pass all three criteria to be considered an independent contractor. They are:

- A.** The individual is free from control and direction in connection with the performance of the service, both under the contract for the performance of service and in fact.
- B.** The service is performed outside the usual course of the business of the employer.
- C.** The individual is customarily engaged in an independently established trade, occupation, profession, or business of the same nature as that involved in the service performed.

The ABC test is used in 13 states including Massachusetts, Illinois, Nevada, and New Jersey. The state laws are similar, but differ in their reach, application, and exceptions. The most important ABC Test is in California where, in 2018, it was included in AB 5, a state law responding to the rising gig economy.

## THE ABC TEST

The “A” criteria is a standard part of labor law and is an important check on companies that are trying to avoid treating employees like employees. The “A” test requires that consultants decide how to do the job they are hired to do. When, where, and how they work is up to them – within the constraints inherent in the job itself. IEEE-USA supports this rule, which is found in most state labor laws.

The “B” test, however, is very problematic. This rule says that companies cannot hire consultants to do work that is similar to work being done by employees at that company. For example, a company that produces software (or just employs programmers) cannot hire consultants to produce computer code. This is a serious problem for IEEE members.

The “C” test is also a concern. It requires consultants to have other clients similar to the company in question. This is fine for established consultants but creates a barrier to entry for people who wish to become consultants. New consultants would need to find two clients simultaneously to meet this criteria.

The states all have exceptions built into their ABC tests. From IEEE-USA’s perspective the most important of these is a “business-to-business” exemption which states that when businesses are hired to provide consulting services, the ABC test does not apply. Importantly, California explicitly includes companies consisting of only one

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person who works out of his/her home. Consultants can (probably) take advantage of this exemption by becoming a corporation, sole proprietorship or some other formal business.

The PRO Act has no exceptions, qualifiers, or limits. All consultants will be subject to the ABC test. This doesn't mean that consultants working for a company (even if that company is just them) will be impacted by the ABC test. It means nobody knows who will be impacted. This creates risk for companies, discouraging them from hiring consultants.

## **IMPACT OF THE ABC TEST**

Some states have been using the ABC test for several years. Engineers in those states have responded in a number of ways. Some have stopped taking clients in the state or moved. Neither strategy will work under a national law.

Other IEEE members have left consulting. IEEE-USA has documented cases where engineers who consult as a side job have simply given up. We've also learned of cases where companies have severed ties with consultants because they view those relationships as too risky. It appears that the software consulting industry has been hit particularly hard in California. A number of IEEE software consultants have lost work as a direct result of AB 5. Worse, the work isn't going to other Americans – it is going offshore.

## **UPSIDE OF THE ABC TEST**

There are some advantages to the ABC Test. Some tech companies have been known to force new hires into consulting contracts to “test drive” them before offering them formal employment. These “test” consultants are required to work like regular employees, but for less money, until they prove themselves. These contractors are usually not allowed to work for other companies. This is an abuse of the labor law and would be prohibited under the “A” test. IEEE-USA supports this application of the ABC test.

## **OUR ASK**

IEEE-USA has no position on the bulk of the PRO Act. We are asking Congress to amend the ABC test to include to protections as follows:

1. The “C” test needs to allow consultants to have only one client to allow consultants to enter the field and because some consultants. The key to the “C” test is that consultants need the right and the ability to take additional clients if they wish to do so. If they chose not to, that needs to be acceptable.
2. The PRO Act needs a “busines-to-business” exemption similar to the exemption in AB 5. This exemption needs to explicitly apply to companies of one person and allow those companies to operate out of an individual's home.

More generally, IEEE-USA is asking Congress to be careful before they pass this sweeping labor bill. There are, to be sure, abuses where companies have forced workers to be consultants for the purpose of underpaying and/or over working them. Such abuses should be curtailed. On the other hand, consulting is a viable, productive, and important part of the high-tech economy. Congress needs to attack the abuses without undermining legitimate consultants.