

Crane Safety: Is the Sky Falling?

Not the way media portrays it. But is this the time to review crane “best practices” and particularly training and certification requirements for crane operators who work with and around cranes? Absolutely, argues this author.

**By Graham Brent,
Executive Director
of the non-profit
certification
organization, National
Commission for the
Certification of Crane
Operators (NCCCO)**

There has probably been more mainstream media coverage about cranes and crane operations over the last six months than at any time in history. Of course, the reason for this is wellknown: the media loves a “good” story and, as regrettable as the accidents are that have occurred during this time, the sad fact is that they are as fascinating to a general

audience as any crisis with a strong human and, perhaps most importantly, *public* impact.

Probably not since the tower crane collapse almost two decades ago in San Francisco, which claimed five lives, have we seen the national print and broadcast media with such a severe case of “crane fever.” That accident spawned a flurry of

The Maryland experience

- Regulations designed to prevent incidents that could cause serious injury or death related to the operation of cranes when used in construction, demolition, or maintenance.
- Spearheaded by Labor Commissioner Ron DeJuliis who assembled a committee of 20 local construction experts including contractors, crane rental firms, manufacturers, labor organizations, and NCCCO to develop these standards in an unprecedented three-month period.
- Identifies the specific training, testing, and re-testing requirements of crane operators, crane operator trainees, riggers (levels 1, 2, and 3), and signalpersons.
- The MOSH (Maryland OSH) Advisory Board unanimously approved the regulations which should take effect before the end of 2008.



state legislative initiatives (the California requirement for third-party crane inspections by licensed certifiers came out of this) and, though the attempt was initially unsuccessful, it set the stage for a debate that culminated in the mandating of crane operator certification in the state three years ago.

But do we really have a "crisis"? Certainly, it's hard to explain to anyone, let alone the non-technical media, why so many crane-related accidents have occurred

in such dramatic fashion in such a short period. It's true that, with the media on crane "high alert", all manner of incidents that would barely have made it into print, say, in February, are now regularly emblazoned across the front pages of regional newspapers across the country. But the fact is that any one of the New York or Miami tower crane accidents would justifiably have attracted intense scrutiny and raised serious questions. The same holds

equally true of the mobile crane accidents in Wyoming, Kansas City, or Houston, each of them the subject of catastrophic damage to property and, in two cases, human life.

Part of the antidote to the "sky is falling" attitude adopted by much of the media is that, when the incidents are examined, some of them are found not to be "crane" accidents at all. Although all the reports are not yet in, and all accidents are (naturally) the subject of litigation, at least one appears to have been caused by a failure to inspect and use a piece of rigging gear correctly. Another, to adequately follow inspection procedures. Yet a third to comply with the manufacturer's explicit erection instructions.

Obviously, without establishing a root cause, it's difficult to address it. In such situations, with the public demanding action, and the media baying at their heels, public officials have a tendency to employ a "knee-jerk" response. We've seen that happen in the past few months in cities such as New York and Philadelphia. And we've seen it happen in states like Maryland.

While "knee-jerk" reactions may or may not be beneficial, they do lead to one thing: *dialogue with the industry*. New York City apparently hasn't had much of it. Philadelphia didn't have it to begin with, but got it in the nick of time. Maryland, which had the benefit of a former crane operator in the role of Labor Commissioner, had it from the beginning. As a result, notably in the latter two instances, we have seen the constructive reform of requirements for the use, erection, and inspection of cranes, as well as those who work in and around them, of historic proportions. And we've seen it occur with (in terms of standard legislative progress, at least) lightning speed. But, most importantly, we've seen it with the full participation, cooperation and acceptance of the industry it is intended to regulate.

Most significant in these more recent state and city debates concerning training and certification requirements, is how the focus has widened well beyond crane operators to encompass similar qualifications for riggers, signalpersons, and inspectors. Of course, that makes perfect sense to the

Leading industries

in Northwest Indiana and the Greater Chicago Area -- our valued clients for construction services since 1969

ArcelorMittal Steel ■ Archer Daniels Midland ■ Ashland ■ Best Foods ■ BP ■ Cargill ■ Con Agra Foods ■ Corn Products International ■ Criterion Catalysts & Technologies ■ Croda Industrial Specialties ■ Dominion ■ Dover Chemical Corporation ■ Ecolab ■ ELG Metals ■ Elgin, Joliet & Eastern Railway Company ■ Exxon Mobil ■ Hammond Port Authority ■ Holcim ■ Horsehead Corporation ■ Indiana Harbor Coke Company ■ Indiana Port Authority ■ INEOS Oligimers ■ International Paper Company ■ Koch Industries ■ Macsteel Service Centers USA ■ Madison Paper Industries ■ Material Service Corporation ■ Nucor Vulcraft Group ■ Resource Management Companies ■ Rhodia ■ Savage Services Corporation ■ U. S. Steel Corporation ■ Unilever



ENGINEERED
CONSTRUCTORS



RAIL - TRAK

Building Trust ■ Constructing Solutions ■ Minimizing Risk

for information on our Companies and our capabilities, contact
T. J. Ferrantella, President, 219 / 933-4110 (Direct)
tferr@engineeredco.com (Email)

710 Michigan Street • Hammond, Indiana 46320
219 / 931-8700 (Indiana) • 708 / 891-3100 (Illinois)

crane operator who has to rely, in large part, on his employer to provide him (or her) with a properly inspected and maintained crane, on the rigger to properly rig the load he is about to lift, and (an operator's pet "peeve") on the signalperson (particularly when lifting "in the blind") to provide correct and appropriate hand and/or verbal instructions. It's also a recognition of the many and varied causes of crane accidents (as we noted previously), and the fact that (a surprise, perhaps, to many) crane accidents are not always the result of "operator error."

This activity at state and city level, all of it unprecedented, and all of it a direct response to the spate of accidents we have witnessed over the last six months, begs a parallel with another historic event: The publication in October of the first complete revision of federal OSHA's rules for crane operations since they were written over 30 years ago. Featured prominently among its new provisions, and mirroring state initiatives, are new certification and qualification requirements for crane operators and signalpersons.

The history of this Proposed Federal Rule (or C-DAC as it has come to be referred to after the Cranes and Derricks Advisory Committee that developed it) is well known. In a similar vein to Maryland and Philadelphia, OSHA used a process of industry involvement known as "negotiated rulemaking." Twentythree crane experts

selected by OSHA met eleven times over a 12-month period to completely overhaul the outdated federal regulations—and then waited four years, while the document they created and delivered (on time) to federal OSHA wended its way through a labyrinthine trail between the Department of Labor, the Small Business Administration, and the Office of Management and Budget, undergoing a seemingly endless process of review and oversight.

It's true that OSHA spent some of that time writing an explanatory Preamble, an introductory document that has added several hundred pages to the original C-DAC recommendation.* As you read this, OSHA's Proposed Rule revising Subpart N: Cranes and Derricks is out for public comment. If you are in any way engaged in, or affected by, cranes of almost any size or type in the construction industry, this document and its provisions will affect the way you do business.

It will behoove you to familiarize yourself with its implications. It's been three decades since the last revision—it may be a while before you get another chance.

Will publication of the proposed federal rule staunch the flow of initiatives at state and city level? It's too soon to tell. But many legislatures, when advised that a federal initiative was underway, reenergized their efforts upon realizing that OSHA would not require operator

certification until *four years after* the other provisions of the revised rule.

Add to that the standard one-year implementation period, as well as the estimated 12 months that OSHA will likely need to receive and process the expected deluge of public comments, and that puts us at almost 2015—an unpalatably long time, many believe, for those who work, with, in and around cranes to be unnecessarily exposed to the consequences of inadequate training and certification. ●

(*) OSHA's Proposed Rule for Cranes and Derricks in Construction can be downloaded from www.nccco.org/ProposedRule.pdf. A companion document, *20 Facts About Crane Operator Certification and the Proposed Federal Rule* is available from www.nccco.org/news/downloads/20_Facts-NCCCO.pdf

Graham J. Brent has been the Executive Director of the National Commission for the Certification of Crane Operators (NCCCO) since 1996. He is responsible for all aspects of the administration and development of NCCCO's national crane operator certification programs. Prior to joining NCCCO, he served as an NCCCO Commissioner, and instructed operators, inspectors and management on hazard recognition and equipment safety, as well as OSHA/ANSI standards compliance.

	Fatal Accidents June 1, 2002 to May 31, 2005	Injury Cases
High-Voltage Line Contacts	5	7
Struck by Loads	4	18
Mobile Cranes Overturned	1	5
Total Cases	10	30

	Fatal Accidents June 1, 2005 to May 31, 2008	Injury Cases
High-Voltage Line Contacts	1	4
Struck by Loads	0	3
Mobile Cranes Overturned	1	6
Total Cases	2	13

California crane fatalities

Crane-related fatalities and injuries in California have declined sharply according to a report by the Division of Occupational Safety and Health (DOSH). Cal-OSHA reviewed the records of crane-related citations and accident descriptions for a three-year period prior to, and after, the regulation requiring mobile and tower crane operators to be certified came into effect on June 1, 2005. Fatalities dropped 80 percent and injuries 57 percent, as the table shows.