ACIA UPDATE

MEMBER SPOTLIGHT

Our education director, Steve Owston, conducted an in person interview with one of our ACIA members, George Lentulo. George comes from a family of immigrants who were all involved in the construction industry throughout his childhood, which opened his eyes to the construction community at a young age. At the age of 12, he got his first construction job building a room addition for a family friend. Over the past 50 years, he has gained a vast knowledge of construction and has some insight to offer. "How did you get into construction inspections?" - Steve Owston.
"Lentulo Contractors was a construction-trades business I started in 1984, eventually getting my “B” license (General Building Contractor), and I wore my bags until I was about 42 years old. Toward the late 1990s a lot of our clients needed construction management services as opposed to a hard-bid G.C. contract, and in 1999 I returned to college at night to study for an Associate in Construction Management – mostly to make the contracting business more useful to the public. While attending classes, I met David Suydam, a DSA-certified inspector but also the Supervisor of DSA inspectors at San Diego Unified. It was he that counseled me to get a DSA certification, something I have never regretted. I was certified in June of 2001." - George Lentulo.

"What are a few notable projects that you have been a part of?" - Steve Owston.
"OK, there may have been a few, but one that was both challenging and had high visibility in the local community were Miramar College Heavy-Duty Advanced Transportation (A# 04-110830). Approximately 4.5 acres of previously undeveloped land adjacent the Miramar campus, the HDAT project created a new training center for diesel mechanics, including an eight bay service building with service pits and an overhead trolley rail for pulling engines, another building for classrooms and administrative offices, a third building with the largest dynamometer you ever saw, capable of handling public buses and diesel trucks, and an outdoor Proving Ground where students would demonstrate that the D9 or whatever equipment it was they had just re-built would actually function as intended. It was designed under the banner of

ACIA UPDATE

MEMBER SPOTLIGHT

Marlene Imirzian, AIA, and KPFF structural engineers, it won an award from the American Institute of Architects in the class of “Best Project Currently Under Construction” ... or category similar to that. Ms. Imirzian is a gifted designer with a great knack for recognizing potential architectural uses of cast-off items and re-purposing them. For example, during a pre-construction walk, she noticed a crate full of old D-9 pistons and connecting rods. She asked the school if her project could have them, and she used them to create lighting fixtures of her design, which now illuminate the exterior exit route. Little things like that merged the industrial with the artistic made for a very interesting project, and it was delightful to have had the opportunity of working with her." - George Lentulo.

"How & when did you become involved in ACIA?" - Steve Owston.
I had heard about it and decided to check it out in 2011 by attending meetings with the San Diego chapter. I never left, that is, until Covid-19 restrictions shut us down. But I am looking forward to being active in the reorganization of the San Diego chapter very soon!

"Is there any advice you could give to someone that wants to become an inspector?" - Steve Owston.
"Yes, recognize that conflict resolution and “people skills” are as important as technical expertise. Avail yourself of training in those areas if possible. Realize that it’s just human nature for the skilled trades to resent someone who probably does not know as much about their work as they do to be looking over their shoulder. Understand that they don’t welcome your presence, at least until you earn their respect, so when you show up, be prepared and respectful every time." - George Lentulo.

George, ACIA thanks you for taking the time to chat with our team and share a little bit about you and your journey in the construction industry throughout your life.

AUGUST 2023

ACIA UPDATE

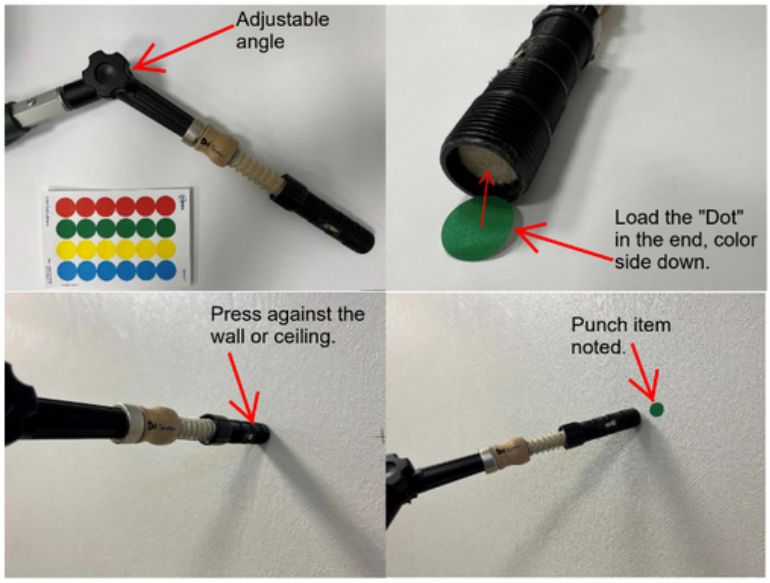
CHAPTER HIGHLIGHTS

The Northern California chapter meets on the fourth Thursday of every month at a new restaurant now - Black Bear Diner in Auburn, CA. We had a very successful meeting last month and cannot wait to see you all next week! Our meetings also count for one unit of the 36 CEU's required to renew every three years, so they are easy units to receive! If you attended last month's meeting where we discussed part 1 of fire stopping, and plan to attend this month, you'll receive two CEU's total. Our next meeting will be held on 7/27 at 5:30 pm!

Address:
13365 Lincoln Way, Auburn, CA 95603

HELPFUL CONSTRUCTION TIPS

I call this my “Dot-Spotter”. It can take those little ¾ inch dots (instead of blue tape) and note issues on a punch walk. With a painter’s extension pole, you can (without a ladder) put those just about anywhere. Using different colors could be utilized to indicate the trade (blue for the plumber, red for the electrician, green for the painter, etc.). With the ability to adjust angle, walls or ceilings are not a problem.



ACIA UPDATE

ARTIFICIAL INTELLIGENCE (AI) IN CONSTRUCTION & INSPECTIONS

It seems that everywhere we look now, AI is showing up. Artificial Intelligence as defined is the use of machines to replicate human functions like problem solving, learning, and observation. Actually, as far as design and construction is concerned, AI has been present to a degree in the form of CAD, Building Information Modeling, 3D modeling, and computer programs that assist in engineering design and project management and scheduling, to mention just a few.

Because we're Inspectors, I'm going to focus on the possibilities of how AI might assist US. We already know about and use programs that coordinate our plans, specifications, and other project documents to help us with our inspections, to include our Daily Field Reports (DFR's) and documentation of what we inspect on a daily basis. How about this though – what if you were able to scan a particular sector of a project with something akin to an "interpretive camera". This would contain the necessary algorithms and programming to automatically locate you on the site (GPS maybe?), access the drawing, specifications & Building Code to determine if there are any issues that may be out of compliance. To take it further, these issues may be sent to your DFR file with photos, as well as an Action List for the Project Management team, notations on the plans for reference, and even updating "As-Builts" for the final drawings.

Let's say you're in a room, and you set a wide angle to catch the entire room, maybe a restroom – we need to pull out a tape measure to verify all of our dimensions related to ADA, code, and drawing compliance. Our fictitious "Interpretive Camera" device would be programmed to take the perspective view into consideration, and be able to automatically calculate every dimension for compliance, and flag or red-line problems. While it's at it, is the wall covering material, color and layout per the Architect renderings, or even with updated ASI's in the drawings, would know if there were changes. Or are the fire devices (strobes, audibles, sprinklers and detectors) there and where they're supposed to be? Anything missing or out of compliance would be noted on the drawings, along with the appropriate specification section and/or Code reference, and then sent to the Action Log where it would sit until corrections are made and verified.

As human beings, we're generally not able to take in a massive amount of information all at one time, that might be our points of observation while on an inspection. We might be thinking about electrical issues for instance, and miss an improperly located fire alarm audible device, and its FACP reference and decibel setting.

ACIA UPDATE

Here's one – when the rebar comes to the project site, and you're going through the tag ID process. Do you count every bar and bent to ensure that everything is there and formed in accordance with the foundation steel design? Sure, not absolutely necessary, but our camera would be able to count, interpret and verify all of that with a quick picture. Even when the steel is placed, absolute compliance would be assured. I'm not saying we should get lazy; it would just be nice to have that extra level of review.

It's hard to imagine moving that fast, but if you think about it, they sent a man to the moon in 1969 with tens- of-thousands of times less computing power than what's in your cell phone, and now here we are. At my age, I actually go back to slide rules and builders' levels (I still have both from the 60's), so it's been a huge leap in the past 60 years for me to grasp. Maybe not in my lifetime, but there might even come a time when actual robots will completely take our place, but for now, maybe we can embrace (or at least consider) whatever comes along to help us do our job faster and more efficiently. This might be all fiction for now, but I wouldn't discount the possibility in the not-so-distant future. It might make us [as Inspectors] more valuable, and help create a safer environment for the public. I've just touched the tip of the iceberg, so I hope this article gives a little food for thought. The actual possibilities are endless, and would take an entire book to cover.

George VanDusen, RCI, DSA, CPBD