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QC Airport: Shorten Runway 5/23 and Realign Taxiway A

Join us on June 16, 2021 when Travis Strait, a Project Engineer with Crawford, Murphy, and Tilly (CMT) Engineers presents on the Quad Cities International Airport project Shorten Runway 5/23 and Realign Taxiway A.

Travis has been with CMT over 19 years. He is a Bradley University Graduate, graduating in 2002 and is currently based in CMT's Moline, IL office.

Travis began his career working for CMT's aviation group out of its Rockford, IL office on airports throughout Northern Illinois, including the Chicago Rockford, International Airport. To better serve CMT's growing client base in the Quad Cities Region, Travis was tasked with opening CMT's Quad Cities office in 2015. He has spent the last 6 years working on projects at the Quad Cities International Airport and various airports throughout the State of Iowa.



The Quad Cities Airport has four airlines. These are Allegiant, American Airlines, Delta, and United Airlines. The airport connects to Chicago, Denver, Atlanta, the Twin Cities, Dallas, Las Vegas, Orlando, Phoenix, Fort Myers, and St. Petersburg. Both the Illinois Department of Transportation (aeronautics) and the Economic Impact of Aviation have documented the viable economic impact of the Quad Cities Airport.

The Airport is governed by a Board of Commissioners that are appointed by the Rock Island County Board Chairman and the Mayors of East Moline, Moline, Milan, Rock Island, and Silvis. The Executive Director is Mr. Benjamin Lieschner, AAE. He became Executive Director in 2018.

Registration information will be sent via e-mail.

President’s Message

Elections are coming! In a few short months we will be holding our annual Quad Cities Chapter ASCE Board Member elections. During the past several years, participating has been decreasing and recruiting new board members has become more challenging. This trend is common among many societies these days. This month I thought it would be good to focus on what attracted me to participate in ASCE and step into a leadership position.



Professional Development/Networking/Mentoring: Making connections and building relationships will help when working to bring in new projects or complete current jobs or if you’re looking for a new job. Inviting and interacting with younger members within our group can help them develop into future leaders and help them gain valuable experience interacting with other engineers (believe it or not, some engineers are quite introverted!)

Personal Development/Making Friends: Being involved in the engineering community helped me get settled quickly and develop friendships when I moved to the Quad Cities area several years ago (and Kansas City when I graduated from college so many years ago.)

Resume/Curriculum Vitae Builder: Being “just” a member is not enough. It’s important to show your initiative and willingness to get involved by stepping up into a committee positions/positions of responsibility.

Develop/Expand Your Skills: Being part of ASCE leadership (a committee position or other positions of responsibility) will help nurture your leadership and management skills and help develop best way to communicate with both individuals and large groups.

Calendar and Upcoming Events

The Quad City Section leadership is working on a full slate of section meetings and tours to advance our members and the profession. The following Section calendar indicates activities currently in planning.

Date	Time	Topic	Speaker	Location
June 16, 2021	12 Noon to 1:00 PM	QC Airport Taxiway Realignment	Crawford, Murphy, Tilly	Virtual
July 21, 2021	12 Noon to 1:00 PM	IL required Sexual Harassment Prevention Training	NSPE - IL	Virtual
July 23, 2021	6:30 PM	Quad City River Bandits vs. Peoria Chiefs	N/A	Modern Woodman Park
Aug. 18, 2021	12 Noon to 1:00 PM	Waterproofing Concrete with Cyrstals	Alcmeo	Virtual

We need your help! Please send us your ideas for upcoming presentations and/or tours - contact any of our officers.

The Practice of Dealing with an Engineering Mistake

As Ms. Bowman will allude to in the first paragraph of her article (to follow), if we are actively engineering, mistakes will be made. That is why we have staff review our plans, review our specifications, review our letters, etc. That is why we analyze our past mistakes and create lessons learned. That is why we study the evolution of codes. And that is why hubris has no place in our engineering character. Peoples lives and safety are dependent upon our designs and decisions. And project costs are equally impacted and magnified.

None of us wants to raise our hands to admit we have made mistakes. But, the only way to avoid a mistake is to do nothing. Personally, if that is how you minimize your liability risk, you have no place on my payroll.

It goes without saying, that as engineers, we must be careful and deliberate in our analyses. We must check and double check. We must be knowledgeable in our field. But, first and foremost, given we have adequately prepared ourselves, take what we do seriously, and impress upon others working with us that poor decisions have consequences, we must engineer. That is what we have been trained to do.

The Unnatural But Ethical Act of Admitting Mistakes

Reprinted from the Spring 2021 Issue of PE Magazine
By Rebecca Bowman, P.E., ESQ.

Various philosophers and grandmothers have reminded us that the only way to avoid mistakes is to do nothing. Since we are not doing nothing, we will make mistakes. Consequently, we have to examine the mistakes we make as learning opportunities—opportunities to learn where we went awry—as well as accept personal responsibility.

In the NSPE Code of Ethics for Engineers, the eighth professional obligation (III.8) states, “Engineers shall accept personal responsibility for their professional activities, provided, however, that engineers may seek indemnification for services arising out of their practice for other than gross negligence, where the engineer’s interest cannot otherwise be protected.”

In our business, learning where we went awry is called forensic engineering. As PEs, we are called to continually examine our assumptions, to diligently watch for deviations from expectations and other warning signs, and to continually dissect our problems and mistakes. Arrogant confidence that “I know that I have considered everything” frequently shifts to the humbling discovery that, in fact, something was missed. All problems and all mistakes contain at least one faulty assumption and at least one lesson to be learned so that that problem or mistake doesn’t happen again.

When my grandson visited recently, he broke something. He came to me quickly and fessed up. We sat down and talked about how his speedy acknowledgement of his mistake did not eliminate the consequences, but that his speedy acknowledgement did prevent the problem from getting bigger. He is only three, but the same principal holds for us. The sooner we recognize and identify a problem or mistake, the sooner it can be addressed. However, more importantly, the sooner we recognize and identify a problem or mistake, the more limited the scope of the implications.

Problems almost never go away, or even shrink, if we ignore them. Problems tend to take root and grow if we try to bury them. Problems cannot be appropriately addressed if the responsible source has attempted to conceal, to delay discovery, or to transfer attention to someone else.

Much of my work is in residential, commercial, and light industrial construction, so that's the arena of the example I will share. I realize that I specified a wrongly positioned opening for framing a second-floor window. If I discover and address my error

- During basement excavation...no cost or time implications;
- During first-floor framing...slight error in the framing order, but no time implications and likely only nominal cost implications;
- After second-floor framing is complete...small time and cost implications to correct;
- After dry-walling or plastering...potentially modest to significant time and cost implications;
- After putting up the expensive, imported, silk wallpaper...potentially significant lead time and cost for replacement paper (if available) and significant bad feelings from the client; and
- After certificate of occupancy and error discovered by client...all detriments are magnified.

Worse, if I discover and fail to address my error and am "found out," my client will—quite justifiably—not trust me in any regard.

Professional obligation III.8 faces those realities head-on: "Engineers shall accept personal responsibility for their professional activities." This simple statement reminds us all that ignoring, burying, concealing, delaying discovery, and transferring attention are all inconsistent with that ethical standard. And, as I discussed with my grandson, knowing of the problem or mistake and waiting to acknowledge it until we get caught is also inconsistent with the ethical standard.

None of us enjoys taking personal responsibility. It's simply not a pleasant experience. None of us is proud of making mistakes or causing problems. I think that normal human responses are to ignore, hide, and bluster through. The obligation laid out in III.8 requires that we do something unnatural: take a deep breath, square our shoulders, and step forward.

As a profession, as employers, and as individual practitioners, we need to foster an environment that encourages early discovery, identification, and acknowledgement of a problem and a quick initiation of forensic examination. The sooner a problem is identified, the narrower the range of consequences and the narrower the range of affected parties. The sooner a problem is dealt with, the fewer the ramifications, both financial and personal.

Standards of ethical behavior in general, and III.8 in particular, require of us behavior that does not come naturally to the species. Being extraordinarily diligent about self-governance and self-discipline in our professional lives is, in its own right, extraordinary.

Rebecca Bowman, P.E., Esq., is NSPE's Senior Director for Ethics and Professional Practice.

Again, my parting shot, part of growing as a young engineer is learning from our mistakes, studying other's mistakes, and learning why codes have evolved the way they did. And again, I will say, young engineers should be involved in ASCE. The opportunities in ASCE to learn history, engineering tragedies, and the evolution of codes is unparalleled.

In order to reduce expenses, the Quad City Section sends its newsletters in electronic format only. If you are aware of a fellow Quad City Section Member that does not receive the newsletter, it means that ASCE National does not have their email address. To receive the newsletter, members must keep their email information current by contacting ASCE at 800.548.2723 or by visiting the Members Only section of the ASCE website at <http://www.asce.org/membersonly>. The Quad City Section does not sell email information to anyone. ASCE's Privacy Statement is available on the ASCE website.