



**NATIONAL COMMISSION FOR THE
CERTIFICATION OF CRANE OPERATORS (NCCCO)**

CANDIDATE HANDBOOK

- **ARTICULATING CRANE OPERATOR**

TM

This candidate handbook contains complete program information as well as applications for the CCO Written and Practical Examinations you must pass to earn your CCO certification. This handbook reflects NCCCO's current policies at the time of publication; to be sure that you have the latest version of this book, see the Handbooks and Forms page on the NCCCO website. Please read this handbook carefully and retain it for reference throughout the certification process.

Do not discard this document.

NCCCO does not discriminate against any individual because of race, gender, age, creed, disability, or national origin.



This NCCCO certification program is accredited by the American National Standards Institute (ANSI) to ISO 17024 (General Requirements for Bodies Operating Certification Systems of Persons).



ISO/IEC 17024
Personnel Certification Body
#0756

Mobile, Tower, Overhead,
Articulating, and Service Truck Crane
Operator, Digger Derrick Operator,
Signalperson, Rigger Level I and
Level II, Crane Inspector, and Lift
Director Programs Accredited

Dear NCCCO Certification Candidate:

Welcome to the National Commission for the Certification of Crane Operators (NCCCO) national crane operator certification program for articulating boom cranes and loaders.

NCCCO is a nonprofit organization founded in 1995 to establish a fair and independent evaluation of crane operator knowledge and skills. Key to this industry-led effort was the development of CCO Written and Practical Examinations, initially for mobile crane operators but now also for tower, overhead, and articulating crane operators, digger derrick operators, riggers, signalpersons, and lift directors. These nationally recognized certification programs are the culmination of many years' hard work by experts from the varied industries and groups that use cranes, including construction, steel erection, operating engineers, utilities, crane rental, petrochemicals, pulp and paper, and others.

The NCCCO Articulating Crane Task Force that developed this certification program was made up of experts from all aspects of the crane industry—crane operators, crane users, trainers, safety supervisors, manufacturers—who together represent many thousands of hours of crane experience. These volunteers gave freely of their time and expertise with the goal of improving the safety of all whose work brings them into contact with cranes and lifting equipment.

Until recently crane operator certification has been voluntary unless required by local jurisdictions or specific employers. However, in August 2010, the federal Occupational Safety and Health Administration (OSHA) enacted new national standards for cranes and derricks used in construction under 29 CFR 1926 Subpart CC. These new rules require that operators of most cranes above 2,000 lb. capacity when used in construction need to be either certified by an accredited crane operator testing organization such as NCCCO or qualified through an audited employer program. Section 1926.1427 of the new rule describes crane operator certification/qualification requirements. Option 1, which is anticipated to be the most commonly used, requires operators to be certified by a nationally accredited crane operator testing organization that tests operators through written and practical testing. Obtaining CCO certification from NCCCO meets all the requirements set forth by the new OSHA rule.

To ensure CCO examinations are—and remain—valid measurements of crane operators' proficiency, NCCCO teamed the task force's knowledge and experience with its exam development expertise. In addition to guiding the development of new examinations, NCCCO continually analyzes the performance of CCO exams and reports to the Exam Management Committees. To be able to provide fair and independent assessments, NCCCO does not conduct training, nor does it provide training materials.

NCCCO, as a third-party certification body, is fully committed to, and understands the importance of, delivering all certification activities on a foundation of impartiality. All policies and procedures are established in an objective manner and ultimately strive to achieve fairness throughout all activities. NCCCO prevents any conflicts of interest through detailed policies and procedures observed by staff, governing body representatives and those involved in written and practical exam administration.

This candidate handbook has been developed to provide you with comprehensive information about the CCO Written and Practical Examinations that you must pass to become certified. We recognize the commitment you are about to make, and we want your experience to be a positive and successful one. If, after reading this handbook, there is anything you do not fully understand or need clarified, please call 703-560-2391 or email info@nccco.org. NCCCO staff will guide you through any aspects of the NCCCO articulating crane operator certification program you would like explained in more detail.

Thank you for your interest—and good luck with your efforts to become CCO-certified!

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Introduction

PROGRAM DESCRIPTION

The National Commission for the Certification of Crane Operators (NCCCO) is an independent, nonprofit organization formed in 1995 to set standards for fairly measuring the knowledge and proficiency required for the safe operation of cranes. NCCCO currently administers a nationwide program of certifications for crane operators and related trades, including riggers and signalpersons.

Based on extensive discussions with representatives from all segments of business and industry who recognize the impact of safety issues, NCCCO has identified the following potential benefits of operator certification:

- Fewer accidents, injuries, and fatalities
- Reduced risk of loss
- Assurance of operator's abilities
- Less property damage
- Improved safety records
- Enhanced public image of crane operators

All candidates are required to pass both Written and Practical Examinations to be certified.

The initial certification period is for five years. To maintain their certification, certificants are required to recertify prior to their expiration date. Periodic written examinations are necessary to ensure that certificants' knowledge of industry standards, equipment, and safety practices keeps pace with changes in these areas. NCCCO's subject matter experts, working in conjunction with psychometric consultants, reviewed the speed of such change in the industry and researched other comparable certification/licensing programs before determining that this goal could be achieved by setting the examination interval at five years; little, if any, additional benefit is believed, would accrue by more frequent testing. A practical (skills) examination is not required for recertification, providing the certificant meets set experience and medical (physical) requirements.

CCO EXAMINATION DEVELOPMENT

The first step in the development of an objective test to measure what is required for safe crane operations was a job analysis study. The study identified the knowledge and skills necessary for safe crane operations. Subject matter experts were consulted to generate test blueprints and content specifications.

Development of the *Articulating Crane Operator Written Examinations* involved a panel of crane operation content experts who worked with NCCCO staff to write and review all questions used in the examination. Each examination contains a unique combination of questions from the question bank. Questions are selected for the examination on the basis of the content areas defined by the test blueprints.

The CCO *Articulating Crane Operator Practical Examinations* were developed as a fair and objective assessment of the essential skills a crane operator needs to operate articulating boom cranes safely. These exams were developed over a one-year period by an NCCCO task force made up of experts from all aspects of the crane industry—crane operators, training directors, managers, safety supervisors, manufacturers—who together represent many thousands of hours of crane-related experience.

NCCCO teamed its exam development expertise with the task force's knowledge and experience. NCCCO guided the task force in establishing key elements of the program, including identifying essential skills, selecting tasks, standardizing test conditions, developing the scoring process, establishing reliability among tests, and creating flexible application and scheduling procedures.

In concert with the task force, NCCCO also helped design the Practical Examiner Accreditation Program whereby NCCCO trains and accredits CCO-certified crane operators to administer CCO Practical Examinations.

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Articulating Crane Operator Certifications

The chart below shows the three different Articulating Crane Operator certifications offered by NCCCO. If you operate multiple categories of cranes, you may need certification in more than one category.

The crane categories identified below apply whether the crane is mounted to a truck or crawler chassis.

If you operate a:		The recommended certification is:
<p>Articulating Boom Crane</p> <p>A crane with two or more boom sections that pivot (articulate) via hydraulic cylinder(s), as defined in the <i>NCCCO Articulating Crane Reference Manual</i>; these are commonly known as a “knuckleboom” or “folding” crane.</p>		<p>Articulating Boom Crane (ABC)</p> <p>Exams:</p> <ul style="list-style-type: none"> • Written: Articulating Boom Cranes (ABC) • Practical: Articulating Boom Crane (ABC)
<p>Articulating Boom Crane with Winch</p> <p>A crane with two or more boom sections that pivot (articulate) via hydraulic cylinder(s) and used with a load hoist mechanism, as defined in the <i>NCCCO Articulating Crane Reference Manual</i>; these are commonly known as a “knuckleboom” or “folding” crane “with winch.”</p>		<p>Articulating Boom Crane w/Winch (ABW)</p> <p>Exams:</p> <ul style="list-style-type: none"> • Written: Articulating Boom Cranes w/Winch (ABW) • Practical: Articulating Boom Crane (ABC)
<p>Articulating Boom Loader or Material Handler</p> <p>A crane with two or more boom sections that pivot (articulate) via hydraulic cylinder(s) and used with an attached hydraulic rotating and folding fork assembly, as defined in the <i>NCCCO Articulating Crane Reference Manual</i>; these are commonly known as a “drywall” or “material-handling” crane.</p>		<p>Articulating Boom Loader (ABL)</p> <p>Exams:</p> <ul style="list-style-type: none"> • Written: Articulating Boom Loader (ABL) • Practical: Articulating Boom Loader (ABL)

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Certification Policies

ARTICULATING CRANE OPERATOR

ELIGIBILITY

To be eligible for certification, candidates must:

- Be at least 18 years of age
- Comply with NCCCO's Substance Abuse Policy
- Pass Written Examination
- Pass Practical Examination(s)
- Comply with the Code of Ethics

CERTIFICATION EXAM OPTIONS

If you are seeking certification for:	Take the corresponding exams:	
	Written	Practical
Articulating Boom Cranes (ABC)	Articulating Boom Crane	Articulating Boom Crane
Articulating Boom Cranes w/ Winch (ABC & ABW)	Articulating Boom Crane w/ Winch	Articulating Boom Crane
Articulating Boom Loaders (ABL)	Articulating Boom Loader	Articulating Boom Loader
Articulating Boom Cranes and Boom Loaders (ABC & ABL)	Articulating Boom Crane	Articulating Boom Crane & Articulating Boom Loader
Articulating Boom Cranes w/ Winch and Boom Loaders (ABC, ABW, & ABL)	Articulating Boom Crane w/ Winch	Articulating Boom Crane & Articulating Boom Loader

These crane categories apply whether the crane is mounted to a truck or a crawler chassis.

CCO WRITTEN EXAMINATIONS

The written examination program consists of three examinations. Candidates choose from these based on the certification designation(s) they seek.

Candidates are given 90 minutes to complete each of the Written Examinations:

- Articulating Boom Crane (ABC)—65 questions
- Articulating Boom Crane w/Winch (ABW)—75 questions
- Articulating Boom Loader (ABL)—50 questions

Written exams may be taken as either paper/pencil tests (PPT), see page 9 for details, or computer-based tests (CBT), see page 11 for details.

CCO PRACTICAL EXAMINATIONS

The CCO Articulating Crane Operator Practical Examination demonstrates crane operator proficiency and is available for two crane types:

- Articulating Boom Cranes (ABC)
- Articulating Boom Loaders (ABL)

To be CCO-certified for a five-year period, candidates must pass the written exam of their choice and at least one corresponding practical exam.

CCO CERTIFICATION TIME FRAMES

Candidates may take their written and practical exams in any order. Candidates have 12 months from the time they pass the initial written or practical Exam they take to pass the corresponding (written or practical) exam.

Any tests passed within a 12-month period count towards certification. For example, a candidate who fails the Articulating Boom Loader Written Exam in January 2015 but passes the Articulating Boom Loader Practical Exam in June 2015 has until the end of June 2016 to retake (and pass) the Articulating Boom Loader Written Exam.

If a certified operator subsequently becomes certified in an additional operator designation by taking the appropriate written and practical exams, the certification period for the additional designation expires at the same time his/her original certification (i.e., all operator designations expire on the same date, regardless of when in the five-year certification period the candidate passed them). If the new designation is added within the final 24 months of his/her certification period, the certificant is exempt from recertifying for the new designation after five years; after that, however, certificants must recertify for all designations during the 12 months prior to their certifications' expiration date. This ensures that all of the certificant's operator designations maintain the same expiration date.

Candidates for certification or recertification may petition for an extension of NCCCO's standard timeline(s). NCCCO staff shall have the discretion to make the initial determination of whether a requested extension should be granted. Petitions for an extension of time are generally denied absent a showing of extraordinary circumstances. Denials of such petitions may be appealed to the Appeals Committee.

RECERTIFICATION REQUIREMENTS

CCO certification is valid for five years. *Recertification candidates must complete all recertification requirements during the 12 months prior to their expiration date.* This includes:

- Passing the Recertification Written Examination
- Compliance with NCCCO’s Substance Abuse Policy
- Compliance with NCCCO’s Code of Ethics

Candidates who can attest to at least 1,000 hours crane-related experience during their period of certification do not need to take the Practical Exam to recertify. *Crane-related experience* is defined as: operating, maintaining, inspecting, or training on cranes.

Candidates who need to take the Practical Exam for any reason, however, must do so before their certification expires. *There is no grace period after the date of expiration.* Candidates whose certification has lapsed must take the regular Written and Practical Examinations again to be certified again.

The Articulating Boom Cranes Recertification Written Examination has 35 multiple-choice questions with a time limit of 1 hour.

The Articulating Boom Loaders Recertification Written Examination has 25 multiple-choice questions with a time limit of 1 hour.

The Articulating Boom Cranes with Winch Recertification Written Examination has 45 multiple-choice questions with a time limit of 1 hour.

Recertification candidates are allowed two attempts to pass the Recertification Written Exam before their certification expires. Candidates who are unsuccessful after two attempts must take and pass the regular exams.

Recertification candidates may take their Recertification Written Examination up to one year prior to their certification’s expiration date. Regardless of the date of the Recertification Examination within that one-year period, the new five-year certification period begins from the date of expiration of the candidate’s initial certification.

Note: Candidates who recertify more than 12 months prior to their expiration date will have their new certification period begin immediately, not from the end of their current certification period.

Recertification Exams are available at regularly scheduled paper/pencil test administrations as well as via computer-

based testing. Candidates wishing to recertify should contact the Test Site Coordinator who set up their initial certification. Candidates whose employment circumstances have changed should ask their new employer to schedule a test administration. Candidates may also locate open paper/pencil Written Exam Test Sites at www.nccco.org/testsites or apply online for computer-based testing sites at www.nccco.org/cbt.

Recertification Exam Options

If you are seeking recertification for:	Take the corresponding written recertification exams:
Articulating Boom Cranes (ABC)	Articulating Boom Crane
Articulating Boom Cranes w/ Winch (ABC & ABW)	Articulating Boom Crane w/ Winch
Articulating Boom Loaders (ABL)	Articulating Boom Loader
Articulating Boom Cranes and Boom Loaders (ABC & ABL)	Articulating Boom Crane
Articulating Boom Cranes w/ Winch and Boom Loaders (ABC, ABW, & ABL)	Articulating Boom Crane w/ Winch

CODE OF ETHICS FOR CERTIFIED CRANE OPERATORS

Certified crane operators must comply with the Code of Ethics for Certified Crane Operators during their certification, as defined below.

In my occupation, I will conduct myself in a manner:

- So as to place the safety and welfare of others associated with my work above all other considerations;*
- So as to protect and preserve nearby general public property and the environment; and*
- So as to be free of bias with regard to religion, ethnicity, gender, age, national origin, and disability.*

Furthermore, in connection with my work and in my dealings with NCCCO, I will:

- Make management and appropriate personnel aware promptly if I have any safety concerns relating to the work that I am performing or with which I am involved;*

- v. *Not knowingly violate any safety-related regulations, warnings, or instructions set forth by OSHA, recognized safety standards, prevailing jurisdictions, or equipment manufacturers; and,*
- vi. *Not mislead, misrepresent or knowingly deceive others concerning my experience or the capabilities of myself or the equipment I am operating or with which I am working.*

In addition, in my dealings with NCCCO, I will:

- vii. *Provide accurate and complete information and abide by NCCCO's policies and procedures, including this Code of Ethics, as they may be updated from time to time;*
- viii. *Not act dishonestly or unfairly in order to gain an advantage, or to provide another with an advantage, in connection with any dealings with NCCCO;*
- ix. *Cooperate fully and completely with any administrative inquiries or investigations by NCCCO; and,*
- x. *Not misrepresent or misuse any NCCCO card, or the NCCCO or CCO acronyms and logos, or any registered trademark or other intellectual property of NCCCO; and I understand that I must return the card to NCCCO immediately if required to do so.*

CCO-certified personnel who intentionally or knowingly violate any provision of the Code of Ethics will be subject to action by a peer review panel, the Ethics and Discipline Committee, which may result in suspension or revocation of certification.

DISCIPLINARY POLICY

NCCCO's Ethics and Discipline Committee is responsible for establishing and implementing standards of conduct, such as ethical standards and policies and procedures for disciplinary action. Grounds for revocation of certification status shall include, but not be limited to, the following:

1. Period of certification exceeded without renewal
2. Evidence of falsification of any information on any documents submitted to NCCCO or its agents
3. Evidence of non-compliance with NCCCO's Substance Abuse Policy
4. Evidence of culpability in an accident during certification period
5. Evidence of non-compliance with the Code of Ethics

NCCCO has established policies and procedures to address alleged violations of the Code of Ethics fairly and consistently. The complaints procedures have been

designed to ensure that only valid and actionable complaints are investigated and considered. These procedures also ensure that all parties involved in the complaint have an opportunity to document circumstances warranting the complaint and to respond to the complaint.

NCCCO has a two-tier process to ensure that issues regarding the practice and conduct of certified crane operators are fairly and reasonably investigated and determined, and that the public is protected against unprofessional and unethical conduct by certificants.

Complaints against certificants are initially investigated by NCCCO's Manager of Test Integrity, who reports to NCCCO's Ethics and Discipline Committee. If the complaint is considered actionable, the Ethics and Discipline Committee informs both the certificant and the complainant of the official opening of the investigation. Following the investigation of the complaint, the Ethics and Discipline Committee informs the certificant and the complainant of its decision.

If a sanction is imposed, the certificant may request an appeal of the decision to the NCCCO Board of Directors. Appeals should be addressed to:

Chief Executive Officer
National Commission for the Certification of Crane
Operators (NCCCO)
2750 Prosperity Avenue, Suite 505
Fairfax, VA 22031

The decision of the NCCCO Board of Directors is final.

SUBSTANCE ABUSE POLICY

It is the policy of the National Commission for the Certification of Crane Operators (NCCCO) that certified personnel shall not perform duties related to their certification while under the influence of any substance that impairs or may reasonably be expected to impair their ability to work safely in the workplace.

This includes alcohol, illegal drugs, look-alike drugs, designer drugs, controlled substances, or any other substance that impairs or may reasonably be expected to impair a certificant's ability to work safely, including prescribed or over-the-counter substances.

NCCCO-certified personnel shall comply with all substance abuse provisions of applicable federal, state, and local regulations, as well as industry standards, including the substance abuse testing provisions of ASME B30.

For purposes of this policy, a refusal to submit to a required substance abuse test shall be treated in the same manner as a positive test.

It is a condition of certification that those certified by NCCCO agree to comply with this Substance Abuse Policy. Non-compliance with this policy may subject a certificant to disciplinary action, up to and including suspension or revocation of their certification status.

CERTIFICATION CARDS

Certified operators receive a laminated photo ID card at no cost when they certify, add a designation, or recertify.

Replacement cards may be obtained from NCCCO at a cost of \$25 and ordered online at: www.nccco.org/newcard.

Certification cards remain the property of NCCCO, are not transferable, and must be returned to NCCCO upon demand.

CHANGE OF ADDRESS

Certificants who change their address must notify NCCCO as soon as possible. Failure to do so may cause important updates on NCCCO's programs to be missed that could affect a certificant's stature.

The fastest and easiest way to update your contact information is using the myCCO portal smartphone app, available for iPhones and Android phones. Alternatively, you may use the companion website (www.nccco.org/myCCO) to access and update your contact information and review your current certifications and expiration dates. The app also enables you to view your upcoming exams and recent exam history, including exam results.



Written Examination Process

ARTICULATING CRANE OPERATOR

APPLICATION PROCESS TO TAKE THE WRITTEN EXAMINATION

Articulating Crane Operator written exams and recertification exams may be taken either as paper/pencil tests (PPT) at an approved NCCCO written exam test site or as computer-based tests (CBT) at approximately 400 PSI test centers across the country. The content of both test formats is identical; see the appropriate sections below for instructions on how to apply for either PPT or CBT exams.

Candidates Requesting Testing Accommodations

Arrangements for persons with disabilities will be provided upon request, in conformance with the Americans with Disabilities Act (ADA).

Professional documentation in support of a request for accommodation must be submitted to NCCCO no later than four weeks prior to the scheduled test date. For further information about testing accommodations, see the complete NCCCO Testing Accommodations Policy at: www.nccco.org/accommodations.

PAPER/PENCIL TESTING (PPT) OPTION

Candidates who want to sit for paper/pencil written exam(s) should visit www.nccco.org/testsites to see a schedule of upcoming Test Dates and Locations. Once a test location and date have been identified, candidates must use the online Candidate Application form at www.nccco.org/applyPPT to apply and use a credit card (VISA, MasterCard, or American Express) to pay the appropriate PPT Written Exam fees.

Applications are due two weeks prior to the scheduled examination date. PPT application deadline examples are shown on page 10. Information about the specific locations of the Test Sites will be available approximately one to three months prior to the examination. Candidates eligible to sit for the examination will be sent an admission letter approximately one week before the scheduled test administration date.

Candidates must follow the directions carefully when filling in the required information. Incomplete applications, incorrect payment, and/or inaccurate documentation will delay the processing and incur additional fees. This could result in *NOT* being able to sit for the examination(s).

Deadlines

Please note that all deadlines are UPON RECEIPT deadlines. Candidates and Test Site Coordinators are solely

responsible for making sure that completed and accurate applications reach NCCCO by the stated deadlines.

Examination Fees

PPT Written Exam/Retest Fees:

- Articulating Crane Operator Written Exam \$180

PPT Recertification Written Exam/Retest Fees:

- Articulating Crane Operator Recertification Written Exam..... \$180

Other Fees:

An additional \$50 late fee will be charged if the application is late.

An additional \$25 will be charged if a candidate:

- Chooses to cancel his/her application
- Needs a replacement certification card or score report

An additional \$30 fee will be charged if:

- An application form is incomplete
- A credit card cannot be processed for any reason
- A candidate wants to add to (or change) the exams he/she plans to take after scheduling has been completed (in addition to the exam fee)

All application materials must be received at NCCCO's office according to the sample test schedule outlined under "Application Deadlines."

Applications received after the main application deadline, but at least four business days prior to the exam administration deadline, may be accepted for an additional \$50 late fee. For example, for a test administration on a Saturday, late applications that arrive at NCCCO's office by 5 p.m. (ET) on the Monday evening prior will be accepted. Candidate Applications that arrive after that time cannot be accepted.

Walk-in candidates cannot be accepted under any circumstances.

Length of Test Day

NCCCO written exams are carefully designed to provide a reliable and valid assessment of a candidate's knowledge and skills. Time limits are carefully determined for each written exam to allow enough time for a prepared candidate to complete the exam and to provide for an efficient and successful administration of all exams to scheduled candidates on testing day.

To provide each candidate with a fair and standardized administration of the written examination(s), and to ensure the reliability and validity of the written examinations is maintained, it is not recommended that a candidate schedule written exams totaling more than six hours of testing time on the same day.

Cancellation Policy

Should a candidate be unable to sit for the examination for any reason, NCCCO must receive email notification at candidate@nccco.org no later than seven business days prior to the examination date. Candidates will receive a refund of exam fees paid within 30 days of the cancellation, minus a \$25 cancellation fee.

Candidates wishing to cancel after the deadline or not sitting for the examination will forfeit all application fees and will NOT receive a refund.

Cancellation Due to Emergency

Only the following situations will be accepted as grounds for cancelling after the deadline (seven business days before scheduled exam):

- **Called to work**—supporting documentation required: *letter from employer*
- **Candidate illness**—supporting documentation required: *doctor's note*
- **Family death**—supporting documentation required: *death certificate or obituary notice*

Emergency-related requests require submission of a letter describing the situation. Full name, address, and Candidate ID/CCO Certification number must be included along with the scheduled test date, written test administration number, and supporting documentation indicated above. Submissions should be sent to: candidate@nccco.org.

NCCCO MUST receive written notification and supporting documentation within seven business days after the scheduled examination date or all application fees will be forfeited.

If the request is approved, candidates will receive a refund of exam fees paid within 30 days of the approval, minus a \$25 cancellation fee.

Test Administration Schedule for CCO Examinations

Paper/pencil CCO written examinations are available for administration on demand with at least four weeks' notice.

Application Deadlines

Tests can be administered at any time as long as the application deadlines are met. Sample deadlines shown are for a test date of January 29.

		January						
		S	M	T	W	Th	F	Sa
Written Test Administration Request Form due four weeks prior to test date.	●		1	2	3	4	5	6
Candidate Applications due two weeks prior to test.	●	7	8	9	10	11	12	13
		14	15	16	17	18	19	20
		21	22	23	24	25	26	27
Test Day	●	28	29	30	31			

Admission Letters

For paper/pencil exams, approximately one week before the scheduled test date, registered and eligible candidates approved to take CCO written examination(s) will receive an admission letter by email. The admission letter contains information regarding the test center address, the reporting time, the examination(s) the candidate is registered for, and the materials candidates need to bring with them on the day of the administration.

Identification at the Test Site

Candidates must bring valid (not expired) government-issued photo identification that includes date of birth to the test site on the day of the test administration. Candidates will be required to sign the test site roster upon entry to the testing area.

Acceptable forms of photo identification may include a current:

- Passport
- Government-issued driver's license
- Military identification card
- U.S. Government-issued alien registration card

NOTE: Candidates without appropriate identification documents will NOT be admitted to take the CCO Written Examination(s) and all fees will be forfeited.

Materials to Bring to the Test Site

Each candidate must bring the following items to the Test Site:

- Valid photo identification
- Admission letter for the specific test date (recommended)
- Two sharpened #2 pencils (to complete the examination answer sheet)
- A good eraser

NOTE: No books, scratch paper, calculators, reference materials, beepers, cellular phones, or other personal items will be allowed in the examination room.

Score Reporting

Paper/pencil CCO Written Examinations are electronically scored by NCCCO. For this reason, it is important to complete the answer sheet according to the instructions provided by the Chief Examiner on the day of the exam. Candidates will receive credit only for answers recorded on the scannable answer sheet. **Answers marked in the test booklet(s) will NOT be counted toward a candidate's score.**

All candidates will receive a score report of their performance. Examination results are mailed to candidates approximately 12 business days after the examination administration.

COMPUTER-BASED TESTING (CBT) OPTION

Candidates desiring to take their written exam(s) using the computer-based testing (CBT) option should visit www.nccco.org and click on the Computer-Based Testing link under Test Dates and Locations (www.nccco.org/cbt). This page includes links to a directory of approximately 400 PSI locations throughout the U.S. as well as the online application form.

Online applications may be completed and submitted at any time. Candidates should apply to take CBT exam(s) as soon as possible, but no later than five business days before their preferred exam date. Please note that site availability is not guaranteed on the preferred exam date or location, and availability can only be confirmed when scheduling the appointment.

After the candidate completes and submits the online application (with payment), the application will be processed within two business days. Candidates authorized for testing will receive a scheduling authorization email from PSI with specific instructions on how to schedule an examination appointment. For the fastest and most convenient test scheduling process, PSI recommends that candidates use the online scheduling service at nccco.org/cbtlocations. Candidates follow the on-screen step-by-step instructions to register for their examination(s).

Candidates may also call the number provided in the email to schedule the test(s) with PSI; the PSI customer service representative will do his/her best to select a test date and location convenient for the candidate. PSI will send an appointment confirmation email within 24 hours.

The candidate must then go to the selected test center at the scheduled date and time.

CBT Examination Fees

Candidates must pay the appropriate CBT Written Exam fees when they apply online. A credit card (VISA, MasterCard, or American Express) must be used to pay online. CBT exam payments are valid for one year. If the candidate does not schedule and test within 12 months, he/she forfeits the fees. This does not affect the deadline(s) noted in the CCO Certification Time Frames or the Recertification Requirements sections.

CBT Written Exam/Retest Fees:

- Articulating Crane Operator Written Exam \$250

CBT Recertification Written Exam/Retest Fees:

- Articulating Crane Operator Recertification Written Exam..... \$250

Other Fees:

An additional \$25 will be charged if a candidate:

- Needs a replacement certification card or score report

An additional \$30 fee will be charged if:

- An application form is incomplete (e.g., name misspelled or does not match name on valid photo ID)
- A credit card cannot be processed for any reason
- Any changes are requested after submitting the application

NOTE: After the candidate has scheduled his/her appointment with PSI, no changes can be made (adding exams, changing exams, etc.). If the name for the scheduled appointment does not match that on the photo ID presented, all fees will be forfeited.

Rescheduling, Cancellation, or Withdrawal

CBT candidates may cancel and reschedule an examination appointment without forfeiting their fees if their cancellation notice is received at least 24 hours before the scheduled examination date.

Candidates will NOT receive a refund if they no longer wish to take the test. **To reschedule an exam appointment, candidates may log into their PSI account or call PSI at 833-333-4752 to speak with PSI Candidates Services Department. A voicemail message is not an acceptable form of cancellation.**

Missed Appointment or Late Cancellation

A candidate's registration will be invalidated and the examination fee(s) will be forfeited if he/she:

- Does not cancel the appointment more than 24 hours before the scheduled examination date
- Does not appear for his/her examination appointment
- Arrives after examination start time
- Does not present proper identification

Identification at the Test Site

Candidates must bring valid (not expired) government-issued photo identification that includes date of birth to the test site on the day of the test administration. Candidates will be required to sign the test site roster upon entry to the testing area.

Acceptable forms of photo identification may include a current:

- Passport
- Government-issued driver's license
- Military identification card
- U.S. Government-issued alien registration card

NOTE: Candidates without appropriate identification documents will NOT be admitted to take the CCO Written Examination(s) and all fees will be forfeited. Work identification is NOT acceptable for computer-based testing centers.

Materials to Bring to the Test Site

Each candidate must bring the following items to the test site:

- Valid photo identification
- Confirmation email from PSI (recommended)

NOTE: No books, scratch paper, calculators, reference materials, beepers, cellular phones, or other personal items will be allowed in the examination room.

Score Reporting

CBT candidates receive their test results immediately following their exams and should retain these score reports for their records.

TEST SITE INFORMATION (BOTH PPT AND CBT)

Test Security

For the purposes of test security, candidates who sit for CCO examination(s) acknowledge that they understand the following:

- The examination is the exclusive property of NCCCO.
- The examination and the questions contained therein are protected by federal copyright law.
- No part of the examination(s) may be copied or reproduced in part or whole by any means whatsoever, including memorization.
- Theft or attempted theft of an examination booklet or any of its pages is punishable as a felony.
- While at the examination site, candidates are considered professionals and shall be treated as such. In turn, candidates must conduct themselves in a professional manner at all times. While at the site, they shall not use words or take actions that are vulgar, obscene, libelous, or that would denigrate the staff or other candidates.
- No conversing or any other form of communication among the candidates is permitted once they enter the examination area.
- No smoking, eating, or drinking is allowed at the examination site.
- No guests, visitors, or family members are allowed in the testing room or reception areas.
- Candidate participation in any irregularity during the examination, such as giving or obtaining unauthorized information or aid, as evidenced by an observation or subsequent statistical analysis, may be sufficient cause to terminate participation, invalidate the results of the examination, or other appropriate remedy.
- A candidate's signature on the answer sheet or roster for the administration of the examination confirms that the candidate has read and understands the above statements.

Candidate Question Comment Forms

Candidates may comment on the examination(s) as a whole or on specific items within an examination by writing their comments on the Candidate Question Comment Form. Written comments should reference the question number as well as the site code and the test date

and should accompany the examination. Examination comments are reviewed by NCCCO content experts on a regular basis.

Computer-based testing candidates may provide comments for any question by clicking on the “Comments” button to the left of the Time button. This opens a dialogue box where candidates may enter comments.

NOTE: Only comments completed on the Candidate Question Comment Form or provided during the computer-based examination at the Test Site will be considered for review.

TEST SCORING INFORMATION

CCO Written Examinations are criterion-referenced examinations; i.e., the passing score is set beforehand, and candidate performance on the examination is not compared to the performance of others taking the examination. In a criterion-referenced examination, a candidate must obtain a score equal to or higher than a predetermined passing score to pass the test. The passing scores represent absolute standards and are determined by panels of NCCCO content experts using a psychometrically accepted standard-setting methodology.

In reporting the examination results to candidates, statistical procedures are used to convert raw scores (i.e., the number of test questions answered correctly) to scaled scores, which are set for all administrations of the examination(s). The scaled score is not a number-answered-correctly score.

Candidate results are reported on a scale ranging from zero to 100 points, with a score of **70** representing the minimum passing score for this test. Written exam score reports include a strength and weakness report by content domain.

Candidate scores are never reported by telephone, email, or facsimile.

Hand Score Requests

Candidates not passing exam(s) may request from NCCCO a hand scoring of their answer sheet(s), provided their request is made in writing within three months of the test date. Hand-scoring requests must be accompanied by a processing fee of \$25 for one test score or \$50 for two or more failed test scores per test administration. Requests should be mailed to:

NCCCO—Written Exam Processing
34125 U.S. Highway 19 North, Suite 150
Palm Harbor, FL 34684

Phone: (727) 449-8525

In the event that the hand scoring of a failing candidate’s answer sheet results in a passing score, the hand-scoring fee will be refunded in full.

RETAKE THE EXAMINATION(S)

Candidates who fail an examination(s) may retake the examination(s); they must reapply and pay all corresponding retest fees. Written exam retest candidates are required to wait a minimum of four weeks before retesting on the same exam. Recertification candidates needing to retake an exam who do not want to wait the required four weeks may retest by taking the applicable initial certification exam(s) instead of retaking the recertification exam.

INFORMATION RELEASE POLICY

NCCCO releases information pertaining to individuals who have successfully passed one or more CCO examinations according to its Information Release Policy (see page 27).

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Written Examination Outline

ARTICULATING CRANE OPERATOR

APPROXIMATE PERCENTAGE OF WRITTEN EXAM BY DOMAIN

DOMAIN	ARTICULATING BOOM CRANE	ARTICULATING BOOM CRANE w/WINCH	ARTICULATING BOOM LOADER
Domain 1: Site and Setup	17%	13%	20%
Domain 2: Operations	37%	35%	40%
Domain 3: Technical Knowledge	30%	35%	28%
Domain 4: Manufacturers' Load Charts	17%	17%	12%

DOMAIN 1: SITE AND SETUP

1. Know the ability of the supporting surface to handle the expected loads; elements of concern include but are not limited to:
 - a. Weakness below the surface, such as voids, tanks, and loose fill
 - b. Weakness on the surface, such as retaining walls, slopes, excavations, and depressions
2. Know the proper use of blocking or cribbing.
3. Know electric power line hazards, corresponding regulations, and safety practices.
4. Know how to identify and evaluate hazards associated with:
 - a. Entering and leaving the job site
 - b. Site hazards such as above ground and underground utilities
 - c. Transportation clearances
 - d. Job site personnel
5. Know how to review lift requirements with site supervisor.
6. Know the responsibilities of various workplace personnel.
7. Know how to establish/re-establish a safety zone.
8. Know how to properly use stabilizers.
9. Know how to deploy and stow boom(s).
10. Know the proper use of wheel chocks.

DOMAIN 2: OPERATIONS

1. Know which federal regulations and industry standards affect safe operation of cranes.
2. Know how to conduct daily inspections and notify supervision of unsafe conditions.
3. Know proper operation of power take-off (PTO).
4. Know how to lift, rotate, and place the load smoothly and safely.
5. Know standard articulating boom crane hand signals.
6. Know how to secure the crane when leaving the controls:
 - a. In normal conditions
 - b. In emergency conditions
 - c. With load suspended
7. Know how to operate in:
 - a. Various weather conditions
 - b. Various environmental conditions
8. Know how to determine the radius.
9. Know how to operate a permanently attached material-handling fork, including:
 - a. Clamping
 - b. Load control
 - c. Centering the load
10. Understand the function of an overload protection (OLP) system.

11. Know the proper procedures for operating safely under the following conditions:
 - a. Operations when power lines are present
 - b. Handling loads out of the operator's vision (operating in the blind)
12. Know the proper procedures for load control.
13. Know the effects of dynamic loading from:
 - a. Wind
 - b. Stopping and starting
 - c. Impact loading
 - d. Moving the load
14. Know the effect of side loading.
15. Know proper procedures for securing the crane for transit.
16. Know how to verify the weight of:
 - a. Load
 - b. Attachments

The following knowledge areas apply to Articulating Boom Crane (ABC) and/or Winch (ABW) ONLY.

17. Know basic rigging procedures.

The following knowledge areas apply to Winch (ABW) ONLY.

18. Know proper procedures of reeving wire ropes and selecting the proper downhaul weight.
19. Understand two block-damage prevention feature.

DOMAIN 3: TECHNICAL KNOWLEDGE

1. Know basic crane terminology and definitions.
2. Know the functions and limitations of attachments.
3. Know the significance, use, and limitations of operator warning, safety, and/or limiting devices.
4. Know the requirements of pre-operational inspections and maintenance.
5. Know how to use manufacturer-approved attachments and their effect on the crane's operation.

The following knowledge areas apply to Articulating Boom Crane (ABC) and/or Winch (ABW) ONLY.

6. Know rigging devices and their use, such as:
 - a. Slings
 - b. Wire rope fittings (e.g., clips, shackles)
 - c. Saddles (softeners)

The following knowledge areas apply to Winch (ABW) ONLY.

7. Know wire rope:
 - a. Construction and breaking strength
 - b. Inspection procedures
 - c. Replacement criteria and procedures
 - d. Capacity and when multi-part rope is needed
 - e. Maintenance and lubrication
 - f. Relationship between line pull and safe working load

DOMAIN 4: LOAD CHARTS

1. Know the terminology necessary to use load charts.
2. Know how to ensure that the load chart is the appropriate chart for the machine in its particular configuration.
3. Know how to verify weight of load.
4. Know how to use load rating charts, including:
 - a. The operational limitations of load charts and footnotes
 - b. How to apply various load rating charts for the crane's working areas
 - c. What is included in load rating charts

The following knowledge areas apply to Articulating Boom Crane (ABC) and/or Winch (ABW) ONLY.

5. Know how to make deductions for rigging, attachments, and manual boom extensions.

The following knowledge areas apply to Winch (ABW) ONLY.

6. Know where to find and how to use:
 - a. The *parts of line* information
 - b. The safe working load of hoist line



Reference List

ARTICULATING CRANE OPERATOR

The following reference materials are used by NCCCO's Articulating Crane Management Committee to verify the accuracy of CCO test questions. Candidates are strongly advised to become familiar with manufacturer's load charts in preparing for the CCO certification examinations. (Prices shown are current as of press time.)

**Occupational Safety and Health Administration,
U.S. Department of Labor Code of Federal
Regulations, 29 CFR 1926 Subpart CC—Cranes
and Derricks in Construction**

Order by Internet: <http://www.osha.gov/>

ANSI/ASME, B30.22 (2016) \$68.00
**Articulating Boom Cranes (and successive
addenda)**

Order by Internet: [https://www.asme.org/
codes-standards/find-codes-standards](https://www.asme.org/codes-standards/find-codes-standards)

Order by mail:

American Society of Mechanical Engineers
22 Law Drive, Box 2900
Fairfield, NJ 07007
Phone: 800-843-2763
Fax: 201-882-1717

*Payable via check, VISA, MasterCard, American Express,
Discover, Diner's Club*

B30.22 applies to the construction, installation, operation, inspection, and maintenance of cranes with knuckle-booms articulated by hydraulic cylinders, which are powered by internal combustion engines or electric motors and are mounted on a mobile chassis or stationary installation. Frequently, hoist mechanisms are used to broaden their versatility; load hoist mechanism-equipped machines are covered by this volume.

NCCCO Articulating Crane \$29.50
Reference Manual

Order by Internet: <http://www.nccco.org/store/>

Payable via VISA or MasterCard

The *NCCCO Articulating Boom Crane Reference Manual* was created to assist candidates preparing to take the CCO Articulating Crane Certification Examinations. The information contained in this manual has been compiled by members of the Articulating Crane Task Force.

Paper copies of the reference manual are for sale via the NCCCO website (above), or download a free PDF from:

www.nccco.org/ACostudymaterials

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Practical Examination Process

ARTICULATING CRANE OPERATOR

ELIGIBILITY

Candidates must pass both a Written Exam and a Practical Exam in the category(s) they want to be certified in. Candidates may take their Written and Practical Exams in either order. Candidates have 12 months after they pass their first exam (Written or Practical) in which to take the corresponding Written or Practical Exam in the same category. For example, a candidate passing the Articulating Boom Loader Written Exam has 12 months from his/her exam date to pass the Articulating Boom Loader Practical Exam.

SKILLS TESTED

CCO Articulating Crane Operator Practical Examinations are available on two crane types:

- Articulating Boom Crane
- Articulating Boom Loader

Candidates may take the Practical Examination on one or both of the crane types. The Practical Examinations are comprised of four main tasks that increase progressively in the skill level tested. Skills tested include booming, swinging, articulating, telescoping, and combination (multifunction) operations.

So as to standardize testing conditions for all candidates wherever and whenever they may test, NCCCO has developed a standard Test Site Layout (CAD) for each of the crane types.

All electronic operator control assistance software and systems will be turned off for the duration of the test.

SCHEDULING A TEST

Candidates for the practical examination should contact their Test Site Coordinator to determine the date of the next scheduled practical exam. Candidates may also visit the NCCCO website at www.nccco.org/practicalsites for a listing of upcoming open Test Sites.

APPLYING FOR PRACTICAL EXAM

Candidates must apply for practical exams online at www.nccco.org/applypractical. Upon submission, candidates will receive a confirmation email within one hour with an authorization code for each practical exam they are approved to take. Candidates have up to 180 days to take their practical exam before their authorization expires.

Please note the following requirements:

- Candidates will **not** be permitted to take a practical exam without their authorization code.
- Candidates must take the authorized practical exam by the expiration date. No extensions permitted.
- Applications **cannot** be cancelled, refunded, or transferred to another candidate.
- **On test day candidates must bring a valid government-issued photo ID (passport, driver's license) with date of birth.**

TEST DAY

Candidates must report to the Test Site at the scheduled time. Candidates must present their Practical Exam Authorization code either as a printed document or electronically.

All candidates shall comply with Test Site requirements concerning personal protective equipment (PPE), which at a minimum shall meet OSHA requirements. Candidates must bring valid (not expired) government issued photo identification that includes date of birth to the test site on the day of the test administration.

Candidates are required to submit a digital passport size head-and-shoulders color photo (without hat or sunglasses). Please coordinate with your Test Site Coordinator to either provide one in advance or have the photo taken the day of the exam.

PRACTICAL SCORING

Candidate performance on the Practical Examination is recorded by Practical Examiners accredited by NCCCO. Examiner requirements include meeting NCCCO requirements for operator certification, passing the Written and Practical Exams, and successfully completing an accreditation workshop.

The testing procedure has been developed to provide the highest degree of standardization and reliability. The Examiner's task is primarily to record the performance of the candidate.

A candidate may lose points either through operational errors or exceeding established optimum time limits. The scoring of candidates' performance is done off site at NCCCO facilities.

PRACTICAL SCORE REPORTING

All candidates receive a score report of their performance. Examination results are mailed to candidates approximately 12 business days after the receipt of Practical Examination score sheets by NCCCO.

Please note that while Practical Examiners are encouraged to expedite score sheets after each test administration, they may batch score sheets from several test administrations over a number of days. This means candidates may receive their score reports from NCCCO more than three weeks after their test administration.

Both the Practical Examination and the scoring system have been validated and verified by NCCCO's pilot testing program. A score of 75 represents the minimum passing score for the Articulating Crane Operator Practical Examinations.

PRACTICAL EXAM CANDIDATE FEES

Practical Exam/Retest Fees:

- Articulating Boom Crane \$60
- Articulating Boom Loader..... \$60

Other Fees:

An additional \$30 fee will be charged if:

- An application form is incomplete
- Full payment is not received or credit card cannot be processed for any reason
- A candidate requests changes to the application

PRACTICAL EXAM HAND SCORING REQUESTS

Candidates not passing the examination(s) may request from NCCCO a hand scoring of their answer sheets, provided the request is made in writing within three months of the test date. Hand scored practical exam reports include details of a candidate's performance on each task.

Requests must be accompanied by a processing fee of \$25 for each test requested.

Requests should be mailed to:

NCCCO—Practical Exam Processing
5250 S. Commerce Dr., Suite 100
Murray, UT 84107

Phone: 801-363-2693

Email: practicalexam@nccco.org

In the event that the hand scoring of a failing candidate's answer sheet results in a passing score, the hand-scoring fee will be refunded in full.



Practical Examination Outline

ARTICULATING CRANE OPERATOR

The following is an outline of the practical testing procedure, as provided to candidates at the time of testing.

CANDIDATE INFORMATION AND INSTRUCTIONS

The following sections describe the specific tasks you will be performing when taking the Practical Examination. It is important that you understand these instructions. If there is anything you do not understand, please request clarification from the Examiner.

TASKS

The Articulating Boom Crane Practical Exam tasks are:

- **Task: Pre-Operational (Shift) Inspection**
- **Task 1: Place Test Weight in Zigzag Start Circle**
- **Task 2: Negotiate Zigzag Corridor (Forward)**
- **Task 3: Negotiate Zigzag Corridor (Reverse)**
- **Task 4: Place Test Weight in Pole Circle**
- **Task 5: Safe Shutdown and Securing Procedures**

The Articulating Boom Loader Practical Exam tasks are:

- **Task: Pre-Operational (Shift) Inspection**
- **Task 1: Place Test Weight in Corral**
- **Task 2: Blind Pick**
- **Task 3: Negotiate Zigzag Corridor**
- **Task 4: Place Test Weight on Truck Bed**
- **Task 5: Safe Shutdown and Securing Procedures**

There are also Pre-Test Briefing and Pre-Test Familiarization periods. Candidates are required to complete all phases of the test in sequence.

You must report to the Test Site at the scheduled time. **All candidates shall comply with Test Site requirements concerning personal protective equipment, which at a minimum shall meet OSHA requirements.**

The Test Site Coordinator is responsible for setting the testing schedule. If you are familiar with the operation of the test crane, you may elect to test first to allow other candidates time to review the operator's manuals and load charts. Otherwise, selection shall be by random drawing or by assignment of the Test Site Coordinator.

During the Practical Examination, you are under the direction of the Examiner and must follow the Examiner's directions at all times. Once you have completed all of the

tests you are taking, you must leave the testing area. Only personnel involved in the administration of the test are allowed in the test area.

TIME LIMITS

For all tasks, an *optimum time limit* has been set. If the task is completed within this time period, you receive no time penalty. Once you exceed this time limit, however, you will lose points on a graduated basis. If you take one and a half times as long as the optimum time, you will have lost all the points allotted to that particular task. The optimum time for each task is stated as part of the task descriptions. At twice the optimum time the Examiner may end the task and move on to the next task.

PRE-TEST BRIEFING

While you are waiting to take your test, you will have sufficient time to read a description of the tasks to be performed and review the operator's manual and load chart for the crane(s) you will operate. In addition, you will be informed of the make and model of the crane and the weight of the Test Weight. You will also watch a short presentation showing all the tasks you will be required to perform during the examination. This video is also available on the NCCCO website and candidates must view it within 24 hours before their practical exam(s). Separate videos are available for Articulating Boom Cranes and Articulating Boom Loaders.

Note that:

- The crane has been set up and leveled; a spirit level is available if you wish to verify levelness.
- No part of the course has been placed at a radius that exceeds the crane's rated capacity.
- All hand signals used throughout the test will be in accordance with the *NCCCO Articulating Crane Reference Manual*.

CIRCUMVENTING THE COURSE

Circumventing the course on CCO Articulating Crane Practical Exams is defined as when:

1. Chain leaves the corridor while on or off the ground and passes more than one pole left still standing on the original string line before re-entering the corridor; you **must** enter the circles from inside the corridor to avoid this being marked as a deficiency
2. Chain leapfrogs from one leg of corridor to another with the chain off the ground, outside the corridor

- Chain passes four or more poles consecutively with the chain off the ground, inside the corridor
- Test Weight and chain enters or exits the corridor without vertically clearing the hurdle (i.e., by going around the hurdle)

All points for that task are lost if a circumvention occurs.

UNSAFE ACT

If, at any time during the Pre-Test Familiarization Period or during the test, you commit an unsafe act, you will be disqualified from continuing with the test. *Unsafe acts* include, but are not limited to, the following:

- Dropping the ball or load hook on ground
- Contacting the crane with the Test Weight
- Uncontrolled or reckless operation (must be sufficient to cause safety concern to personnel or crane)
- Failure to respond to a *stop* signal
- Contacting obstruction with crane or Test Weight
- The Test Weight touching any part of the candidate's body during the exam
- Walking or standing underneath the Test Weight while operating the crane with a remote control

The Examiner has the authority to stop the test at any time for reasons of safety. Please ask the Examiner if you have any questions.

If you are disqualified due to an unsafe act, you will not be permitted to retest on that day.

CANDIDATE ID AND SIGNATURE

Prior to beginning the examination, the Examiner will ask you for a valid (not expired) government-issued photo identification that includes date of birth, such as a driver's license.

The Examiner will ask if you have read the Candidate Information and Instructions and will answer any questions you may have. He/she will review with you the weather conditions and ask you to sign, indicating that you understand the instructions for the test and that you agree with the Examiner's assessment of the weather conditions.

WEATHER CONDITIONS AND EQUIPMENT PROBLEMS

The Examiner will use an anemometer to check the wind speed and then will record the weather conditions on the score sheet.

The Examiner has the responsibility to determine if weather conditions or equipment problems are such that a test needs to be suspended. If the test is interrupted due to weather conditions or equipment problems, the procedure for restarting is as follows:

- You will resume the test at the beginning of the task you were performing at the time of the interruption.
- You will be entitled to a Pre-Test Familiarization period before resuming the test.
- If testing resumes on a different machine, you must start the test over from the beginning. The first score sheet will be marked as "VOID" with an explanation and returned to NCCCO.
- If the testing is delayed to a different day, the test must be restarted from the beginning.



Practical Examination

ARTICULATING BOOM CRANE

CRANE WALK AROUND

- Before you begin operations, you are allowed a couple of minutes to walk around the crane to ensure proper setup.

TASK: PRE-OPERATIONAL (SHIFT) INSPECTION

- The Practical Examiner will identify five items regarding the crane that are part of the pre-operational inspection. One at a time, you will describe how you would conduct the inspection and what deficiencies you would look for.
- You have approximately one minute per item.

PRE-TEST FAMILIARIZATION PERIOD

- You will be allowed 10 minutes to familiarize yourself with the crane and to examine anything on the crane that you feel is necessary to operate it comfortably.
- You are allowed to get the feel of the controls and are permitted to run the crane through its functions.
- You may not interfere with the test course, lift the Test Weight, or shadow the Zigzag Corridor.
- You must finish the Pre-Test Familiarization Period with the boom tip centered over the Test Weight within the 10-minute period.
- You will be notified when there are five and one minute(s) remaining.
- If you are ready in less than 10 minutes, you may indicate this to the Examiner.
- If, at the end of the Pre-Test Familiarization Period, you feel you are not ready to take the examination, you should notify the Examiner. You will have, in effect, disqualified yourself from taking the examination at this time, and you will be required to sign to that effect on the *Candidate Score Sheet*.

Remote Operators: *At no time during the Familiarization Period or test should you walk into any part of the course, nor should you walk or stand underneath the Test Weight or boom.*

TASK 1: PLACE TEST WEIGHT IN ZIGZAG START CIRCLE

Optimum Time: 1 minute, 30 seconds

- At the Examiner's indication to start, at which point timing will begin, lift the Test Weight from Designated Area 1 and bring it to Designated Area 2. Avoid touching the ground, truck, or Zigzag Corridor with the Test Weight or chain.
- Place the Test Weight and chain inside Designated Area 2.
- Timing will stop when the Test Weight and chain have been placed within Designated Area 2 and the Examiner has given you a *stop* signal. If you do not receive a *stop* signal, this indicates that the Test Weight or chain is not within the outside perimeter of the Designated Area, and the task continues to be timed.
- Points will be deducted for the following:
 - a. Knocking balls off poles surrounding Designated Area 1
 - b. Knocking poles over surrounding Designated Area 1
 - c. Test Weight or chain touching ground, truck, or Zigzag Corridor
 - d. Exceeding the optimum time

TASK 2: NEGOTIATE ZIGZAG CORRIDOR (FORWARD)

Optimum Time: 4 minutes

- At the Examiner's indication to start, at which point timing will begin, lift the Test Weight from Designated Area 2 and guide it through the Zigzag Corridor. Avoid touching the ground or truck with the Test Weight, and avoid touching or knocking over any part of the PVC pole barriers.
- Keep the chain on the ground until any part of the chain has touched or crossed the denotation line located 4 ft. before the hurdle.
- Raise the Test Weight and chain over the hurdle without touching or knocking it over.
- Place the Test Weight and chain inside Designated Area 3.

- Timing stops when the Test Weight has been placed within Designated Area 3 and the Examiner has given you a *stop* signal. If you do not receive a *stop* signal, this indicates the Test Weight or chain is not within the outside perimeter of the Designated Area, and the task continues to be timed.
- Points will be deducted for the following:
 - a. Knocking balls off poles
 - b. Moving pole bases off line
 - c. Knocking poles over
 - d. Knocking down hurdle
 - e. Chain leaving ground before denotation line
 - f. Passing poles with chain off ground
 - g. Test Weight touching ground or truck
 - h. Chain touching ground outside Designated Area 3
 - i. Exceeding optimum time

TASK 3: NEGOTIATE ZIGZAG CORRIDOR (REVERSE)

Optimum Time: 4 minutes

- At Examiner's indication to start, at which point timing will begin, lift the Test Weight from Designated Area 3 and over the hurdle.
- Once the hurdle is cleared, lower the Test Weight so that the chain touches the ground before reaching the denotation line. Guide it through the Zigzag Corridor in reverse, keeping the chain on the ground. Avoid touching the ground or truck with the Test Weight, and avoid touching or knocking over any part of the PVC pole barriers.
- Place the Test Weight inside of Designated Area 2.
- Timing stops when the Test Weight has been placed within Designated Area 2 and the Examiner has given you a *stop* signal. If you do not receive a *stop* signal, this indicates that the Test Weight is not within the outside perimeter of the Designated Area, and the task continues to be timed.
- Points will be deducted for the following:
 - a. Chain initially contacting ground after denotation line
 - a. Knocking balls off poles
 - b. Moving pole bases off line
 - c. Knocking poles over
 - d. Knocking down hurdle
 - e. Chain leaving ground after denotation line
 - f. Passing poles with chain off ground
 - g. Test Weight touching ground or truck
 - h. Exceeding optimum time

TASK 4: PLACE TEST WEIGHT IN POLE CIRCLE

Optimum Time: 1 minute, 30 seconds

- At the Examiner's indication to start, at which point timing will begin, lift the Test Weight from Designated Area 2 and place it inside Designated Area 1. Avoid touching the ground, truck, or Zigzag Corridor with the Test Weight or chain, and avoid touching or knocking over any part of the PVC pole barriers surrounding Designated Area 1.
- Timing stops when the Test Weight has been placed within Designated Area 1 and the Examiner has given you a *stop* signal. If you do not receive a *stop* signal, this indicates that the Test Weight or chain is not within the outside perimeter of the Designated Area, and the task continues to be timed.
- Points will be deducted for the following:
 - a. Knocking ball off pole
 - b. Knocking pole over
 - c. Test Weight or chain touching ground, truck, or Zigzag Corridor
 - d. Exceeding optimum time

Make sure to deactivate the remote control (if using one) and ensure all controls are in neutral before leaving the test area.

TASK 5: SAFE SHUTDOWN AND SECURING PROCEDURES

- Before leaving the operator station, you will be required to apply safe shutdown procedures to the crane in preparation for the next candidate.
- Once the crane is shut down, you will leave the operator station and describe to the Examiner the procedures you would follow to secure the crane at the end of the work day.

POST-TEST PROCEDURES

Once you have completed the Practical Examination:

- The Examiner will record your performance.
- The Examiner is not permitted to review your score sheet or discuss your performance on the test.
- Exam results will be mailed to you within approximately 12 business days of NCCCO's receipt of the score sheet.
- If you have made formal application to test on other crane types, return to the candidate briefing area.
- If you have completed all of your tests, you must leave the Test Site.



Practical Examination

ARTICULATING BOOM LOADER

CRANE WALK AROUND

- Before you begin operations, you are allowed a couple of minutes to walk around the crane to ensure proper setup.

TASK: PRE-OPERATIONAL (SHIFT) INSPECTION

- The Practical Examiner will identify five items regarding the crane that are part of the pre-operational inspection. One at a time, you will describe how you would conduct the inspection and what deficiencies you would look for.
- You have approximately one minute per item.

PRE-TEST FAMILIARIZATION PERIOD

- You will be allowed 15 minutes to familiarize yourself with the crane and to examine anything on the crane that you feel is necessary to operate it comfortably.
- You are allowed to get the feel of the controls and are permitted to run the crane through its functions.
- You may not interfere with the test course, lift the test weight, or shadow the zigzag corridor.
- You must finish the Pre-Test Familiarization Period with the forks fully closed with the forks facing the truck and the chain touching the ground inside Designated Area 5 within the 15-minute period.
- You will be notified when there are ten, five, and one minute(s) remaining.
- If you are ready in less than 15 minutes, you may indicate this to the Examiner.
- If, at the end of the Pre-Test Familiarization Period, you feel you are not ready to take the examination, you should notify the Examiner. You will have, in effect, disqualified yourself from taking the examination at this time, and you will be required to sign to that effect on the candidate score sheet.

Remote Operators: *At no time during the Familiarization Period or Test should you walk into any part of the course or walk underneath the Test Weight or boom.*

TASK 1: PLACE TEST WEIGHT IN CORRAL

Optimum Time: 4 minutes, 50 seconds

- At the Examiner's indication to start, at which point timing begins, raise the forks out of Designated Area 5. Lift the test weight from Designated Area 1 and fully close the fork assembly.
- Guide the test weight and place it inside Designated Area 2 with the fork body on the side marked "A," and remove the forks.
- Avoid touching anything but the designated area.
- Timing stops when the test weight has been placed within Designated Area 2, you have removed the forks completely clear of the test weight, and the Examiner gives you the *stop* signal. If you do not receive a *stop* signal, that means that the forks haven't been fully removed from the Test Weight.
- Points will be deducted for the following:
 - a. Knocking balls off poles
 - b. Moving pole bases off line
 - c. Knocking poles over
 - d. Test weight touching the ground or truck outside of the Designated Areas
 - e. Test weight left outside of Designated Area 2 at end of task
 - f. Fork assembly not properly closed
 - g. Exceeding optimum time
- If you exceed twice the optimum time (9 minutes, 40 seconds total), the test will end and you will not be permitted to continue.

TASK 2: BLIND PICK

Optimum Time: 3 minutes, 20 seconds

- At the Examiner's indication to start, at which point timing begins, raise the test weight from the blind side (marked "B"), and fully close the fork assembly.
- Guide the test weight to Designated Area 3, and lower it until the chain is touching the ground inside Designated Area 3.
- Timing stops when the test weight chain is touching the ground within Designated Area 3 and you have been given the *stop* signal. If you do not receive a *stop* signal, that means that the chain is not within the

outside perimeter of the designated area, and the task continues to be timed.

Points will be deducted for the following:

- a. Test weight or fork assembly touching ground, truck, or zigzag corridor after chain has left the ground
- b. Chain touching ground outside of the designated area
- c. Fork assembly not properly closed
- d. Exceeding optimum time

TASK 3: NEGOTIATE ZIGZAG CORRIDOR

Optimum Time: 4 minutes, 30 seconds

- At the Examiner's indication to start, at which point timing will begin, guide the test weight from Designated Area 3 through the zigzag corridor. Keep the chain on the ground until the chain has touched or crossed the denotation line located 6 ft. before the hurdle.
- Raise the test weight over the hurdle. Once the hurdle is cleared, lower the load until chain touches ground inside the designated area.
- Timing stops when the Test Weight chain is touching the ground within Designated Area 4 and you have been given the *stop* signal. If you do not receive a *stop* signal, this indicates that the Test Weight chain is not within the outside perimeter of the Designated Area, and the task continues to be timed.
- Points will be deducted for the following:
 - a. Knocking balls off poles
 - b. Moving pole bases off line
 - c. Knocking poles over
 - d. Knocking down hurdle
 - e. Chain leaving ground before denotation line
 - f. Passing poles with chain off ground
 - g. Test weight or fork assembly touching ground or truck
 - h. Chain touching ground outside of Designated Area 4
 - i. Exceeding optimum time

TASK 4: PLACE TEST WEIGHT IN DESIGNATED AREA 1

Optimum Time: 3 minutes, 40 seconds

- At the Examiner's indication to start, at which point timing begins, lift the test weight from Designated Area 4 and bring it over to Designated Area 1. Avoid

touching the ground, truck, or any part of the zigzag corridor.

- Place the test weight fully inside Designated Area 1.
- Once the weight has been placed inside Designated Area 1 and the forks have been removed, bring the forks to Designated Area 5.
- Timing stops when the forks are fully closed with the forks facing the truck and the chain touching the ground inside Designated Area 5 and the Examiner has given you a *stop* signal. If you do not receive a *stop* signal, this indicates that the fork assembly has not been properly stowed, and the task continues to be timed.
- Points will be deducted for the following:
 - a. Any part of the test weight or fork assembly touching the ground or zigzag corridor
 - b. Test weight left outside of Designated Area 1 at end of task
 - c. Exceeding optimum time

Make sure to deactivate the remote control (if using one) and ensure all controls are in neutral before leaving the test area.

TASK 5: SAFE SHUTDOWN AND SECURING PROCEDURES

- Before leaving the operator station, you will be required to apply safe shutdown procedures to the crane in preparation for the next candidate.
- Once the crane is shut down, you will leave the operator station and describe to the Examiner the procedures you would follow to secure the crane at the end of the work day.

POST-TEST PROCEDURES

Once you have completed the Practical Examination:

- The Examiner will record your performance.
- The Examiner is not permitted to review your score sheet or discuss your performance on the test.
- Exam results will be mailed to you within approximately 12 business days of NCCCO's receipt of the score sheet.
- If you have made formal application to test on any other cranes, return to the candidate briefing area.
- If you have completed all of your tests, you must leave the test site.



NCCCO Information Release Policy

A. Definitions

1. “NCCCO” means and refers to the National Commission for the Certification of Crane Operators acting through its staff and authorized agents and representatives.
2. “Releasable Information” means and refers to the following information: name, certification status, examination dates, certification dates, certification number(s), and designations. In the case of accredited Practical Examiners, “Releasable Information” also means and refers to the following information: name, accreditation status, accreditation dates, accreditation number, and categories in which the Practical Examiner is authorized to administer exams.
3. “Third Party” means and refers to an employer, prospective employer, regulatory agency, or any other person or entity that makes an inquiry to NCCCO.

B. Policies

1. It shall be the policy of NCCCO to provide Releasable Information pertaining to individuals who have successfully passed one or more NCCCO examinations. It shall also be the policy of NCCCO to provide Releasable Information pertaining to such individuals on its website using such protocols as may be established. In addition, it shall be the policy of NCCCO to provide information, as appropriate, concerning individuals who have been sanctioned, suspended or revoked from participation in NCCCO’s programs, using such protocols as may be established.
2. Releasable Information may be released to a Third Party who makes a written request, including by electronic correspondence. Generally, Releasable Information will be released within one business day from actual receipt of a written request.
3. If a Third Party requests information concerning an individual who has not taken or successfully passed an NCCCO examination, NCCCO may release a statement confirming that, as of a given date, the individual does not appear on NCCCO’s list of successful candidates in one or more categories of certification.
4. If an applicant or certificant is under formal sanction, suspension, or revocation by NCCCO, then NCCCO may release a statement to that effect to any persons and by any reasonable means, including by means of a list published on the NCCCO website. In addition, if an individual applicant or certificant is under formal investigation, sanction, suspension, or revocation by NCCCO, then NCCCO may release a statement concerning the status of the applicant or certificant to any Third Party and to any jurisdiction that requires or accepts CCO certification as a basis for satisfying requirements to work in the jurisdiction. Any such statement to a Third Party or jurisdiction may identify the applicant or certificant, the certifications affected, the actions taken, and the effective dates of any such actions.
5. If an accredited Practical Examiner, authorized Test Site Coordinator, listed Training Provider, or other authorized participant in NCCCO’s programs (“Authorized Participant”) is under formal sanction, suspension, or revocation by NCCCO, then NCCCO may release a statement to that effect to any persons and by any reasonable means, including by means of a list published on the NCCCO website. In addition, if an Authorized Participant is under formal investigation, sanction, suspension, or revocation by NCCCO, then NCCCO may release a statement concerning the status of the Authorized Participant to any persons and by any reasonable means, including by means of a list published on the NCCCO website. Any such statement may identify the Authorized Participant, the credentials or capacities affected, the actions taken, and the effective dates of any such actions.
6. If a Third Party seeks information other than the foregoing information, generally, absent a subpoena or similar legal process, such information will not be released. However, in the course of business, as circumstances reasonably warrant, NCCCO reserves the discretion to release information other than the foregoing information.
7. Certain situations may require or warrant the immediate verbal confirmation of an individual’s certification status or other Releasable Information in response to a written or verbal request. Under such circumstances, NCCCO may provide such immediate verbal confirmation, at its discretion. When such a verbal confirmation is provided, it shall be NCCCO’s policy to follow up with a written confirmation.
8. It shall be the policy of NCCCO to discuss score-related and test-specific matters only with a candidate or a candidate’s authorized legal representative.
9. NCCCO will release Releasable Information about an individual upon receipt of a written request (including electronic correspondence) from that individual. NCCCO may release information other than Releasable Information about an individual, at its discretion, upon receipt of a signed, notarized, written request from that individual. In addition, NCCCO will release information other than Releasable Information about an individual when required by a legal authority of competent jurisdiction under a duly-issued subpoena, subject to any objection, or as otherwise required by law.

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IMPORTANT CONTACT INFORMATION



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