

Editorial | Hold Your Breath for Just a Moment...

By David W. Mykins, P.E., CASE Chair



I remember when I was a kid, I remember riding in a car with my family and my grandma. As we were nearing a local cemetery, she quietly said to me “You know, you need to hold your breath when we pass the cemetery. There are restless ghosts there that want to haunt you, and the only way to keep them away is to hold your breath”. That was pretty scary stuff. Needless to say, I did as I was told. I often feel the same need to hold my breath when I hear about a structural failure. What’s your response when you learn problems caused by the unfortunate errors of others?

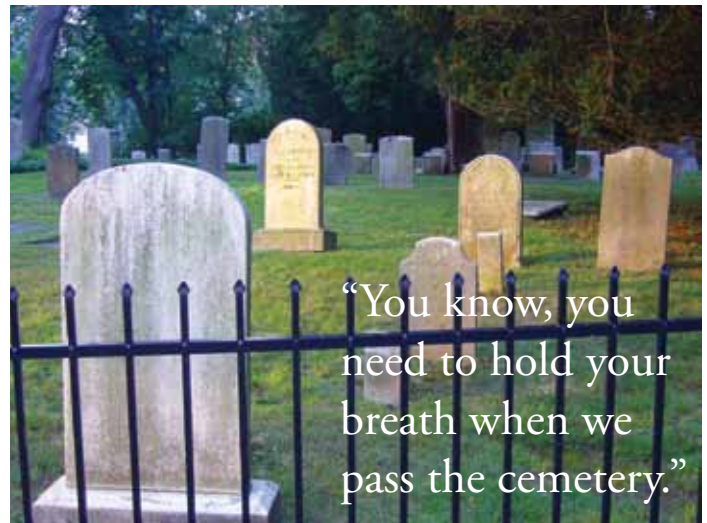
Some seek the opportunity to capitalize on the incident and boost their own businesses at the expense of those involved. The Germans have a word for this; it’s called “schadenfreude” and it means taking joy from the misfortune of others. While this may seem to be good for your business in the short term, it may do long term and even permanent damage to your reputation if you are perceived to be taking unfair advantage of a dreadful situation.

A few will seek to help the parties involved by offering their services as forensic experts to determine the causes of the failure. This may mean establishing whether the standard of care was met by the design professional, whether there were standard construction safety measures that were not observed, or if there were some unforeseen forces or conditions contributing to the failure. The role of forensic expert may be best served by firms who are geographically removed from both the project site and from the offices of any involved parties. The physical separation allows forensic consultants to be objective and avoids the appearance of trying to take advantage of a competitor.

Most firms, however, will never be directly involved in the investigation of the failure. Most firms will simply be outside, interested – but hopefully not passive – observers. By this I mean: even if not directly involved, practicing structural engineers should take an interest in these types of stories and use the lessons learned from them to improve our own practices, and ultimately, the profession.

When an incident occurs, we shouldn’t simply read about it and think “better than us” and move on. We should take the opportunity to turn inward and look at our own training, policies, procedures and quality control. Consider what steps can be implemented in our own practices to avoid a similar incident. Examine whether

we have the right people in the right roles in our firm. Do we have adequate technical reviews of projects? This is especially true for projects that stretch our firm’s capabilities. Take a look at what types of tools, documents, references and resources your firm has, and whether they are still relevant to the way you are providing services. Chances are that you will find some holes and will need to make some changes or additions to your practice policies or procedures.



As an example, one of the changes our firm made recently as a result of this type of self-examination was the decision to implement a program of internal peer reviews. Here’s how our process unfolded. We were considering ways in which we could improve the quality of our documents in light of a recent structural failure we had read about. We began to consider whether a peer review might have brought to light the problem that ultimately caused the failure. We had been peer reviewed by other firms in the past, and have also been peer reviewers. It had been our experience that, no matter how good a firm’s quality control procedures are, it is almost certain that the peer review process will bring up questions that improve the design. However, since peer reviews are not required in the jurisdictions where we typically practice, these experiences have been rare. So we decided to begin performing random peer reviews on ourselves.

This is just one example that we hope will work for us. If you are looking for some other ideas or helpful tools to organize your firm’s approach to managing the risks associated with structural engineering, you will find lots useful information on the CASE website (www.acec.org/CASE). CASE provides contracts, guidelines and practical administrative tools to help structural engineers in both business management and project management.

And next time you hear about an incident involving a structural failure, hold your breath for just a moment. Critically examine your own business practices and try to make at least one change to help improve the way that you provide services. Your grandmother will be relieved that you did. ■



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