

U.S. Department of Labor  
Occupational Health and Safety Administration

Cranes and Derricks Negotiated Rulemaking Advisory Committee

Meeting Summary - September 3 - 5, 2003

Agenda Review

C-DAC members reviewed and accepted the meeting agenda.

Review and Approve July 30-August 1 Meeting Summary

C-DAC members reviewed the July 30-August 1 draft meeting summary and made two editorial changes. It was approved as final and will be available through the OSHA docket.

Review and Adopt Ground Rules

C-DAC members discussed the revised ground rules. They engaged in in-depth discussions of Sections IIIA Decision Making and IVE Agreement. The ground rules were tentatively adopted, subject to agreement from the three C-DAC members not present at the meeting.

**Section IIIA Decision Making:** Some C-DAC members expressed concern that no agreement could be reached if there was dissent by OSHA. Others felt this would give them an opportunity to negotiate with OSHA to reach an agreement on a draft proposed rule that would be less likely to be changed in the final rule. Ultimately, all present agreed to maintain the requirement for OSHA approval, with an agreement that if a situation arises in which OSHA is the lone dissenter, it will publish the language agreed to by the other C-DAC members as an alternative in the preamble and specifically ask the public to comment on that alternative.

**Section IVE Agreement:** Some C-DAC members raised concerns about a ground rule that would allow C-DAC members to provide formal negative comments on all elements of the proposed rule if OSHA changes any of the consensus language. This ground rule is meant to underscore that the negotiations lead to a package of agreements. C-DAC decided to allow committee members to formally comment negatively only on the consensus language changed by OSHA and those issues specifically linked to the issues for which the consensus language was changed. "Linked issues" are those for which decisions were made in conjunction with each other.

**Who is bound by agreements reached by C-DAC?:** C-DAC members reiterated their understanding that agreements reached by C-DAC members bind the organizations they represent. This means that their organizations will refrain from providing formal written negative comments on the consensus-based language published in the Federal Register. However, all understand that associations cannot control actions taken by their members.

### Review List of Issues

A C-DAC member proposed adding slings to the list of issues to be discussed during the negotiations. OSHA stated that the C-DAC Federal Advisory Committee Act (FACA) Charter covers discussions solely about Subpart N. Since slings are covered in Subpart H, the issue is outside the scope of the C-DAC.

Another member proposed adding the issue of fall protection to the list of issues. Given that existing standards will apply if Subpart N is silent on fall protection, C-DAC agreed to add fall protection to its list of issues to be addressed in the cranes and derricks safety standards.

### Draft Regulatory Text

C-DAC members reviewed the draft regulatory text that resulted from its discussions at the July 30 - August 1 meeting and additional sections of the Draft Crane Work Group Report (December 2002). The issues discussed included scope; erecting and dismantling procedures; signals; wire rope; manufacturer approval for modifications; and staying clear of loads.

**Scope:** C-DAC discussed setting limited requirements for equipment with a manufacturer rating of 2000 pounds or less. There was discussion as to what the appropriate number should be for this purpose. Members noted that the 2000 pound figure was used in the ANSI standard for purposes of excluding equipment from the ANSI cranes requirements. Others noted that California's crane requirements apply to equipment over 6000 pounds; another jurisdiction has a 4000 pound cut-off. C-DAC decided to maintain the 2000-pound limit for purposes of applying a lesser set of requirements and to revise that number if reasons to do so emerge during development of the safety standards.

C-DAC members agreed to add side boom tractors (and to delete "tractors" from the list of excluded equipment). One member reported that the American Pipeline Association wants side-boom tractors included in the standard. The Committee also agreed to add self-erecting tower cranes. The term "rough terrain" will be added.

There was discussion about whether to exclude hydraulic jacking systems.

Some members suggested that the exclusion be limited to hydraulic *telescoping* jacking systems; another member suggested that gantries be included in the scope but to exclude the jacking systems. The Committee decided to wait until a member gets input on this issue from his constituents before deciding how to resolve this question.

After discussions concerning the inclusion of dedicated pile drivers, C-DAC concluded that it needs more information before making a decision and asked OSHA to invite a panel of operators, users and manufacturers of dedicated pile drivers to a future meeting.

**Erecting and Dismantling - Requirements for Employer Procedures:** After an intensive discussion of employer procedures for erecting and dismantling cranes, C-DAC members decided to pursue an approach that includes training, supervision by a competent person, and other specific requirements designed to reduce the hazards. C-DAC members identified some of the hazards associated with crane assembly and disassembly procedures. They included hazards resulting from: removal of pins without proper support for the boom or release of tension in pendant lines; cantilevering too much boom out; overloading of temporary boom suspension; improper blocking for disassembly; use of improper lifting points given changed center of gravity; overloading of assist crane due to lack of information on the weight of each component being lifted; lack of securing hand tools used by employees; improper rigging hardware for lifting each component; and improper sequencing due to lack of sequencing information or trucks arriving out of sequence. The advantages of pre-installed lifting lugs and the need to review erecting/dismantling procedures before starting work was also discussed.

During discussions of crane erection procedures, C-DAC members discussed injuries resulting from the lack of suitable walking surfaces and ladders on the boom. U.S. manufacturers do not include catwalks and ladders because, if existing regulations were to be followed (which require handrails and toe plates and set maximum spacing for steps), the catwalks and ladders would interfere with crane operations.

C-DAC members expressed interest in reviewing existing European and other industry standards for the possibility of requiring cranes manufactured after a certain date to include catwalks and built-in access points.

**Signals:** C-DAC members discussed the need for standardized signals and for signal persons to have sufficient training/experience, but also identified situations when standardized hand signals were infeasible. In such cases, the operator and signal person may need to use agreed upon signals discussed prior to the lift. C-DAC members also discussed how to write the standard to allow for technologies that may emerge in the future.

**Inspections:** C-DAC members discussed the need for pre-shift, monthly, and periodic inspections, including the components of each and documentation requirements. C-DAC members compared the requirements of Subpart R and the ASME B30.5 (2000) standard. A concern was raised that some elements included in pre-shift inspections in Subpart R could be interpreted such that it could require one to two hours to perform. Other members stated that the Subpart R pre-shift inspection requirements are typically accomplished in 15 minutes.

After a great deal of discussion, C-DAC members decided to continue to discuss a proposal to require a visual pre-shift inspection; a monthly documented inspection consistent with the elements listed in Subpart R; abide by manufacturers maintenance recommendations; and a periodic inspection, consistent with Subpart R, not less than annually and based on crane use. In addition, OSHA will explore developing a definition and/or appendix that would have the effect of clarifying what would satisfy the visual pre-shift inspection requirements.

**Wire Rope:** A C-DAC member will work with OSHA to develop draft language for review at the next meeting.

**Manufacturer Approval for Modifications:** With regard to modifications that will affect capacity or safe operation, C-DAC members discussed scenarios when the manufacturer: 1) approves a modification; 2) rejects a modification after a technical review; and 3) is no longer in business or declines to address a request. C-DAC members discussed the first two cases and agreed that crane owners should comply with manufacturer decisions. In the last case, the discussion centered on how to ensure that modifications are properly designed, installed, and crew tested. One suggestion was to require documentation of the modification plan by a registered professional engineer with crane experience so that the user would know that the change was done and done properly. It was stated that in such cases, the crane owner may be considered a crane manufacturer for civil liability purposes.

**Staying clear of loads:** In discussions of staying clear of a load, C-DAC members suggested distinguishing between workers who handle the load from those who do not; intermittent exposure from moving loads over a job site versus exposure from loads suspended and fixed overhead; and proximity to the load. There was a suggestion to direct the operator to use routes of limited exposure, and another to require employers to show a lack of alternatives for those tasks that can only be completed by an employee directly under the load.

### Public Comment

Norm Hoffman of Bechtel Construction stated that most problems happen with smaller cranes (between 2000 – 6000 lbs) and urges limiting exclusions for small cranes. He also stated that Bechtel is interested in increased crane operator qualifications, including a requirement for documentation.

Jack Robertson of Hunt Construction Group suggested that dedicated pile drivers be included in the standard. He offered to provide a video of pile driving equipment.

Jim Brown of AGC of Indiana cautioned C-DAC members about placing the responsibility for clearance of lifts on the general contractor.

### Logistics

**Review meeting dates, locations:** Meeting #6 will be held on January 5-7 rather than 7-9, and Meeting #9 will be held on March 29-31 rather than March 31-April 2. Both meetings will begin at 1:00 pm on the first meeting day, followed by two full meetings days from 8:30 am – 4:30 pm.

C-DAC proposed holding its January meeting in Las Vegas and its May meeting in Chicago. This will provide opportunities for individuals and organizations in other regions of the country to attend meetings and address C-DAC members. OSHA will confirm the off-site meeting locations.

**Other:** Michael Hyland, representative of the American Public Power Association, resigned from C-DAC. The government will work to identify and appoint a new C-DAC member to represent the interests of the power industry.

### Next Steps

**Documents:** The facilitator will revise the ground rules and send them to the C-DAC members absent from the meeting. If approved by those 3 members, the ground rules will be considered final. The July 30 - August 1 meeting summary will be revised as

discussed and distributed as final. The facilitator will draft the meeting summary for this meeting and send it out prior to the October meeting.

**Panels:** OSHA will work to put together a panel on dedicated pile drivers and another for cranes on barges. People with recommendations for those panels should send them to OSHA.

**Conference call on Section 1411: Erecting and Dismantling -- Requirements for Employment Procedures:** To be held on Tuesday, September 16, 11:00-1:00 EDT.

**Revised Regulatory Text:** OSHA will distribute revised regulatory text prior to the next meeting.

**Proposed Meeting Locations:** OSHA will confirm off-site meeting locations.

## C-DAC Attendance – September 3 - 5, 2003

### **Present:**

Stephen Brown, International Union of Operating Engineers  
Michael Brunet, Manitowoc Cranes, Inc., Crane Manufacturers (AEM/CIMA)  
Stephen P. Charman, Viacom Outdoor, Inc., Outdoor Advertising Association of America (OAAA)  
Joseph Collins, Zachry Construction Corporation, American Road and Transportation Builders (ARTBA)  
Noah Connell, U.S. Department of Labor/OSHA  
Peter Juhren, Morrow Equipment Company, L.L.C.  
Bernie McGrew, Link-Belt Construction Equipment Co.  
Larry Means, Wire Rope Technical Board, ASME  
Frank Migliaccio, International Association of Bridge, Structural, Ornamental and Reinforcing Iron Workers  
George R. "Chip" Pocock, C.P. Buckner Steel Erection, Steel Erectors Association of America  
David Ritchie, The St. Paul Companies, Training and Testing  
Emmett Russell, International Union of Operating Engineers  
William Smith, Maxim Crane Works  
Craig Steele, Schuck & Sons Construction Company, Inc., National Association of Home Builders (NAHB)  
William J. "Doc" Weaver, National Electrical Contractors Association, Inc.  
Robert Weiss, Cranes Inc. and A.J. McNulty & Company, Inc., Allied Building Metal Industries  
Doug Williams, Buckner Heavylift Cranes, Specialized Carriers and Rigging Association  
Stephen Wiltshire, Turner Construction Company, Associated Builders and Contractors  
Charles Yorio, Acordia  
Susan Podziba, Facilitator

### **Not Present:**

Brian Murphy, Sundt Construction, Associated General Contractors (AGC)  
Dale Shoemaker, Carpenters International Training Center

Darlaine Taylor, Century Steel Erectors, Co., Association of Union Constructors

Approved Mtg Summary