



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

**CANDIDATE
HANDBOOK
(MOBILE CRANES)**



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This Handbook and Application Packet for the Written and Practical Examinations contains the following important documents: a Candidate Written Examination Application form, a Candidate Practical Examination Application form and a Physical Examination 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 crane operator 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.

This nationally recognized program is the culmination of many years' hard work by experts from the varied industries and groups that use cranes, including construction, steel erection, the operating engineers, utilities, crane rental, petrochemical, pulp and paper, etc. NCCCO Task Forces were staffed by experts from all aspects of the crane industry—crane operators, training directors, managers, supervisors, manufacturers—representing many thousands of hours of crane operating 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 cranes and lifting equipment.

In order to ensure NCCCO examinations are, and remain, a valid measurement of a crane operator's proficiency, 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 Crane Operator Certification Program.

Thank you for your interest—and good luck!

**The NCCCO Mobile Crane Operator Certification Program is
accredited by the American National Standards Institute (ANSI)
and the National Commission for Certifying Agencies (NCCA).**



ANSI Accredited Program
PERSONNEL CERTIFICATION
0756

Mobile, Tower and Overhead Crane
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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 the safe operation of cranes. 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 operator certification:

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

All candidates are required to pass both the Written and Practical Examination(s) in order to be certified.

The Practical Examination Specialties correspond to the Written Exam Specialties except that the candidate may pass either the Lattice Boom Crawler Crane or the Lattice Boom Truck Crane Practical Specialty. Candidates wishing to take the Practical Examination should contact their Test Site Coordinator.

The initial certification period is for five (5) years, after which an operator 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 is believed, would accrue by more frequent testing. A Practical (skills) Examination is not required for recertification providing the certificant meets experience and medical (physical) requirements.

DEVELOPMENT OF THE NCCCO EXAMINATIONS

The first step in the development of an objective test to measure the knowledge of safe crane operations was a job analysis study. The study identified the knowledge necessary for safe crane operations. A survey was given to a representative number of crane operators, 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 **Written Examinations** (Core and Specialties) involved a panel of crane operation content experts who worked with the staff of 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 and specialties as defined by the test blueprints.

The NCCCO **Practical Examinations** were developed as a fair and objective assessment of the essential skills a crane operator needs in order to safely operate mobile cranes.

They were developed over a three-year period by a NCCCO Task Force staffed by experts from all aspects of the crane industry—crane operators, training directors, managers, supervisors, manufacturers—representing many thousands of hours of crane operating 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, International Assessment Institute also designed the Practical Examiner Accreditation Program whereby NCCCO trains and accredits NCCCO-certified crane operators to administer NCCCO Practical Examinations.

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Certification Policies

ELIGIBILITY

Requirements for certification include the following:

- Be at least 18 years of age
- Meet Medical Requirements
- Comply with NCCCO's Substance Abuse Policy
- Pass Written Examinations (Core and one Specialty)
- Pass Practical Examination(s)
- Comply with the Code of Ethics

PHYSICAL EVALUATION

Certified crane operators must continue to meet ASME B30 physical requirements throughout their certification period and attest to their agreement to this requirement in their application.

Means of compliance with ASME Physical Requirements include, but are not limited to, the following:

- NCCCO Physical Examination Form (Valid for three [3] years)
- A current DOT (Department of Transportation) Medical Examiner's Certificate (Valid for two [2] years)

NCCCO WRITTEN EXAMINATIONS

The Written Examination program consists of a Core Examination in crane operation, as well as four crane Specialty Examinations. The Core Examination has 90 multiple-choice questions. Candidates are allowed 90 minutes to complete the Core Examination.

All Specialty Examinations consist of 26 multiple-choice questions. Candidates are allowed 55 minutes to complete each Specialty Examination.

All candidates are required to take the Core Examination regardless of the specialty(s) in which they wish to be certified.

NCCCO Specialty Examinations:

- Lattice Boom Crawler Cranes (LBC)
- Lattice Boom Truck Cranes (LBT)
- Large Telescopic Boom Cranes (TLL-Swing Cab)
- Small Telescopic Boom Cranes (TSS-Fixed Cab)

Candidates must register for the Core and at least one of the Specialty Examinations. Certification requires competency in both the Core and one or more Specialty categories. Candidates meeting the eligibility requirements may take the Written or Practical Examination in any order.

NCCCO PRACTICAL EXAMINATIONS

The NCCCO Practical Examination demonstrating crane operation proficiency is available in three (3) crane types:

- Lattice Boom Cranes
- Large Telescopic Boom Cranes (Swing Cab)
- Small Telescopic Boom Cranes (Fixed Cab)

A candidate must pass the Written Core and at least one Specialty Examination as well as the corresponding Practical Exam in order to be certified for a five (5) year period.

NCCCO CERTIFICATION TIME FRAMES

Candidates must pass a Written Exam and a Practical Exam in the category they wish to be certified in. 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. Candidates may take their Written and Practical Exams in any order. For example, a candidate passing the Written Exams (Core + Specialty) in the Large Telescopic Crane (Swing Cab) category has 12 months to pass the Large Telescopic Crane Practical Exam.

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

If a certified candidate subsequently becomes certified in additional specialties, the five (5) year certification period for additional specialties begins at the same time as he/she was originally certified, i.e., all specialties expire on the same date regardless of when in the five (5) year certification period the candidate passed them.

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 Examinations
- Continuing to meet Medical Requirements
- Compliance with NCCCO's Substance Abuse Policy
- Compliance with Code of Ethics

Candidates who can document 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, maintenance, inspection or training.

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 Written Recertification Examination consists of a Core Examination in crane operation, as well as four Specialty Examinations.

The Core Recertification Examination has 40 multiple choice questions with a time limit of 40 minutes.

Each Specialty Recertification Examination consists of ten (10) multiple choice questions with a time limit of 25 minutes. Four of the questions in each Specialty Exam are load chart questions.

All candidates are allowed two (2) attempts to pass the Recertification Core and Specialty Exams before their certification expires. Candidates who are unsuccessful after two (2) attempts must take and pass the regular Core and Specialty Exams.

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 (1) year period, the new five (5) 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 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.

Candidates who are not certified in all Specialties may add a new Specialty at the same time as they take their Recertification Examinations by taking the full examination in that Specialty.

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 CRANE OPERATORS

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

As a NCCCO Certified Crane Operator, 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 the lifting operation 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 lifting operations which I am performing.
- (v) not knowingly violate safety related regulations, warnings or instructions set forth by OSHA, recognized safety standards, or the crane manufacturer.
- (vi) not misrepresent or knowingly deceive others concerning my experience or the capabilities of myself or the crane I am operating.
- (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 ASME B30 medical requirements.
6. Evidence of non-compliance with the Code of Ethics.

Certified Operators, who wish to appeal a decision regarding revocation of their operator status, must do so in writing, 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 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. The decision of the NCCCO Board of Directors is final.

SUBSTANCE ABUSE POLICY

It is the policy of NCCCO that crane operators shall not use a prescribed or over the counter substance which would impair their ability to operate cranes safely. 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 an operator may use such a substance or drug if it is prescribed by a licensed medical practitioner, who is familiar with the operator's medical history and all assigned duties, and who has advised the operator the prescribed substance will not adversely affect the operator's ability to safely operate a crane.

NCCCO certified crane operators shall comply with the substance abuse testing provisions of ASME B30. It is a condition of certification that crane operators 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 operators receive a plastic photo ID card at no cost when they certify for the first time and when they complete the requirements for recertification.

Replacement cards, cards showing certification in an additional specialty, or revision of cards for candidates who retake and pass a specialty they previously failed, may be obtained from International Assessment Institute at a cost of \$25.

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 in writing via letter or fax to International Assessment Institute (IAI). A change of address form is provided in this handbook.



Written Examination Process

APPLICATION PROCESS TO TAKE THE WRITTEN EXAMINATION

Candidates wishing to sit for the NCCCO examination(s) 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. The application deadline examples are listed on page 10.

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 accommodation must be submitted to NCCCO no later than four (4) weeks prior to your scheduled test date. For further information, see the *Written Examination Test Site Coordinator Handbook*.

SUBMISSION OF APPLICATION

The Candidate Application and Physical Examination forms are located at the back of this Handbook. These forms 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: NCCCO 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 required information. Incomplete applications, incorrect payment, and/or inaccurate documentation will delay the processing and incur additional fees. This could result in your **NOT** being able to sit for the examination(s).

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 FEES

All returned checks that are unable to be processed will be subject to a \$25 fee.

Written Exam Fees:

Core Exam plus any one (1) Specialty Exam	\$165
Core Exam plus two (2) Specialties	\$175
Core Exam plus three (3) Specialties	\$185
Core Exam plus four (4) Specialties	\$195

Retesting Exam Fees:

Core Exam Only (Specialty passed) or Core plus one Specialty	\$165
Core Exam plus two (2) Specialties	\$175
Core Exam plus three (3) Specialties	\$185
Core Exam plus four (4) Specialties	\$195
One (1) Specialty Exam only (Core passed)	\$ 65
Two (2) Specialty Exams (Core Passed)	\$ 75
Three (3) Specialty Exams (Core Passed)	\$ 85
Four (4) Specialty Exams (Core Passed)	\$ 95

Recertification Written Exam Fees:

Core Exam plus any one (1) Specialty Exam	\$150
Core Exam plus two (2) Specialties	\$155
Core Exam plus three (3) Specialties	\$160
Core Exam plus four (4) Specialties	\$165

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 duplicate/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 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 date, 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 (EST) 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 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 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 adhered to. Sample deadlines shown below are for a test date of January 29.

Test Site Application Form and Written Test Administration Request Form due four (4) weeks prior to test date.	January						
	S	M	T	W	Th	F	Sa
Candidate Applications due two (2) weeks prior to test.	7	8	9	10	11	12	13
	14	15	16	17	18	19	20
Test Day	21	22	23	24	25	26	27
	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 test 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 test 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 purpose 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 physical/medical 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 can 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 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 for 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) failed test score and \$50 for two (2) or more failed test scores per test administration. Requests should be mailed to:

International Assessment Institute

Attention: NCCCO 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(s) 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 (Core Examination)

The Core examination portion of the NCCCO written certification program tests the following knowledge areas relating to the operation of cranes:

- Domain 1: Site**
(Approximately 20% of the Test)
- Domain 2: Operations**
(Approximately 26% of the Test)
- Domain 3: Technical Knowledge**
(Approximately 28% of the Test)
- Domain 4: Manufacturers' Load Charts**
(Approximately 26% of the Test)

DOMAIN 1: SITE

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 mats, blocking or cribbing and outriggers or crawlers as they affect the ability of supporting surfaces to handle the expected loads of the operation.
3. Know electric power line hazards, corresponding regulations and safety practices
4. Know how to identify and evaluate hazards associated with:
 - (a) access to job site;
 - (b) site hazards such as underground utilities;
 - (c) transportation clearances.
5. Know how to review lift requirements with site supervision to include determination of working height, boom length, load radius, load weight, crane capacity, travel clearance, extension of crawlers or outriggers/stabilizers and counterweights.
3. Know how to pick, carry, swing and place the load smoothly and safely on rubber tires and on outriggers/stabilizers or crawlers (where applicable).
4. Know proper procedures and methods of reeving all wire ropes and methods of reeving multiple part lines and selecting the proper load block and/or ball.
5. Know standard signals as specified in ASME B30.5.
6. Know how to shut down and secure the crane properly when leaving it unattended, based on manufacturer's recommendations in both normal and emergency conditions.
7. Know the manufacturer's recommendations for operating in various weather conditions, and understand how environmental conditions affect the safe operation of the crane.
8. Know how to verify the weight of the load and rigging prior to initiation of the lift.
9. Know how to determine where the load is to be picked up and placed and how to verify the radii.
10. Know basic load rigging procedures.
11. Know how to perform daily maintenance and inspection.
12. Know how to use the following operator aids:
 - (a) LMI;
 - (b) anti-two block device;
 - (c) boom angle indicator;
 - (d) rated load indicator;
 - (e) boom length indicators.
13. Know which operations reduce crane capacity or require specific procedures or skill levels such as:
 - (a) multi-crane lifts;
 - (b) suspended personnel platforms;
 - (c) duty cycle operations;
 - (d) barge operations.

DOMAIN 2: OPERATIONS

1. Know which federal regulations and industry standards affect safe operation of the crane, including but not limited to ASME B30.5, B30.23, OSHA 1910.180, 1926.550.
2. Know how to conduct daily crane inspections for unsafe conditions/deficiencies and to notify supervision of these conditions.
14. Know the proper procedures for operating safely under the following conditions:
 - (a) traveling with suspended loads;
 - (b) approaching two-blocking;
 - (c) operating near electric power lines;
 - (d) using suspended personnel platform;

- (e) lifting loads from beneath the surface of the water;
 - (f) using various approved counterweight configurations;
 - (g) handling loads out of the operator's vision ("operating in the blind");
 - (h) using electronic communications techniques, such as radios, extreme weather.
15. Know the proper procedures for load control and the use of hand-held tag lines.
 16. Know how to react to:
 - (a) electric power line contact
 - (b) loss of stability;
 - (c) control malfunction;
 - (d) block and line twisting;
 - (e) carrier or travel malfunction.
 17. Know how to properly use the outriggers in accordance with manufacturer's specifications.
 18. Know alternative operating procedures when operator aids malfunction.
 19. Know the effects of dynamic loading from:
 - (a) wind;
 - (b) stopping and starting;
 - (c) impact loading;
 - (d) moving the load;
 - (e) traveling with load (pick and carry).
 20. Know the effect of side loading.

DOMAIN 3: TECHNICAL KNOWLEDGE

1. Know basic crane terminology and definitions
2. Know functions and limitations of the crane and attachments.
3. Know wire rope:
 - (a) construction and breaking strength, inspection procedures;
 - (b) replacement criteria and procedures;
 - (c) capacity and when multi-part rope is needed;
 - (d) maintenance and lubrication, relationship between line pull and safe working load.
4. Know rigging devices and their use, such as:
 - (a) slings;
 - (b) spreaders;
 - (c) lifting beams;
 - (d) wire rope fittings; such as clips, shackles and wedge sockets.
 - (e) saddles (softeners);
 - (f) clamps;
 - (g) hook blocks and overhaul balls.
5. Know the limitations of protective measures against electrical hazards.
6. Know the effects of load share and load transfer in multi-crane lifts.
7. Know the significance of the instruments, gauge readings and machine power systems.
8. Know the requirements of pre-operational inspections and maintenance.
9. Know the uses and limitations of all operational devices/aids.
10. Know how to calculate net capacity for the crane configuration using the applicable manufacturer's load chart.
11. Know how to use manufacturer-approved attachments and their effect on the cranes operation.
12. Know the principles of backward stability.

DOMAIN 4: MANUFACTURER'S 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 application.
3. Know how to use capacity load charts. This includes knowing:
 - (a) the operational limitations of load charts and footnotes;
 - (b) the difference between structural capacity and capacity limited by stability;
 - (c) what is included in load chart capacity;
 - (d) the range diagram and its relationship to the load chart;
 - (e) the work area chart and its relationship to the load chart;
 - (f) where to find and how to use the "parts-of-line" information;
 - (g) the safe working load of hoist line.
4. Know how to use the load chart together with the load indicators.



Written Exam Outline (Specialty Examinations)

The Specialty Examination for the NCCCO certification program tests the following knowledge areas relating to the operation of each of these types of cranes.

- Lattice Boom Truck Cranes
- Lattice Boom Crawler Cranes
- Large Telescopic Boom Cranes (Swing Cab)
- Small Telescopic Boom Cranes (Fixed Cab)

Domain 1: Site
(Approximately 12% of the Test)

Domain 2: Operations
(Approximately 30% of the Test)

Domain 3: Technical Knowledge
(Approximately 23% of the Test)

Domain 4: Manufacturers' Load Charts
(Approximately 35% of the Test)

DOMAIN 1: SITE

1. Know the proper use of mats, blocking or cribbing and outriggers or crawlers as they affect the suitability of supporting surfaces to handle the expected loads of the operation.
2. Know the limitations of machine clearances, extension of crawlers or outriggers/ stabilizers and counterweights.

DOMAIN 2: OPERATIONS

1. Know how to inspect the crane for unsafe conditions, complete required records and communicate the unsafe conditions to the proper authority.
2. Know how to pick, carry, swing and place the load smoothly and safely on rubber tires and on outriggers/stabilizers or crawlers (where applicable).
3. Know proper boom assembly and disassembly techniques:
 - (a) lattice booms;
 - (b) extension and retraction of "power pinned" and/or manual boom "extension";
 - (c) erection and dismantling of lattice extension jibs.
4. Know how to react to changes in conditions that affect the safe operation of the crane.
5. Know how to shut down and secure the crane properly when leaving it unattended.

6. Know how to prepare the crane for transportation by loading or unloading on trailers and be familiar with the differences between rail and barge loading.
7. Know how to move the crane (no load) safely under its own power;
 - (a) between job sites;
 - (b) within job sites;
 - (c) loading and unloading on trailers.
8. Know the manufacturer's specifications for operating in various weather conditions and understand how environmental conditions affect the safe operation of the crane.
9. Know how to properly level the crane.
10. Know how to perform daily maintenance and inspection.
11. Know how to use the following operator aids:
 - (a) wind indicator;
 - (b) anti-two block device;
 - (c) boom angle indicator;
 - (d) boom angle device;
 - (e) boom length indicators.
12. Know the proper procedures for operating safely under the following conditions:
 - (a) traveling with suspended loads;
 - (b) approaching two-blocking;
 - (c) operating near electric power lines;
 - (d) using suspended personnel platforms;
 - (e) using other than full outrigger/crawler extensions;
 - (f) lifting loads from beneath the surface of the water;
 - (g) using various approved counterweight configurations;
 - (h) handling loads out of the operator's vision "operating in the blind";
 - (i) using electronic communication techniques, such as radios.
13. Know emergency response procedures for:
 - (a) fire control;
 - (b) electric power line contact;
 - (c) loss of stability;
 - (d) control malfunction;
 - (e) two-blocking;
 - (f) overload;
 - (g) carrier or travel malfunction.

DOMAIN 3: TECHNICAL KNOWLEDGE

1. Know the functions and limitations of the crane and attachments.
2. Know basic crane terms.
3. Know the basics of machine power flow systems:
 - (a) mechanical;
 - (b) electrical;
 - (c) pneumatic;
 - (d) hydraulic;
 - (e) combination.
4. Know how the boom hoist and load hoist(s) are driven and engaged to the power source.
5. Know the requirements of standard and optional controls.
6. Know the requirements of pre-operation inspection and maintenance.
7. Know how to use operational assist devices which include:
 - (a) anti-two block;
 - (b) load moment indicators and rated load indicators;
 - (c) outrigger position indicators;
 - (d) mechanical levels;
 - (e) boom angle indicators;
 - (f) load indicating devices;
 - (g) boom stops and boom hoist disconnect;
 - (h) radius indicators;
 - (i) drum rotation indicators and boom length indicators.
8. Know how to use manufacturer approved attachments and their effect on the crane.
9. Know the function and safe use of crawler position (extended or retracted), outriggers, and/or stabilizers.
10. Know how to assemble and disassemble boom sections, extensions and jib.

DOMAIN 4: MANUFACTURER'S LOAD CHARTS

1. Know the terminology necessary to use load charts.
2. Know how to use load charts. For example:
 - (a) the operational limitations of load charts and footnotes;
 - (b) how to relate the chart to the configuration of the crane, crawlers or outriggers extended or retracted, jib erected or offset, and various counterweight configurations;
 - (c) the difference between structural capacity and capacity limited by stability;
 - (d) what is included in load chart capacity;
 - (e) the range diagram and its relationship to the load chart;
 - (f) the work area chart and its relationship to the load chart;
 - (g) where to find and how to use the "parts-of-line" information.
3. Know how to calculate net capacity for allowable configurations of the crane using the manufacturer's load chart.



Sample Questions

The following are sample test questions typical of the style and content of the questions used in the NCCCO Written Certification Examinations. Additional sample questions can be found at the NCCCO's website, www.NCCCO.org.

1. Unless the manufacturers state otherwise, truck cranes generally have no lifting capacity over which area?
 - (a) The side
 - (b) The rear
 - (c) The front
 - (d) The outriggers
2. "Working radius" is defined as the distance from the
 - (a) base of the boom to the center of the load.
 - (b) front of the crane to the center of gravity of the load.
 - (c) center of rotation of the crane to the center of the load.
 - (d) center of rotation of the crane to the center of gravity of the load.
3. If a bold line is shown on a load chart, the capacities below the line
 - (a) are based on the structural strength of the crane.
 - (b) must not be used.
 - (c) are based on the stability of the crane.
 - (d) should only be used if the crane is set up on outriggers.
4. Rough terrain crane capacities are generally greater over the
 - (a) front
 - (b) rear
 - (c) right side
 - (d) left side
5. According to federal requirements, under what conditions is it OK for a person to ride the headache ball?
 - (a) When there is no other way to gain access
 - (b) When the lift has been approved by an engineer
 - (c) When other means would be more dangerous
 - (d) It is never OK

Question #	1
Answer	C
	2
	D
	C
	3
	V
	4
	D
	5



Reference List

The following reference materials are used by NCCCO's Written Examination Committee to verify the accuracy of NCCCO test questions.

Candidates are strongly advised to become familiar with manufacturer's load charts in preparing for the NCCCO certification examinations. Prices current at time of going to press.

ANSI/ASME, B30.5 (2004) \$80.00
MOBILE AND LOCOMOTIVE CRANES
(And successive addenda)

ANSI/ASME, B30.23 \$52.00
PERSONNEL LIFTING SYSTEMS
(And successive addenda)

Order by Mail:

American Society of Mechanical Engineers
22 Law Drive, Box 2900
Fairfield, NJ 07007
ph: 800-843-2763 / Fax: 201-882-1717
Website: asme.org/codes/
Check, VISA, MasterCard, American Express,
Discover, Diner's Club

MOBILE CRANE MANUAL \$70.00
RIGGING MANUAL \$46.00

Order by Mail:

Construction Safety Association of Ontario
21 Voyager Court South
Etobicoke, Ontario M9W5M7 Canada
ph: 800-781-2726 / Fax: 416-674-8866
Website: www.csao.org
Check, VISA, MasterCard, American Express,
Discover, Diner's Club

OCCUPATIONAL SAFETY AND HEALTH
ADMINISTRATION, US DEPT. OF LABOR CODE OF
FEDERAL REGULATIONS,
PARTS 1926.550 AND 1910.180

Order by Internet:

www.osha.gov

Order by Mail:

NCCCO
2750 Prosperity Avenue, Suite 505
Fairfax, VA 22031-4312
ph: 703-560-2391 / Fax: 703-560-2392
E-Mail: Info@NCCCO.org

BOB'S RIGGING & CRANE HANDBOOK

Desk Size \$24.00
Pocket Size \$13.00

Order by Mail:

Pellow Engineering Services
406 West 50th South
Kansas City, MO 64112
ph: 877-473-5569 / Fax: 816-931-4113
Website: www.donpellow.com
VISA, MasterCard, Check, Money Order

CRANE SAFETY MANUAL \$3.00

Order by Mail:

111 East Wisconsin Ave, Suite 940
Milwaukee, WI 53202-4879
ph: 414-272-0943 / Fax: 414-272-1170
Website: www.aem.org (click "AEM Store")
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IPT'S CRANE AND RIGGING
HANDBOOK \$20.00 + S&H (\$9.00)

IPT'S CRANE AND RIGGING
MANUAL \$34.00 + S&H (\$10.00)

Order by Mail:

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Money Order, Purchase Order



Practical Examination Process

ELIGIBILITY

Candidates must pass a Written Exam and a Practical Exam in the category they wish to be certified in. 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 in the same category. For example, a candidate passing the Written Exams (Core + TLL Specialty) has 12 months to pass the Large Telescopic Crane Practical Exam.

SKILLS TESTED

The NCCCO Practical Examinations are available on three crane types.

- Lattice Boom Cranes
- Large Telescopic Boom Cranes (Swing Cab)
- Small Telescopic Boom Cranes (Fixed Cab)

Candidates may take the Practical Examination on one, two, or all three of the crane types provided they have already passed/will pass the Written Examination in the corresponding category within the 12 month time frame.

Written Exam	Corresponding Practical Exam
Lattice Boom Truck Crane	Lattice Boom Crane (Truck or Crawler)
Lattice Boom Crawler Crane	Lattice Boom Crane (Truck or Crawler)
Large Telescopic Crane	Large Telescopic Crane
Small Telescopic Crane	Small Telescopic Crane

The Practical Examination is comprised of four main tasks that increase progressively in the skill level tested. Skills tested are: hoisting, booming, swinging, following hand signals, and combination (multifunction) operations. Crane operation with load and without load is required.

NCCCO adapts the test site layout for each model of crane used for the Practical Examination to ensure the examination remains standardized for all candidates wherever and whenever they may test.

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. Candidates are required to bring personal protective equipment to wear during the test, including at a minimum; hard hat, work boots and suitable work clothing.

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 75 represents the “minimum passing” score for the Mobile Crane Practical Examinations.

PRACTICAL CANDIDATE FEES

The examination fee for testing on one crane type is \$60. For each additional crane type applied for and taken at the same time, the fee is \$10. The appropriate fees must be submitted with your application through your Test Site Coordinator. The same fees apply for retest candidates.

Practical Exam Candidate Fees

- 1 Crane Type \$60
- 2 Crane Types \$70
- 3 Crane Types \$80

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. Request(s) should be mailed to:

International Assessment Institute

Attention: NCCCO 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.



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: Place overhaul ball chain in **Stop Circle**
- Task 2: Follow hand signals
- Task 3: Place overhaul ball in barrels
- Task 4: Negotiate **Zigzag Corridor** with **Test Weight**

There is also a Pre-Test Briefing, a Pre-Test Familiarization Period, and a Pre-Task Familiarization Period (prior to the zigzag task) with a load. You will be required to complete all phases of the test in sequence.

You must report to the test site at the scheduled time. You are required to bring personal protective equipment to wear during the test including a minimum: hard hat, work boots, and suitable work clothing.

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 Task 1, Task 3 and Task 4 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, you will lose points on a gradual 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 two times the optimum time the Examiner will end the task.

PRE-TEST BRIEFING

While you are waiting to take your test you will have sufficient time to read this 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, the boom length, and the weight of the test load. You will also watch a short video showing all the tasks you will be required to perform during the examination.

Note that:

- The crane's LMI system (if the crane is so equipped) has been correctly programmed and will not interfere with the proper operation of the crane.
- The crane has been set up and leveled. A spirit level is available if you wish to verify level.
- None of the target points have been placed at a radius that exceeds the crane's rated capacity.
- On telescopic boom cranes, the boom length has been pre-set. You will **NOT** be permitted to telescope at any time.
- All hand signals used throughout the test will be in accordance with ASME B30.5.

CIRCUMVENTING THE COURSE

"Circumventing the course" on the NCCCO Mobile Crane Practical Exam is defined as when the load:

- leaves the **Zigzag Corridor** and passes more than one pole without touching them before re-entering the corridor: *or*
- "leapfrogs" from one leg of the **Zigzag Corridor** to another with the chain off the ground; *or*
- passes more than four (4) poles consecutively with the chain off the ground, inside or outside of the corridor

The Examiner has the authority to stop the exam at anytime if he/she feels that the candidate is attempting to circumvent any task.

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. An “unsafe” act includes the following:

- Dropping the **Overhaul Ball** or **Test Weight** (on ground, in barrel, etc.);
- Two blocking of the crane;
- Uncontrolled or reckless operation;
- Failure to respond to a “**Stop**” signal;
- Any action that in the judgment of the Examiner could endanger personnel or equipment at the test site;

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, your case will be reviewed by IAI and NCCCO, and you will be notified as to your eligibility for rescheduling your practical test.

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 review with you the weather conditions and ask you to sign indicating you understand the instructions for the test, and 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 record weather conditions on your score sheet.

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

- You will resume the test at the beginning of the task you were performing at the time of the interruption, except for Task 4, when you will go back to the beginning of either Task 4a or 4b, as appropriate.

- You will also be entitled to a Pre-Test or Pre-Task Familiarization period before resuming the test.
- If you resume the test on a different machine, you will have the option of starting the entire test over from the beginning.
- If the testing is delayed to a different day, the test must be restarted from the beginning.

PRE-TEST FAMILIARIZATION PERIOD

- You will be allowed 15 minutes to familiarize yourself with the crane and to examine anything on the crane which you feel is necessary to operate it comfortably.
- You will be allowed to “get the feel” of the controls and run the crane through its functions. The boom length has been preset. The brakes and other devices have been set according to the crane manufacturer’s recommendation.
- You may not interfere with the test course, lift the **Test Weight**, or “shadow” the **Zigzag Corridor** or the barrels.
- You must finish the Pre-test Familiarization Period with the load hook under control in the **Start Circle** within the 15 minute period.
- The Examiner will notify you when there are 10, 5, and 1 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.

TASK 1: PLACE BALL IN STOP CIRCLE

Optimum Time: one and one-half (1-1/2) minutes.

- At the Examiner’s indication to start (at which point timing will begin) raise the ball and chain at least 10 ft. off the ground to clear all obstacles and personnel.
- Bring it from its starting position in the **Start Circle** to the **Stop Circle**.

- Once the ball and chain reaches the **Stop Circle**, place it there such that the chain suspended from the hook makes contact with the ground inside the circle and remains there.
- The Examiner will give you a stop signal once the ball and chain are under control.
- Points will be deducted for the following:
 - Dragging or contact of chain outside of the circle;
 - Hook or ball touching ground either inside or outside of the circle;
 - Hook or ball contacting any part of the course or crane;
 - Exceeding the *optimum time*.

TASK 2: FOLLOW HAND SIGNALS

This task is not timed.

- At the Examiner's indication to start, bring the ball and chain from the **Stop Circle** to the **Start Circle**.
- You will be asked to respond to four standard B30.5 hand signals given by the Examiner.
- The Examiner's four signals will be selected from the following:
 - Hoist and stop;
 - Swing and stop;
 - Raise the boom;
 - Lower the load slowly and stop;
 - Lower the boom, raise the load, and stop;
 - Raise the boom and stop;
 - Lower the boom and stop;
 - Raise the boom, lower the load, and stop.
- The Examiner may give the signals in any sequence.
- The Examiner or Proctor will remove the chain at the completion of this task.

TASK 3: PLACE BALL IN BARRELS

Optimum Time:

Small Telescopic Crane — three and one-half (3 -1/2) minutes.

Large Telescopic Crane — three and one-half (3 -1/2) minutes.

Lattice Boom Crane — four (4) minutes.

- At the Examiner's indication to start (at which point timing will begin), bring the overhaul ball from the **Start Circle** and place it into Barrel #1. (If you knock over Barrel #1, at the Examiner's indication, proceed to try and put the ball in Barrel #2.)

- The Examiner will determine when the horizontal white line painted around the center of the ball has dropped below the rim of Barrel #1, and will so indicate to you. At the Examiner's indication, move the ball from Barrel #1 to Barrel #2.
- The Examiner will determine when the horizontal white line painted around the center of the ball has dropped below the rim of the barrel. Hold the ball in Barrel #2 until instructed by the Examiner to remove it.
- Timing shall stop when the ball is completely clear of Barrel #2 and the Examiner has given you a stop signal.
- Points will be deducted for the following
 - Moving barrel (2 in. or more);
 - Knocking over barrel;
 - Hook or ball touching ground;
 - Exceeding the *optimum time*.

PRE-TASK FAMILIARIZATION PERIOD (WITH TEST WEIGHT)

This part of the test is not scored.

- At the Examiner's indication, bring the overhaul ball over the **Test Weight** located in the **Test Weight Circle**.
- The load will be attached to the crane's hook by the Examiner or Proctor.
- You are allowed to bring the **Test Weight** to the designated area where you can get the feel of the load, test the brake, etc. before beginning the **Zigzag Corridor** task.
- You may not swing the load outside of the designated area or shadow the **Zigzag Course**.
- You will be allowed a maximum of five (5) minutes for this Pre-Task Familiarization, by the end of which period, you must have placed the **Test Weight** on the ground in the **Test Weight Circle** with the rigging taut.
- The Examiner will notify you when there is one (1) minute remaining.

TASK 4: NEGOTIATE ZIGZAG CORRIDOR WITH LOAD

Optimum Time:

Small Telescopic Crane — four (4) minutes each direction.

Large Telescopic Crane — three (3) minutes each direction

Lattice Boom Crane — three (3) minutes each direction

- At the Examiner's direction to start (at which point timing will begin), lift the **Test Weight** into the air and swing, boom up or down, hoist up or down as you judge necessary to guide the load through the **Zigzag Corridor** without touching the ground with the **Test Weight**, or raising the **Test Weight** so high that the chain leaves the ground, or knocking over any part of the PVC barrier.
- Points will be deducted for the following:
 - Knocking ball off pole;
 - Moving pole base off line;
 - Knocking pole over;
 - Chain leaving ground;
 - Passing poles with chain off ground;
 - Load touching ground;
 - Circumventing the course;
 - Exceeding the *optimum time*.
- Timing will stop when you have placed the **Test Weight** on the ground in the **Stop Circle** and the Examiner has given you a stop signal. Task is not complete until the load is placed completely within the outside perimeter of the circle and the Examiner has given you a stop signal. If the Examiner does not give you a stop signal, this will indicate the weight is not within the circle and the task continues to be timed.
- Once you have placed the **Test Weight** in the **Stop Circle** and the Examiner has given you a stop signal, you may reposition the boom tip over the **Test Weight** if necessary. You may not lift or reposition the **Test Weight**.
- At this time the Examiner will reconstruct the corridor as necessary.
- At the direction of the Examiner, at which point timing will begin, lift the **Test Weight** from the **Stop Circle** and travel through the corridor in reverse fashion.
- Timing will stop when you have placed the **Test Weight** on the ground in the **Test Weight Circle** and the Examiner has given you a stop signal. Task is not complete until the load is placed completely within the outside perimeter of the circle and the

Examiner has given you a stop signal. If the Examiner does not give you a stop signal, this will indicate the weight is not within the circle and the task continues to be timed.

- The Proctor will then detach the **Test Weight** from the load hook.
- At the Examiner's direction, swing the hook to the **Start Circle** and allow the Examiner to attach the chain in readiness for the next candidate. Remain in the cab or at the operator's station until the Examiner gives you a clear indication that you may leave. Set the swing brake and lock before leaving the cab.

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 twelve (12) working days of International Assessment Institute's receipt of the score sheet.
- For tests on any other cranes you have made formal application to test on, return to the candidate briefing area.
- 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 Examinations

Physical Examination Form

Physician Instructions for Medical Examinations

Candidate Application - Practical Examinations

Candidate Recertification Application - Written Examinations

Change of Address Form



CANDIDATE APPLICATION

WRITTEN EXAMINATION - MOBILE CRANES

Please type or print neatly.

NAME <i>First</i> <i>Middle</i> <i>Last</i>		
CCO CERTIFICATION NUMBER (IF PREVIOUSLY 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 MOBILE RETEST CANDIDATE? NO YES Date last tested: ____/____/____		

WRITTEN EXAMINATIONS FOR WHICH YOU ARE APPLYING

BUBBLE IN the circle next to the crane type(s) for which you are applying. **CHECK (✓)** the load chart you want to use for the crane type. **NOTE:** You must register for the CORE exam and at least one Specialty examination, unless you are a retest candidate. **RETEST CANDIDATES** check **YES** above and follow the retest instructions below. (If you are recertifying, please use separate Recertification Application Form.) Also check (✓) the appropriate boxes below for correct fees.

EXAM DESCRIPTION

<input type="radio"/> Core Exam	652603	LOAD CHARTS (Check one for each Specialty selected)
<input type="radio"/> Lattice Boom Crawler:	652620	<input type="checkbox"/> American
	652607	<input type="checkbox"/> Manitowoc
<input type="radio"/> Lattice Boom Truck:	652609	<input type="checkbox"/> Link-Belt
	652610	<input type="checkbox"/> Manitowoc
<input type="radio"/> Large Telescopic:	652612	<input type="checkbox"/> Grove
(Swing Cab)	652613	<input type="checkbox"/> Link-Belt
<input type="radio"/> Small Telescopic:	652616	<input type="checkbox"/> Manitex
(Fixed Cab)	652650	<input type="checkbox"/> Broderson

ADDITIONAL SPECIALTY FEES

One (1) <i>Specialty only</i> - Core passed	\$65 <input type="checkbox"/>
Two (2) <i>Specialties only</i> - Core passed	\$75 <input type="checkbox"/>
Three (3) <i>Specialties only</i> - Core passed	\$85 <input type="checkbox"/>

ADD TO TOTAL AMOUNT AT RIGHT



EXAM FEES

Core Exam plus one (1) Specialty	\$165 <input type="checkbox"/>
Core Exam plus two (2) Specialty	\$175 <input type="checkbox"/>
Core Exam plus three (3) Specialty	\$185 <input type="checkbox"/>
Core Exam plus four (4) Specialty	\$195 <input type="checkbox"/>

RETEST CANDIDATE FEES ONLY

Core only for Retest Candidates	\$165 <input type="checkbox"/>
One (1) Specialty only - Core passed	\$65 <input type="checkbox"/>
Two (2) Specialties - Core passed	\$75 <input type="checkbox"/>
Three (3) Specialties - Core passed	\$85 <input type="checkbox"/>
Four (4) Specialties - Core passed	\$95 <input type="checkbox"/>

Candidate Late Fee (if applicable)	\$50 <input type="checkbox"/>
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Incomplete Application Fee (if applicable)	\$30 <input type="checkbox"/>
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TOTAL AMOUNT ENCLOSED

\$

CANDIDATE APPLICATION (CONT'D)

WRITTEN EXAMINATION

TEST SITE AT WHICH YOU INTEND TO TAKE THE WRITTEN EXAMINATION

PAGE 2 OF 2

TEST SITE NAME	TEST SITE COORDINATOR		
TEST SITE MAILING ADDRESS			
CITY	STATE	ZIP	
TEST SITE NUMBER	DATE YOU INTEND TO TAKE THE CCO EXAMINATION (MONTH / DAY / YEAR) / /		

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 CCO Candidate Handbook and have read, and do understand and agree to be bound by all prevailing NCCCO policies and procedures. I attest that I have passed a substance abuse test conducted by a recognized laboratory service and agree to comply with NCCCO's substance abuse policy. I have passed a physical exam that complies with the ASME B30 standard for my certification category and I will continue to comply with those requirements.

CANDIDATE SIGNATURE	DATE
---------------------	------

METHOD OF PAYMENT FOR CANDIDATE EXAMINATION FEES

Do not send cash.

<input type="checkbox"/> 	<input type="checkbox"/> 	<input type="checkbox"/> 	<input type="checkbox"/> Personal Check	<input type="checkbox"/> Employer Check	<input type="checkbox"/> Money Order	<i>Do not staple your check.</i>
---	---	---	---	---	--------------------------------------	----------------------------------

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

Note: Application is valid for one (1) year from date of approval, after which time your fee will be forfeited and a new application is required.

CANDIDATE APPLICATION CHECKLIST

<input type="checkbox"/> I have completed and signed the Candidate Application.
<input type="checkbox"/> I have provided credit card information or a check or money order for the correct amount.



PHYSICAL EXAMINATION FORM

TO BE FILLED IN BY EXAMINING PHYSICIAN (Please print)

DATE OF EXAMINATION
(Month / Day/ Year)

OPERATOR'S NAME			FIRST	Middle	Last
SOCIAL SECURITY #			DATE OF BIRTH (Month / Day/ Year)		AGE
HOME ADDRESS				PHONE	
CITY			STATE	ZIP	

HEALTH HISTORY

Yes	No	Yes	No	Yes	No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

IF ANSWER TO ANY OF THE ABOVE IS YES, EXPLAIN:

GENERAL APPEARANCE AND DEVELOPMENT:

☐ Good ☐ Fair ☐ Poor

VISION:

For Distance: ☐ Right/20 ☐ Left/20 ☐ Both/20 ☐ Without Corrective Lenses ☐ With Corrective Lenses

Evidence of disease or injury: Right _____ Left _____

Color Test: _____

Horizontal Field of Vision: Right _____ Left _____

HEARING:

Right Ear _____ Left Ear _____

Evidence of disease or injury: Right _____ Left _____

AUDIOMETRIC TEST:

Decibel loss at ☐ 500 HZ ☐ 1,000 HZ ☐ 2,000 HZ ☐ 3,000 HZ ☐ 4,000 HZ
☐ 5,000 HZ ☐ 6,000 HZ ☐ 7,000 HZ ☐ 8,000 HZ

THROAT:

THORAX:

Heart: _____

If organic disease is present, is it fully compensated? _____

Blood Pressure: Systolic _____ Diastolic _____

Pulse: Before Exercise _____ Immediately after _____

Lungs: _____

ABDOMEN:

Scars _____ Abdominal Masses _____ Tenderness _____

PHYSICAL EXAMINATION FORM (CONT'D)

PAGE 2 OF 2

HERNIA:	<input type="checkbox"/> Yes <input type="checkbox"/> No	If so, where? _____	Is truss worn? _____
GASTROINTESTINAL:	Ulceration or other disease?		Yes _____ No _____
GENITO-URINARY:	Scars: _____	Urinal Discharge: _____	
REFLEXES:	Romberg _____ Pupillary: _____ Light R _____ L _____ Accommodation: _____ R _____ L _____		
KNEE JERKS:	Right	Normal _____ Increased _____ Absent _____	
	Left	Normal _____ Increased _____ Absent _____	
REMARKS:	_____		
EXTREMITIES:	Upper _____	Lower _____	Spine _____
LABORATORY & OTHER SPECIAL FINDINGS:	Urine Spec. Gr. _____	Alb. _____	Sugar _____
	Other Laboratory Data (Serology, etc.) _____		
	Radiological Data _____	Electrocardiograph _____	
GENERAL COMMENTS:	_____		

NAME OF EXAMINING DOCTOR (PLEASE PRINT)		SIGNATURE
ADDRESS OF EXAMINING DOCTOR		
CITY	STATE	ZIP

MEDICAL EXAMINER'S CERTIFICATE TO BE COMPLETED ONLY IF OPERATOR IS FOUND QUALIFIED

MEDICAL EXAMINER'S CERTIFICATE	MEDICAL EXAMINER'S CERTIFICATE
I certify that I have examined	I certify that I have examined
CRANE OPERATOR'S NAME (PRINT)	CRANE OPERATOR'S NAME (PRINT)
with the knowledge of his/her duties, I find him/her qualified under the regulations.	with the knowledge of his/her duties, I find him/her qualified under the regulations.
<input type="checkbox"/> Qualified only when wearing corrective lenses. <input type="checkbox"/> Qualified only when wearing a hearing aid. <input type="checkbox"/> Qualified — see Accommodation Statement attached.	<input type="checkbox"/> Qualified only when wearing corrective lenses. <input type="checkbox"/> Qualified only when wearing a hearing aid. <input type="checkbox"/> Qualified — see Accommodation Statement attached.
A complete examination form for this person is on file in my office:	A complete examination form for this person is on file in my office:
ADDRESS	ADDRESS
DATE OF EXAMINATION	DATE OF EXAMINATION
NAME OF EXAMINING DOCTOR	NAME OF EXAMINING DOCTOR
SIGNATURE OF EXAMINING DOCTOR	SIGNATURE OF EXAMINING DOCTOR
SIGNATURE OF OPERATOR	SIGNATURE OF OPERATOR
ADDRESS OF OPERATOR	ADDRESS OF OPERATOR



PHYSICIAN INSTRUCTIONS

FOR MEDICAL EXAMINATION

Please give these instructions to the Examining Physician.

PHYSICAL QUALIFICATIONS AND EXAMINATIONS OF CRANE OPERATORS

A person is physically qualified to operate a crane if that person:

1. Has no loss of a foot, a leg, a hand, or an arm, or has been granted a waiver;
2. Has no impairment of the use of a foot, a leg, a hand, fingers, or an arm, and no other structural defect or limitation, which is likely to interfere with his/her ability to control and safely operate a crane or has been granted a waiver upon a determination that the impairment will not interfere with his/her ability to control and safely operate a crane;
3. Has no established medical history or clinical diagnosis of diabetes mellitus currently requiring insulin for control;
4. Has no current clinical diagnosis of myocardial infarction, angina pectoris, coronary insufficiency, thrombosis, or any other cardiovascular disease of a variety to be known accompanied by syncope, dyspnea, collapse or congestive cardiac failure;
5. Has no established medical history or clinical diagnosis of respiratory dysfunction likely to interfere with his/her ability to control and operate a crane safely;
6. Has no current clinical diagnosis of high blood pressure likely to interfere with his/her ability to operate a crane;
7. Has no established medical history or clinical diagnosis of rheumatic, arthritic, orthopedic, muscular, neuromuscular, or vascular disease which interferes with his/her ability to control and operate a crane safely;
8. Has no established medical history or clinical diagnosis of epilepsy or any other condition which is likely to cause loss of consciousness or any loss of ability to control a crane;
9. Has no mental, nervous, organic or functional disease or psychiatric disorder likely to interfere with his/her ability to operate a crane;
10. Has distant visual acuity of at least 20/40 (Snellen) in each eye without corrective lenses or visual acuity separately corrected to 20/40 (Snellen) or better with corrective lenses, distant binocular acuity of at least 20/40 (Snellen) in both eyes with or without corrective lenses, field of vision of at least 70 degrees in the horizontal meridian in each eye, and the ability to recognize the colors of traffic signals and devices showing standard red, green, and amber;
11. When tested by use of an audiometric device, does not have an average hearing loss in the better ear greater than 40 decibels at 500 Hz, 1,000 Hz, 2,000 Hz, 3,000 Hz and 4,000 Hz with or without a hearing aid when the audiometric device is calibrated to American National Standard (formerly ASA Standard) Z24.5-1951;
12. Does not use a prescribed or over the counter substance, including ethanol, which would impair the operator to perform safe operation of a crane. These include illegal drugs, controlled substances (including trace amounts), look-alike drugs, designer drugs, or any other substance which may have the effect on the human body of being a narcotic, depressant, stimulant or hallucinogen. An exception to this ruling is that an operator may use such a substance or drug if the substance or drug is prescribed by a licensed medical practitioner who is familiar with the operator's medical

history and all assigned duties and who has advised the operator that the prescribed substance or drug will not adversely affect the operator's ability to safely operate a crane. The treating physician will also provide a waiver to the Medical Examiner. (See waiver statement.)

INSTRUCTIONS FOR PERFORMING AND RECORDING PHYSICAL EXAMINATIONS

The examining physician should review these instructions before performing the physical examination. Answer each question yes or no where appropriate.

The examining physician should be aware of the rigorous physical demands and mental and emotional responsibilities placed on the operator of cranes. In the interest of public safety the examining physician is required to certify that the operator does not have any physical, mental, or organic defect of such a nature as to affect the operator's ability to operate safely a crane.

General Information. The purpose of this history and physical examination is to detect the presence of physical, mental or organic defects of such a character and extent as to affect the applicant's ability to operate a crane safely. The examination should be made carefully and at least as complete as indicated by the attached form. History of certain defects may be cause for rejection or indicate the need for making certain laboratory tests or a further, and more stringent, examination. Defects may be recorded which do not, because of their character or degree, indicate that certification of physical fitness should be denied. However, these defects should be discussed with the applicant and he/she should be advised to take the necessary steps to ensure correction, particularly of those which, if neglected, might lead to a condition likely to affect his/her ability to operate safely.

General Appearance and development. Not marked overweight. Not any posture defect, perceptible limp, tremor, or other defects that might be caused by alcoholism, thyroid intoxication, or other illnesses including sedating or habit forming drugs.

Head-eyes. When other than the Snellen chart is used, the results of such test must be expressed in values comparable to the standard Snellen test. If the applicant wears corrective lenses, these should be worn while applicant's visual acuity is being tested. If appropriate, indicate on the Medical Examiner's Certificate by checking the box "Qualified only when wearing corrective lenses." In recording distance vision use 20 feet as normal. Report all vision as a fraction with 20 as a numerator and the smallest type read at 20 feet as denominator. Note ptosis, discharge, visual fields, ocular muscle imbalance, color blindness, corneal scar, exophthalmos, or strabismus, uncorrected by corrective lenses.

Contact lens wear may not be allowed in many work areas where mandatory eye protection disallows contact lens wear. The applicant must be made aware that safety glass eye wear may routinely be required at job sites and must also pass vision testing protocols with safety eye glasses specified and approved ANSI Z89.

Ears. Note evidence of mastoid of middle ear disease, discharge, symptoms of aura vertigo, or Meniere's Syndrome. When recording hearing an audiometer is used to test hearing. Record decibel loss at 500 Hz, 1,000 Hz, 2,000 Hz, 3,000 Hz, and 4,000 Hz.

Throat. Note evidence of disease, irreparable deformities of the throat likely to interfere with eating or breathing, or any laryngeal condition which could interfere with the safe operation of a crane.

Thorax-heart. Stethoscopic examination is required. Note murmurs and arrhythmias, and any past or present history of cardio-

PHYSICIAN INSTRUCTIONS (CONT'D)

FOR MEDICAL EXAMINATION

vascular disease, of a variety known to be accompanied by syncope, dyspnea, collapse, enlarged heart or congestive heart failures. Electrocardiogram is required when findings so indicate.

Blood Pressure. Record with either spring or mercury column type of sphygmomanometer. If the blood pressure is consistently above 160/90mm. Hg., further tests may be necessary to determine whether the operator is qualified to operate a crane.

Lungs. If any lung disease is detected, state whether active or arrested; if arrested, your opinion as to how long it has been quiescent.

Gastrointestinal system. Note any diseases of the gastrointestinal system.

Abdomen. Note wounds, injuries, scars, or weakness of muscles of abdominal walls sufficient to interfere with normal function. Any hernia should be noted if present. State how long and if adequately contained by truss.

Abnormal masses. If present, note location, if tender, and whether or not applicant knows how long they have been present. If the diagnosis suggests that the condition might interfere with the control and safe operation of a crane, more stringent tests must be made before the applicant can be certified.

Genito-urinary. Urinalysis is required. Acute infections of the genito-urinary tract, as defined by local and State public health laws, indications from urinalysis of uncontrolled diabetes, symptomatic albuminuria in the urine, or other findings indicative of health conditions likely to interfere with the control and safe operation of a crane will disqualify an applicant from operating a crane.

Neurological. If positive Romberg is reported, indicate degrees of impairment. Pupillary reflexes should be reported for both light and accommodation.

Knee jerks are to be reported absent only when not obtainable upon reinforcement and as increased when foot is actually lifted from the floor following a light blow on the patella, sensory vibratory and positional abnormalities should be noted.

Extremities. Carefully examine upper and lower extremities. Record the loss or impairment of a leg, foot, toe, arm, hand, or fingers. Note any and all deformities, the presence of atrophy, semiparalysis or paralysis, or varicose veins. If a hand or finger deformity exists, determine whether sufficient grasp is present to enable the operator to secure and maintain a grip on the controls. If a leg deformity exists, determine whether sufficient mobility and strength exists to enable the operator to operate pedals properly. Particular attention should be given to, and a record should be made of, any impairment or structural defect which may interfere with the operator's ability to operate a crane safely.

Spine. Note deformities, limitation of motion, or any history of pain, injuries, or disease, past or presently experienced in the cervical or lumbar spine region. If findings so dictate, radiologic and other examinations should be used to diagnose congenital or acquired defects; or spondylolisthesis and scoliosis.

Recto-genital studies. Diseases or conditions causing discomfort should be evaluated carefully to determine the extent to which the condition might be handicapping while lifting, pulling, or during periods of prolonged operation that might be necessary as part of the operator's duties.

Laboratory and other special findings. Urinalysis is required, as

well as such other tests as the medical history or findings upon physical examination may indicate are necessary. A serological test is required if the applicant has a history of luetic infection or present physical findings indicate the possibility of latent syphilis. Other studies deemed advisable may be ordered by the examining physician.

Diabetes. If insulin is necessary to control a diabetic condition, the operator is not qualified to operate a crane. If mild diabetes is noted at the time of examination and it is stabilized by use of a hypoglycemic drug and a diet that can be obtained while the operator is on duty, it should not be considered disqualifying. However, the operator must remain under adequate medical supervision.

General. The physician must date and sign his findings upon completion of the examination.

The medical examination shall be performed by a licensed doctor of medicine or osteopathy. A licensed ophthalmologist or optometrist may perform examinations pertaining to visual acuity, field of vision and ability to recognize colors.

If the medical examiner finds that the person he/she examined is physically qualified to operate a crane, the medical examiner shall complete the Medical Examiner's Certificate and furnish one copy to the person examined and one copy to the employer.

The medical examiner must attach all treating physician, ophthalmologist, or optometrist medical information pertaining to the applicant. Waiver acceptance is up to the medical examiner when waiver is attached to applicant application. The medical examiner is expected to verify the waiver provided by treating physician and qualify or disqualify applicant because of his examination of the applicant.

The medical examiner is expected to perform testing as needed of all applicants and may submit an accommodation statement if applicable about applicants' physical limitations to aid an employer with ADA guidelines. Any accommodation statements must be attached to medical attestation.

Waiver by physician. Treating physicians must provide signed statements disclosing disease state and/or medication and that the applicant is qualified for the practical examination, and state, "I have examined the aforementioned crane operator applicant and within medical certainty I find the applicant at no greater risk than the general population as a result of any physical, mental, or organic defects, and can safely operate a crane with the aforementioned diagnosis and treatment regimen subject to passing the CCO practical examination."



CANDIDATE APPLICATION

PRACTICAL EXAMINATION

Please type or print neatly.

NAME First Middle Last		
NCCCO CERTIFICATION NUMBER (IF PREVIOUSLY)	SOCIAL SECURITY #	
MAILING ADDRESS		DATE OF BIRTH
CITY	STATE	ZIP
PHONE	CELL	FAX
COMPANY ORGANIZATION		PHONE
COMPANY STREET ADDRESS		
CITY	STATE	ZIP
ARE YOU A MOBILE RECERTIFICATION CANDIDATE? NO <input type="checkbox"/> YES <input type="checkbox"/> PRACTICAL EXAM TEST DATE ____/____/____		

Indicate with a check mark the crane type(s) you wish to be tested on and the date you passed the corresponding Written Examination if applicable. If you have passed the Written Exams you must also provide a copy of either a score report, or certification card.

PRACTICAL EXAM

- ☐ Lattice Boom
- ☐ Large Telescopic (Swing Cab)
- ☐ Small Telescopic (Fixed Cab)
- ☐ Tower
- ☐ Overhead

WRITTEN EXAM

- Lattice Boom Crawler
and/or
Lattice Boom Truck
- Large Telescopic (TLL)
- Small Telescopic (TSS)
- Tower Crane
- Overhead Crane

Date on which you passed the Written Exam

____/____/____
____/____/____
____/____/____
____/____/____
____/____/____
____/____/____

TEST SITE AT WHICH YOU INTEND TO TAKE THE PRACTICAL EXAMINATION.

TEST SITE COORDINATOR NAME		
PHONE	FAX	E-MAIL
TEST SITE STREET ADDRESS		
CITY	STATE	ZIP

Under penalties of perjury, I declare that the foregoing statements and those to 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. I attest that I have passed a substance abuse test conducted by a recognized laboratory service and agree to comply with NCCCO's substance abuse policy. I have passed a physical exam that complies with the ASME B30 standard for my certification category and I will continue to comply with those requirements.

CANDIDATE SIGNATURE	DATE
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CANDIDATE APPLICATION (CONT'D) PRACTICAL EXAMINATION

NCCCO CERTIFICATION CARDS

PAGE 2

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.

Attach Color
Passport Photo
Here

1 - 3/8 " W X 1 - 3/4 " H

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

PRACTICAL EXAMINATION FEES

Checks and money orders must be made payable to **International Assessment Institute**. Credit cards (Visa ,Master Card or American Express) may be used by filling out the Credit Card Box below.



Check the box next to the Practical Exam category for which you are registering.

Examination Fees:

- ☐ One Mobile Crane Type - \$60 ☐ Two Mobile Crane Types - \$70 ☐ Three Mobile Crane Types - \$80
- ☐ Tower Crane Category Only - \$60
- ☐ Tower Crane *(added to existing Mobile Crane Certification, no new card)* - \$50
- ☐ Overhead Crane Category Only - \$60
- ☐ Overhead Crane *(Added to existing Mobile and/or Tower Crane Certification, no new card)* - \$50
- ☐ Charge an additional \$25 for a replacement card.

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: NCCCO Testing

Do not send this application to IAI or NCCCO. Give this application, along with payment and all necessary documentation, to your Test Site Coordinator on test day.



CANDIDATE RECERTIFICATION APPLICATION

WRITTEN EXAMINATION

Please type or print neatly.

NAME <i>First</i>			<i>Middle</i>			<i>Last</i>								
NCCCO CERTIFICATION NUMBER (IF PREVIOUSLY CERTI-)			DATE OF BIRTH			SOCIAL SECURITY #								
MAILING ADDRESS			CITY			STATE			ZIP					
PHONE			CELL			FAX			E-MAIL					
COMPANY ORGANIZATION						PHONE								
COMPANY MAILING ADDRESS						CITY			STATE			ZIP		

WRITTEN EXAMINATIONS FOR WHICH YOU ARE APPLYING

This application is for the purpose of recertification. You may **ONLY** recertify in the category(ies) in which you are currently certified. **BUBBLE IN** the circle next to the categories for which you are applying for recertification. If you would like to take additional examinations in which you are not currently certified, **BUBBLE IN** the examination(s) of your choice and **CHECK** (✓) the load chart you want to use for the crane type. *You must also provide a copy of either a score report or certification card.*

EXAMINATIONS

RECERTIFICATION EXAMS		LOAD CHARTS (Check one for each Specialty selected)	
<input type="radio"/> Core Exam	652605		
<input type="radio"/> Lattice Boom Crawler:	652625	<input type="checkbox"/> American	
	652608	<input type="checkbox"/> Manitowoc	
<input type="radio"/> Lattice Boom Truck:	652611	<input type="checkbox"/> Link-Belt	
	652635	<input type="checkbox"/> Manitowoc	
<input type="radio"/> Large Telescopic:	652614	<input type="checkbox"/> Grove	
(Swing Cab)	652645	<input type="checkbox"/> Link-Belt	
<input type="radio"/> Small Telescopic:	652656	<input type="checkbox"/> Manitex	
(Fixed Cab)	652655	<input type="checkbox"/> Broderson	
<input type="radio"/> Tower Crane:	654602		
<input type="radio"/> Overhead Crane:	653602		

ADDITIONAL EXAMINATIONS		LOAD CHARTS (Check one for each Specialty selected)	
<input type="radio"/> Core Exam	652603		
<input type="radio"/> Lattice Boom Crawler:	652620	<input type="checkbox"/> American	
	652607	<input type="checkbox"/> Manitowoc	
<input type="radio"/> Lattice Boom Truck:	652609	<input type="checkbox"/> Link-Belt	
	652610	<input type="checkbox"/> Manitowoc	
<input type="radio"/> Large Telescopic:	652612	<input type="checkbox"/> Grove	
(Swing Cab)	652613	<input type="checkbox"/> Link-Belt	
<input type="radio"/> Small Telescopic:	652616	<input type="checkbox"/> Manitex	
(Fixed Cab)	652650	<input type="checkbox"/> Broderson	
<input type="radio"/> Tower Crane:	654601		
<input type="radio"/> Overhead Crane:	653601		

FEES

RECERTIFICATION EXAM FEES	
Core Exam plus one (1) Specialty	\$150 <input type="checkbox"/>
Core Exam plus two (2) Specialties	\$155 <input type="checkbox"/>
Core Exam plus three (3) Specialties	\$160 <input type="checkbox"/>
Core Exam plus four (4) Specialties	\$165 <input type="checkbox"/>
Tower Crane (only)	\$150 <input type="checkbox"/>
Tower Crane (with mobile crane)	\$50 <input type="checkbox"/>

RECERTIFICATION RETEST FEES	
Core only for Retest Candidates	\$150 <input type="checkbox"/>
One (1) Specialty Only - Core passed	\$50 <input type="checkbox"/>
Two (2) Specialties - Core passed	\$55 <input type="checkbox"/>
Three (3) Specialties - Core passed	\$60 <input type="checkbox"/>
Four (4) Specialties - Core passed	\$65 <input type="checkbox"/>
Tower Crane	\$50 <input type="checkbox"/>

ADDITIONAL EXAM FEES (ONLY For Candidates adding to existing certifications)	
One (1) Specialty Only	\$65 <input type="checkbox"/>
Two (2) Specialties	\$75 <input type="checkbox"/>
Three (3) Specialties	\$85 <input type="checkbox"/>
Tower Crane	\$50 <input type="checkbox"/>
Overhead Crane	\$50 <input type="checkbox"/>

Candidate Late Fee (if applicable)	\$50 <input type="checkbox"/>
Incomplete Application Fee (if applicable)	\$30 <input type="checkbox"/>
TOTAL AMOUNT ENCLOSED	\$ <input type="text"/>



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		First	Middle	Last
NCCCO CERTIFICATION NUMBER (IF PREVIOUSLY CERTI-		SOCIAL SECURITY #		

OLD ADDRESS

STREET ADDRESS			
CITY		STATE	ZIP
PHONE	FAX	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: NCCCO Testing
600 Cleveland Street, Suite 900
Clearwater, Florida 33755

Phone: 727-449-8525

Fax: 727-461-2746



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