

osing view

Extra eyes don't eliminate blind lifts. Bill Smith reports.

erhaps, like me, you've read the September ACT article titled, "Crane cameras serve as 'extra eyes,' which asserts that according to the makers of these devices, "crane cameras make jobsites safer, more productive and are a critical aid to operators..." It may come as no surprise to hear that I am again compelled to give an opinion on visual-enhancement technology and equipment and the use of it both at the jobsite and in the courtroom.

Experience, and common sense

For years, crane operators have been "working in the blind" - meaning making picks where the load is at some point, if not always, out of the operator's direct line of sight. In these scenarios, the operator relies on a trained signalperson and the crane's technology – the LMI (load moment indicator), kick-outs, A2Bs (anti-two block), range limiters, proximity warning devices, etc. - to direct his or her actions.

What worries me most about the rate at which we're introducing new technology into cranes is that many operators are now allowing the crane to tell them when it's safe to operate, which is a terrible idea because the crane only knows what it's been programmed to know. That means that if a crane has been programmed incorrectly, or not programmed at all, the system can't tell the operator he or she is in trouble until it's too late. The addition of cameras into the mix also now means that operators have yet another thing competing for their attention while making a lift. Where does it end? When is it too much?

We have a standard

For more than 25 years, I have been a member of the American Society of Mechanical Engineers (ASME) B30.5



THE AUTHOR

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Subcommittee, the foremost authority in crane safety standards, approved by the American National Standards Institute (ANSI). In 2007, the committee, for the first time, placed responsibilities on all parties in a crane lift, defining and delineating roles. Since then, responsibilities have been further defined and delineated in revisions to the standard that appeared in 2011 and 2014, and which are again under revision consideration right now. However, at no time has the B.30.5 committee included cameras in the standard using "may" (recommendation) language or "shall" (mandatory) language. It's also not currently up for consideration. If at any point the forty-five members of the committee - whose mission is to make our industry progressively and consistently safer - had thought that cameras on crane hooks or booms would reduce accidents, they would have moved to include them in one of the standard's

Don't get me wrong; I think cameras can bring certain benefits to our industry, and agree that in certain situations cameras can be an aid: drum cameras for operators to see if cables are spooling correctly, back-up cameras for vehicles (because in almost all cases the driver is alone with no signals or assistance from anyone else), and dash cameras and mirror cameras to record an event. Remember, though, that these cameras are performing in a reactionary capacity and they are not preventative in nature. These cameras will show you what happened after the incident but they won't prevent it from happening.

In terms of hook cameras, though, many manufacturers of these products are claiming benefits that appear to be fairly self-serving. In the September ACT article, one manufacturer's representative purported that a camera system can provide the operator with a way to:

- Verify if the area is clear of obstructions and personnel.
- Verify if the load is properly attached to the hook block.
- Improve communication with the crane operator and rigger.
- Increase accuracy of load placements

and therefore increase the speed and completion of the lift.

This is completely contradictory to the work of B30 committee - and to the standard itself. The B30.5 standard clearly lays out the responsibilities of the crane owner, crane user, site supervisor, lift director and operator. To verify or confirm proper rigging has been performed, and that the crane is working in area free from obstructions and personnel, is absolutely not the operator's responsibility. We don't need language trying to put more responsibilities on the operator when those responsibilities have already been established. We need to consider the contradictory and diminishing affect these cameras might have on our already-established standards.

Furthermore, there's also the potential for attorneys and paid expert witnesses to use cameras to try and place much more, if not all, of the responsibility back on the operator for not acting appropriately simply because they perceive the operator is no longer working in the blind. As an industry, is that a battle we're prepared to fight again? I think not. We shouldn't take chances with our ability to defend ourselves by jumping into something too

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RISK MANAGEMENT



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quickly.

With this type of marketing any owner will likely be convinced that an operator who constantly has eyes on the load will be able to avoid more accidents. It's only logical. But the reality that I know to be true from all the time I've spent investigating accidents throughout my career - and recent studies will back this up – is that the vast majority of accidents emanate from ground condition issues, crane stability, poor rigging, or people putting their appendages and bodies in places where they don't belong. Case in point: Construction industry fatality data gathered from 1992 through 2007 from the Census of Fatal Occupational Injuries (CFOI) database and the North American Industry Code System (NAICS) shows that of the 323 crane-related deaths identified, 102 were caused by overhead power line electrocutions (32 percent),

68 deaths were associated with crane collapses (21 percent), and 59 deaths involved a construction worker being struck by a crane boom/jib (18 percent).

Using that very specific data, it's clear that cameras would have had little to no effect on accident prevention.

Again, I'm not saying hook and boom cameras are entirely negative, but I am saying that we need to think about them carefully and consider every outcome before you purchase and install. If the article bullet points stated something along the lines of, "This new tool is an aid to the operator but in no way replaces his entire field of vision," and, "the operator must still rely on the qualified signalman and riggers while working in the blind because the operator is still making a blind lift," it would be much more palatable.

Crane owners - actually, all of us -

should consider the entire picture of liability before purchasing these cameras. Where we were able to defend the operator in the past while working in the blind, it could be much more difficult with the statements made by profit-driven camera manufacturers. Remember, these manufacturers won't

be defending you after an accident, but your insurance company will. And that should give you pause. There's simply too much to lose not to think about it carefully.

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