



CRANE OPERATOR CERTIFICATION & LICENSING

*NCCCO National Crane Operator and
Related Certification Programs*

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Program Background

- Early 1987: User group meetings
- Unacceptable number of crane accidents
- Many apparently attributable to operator
- Real cost much higher than realized
 - ◆ Personal Injury/Property Damage
 - ◆ Workers' Comp./Lost Time
 - ◆ Safety Record/"Mod." Rate
- Training only effective if verified
- Verification through operator certification



Standards & Regulations

- No Federal licensing requirement
- Handful of States and Cities required licensing
- OSHA Federal training rule very general
- ASME national standard (B30.5) more specific
- No culture of testing or even systemized training in construction industry



Founding Principles/Mission

- National Commission for the Certification of Crane Operators (NCCCO) established 1995 as a non-profit organization
- Focus on safe crane operation
- Measure knowledge and skills
- Provide information on need for, and benefits of, certification
- Develop & administer nationwide certification program
- Test standard level of competence
- Issue Certification of Competence



Participants in Certification Program Development

- Operators
- Equipment Inspectors
- Operator Training Companies
- Insurance Carriers
- Safety Specialists
- Construction Companies
- Consultants
- Contractors
- Trade Unions
- Crane Manufacturers
- ASME/ANSI B30 & B30.5 Members
- Crane Rental Firms
- Industrial Corporations
- Educators
- Military Agencies
- OSHA



Role of Psychometricians

- Method of exam development and maintenance equally as important as exam content
- NCCCO hired Test Development Specialists, **International Assessment Institute (IAI)**
- Assist in development and administration of CCO written and practical certification tests
- Ensure tests are valid and reliable and “psychometrically” sound
- Critical for fairness and legal defensibility



Key CCO Components

- Third-party, independent testing
- Industry developed & supported
- Joint labor/management effort
- Psychometrically sound
- Validated through peer review
- Standardized; Nationwide; Secure
- Net result: Increased training
- Nationally accredited and recognized



Current Status

Since April 1996:

- More than 65,000 operators tested
- 350,000+ tests administered
- 50,000 certified, of which 35,000+ current
- In all 50 states



Recognition

- NCCA Accreditation
- ANSI/ISO 17024 Accreditation
- Federal OSHA Agreement
- Other Federal Agencies
- State Adoption
- Labor Endorsement
- Employer Organizations



Recognition-Federal

- Department of Labor
- Department of Defense
- DANTES
- Department of Education
- U.S. Army Corps of Engineers
- Department of Energy
- U.S. Navy



Recognition-Industry

- American Institute of Steel Construction
- American Subcontractors Association
- Articulating Crane Council of North America
- Association of Equipment Manufacturers
- Associated General Contractors of America
- American Society of Civil Engineers
- Crane Manufacturers Association of America
- International Union of Operating Engineers
- TAUC-The Association of Union Constructors
- Specialized Carriers & Rigging Association
- Steel Erectors Association of America



ASME B30 Requirements

- Physical Qualifications
- Written Examination
- Arithmetic Skills
- Load Chart Usage
- Testing in the Language of the Crane Operations Manual
- Operation 'Hands-on' Test
- Re-qualification



Certification Examinations

WRITTEN EXAMS

- Four Knowledge Areas
 - ◆ Site
 - ◆ Operation
 - ◆ Technical knowledge
 - ◆ Manufacturers' load charts
- 200 +/- multiple-choice questions

PRACTICAL EXAMS

Nationwide exam sites

- By crane type

MEDICAL EVALUATION

- Attestation by candidate
- CCO form or DOT approved physical optional

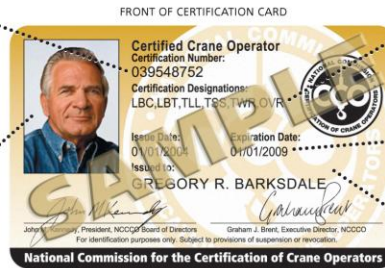


Certification ID Card

CCO Certification Card FACT SHEET

Certification Number:
Look for an eight (8)
to nine (9) digit
Certification Number

Color Photo:
Look for photo embedded
in laminated card



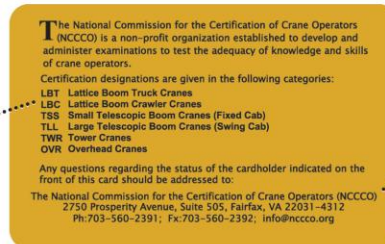
Certification Designations:
This area specifies what
categories of crane the
individual is certified in

Issue and Expiration Dates:
These dates tell you if the
certification card is valid

NCCCO Logo:
Look for the ghosted logo
and shading on the card

BACK OF CERTIFICATION CARD

Certification Code:
On the back of the card
is an explanation of each
certification category code



Verification:
If you have questions regard-
ing the status of a candidate,
please verify with our office
using the contact info here

IMPORTANT

- NCCCO Certification Card is valid only in conjunction with a current DOT or NCCCO Medical Certificate
- Verify certification is current and in the appropriate crane categories
- Check card for irregularities
- Never accept a photocopy of a CCO card as proof of certification
- Contact NCCCO if in doubt!



0908



Available Certification

- Mobile Cranes
 - ◆ Lattice Boom Truck (LBT)
 - ◆ Lattice Boom Crawler (LBC)
 - ◆ Large Telescopic (TLL)
 - ◆ Small Telescopic (TSS)

- Tower Cranes

- Overhead (Gantry) Cranes

- Signalperson



In Development/Proposed

■ Rigger

- ◆ Basic (*Q1 2009*)
- ◆ Intermediate (*2009*)
- ◆ Advanced (*2009*)

■ Crane Inspector (*2009*)

■ Articulated Boom Crane (*2009*)

■ Lift Supervisor

■ Assembly/Disassembly Supervisor



Test Administration

- Written Exam
- Practical Exam
- Score Reporting
- Retest/Rescore Options
- Recertification



Candidate Applications

- To be received by IAI 10 business prior to test
- Must be filled out properly
 - ◆ Legible and complete
 - ◆ Signature required on 2nd page of application
 - ◆ Must choose exams to be taken
 - ☞ Must choose load chart option for each specialty exam
- Attestation to compliance with physical requirements and substance abuse policy



Role of Test Site Coordinator

- Submitting all information to IAI
- Preparing the testing room
- Liaison with Chief Examiner
- Ensuring applications are complete and submitted in accordance with deadlines
- Remain at test site for the duration of the Written Exam



Role of Chief Examiner

- CCO and IAI are responsible for Chief Examiner
- Liaison with Written Test Site Coordinator
- Responsible of all facets of test administration



Written Test Day Schedule

- Process starts @ 8:00 AM
- Core Exam is first test administration
 - ◆ 90 questions – 90 minutes
- Specialty Exam(s)
 - ◆ 26 questions – 55 minutes
- Candidates taking the Core and all four specialty exams can expect to finish testing at approximately 3:00 PM



Written Test Parameters

- Test Requirements
 - ◆ Must be able to read, write, comprehend and perform basic math without a calculator
- Test is in English
- Formal training is best option
 - ◆ Few operators can pass without it
 - ◆ Study guides have some value, but typically ineffective without classroom training
- Who has trouble?
 - ◆ Language issues (terminology + literacy + ESL)
 - ◆ Learning disabilities



Practical Exam

- Can be taken before *or* after Written Exam
- 1,600+ test sites, 5,000+ cranes registered nationwide
- Testing available through:
 - ◆ Permanent Test Site
 - ◆ Employer
 - ◆ Union Training Center
 - ◆ Association/Organization Facilities
- Practical Examiners trained by NCCCO
- QA/Integrity Control through:
 - ◆ Test process: scoring/notification/candidate interaction
 - ◆ Probationary Period
 - ◆ Audit Program
 - ◆ Retraining and Reauthorization Program



Practical Exam

- Test crane/Test site Approval Process
- Site and test equipment construction rigorously controlled
- Unique CAD issued for every crane/site by SN
- Prior notice by NCCCO or IAI not required
- Practical Examiner:
 - ◆ verifies test site/crane configuration
 - ◆ records candidate performance
- No scoring onsite
- Results mailed to candidate



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Recertification Test Administrations

- Joint or Separate Written Test Administrations
- Practical Test required only if less than 1,000 hours experience
- Computer Based Testing Option (CBT)



Mobile Crane Certification Fees

- | | |
|------------------------------|--------|
| ■ Core Exam + 1 Specialty | \$165 |
| ■ Each Additional Specialty | \$ 10 |
| ■ First Practical Test | \$ 60 |
| ■ Each Additional Practical | \$ 10 |
| ■ Total Fees | |
| ◆ Basic 5-Year Certification | \$ 225 |
| ◆ Full 5-Year Certification | \$ 275 |



Practical Exam Audit Program

- Auditors hand-picked by NCCCO based on demonstrated integrity, knowledge, expertise
- Must be CCO Certified, Practical Examiner in good standing
- Trained by NCCCO through dedicated program
- Audit “Triggers”
- Audits may be:
 - ◆ Announced
 - ◆ Unannounced
 - ◆ “Secret Shopper”
- Examiners subject to suspension or revocation



Supporting Administration

- Five (5) Exam Management Committees
- Candidate Database Management
- Practical Examiner Training & Monitoring Program
- Practical Test Site/Crane Approval System
- Training Provider Agreement Program
- Practical Exam Audit Program
- Test Integrity/Quality Assurance
- Ethics & Discipline Oversight
- Appeals Process for Disciplined Certificants/Examiners
- Electronic and Physical Security Systems
- Internet Patrol for Logo Misuse/Test Questions
- Regulatory Reference & Expert Testimony

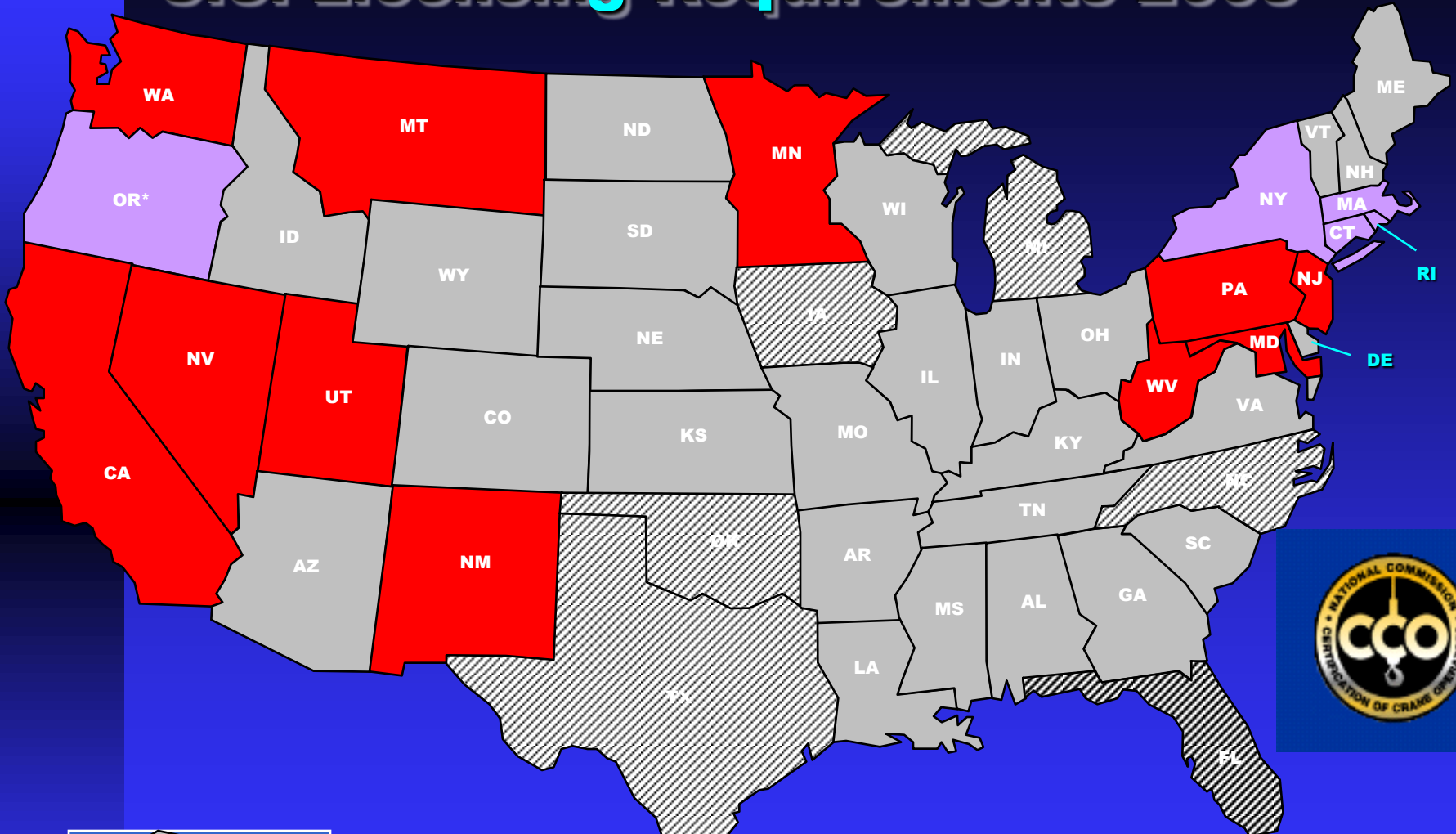


Legislation and Regulation

■ 1995-Present

- ◆ 12 more states with crane operator certification or licensing requirements
- ◆ All recognize or require NCCCO certification
- ◆ Increased portability
- ◆ A clear 'bar' has been set
- ◆ Accreditation requirements
- ◆ Also reference ASME B30 industry standards

U.S. Licensing Requirements 2008



- : Recognize or require CCO Certification by law
 - : Legislation in development (recognizes CCO)
 - : CCO Certification not recognized in legislation
 - : No State Requirement for Certification
- *Mandatory Training Requirement Only*



State Adoption of CCO

- West Virginia (2001)
- Hawaii (2003)
- New Jersey (2004)
- California (2005)
- Montana (2005)
- Maryland (2009)
- New Mexico (2007)
- Minnesota (2007)
- Nevada (2007)
- Pennsylvania (2010)
- Utah (2007)
- Washington (2010)



City Requirements

- Chicago
- District of Columbia
- Los Angeles
- New Orleans
- New York
- Omaha
- Philadelphia



The California Experience

CRANE ACCIDENTS, June '02-'05 vs. June '05-'08

FATAL ACCIDENTS

	'02-'05	'05-'08	
■ High-Voltage line contacts	5	1	
■ Struck by Loads	4	0	
■ Mobile Cranes Overturned	1	1	
■ <u>Total Cases</u>	<u>10</u>	<u>2</u>	<u>80% decrease</u>

NON-FATAL ACCIDENTS

	'02-'05	'05-'08	
■ High Voltage Line Contact	7	4	
■ Struck by Loads	18	3	
■ Mobile Cranes Overturned	5	6	
■ <u>Total Cases</u>	<u>30</u>	<u>13</u>	<u>57% decrease</u>



CERTIFICATION
QUICK LINKS

MOBILE CRANE OPERATOR
SIGNALPERSON

TOWER CRANE OPERATOR
RIGGER

OVERHEAD CRANE OPERATOR

STATE LICENSING REQUIREMENTS

New York City Central

Welcome to New York City Central, your "one-stop shop" for certification news from the city. This page has been developed to provide you with valuable information about the new New York City crane operator licensing requirement. Please check back frequently as information will be updated as it becomes available.

[Visit the New York City Department of Buildings website](#)

[New York City Department of Buildings Press Release - PDF format](#)

[How to Become a New York City Licensed Hoisting Machine Operator-Class C](#)

[New York City Department of Buildings Class C Licensing Procedures Fact Sheet](#)

[Mobile Crane Candidate Handbook](#) (information on NCCCO policies and procedures, exam outlines, reference material list, registration forms and more)

[Current CCO Written Test Sites](#)

[CCO Permanent Practical Test Sites](#)

[Firms providing training](#)

ABOUT NCCCO

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TRAINING RESOURCES

HOSTING CCO EXAMINATIONS

PRACTICAL EXAMINER PROGRAM

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STATE LICENSING REQUIREMENTS

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TEST DATES & LOCATIONS

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