RICK D. CHANDLER, P.E. COMMISSIONER NEW YORK CITY DEPARTMENT OF BUILDINGS

HEARING BEFORE THE CITY COUNCIL COMMITTEE ON HOUSING AND BUILDINGS ON INTROS 298-A, 299-A, 472-A, 473-A, 474, AND 476

September 22, 2014

Good afternoon Chairperson Williams and members of the Committee on Housing and Buildings. I am Rick Chandler, Commissioner of the Department of Buildings. I am joined today by First Deputy Commissioner Thomas Fariello, Assistant Commissioner Michael Alacha, Gus Sirakis, Executive Director of Technical Affairs, and Helen Gitelson, Executive Director of Code Development. Due to a previous scheduling conflict, I will only have time this afternoon to provide testimony. However, my colleagues here will be able to answer any questions you may have.

At the outset, I want to note that this is my first opportunity to testify before this Committee as the Commissioner of the Department of Buildings. I appreciate the ability to offer our thoughts on this proposed legislation, and look forward to working with the Speaker, Chairman Williams, and Council Members as we move forward in partnership and discussion on a number of initiatives, including this proposed legislation.

Thank you for this opportunity to testify on two sets of bills. The first set includes **Intro. 472-A**, which is a clean-up bill for the 2014 NYC Construction Codes and **Intro. 474**, which is the extender bill for the 2014 NYC Construction Codes.

Intro. 472-A makes no substantive changes to the requirements of the current or enacted law. The changes contained in this bill are necessary to ensure that on their effective date, the 2014 NYC Construction Codes are as error-free as possible.

As you know, the revisions to the New York City Construction Codes are comprised primarily of Local Law 41 of 2012 and Local Law 141 of 2013. In bill form, these revisions consisted of more than 2500 pages. It is inevitable that in legislation this size we would miss typos, or instances where we used imprecise language. Subsequent to bill passage minor, non-substantive typographical errors and drafting inconsistencies were identified. This bill proposes to redress those non-substantive defects.

This current bill before you will fix an amazingly small number, 33, of minor errors. The reason that number is so small is due to the diligence and dedication of all the people that worked on code revision, including the more than 300 committee members, staff from the City Council, Law Department and my

staff at the Department of Buildings. I would like to extend my thanks to all of them, once again, for a job well-done. I should mention that the first clean-up bill passed by the City Council as Local Law 8 of 2008 for the 2008 Codes contained fixes to 295 items!

Of the 33 items contained in **Intro. 472-A**, 21 are drafting errors, 5 are typos and 7 resolve inconsistencies between code sections.

We are grateful for the Council's leadership in this effort. We ask that you consider & pass Intro. 472-A expeditiously.

Intro. 474, contains provisions extending the effective date from October 1, 2014 to December 31, 2014 of Local Law 41 of 2012; Local Laws 79, 100, 101, 108, 110, 130, and 141 of 2013; Local Laws 10, 12, 13, 17, and 18 of 2014. All of these bills together make up the 2014 New York City Construction Codes. Intro. 474 makes no substantive changes other than to extend the effective date of these local laws.

The extension would allow additional time for the design professionals to prepare plans and specifications in compliance with the new provisions. Representatives of affordable housing, construction, real estate, building owners, building designers and building contractors, have petitioned the Agency to extend

the effective dates of the 2014 New York City Construction Codes to give them additional time to familiarize industry stakeholders with these new provisions.

The Department believes that the transition to the use of the new codes should be as seamless as possible. Accordingly, we agree with the need to extend by 3 additional months the transitional period to continue stakeholder education regarding the improvements that have been incorporated into the 2014 Construction Code by extending the effective date from October 1, 2014 to December 31, 2014.

The second set of bills include **Intro. 298-A**, a bill to amend provisions of the 2014 Construction Codes relating to rigging, **Intro. 299-A**, a bill to amend provisions relating to the licensing of hoisting machine operators, **Intro. 473-A**, a bill to amend provisions of the 2014 Construction Codes relating to suspended scaffolds, and **Intro. 476**, a bill to amend provisions relating to the licensing of special riggers.

The guiding priority of the Department of Buildings is safety – to help ensure all of those who live, work, and pass-by a construction site are able to do so without harm.

Equally, it is vital for the construction industry to continue to build in an efficient manner. The Mayor and the Council are committed to the development of affordable housing and the growth of quality construction jobs.

This legislation proposes substantial changes to the Construction Codes. Many of these matters were deliberated over the past few years during the development of the 2014 Construction Codes by a comprehensive group of construction safety experts and industry stakeholders and were subsequently approved by the City Council in December 2013. Because the amendments to the 2014 Codes were more than two thousand pages long, it may be helpful for me to explain in a bit more detail the rigging and hoisting machine processes.

RIGGING

The first three bills before the Committee, Intro. 298-A, Intro. 473-A, and Intro. 476-A, all relate to rigging.

Rigging is the use of ropes, cables, chains, and related equipment to hoist or lower materials. At a construction site, this often takes one of two forms. The first form consists of preparing and attaching materials to the hook of a hoisting machine, such as a crane, to be lifted or lowered. The second form consists of suspending a scaffold from the top of a building with cables, and hoisting or lowering the scaffold along the face of the building.

Rigging was extensively discussed during the development of the 2014 Construction Codes by the Department's Construction and Demolition Safety Committee. This committee consisted of 27 industry experts, including 2 licensed master riggers, 4 licensed special riggers, a representative from the crane operator's union, Local 14, as well as architects, engineers, and representatives from construction safety firms, general contractors, real estate, and the construction trades.

The goal of the committee was to develop construction safety regulations – including for rigging – that balance safety with practicality and the interests of all relevant stakeholders. Under the 1938 and 1968 Building Codes, a licensed rigger was not required for construction work. The 2014 Construction Codes continued this pattern by mandating a licensed rigger only for certain specialty work.

Intro. 298-A involves the first type of rigging I described – preparing and attaching materials to the hook of a hoisting machine. The proposed legislation makes numerous changes to these types of operations. It may be helpful, as the Administration and Council work with stakeholders, to share some of our initial concerns.

This legislation would eliminate the option for a national certification, which may limit the pool of qualified workers when the certification requirement goes into effect in 2016.

Intro. 298-A prohibits special riggers from supervising "industrial rope access" and requires that only a master rigger can supervise such work. Industrial rope access involves the use of ropes to repel down the side of a building, often to inspect façades, as well as to install and repair cellular antennas. Today approximately 90% of this work is supervised by special riggers.

Intro. 298-A also requires a licensed master rigger to supervise the hoisting of "permanent mechanical, electrical or plumbing equipment" that weighs in excess of 2,000 pounds. We are open to hearing any thoughts from stakeholders and elected officials about how this requirement may improve safety.

Intro. 473-A involves the second type of rigging I described – suspending a scaffold from the top of a building with cables and hoisting or lowering the scaffold along the face of the building. This legislation requires that a licensed rigger supervise the installation and use of a suspended scaffold in façade work. This would mean only those who are employed by the licensed rigger would be able to install or use the suspended scaffold. This bill warrants further policy discussion. We should consider whether this change may result in building owners deferring necessary maintenance or leaving sidewalk sheds in front of their building for extended periods of time without any work occurring.

Intro. 476 amends the experience requirements to obtain a special rigger license from the Department. This experience requirement dates back to the 1938

Building Code and has remained unchanged throughout the 1968, 2008, and 2014 Codes. Although we are open to hearing any concerns raised at today's hearing by Council Members and stakeholders, the Department is unaware of any safety issues related to experience requirements, and believes this also warrants further discussion.

Intro. 476, taken together with Intros. 298 and 473, would expand the need for a licensed special rigger and may reduce the pool of eligible licensed applicants.

HOISTING MACHINE OPERATOR LICENSING

Lastly, I would like to take this opportunity to discuss Intro. 299-A, a bill that amends provisions relating to the licensing of hoisting machine operators. Intro. 299-A mandates that examinations for Class A and Class B licensed hoisting machine operators be developed and administered by the City. Under Occupational Safety and Health Administration (OSHA) crane regulations scheduled to go into effect in 2017, any crane licensing exam offered by the City will have to meet strict criteria. In anticipation of the OSHA mandate, New York City requires hoisting machine operators to hold valid national crane operator certification. Intro. 299-A would instead require New York City to take on the

cost and liability of developing and administering standalone examinations that meet OSHA requirements and align with national best practices.

Intro. 299-A proposes that Class A hoisting machine operator license applicants obtain their experience within New York City. The City, the Council, and stakeholders should consider that this would prohibit operators from other major cities with similar dense urban environments, such as Chicago and Los Angeles, from applying to become a hoisting machine operator here.

Intro. 299-A would prohibit Class C licensed hoisting machine operators from operating "multiple control station" cranes. Since 2009, the Department has required Class C licensed hoisting machine operators, who operate a multiple control station crane, to pass a national certification exam specific to this type of machinery. As we review this legislation, we should consider the relationship between this certification requirement and the guiding priority of safety for New Yorkers.

CONCLUSION

I first want to thank Chairman Williams and the Council for holding this hearing. The Department is available to work with the Council and all relevant stakeholders from industry to improve the Construction Codes. Our shared goal is to enhance safety and compliant development while facilitating the construction of affordable housing and the growth of quality construction jobs. We look forward to

studying this legislation further to determine what effect these bills have on our shared vision.

Thank you.

As I mentioned earlier, I am unable to stay for questions. However, First

Deputy Commissioner Thomas Fariello and Assistant Commissioner Michael

Alacha will be able to answer any questions you may have.



NEW YORK COMMITTEE FOR OCCUPATIONAL SAFETY AND HEALTH

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September 22, 2014

Statement in Support of Intro 299-A-2014

My name is Tony Straka. I am employed as a Safety and Health Specialist by the New York Committee for Occupational Safety and Health (NYCOSH). Our organization stands in support of Intro 299-A, "Operation of Hoisting Machines." In recent years, there have been a number of developments concerning qualifications, certification and licensing of crane operators in New York City. A quick overview follows.

- NYCOSH submitted a written comment to OSHA in January 2009, concerned
 that its proposed rule on cranes and derricks in construction would have
 undermined the extensive licensing and testing required by the City of New York.
 Our concern was that the proposed standard would have pre-empted New York
 City's licensing of crane operators.
- 2. In February 2012, NYCOSH opposed proposed amendments to the New York City Administrative Code promulgated by the Department of Buildings. We objected to the City's move to relinquish its oversight of the certification needed for crane licenses. Unfortunately, the DOB regulations passed, although they have not been implemented. We continue to view those regulations as an endrun around the New York City legislative process.
- 3. Meanwhile, OSHA has still not issued their cranes and derricks rule as proposed in 2009. In fact, they have now extended the time period for its release by an additional three years, until November 2017.

New York City still retains the strictest and most demanding urban testing and licensing procedures for crane operators in the United States. In fact, in response to a lawsuit filed by the Steel Institute of New York, New York City vigorously protected and defended its regulations and authority to administer its rules and licensing when challenged. The result was that the City's authority was upheld by the Supreme Court of the United States

Statement in Support of Intro 299-A-2014

Clearly, we are at the point where more level heads should prevail. It's important to recognize reality: New York City has nearly 6,000 skyscrapers, 50 million tourists, four million people on the streets of Manhattan every day, as well as hundreds of miles of subways and underground infrastructure of all types. In view of this reality, it's also time to recognize that there is no other area in the United States of "comparable urban density" relative to New York City.

The City Council needs to get behind Intro 299-A. The City needs to once again create and administer its own test(s) for the licensing of the highly skilled, fully experienced and thoroughly qualified crane operators that we need for safe crane operation in New York City.

Thank you for your careful and deliberate consideration of this important matter.

TESTIMONY

TO: NYC Council, Committee on Housing and Buildings

RE: Intro 473 and Intro 476 of 2014

FROM: Dennis Holloway, Director of Training,

International Masonry Institute, IUBAC

12-07 44th Ave.,

Long Island City, NY 11101,

718-706-0593

On behalf of Bricklayers & Allied Craftworkers Local Union, No. 1, NY

DATE: September 22, 2014

Good afternoon Chair Williams and the members of the Committee. My name is Dennis Holloway and I currently serve as the Director of Training at the International Masonry Institute or IMI in Long Island City. IMI serves, in part, as the training facility for Bricklayers Allied Craftworkers Local Union No. 1's Joint Apprenticeship Training Program. I have spent over 32 years working in the masonry restoration craft in New York City repairing the facades of buildings on suspended scaffolds, rigging suspended scaffolds for crews of workers to safely scale the building exterior and training apprentices to do both. During my years in the field, I worked on the rigging crew for the Empires State Building and the Solo Building and many other less notable buildings. I, myself, held a Special Riggers license on behalf of IMI during the period August 1996 through August 2007. In 1998, I worked with Jack Mead at the Department of Buildings to help develop the outline for the mandatory certificate of fitness for workers on suspended scaffolds and the outline for the Rigging Foreman certificate - the worker designated by a Special Rigger to rig and supervise those suspended scaffolds. In the wake of September 11, 2001, I headed a rigging team for the Mayor's Office of Emergency Management in order to safely protect emergency workers from falling debris from 1 Liberty Plaza, the Millennium Hotel, Century 21.

Today, I'm here on behalf of my union Bricklayers & Allied Craftworkers Local Union No. 1. Local 1 represents about 5000 members, nearly ½ of whom work in the exterior masonry restoration industry in New York City and primarily on 2-point suspended scaffolds. Local 1 requests that the Committee and the Council vote in favor of the following legislation: a) Intro 473 which contains a series of changes to the new 2014 Building Code that will correct several major errors pertaining to suspended scaffolds that, if left unaddressed and implemented on October 1st of this year as planned, will seriously endanger the safety of workers and the public by virtually eliminating the necessity for a Special Riggers on façade inspection, maintenance and repair on buildings over 14 stories; and b) Intro 476 which will strengthen the licensing requirements for the Special Rigger by increasing the number of years of necessary experience from 1 to 3.

Special Riggers' Segment of the Construction Industry

Currently the Special Rigger is the only licensee designated by the department to install or use 2-point suspended scaffolds and hoist or lower any article not exceeding 2,000 lbs on the exterior of a building. These scaffolds are essential to routine façade inspection, maintenance and repair. As you probably know, since 1998, NYC's Local Law 11 requires all building owners to conduct

Testimony of Dennis Holloway BAC Local 1, NY September 22, 2014 Page 2 of 4

façade inspections on 5 year cycles for all buildings over 6 stories. This inspection, maintenance and repair process is absolutely necessary to protect the public from falling debris where a building owner may have inadvertently permitted his or her façade to fall into disrepair. The actual inspection, maintenance and repair work routinely requires workers to perform grinding, cutting, pointing and bricklaying while hanging from a two-point, suspended scaffold. The two-point suspended scaffold comes in various shapes and sizes, but it is generally a narrow platform approximately 32" wide, dangling from the side of the building. For workers and the public, it is statistically one of the most dangerous segments of the construction industry where a disproportionate number of deaths and serious injuries regularly occur. As you can imagine, every rigging job is different and therefore each building presents its own set of complicated problems – height, set-back, accessibility, weather conditions, structural integrity, proximity to other structures, to name a few. The existing DOB licensing and regulations have been designed to build and encourage the licensed Special Rigger to obtain an expertise for the rigging of two point suspended scaffolds in the unique environment presented by New York City and to directly employ and designate the Rigging Foreman, responsible for the day-to-day supervision of a job.

Special Rigger's Licensing Requirements (Intro 476)

The building code and the DOB regulations require that the Special Rigger, among other things, take a 30 hour training course, pass a licensing test, provide proof of Workers' Compensation and Disability Insurance for all workers on the scaffold, provide proof of General Liability insurance and complete a background check. However, the Code only requires that the Special Rigger obtain 1 year of practical experience in order to obtain a license that permits him or her to hoist any objects less than 2,000 pounds on a 2-point suspended scaffold on the exterior of any building in NYC. Given the history of accidents in this business, we think these requirements should be more rigorous and require at least 3 years of experience in the business rather than 1. At the height of the last construction boom, the December 2006 Suspended Scaffold Task Force reported that, of the 29 construction deaths in 2006, 71% were caused by falls. Further the Task Force reported 18 "incidents" involving suspended scaffolds through the first 11 months of 2006 with 22% resulting in death. As a result of the Task Force, the DOB created a "scaffold safety team" of 14 inspectors that blitzed the city issuing summonses. Despite the beginning of a new boom in construction activity, in 2012 the scaffold safety team was reduced to only 9 inspectors, the number of summonses fell dramatically and funding for the team was cut from \$1.2 million to \$500,000. Yet, in almost every year, a disproportionate number of construction-related accidents are caused by falls from scaffolding or falling objects dropped from scaffolding.

Simply put, there is little substitute for practical experience. For the Special Rigger, the existing 1 year practical experience requirement is out of step with all other licenses pertaining to rigging and hoisting and fails to ensure the license holder obtains an adequate grounding in and appreciation of the complexities of the business. First, consider that the Rigging Foreman, a worker who earns a certificate for completing a 32 hour course, is supposed to serve in a subordinate position to and be employed by the Special Rigger. Yet, both positions require only

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a single year of practical experience. In addition, under Building Code Article 404 a Master Riggers License (which allows the licensee to operate a business that can hoist or lower any object regardless of weight on the exterior of a building) and a Tower Crane Riggers License both require 5 years practical experience. Similarly, under Article 415 of the Code a Master Sign Hanger and a Special Sign Hanger requires 5 years and 3 years of industry experience, respectively. Although each licensee works under unique circumstances and tolerances, the threat to public and worker safety presented by the Special Rigger is, under many circumstances, nearly identical to the threat to safety posed by the other licensees. Further, even with respect to the construction workers doing the cutting, pointing and bricklaying on the 2 point suspended scaffold, the 1 year experience requirement is inadequate. Consider that the BAC Local 1 apprenticeship training program for Exterior Masonry Restoration (a/k/a "Pointing, Cleaning & Caulking") requires under NY State Regulations that an apprentice be under the direct supervision of a journeyman for a period of 4 years or 4,000 hours. Finally, a single year of experience in this business typically amounts to only 1000 to 1200 hours of actual work – a very short year. The exterior façade restoration performed under the supervision of the Special Rigger can only operate in good weather and often the business shuts down for what adds-up to several months each year to avoid cold, rain and wind. So, a year of experience is not necessarily a year of experience. For the reasons outlined above, we are seeking a modest increase in the required experience level for the Special Rigger from 1 to 3 years to provide a more consistent regulatory framework with other licensed Riggers and better ensure the safety of workers and the public.

Maintaining the Special Rigger's Jurisdiction (Intro 473)

Further, with respect to suspended scaffolds hung on buildings over 14 stories, the 2014 code mistakenly dilutes the requirement that only a licensed Special Rigger may hang the two-point, suspended scaffold. Instead, on buildings over 14 stories, the new code will now permit something called "scaffold controlling entity" (a General Contractor, a Construction Manager or a building owner) to also hang, maintain and remove the suspended scaffold. We believe the premise for the change is that on buildings over 14 stories a "Site Safety Manager" is required to be present. However, diluting the jurisdiction of the Special Rigger in favor of someone called a "Site Safety Manager" will, in our opinion, do nothing to improve safety in the utilization of 2point suspended scaffolds. In fact, it may do the opposite. The Site Safety Manager is more akin to a generalist who can best serve to police and oversee the coordination of multiple trades and subcontractors on new construction projects. Again, the purpose of the Special Rigger's license is the acute need for specialization and experience in a uniquely dangerous but narrowly tailored segment of the construction industry. Although the Scaffold Controlling Entity will be required to employ a Rigging Foreman for day-to-day supervision, that Rigging Foreman holds only a certificate, is not subjected to the same scrutiny as a licensed Special Rigger and will not operate with the benefit of the expertise of the licensed Special Rigger to fall back on. Similarly, a "Scaffold Controlling Entity" is unlikely to be licensed and therefore unlikely to have withstood the level of scrutiny applied to the Special Rigger. Similarly, the "Scaffold Controlling Entity"

Testimony of Dennis Holloway BAC Local 1, NY September 22, 2014 Page 4 of 4

is unlikely to have any expertise in rigging and would have no reason to know which Rigging Foreman would be best qualified to rig a particular building.

With activity in the NYC construction industry finally rising to pre-recession levels, the number of fatal construction accidents is rising again to the peak 2007 levels where 39 construction workers were killed on NYC jobsites. In 2011 there were 16 construction fatalities in NYC and in 2012 there were 20 construction fatalities. Further, it is abundantly clear that the City's Department of Building and OSHA, despite their best efforts, lack sufficient resources to carefully and thoroughly police the rigging industry. The Special Rigger is the lynchpin for safety in scaffolding in New York City. Unfortunately, the 2014 Building Code appears to further dilute responsibility and jurisdiction for the Special Rigger and, thus, will ultimately put workers and the public at greater risk. Given these circumstances, the most practical way of improving the long term safety of workers and the public is to: 1) enhance the Special Rigger's licensing requirements by increasing the years of required industry experience from 1 to 3 as put forth Intro 476; and 2) maintain the Special Rigger's primary jurisdiction and responsibility for two-point suspended scaffolds on façade restoration as put forth in Intro 473.

Respectfully submitted,

Dennis Holloway Director of Training International Masonry Institute On Behalf of Bricklayers & Allied Craftworkers Local 1, NY

September 22, 2014

NYC Council Committee on Housing and Buildings Int. No. 473-A, Strengthening Scaffolding Requirements

Good Afternoon, Chairman Williams and Members of the Committee.

My name is Kenneth Buettner, and I am President of York Scaffold Equipment Corp., of Long Island City. I am the third generation of our family-owned and operated business, which has provided scaffolding in New York City for over eighty-five years. I have held a New York City Special Riggers license since 1985.

I am a Past President (1992-1994) of the Scaffold and Access Industry Association (SAIA), our industry's national voice. I was a member of the Mayor's 2006 Scaffold Worker Safety Task Force. I have been a member of the New York City DOB's Construction and Demolition Safety Technical Committees for both the 2008 and 2014 Building Code revisions.

Intro 473-A is purely and simply about safety.

Since at least as early as the writing of the 1968 Building Code, it has been a requirement that all suspended scaffolding hung and used in New York City for maintenance and repair of building facades must be done by, and under the continuing supervision of, licensed Special Riggers.

To be granted a Special Rigger license by the DOB, an applicant must have prior practical experience working under another licensed Special Rigger, must undergo training, must pass a written test and a practical exam, and must be investigated by the DOI.

These Special Riggers are held responsible that the suspended scaffolds they install are properly designed, installed, used and maintained.

These Special Riggers are held responsible to notify the DOB of the location of each and every suspended scaffold they have hung in the City.

These Special Riggers are held responsible that the workers installing and using the suspended scaffolds have successfully completed the required training to be rigging foreman and scaffold workers.

These Special Riggers are required to register on their license, with the DOB, the names of persons acting as their rigging foremen.

When the 2014 Building Code comes into effect, this will dramatically change. Under the revised Code, suspended scaffolds can be hung on buildings over fourteen (14) stories without requiring the experience and oversight of a Special Rigger.

Currently, with Special Riggers held responsible for every suspended scaffold hung for façade maintenance or repair, the DOB can immediately identify, and contact, the rigger who installed it. That will not be the case.

Currently, the DOB has on hand the names of all Rigging Foremen via the filings made by the Special Riggers. That will not be the case.

Currently, the DOB relies on the combined experience of several hundred licensed Special Riggers, both union and non-union, to properly and safely install suspended scaffolds throughout the City. That will no longer be the case.

It is absolutely foolish and unconscionable that a highly successful safeguard that has been in place for almost fifty years will be simply removed.

I urge this Committee, and the Council, to correct this horrible mistake, and to pass Int. No. 473-A for the sake of safety.

September 22, 2014

David R. O'Connell
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Committee on Housing and Buildings New York City Council

Attention: Honorable Chairman Jumaane Williams

Re: Proposed Initiative 298-A Amendment to The NYC Building Code

Dear Chairman Williams:

I have been rigging since 1987. I am a NYC Licensed Master Rigger, Licensed Crane Operator and the Secretary Director of the NYC Master Riggers Association, Inc.

This is my testimony to gain your support and your fellow council members support for part of the 2014 Construction Safety Act known as Intro 298-2014.

In the past, the 1968 Building Code for crane and rigging operations included what was the latest thinking in building code science. At that time, NYC Licensed Master Riggers and their crews primarily hoisted basement boilers and tanks. Thirty three years passed. The Rules of the City of NY (RCNY) were added to update the code for crane and rigging work in a more dense, high-rise urban environment. In 2003, NYC Department of Buildings (DOB) began a multi-year effort which resulted in the 2008 NYC Construction Codes which increased public safety, incorporated the latest in engineering technology, and contained progressive ideas on sustainable development.

On a present day in NYC, a six hundred (600) ton capacity mobile crane reaches in excess of 470' up and 350' away. Advanced rigging equipment and methods are used to hoist skyscraper's immense structural steel shapes, heavy pre-fabricated concrete floor and wall panels, stackable modular housing units, rooftop HVAC components, rooftop communication equipment, rooftop backup generators, etc. DOB is the most advanced municipal agency in the United States with regards to construction regulation and enforcement of crane and rigging operations. DOB is the only agency in the country known to issue a Master Rigger License to those individual applicants proven qualified thru testing by written and practical exams. The five (5) years of required prerequisite crane and rigging experienced hours of work are verified by an affidavit which is signed by each Licensed Master Rigger supervisor. The affidavit and certified earnings statements of applicants are then vetted by NYC Department of Internal Audits and Discipline to verify the experience. A Licensed Master Rigger must be an officer or major stakeholder of the corporation for personal accountable liability, is required to have a NYC business address, shall maintain a liability insurance policy, must produce an insurance bond for NYC, shall register his Master Rigger Foremen and his entire rigging crew must be employees of the Licensee.

The future of the crane and rigging industry will change unfavorably on October 1, 2014 with the enactment of LL141-2013. DOB will be removing key individuals from critical crane and rigging oversight roles to save builders and their clients money. DOB's new agenda is to relax requirements for crane and rigging operations to make the 2014 Construction Codes more accessible to contractors by providing administrative flexibility. DOB's administrative burden of licensing will be reduced by mimicking OSHA's minimal guidelines which require only certificates. Licensed Master Riggers will no longer be required on any new construction. This is the result of influences by employer, realtor and business groups during the 2014 Construction Code crane and rigging committee processes. By enactment of LL141, some of over twenty seven thousand (27,000) licensed architects will be allowed to calculate and supervise to place cranes, close city streets by permit and supervise "critical picks" while hoisting with cranes and rigging on new construction sites. All this, while not have ever actually performed these crane and rigging operations physically. DOB does not have a standard written for requiring or evaluating any prerequisite "hands on" experience of these new design professionals. The veteran, "hands on" Licensed Master Rigger will be replaced by any individual who sits thru a thirty two (32) hour certificate class to be appointed by his employer as a competent person. These appointee supervisors will not be required by DOB to prove; prior experience. demonstrate individual insurance, attain a bond to protect NYC, nor will they register their own rigging crew.

Intro-298 is the crane and rigging part of the "Construction Safety Act". It is is the result of stakeholders and industry professionals that were not invited to assist in the committees for creation of the 2014 Building Codes. This bill is an effort to revert back in essence to the codes that worked for 35 years prior to 2008 to include updates to consider the latest materials and work practices in the crane and rigging industry. This bill transcends all industry groups with a consideration for safety as being paramount. Please vote in favor of Intro 298-2014.

Respectfully Submitted.

David R. O'Connell

Secretary Director of NYC Master a riggers Association, Inc.



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Building Trade Employers' Association

New York City Council Committee on Housing and Buildings

Introduction 298 September 22, 2014

Good afternoon Chairperson Williams and members of the Committee. I am Donald Ranshte, Senior Vice President at the Buildings Trades Employer's Association (BTEA), an organization representing 27 union contractor associations and over 2,000 construction managers, general contractors and specialty trades contractors doing business in New York City. Thank you for allowing me the opportunity to testify today on Intro 298.

The BTEA opposes this bill that would effect changes in the Construction Code with relation to rigging and hoisting. The provisions in the Code that this bill propose to change were the result of almost two years of deliberations by members of a special subcommittee within the consensus based Construction Code revision process.

The Code Revision process undertaken by the Buildings Department, in conjunction with hundreds of industry professionals, is used to more thoroughly integrated changes to the Codes, while inserting safety provisions based on the unique character of construction work in New York City. The subcommittee that studied this exact question, concerning rigging, was made up of members of the

construction industry, technical and safety experts, as well as, master riggers. The final agreed upon Code provisions (later enacted in Local Law 141) were the result of all of the subcommittee members reaching consensus. The new Code provisions provide more protection than the old language did, and during certain operations will still require the use of a master rigger, or, design professional. The new Code language strengthened the safety requirements by making changes in the 2014 Code that erased an anomaly from the 2009 Code and revert to the provisions contained in all prior Codes.

In the most recent cyclical review and amendment to the Building Code, Local Law 141 of 2013, this situation was deliberately avoided by creating clear and concise language changes in Chapter 33. Now, because there is a proposal to extend the effective date of the Code, we shouldn't use this time to cherry pick those provisions of the Code (again reached by consensus) which some groups are unhappy with, and try to change technical and safety provisions in order to ensure more work for certain licensees.

We respectfully urge the Council not to move forward with this bill. Thank you for your consideration of the Building Trade Employers' Association's position.

Thank you.



Testimony before the Committee on Housing and Buildings of the New York City Council By Angela Pinsky, Senior Vice President, Management Services Real Estate Board of New York September 22, 2014

Good afternoon Chairperson Williams and members of the Committee on Housing and Buildings. The Real Estate Board of New York, representing over 15,000 owners, developers, managers, and brokers of real property in New York City, thanks you for the opportunity to testify regarding the proposed changes to the New York City Construction Codes. Below are our comments on the specific bills:

Int. No. 0472-2014 - Technical Corrections & Clarifications of Provisions of NYC Construction Codes

- We support the proposed changes to the Construction Codes.
- We would like to point out two additional items in need of your attention.
 - Section 207.1 requires only 1 mean of egress and is inconsistent with the 2010 Standards for Accessible Design, raising liability issues for rooms for more than 50 occupants.
 - o Section 508.4.4 The building code uses an exception to require dining spaces to be separated from kitchens, which would be better suited elsewhere in the code.

Int. No. 0474-2014 – Revision to the NYC Construction Codes

We support Int. No. 474 and the delay of the effective date to December 31, 2014. This will provide
much needed relief to the industry regarding complying with new codes before they are broadly
distributed.

Int. No. 0299-2014 - Operation of Hoisting Machines

- We strenuously object to the proposed changes to crane operator licensing in New York City.
 Following two fatal crane accidents in 2008, the City convened the High Risk Construction Oversight
 Study Advisory Committee, which convened over 40 industry stakeholders. After 7 months of
 inspections and interviews, the advisory committee made 66 recommendations, including the
 adoption of the National Commission for the Certification of Crane Operators (NCCCO) training and
 testing that are currently in place.
- The advisory committee's recommendations to improve safety have since been corroborated by several other studies, including an investigation by the California Division of Occupational Safety and Health that attributes a 62.5% decrease in crane-related fatalities and injuries to the adoption of NCCCO training and testing. Similarly, the research center of the national AFL-CIO, with the support of the Greater New York Building Trades Council and International Operating Engineers Union, recommended NCCCO certification in 2008. We have submitted both of these reports along with our testimony.
- The City's past training and testing program has demonstrated that a City-administered licensed can
 easily become obsolete, risking the safety of the operators, other construction workers and the



public. Prior to the adoption of NCCCO standards, had not updated the written examination in decades, it tested applicants on a single, decades-old, outmoded crane for all of its certifications, and only offered 1 written and 1 practical test during all of 2011. By contrast, NCCCO continually updates its written exams, offered 131 written exams in the NYC area within the first four months of the City's adoption, and requires equipment-specific training and testing on modern cranes.

We oppose the following 3 bills as they represent significant costs and were mediation items during the Building Code revisions that did not receive support from a wide cross section of the industry.

Int. No. 0298-2014 - Rigging

- The expansion of all lifts and "picks" to be determined to be "critical", as well as requiring a master rigger to supervise the hoisting of "all electrical and mechanical equipment" would substantially increase construction costs, disproportionately to smaller new developments (at an average of \$904,000 per rigger position per year). Additionally, the increased demand for these positions may cause a shortage of master riggers in the industry, increasing costs more.
- As in intro 299, we oppose disallowing training from NCCCO/ANSI, which we believe will reduce safety in training, decrease the supply of registered professionals, and would turn back the advancements in moving towards national standards.

Int. No. 0473-2014 – Strengthening Scaffolding Requirements

- We believe the City is fully protected under the current language for suspended scaffolds, requiring
 a competent person designated by the scaffolding company where the City requires a site safety
 plan.
- Currently, the site safety plans are reviewed by the Department of Buildings and it is determined by
 individual review if the site requires oversight to protect the public. DOB retains the right to require
 additional staff if necessary and any other oversight is monitored by the site safety manager.
- This requirement would impact most multifamily and commercial buildings in the City subject to Local Law 11, and would represent substantial costs to private developments and the city (including NYCHA buildings).

Int. No. 0476-2014 - Special Rigger Licensing Requirement

 We oppose the proposed changes as increasing the practical experience requirement would unnecessarily restrict the pool of available riggers in the City. Additionally, we feel that this would restrict those who would want access to this stable career path. Subjecting apprentices to an additional 2 years of apprentice level salaries and benefits would create significant barriers to entry into this field.

Thank you again for the opportunity to comment. We look forward to continuing our conversation with the Council to continue improving construction throughout the City for all New Yorkers.

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CPWR THE CENTER FOR CONSTRUCTION RESEARCH AND TRAINING

FOR IMMEDIATE RELEASE June 17, 2008

Contact: Mary Watters: mwatters@cpwr.com 301-495-8523/o, 301-919-4627/c

CPWR RELEASES REPORT ON CRANE DEATHS WITH RECOMMENDATIONS FOR PREVENTING MORE FATALITIES, INJURIES

BUILDING AND CONSTRUCTION TRADES DEPARTMENT, AFL-CIO, GREATER NEW YORK BUILDING TRADES COUNCIL AND OPERATING ENGINEERS UNION JOIN IN RELEASE OF REPORT, RECOMMENDATIONS

An in-depth report on U.S. crane fatalities found the number of crane-related deaths among construction workers is significant, with an average of 22 workers killed annually. The report, authored by Director of Safety Research Michael McCann and two colleagues at CPWR – The Center for Construction Research and Training, also lists examples of crane incidents that resulted in bystander fatality or injury gathered from news reports.

The report's findings, released June 17, used Bureau of Labor Statistics' worker fatality data from 1992 to 2006 on construction workers: the numbers and causes of death, the trades of workers involved, the size of employers, and types of cranes involved.

Perhaps most important, the report gives eight recommendations to prevent fatalities and injuries from occurring. The recommendations, which draw from issues apparent in the findings and McCann's 34 years analyzing and writing about safety and health, suggest a national certification program for crane operators, crane inspectors, and for the signalpersons and riggers who manage the crane load and its direction. Another recommendation is the thorough inspection of cranes by a certified crane inspector after the crane is assembled but before it is used. The report recommends that a crane load should not pass over street traffic, suggests OSHA conduct more thorough investigations and more detailed reporting of crane fatalities when they occur, and urges action on public comment and adoption of OSHA's proposed crane and derrick standards, including the recommendations within this report.

"The deaths of Donald Leo and Ramadan Kurtaj May 30 when a tower crane collapsed in New York City are just the latest in a long list of workers who have died in work-related incidents involving cranes," said Mark H. Ayers, President of the Building and Construction Trades Department, AFL-CIO. "We in the trades mourn every single loss, and we offer our thoughts and prayers to the families of these men. These losses are bitter to us because, in almost every instance, they are preventable. CPWR's recommendations would benefit all construction workers, as well as those who live and work near cranes, if they are implemented nationwide."

"We need to hold government accountable for its role in ensuring the lives of America's workers," said Vincent J. Giblin, President of the International Union of Operating Engineers. "We need OSHA to enforce the standards they have and create new standards where there is an obvious need."

Despite the media attention given recent crane collapses, the CPWR report found the leading cause of death among workers was electrocution when the crane touched an overhead power line. Of the 323 www.cpwr.com

worker deaths recorded by BLS, 102 workers (32%) were electrocuted and 68 workers (21%) died due to a crane collapse. Of the 59 deaths (18%) of workers struck by crane boom/jib, 52 deaths were caused by falling booms or jibs (the jib is the short piece that extends on the other side of the boom). A falling boom or jib can happen when the crane is being assembled or dismantled. Other causes of crane-related deaths are described in the report.

The findings show more than half of worker deaths were among construction laborers and heavy equipment operators. Workers employed by small contractors represent a large portion (about one-third) of total deaths. Although tower crane collapses are dramatic, most crane-related deaths involved mobile cranes. The intersection of electrocutions from power lines and mobile cranes bears noting.

"Construction workers are counting on employers and OSHA to keep them safe on the job," said Edward Malloy, President of both the Greater New York and the New York State Building and Construction Trades Councils. "Union contractors and unions spend millions of dollars training workers – we know we bring that to the table. But poorly maintained equipment or a 'speed up' work schedule can bring disaster to any worker, even the best trained one."

BCTD President Ayers agreed, saying, "OSHA needs to put in place its Safety Standards for Cranes and Derricks, which have been gathering dust at that agency for four years. In 2003, OSHA established a rulemaking committee that had representatives of suppliers, manufacturers and users on it. They produced a consensus document in July of 2004, and OSHA has failed to move it to the next step, publishing the proposed standard. Secretary Chao's December 2007 regulatory plan stated they would have the standard proposed by January 2008, and that didn't happen. Then the May 2008 plan said it would be out August 2008. Meanwhile, more construction workers die, bystanders and first responders are injured, killed and put at risk, and we wait for OSHA to act."

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Research for this report was funded by CPWR – The Center for Construction Research and Training, using grant U54 OH008307 from the National Institute of Occupational Safety and Health (NIOSH). The contents are solely the responsibility of the authors and do not necessarily represent the official views of NIOSH.

CPWR – The Center for Construction Research and Training is a 501-c-3 organization affiliated with the Building and Construction Trades Department, AFL-CIO, and serves as the research arm of the BCTD. CPWR provides safety and health research and information for the construction trades and industry. For more information, visit www.cpwr.com.



Crane-Related Deaths in Construction and Recommendations for Their Prevention

Introduction

The deaths of six construction workers and a bystander, along with injuries to 24 construction workers and first responders in a New York City crane collapse March 15, 2008, set off an alarm within the construction community and city dwellers living in the shadow of large scale projects. Just 10 days later, a 20-foot crane section in Miami fell 30 stories, killing two construction workers and injuring five. New Yorkers, already jittery from the first crane collapse, saw another crane fall in their city May 30, which killed two construction workers and injured one worker and one bystander.

The first New York crane collapse garnered much media attention because of the scale of the event – a high death toll among workers and a visitor killed when the crane's boom crushed a residential building. But injury and death to bystanders is not a first-time occurrence. Selected examples of crane-related bystander deaths collected from news reports are included in Table 1.

In 2003, OSHA formed a Crane and Derrick Negotiated Rulemaking Advisory Committee (C-DAC) of representatives from industry, labor and government to develop a new safety standard for the construction industry to aid in reducing the number of fatalities. The committee first met in July 2003, and reached a consensus on regulatory language for the new standard on July 9, 2004. In May 2008, OSHA published its semiannual agenda and announced that the proposed crane standard will be published for public comment in the Federal Register in August 2008.

In light of the large number of recent fatalities, CPWR examined the data from the Bureau of Labor Statistics (BLS) to evaluate trends over time and propose recommendations to prevent future injury and death.

Report Authors

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Methods

Construction industry fatality data for the 2-digit BLS Standardized Industrial Classification (SIC) Codes 15, 16 and 17 for 1992 through 2002 were identified in the Census of Fatal Occupational Injuries (CFOI) database. For 2003-2007, the 2002 North American Industry Code System (NAICS) codes 236-238 were used. The resulting data were entered into a Microsoft Excel 2003 database for analysis.

Construction worker deaths related to cranes were identified by selecting all records with the source code 34* (Cranes). (This does not include non-construction crane-related deaths from maritime, mining and general industry.) Records involving aerial lifts, and scissor lifts were excluded, but crane man baskets were included.

The CFOI narratives including event, occupation and establishment codes of the cranerelated deaths were used to classify deaths by cause, occupation and establishment size. This report identifies the main causes of death, the types of cranes involved in fatal incidents, the trades of those who died, and the size of the employer experiencing the greatest number of fatalities.

Results

A total of 323 construction worker deaths involving 307 crane incidents were identified from 1992-2006, an average of 22 construction worker deaths per year. Figure 1 shows the number of deaths by year. There were 12 multiple-death incidents in this time period, resulting in a total of 28 deaths.

Four main types of cranes have been associated with crane-related fatalities. Of the 307 fatal crane incidents, 216 (71%) involved mobile or truck cranes. Sixteen of the fatal incidents involved tower cranes (5%), 13 involved floating or barge cranes (4%), and 12 involved overhead cranes (4%). The remaining 66 reports were not sufficiently detailed to determine the type of crane involved or do not meet BLS publication requirements.

Causes of death

Of the total 323 crane-related deaths, 102 were caused by overhead power line electrocutions (32%), 68 deaths were associated with crane collapses (21%), and 59 deaths involved a construction worker being struck by a crane boom/jib (18%). (See Table 2.)

Half of all electrocutions, the leading cause of death, were associated with the crane boom or a crane cable contacting an overhead power line. The rest involved contact of an overhead power line with unspecified parts of the crane. Mobile cranes were involved in 80 of the 95 overhead power line fatal incidents. Table 3 describes worker activities leading to electrocutions. Those activities involved workers on foot touching or guiding

the crane load or cables, workers operating the crane – including several operators who were electrocuted after jumping from the crane, and workers on foot touching the crane.

Crane collapses were the second leading cause of death. An unstable, uneven or icy surface on which the crane was sitting accounted for 12 fatalities (20%). Overloading the crane accounted for another 10 deaths (16%). In five cases (8%), the crane load or boom shifted. In 56% percent of the reported cases, there was no information provided as to the cause in the CFOI narrative. Of the 59 crane collapses, 37 involved mobile cranes.

The third leading cause of crane-related deaths is struck by the crane boom or jib. Fifty-two of the 59 struck-by crane booms or jib deaths were caused by a falling boom or jib. Almost half of these deaths (48%) occurred while workers were dismantling the boom. In most of these cases, the pins holding the boom sections together were removed without adequate support to prevent the sections from falling. In 12% of these cases, the deaths occurred while lengthening the boom. The remaining seven workers were struck by swinging booms in an unspecified manner. Of the 59 struck by boom/jib fatalities, a minimum of 35 deaths were caused by mobile cranes.

Trades Involved

Construction laborers experienced the greatest number of crane-related deaths between 1992 and 2006 (total of 96 or 30%), followed by heavy equipment operators (74 deaths or 23%), which included 50 crane and tower operators. In addition, 40 supervisors/managers/administrators died in crane-related incidents (12%), as did 18 ironworkers (6%), and 17 mechanics (5%). Other trades with fewer numbers of deaths included electrical workers, truck drivers, welders and carpenters (totaling 24%).

Overall, 103 of the 323 construction workers were employed by subcontractors with fewer than 10 employees. Fifty-one individuals worked for employers with over 100 employees. Twenty of the construction workers who died on the job were self-employed.

Conclusions and Recommendations

The findings of this analysis indicate the number of crane-related deaths reported by CFOI is significant. The main causes of worker deaths were electrocution, collapse, or struck by crane parts or crane loads. More than half of the deaths were among construction laborers and heavy equipment operators. Employees working for small contractors represent a large portion (about one-third) of the total number of deaths. Most crane-related deaths involved mobile cranes.

Possible explanations for these findings are a lack of worker and supervisor training, lack of jobsite safety plans, lack of adequate crane inspections, and lack of proper investigation and reporting of crane accidents and fatalities.

Specific recommendations to reduce and prevent future injuries and fatalities are as follows:

First, crane operators should be certified by a nationally accredited crane operator testing organization, such as the National Commission for the Certification of Crane Operators (NCCCO)*. Presently only 15 states and a few cities (including New York City) require certification or licensing of crane operators, and some have their own certification program. We recommend that states and cities should require certification by a national certification organization for reasons of standardization of qualifications and to promote the transfer of credentials between states.

Second, riggers who attach the load to the crane and signalpersons who visibly or audibly direct the crane operator on where to place the load should be certified. NCCCO will in the future offer certifications for these types of workers.

Third, crane inspectors should also be certified. OSHA requires that employers designate a competent person to inspect machinery and equipment prior to each use, and during use, to make sure it is in safe operating condition [29 CFR 1926.550(a)(5)]. OSHA also requires annual inspections. For some work activities, such as use of cranes for maritime activities and work at nuclear plants, OSHA may require a higher degree of inspection. However, since inadequate inspections have been implicated in work-related crane deaths, we recommend that crane inspectors should have the same degree of qualification as crane operators.

Fourth, in addition to other mandated inspections, cranes must be inspected thoroughly by a certified crane inspector after being assembled or modified, such as the "jumping" of a tower crane.

Fifth, according to the proposed OSHA consensus standards on cranes, only trained workers should assemble, modify or disassemble cranes, and they should always be under the supervision of a person meeting both the definition of qualified person** and competent person specified in the standard. In many instances, especially with rented cranes, there are no trained personnel present when cranes are set up and dismantled. This issue must also be addressed.

Sixth, crane loads should not be allowed to pass over street traffic. If rerouting is not possible, then streets should be closed off when loads pass over streets and pedestrian walkways.

Seventh, more complete reporting of data, particularly after a crane collapse, is necessary. OSHA should conduct more thorough investigations of crane-related fatalities and capture more complete data in its reporting system.

Eighth, after OSHA publishes the proposed crane and derrick safety construction standard in August 2008 for public comment, all efforts should be made to speed up the adoption of the C-DAC consensus standard and the additional recommendations provided in this report.

- * Such certification organizations should be accredited by a nationally recognized accrediting organization such as the American National Standards Institute (ANSI), should administer written and practical tests to determine the knowledge and skills of the applicant, and meet other standard accreditation criteria.
- ^k California, Hawaii, Minnesota, Montana, Nevada, New Jersey, New Mexico, Utah, Washington (as of 2010), and West Virginia require or recognize NCCCO certification of crane operators as part of their state licensing program. Connecticut, Massachusetts, New York, Oregon, and Rhode Island have their own licensing programs. Among cities, New Orleans and Omaha require or recognize NCCCO certification of crane operators; Chicago, Los Angeles, New York City, and Washington, D.C., have their own licensing program.
- ^Ψ A competent person, according to OSHA, is one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous or dangerous to employees, and who has authority to take prompt corrective measures [italics added for emphasis] to eliminate them. [29 CFR 1926.32(f)]
- ** A qualified person means a person who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training and experience, has successfully demonstrated the ability to solve/resolve problems relating to the subject matter, the work, or the project.

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Table 1. Examples of Fatal Crane Incidents

Date	Location	Description
4/27/78	Willow Island, WV	Crane lifting bucket of cement collapsed onto scaffold inside cooling tower. Construction workers: 51 dead Source: [Ward, 2008]
11/29/89	San Francisco, CA	Tower crane fell 16 stories while being jumped. Construction workers: 4 dead Bystanders: 1 dead; 22 injured Source: [Kilborn, 1989]
11/14/99	Milwaukee, WI	"Big Blue" tower crane collapsed at stadium and struck three workers in a crane basket. Winds 25-30 mph. Construction workers: 3 dead Source: [LaBar, 1999]
9/29/06	New York, NY	4-ton chunk of steel fell from crane crushing a taxi. Bystanders: 5 injured Source: [Kates, 2008]
11/16/06	Bellevue, WA	Crane collapsed on a condo. Construction workers: 1 injured Bystanders: 1 dead Source: [Jamieson, 2006].
3/15/08	New York, NY	Tower crane collapsed while being jumped, damaging several buildings. Construction workers: 6 dead, 13 injured Bystanders: 1 dead, 11 first responders injured Source: [Ware, 2008]
3/25/08	Miami, FL	20-foot section crane fell 30 stories while jumping the crane. Construction workers: 2 dead, 5 injured Source: [Walter, 2008]
5/30/08	New York, NY	Crane cab, boom, and machine deck separated from the tower mast and collapsed onto the street Construction workers: 2 dead, 1 injured Bystanders: 1 injured Source: [MSNBC staff, 2008]

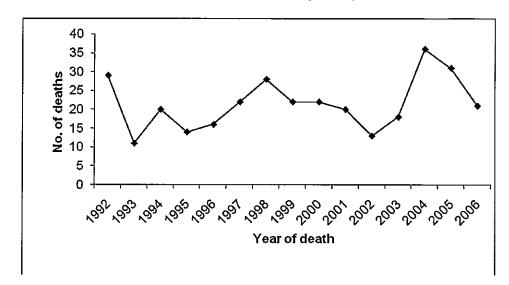


Figure 1. Crane-Related Deaths in Construction by Year, 1992-2006*

Table 2. Causes of crane-related deaths in construction, 1992-2006

Cause of death	# deaths	%
Overhead power line electrocutions	102	32%
Crane collapses	68	21%
Struck by crane booms/jibs*	59	18%
Struck by crane loads	24	7%
Caught in/between	21	7%
Struck by cranes**	18	6%
Other causes***	31	10%
Total	323	****

^{* 52} of 59 struck by crane booms/jibs were due to falling booms/jibs

Source: U.S. Bureau of Labor Statistics Census of Fatal Occupational Injuries Research File

^{*} Data from 2006 are preliminary; data from 1992-2005 are revised and final. Source: U.S. Bureau of Labor Statistics Census of Fatal Occupational Injuries Research File

^{**} Includes 10 run over by mobile cranes

^{***} Other causes includes 14 struck by other crane parts and 9 highway incidents

^{****}Does not add to 100 due to rounding.

Table 3. Activity of construction workers electrocuted by overhead power lines, 1992-2006

Contact with overhead power lines	#	%
Worker on foot touching/guiding load or cables	40	39%
Operating crane*	32	31%
Worker on foot touching crane	19	19%
Other**	11	11%
Total	102	100%

^{*} Includes 7 deaths of operators who jumped from crane

Source: U.S. Bureau of Labor Statistics Census of Fatal Occupational Injuries Research File

Research for this report was funded by CPWR – The Center for Construction Research and Training, using grant U54 OH008307 from the National Institute of Occupational Safety and Health (NIOSH). The contents are solely the responsibility of the authors and do not necessarily represent the official views of NIOSH.

CPWR – The Center for Construction Research and Training is a 501-c-3 organization affiliated with the Building and Construction Trades Council, AFL-CIO, and serves as the research arm of the BCTD. CPWR provides safety and health research and information for the construction trades and industry. For more information, visit www.cpwr.com.

^{**} Includes 6 deaths of workers on foot near crane

FOR THE RECORD



September 22, 2014

The Building Owners and Managers Association of Greater New York, Inc. (BOMA/NY), which represents more than 750 owners, property managers, and building professionals who either own or manage 400 million square feet of commercial space, appreciates this opportunity to submit testimony on the proposed legislation being heard by the Committee on Housing and Buildings today, September 22, 2014. Although we of course support legislation that would improve efficiency and safety, we have some concerns with some of these proposed bills. We look forward to working with you going forward on these proposed measures.

Intro. Nos. 472-A/2014 and 474-A-2014

BOMA/NY supports both of these proposed laws. The first is needed to make technical corrections and clarifications regarding the Codes. The second would push the effective dates of the Codes back three months, to December 31, 2014. Such a change will provide extra time to allow for compliance with the new Codes, which is particularly necessary as those Codes have not yet been widely distributed.

Int. No. 298-A/2014

This proposed bill would impose major costs to construction and adds unnecessary training requirements for competent persons. To the first point, requiring a master rigger to be on sight under the additional conditions envisioned in the proposed bill would be very costly, and the current approach has been successfully employed since 2001. To the second point, there is no reason to stop relying on training from organizations accredited by the National Commission for Certifying Agencies and the American National Standards Institute. This simply imposes burdens without providing benefits.

Int. No. 299-A/2014

This bill would undermine crane safety operations and impose significant costs on the City. Crane operation was carefully studied not long ago by the City's High Risk Construction Oversight Study Advisory Committee, which was made of industry experts and specifically called for, among its 66 recommendations, the adoption of the National Commission for the Certification of Crane Operators (NCCCO) training and testing that are in place now. The value of this recommendation has since been corroborated by subsequent studies. Abandoning that approach will inevitably lead to less rigorous training and testing and decreased safety. In addition, the cost burdens imposed on the City for purchasing and maintaining the significant amount of equipment on which operators would need to be trained and tested would be consequential and is, because NCCCO training and testing is available, unnecessary.



Int. No.473-A/2014

Direct and continuing supervision by a licensed rigger throughout the period of use of a hanging scaffolding seems unnecessary, burdensome, and costly. This provision would impact most multifamily and commercial buildings subject to Local Law 11 and would impact NYCHA, affordable housing, and other buildings in lower income neighborhoods.

Int. No. 476-A/2014

This draft bill would unnecessarily raise the amount of practical experience required for riggers, making it harder for people to pursue this career and reducing the number of riggers available in the City.



Association of Electrical Contractors, Inc.

36-36 33rd Street, Suite 402, Long Island City, NY 11106 Phone: 718.752.0800 Fax: 718.752.0805 www.aecnyc.com

> TESTIMONY TO THE NEW YORK CITY COUNCIL COMMITTEE ON HOUSING AND BUILDINGS PUBLIC HEARING ON INTRO. 0298-2014 SEPTEMBER 22, 2014

SUBMITTED BY JEFFREY ELMER, AEC EXECUTIVE SECRETARY

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JEFFREY ELMER

DENOTES PAST PRESIDENTS

I am writing on behalf of the Association of Electrical Contractors in opposition to Intro 0298-2014 as it is currently drafted. The AEC is comprised of 85 electrical contractors and supply houses affiliated with IBEW Local Union # 3 and the Joint Industry Board of the Electrical Industry (JIB). The AEC is also one of two trade organizations that make up the New York City chapter of the National Electrical Contractors Association (NECA).

Currently, "competent persons", as opposed to just licensed riggers, can supervise the hoisting of electrical and mechanical equipment. The proposed legislation would harm our industry by only allowing riggers to hoist or supervise hoisting of electrical or mechanical equipment or a major component thereof, weighing in excess of 2,000 pounds. We believe this is a very unreasonable limitation. Safety is not compromised by allowing competent persons to supervise hoisting and lowering this kind of equipment. Our electrical contractors have always hoisted our own electrical equipment. We are unaware of a rash of accidents that presumably prompted this legislative proposal.

We strongly share the City Council's concern about the safety of construction workers and the general public. However it should be pointed out that the unionized electrical industry has an excellent safety record overall. Our contractor members contribute millions of dollars to national and local programs that train our skilled electricians to work as safely as possible. In fact, this is the number one priority for our industry. Just last Wednesday, we brought NECA's Executive Director for Safety and Standards to our meeting for a Safety Seminar for our members, and their superintendents and forepersons.

We respectfully request that the City Council modify the language in this bill to address our concerns.



Testimony before the New York City Council Committee on Housing and Buildings Introductions 298, 299, 473, 473, and 476 By Alexandra Hanson, Policy Director September 22nd, 2014

On behalf of the New York State Association for Affordable Housing (NYSAFAH), I would like to thank Chair Williams and the members of the Committee on Housing and Buildings for the opportunity to submit comments on the bills before the committee today.

NYSAFAH supports measures to increase the supply of affordable housing through public investment in housing development and through cost-saving measures, including regulatory reform, for greater efficiency in the development process while continuing to ensure high quality and safety standards. As the trade association for New York's affordable housing industry, our 300 members include developers, lenders, investors, attorneys, architects and others active in the financing, construction, and operation of affordable housing.

Int. 474-2014: NYC Construction Codes

NYSAFAH supports Int. 474, which provides a three month delay to the implementation of the recent changes to the new codes from October 1st to December 31st 2014. The delay will offer the industry relief from complying with the new codes before they have been widely distributed.

Int. 299-2014: Operation of hoisting machines

NYSAFAH opposes Int. 299 as it would reverse progress made by the City over the past several years to move to a national crane licensing and training standard. Until recently, New York City administered crane licensing standards and testing, which did not meet modern safety standards. Training and exam standards were not eligible for national accreditation as they tested proficiency on outdated equipment and did not meet current safety standards or continuing education OSHA requirements. In addition, the process discounted the experience of skilled crane operators from comparably dense areas, instead requiring that they have several years of training in New York City before being eligible for licensing.

After two crane accidents in 2008 involving multiple fatalities, New York City convened an advisory committee of over 40 industry experts to provide recommendations to improve safety. The committee's findings included the recommendation to move to a nationally accredited training and testing standard which was implemented by the City in 2012. National crane licensing training and examination are administered by the National Commission for the Certification of Crane Operators (NCCCO), which coordinates its testing services through all major industry groups and is formally recognized by a number of national organizations including the International Union of Operating Engineers (IUOE). The NCCCO has multiple committees that constantly review and revise exams to ensure that they reflect the equipment and safety requirements of modern construction.

Int. 299 would reverse this progress to a national crane licensing standard as well as return to the requirement for two years of training in New York City to be eligible for Class A and Class B

licenses. Such a move would roll back safety standards, as well as make jobs less accessible to qualified operators.

Ints. 298, 473 and 476-2014

NYSAFAH opposes Ints. 298, 473 and 476. The requirements put forth in these bills were mediation items during the Building Code process and did not receive support from a significant portion of the construction industry. As a result, they were not included in the Code revisions. That process should be respected as it reflects months of careful deliberations by industry experts. Each of these bills would increase the cost of construction without any commensurate benefit to the City or the public at a time when construction costs are rising rapidly and the City's affordable housing crisis is worsening.

Int. 298-2014: Rigging

The issue of requiring all lifts and "picks" to be determined to be "critical" and requiring a master rigger on site was reviewed during the Building Code revision process. The language was adopted without changes proposed in Int. 298. These new requirements will add approximately \$900K per job per year unnecessarily. Increased demand for these positions may further drive up cost by causing a shortage of master riggers.

Int. 473-2014: Scaffolding requirements

NYSAFAH believes the City is fully protected under the current language for suspended scaffolds, requiring a competent person designated by the scaffolding company where the City requires a site safety plan. DOB currently reviews site safety plans and has the right determine if the site requires oversight to protect the public. This requirement would particularly impact multifamily buildings subject to Local Law 11.

Int. 476-2014: Special rigger licensing requirements

NYSAFAH is concerned that increasing the practical experience requirement in New York City would artificially restrict the pool of available riggers in the city and drive up construction costs due to lower supply. It would also create greater barriers to entry into this field. It is unclear what will be gained by requiring two additional apprentice years.

I would like to thank Chair Williams and the Committee on Housing and Buildings again for the opportunity to testify today and for your consideration of NYSAFAH's comments.

Contact: Alexandra Hanson, (646) 473-1209 alexandra@nysafah.org



25-20 Borden Avenue, Long Island City, NY 11101 P: (917) 584-6569

September 22, 2014

RE: Intro 0473a-2014

The following points pertain to the service and responsibility of the New York City communities of the Special Rigger.

- Special riggers are the responsible, experienced professionals investigated at length by the IAD (internal audits and discipline unit of DOB) as well as the DCAS (Department of City Wide Administrative Services) and then licensed by the New York City Department of Buildings (Licensing Unit).
- Special Riggers are found in the fabric of the construction, alteration and maintenance fields of our city, with one direct constant including the alteration, maintenance and repair of building facades and balconies.
- Our Special Riggers can be seen anywhere you go in our city by looking up or across to the highest of high rises to the lower but not least of two, three & four story residential buildings, suspended (hanging) from 2,3 & 4 point suspended scaffolds as well as installing & operating hoisting equipment.
- Special Riggers provide many services within the city and specifically are needed for the preservation and restoration of the many Historically Land Marked and Contemporary buildings as with the waterproofing, brick replacement, repair to cleaning and painting. Providing access, hoisting and lowering to the most complex situations of our densely populated city.
- The current requirement to install or operate a suspended scaffold and hoisting equipment in all the five boroughs is to maintain a valid Special Riggers license which includes; a registered corporation, being an officer of the same, current and on file the proper general liability, disability and workers compensation insurance for the business of hoisting and lowering personnel and/materials in NYC and maintaining a current business address, telephone line (land line) as well as being in direct and frequent communication with all designated foreman and specific and random site visits for supervision.



25-20 Borden Avenue, Long Island City, NY 11101 P: (917) 584-6569

Continued:

September 22, 2014

RE: Intro 0473a-2014

- The role of the Special Rigger is vast and personal he or she is required to plan, set up and/or inspect all installations and subsequent relocations of hoisting equipment.
 - ➤ Designation of a Rigging Foreman: they are required to interview in great length, personally check there ability of hands on knowledge, Industry Safe Practice—and train them as needed, ensure continued education to there designated foremen. Once this process is complete a document is provided to the Department licensing unit on record and providing specific information to designate these as foreman under there supervision. After this is done the Special Rigger is required to oversee the operations of them and in no way does any number of foremen remove the responsibility of the Special Rigger. All Special Rigger's and Designated Foremen must be in frequent direct contact.
 - Designating Operating Personnel: all personnel hired on to a Rigging Crew and to operate Suspended Scaffold and Hoisting Equipment are subject to an interview verbally and practical hands on knowledge, verifying there certification and ensuring there continued education in all safety pertaining to there trade and job sites they will be in contact.
- The current requirement to obtain a Special Riggers license are; a minimum of one year's experience working directly under a Special Rigger (subsequently obtaining that Special Riggers sign off), receive training in the thirty two hour Rigging Supervisors certification course, pass the practical (hands on) and written exams. The apply to the licensing division of DOB where these and many other attributes are verified including pay stubs, tax returns, social security abstracts and criminal abstracts etc., then a full and complete background check performed by their IAD unit is passes or issues explained and determined and to that end a formal practical and written exams are required passed.



25-20 Borden Avenue, Long Island City, NY 11101 P: (917) 584-6569

Continued:

September 22, 2014

RE: Intro 0473a-2014

- When the new building code law goes into effect on October 1, 2014, who is responsible as well as who they would be responsible to is precarious at best.
- These revisions to the 2008 code have sometimes eliminated the requirement for a Special Rigger, sometimes cites the supervision of others to be named and totally eliminates any supervision whatsoever in the Rigging and operation of suspended scaffold and hoisting equipment for material & personnel.
- By removing the these required, responsible experts from Rigging operations, Local Law 141 of 2013 will inadvertently reduce the safety standards, which have been painstakingly enforced and adhered to with training, education at great expense to this cities Special Riggers, Crews, Clientele, enforcing agencies and citizens. These standards that have allowed the city to enjoy a paramount level of safety to that protects the public, pedestrians, workers and property in or around construction sites.
- There are few named that will be responsible for the overall supervision Rigging operations:
 - > The first being a "competent person" who by the definition would require only (in this trade) 32 hour training certificate with no responsible/ accountable supervision.
 - Second "scaffold controlling entity" of which no definition has been delivered.
 - Third a "licensed engineer or architect" that we even in this city will be hard pressed to locate one with enough direct knowledge of the regulations (local, state and federal) and industry safe practices that would have the time to supervise these operations with any real results or that would be willing to take this responsibility and expense of insurances and manpower.



25-20 Borden Avenue, Long Island City, NY 11101 P: (917) 584-6569

Continued:

September 22, 2014

RE: Intro 0473a-2014

- Only Special Riggers have the knowledge, experience wherewithal needed to maintain this the highest level of safety required to supervise and protect the public, workers and properties of this city. Furthermore we would be remiss to take a lack of tangible incidents & injuries as a reason to remove these professionals from the field.
- The Special Riggers Association represents thousands of the premier responsible, licensed professional with decades of experience operating in New York City and continuously training to further there objectivity in the Industry Safe Practice.
- We all recognize the importance of maintaining a safe work environment for all workers, public, passing pedestrians and properties and have woven it into our daily practice, project development with the most up to date equipment, continuous training of our personnel.
- The bill before you will ensure this safety is continued as well as built on by requiring the licensed Special Riggers maintain their responsibility for the repair, alteration and maintenance of buildings with a certificate of occupancy.
- Though our bill does not affect the exemptions for new construction. The new law provides an exemption for new construction.
- Ensuring a scaffold is designed either a registered design professional, Special Rigger or both and filed with the Department of Buildings creates much needed checks and balances.
- As licensed professionals, we maintain, preserve and protect the integrity of New York City's skyline- from oldest to newest, from highest to lower buildings that make up our city.

25-20 Borden Avenue, Long Island City, NY 11101 P: (917) 584-6569

Continued:

September 22, 2014

RE: Intro 0473a-2014

- Our members have provided access, hoisted personnel, and material and worked on the New Yorker Hotel, Woolworth Building, Empire State Building, Rockefeller Center, Bank of America, Trump Towers......
- Site Safety Managers play a strong and specific role in the construction industry. However with this knowledge we cannot and should not attempt to replace the experienced, Licensed Special Rigger because the duties conflict on many occasions and the learning curve would be to our detriment.
- The Special Riggers goal in no uncertain terms is to protect the integrity of the industry while maintaining a safe environment for all.
- The Special Riggers Association Thanks council. Chair Jumaane Williams, his colleagues and his staff for all their hard work on this bill.

Sincerely,

Robert DeMarco

Managing Member Director of Programs



GARY Labarbera President AFFILIATED WITH THE BUILDING CONSTRUCTION TRADES DEPARTMENT OF WASHINGTON D.C.

BUILDING AND CONSTRUCTION TRADES COUNCIL OF NEW YORK STATE

AMERICAN FEDERATION OF LABOR OF CONGRESS OF INDUSTRIAL ORGANIZATION

September 22, 2014

Via Email: viverito@council.nyc.ny.us
New York City Council
Speaker's Office
250 Broadway, Suite 1856
New York, New York 10007

Dear Speaker Mark – Viverito;

The New York City Building and Construction Trades Council ("BCTC") represents approximately 100,000 construction workers in the City of New York. We are the leading advocate for worker safety and responsible contracting practices in the City of New York.

The BCTC believes that construction in New York City presents its own unique safety conditions and requirements. On this basis the BCTC fully supports Intro 299, a law to amend the New York City Building code in relation to the hoisting of machines. Intro 299 recognizes that the unique challenges presented by construction in our City can best be addressed by local training, experience and local knowledge. The local training and testing provided for in this Bill is vital to maintaining construction site safety.

It is respectfully submitted that Intro 299 enhances safety for workers and the public and should be passed.

Thank you.

Sincerely,

Mary EaBarbera Labora

Testimony of Allen Wright

Before

The New York City Council Committee on Housing and Buildings

Honorable Jumaane Williams

Chairman

Monday, September 22, 2014

Good afternoon Chairman Williams and members of the committee; sitting beside me are IUOE Local 14 business agents John Powers and Kenneth Klemmens. We would like to thank you for this opportunity to address the committee on the critical issue of crane licensing and safety.

My name is Allen Wright, and I have been a member of IUOE Local 14 for nearly 20 years. I was born and raised in Brooklyn and am a graduate of Brooklyn College. More importantly, I am also a graduate of the IUOE Local 14 Training Program. I have held a New York City Hoisting Machine Operator License since 1999.

We are here today to urge the members of this Council to join us in supporting Intro 299A. This legislation will once again require the City of New York to develop and conduct written and practical license exams and provide oversight of the unique challenges of operating a crane in New York City.

Once passed, this legislation will further require applicants for a Class A license who have met all other criteria to have at least three years of experience within the past five years under the direct and continuing supervision of a licensed Class A or B hoisting machine operator; provided that those years of experience were undertaken in New York City.

This is important legislation because it will provide New York City the ability to differentiate "qualification" from "certification."

Allow me to provide some background about crane licenses. The most widely held is the "C" license, the so-called "cherry picker" license. Holders of this license are permitted to operate smaller mobile cranes.

But, when people talk about crane operations in New York City they are generally speaking about the tall tower cranes. Those are the giant cranes at the top or along the sides of skyscrapers with jibs and booms that stretch hundreds of feet and hoist thousands of pounds of material above our heads. Working on these cranes requires an "A" license or an "A" license with a "B" endorsement.

Because I hold an "A" license I've had the privilege of operating nearly every type of heavy equipment imaginable including milling machines, pavers, excavators, and every type of crane from a "cherry picker" to a tower crane at the top of World Trade Center.

Believe me, there is no office in the world that can match the view from the cockpit of a crane more than 1,000 feet above New York City. There is also no other job where you -- and you alone -- are responsible for hoisting tons of steel, cement, glass and miscellaneous equipment high above the heads of hundreds of workers and thousands of pedestrians all day, every day.

We're up there because we have successfully demonstrated our knowledge in the classroom; and then honed our skills over more than three years by working on cranes and learning from the best crane operators in the world.

That New York City issued license says we are worthy and capable of not only ensuring the pace of work, but the great responsibilities of protecting the health, safety and even the lives of everyone on the worksite and the hundreds of pedestrians beneath our cranes.

Every day, thousands of New Yorkers unknowingly depend on our knowledge of weather and wind and our skill to handle and limit its effects on the material we are hoisting.

In that cab we know and understand how each piece that goes up may rise differently than the piece that went up yesterday...or even just an hour earlier. We know that bundled strands of rebar are going to rise differently than an eight ton bucket of cement, or oversized windows or a refrigeration unit.

We also know the tiniest change in wind direction or velocity can change everything in an instant. It is incumbent upon us to respond to those changes.

We do that with one simple mantra: safety first and foremost.

So, no matter the demands and targets of the project, when wind, weather or other external conditions create a risk we must be able to say: "We cannot do this today."

That's why New York City developed and maintained complete oversight of the most stringent and demanding urban testing and licensing procedures for crane operators in the United States. And, New York City has fought vigorously to defend its right to maintain those standards when challenged.

Unfortunately that is no longer the case.

The New York City Department of Buildings no longer develops, conducts or supervises the exam for Class C license. Under the rules introduced near the end of the Bloomberg administration New York City now accepts the national certification exam conducted outside New York City under the National Commission for the Certification of Crane Operators (NCCCO); or the Crane Institute Certification (CIC).

Along with this "national certification" New York City also requires applicants for an A license to have "at least two years of experience within three years prior to application under the direct and continuing supervision of a licensed Hoisting Machine Operator in New York City or in another jurisdiction that regulates crane operators. Only one year of that required experience must be in New York City or in an urban area of comparable density.

I challenge anyone to find any city in the United States with a "comparable density" to match New York. I don't want to take anything away from any of the many great American cities. Let's just look at the facts.

According to the industry publication The Real Deal, buildings of more than 12 floors are considered a high-rise; buildings taller than 500-feet are skyscrapers.

With 5,900 high-rise buildings and 204 skyscrapers, New York City has the greatest concentration of tall, taller, and tallest buildings in the United States. No other city can match those numbers: Chicago boasts 1,150 high-rises and 79 skyscrapers; Los Angeles 546 high-rise buildings; 21 skyscrapers; Philadelphia 364 high-rise buildings, 11 skyscrapers; and of Boston's 320 high-rise buildings, only six rise above of 500-feet.

Now let's look at population: The majority of our tall buildings are squeezed into the 23-square miles of Manhattan with a population density of 52,000 people for every square mile. Even if you factor in the Bronx, Brooklyn, Queens and Staten Island there are still 27,700 New Yorkers for each square mile of the city.

That's more than twice the 13,300 residents per square mile in Boston and nearly four times the 7,400 residents per square mile in Los Angeles!

Those numbers don't include the 55 million tourists who visit New York each year and a millions of commuters entering Manhattan each day to work. Factor in New York's underground maze of subways, utility vaults, steam pipes, traffic, and the complex infrastructure systems upon which these multi-ton cranes sit upon, we have the most complex and unique infrastructure to be found anywhere in North America.

Construction, especially high-rise construction within these tight, restrictive spaces is such that engineers have designed equipment and developed construction techniques specifically for New York City's unique conditions. There are methods and equipment employed in New York which cannot be found anywhere else in the world.

Past administrations knew and understood that in this environment any mistake involving a crane is a catastrophe.

So we ask why. Why would New York City walk away from its long-held responsibilities and obligations to protect and ensure the safety of thousands of workers, and millions New Yorkers by giving up its oversight to adopt a national standard?

Can you imagine the outrage if New York City decided to stop testing for new Police Officers and Firefighters and simply accepted prior experience from another city? Imagine putting a police officer from Dallas onto the streets of Flushing or Washington Heights.

What could possibly go wrong?

The 1,400 members of Local 14 cannot understand the reasoning behind the decision made by the previous administration. Why, in the midst of a construction boom, would New York City step away from its historic and critical obligation to ensure the safety of New Yorkers? It makes no sense.

And, while New York City has stepped away from its oversight, New York State has not, and still requires NCCCO and CIC approved operators from out of state to take the exam developed and administered by the New York State Department of Labor. That exam has produced some very disturbing results.

According to the state DOL during a recent testing period 50 percent of all NCCCO certificate holders failed that exam. Even more troubling half of those who failed that practical exam were stopped and removed during the test because of safety concerns.

Results like those, concerns raised within the industry, and within the committee which helped draft the new OSHA standards have prompted OSHA to postpone establishing their regulations until November of 2017.

In their letter to OSHA, 16 members of the Crane and Derricks Advisory Committee (C-DAC) wrote: "it was never the intent of C-DAC... to imply that crane operator certification was equal to qualification."

While OSHA came to realize they acted in haste and stepped back, the Department of Buildings ignored the City Charter, a century of local regulatory control and oversight to accept certification as qualification.

I know that I have talked at some length and have thrown a lot of facts and figures at you. We wanted to make sure everyone understands crane operations within New York City are dangerous and can be deadly.

Taking into consideration the density, and complexity that has led to the development of specific machinery and construction techniques, it is critically important New York City again take back its rightful control and oversight of in the licensing of crane operators.

Certified does not mean qualified.

Thank you for your time. We will be happy to answer any questions.



September 22, 2014

Re: Intro 0473A-2014

Good morning Council Members,

My name is James Bifulco. I am the managing consultant for Total Safety Consulting and oversee more than 150 safety professionals assigned to major construction projects throughout NYC. I've been a practicing safety professional more than 20 years, certified by the Board of Safety Professionals, a licensed NYC Site Safety Manager, and a strong advocate for improved construction safety in New York City. I've held technical committee positions on the 2008 NYC International Code Committee, and was the Co-chairman of the 2013 NYC Building Code Update Committee on Construction Safety and Demolition.

I strongly believe that when the public is exposed to potential hazards because of construction operations, there is a greater duty to safety, oversight and accountability. This is currently the case for lifting material or erecting and operating suspended scaffolds over areas used by the public in occupied buildings. These high-hazard operations require direct and continual supervision by Riggers. The current process to receive and maintain a Riggers License, and a system of disciplinary action is clear. It's undisputable and ensures a significantly greater level of quality, safety and accountability.

In an attempt to correct the misapplication of the Licensed Riggers requirements for new buildings or full demolitions where buildings are typically unoccupied, the changes that will become effective with the updated Building Code exempt the requirement for Licensed Riggers for all buildings whether they are occupied or not.

The allowed alternative to a Licensed Rigger will be a "competent person" with no accountability, no mechanism for discipline, and whose competency is verified by a training card that unfortunately can be purchased from an unscrupulous street vendor. Reputable contractors will maintain safeguards to ensure safety, however, experience has shown there will be many who will take chances at a cost to public safety.

Over the last 10 years the construction industry has made great strides to improve construction and public safety, including tighter restrictions on the use of suspended scaffolds. There has been a significant reduction in accidents, incidents and fatalities because of this.

I wholeheartedly endorse the changes proposed in Intro 0473A-2014. This bill will maintain the safeguards necessary for public safety on restoration projects where buildings are occupied, while maintaining the solution achieved in the new code provisions of exempting the license requirement for new buildings and full demolitions.



September 22, 2014

Ladies & Gentlemen of the Housing and Building Committee,

My name is Howard Zimmerman. I am the Owner of Howard L. Zimmerman- Architects, a sixty person Architectural/Engineering firm located in Manhattan for the past thirty five years specializing in the repair and restoration of existing buildings (commonly known as Local Law 11). In any given year, we have approximately four hundred active façade repair projects which can range in cost from \$100,000-\$15,000 million dollars. At the bare minimum we generate at least \$75 million dollars in work more likely \$150,000 million dollars in work for the Exterior Restoration Contractors of New York City on an annual basis.

My work is performed on the exterior facades of buildings by restoration workmen who are suspended by swing stage platforms hanging from ten to forty stories above the ground. It is the driving concern of all parties; The Architect/Engineer- Restoration Contractor-Workers performing the work-The Special Riggers and The Department of Buildings- that SAFETY be of paramount concern. Like any job that has any amount of danger or safety concern- everybody wants to make sure at the end of the day- everyone returns home safely to their families.

The current requirement to install and operate a 2-point hanging scaffold in NYC is a valid Special Rigger's License, issued by the NYC Department of Buildings. In order to become a special rigger, you must have at least one year of experience working under a licensed special rigger, take a 32 hour course, pass both practical and written exams and undergo a Department of Investigation background check.

When the new Building Code goes into effect on October 1, 2014- the new code becomes ambiguous and sometimes eliminates the need for a Special Rigger and other times any oversight whatsoever, in the rigging and operation of a suspended scaffold.

What thought process or what was the ill -conceived thinking behind reducing the safety training or requirements for ensuring safety in a high risk environment?

I want to ensure a scaffold is designed by a registered Design Professional or a Special Rigger and filed with the Department of Buildings, knowing this sets up a series of safety checks and balances.

I am all for less government and less regulation but not when the public safety is involved, I cannot stress enough that the proposed dilution of proper safety requirements and training by eliminating the need for Special Riggers seems to be going in the wrong direction and not in the best interests of Public Safety.

I support the passage of Intro 0473a-2014.

Thank you very much for your time and for the privilege of being able to speak before you.

Howard

Testimony for Public Hearing City of New York Housing and Buildings Committee

September 22, 2014

Michael R. Gianatasio 1 Radisson Plaza, 8th Floor New Rochelle, NY 10801

RE: Intro 0473a-2014, - An Act Concerning Licensed Special Riggers

Good afternoon Housing and Building Committee Members. My name is Michael R. Gianatasio. I am a New York State licensed professional engineer and New York City licensed construction site safety manager. I am also a Director of ISG Risk Management, Inc., which is a full service safety and occupational risk management firm that conducts and provides site safety consulting, training and safety engineering on major projects in New York City. I am also a member of the Special Riggers Association which represents thousands of licensed, trained professionals with decades of experience.

I am here today to ask you to support the above referenced bill.

I ask you not to allow unlicensed and inexperienced individuals with no former education, background or experience to take the place of a special rigger on major projects in NYC.

Licensed Special Riggers, like licensed Construction Site Safety Managers, are experienced professionals, licensed by the New York City Department of Buildings. Special Riggers have been trained in the alteration, maintenance and repair of building facades. The services provided by Special riggers include waterproofing, brick replacement/repair, masonry pointing, and restoration of historic landmark and contemporary buildings. In order to become a special

rigger, you must have at least one year of experience working under a licensed special rigger, take a 16-hour course (32 for a foreman), pass both practical and written exams and undergo a Department of Investigation background check. When the new building code law goes into effect on October 1, 2014, the new code appears to eliminate the need for a Special Rigger and other times any oversight whatsoever, in the rigging and operation of a suspended scaffold. By removing the experts from rigging operations, Local Law 141 of 2013 will reduce the safety standards, which have been developed to protect the general public and workers on and around construction sites.

This bill ensures that licensed special riggers are required for the repair, alteration and maintenance of buildings with a certificate of occupancy. Ensuring a scaffold is designed by a registered design professional or a Special Rigger and filed with the Department of Buildings creates checks and balances. As licensed professionals, we maintain, preserve and protect the integrity of New York City's skyline.

Licensed Construction Site Safety Managers and the Special Riggers' goal are to protect the integrity of the industry and maintain a safe work site. This is my opinion based on my education, background and experience in this area.

Thank you for your time and consideration.

Sincerely,

Michael R. Gianatasio, P.E.

Andrew Janusas, NYC Master Rigger License # 201, September 22, 2014

What is rigging? According to "Cranes Today," rigging is "the art of lifting heavy objects." Crane rigging is a mentally demanding job that requires considerable foresight and planning. This acute attention to detail is aimed not only at the successful completion of a job, but also at maintaining a safe work environment...As with any industry involving heavy equipment and heavy loads, crane rigging requires experience and specialization. Read more: http://www.ehow.com/facts_7308495_crane-rigging-definition.html

Add to the above that you will be working in the unique physical and operational confines of NYC.

Discussion: New York City Master Rigger Qualification for Exam/ Experience Requirements

Prior to being considered a candidate for licensing as a Master Rigger in NYC you must have five years of full time rigging work experience in NYC. This should remain as a minimum requirement.

Break it down: 5 years of full time employment at 50 weeks per year at 40 hours a week=10,000 hours

It is noteworthy to say that this is the same standard that's applied to apprenticeship programs in many skilled trade unions and trade licensing programs.

After achieving the 10,000 hours of experience a person interested in pursuing the license must first pass a written exam and then pass a practical (hands on) exam. After that the candidate must clear a background examination. Then you qualify for licensing as a master rigger.

Really this is all about development of expertise in the field from experience.

The scope that a master rigger is responsible for is broad. It's not just about placing a crane in the correct location and hoisting equipment to a building's roof. The master rigger is required to have thorough knowledge and understanding of the tools, equipment, materials and the codes that govern the work and protects the public. A master rigger is involved from early in the planning stages right thru the safe completion of the job. Including how the rigging is connected to the equipment being hoisted and how the equipment is controlled while the crane hoists it. When it comes to execution of the job the master rigger has to use his experience to assess and control risks inherent to the rigging in NYC environment.

There have recently been discussions by code writers to allow using a person with a national certification that requires only 30 hours of study and test time to perform the functions of a master rigger. This is proposed instead of the 10,000 hours of hands on experience to qualify to become a licensed master rigger.

There is no substitute for hands on experience, especially when it comes to highly specialized services to the unique construction industry in NYC. How much experience should somebody have who is responsible for the safety and proper execution of rigging work in New York City? More is better. No? As it is right now 10,000 hours of hands on experience is the minimum. This requirement should not be reduced.

The New York City Council

Hon. Melissa Mark-Viverito, Speaker

City Hall & 250 Broadway

New York, NY 10007

Committee on Housing & Buildings
Hon. Jumaane D. Williams, Chair

Public Hearing Testimony on Int. 0298-A-2014 Monday, September 22, 2014, 1:00PM

Hello, my name is Bobbie Mack and I am licensed rigging foreman. I am here today to speak to you about the rigging industry and why it's important that licensed riggers are involved in the housing and rigging work that takes place in the field. I am 2 years into my 5 year master rigger apprenticeship.

In a growing industry where safety is becoming a major concern, it's vital to our community and employees to be protected by Master Riggers. Training companies have tried to eliminate the purpose and length of regular training standards, by offering 16-32 hours course to allow individuals to perform lifting practices that may require more experience. Master Riggers and the Licensed Rigging Foreman that work under them undergo extensive training that surpass the 16-32 hours courses offered as it takes 5 years or 10,000 hours before your eligible to become a Master Rigger. One aspect of major focus on construction sites is to get jobs completed without incident or injury. Master Riggers exceed the requirements presently being asked by new Code Writers & Licensing Committees. Master Riggers have worked in the city and have protected its citizens for many years and will continue to do so with help of the City Council.

Thank you.



September 22, 2014

Glenn J. Fuerth 212,915,5369 (direct) 917,538,0376 (mobile) Glenn.Fuerth@wilsonelser.com

New York City Council Committee on Housing and Buildings City Hall New York, New York 10007

Attention: Councilman Jumaane Williams

Re: Proposed Initiative 298-A Amendment to The NYC Building Code

Dear Councilman Williams:

I am a partner in the law firm of Wilson Elser and am the co-chairman of my Firm's national Design Professional Practice Team. I have been engaged in construction litigation for 36 years and have developed a sub specialty as relates to hoisting equipment, and in particular cranes. I have been asked by the NYC Master Rigger Association to provide my comments concerning the above proposed amendment.

At present, a master rigger is required to participate in the erection, jumping, climbing, rigging of dismantling of a tower or climber crane as set forth in Building Code Section 3319 et. seq., because of the master rigger's specialized expertise. Additionally, a master rigger's participation is required for the hoisting of any article per the provisions of Building Code Section 3316 to be effective October 1, 2014, other than the exemptions set forth therein. What the proposed legislation intends to address, as an enhancement to the October 1, 2014, revision, is the requirement for the utilization of a master rigger during the operation of all cranes when a pick is being made of specialized loads consisting of permanent mechanical, electrical or plumbing equipment or a major component thereof weighing in excess of 2,000 pounds. These picks involve extraordinary loads in contrast to the standard pick of rebar, structural steel floor beams, headers and columns, as well as concrete buckets, planking and the like. There is a clear need for the amendment because the enumerated loads are irregular in configuration and present unusual hoisting and rigging issues requiring the specialized expertise of a master rigger. The enactment of the amendment clearly serves to enhance the safety of both the public and workers on site as opposed to leaving the responsibility to workers lacking the specialized training of a master rigger.

I thank you for the opportunity to provide this submission.

Wilson Elser Moskowitz Edelman & Dicker

Glenn L. Puerth

150 East 42nd Street • New York, NY 10017 • p 212,490,3000 • f 212,490,3038

Good afternoon.

My name is Peter Ronzetti.

I am the Vice President of Operations at Welsbach Electric Corp., located in College Point, Queens, NY. Welsbach Electric Corp. is a member in good standing of the New York City Chapter, National Electrical Contractors Association, Inc.

I am here to testify in opposition to Intro 0298.

Currently, Building Code Section 3316.9.1 allows in limited circumstances for rigging to be performed or supervised by a competent person, in lieu of a licensed rigger.

A competent person is authorized when hoisting or lowering is in conjunction with (1) construction of a new building, or (2) the full demolition of an existing building, or (3) the vertical or horizontal enlargement of an existing building or (4) the alteration, maintenance or repair of a façade of a major building where a site safety plan is required.

Intro 0298 would change the Building Code so that only a licensed rigger could hoist or lower certain mechanical and electrical equipment and only a licensed rigger could perform in connection with the enlargement of an existing building and the maintenance or repair of the specified facades.

The proposed changes are unwarranted. Building Code Section 3316.9.2 includes several paragraphs of requirements to ensure that competent persons are fully capable of performing the permitted tasks.

Certification by either the National Committee of Certifying Agencies ("NCCA") or American National Standards Institute ("ANSI") is required or, in lieu thereof, training through the Building Department must be completed. Intro 0298 would inexplicably dismiss NCCA and ANSI certifications as ways to become qualified.

The bottom line is that the safety of the public is assured by Building Code Section 3316.9 as currently written. We are therefore opposed to Intro 0298 in its entirety.

Thank you for allowing me the opportunity to provide testimony this afternoon.

Empire Erectors and Electrical Co., Inc 801 East 134th Street Bronx, New York 10454

September 22, 2014,

New York City Council Members,

Dear Sirs,

I am writing to ask you to keep the license requirements that are currently in existence for Riggers and Sign Hangers in place as they are written. I feel that lowering these standards will be a mistake and create a danger to the public. If safety is our main concern why would you lower the standards that currently here to protect the workers and the public? I worked in these industry's for years to obtain the knowledge and experience it takes to obtain these licenses and perform these tasks safely. I employ union labor and I personally would not issue a rigging or sign hanging foreman certificate to someone in my employ that passed a 8, 16 or 32 hour course. I take my license privilege's very seriously and would expect the City of New York to as well. I know that all of my foreman are qualified to do the tasks that they perform because they have worked in the industry for years and have been trained at the union's school. All of the journeymen in my employ have completed 5 years of schooling at the union school. I urge the council to keep the current licensing and codes as they are.

Thank you,

ames Ramsburgh

Master Rigger #178, Master Sign Hanger #178, and Hoist Machine Operator #6453

September 22, 2014

TO: New York City Department of Buildings

RE: Master a Special Sign Hanger

We strongly disagree with your proposal that states "in lue of a Master a Special Sign Hanger a Master Rigger can hang a sign".

We have been hanging signage with Master or Special Sign Hanging licenses throughout the City for over 100 years.

The companies that hold the licenses also hold electrical licenses. Most signs require electrical hook ups.

We feel the Master Rigger is not qualified to hang signs.

We strongly disagree with this proposal change.

Thank you.

Frank J. Lettera

Frank J. Lettera President



Local Union No. 3 International Brotherhood of Electrical Workers OF GREATER NEW YORK AND VICINITY

OFFICES AND HEADQUARTERS

158-11 Harry Van Arsdale Jr. Avenue, Flushing NY 11365 Phone 718-591-4000 • Fax 718-380-8998

200 Bloomingdale Road, White Plains NY 10605 Phone 914-948-3800 • Fax 914-948-1843 AFFILIATED WITH AFL-CIO

NEW YORK CITY
CENTRAL LABOR COUNCIL
AFL-CIO

BUILDING & CONSTRUCTION TRADES COUNCIL OF GREATER NEW YORK AFL-CIQ

AND ALL STATE AND CENTRAL BODIES

Testimony of Richard N. Duva Jr.
Business Representative, Local #3 IBEW
Intro. 0298-2014
Meeting of the Committee on Housing & Buildings
September 18, 2014

Good Morning Chair Jumaane D. Williams and distinguished Committee Members. Thank you for the opportunity to testify at this hearing on behalf of Local Union #3 of the IBEW, NYC Electricians. My name is Richard Duva; I am a Business Representative for Local Union No. 3 of the International Brotherhood of Electrical Workers (I.B.E.W). Local 3, the largest local union of the International Brotherhood of Electrical Workers has 44 divisions with approximately 27,000 rank and file members including the Manufacturing, Supply, Expeditors, Street Lighting, Maintenance, Cable, A-Telephone, A-City, Administrative, and Construction Divisions. The construction division alone employs over 11,000 A-rated electricians. Many of our jobs and work opportunities for our members could be greatly affected by the proposed Intro. 0298-2014 (Rigging bill).

As a representative of Local Union #3, I would like to express my opposition to Intro. 0298-2014. Under the current NYC Administrative Code 28-404.1 rigging is allowed to be performed under the supervision of a "competent person" pursuant to Chapter 33 of the Building Code. For decades our skilled workforce and responsible contractors have unloaded and handled "our electrical equipment" in a safe, responsible manner. Under this proposed bill "electrical equipment" in excess of 2,000 pounds would require a licensed rigger. Historically this equipment has been handled by a "competent person" designated by our electrical contractors. We strongly object to the incursion of our work that this bill would create, if enacted. Local Union #3 along with The Joint Industry Board of the Electrical Industry and NECA-NY stand strongly united against Intro. 0298-2014.

Thank you, Chair Williams and your committee for the opportunity to convey our concerns regarding this bill.





JOINT INDUSTRY BOARD OF THE ELECTRICAL INDUSTRY

158-11 HARRY VAN ARSDALE JR. AVENUE • FLUSHING, N.Y. 11365 TEL: (718) 591-2000 • FAX: (718) 380-7741 • www.jibei.org

Testimony of Humberto J. Restrepo
Political Affairs Liaison, Joint Industry Board of the Electrical Industry
Intro. 0298-2014
Meeting of the Committee on Housing & Buildings
September 22, 2014

Good Morning Chair Jumaane D. Williams and distinguished Committee Members. Thank you for the opportunity to testify at this hearing on behalf of the Joint Industry Board of The Electrical Industry (JIB). My name is Humberto Restrepo; I am the Political Affairs Liaison for the Joint Industry Board of the Electrical Industry. The Joint Industry Board is a labor-management organization founded in 1943. The union partner is Local Union No. 3 of the International Brotherhood of Electrical Workers (I.B.E.W.). The management partners are the New York Chapter of the National Electrical Contractors Association and the Association of Electrical Contractors, Inc. The JIB is the ERISA administrator for a family of multi-employer benefits plans serving Local Union #3 and its affiliated contractors in the greater New York City area.

Local 3 is the largest local union of the International Brotherhood of Electrical Workers (I.B.E.W.). It has 44 divisions with approximately 27,000 rank and file members including the Manufacturing, Supply, Expeditors, Street Lighting, Maintenance, Cable, A-Telephone, A-City, Administrative, and Construction Divisions. The construction division alone employs over 11,000 A-rated electricians.

The JIB is testifying today in opposition to Intro. 0298-2014 (Rigging bill). Under the current NYC Administrative Code 28-404.1 rigging is allowed to be performed under the supervision of a "competent person" pursuant to Chapter 33 of the Building Code. For decades our skilled workforce and responsible contractors have unloaded and handled our electrical equipment in a safe, responsible and efficient manner. Under this proposed bill, electrical equipment in excess of 2,000 pounds would require a licensed rigger. Historically this equipment has been handled by a "competent person" designated by our electrical contractors. We strongly object to the incursion into our traditional scope of work that this bill would create, if enacted. The Joint Industry Board of the Electrical Industry along with its partners Local Union #3 I.B.E.W. and NECA-NY stand strongly united against Intro. 0298-2014.

Thank you Chair Williams and your committee for the opportunity to convey our concerns regarding this bill.



TESTIMONY OF TERENCE O'BRIEN, DEPUTY DIRECTOR OF THE PLUMBING FOUNDATION CITY OF NEW YORK, INC. BEFORE THE HOUSING AND BUILDINGS COMMITTEE OF THE CITY COUNCIL REGARDING INTRO. 298-A (IN REGARDS TO RIGGING) ON SEPTEMBER 22, 2014

I am Terence O'Brien Executive Deputy Director of the Plumbing Foundation of the City of New York, Inc. The Plumbing Foundation of the City of New York, Inc. is a clearinghouse and educational forum for the plumbing industry. The Plumbing Foundation is a nonprofit association of licensed contracting firms; engineering associations, manufacturers, and suppliers whose mission is to ensure the public health through the enactment and enforcement of safe plumbing codes. In connection with that mission we regularly meet with legislative and regulatory bodies that pass laws and promulgate regulations which affect the plumbing industry. I am here today to testify not in support or opposition of Intro. 298-A but to ask the Council for more time to evaluate the impact this proposed rigging change may have on the plumbing industry. I am in no position to comment on the bill since it wasn't until recently that plumbing work was to be covered by this legislation.

The original introduction 298 made no reference to plumbing or plumbing equipment. It was only 4 days ago, on September 18th, when the "A" version of this bill was introduced, was plumbing added to section 3316.16.9.1 subsection 3.4.2. It is not reasonable to think that 2 work days gives me enough time to contact my members and see how/if this will impact the plumbing industry. It is only fair that this bill be laid over to give more than 2 work days, in order for an entire industry to gauge the impact of this or any legislation.



TESTIMONY OF TERENCE O'BRIEN, DEPUTY EXECUTIVE DIRECTOR OF THE PLUMBING FOUNDATION CITY OF NEW YORK, INC. BEFORE THE HOUSING AND BUILDINGS COMMITTEE OF THE CITY COUNCIL REGARDING INTRO. 474 (EXTENDING EFFECTIVE DATE OF THE 2014 REVISION TO THE NEW YORK CITY CONSTRUCTION CODES) ON SEPTEMBER 22, 2014

I am Terence O'Brien Executive Deputy Director of the Plumbing Foundation of the City of New York, Inc. The Plumbing Foundation of the City of New York, Inc. is a clearinghouse and educational forum for the plumbing industry. The Plumbing Foundation is a nonprofit association of licensed contracting firms; engineering associations, manufacturers, and suppliers whose mission is to ensure the public health through the enactment and enforcement of safe plumbing codes. In connection with that mission we regularly meet with legislative and regulatory bodies that pass laws and promulgate regulations which affect the plumbing industry.

Regarding Intro. 474, "Extending the Effective Date of the 2014 Code Revisions", we have only one comment. After 2 years of extensive work the revised plumbing code was passed by the City Council and signed by the Mayor in 2012. Pursuant to Local Law 141 of 2013, enacted in December 2013, the new effective date of the new plumbing code was October 1, 2014. The industry prepared and spent this summer educating hundreds of licensed plumbing contractors of the changes to the plumbing code. On September 8, 2014, just 3 weeks before the new plumbing code was to take effect, we were notified that the Department of Buildings was seeking legislation to delay the effective date by 3 months. No one has explained any reason for the change in the effective date of the plumbing code. Indeed, City Books has been selling the printed version of the plumbing code which states that it is effective October 1, 2014. We are ready for implementation

on either date. We strongly suggest, though, that in the future, there be consultation with the industry before proposing major changes.

Again, thank you for the opportunity to comment on this bill.

NEW YORK CITY CENTRAL LABOR COUNCIL AFL-CIO



Secretary-Treasurer
JANELLA T. HINDS

Testimony of Vincent Alvarez, President New York City Central Labor Council, AFL-CIO

New York City Council Committee on Housing and Building

September 22, 2014

Safety in the construction industry is of utmost importance to the City labor movement. Thanks to the work of the New York City Building and Construction Trades Council and its affiliated unions, our city's construction workers represent the best trained, most skilled, and safest in the nation.

The safety of workers is paramount in the construction industry, and to ensure the safety of workers and the public, New York City has maintained its own system of testing and licensing standards for crane operators. This decades-old system is reflective of the increased level of training and skill required to operate cranes and other heavy machinery in such a densely populated city.

Unfortunately, over the last few years, certain changes to existing industry regulations were proposed as a way to increase safety standards, but have failed to do so. In fact, some of these standards would work to reduce safety oversight in the construction industry and for the surrounding public. These changes have worked to expand the private business interests of certain real estate owners, at the expense of the safety of everyday New Yorkers.

I urge you to consider the danger caused by attempts to weaken the examination and licensing process by using the national standards to regulate crane operators here in New York City. The national model proposes cost-saving tools like third-party administration of examinations, which would essentially remove the requirement to evaluate certain operational skills, and the use of safety standards.

Instead of implementing the error-ridden national model, the New York City Central Labor Council, AFL-CIO supports Intro 299A, a measure that would require applicants to demonstrate competency and skill in operating the equipment for which they seek licensure. The measure would also require a criminal background check, physical fitness, compliance with a substance abuse policy, and 8-hour refresher training course, none of which would be required under the national model.

Through Intro. 299A, New York City's crane operators would be judged by the highest possible standards, and trained in a way that reflects the heightened level of training, skill, and professionalism needed to operate such heavy machinery, while protecting the safety of workers and residents here in New York City.



New York City Special Riggers Association

49-47 31st Street, Long Island City, NY 11101

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TESTIMONY OF JOHN PANTANELLI, PRESIDENT, NYC SPECIAL RIGGERS ASSOCATION TO THE NYC COUNCIL COMMITTEE ON HOUSING AND BUILDINGS ON INTRO 0473A-2014 AND INTRO 0476-2014

September 22, 2014

Good afternoon, Chair Williams and members of the Council Housing and Buildings committee. My name is John Pantanelli. I am President of the New York City Special Riggers Association, and a licensed rigger with over 30 years of experience. On behalf of all licensed special riggers, the SRA applauds Council Chair Williams and the 21 Council co-sponsors to date for introducing the special riggers legislation. We also thank Council staffers, Nick Smith and Ed Atkin.

The SRA represents experienced, trained professionals who are licensed by the New York City Department of Buildings. Our association is comprised of licensed special riggers, Bricklayers and Allied Craftworkers Local Union 1, site safety managers, professional engineers and former DOB employees.

Special riggers can be seen all over the city working on scaffolds suspended from the roofs of buildings of all sizes, performing alterations, maintenance and repairs on building facades. As an organization we are dedicated to keeping our members updated on safety trends and methods, with the emphasis on safety of workers and the general public.

The services provided by Special riggers include waterproofing, brick replacement and repair, masonry pointing, and restoration of historic landmark and contemporary buildings – just to name a few.

The current requirement to install and operate a 2-point hanging scaffold in New York City is a valid Special Rigger's License, issued by the New York City Department of Buildings.

In order to become a special rigger, you must have at least one year of experience working under a licensed special rigger, take a 32-hour course, pass both practical and written exams and undergo a Department of Investigation background check.

When Local Law 141 of 2013 goes into effect, the new code eliminates the need for a licensed Special Rigger in the rigging and operation of a suspended scaffold, on buildings higher than 14 stories. Please note I said HIGHER than 14 stories.

Removing the experts from rigging operations will reduce the safety standards, which have been developed to protect the general public and our workers on and around construction sites.

The overall supervision of suspended scaffold installation, use and removal would be left to a 32-hour trainee with no experience.

The building code amendments in Intro 473a do not affect the exemptions for new construction, which we recognize was a problem for the industry and DOB.

We also recognize the intent by DOB to allow Site Safety Managers to replace special riggers in certain situations. While Site Safety Managers play a strong role in the construction industry, they are not trained to be special riggers and cannot replace the experienced, licensed Special Rigger — especially in a city with such a complex and historic skyline.

Ensuring a scaffold is designed by a registered design professional or a Special Rigger and filed with the Department of Buildings creates checks and balances.

Only licensed Special Riggers have the knowledge, training and experience needed to maintain the highest level of safety required to protect the public and workers.

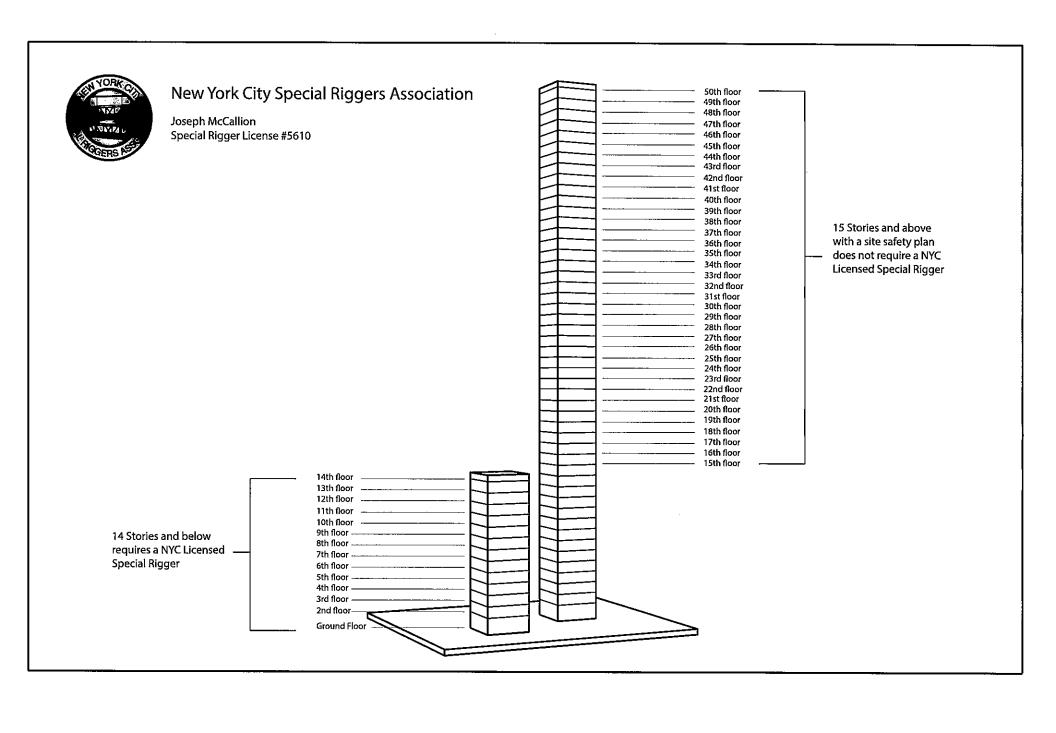
As licensed professionals, we maintain, preserve and protect the integrity of New York City's skyline – from the oldest to the newest buildings. Our trained, experienced professionals have worked on landmark buildings like the Empire State Building, the Woolworth building, and Rockefeller Center. We understand how vital it is to have experienced professionals performing the work of a special rigger.

That is why we also support Intro 0476-2014, which increases from 1 to 3 years the amount of experience required before being able to apply for a special riggers license.

The Special Riggers Association once again thanks Council Chair Jumaane Williams, his colleagues and his staff – especially Nick Smith, Director of Legislation for Council Chair Jumaane Williams and Ed Atkin from Speaker Mark-Viverito's legislative division - for all of their hard work on this bill.

I hope the Council will pass the special riggers legislation.

Thank you.

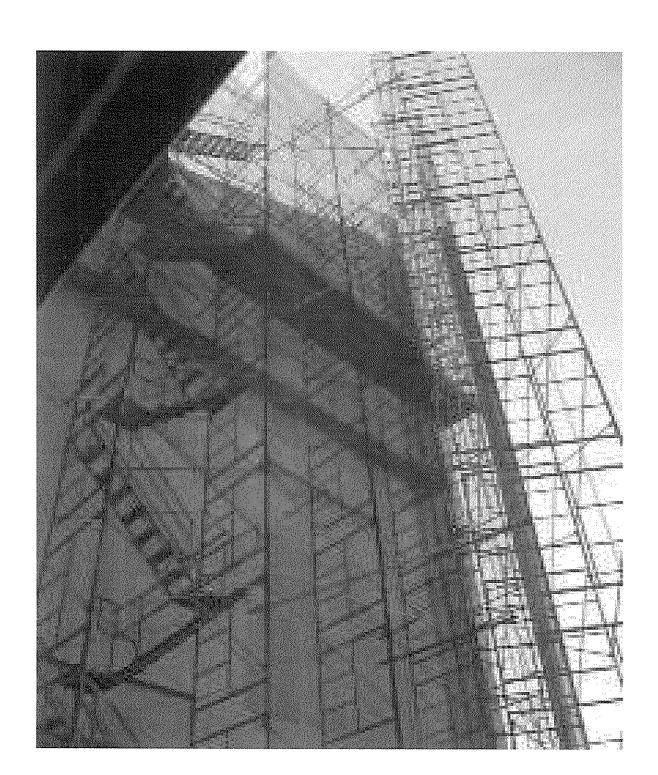
















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National Commission for the Certification of Crane Operators

2750 Prosperity Avenue, Suite 505 Fairfax, Virginia 22031-4312 Telephone: (703) 560-2391 Fax: (703) 560-2392 info@nccco.org www.nccco.org

September 22, 2014

Testimony before the Committee on Housing and Buildings By Joel Oliva, Director of Operations and Program Development National Commission for the Certification of Crane Operators (NCCCO)

Good afternoon Chairperson Williams and members of the Committee on Housing and Buildings. I am Joel Oliva, Director of Operations and Program Development with the National Commission for the Certification of Crane Operators (better known as NCCCO), a nonprofit organization dedicated to improving crane safety through the development of performance standards for personnel involved in and around cranes. Since 1995, NCCCO has been committed to providing the crane industry with the means to ensure crane operator competence through fair, valid, reliable, and legally defensible certification programs. In our history, we have certified over 100,000 individuals.

I am here today to speak on behalf of NCCCO and to highlight some of the key benefits of the third party certification program that was adopted by New York City for its Class A and Class B licenses and recommend to this Committee to continue with the current licensing requirements in New York City.

#1. Accredited national certification is a proven method of improving safety for crane operations.

We are an organization built on a foundation of improving safety for the sophisticated, complex, and expensive business of cranes. Employers, operators, and regulatory bodies who have adopted the national certification program have experienced a reduction in accidents and incidents, a more skilled and better trained work force, and even increases in productivity and reductions in maintenance and repair costs. For exam, the state of California conducted a research study regarding the effects of certification on fatalities and incidents attributed to cranes in the state. California adopted NCCCO certification in 2005, and in 2008 compared data from 2002 to 2005 and 2005 to 2008. The study conducted by Cal-OSHA illustrated an 80% decrease in fatalities and a 57% decrease in injuries over that time period. Several other studies, including those published by the Center for Construction Research and Training (CPWR) and even New York's own High Risk Construction Oversight study from 2009 endorse national certification as a model for improving crane safety.

#2. Accredited national certification is applicable to current industry standards and practices.

Working with over 100 subject matter experts, all of whom have dedicated their lives to crane safety and bring experience that spans all facets of the industry (such as crane rental firms, construction companies, labor organizations, both union and non-union crane operators, safety professionals, etc.), NCCCO ensures its written and practical exams remain relevant to the knowledge and skills necessary for today's crane operations. The latest ASME industry consensus standards and Federal OSHA regulations are the foundation for the exams, and are reviewed continuously by our Committees on a regular basis. Of critical importance, NCCCO tests individuals on the specific type of crane they operate. The operational characteristics of a lattice boom crane and a tower (or climber) crane are vastly different, and require completely separate testing protocols, which both fall under the Class A and B licenses.

#3. NCCCO's certification program is easily accessible and can adjust to market demand quickly.

Our business model allows for written and practical exam test sites to be set up very quickly and with minimal cost. In short, we will come to you. A written test site can be established just about anywhere. We run on average 160 test sites a month, and have managed as many as 250 in one month. We also have computer based testing sites. Within 50 miles of this address, 250 Broadway, we have 11 test sites offering NCCCO exams. As for practical exams, if you have a crane and a place to set it up, you can set up your own test site. We have established thousands of test sites all over the country. Within 75 miles of this address, we currently have ten test sites with a lattice boom crane and five with a tower (or climber) crane. And by the way, there is no limit for adding test sites. If New York City has a demand for more, simply contact NCCCO and we will work with locals to approve their sites and their cranes for testing.

In closing, for New York City to maintain the highest standard for crane safety in the industry, it must continue with its national certification requirement as part of the New York City license. 17 states and six cities have adopted it and the safety benefits are well documented. Thank you again for the opportunity to comment today. NCCCO remains at the service of New York City in its efforts to improve crane safety.

Sincerely,

Joel Oliva

Director of Operations and Program Development

National Commission for the Certification of Crane Operators (NCCCO)

Available CCO Certifications

Safety is one of the most important issues facing the crane industry. Accidents on the construction site have many costs—death or serious injury, property damage, lost time, and litigation. The inherent hazards involved in lifting operations mean that only qualified professionals should operate cranes and digger derricks, rig loads, signal operators, inspect cranes, and plan and direct lifts. Standardized assessment and certification of the skills and knowledge required for safe operation have repeatedly proven to improve safety.

NCCCO offers nationally accredited certifications for the following job functions:

- Mobile Crane Operators—for operators of lattice boom, telescopic boom, service truck, and boom truck cranes
- Tower Crane Operators—for operators of hammerhead, luffing jib, or self-erecting tower cranes
- Overhead Crane Operators—for operators of overhead bridge or gantry cranes
- Articulating Crane Operators—for operators of articulating boom cranes or loaders (also known as "material loaders" or "wallboard cranes")
- Digger Derrick Operators—for those who operate these unique pieces of equipment, which have their own capabilities and risks
- Signalpersons—for those who signal the crane operator during a lift
- Riggers—for those who prepare loads for safe lifting; Rigger Level I and Rigger Level II certifications available
- Inspectors—for those who certify cranes to national standards
- Lift Directors—for those who plan and direct complex lifts to ensure operations run safely

All CCO certifications meet the requirements defined under OSHA's new rules for cranes and derricks used in construction (29 CFR 1926 Subpart CC). NCCCO representatives regularly liaise with OSHA officials to seek clarification of the new rules, relay concerns from industry, and ensure that CCO examinations remain in compliance.

The NCCCO Mission

The National Commission for the Certification of Crane Operators (NCCCO) is an independent, nonprofit organization formed in 1995 to develop effective performance standards for safe crane operation. By providing thorough, independent assessments of knowledge and skills, NCCCO seeks to enhance lifting equipment safety, reduce workplace risk, improve performance records, stimulate training, and give due recognition to the professional skill of individuals who work on, with, and around cranes.

Officially recognized by federal OSHA as meeting OSHA and ANSI (ASME) requirements for crane operator, rigger, and signalperson qualifications.



Mobile, Tower, and Overhead Crane Operator, Digger Derrick Operator, Signalperson, Rigger Level I and Level II, and Crane Inspector Programs Accredited (#0756) by the American National Standards Institute.



Accredited to ISO 17024, General Requirements for Bodies Operating Certification Systems of Persons.



Accredited by the National Commission for Certifying Agencies for fairness, validity, and reliability in testing.

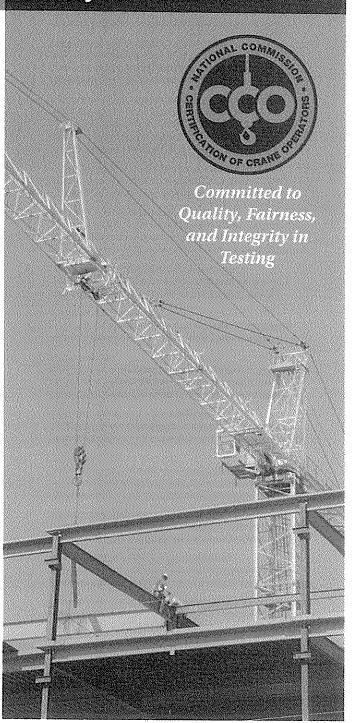


National Commission for the Certification of Crane Operators

2750 Prosperity Avenue, Suite 505 Fairfax, VA 22031-4312 PHONE 703.560.2391 FAX 703.560.2392 EMAIL info@nccco.org WEBSITE www.nccco.org



Why Choose CCO?





CCO Certification:

Fair. Valid. Reliable. Authoritative. Defensible.

CCO certification by the National Commission for the Certification of Crane Operators (NCCCO) is the "gold standard" of crane and crane-related personnel certifications. NCCCO's solid track record of providing nationally recognized certification to more than 100,000 operators, riggers, signalpersons, inspectors, and lift directors has given it unrivaled credibility as the leader in professional credentialing for those who work with and around cranes.

CCO certification programs are developed and managed by scores of subject matter experts representing literally thousands of years of crane experience from all areas of industry that use cranes. With over a decade of formal recognition by federal OSHA as meeting OSHA and ANSI (ASME) requirements, CCO programs are endorsed or recognized by dozens of industry associations and state and federal agencies and are relied upon by thousands of employers nationwide.

NCCCO certification programs are also accredited to rigorous national and international personnel certification accreditation standards by the American National Standards Institute (ANSI) and the National Commission for Certifying Agencies (NCCA). CCO certifications have been nationally accredited by NCCA since 1998 and ANSI (to the international standard ISO 17074) since 2007. These accreditations demonstrate that NCCCO's nationally recognized and administered programs have been developed—and are maintained—to the highest standards of test integrity and bring with them a guarantee of testing validity and fairness.

CCO certifications are:

- Industry-driven—Growing out of an industry coalition a quarter century ago, CCO certifications were established by the crane industry, for the crane industry, and have been supported by it ever since.
- Trusted—CCO certifications are endorsed by the insurance industry for their effectiveness as a risk management tool.
- Effective—CCO certifications have contributed to an 80 percent decrease in crane-related fatalities in California since 2005.
- Non-profit—As a non-profit organization, NCCCO's only goal is to improve safety for those working on and around cranes.
- Accredited—All NCCCO certification programs are accredited by ANSI and/or NCCA, and are internationally accredited to JSO 17024.
- Endorsed—Federal OSHA has officially recognized CCO certification since 1999, and dozens of industry associations and state and federal agencies as well as thousands of employers nationwide endorse and/or recognize CCO certification.
- Relevant—CCO exams test only the knowledge and skills that are relevant to the job and in a manner that is fair to the candidate.
- Volunteer-driven—CCO certification programs are developed and managed by scores of subject matter experts—representing literally thousands of years of crane experience—who volunteer their time and expertise.
- Defensible—CCO's test integrity has never been legally challenged after hundreds of thousands of written and practical tests administered. CCO tests are continually reviewed to ensure optimum standards of test performance.
- Popular—CCO programs have an unparalleled retention rate of over 70 percent by operators, riggers, and signal persons who choose CCO to recertify every five years.
- Transparent—CCO certifications are backed by an unequalled quality assurance program centered on a comprehensive network of carefully selected and trained auditors who conduct on-site inspections at CCO test sites nationwide.
- Audited—NCCCO management systems are subject to rigorous internal and external reviews for maximum transparency of the CCO certification process.
- Compliant—All CCO certifications meet or exceed federal, state, and industry standards such as OSHA 29 CFR 1926 Subpart CC and ASME B30.

- User-friendly—Testing can be done at an employer's location or at one of several thousand test sites nationwide.
- Standardized—From Florida to Alaska, Hawaii to Maine, CCO exams are designed to ensure uniformity of both written and practical test administrations.
- Independent—NCCCO does not provide training (nor is it affiliated with any training provider) to ensure complete impartiality in testing.
- Scrutinized—Every CCO test decision is subject to independent reviews by NCCCO Committees, the NCCCO Commission and, ultimately, the NCCCO Board of Directors.
- Recognized—CCO certifications are recognized in more states and by more employers and industry associations than any other certification program.
- Psychometrically sound—All certification exams are developed by nationally recognized test development specialists working hand-in-hand with industry subject matter experts.
- Unaffiliated—NCCCO provides certification services to all eligible candidates, regardless of union or association affiliation or membership.
- Up-to-date—CCO exams are continually updated by subject matter experts to reflect rule changes, best practices, and technological developments.
- Accessible—NCCCO provides more written and practical test centers nationwide than all other certifiers combined. All CCO written exams are available as paper-and-pencil tests and via computer-based testing.
- Comprehensive—NCCCO offers the largest range of certifications to encompass all critical aspects of crane and rigging operations.
- Representative—NCCCO's subject matter experts represent all facets of industries that use cranes, including manufacturers, insurance, petrochemical, steel erection, government, regulatory, labor, associations, consultants, and construction owners.
- Supported—All major crane manufacturers have supported CCO certification since its inception, and their representatives sit on NCCCO committees, the Commission, and Board of Directors.
- Mission-focused—The many industry associations NCCCO has partnered with are all in step with the common goal of improving crane safety through CCO certification.



With Crane Operator Certification, California Sees Fewer Incidents

Crane-related fatalities and injuries in California have declined sharply after more than four years of training and testing that produced more than 10,000 certified crane operators in the state, according to the Division of Occupational Safety and Health (DOSH).

Fatalities dropped to just two between June 1, 2005 and May 31 of this year from 10 between June 1, 2002 and May 31, 2005, which was just before the crane operator certification requirements (General Industry Safety Orders §5006.1) took effect. DOSH Principal Engineer Larry McCune and Graham Brent, executive director of the National Commission for the Certification of Crane Operators (NCCCO), briefed the Cal/OSH Standards Board last month on the latest crane statistics.

Injury incidents in the relative periods went from 30 to 13.

"You can see there's a serious reduction" in incidents after the certification standard took effect, McCune told the board. Even though statistics may not tell the whole story, "This is certainly a positive trend," he said.

Brent noted that NCCCO-certified crane operators number more than 10,000 now. (Operating Engineers Local 12 in Southern California also certifies crane operators.) From 2004 to 2007, NCCCO issued certification cards to 8,916 operators.

June 1, 2002-May 31, 2005	Fatal Incidents	Injury Cases
High-Voitage Contact	5	7
Struck by Loads	4	18
Mobile Cranes Overturned	ng i kateres is	5
Total Cases	10	30
June 1, 2005-May 31, 2008		
	Fatal Incidents	Injury Cases
High-Voltage Contact	*	4
Struck by Loads	0	8
Mobile Cranes Overturned	*	6
Total Cases	2	13 stylich out about

Mobile crane operators make up the vast majority of the ranks; NCCCO has certified 368 tower crane operators to date.

Between 2004 and 2008, the certification organization reports that 15,286 crane operators took more than 45,000 exams, with an overall pass rate of 68%. Candidates took an average of 2.9 exams, including a core test plus specialty exams. "This means that candidates generally only tested on the type of crane that they were likely to use on the job and did not try to become certified in all of the various crane types," Brent said.

Fixed-cab and swing-cab telescopic cranes were most frequently selected for certification.

NCCCO administered 20,865 hands-on exams to 14,416 mobile crane operators, with a pass rate averaging 78%.

In the tower crane program, 713 candidates took the NCCCO written exam and 559 took the practical.

Testing has leveled off in recent years to 25%-30% of the volume in 2005. "But "there is still a tremendous amount of testing taking place," Brent said.

NCCCO is developing certification programs for crane signalpersons, riggers and articulating-boom mobile crane operators.

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Crane-Related Deaths in Construction and Recommendations for Their Prevention

Introduction

The deaths of six construction workers and a bystander, along with injuries to 24 construction workers and first responders in a New York City crane collapse March 15, 2008, set off an alarm within the construction community and city dwellers living in the shadow of large scale projects. Just 10 days later, a 20-foot crane section in Miami fell 30 stories, killing two construction workers and injuring five. New Yorkers, already jittery from the first crane collapse, saw another crane fall in their city May 30, which killed two construction workers and injured one worker and one bystander.

The first New York crane collapse garnered much media attention because of the scale of the event — a high death toll among workers and a visitor killed when the crane's boom crushed a residential building. But injury and death to bystanders is not a first-time occurrence. Selected examples of crane-related bystander deaths collected from news reports are included in Table 1.

In 2003, OSHA formed a Crane and Derrick Negotiated Rulemaking Advisory Committee (C-DAC) of representatives from industry, labor and government to develop a new safety standard for the construction industry to aid in reducing the number of fatalities. The committee first met in July 2003, and reached a consensus on regulatory language for the new standard on July 9, 2004. In May 2008, OSHA published its semiannual agenda and announced that the proposed crane standard will be published for public comment in the Federal Register in August 2008.

In light of the large number of recent fatalities, CPWR examined the data from the Bureau of Labor Statistics (BLS) to evaluate trends over time and propose recommendations to prevent future injury and death.

Report Authors

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Methods

Construction industry fatality data for the 2-digit BLS Standardized Industrial Classification (SIC) Codes 15, 16 and 17 for 1992 through 2002 were identified in the Census of Fatal Occupational Injuries (CFOI) database. For 2003-2007, the 2002 North American Industry Code System (NAICS) codes 236-238 were used. The resulting data were entered into a Microsoft Excel 2003 database for analysis.

Construction worker deaths related to cranes were identified by selecting all records with the source code 34* (Cranes). (This does not include non-construction crane-related deaths from maritime, mining and general industry.) Records involving aerial lifts, and scissor lifts were excluded, but crane man baskets were included.

The CFOI narratives including event, occupation and establishment codes of the cranerelated deaths were used to classify deaths by cause, occupation and establishment size. This report identifies the main causes of death, the types of cranes involved in fatal incidents, the trades of those who died, and the size of the employer experiencing the greatest number of fatalities.

Results

A total of 323 construction worker deaths involving 307 crane incidents were identified from 1992-2006, an average of 22 construction worker deaths per year. Figure 1 shows the number of deaths by year. There were 12 multiple-death incidents in this time period, resulting in a total of 28 deaths.

Four main types of cranes have been associated with crane-related fatalities. Of the 307 fatal crane incidents, 216 (71%) involved mobile or truck cranes. Sixteen of the fatal incidents involved tower cranes (5%), 13 involved floating or barge cranes (4%), and 12 involved overhead cranes (4%). The remaining 66 reports were not sufficiently detailed to determine the type of crane involved or do not meet BLS publication requirements.

Causes of death

Of the total 323 crane-related deaths, 102 were caused by overhead power line electrocutions (32%), 68 deaths were associated with crane collapses (21%), and 59 deaths involved a construction worker being struck by a crane boom/jib (18%). (See Table 2.)

Half of all electrocutions, the leading cause of death, were associated with the crane boom or a crane cable contacting an overhead power line. The rest involved contact of an overhead power line with unspecified parts of the crane. Mobile cranes were involved in 80 of the 95 overhead power line fatal incidents. Table 3 describes worker activities leading to electrocutions. Those activities involved workers on foot touching or guiding

the crane load or cables, workers operating the crane – including several operators who were electrocuted after jumping from the crane, and workers on foot touching the crane.

Crane collapses were the second leading cause of death. An unstable, uneven or icy surface on which the crane was sitting accounted for 12 fatalities (20%). Overloading the crane accounted for another 10 deaths (16%). In five cases (8%), the crane load or boom shifted. In 56% percent of the reported cases, there was no information provided as to the cause in the CFOI narrative. Of the 59 crane collapses, 37 involved mobile cranes.

The third leading cause of crane-related deaths is struck by the crane boom or jib. Fifty-two of the 59 struck-by crane booms or jib deaths were caused by a falling boom or jib. Almost half of these deaths (48%) occurred while workers were dismantling the boom. In most of these cases, the pins holding the boom sections together were removed without adequate support to prevent the sections from falling. In 12% of these cases, the deaths occurred while lengthening the boom. The remaining seven workers were struck by swinging booms in an unspecified manner. Of the 59 struck by boom/jib fatalities, a minimum of 35 deaths were caused by mobile cranes.

Trades Involved

Construction laborers experienced the greatest number of crane-related deaths between 1992 and 2006 (total of 96 or 30%), followed by heavy equipment operators (74 deaths or 23%), which included 50 crane and tower operators. In addition, 40 supervisors/managers/administrators died in crane-related incidents (12%), as did 18 ironworkers (6%), and 17 mechanics (5%). Other trades with fewer numbers of deaths included electrical workers, truck drivers, welders and carpenters (totaling 24%).

Overall, 103 of the 323 construction workers were employed by subcontractors with fewer than 10 employees. Fifty-one individuals worked for employers with over 100 employees. Twenty of the construction workers who died on the job were self-employed.

Conclusions and Recommendations

The findings of this analysis indicate the number of crane-related deaths reported by CFOI is significant. The main causes of worker deaths were electrocution, collapse, or struck by crane parts or crane loads. More than half of the deaths were among construction laborers and heavy equipment operators. Employees working for small contractors represent a large portion (about one-third) of the total number of deaths. Most crane-related deaths involved mobile cranes.

Possible explanations for these findings are a lack of worker and supervisor training, lack of jobsite safety plans, lack of adequate crane inspections, and lack of proper investigation and reporting of crane accidents and fatalities.

Specific recommendations to reduce and prevent future injuries and fatalities are as follows:

First, crane operators should be certified by a nationally accredited crane operator testing organization, such as the National Commission for the Certification of Crane Operators (NCCCO)*. Presently only 15 states and a few cities (including New York City) require certification or licensing of crane operators, and some have their own certification program. We recommend that states and cities should require certification by a national certification organization for reasons of standardization of qualifications and to promote the transfer of credentials between states.

Second, riggers who attach the load to the crane and signalpersons who visibly or audibly direct the crane operator on where to place the load should be certified. NCCCO will in the future offer certifications for these types of workers.

Third, crane inspectors should also be certified. OSHA requires that employers designate a competent person to inspect machinery and equipment prior to each use, and during use, to make sure it is in safe operating condition [29 CFR 1926.550(a)(5)]. OSHA also requires annual inspections. For some work activities, such as use of cranes for maritime activities and work at nuclear plants, OSHA may require a higher degree of inspection. However, since inadequate inspections have been implicated in work-related crane deaths, we recommend that crane inspectors should have the same degree of qualification as crane operators.

Fourth, in addition to other mandated inspections, cranes must be inspected thoroughly by a certified crane inspector after being assembled or modified, such as the "jumping" of a tower crane.

Fifth, according to the proposed OSHA consensus standards on cranes, only trained workers should assemble, modify or disassemble cranes, and they should always be under the supervision of a person meeting both the definition of qualified person** and competent person specified in the standard. In many instances, especially with rented cranes, there are no trained personnel present when cranes are set up and dismantled. This issue must also be addressed.

Sixth, crane loads should not be allowed to pass over street traffic. If rerouting is not possible, then streets should be closed off when loads pass over streets and pedestrian walkways.

Seventh, more complete reporting of data, particularly after a crane collapse, is necessary. OSHA should conduct more thorough investigations of crane-related fatalities and capture more complete data in its reporting system.

Eighth, after OSHA publishes the proposed crane and derrick safety construction standard in August 2008 for public comment, all efforts should be made to speed up the adoption of the C-DAC consensus standard and the additional recommendations provided in this report.

- * Such certification organizations should be accredited by a nationally recognized accrediting organization such as the American National Standards Institute (ANSI), should administer written and practical tests to determine the knowledge and skills of the applicant, and meet other standard accreditation criteria.
- ⁶ California, Hawaii, Minnesota, Montana, Nevada, New Jersey, New Mexico, Utah, Washington (as of 2010), and West Virginia require or recognize NCCCO certification of crane operators as part of their state licensing program. Connecticut, Massachusetts, New York, Oregon, and Rhode Island have their own licensing programs. Among cities, New Orleans and Omaha require or recognize NCCCO certification of crane operators; Chicago, Los Angeles, New York City, and Washington, D.C., have their own licensing program.
- ^Ψ A competent person, according to OSHA, is one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous or dangerous to employees, and who has authority to take prompt corrective measures [italics added for emphasis] to eliminate them. [29 CFR 1926.32(f)]
- ** A qualified person means a person who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training and experience, has successfully demonstrated the ability to solve/resolve problems relating to the subject matter, the work, or the project.

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Table 1. Examples of Fatal Crane Incidents

Date	Location	Description
4/27/78	Willow Island, WV	Crane lifting bucket of cement collapsed onto scaffold inside cooling tower. Construction workers: 51 dead
		Source: [Ward, 2008]
11/29/89	San Francisco, CA	Tower crane fell 16 stories while being jumped. Construction workers: 4 dead Bystanders: 1 dead; 22 injured Source: [Kilborn, 1989]
11/14/99	Milwaukee, WI	"Big Blue" tower crane collapsed at stadium and struck three workers in a crane basket. Winds 25-30 mph. Construction workers: 3 dead Source: [LaBar, 1999]
9/29/06	New York, NY	4-ton chunk of steel fell from crane crushing a taxi. Bystanders: 5 injured Source: [Kates, 2008]
11/16/06	Bellevue, WA	Crane collapsed on a condo. Construction workers: 1 injured Bystanders: 1 dead Source: [Jamieson, 2006].
3/15/08	New York, NY	Tower crane collapsed while being jumped, damaging several buildings. Construction workers: 6 dead, 13 injured Bystanders: 1 dead, 11 first responders injured Source: [Ware, 2008]
3/25/08	Miami, FL	20-foot section crane fell 30 stories while jumping the crane. Construction workers: 2 dead, 5 injured Source: [Walter, 2008]
5/30/08	New York, NY	Crane cab, boom, and machine deck separated from the tower mast and collapsed onto the street Construction workers: 2 dead, 1 injured Bystanders: 1 injured Source: [MSNBC staff, 2008]

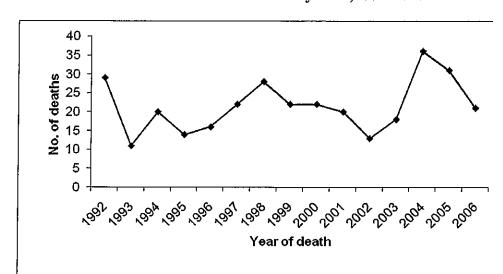


Figure 1. Crane-Related Deaths in Construction by Year, 1992-2006*

Table 2. Causes of crane-related deaths in construction, 1992-2006

Cause of death	# deaths	%
Overhead power line electrocutions	102	32%
Crane collapses	68	21%
Struck by crane booms/jibs*	59	18%
Struck by crane loads	24	7%
Caught in/between	21	7%
Struck by cranes**	18	6%
Other causes***	31	10%
Total	323	****

^{* 52} of 59 struck by crane booms/jibs were due to falling booms/jibs

Source: U.S. Bureau of Labor Statistics Census of Fatal Occupational Injuries Research File

^{*} Data from 2006 are preliminary; data from 1992-2005 are revised and final. Source: U.S. Bureau of Labor Statistics Census of Fatal Occupational Injuries Research File

^{**} Includes 10 run over by mobile cranes

^{***} Other causes includes 14 struck by other crane parts and 9 highway incidents

^{****}Does not add to 100 due to rounding.

Table 3. Activity of construction workers electrocuted by overhead power lines, 1992-2006

Contact with overhead power lines	#	<u>%</u>
Worker on foot touching/guiding load or cables	40	39%
Operating crane*	32	31%
Worker on foot touching crane	19	19%
Other**	11	11%
Total	102	100%

^{*} Includes 7 deaths of operators who jumped from crane

Source: U.S. Bureau of Labor Statistics Census of Fatal Occupational Injuries Research File

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CPWR – The Center for Construction Research and Training is a 501-c-3 organization affiliated with the Building and Construction Trades Council, AFL-CIO, and serves as the research arm of the BCTD. CPWR provides safety and health research and information for the construction trades and industry. For more information, visit www.cpwr.com.

^{**} Includes 6 deaths of workers on foot near crane

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