



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

**CANDIDATE
HANDBOOK**
Basic Rigger



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This Handbook for the Basic Rigger Certification Program contains the following important document: a Candidate Written and Practical Examination Application form. 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.



Dear NCCCO Candidate:

Welcome to the NCCCO national rigger certification program.

The National Commission for the Certification of Crane Operators (NCCCO), a nonprofit organization, was founded in January 1995 to establish a fair and independent evaluation of crane operator knowledge and skills. Key to this industry-led effort was the development of the NCCCO Written and Practical Examinations.

As personnel responsibilities in the lifting industry have become better defined, NCCCO has developed additional certification programs for other occupations involved in the lifting industry. This program is the culmination of two years' hard work by experts from the varied industries and groups that use rigging, including construction, steel erection, iron workers, the operating engineers, utilities, petrochemical, specialty rigging companies, rigging hardware and sling manufactures, etc. NCCCO Task Forces were staffed by experts from all aspects of the rigging industry—riggers, training directors, managers, supervisors, manufacturers—representing many thousands of hours of rigging experience. These volunteers gave freely of their time and expertise with the single goal of improving the safety of all whose work brings them into contact with rigging equipment.

In order to ensure NCCCO examinations are, and remain, a valid measurement of the proficiency of personnel in the lifting industry, NCCCO has teamed this group's knowledge and experience with the exam development expertise of International Assessment Institute. Based in Clearwater, Florida, International Assessment Institute continually analyzes the performance of NCCCO exams and reports to NCCCO's Exam Management Committees, which also guides in the development of new examinations. Additionally, International Assessment Institute assists NCCCO in the administration of its Written and Practical Examinations.

This Candidate Handbook has been developed to provide you with comprehensive information about the NCCCO Written and Practical Examinations. NCCCO recognizes 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 NCCCO at 703-560-2391, or e-mail us at info@nccco.org. NCCCO staff will be happy to guide you through any aspect of the NCCCO National Rigger Certification Program.

Thank you for your interest—and good luck!

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Introduction

PROGRAM DESCRIPTION

The National Commission for the Certification of Crane Operators (NCCCO) is an independent not-for-profit organization formed to establish and administer a nationwide program of certification for crane operators. The purpose of NCCCO is to set standards for measuring the knowledge and proficiency required for safe rigging practices. Based on extensive discussions with representatives from all segments of business and industry who recognize the impact of construction safety issues, NCCCO has identified the following potential benefits of rigging certification:

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

All candidates are required to pass both the written and practical examination(s) in order to be certified.

Candidates wishing to take the Written and Practical Examinations should contact their Test Site Coordinator.

The initial certification period is for five (5) years, after which a rigger is required to recertify. Periodic written examination is 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, it is believed, would accrue by more frequent testing. A practical (skills) examination is not required for recertification providing the certificant meets experience requirements.

DEVELOPMENT OF THE NCCCO EXAMINATIONS

The first step in the development of an objective test to measure the knowledge of safe rigging operations was a job analysis study. The study identified the knowledge necessary for safe rigging operations.

A survey was given to a representative number of subject matter experts (SMEs), who validated that the knowledge recommended by the experts was vital to safe operations. The test blueprints or content specifications were generated from the validation study.

Development of the Rigger Written Examination involved a panel of SMEs who worked with the staff of NCCCO and International Assessment Institute to write and review all questions used in the examination. Each examination contains a unique combination of questions from the question bank. These questions are selected for the examination on the basis of the content areas as defined by the test blueprint.

The NCCCO Rigger Practical Examination was developed as a fair and objective assessment of the essential skills a rigger needs in order to perform safe rigging duties.

They were developed over a 18 month period by a NCCCO Task Force staffed by experts from all aspects of the rigging industry—specialty riggers, Ironworkers, training directors, managers, supervisors, manufacturers— representing many thousands of hours of rigging experience.

NCCCO teamed their knowledge and experience with the exam development expertise of International Assessment Institute who guided the NCCCO Task Force in establishing key elements of the program, including: identifying essential skills, selecting tasks, standardizing test conditions, developing the scoring process, establishing reliability between tests, and creating flexible application and scheduling procedures.

In concert with the NCCCO Task Force, NCCCO staff designed the Practical Examiner Accreditation Program whereby NCCCO trains and accredits NCCCO-certified riggers to administer NCCCO Rigger Practical Examinations.

DEFINITION OF A RIGGER

A person who has become certified to handle and move loads. The level of certification depends on the individual's training, knowledge, skill base and ability to perform functions related to the selection, inspection and proper use of rigging equipment.

This person may be qualified in a craft or trade and carry an occupational title such as iron worker, electrician, carpenter, millwright, mechanic, laborer, mason, longshoreman, lineman, pipe fitter, boilermaker, and the like. (The persons described in the categories below will be referred to as "rigger" though they carry another occupational title.)

CERTIFIED BASIC RIGGER

The NCCCO Rigger Task Force has identified the following job duties for the Basic level certified rigger. The basic level rigger can perform simple, repetitive rigging tasks when the load weight, center of gravity, the rigging and rigging configuration are provided or known by the rigger through experience, or on-the-job training prior to the rigging activities. Specifically, they should be able to demonstrate or have knowledge of the following:

- Pre-use rigging inspection
- Identify and attach rigging with basic knowledge of hitch configurations, capacities, and basic knots
- Recognize associated hazards
- Signaling operations
- Use various types of rigging equipment and basic hitches and their applications



Certification Policies

ELIGIBILITY

Requirements for certification include the following:

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

EXPERIENCE

NCCCO certification examinations are designed for persons who are trained to handle and move loads.

WRITTEN EXAMINATION

The Basic Rigger Written Examination consists of 60 multiple-choice questions. Candidates are allowed 60 minutes to complete the Basic Rigger Written Examination.

PRACTICAL EXAMINATION

The successful completion of a NCCCO Rigger Basic Practical Examination demonstrates a candidate's basic rigging competency.

CERTIFICATION TIME FRAMES

Candidates have 12 months from the time they pass the initial Written or Practical test in which to pass the corresponding (Written or Practical) exam. The written or practical exam can be taken in any order. A candidate must pass both the Written and Practical Examination in order to be certified for a 5-year period.

Candidates who do not take and pass both the Written and Practical Exams within the 12 month time frame will be required to start the certification process again from the beginning.

RECERTIFICATION

NCCCO certification is valid for five (5) years. Candidates must complete all of their recertification requirements during the 12 months prior to their expiration date. This includes:

- Passing the Written Recertification Examination
- Compliance with CCO's Substance Abuse Policy
- Compliance with the Code of Ethics

However, candidates who do need to take the Practical Exam for any reason 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 full Written and Practical Examinations over again in order to be recertified.

The Basic Rigger Recertification Examination consists of 30 multiple choice questions with a time limit of 30 minutes.

Certified candidates may take their Written Recertification Examinations up to one (1) year prior to their date of expiration. 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 will be available at regularly scheduled test administrations. Candidates wishing to recertify should contact the Test Site Coordinator who set up the initial certification. Candidates whose employment circumstances have changed should ask their new employer to schedule a test administration.

For more information about recertification, please contact NCCCO's Recertification Department at (703) 560-2391 or via e-mail at info@nccco.org.

CODE OF ETHICS FOR CERTIFIED RIGGERS

NCCCO Riggers must comply with the NCCCO's Code of Ethics during their certification as illustrated below:

As a NCCCO-Certified Rigger, I will perform my work in a manner:

- (i) free of bias with regard to religion, ethnicity, gender, age, national origin and disability.
- (ii) so as to place the safety and welfare of workers associated with load movement activities above all other considerations.
- (iii) so as to protect nearby general public property and the environment.

In addition, I will:

- (iv) make my management aware if I have safety concerns relating to the operations which I am performing.
- (v) not knowingly violate safety related regulations, warnings or instructions set forth by OSHA, recognized safety standards, or the rigging gear manufacturer.
- (vi) not misrepresent or knowingly deceive others concerning my experience or the capabilities of myself or the rigging operations I am performing.
- (vii) not misrepresent or misuse my certification card or the NCCCO logo, which are the property of NCCCO, and I understand that I must return the card to NCCCO immediately if required to do so.

DISCIPLINARY POLICY

NCCCO's Ethics and Discipline Committee is responsible for establishing and implementing standards of conduct, such as ethical standards, 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

Certified Riggers, who wish to appeal a decision regarding revocation of their rigger certification, must do so in writing to the Appeals Committee, stating the grounds for the appeal. This should be addressed to:

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

NCCCO has established policies and procedures to fairly and consistently address alleged violations of the Code of Ethics. The complaints procedures have been designed to ensure that only valid and actionable complaints are investigated and considered, and 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 riggers 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. The decision of the NCCCO Board of Directors is final.

SUBSTANCE ABUSE POLICY

It is the policy of NCCCO that riggers shall not use a prescribed or over-the-counter substance which would impair their ability to perform safe rigging practices.

This includes illegal drugs, controlled substances (including trace amounts), look-alike drugs, designer drugs, or any other substance which may have an effect on the human body of being a narcotic, depressant, stimulant or hallucinogen.

An exception to this rule is that a rigger may use such

a substance or drug if it is prescribed by a licensed medical practitioner who is familiar with the rigger's medical history and all assigned duties, and who has advised the rigger that the prescribed substance or drug will not adversely affect the rigger's ability to perform safe rigging practices

It is a condition of certification that riggers certified by NCCCO attest to their compliance with this Substance Abuse Policy. Non-compliance with this policy automatically revokes a candidate's certification status.

CERTIFICATION CARDS

Certified riggers receive a laminated photo ID card at no cost when they certify for the first time and when they complete the requirements for recertification.

CHANGE OF ADDRESS

If you change your address you must notify NCCCO as soon as possible. Failure to do so may cause you to miss important updates on the NCCCO program that could affect your certification.

Changes of address should be sent to International Assessment Institute (IAI). They must be in writing, but can be sent via letter or fax. A form is provided for this purpose in this Handbook.

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Written Examination Process

APPLICATION PROCESS TO TAKE THE WRITTEN EXAMINATION

Candidates wishing to sit for the NCCCO Rigger Examination may request an application form or obtain further information from either the National Commission for the Certification of Crane Operators (NCCCO) or International Assessment Institute. Candidate applications must be submitted with the appropriate documentation to International Assessment Institute. Applications are due two (2) weeks prior to the scheduled examination date. Information about the specific locations of the test sites will be available approximately four (4) weeks prior to the examination. Candidates eligible to sit for the examination will receive an admission letter approximately one (1) week before the scheduled test administration date.

Candidates Requesting Special Accommodations

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

Professional documentation in support of a request for accommodations must be submitted to NCCCO no later than four (4) weeks prior to your scheduled test date. You may contact NCCCO for further information.

SUBMISSION OF APPLICATION

The Candidate Application form is located at the back of this Handbook. This form can be easily photocopied for your use.

The Candidate Application with the appropriate fees, as well as any correspondence and request for information concerning the administration of the NCCCO Certification Examinations, should be directed to:

International Assessment Institute

Attention: CCO Testing

600 Cleveland Street, Suite 900

Clearwater, Florida 33755

Phone: (727) 449-8525 — Fax: (727) 461-2746

Check your application to ensure that all information is accurate and complete. In addition to your completed application, make sure you have enclosed the appropriate fees.

Follow the directions carefully when filling in the information required.

Incomplete applications, incorrect payment, and/or inaccurate documentation will delay the processing and incur additional fees. It could result in your NOT being able to sit for the examination.

Therefore, please be sure your application is complete and the payment is correct.

Deadlines

Please note that all deadlines are UPON RECEIPT deadlines and that candidates and Test Site Coordinator are solely responsible for making sure that completed and accurate applications reach International Assessment Institute by the stated deadline.

APPLICATION FEE

The appropriate fee must be enclosed with your application. Checks and money orders payable to International Assessment Institute are preferred.

You may also pay by credit card – VISA, MasterCard or AMEX. Do not send cash. Please do not staple your check or money order to your application form, but do include your payment in the envelope with all the other application materials. **All returned checks will be subject to a \$25 fee.**

| | |
|---|-------|
| Basic Rigger Written and Practical Exam (Basic Rigger candidates only - certification card INCLUDED) | \$190 |
| Basic Rigger Written and Practical Exam (Current NCCCO certified card holder) | \$100 |
| RETEST Basic Rigger Written Exam (Rigger candidate only) | \$95 |
| RETEST Basic Rigger Practical Exam (Rigger candidate only) | \$95 |
| RETEST Basic Rigger Written Exam (Current NCCCO Certified card holder) | \$50 |
| RETEST Basic Rigger Practical Exam (Current NCCCO Certified card holder) | \$50 |

Other Fees:

You will be charged an additional \$50 fee if your application is late.

You will be charged an additional \$25 fee if:

- you wish to reschedule without a valid reason; (see Emergency Cancellations or Withdrawals)

- you need a replacement certification card or score report

You will be charged an additional \$30 fee if:

- your application form is incomplete
- you do not send in full payment
- your credit card cannot be processed for any reason
- you want to add to, or change the exams you want to take after scheduling has been completed (in addition to the exam fee)

Your application materials must be received at International Assessment Institute Assessment’s office according to the sample test schedule outline in this Candidate Handbook.

Applications received after the main application deadline, but at least four (4) business days prior to the exam administration deadline, can be accepted for an additional \$50 late fee. For example, for a test administration on a Saturday, late applications that arrive at IAI’s testing office by 5pm (ET) on the Monday evening prior to the test can be accepted.

Candidate applications that arrive after that time cannot be accepted. Walk-in candidates cannot be accepted under any circumstances.

RESCHEDULING, CANCELLATIONS, AND WITHDRAWALS

Should you be unable to sit for the examination, International Assessment Institute must receive notification in writing no later than seven (7) business days prior to the examination date. Your fees will be held until you reschedule. When you reschedule you will need to pay an additional \$25.00 rescheduling fee. Candidates who wish to reschedule their NCCCO written examination MUST notify International Assessment Institute and submit the necessary documentation and fees to International Assessment Institute by the deadline for the rescheduled test date.

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

Emergency Cancellations or Withdrawals

ONLY the following situations will be accepted as grounds for emergency cancellations or withdrawals:

- 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

Requests for medical and personal emergency withdrawals are handled by International Assessment Institute. Please write a letter or fax to International Assessment Institute describing your situation. Be sure to include your full name, address and social security number along with the scheduled test date, site number, and supporting documentation indicated above.

International Assessment Institute MUST receive your written notification within seven (7) business days after the scheduled examination date or you will forfeit ALL application fees. You will be allowed to reschedule for a future examination administration.

You will NOT receive a refund if you decide you no longer wish to take the test.

TEST ADMINISTRATION SCHEDULE FOR THE NCCCO EXAMINATIONS

The NCCCO written certification examinations are available for administration on demand with at least four (4) weeks notice.

APPLICATION DEADLINES

Tests can be administered at any time so 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 |
| Test Site Application Form and Written Test Administration Request Form due four (4) weeks prior to test date. | ● | | 1 | 2 | 3 | 4 | 5 | 6 |
| | | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| Candidate Applications due two (2) weeks prior to test. | ● | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| | | 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| Test Day | ● | 28 | 29 | 30 | 31 | | | |

ADMISSION LETTERS

Approximately one week before the scheduled test date, registered and eligible candidates approved to take the NCCCO Written Certification Examinations will receive an admission letter by mail. The admission letter will contain information regarding the test center address, the reporting time, the examination(s) the candidate registered for and the materials candidates will need to bring with them on the day of the administration. This admission letter must be presented at the test site to gain admittance to the examination(s).

No candidate will be allowed to sit for the examination unless an admission letter, valid for the specific test date, is presented. Candidates who have registered late and paid the candidate late fees will need to present their photo ID at the test site.

TEST SITE INFORMATION

Identification at the Test Site

In addition to an admission letter valid for the specific test date, candidates must bring government issued photo identification to the test site on the day of the administration. Candidates will be required to sign the test site roster upon entry to the testing area. Acceptable forms of photo identification are:

- passport
- government issued driver's license
- work identification

NOTE: *Candidates without appropriate identification documents will NOT be admitted to take the Written Certification Examination(s).*

Materials to Bring to the Test Site

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

- Government issued photo ID
- The admission letter for the specific test date
- Two (2) sharpened #2 pencils (to complete the examination answer sheet)
- A good eraser

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

Test Security

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

- This examination is the exclusive property of NCCCO.
- This examination and the questions contained therein are protected by federal copyright law. No part of the examination(s) may be copied, 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.
- Candidate participation in any irregularity occurring 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.
- Candidates verify that they have successfully met the requirements and are eligible to take this examination. If at any time it is confirmed a candidate has not met all the requirements, candidates will no longer be eligible for certification.
- A candidate's signature on the answer sheet 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 the comments on the Candidate Question Comment Form. These comments should be accompanied by the candidate's name (which is optional), the specific examination and question referred to, the site code and test date. Examination comments are reviewed by NCCCO content experts on a regular basis.

NOTE: *Only comments completed on the Candidate Question Comment Form at the test site will be considered for review.*

TEST SCORING INFORMATION

Test Scoring

The NCCCO Written Certification 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 the “passing score” to pass the test. The passing scores represent absolute standards and are determined by panels of NCCCO content experts using psychometrically accepted standard-setting methodology.

Score Reporting

The Written Examinations are electronically scored by International Assessment Institute. 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 twelve (12) business days after the examination administration.

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 equivalent of all administrations of the examination(s). The scaled score is not a “number answered correctly” score. Candidate results will be reported as a scaled score, on a scale ranging from 0 to 100 points, with a score of **70** representing the “minimum passing” score. Candidate scores cannot be given over the telephone.

Hand Score Requests

Candidates not passing the examination(s) may request from International Assessment Institute a hand scoring of the answer sheet, provided the request is made in writing within three months of the test date, and the request is accompanied by a processing fee of \$25 for one (1) test score per test administration. Requests should be mailed to:

International Assessment Institute

Attention: CCO Testing

600 Cleveland Street, Suite 900

Clearwater, Florida 33755

Phone: (727) 449-8525 — Fax: (727) 461-2746

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

Retaking the Examination(s)

Candidates who fail an examination(s) may retake the examination(s). Candidates will need to reapply and pay all corresponding fees.

Information Release Policy

NCCCO may release any information regarding a candidate’s examination application and a candidate’s examination administration to any employer, regulatory agency or any other person or entity that may inquire in writing to the Commission.

The name and certification status of individuals who have successfully completed the NCCCO examinations may be published and released upon request to employers and other interested parties. NCCCO and International Assessment Institute will discuss score-related matters with the candidate or the candidate’s legal representative only.



Written Exam Outline

The Basic examination portion of the NCCCO Rigger written certification program tests the following knowledge areas relating to Rigging:

Domain: Scope of the Rigging Activity

(Approximately 11% of the Test)

Domain: Rigging Components

(Approximately 18% of the Test)

Domain: Technical Knowledge

(Approximately 10% of the Test)

Domain: Inspection

(Approximately 25% of the Test)

Domain: Execution of Rigging Activity

(Approximately 36% of the Test)

DOMAIN: Scope of the Rigging Activity

- Know How to Identify Load Characteristics.
- Recognize Special Handling Requirements.
- Recognize Unsafe Rigging Practices.
 - Pinch points
 - Need for softeners
 - Load stability
 - Shock load
 - Side load
 - Body positioning
 - Electrical Hazards
 - Load Path
- Know How to Communicate a Hazard Identification.

DOMAIN 2: Rigging Components

- Know How to Identify Slings.
 - Chain
 - Wire Rope
 - Metal Mesh
 - Synthetic Rope
 - Synthetic Web
 - Synthetic Round

- Know How to Identify Rigging Hardware.

- Shackles
- Adjustable hardware
 - ♦ Turn Buckles
 - ♦ Chain Hardware
- Links, Rings and Swivels
- Rigging Block
- Hooks
- Hoists
 - ♦ Air
 - ♦ Lever
 - ♦ Electric
 - ♦ Manual (Chain Falls)
- Dollies
- A-frames
- Trolley
- Compression Hardware
 - ♦ Wire Rope Clips
 - ♦ Plate Clamps
- Softeners
- Spreader Beams
- Eyebolts
- Skates
- Jacks

DOMAIN 3: Technical Knowledge

- Understand and Apply ASME Non-Inspection Standards.
- Understand and Apply Manufacturers Recommendations.
- Understand and Apply OSHA Non-Inspection Regulations

DOMAIN: Inspection

- Know applicable inspection and removal criteria.
 - Know ASME Inspection Standards.
 - ◆ B30.9
 - ◆ B30.16
 - ◆ B30.21
 - ◆ B30.26
 - Know OSHA Inspection regulations.
 - ◆ 1910.180
 - ◆ 1926.251
 - ◆ 1926.550
- Know how to conduct a pre-use inspection.

DOMAIN 5: Execution of Rigging Activity

- Know how to attach rigging components.
 - Validate rigging set-up.
- Know how to use Slings.
 - Chain
 - Wire Rope
 - Metal Mesh
 - Synthetic Rope
 - Synthetic Web
 - Synthetic Round
- Know how to use Rigging Hardware.
 - Shackles
 - Adjustable hardware
 - ◆ Turn Buckles
 - ◆ Chain Hardware
 - Links, Rings and Swivels
 - Rigging Block
 - Hooks
 - Hoists
 - ◆ Air
 - ◆ Lever
 - ◆ Electric
 - ◆ Manual (Chain Falls)
 - Dollies
 - A-frames
 - Trolley
 - Compression Hardware
 - ◆ Wire Rope Clips
 - ◆ Plate Clamps
 - Softeners
 - Spreader Beams

- Eyebolts
- Skates
- Jacks
- Tag Lines
 - Know how to tie basic knots.
 - Know proper use of basic knots.
 - Know proper use of tag lines.
- Know pre-movement requirements.
 - Know the responsibility of signal person.
 - Know how to communicate with the operator.
 - Know roles of the lift director.
 - Understand safety procedures.
 - Know how to recognize hazards.
 - Know how to verify the load is free to move.
- Know how to move the load.
- Know post-load movement activities.
 - Know how to secure the load.
 - Know how to disconnect the rigging.
 - Know how to stow the gear.
 - Know how to communicate damage to lift director.



Reference List

The following reference materials are used by NCCCO's Rigger Examination Committee to verify the accuracy of NCCCO test questions. Prices current at time of going to press.

- | | | |
|--|----------------|--|
| <p>ASME, B30.9 SLINGS Order by Mail: American Society of Mechanical Engineers 22 Law Drive, Box 2900 Fairfield, NJ 07007 Ph: 800-843-2763 Fax: 201-882-1717 <i>Check, VISA, MasterCard, American Express, Discover, Diner's Club</i></p> | <p>\$79.00</p> | <p>OSHA SAFETY AND HEALTH STANDARDS FOR THE CONSTRUCTION INDUSTRY</p> <ul style="list-style-type: none"> • 1910.184 - Slings • 1926.251 - Rigging Equipment for Material Handling. • 1926.550 - Cranes and Derricks <p>Order by Internet: www.osha.gov CONTAINED IN NCCCO'S RIGGER REFERENCE MANUAL</p> |
| <p>ASME, B30.16 HOISTS Order by Mail: American Society of Mechanical Engineers 22 Law Drive, Box 2900 Fairfield, NJ 07007 Ph: 800-843-2763 Fax: 201-882-1717 <i>Check, VISA, MasterCard, American Express, Discover, Diner's Club</i></p> | <p>\$59.00</p> | <p>IPT'S CRANE AND RIGGING TRAINING MANUAL (2005)</p> <p style="text-align: right;">\$38.50 + S&H</p> <p>Order by Mail: IPT Publishing and Training Ltd. P.O. Box 9590 Edmonton, Alberta, T6E 5X2 Canada Ph: 780-962-4548 Fax: 780-962-4819 Website: www.iptbook.com <i>VISA, MasterCard, American Express, Check, Money Order</i></p> |
| <p>ASME, B30.21 MANUALLY OPERATED HOISTS Order by Mail: American Society of Mechanical Engineers 22 Law Drive, Box 2900 Fairfield, NJ 07007 Ph: 800-843-2763 Fax: 201-882-1717 <i>Check, VISA, MasterCard, American Express, Discover, Diner's Club</i></p> | <p>\$60.00</p> | <p>NCCCO RIGGER REFERENCE MANUAL Order by Internet: Website: www.nccco.org The manual was created to assist candidates preparing to take the NCCCO Rigger Certification Examinations. The information contained in this manual has been compiled from a number of different sources. These sources and the relevant material selected for inclusion in the Rigger Reference Manual are as follows:</p> <ul style="list-style-type: none"> • ASME B30.10 - 2005 -Hooks • ASME B30.20 - 2006 Below-the-Hook Lifting Devices • ASME B30.23 - 2005 Personnel Lifting Systems • OSHA 1910.184 - Slings • OSHA 1926.251 - Rigging Equipment for Material Handling. • OSHA 1926.550 - Cranes and Derricks |
| <p>ASME, B30.26 RIGGING HARDWARE Order by Mail: American Society of Mechanical Engineers 22 Law Drive, Box 2900 Fairfield, NJ 07007 Ph: 800-843-2763 Fax: 201-882-1717 <i>Check, VISA, MasterCard, American Express, Discover, Diner's Club</i></p> | <p>\$45.00</p> | |
| <p>RIGGING HANDBOOK Jerry Klinke Third Edition Order by Internet: www.acratecch.com <i>VISA, MasterCard, American Express, Discover</i></p> | <p>14.95</p> | |
| | | <p>RIGGING FOR IRONWORKERS REFERENCE MANUAL</p> <p style="text-align: right;">\$17.00</p> <p><i>Can be purchased from any local Ironworkers.</i></p> |

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Practical Examination Process

ELIGIBILITY

Candidates must pass a Practical Exam to be certified. Candidates may take their Written and Practical Exams in any order. Candidates have 12 months after they pass their first exam (Written or Practical) in which to take the corresponding Written or Practical Exam.

SKILLS TESTED

Basic Rigging Practical Exam

The Practical Examination is comprised of four main tasks that increase progressively in the skill level tested. Skills tested are: Pre-use Rigging Inspection, Rigging Hitches, Rigging Connections, and Basic Knot Tying.

SCHEDULING A TEST

A candidate for the Practical Examination should contact their Test Site Coordinator to determine the date of the next scheduled Practical Exam.

Alternatively, the candidate may contact NCCCO for this information.

You must bring your completed Practical Exam Candidate Application Form with you to your scheduled examination, along with any required supporting materials.

TEST DAY

Candidates must report to the test site at the scheduled time. All candidates shall comply with test site requirements concerning personal protective equipment (PPE), which requirements, at a minimum, shall meet OSHA requirements.

PRACTICAL SCORING

Candidate performance on the Practical Examination is recorded by Practical Examiners accredited by NCCCO. Examiner requirements include meeting NCCCO requirements for 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 the facilities of International Assessment Institute.

PRACTICAL SCORE REPORTING

All Candidates receive a score report of their performance. Examination results are mailed to candidates approximately twelve (12) business days after the receipt of Practical Examination score sheets by International Assessment Institute.

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 may mean candidates receive their score reports from IAI more than three (3) weeks after their test administration.

Both the Practical Examination and the scoring system have been validated by NCCCO's pilot testing program and verified by International Assessment Institute. The score of 68 represents the "minimum passing" score for the Basic Rigger Practical Examination.

PRACTICAL CANDIDATE FEES

The examination fee for testing is \$190, which includes the Written Exam fee. Retesting fees are \$95 for Basic Rigger only or \$50 for candidates who hold other NCCCO certifications. The appropriate fees must be submitted with your application through your Test Site Coordinator. See the Candidate fee schedule in the front part of this Handbook.

PRACTICAL HAND SCORE REQUESTS

Candidates not passing the examination(s) may request from International Assessment Institute a hand scoring of the answer sheet, provided the request is made in writing within three (3) months of the test date, and the request is accompanied by a processing fee of \$25 for each test requested. Requests should be mailed to:

International Assessment Institute

Attention: CCO Testing

600 Cleveland Street, Suite 900

Clearwater, Florida 33755

Phone: (727) 449-8525 — Fax: (727) 461-2746

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

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Basic Practical Exam Outline

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 Four Tasks are:

- Task 1: Pre-Use Rigging Inspection
- Task 2: Rigging Hitches
- Task 3: Rigging Connections
- Task 4: Basic Knots

You will be required to complete all phases of the test in sequence. You must report to the test site at the scheduled time. The Test Site Coordinator is responsible for setting the testing schedule. 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 Practical Exam you must leave the testing area. Only personnel involved in the administration of the test are allowed in the test area.

TIME LIMITS

There are no 'time limits' for the Basic Rigger Practical Exam.

PRE-TEST BRIEFING

You will also watch a short Candidate Video or PowerPoint presentation showing all the tasks you will be required to perform during the examination.

CANDIDATE ID AND SIGNATURE

Prior to beginning the examination, the Examiner will ask you for a government issued photo identification 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 will have you sign the score sheet indicating you understand the instructions for the test.

TASK 1: PRE-USE RIGGING INSPECTION

- At the Examiner's indication to 'Start' you will inspect all of the rigging slings and hardware located in front of you. Select those items that meet the 'Removal from Service' criteria.
- Place the selected items to one side and say 'done' to indicate you have finished.

TASK 2: RIGGING HITCHES

- At the Examiner's indication to start, you will be directed to demonstrate six (6) different hitches.
- When you complete each hitch, say 'done' when you are ready to have the hitch evaluated.
- You will rig a single vertical hitch using the web sling and a 5/8" shackle on the eye bolt located on the round tube. All other hitches will be rigged around the round tube.

TASK 3: RIGGING CONNECTIONS

- You will have one (1) minute to review the available rigging equipment for this testing session. The rigging has been inspected and is approved for use.
- If your task involves the use of hardware that requires a torque wrench for final tightening, you are only required to secure the hardware to 'finger tight' condition for the task assignment.
- Softeners are not required for these tasks.
- You will choose three task assignment cards, one of each color for the three (3) rigging tasks.
- At the Examiner's indication to 'Start' gather and assemble the rigging materials that are required to complete the assigned task. You will then rig and suspend the 6" x 30" square aluminum tube as described on the task assignment card.
- When you have completed your rigging assignment, announce that you are 'done.' The Examiner will evaluate your completed rigging setup.
- You will disassemble the rigging assembly before continuing on to the next rigging assignment.

TASK 4: BASIC KNOTS

- At the Examiner's indication to 'Start' you will tie five (5) different knots using a rope.
- When it is necessary, use the 4" round PVC pipe and eye bolt as your anchor point.

- Tie each knot and say 'done' when you are ready to have the knot evaluated.
- Place the tying rope on the table after the last knot has been evaluated.

POST TEST PROCEDURES

Once you have completed the Practical Examination:

- The Examiner will complete your score sheet.
- 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 twelve (12) working days of International Assessment Institute's receipt of the score sheet.
- If you have completed all of your tests, you must leave the test site.



CANDIDATE APPLICATION FORMS

*Please photocopy all sides of the following forms
for your use in applying for the NCCCO Written and
Practical Examinations.*

Candidate Application - Written and Practical Examinations

Change of Address Form

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CANDIDATE APPLICATION

WRITTEN AND PRACTICAL EXAMINATION - RIGGER/SIGNALPERSON

Please type or print neatly.

| | | | | | | | | | |
|---|--|------|-----------------------------|--------------------------------------|------------------------------|---------------|-------------------------------|--|--|
| NAME <i>First</i> | | | <i>Middle</i> | | | <i>Last</i> | | | |
| CCO CERTIFICATION NUMBER (IF CURRENTLY CERTIFIED) | | | | SOCIAL SECURITY # | | | | | |
| MAILING ADDRESS | | | | | | DATE OF BIRTH | | | |
| CITY | | | | STATE | | ZIP | | | |
| PHONE | | CELL | | FAX | | E-MAIL | | | |
| COMPANY ORGANIZATION | | | | | | PHONE | | | |
| COMPANY MAILING ADDRESS | | | | | | | | | |
| CITY | | | STATE | | ZIP | | | | |
| ARE YOU A RETEST CANDIDATE? | | | NO <input type="checkbox"/> | | YES <input type="checkbox"/> | | DATE LAST TESTED: ___/___/___ | | <input type="checkbox"/> I AM TAKING THE PRACTICAL EXAM FIRST. |
| WRITTEN TEST SITE # (contact Test Site Coordinator) | | | | DATE YOU INTEND TO TEST (mm/dd/yyyy) | | | TEST SITE COORDINATOR | | |

Note: Applications received without a Test Site Number will be marked incomplete and cannot be processed.

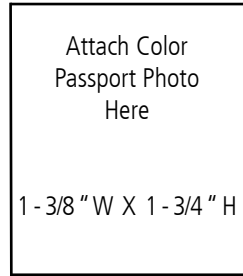
BUBBLE IN next to the Exam category for which you are applying.

| EXAM DESCRIPTION | EXAM FEES |
|---|--------------------------|
| <input type="radio"/> Rigger Basic Written and Practical Exams <i>(Rigger candidates only - certification card INCLUDED)</i> | 652801 \$190 |
| <input type="radio"/> Rigger Basic Written and Practical Exams <i>(Current NCCCO Certified card holder)</i> | 652801 \$100 |
| <input type="radio"/> RETEST Rigger Basic Written Exam <i>(Rigger candidate only)</i> | 652801 \$95 |
| <input type="radio"/> RETEST Rigger Basic Practical Exam <i>(Rigger candidate only)</i> | 652801 \$95 |
| <input type="radio"/> RETEST Rigger Basic Written Exam <i>(Current NCCCO Certified card holder)</i> | 652801 \$50 |
| <input type="radio"/> RETEST Rigger Basic Practical Exam <i>(Current NCCCO Certified card holder)</i> | 652801 \$50 |
| <input type="radio"/> Rigger Basic & Signalperson Written and Practical Exams <i>(Rigger/Signalperson candidates only - certification card INCLUDED)</i> | 652801 & 652701 \$250 |
| <input type="radio"/> Rigger Basic & Signalperson Written and Practical Exams <i>(Current NCCCO Certified card holder)</i> | 652801 & 652701 \$250 |
| ADDITIONAL FEES | |
| <input type="radio"/> Updated Certification Card <i>(*for current NCCCO Certified card holder ONLY)</i> | \$25 |
| <input type="radio"/> Candidate Late Fee | \$50 |
| <input type="radio"/> Incomplete Application Fee <i>(See Candidate handbook for details)</i> | \$30 |
| TOTAL AMOUNT ENCLOSED | \$ |

CANDIDATE APPLICATION (CONT'D)
Rigger

NCCCO CERTIFICATION CARDS

Candidates who meet all the requirements for certification in any one category are issued a certification card at no charge. Replacement and updated cards are available for an additional fee; see panel below.



Please attach a passport color photo, without hat or sunglasses, and enclose any required payment based upon the information listed below with your application form




Under penalties of perjury, I declare that the foregoing statements and those in any required accompanying documentation are true. I understand and agree that my failure to provide accurate and complete information or abide by NCCCO's policies and procedures, including the Code of Ethics, shall constitute grounds for the rejection of my application, or denial or revocation of my certification. I understand that NCCCO reserves the right to verify any information in this application or in connection with my certification. I consent to NCCCO's release of any information regarding this application and my examination administration to third parties. I have received a copy of the NCCCO Candidate Handbook and have read, and do understand and agree to be bound by all prevailing NCCCO policies and procedures.

CANDIDATE SIGNATURE

DATE

METHOD OF PAYMENT FOR CANDIDATE EXAMINATION FEES

Do not send cash.

   Personal Check Employer Check Money Order *Do not staple your check.*

If paying by credit card – complete the following information

SECURITY CODE

CREDIT CARD NUMBER

EXPIRATION DATE

NAME (Print as it appears on card)

SIGNATURE (on card)

Checks and money orders should be payable to:

International Assessment Institute - Attention: CCO testing
600 Cleveland Street, Suite 900
Clearwater, Florida 33755

Phone: 727-449-8525
Fax: 727-461-2746

CANDIDATE APPLICATION CHECKLIST

- I have completed and signed the Candidate Application.
- I have provided credit card information or a check or money order for the correct amount.



CHANGE OF ADDRESS FORM

Please use this form to advise of any changes of address. Please mail or fax this to:

International Assessment Institute (IAI)
600 Cleveland Street, Suite 900
Clearwater, Florida 33755

Phone: 727-449-8525
Fax: 727-461-2746

Please type or print neatly.

| | | | |
|--|--------------|-------------------|-------------|
| NAME | <i>First</i> | <i>Middle</i> | <i>Last</i> |
| CCO CERTIFICATION NUMBER (IF PREVIOUSLY CERTIFIED) | | SOCIAL SECURITY # | |

OLD ADDRESS

| | | | |
|------------------------|-----|--------|-----|
| STREET ADDRESS | | | |
| CITY | FAX | STATE | ZIP |
| PHONE | | E-MAIL | |
| COMPANY / ORGANIZATION | | PHONE | |
| COMPANY STREET ADDRESS | | | |
| CITY | | STATE | ZIP |

NEW ADDRESS

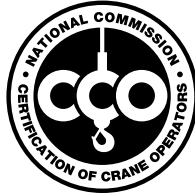
| | | | |
|------------------------|-----|--------|-----|
| STREET ADDRESS | | | |
| CITY | | STATE | ZIP |
| PHONE | FAX | E-MAIL | |
| COMPANY / ORGANIZATION | | PHONE | |
| COMPANY STREET ADDRESS | | | |
| CITY | | STATE | ZIP |

EFFECTIVE DATE OF CHANGE

| |
|--|
| |
|--|

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IMPORTANT CONTACT INFORMATION



NATIONAL COMMISSION FOR THE CERTIFICATION OF CRANE OPERATORS

2750 Prosperity Avenue, Suite 505
Fairfax, VA 22031-4312

Phone: 703-560-2391

Fax: 703-560-2392

E-mail: info@nccco.org



INTERNATIONAL ASSESSMENT INSTITUTE

Attention: CCO Testing
600 Cleveland Street, Suite 900
Clearwater, Florida 33755

Phone: 727-449-8525

Fax: 727-461-2746



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