letters

More Agreement on the Value of Hand-Checks

I want to compliment you for printing, and Matt Thomas for writing, the Topping Out article ["If You Want it Done Right, Do it Yourself"] in the July 2009 edition of MSC.

As a "senior" member of the structural engineering profession, I heartily agree with Matt's opinion. He is on target when it comes to "feeling a structure." I am very impressed with his insight and practical approach.

I graduated in 1970, and during my early years calculations were done by hand, which helped to develop a "feel for structures." As my career progressed I used analysis programs which reinforced my "feel for structures." I envy the young keyboard jocks, but would not trade my apprenticeship years for anything. There are times when the most obvious item is entrusted to a program, but in fact not included in the analysis checking.

As I mentor young engineers, I continually convey embracing their craft and understand why structures behave as they do. Now I have a great article to give to them to bring that concept home.

Please forward my gratitude to Matt for expressing his thoughts so well. It's comforting to know that there are Matts out there to continue the profession.

Dennis Schiffer, P.E., S.E.

Great Advice on Double Checking

As a corrosion consultant for URS Washington Division in Princeton, N.J., I work a lot with consulting structural engineers, probably more than any other engineering discipline. While not an S.E. myself—I'm a chemical engineer—I work with structural steel and reinforced concrete daily. They are two of my favorite materials of construction.

The article "If You Want it Done Right, Do it Yourself" by Matt Thomas (July MSC, page 66) is a good reminder of the great benefits of hand calculations in checking computer models and assumptions. In discussing the article with a P.E. I know who worked on the Hartford Civic Center, he replied, "Thanks for the great article by Matt Thomas. This brings back memories in my work with Ewing Cole Engineers who designed the HCC." He and I fully agree with Matt that young engineers should be wary of trusting the "black boxes" without double checking them by doing hand calcs. After all, the computer analysis is only as good as the engineers' assumptions and data. Good job, Matt!

Robert E. Moore, P.E.