

Great progress

C-DAC is only the second time that OSHA (Occupational Safety and Health Administration) has revised a standard using the negotiated rulemaking process. The first was the steel erection standard and Williams was also close to this one through his father's involvement. It is a big commitment for Williams as he says that it is occupying between 20 and 25 % of his professional life at the moment.

OSHA explains the need to revise the standard as follows:

"There have been considerable technological changes since the consensus standards upon which the 1971 OSHA standard is based were developed. For example, hydraulic cranes were rare at that time but are now prevalent. The existing OSHA standard does not specifically address hydraulic cranes. In contrast, industry standards for derricks were updated in 1995 and crawler, truck and locomotive cranes were updated as recently as 2000."

The way it works is that a committee of 23 appointed members is developing a recommended proposal for a new construction safety standard for cranes and derricks.

Crane users form the largest group on the committee, followed by crane manufacturers. Other members include representatives from unions and one from OSHA, Noah Connell. The committee held its first public hearing in July last year and completion is expected in June or July this year.

Progress so far has been extremely good, Williams said, "I am extremely impressed and pleased with the way things are going." He continued, "It is, in my opinion, fantastic. The particular group is outstanding, there is a lot of knowledge and a lot of concern to improve safety in a way that does not

DOUG WILLIAMS is the appointed SC&RA representative on OSHA's Crane and Derrick Negotiated Rulemaking Advisory Committee (C-DAC), and he is president of Buckner Heavylift Cranes in the US. IC talked to him about progress on revising the cranes and derricks portion (1926.550) of 29 CFR part 1926 Subpart N – Cranes, Derricks, Hoists, Elevators and Conveyors, the safety regulation covering construction crane operations in the US

harm individual companies. Everyone is working together to achieve a consensus and the same spirit is upheld by OSHA. We want to come out with a fair and enforceable standard."

The process

Existing reference material consulted as part of the process of drafting the new standard includes the ACCSH (Advisory Committee on Construction Safety and Health) working draft, the appropriate existing OSHA and ANSI standards, and other relevant standards from around the world, for example, DIN. Manufacturers' manuals and literature, books and other published material are also used.

Williams is very optimistic that it will work out and that a consensus will be reached. So far "there is nothing that we have deadlocked on. Some things have been laid to one side and we will have to go back to them but the good faith of the committee members is seeing it through."

It is not only the committee that is involved –

members of the public are an integral part of the process and there has been public comment in each meeting to date. "The public has been very involved and brought quite a few things to the table." Members of the public have requested and offered presentations, many people have consistently attended the meetings, and they will have influenced the standard. The January meetings were moved to Las Vegas so that members of the public from the west coast could participate more easily.

Something that really brought home the importance of what is being done was a presentation from the parents of a man who was electrocuted in a crane and powerline contact accident. ➔

Doug Williams is the appointed SC&RA representative on C-DAC



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OSHA organized the size and composition of the committee and Williams feels it did a good job. "The number of people is not a problem, everyone contributes and I can't pick out anyone that shouldn't be on the committee. Some members have a narrow area of experience but they have specific knowledge that is good when their subject area comes up for discussion." It might be that somebody only makes three comments in as many days, but without that input the standard would be missing something.

Committee members include representatives from specific industry sectors, for example, home builders, steel erectors and the sign erection industry. "Sign erectors tend to use fairly unusual types of crane, perhaps just different enough to be the thinking behind having a separate member," Williams explained, and the same applies to the other niche sectors.

On the issue of the intention to bring all issues to the table in good faith, Williams is "amazed by how fair all the members have been." As an example he explains, "I am particularly impressed by the two representatives from the operating engineers union. They have done what's good for the industry and for the safety of the members."

Further discussion

It would be no surprise if a process like this brought up some contentious issues but so far there really have not been any. "There have been some issues that get batted around in a good natured way that at some point will be contentious." An example is the issue of the controlling contractor and where the responsibility should lie, for example, for ground conditions and their suitability for crane operations. Whether or not it is decided that responsibility should be with the main contractor or, for example, with the crane provider, there should be something in the standard that makes it clear.

Another widely discussed topic concerns the signal person. Many members feel that this constitutes a large part of the safe operation of a crane on a job site. There is some feeling on the committee that it is asking too much on small sites to expect them to provide it.

Wire rope rejection criteria is another area of debate. "Maybe lots of the data that says a wire rope should be rejected is old and does not relate to many of the ropes on the market today." Outdated criteria raises the issue of the standard's 'forward compatibility'. Williams explained, "The new standard should look to the future as it might not be reviewed for the next 30 years or more. This has been very interesting and challenging – if you step back and look out of the box there are many possibilities down the road that we don't want to exclude."

This forward compatibility issue could also similarly apply to the definition of a crane – what is known today as, for example, hoists or winches, may not even apply to cranes of the future.

A full glossary of specific crane industry terms and a list of definitions of all the different types of cranes will be part of the new standard. "We have built on lists of existing terms and for others we will have to sit down and develop definitions." Definitions for crane types (truck cranes, crawlers, etc.) are still to be done.

Another point for discussion by the committee regarding definitions is

whether drill rigs and pile drivers should be considered as cranes. At present the position is to include pile drivers but to exclude drill rigs, although this is not finalized.

And telescopic hydraulic lifting systems are another topic for discussion to determine a definition, and whether or not to include them under the same regulatory umbrella as cranes. At the moment "it appears that the way it is going to be handled is that if SC&RA writes industry consensus guidelines, then OSHA will plan to address jacking systems under the general duty clause. SC&RA has a task force for this that attended the C-DAC meeting of 3 March. One of the things that came out of the meeting was that SC&RA's task force has agreed to refer to this equipment as telescopic hydraulic gantries to remove any confusion with hydraulic jacks and gantry cranes."

In detail

Moving on to other areas of the committee's discussion, further details of specific areas of the proposed standard, include section 1402 (b) *employer procedures for safe erecting and dismantling*. "We spent quite a bit of time on this and we think we have come up with adequate wording." The manufacturer's method is just one way of assembling and disassembling a crane. And often it is an ideal way, for example, on a test pad. On 'real' job sites there are many things, for example, space restrictions and uneven ground that affect the procedure.

The main example discussed is assembling a lattice boom, luffing jib, etc. in the air. With the boom laid out horizontally, on a typical site, part of it will be on the ground and part of it is likely to be in the air over depressions in the ground so the manufacturer's assembly method cannot be used.

"What we have done is try to write some criteria or level of competence requirements for the person supervising, and to try and write a procedure that addresses all hazards."

Commenting further on the successful progress to date, Williams has more praise, "A really key factor has been the quality, expertise, enthusiasm, open-mindedness and competence of the OSHA representatives and staff.

"Why we are moving forward and why we are not getting bogged down is due to the professional facilitator, Susan Podziba. Her ability to keep us on track, in the right spirit, and with opportunities to express ourselves, has been an amazing skill to observe." ■

