



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

**PRACTICAL EXAMINATION
TEST SITE COORDINATOR
HANDBOOK**

- **ARTICULATING CRANE OPERATOR**



BOARD OF DIRECTORS

This handbook reflects NCCCO's current policies at the time of publication. To be sure that you have the latest version of this book, see the Handbooks and Forms page on the NCCCO website.

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



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



ISO/IEC 17024
Personnel Certification Body
#0756

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

Dear Practical Test Site Coordinator:

Welcome to the Practical Examination segment of the National Commission for the Certification of Crane Operators (NCCCO) articulating crane operator certification program.

CCO Practical Examinations have been developed as fair, valid, and reliable assessments of the essential skills that crane operators need to demonstrate to be certified by NCCCO to operate cranes. These Practical Examinations were developed by NCCCO task forces made up of experts from all aspects of the crane industry—crane operators, training directors, managers, supervisors, manufacturers—who together represent many thousands of hours of crane experience. These volunteers gave freely of their time and expertise with the goal of improving the safety of all whose work brings them into contact with cranes and lifting equipment. NCCCO used its exam development expertise to guide its task forces in establishing key elements of the program, including identifying essential skills, selecting tasks, standardizing test conditions, developing the scoring process, establishing reliability among tests, and creating flexible application and scheduling procedures. In concert with its task forces, NCCCO also designed the Practical Examiner Accreditation Programs whereby NCCCO trains and accredits CCO-certified crane operators to administer CCO Practical Examinations.

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

This handbook has been developed to provide you, the Practical Test Site Coordinator, with all the information you need to prepare for successful CCO Practical Examinations. As the Practical Test Site Coordinator, you play a critical role in the smooth administration of CCO exams on test day. ***It is vitally important that you study this entire handbook carefully before making any preparations for a practical test administration.*** The overview of the Practical Examination Process on page 1 and the summary of your responsibilities in the subsequent chapter are particularly important to understand the requirements for hosting and administering Practical Examinations. As you read through this handbook, you will find that it provides a large amount of detail on such aspects as crane selection and configuration layout of the Test Site and construction of the Test Weight and other Test Site equipment. The validity and reliability of the test you are planning to administer depends on your following of these each requirements precisely. Failure to do so could result in your practical test being declared invalid and the need to start over.

NCCCO recognizes the commitment you have made and the resources you will allocate to hosting CCO Practical Examinations. We want your experience to be a positive and successful one, and we stand ready to assist you in reaching that goal. If, after reading this handbook, there is anything you do not fully understand or need clarifying, please call NCCCO at 703-560-2391 or email info@nccco.org. NCCCO staff will guide you through any aspects of the Practical Examination administration process that you would like explained in detail.

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Table of Contents

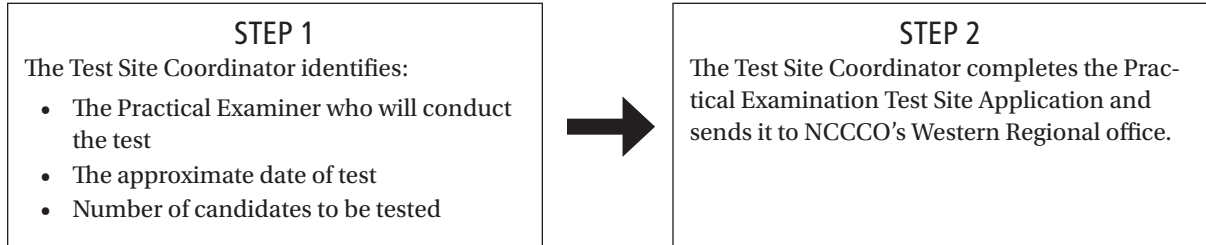
Practical Examination Process	1
Hosting and Administering CCO Practical Examinations	3
Criteria for Test Sites	3
New and Probationary Test Sites	3
Test Site Coordinator	3
Practical Examiner	4
Proctors	4
Applying to Host a Practical Examination.....	4
Site Layout.....	4
Practicing the Test Course.....	5
Permanent Test Sites.....	5
Secure Test Sites	5
Verifying Candidate Eligibility.....	5
Candidate Photographs	5
Examination Fees	5
Submitting Applications.....	5
Score Reporting	5
Mentor Program	6
Audit Program	6
Test Site Setup	7
Pole Barrier Construction.....	8
Articulating Crane Operator—Test Site Coordinator Forms.....	9
Test Site Application—Articulating Cranes.....	11
Test Site Coordinator Agreement—Practical Exams	12
Practical Test Administration Summary Form	13
Candidate Application—Practical Examination	15
Detailed Score Report Request Form	17
Security Requirements Report	19
Permanent Test Site Application.....	21
Articulating Boom Cranes.....	23
Photographs	25
Sample Test Site Layout (CAD).....	27
Test Site Layout Instructions	28
Crane Selection and Setup.....	29
Ready Reference Checklist.....	31
Site Report.....	33
Crane Report	36

Articulating Boom Loaders	37
Photographs	39
Sample Test Site Layout (CAD).....	41
Test Site Layout Instructions	42
Crane Selection and Setup.....	43
Ready Reference Checklist.....	45
Site Report.....	47
Crane Report	50
NCCCO Information Release Policy.....	51
Summary of Changes	52

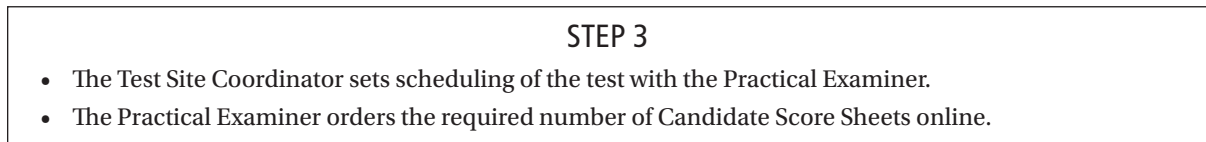


Practical Examination Process

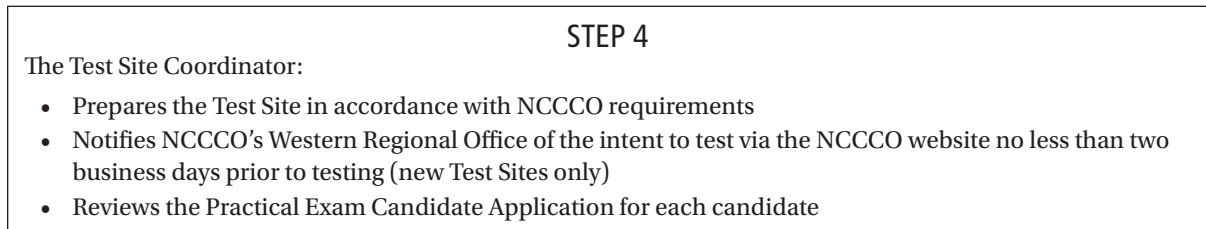
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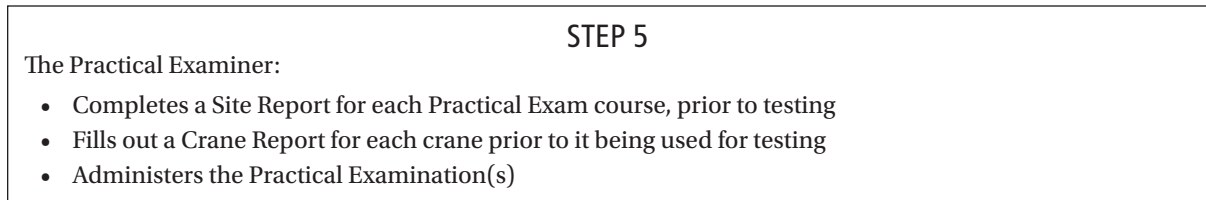
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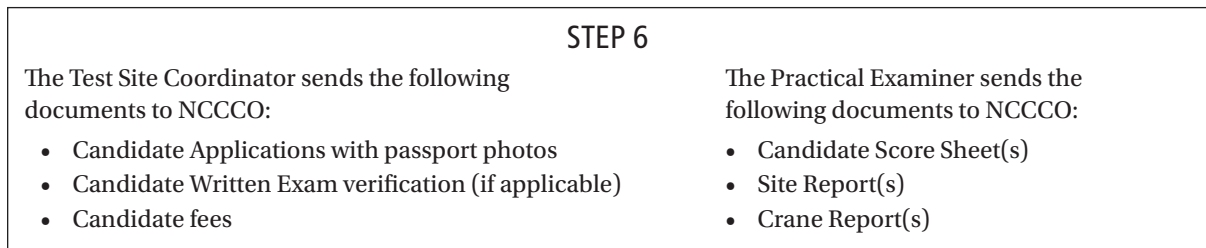
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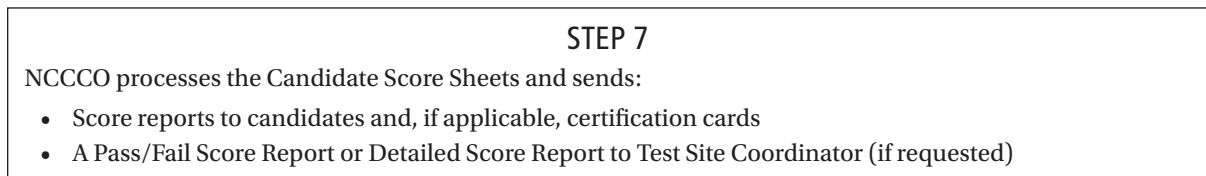
ON THE DAY OF THE PRACTICAL EXAM...



AFTER THE PRACTICAL EXAM...



WITHIN 12 BUSINESS DAYS AFTER RECEIVING THE NECESSARY DOCUMENTS...



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Hosting and Administering CCO Practical Examinations

Facilities seeking to serve as NCCCO Practical Exam Sites must meet all the following criteria for hosting a Practical Exam. If the facility meets the stated criteria, NCCCO will provide all the information necessary to schedule Practical Examinations.

CRITERIA FOR TEST SITES

Each Practical Exam Test Site facility must arrange to have on site the following:

- A designated Test Site Coordinator
- An NCCCO-Accredited Practical Examiner
- A designated Proctor(s) to assist the Practical Examiner during the test
- Crane(s) that meet NCCCO requirements for the Practical Exam(s) to be given
- An area suitable for testing on the cranes selected; pole corridors may be set up on asphalt, concrete surface, or firm and compacted sand, dirt, or gravel (free of vegetation) with a sufficiently uniform surface to permit the poles to stand vertical and slide freely; grass surfaces are not acceptable
- Any ancillary equipment necessary for conducting the exam(s)
- An indoor facility suitable for the Pre-Test Briefing of exam candidates and a waiting area.

In addition, Practical Exam Test Sites must pay an annual \$50 registration fee at the time of application and before the first practical test of each calendar year thereafter. If running a variety of CCO exams at that location, only one Test Site fee is charged on an annual basis. Employers or organizations with more than one Test Site must pay a fee for each site. Candidate Score Sheets from exams conducted at Practical Exam Test Sites that have not paid the \$50 annual fee will not be processed.

Test Sites are established by the physical address where the equipment is located. Multiple companies and/or sites are not permitted to be established under the same address, although additional equipment can be added by submitting the appropriate Test Site Application(s) to NCCCO's Western Regional Office. Should a Test Site need to become inactive or remove equipment, it must provide the following information to NCCCO in writing:

- PE Site Number
- Company Representative
- Company
- Contact information (phone and email)
- Company Representative signature

No site will be discontinued without this documentation. Any Practical Exam Test Sites that become inactive (i.e., do not pay their annual test site fee) will be placed in probationary status (see below) and must follow the requirements for new test sites should they want to become approved again in the future.

NEW AND PROBATIONARY TEST SITES

For all new test sites and for 12 months after their first test administration, all new NCCCO Practical Exam Test Sites are conferred "probationary" status. The purpose of this probation is to monitor new test sites and ensure that they are following NCCCO's policies and procedures. These procedures include proper notification of testing, proper cancellation, and cooperation in the audit process.

Probationary test sites are required to provide notification via the NCCCO website at <http://nccco.org/login> no less than two business days prior to any test administration. Changes or cancellations to testing plans are subject to the same notification requirement. Once a site has provided test notification to NCCCO, that will be considered intent to test on that day and the site may be audited even if no testing occurs.

After a 12-month time frame, a probationary test site's history is reviewed to ensure that it has followed NCCCO's policies and procedures, including notification procedures. If a test site has not been providing proper notification, the probationary period will be extended at six-month intervals until such time that the policies and procedures have been properly followed.

TEST SITE COORDINATOR

The person designated by the host company or organization to liaise with NCCCO and its testing company International Assessment Institute (IAI) on test administration matters is known as the *Test Site Coordinator*. The Test Site Coordinator is responsible for the following:

- Preparing a test area in accordance with the directions in the Test Site Setup, Test Site Layout Instructions, and Test Site Layout (CAD) provided by NCCCO for the crane type to be tested on
- Preparing test equipment in accordance with the directions provided under Crane Selection and Setup for the appropriate crane type
- Scheduling candidates to take the Practical Exam, and informing them of their test date, location, and time
- Liaising with the Practical Examiner and NCCCO in all aspects of test preparation and administration

- Remaining at the Test Site throughout each test administration (or a designated representative)
- Have a direct email address to receive email notifications from NCCCO (this may not be a shared address)

Test Site Coordinators are also responsible for ensuring that all candidates and proctors meet NCCCO's personal protective equipment (PPE) policies, which at a minimum meet OSHA requirements.

All Test Site Coordinators and their designated representative are required to submit a completed Test Site Coordinator Agreement form to the NCCCO Western Regional Office.

NCCCO periodically emails Information Bulletins to all Test Site Coordinators containing clarifications and updated policies. To remain in good standing, Test Site Coordinators are required to abide by the information contained therein.

PRACTICAL EXAMINER

Practical Examinations are conducted by NCCCO-accredited Practical Examiners. NCCCO does not assign a Practical Examiner for your site; you can search a directory of accredited Practical Examiners available for hire on NCCCO's website at www.nccco.org/pe-for-hire. Practical Examiners must have an email address as a condition of accreditation.

Examiners may test only one candidate on one crane at one time. Thus, testing a candidate (or several candidates, in turn) on one crane, requires only one Practical Examiner. Testing two candidates simultaneously on separate cranes would, however, require two Practical Examiners, and so on.

If you need assistance on selecting a Practical Examiner, contact NCCCO.

Only Practical Examiners are permitted to request official Candidate Score Sheets from NCCCO. These must be requested at least two weeks prior to the intended test date.

PROCTORS

Proctors are volunteers who assist the Practical Examiner in administering exams. The Test Site Coordinator is responsible for assigning one Proctor per Practical Examiner to assist during the test. Proctors are under the direction of the Practical Examiner during the test admin-

istration. Candidates waiting to take the Practical Exam are permitted to serve as Proctors during Practical Exams.

APPLYING TO HOST A PRACTICAL EXAMINATION

When the Test Site Coordinator is ready to schedule a test, he/she must submit to NCCCO a completed Test Site Application.

NCCCO Practical Test Sites are registered by the host company for which the services are being provided, not the training company or the Practical Examiner.

The Test Site Application shall be filled out under the company's information for which the services are being provided (not the training company). All contact information (including an email address for the company contact person) must be provided. The training representative is not an acceptable contact person.

As illustrated on page 1, Test Site Application(s) should be sent, along with all additional requested materials, to NCCCO no later than four weeks prior to the desired test date. Note that all the information requested must be included; incomplete applications cannot be processed.

Once the application has been approved, NCCCO will send the layout of the Test Site and crane setup, including a CAD Test Site Plan. NCCCO will email the CAD directly to the host company representative and the Test Site Coordinator.

SITE LAYOUT

Using the information NCCCO provides, including the Test Site Layout (CAD) and the instructions contained in this handbook, the Test Site Coordinator should prepare the cranes and lay out the Test Site.

Before the Practical Examiner can begin testing, he/she will verify the test site has been laid out correctly.

Copies of the Site Reports and Crane Reports used for each crane type are provided in this handbook. NCCCO encourages Test Site Coordinators to use these reports to check that all items are in order before the Examiner arrives. This will expedite the Examiner's verification of the Test Site.

For permanent practical Test Sites, the requirement for a site inspection prior to each test may be waived. This option is available only to Test Sites where there has been no change in test crane, test site/location, and Test Site Coordinator in the last six months. If it has been more than six months since the last full Site Report was submitted, another full Site Report must be submitted.

*If the Test Site Coordinator requests a **Test Site Report Waiver**, the Examiner must have the Test Site Coordinator sign a statement on the last page of the Site Report attesting that all the requirements for such a waiver have been met.*

PRACTICING THE TEST COURSE

NCCCO discourages the use of authorized test courses for practice purposes. No CAD will be issued for a “practice” purpose only. Those wishing to establish a test course for practice purposes may use the Sample CAD provided in this handbook. Practicing the Practical Exam on or before the day of the test is permitted, however, with the approval of the site’s Test Site Coordinator.

PERMANENT TEST SITES

Practical Test Sites that test on a regular basis may become permanent Practical Test Sites. For such sites, the requirement for a site inspection prior to each test may be waived. This option is available only to test sites where there has been no change in test crane, test site/location, and Test Site Coordinator in the last 12 months.

An annual full site report is required for permanent test sites.

Use the Permanent Test Site Application in this handbook to apply for Permanent Test Site status. Probationary test sites may not apply.

SECURE TEST SITES

Test sites with limited access and/or enhanced security protocols that might interfere with the ability of testing personnel and/or NCCCO staff and Auditor to enter are required to indicate on their Test Site Applications that they are secure sites. They must also complete the enclosed Security Requirements Report and provide any associated documentation (such as the site’s formal security policy), all of which should be submitted along with the Test Site Application. All Secure Test Sites—including permanent Test Sites—must submit completed Security Requirement Reports annually.

VERIFYING CANDIDATE ELIGIBILITY

Candidates must pass both a Written Exam and a Practical Exam in the category(s) they wish to be certified in. Candidates have 12 months after they pass the first Exam (Written or Practical) in which to take and pass 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

ABC Written Exam would have 12 months to pass the ABC Practical Exam.

CANDIDATE PHOTOGRAPHS

All candidate applications must be accompanied by a color, head-and-shoulders photograph of the candidate without hat or sunglasses. Test Sites equipped with digital photographic equipment are encouraged to submit candidate photographs to NCCCO in digital format via email or CD.

EXAMINATION FEES

Examination fees for the Practical Examinations are as follows:

- One Articulating Crane type (*new candidate*) \$60
- Two Articulating Crane types (*new candidate*) \$70
- One Articulating Crane type (*current CCO–certified Mobile Crane Operator, or new candidate registering for Mobile Crane Operator exams at the same time*)..... \$50
- Two Articulating Crane types (*current CCO–certified Mobile Crane Operator, or new candidate registering for Mobile Crane Operator exams at the same time*) \$60
- Updated/replacement card \$25

SUBMITTING APPLICATIONS

Once testing is completed, the Test Site Coordinator must send to NCCCO via overnight or second-day courier:

- Candidate applications with photos
- Candidate fees

SCORE REPORTING

All candidates are mailed a report of their performance from NCCCO approximately 12 business days after receipt of the Candidate Score Sheets from the Practical Examiner.

Test Site Coordinators are automatically sent at no charge a Pass/Fail Score Report for all candidates testing at their sites.

Test Site Coordinators may also request a Detailed Score Report for all candidates by completing the appropriate form in this handbook and submitting it, along with a \$50 processing fee, to NCCCO when returning test administration materials for each administration. **Note that all requests for Detailed Score Reports must include the release signature of each candidate.**

MENTOR PROGRAM

Practical Test Sites testing for the first time are encouraged to request a Mentor from NCCCO. Mentors are NCCCO-accredited Practical Examiners who have experience in laying out Test Sites and who have been approved as Mentors by NCCCO's Practical Exam Management Committee.

Mentors are volunteers who receive no compensation from NCCCO for their services. However, Test Sites may negotiate fees with Mentors for test site setup and/or Practical Exam guidance services. Practical Test Sites interested in having a Mentor attend their site should contact NCCCO.

AUDIT PROGRAM

NCCCO conducts audits of Test Sites and/or Practical Examiners in accordance with the accreditation requirements of the American National Standards Institute (ANSI).

Test Sites and/or Practical Examiners are selected for audits on the basis of a variety of criteria, including random selection, in response to issues reported by candidates, unusually high or low pass rates, new Test Sites, or probationary Examiners.

Once a site has been selected for an audit, the Test Site Coordinator or company representative from the site may be notified by letter from NCCCO prior to the scheduled test day. In addition, the auditor will contact the Test Site Coordinator or company representative to verify the testing date and the site address. Unannounced audits may also be conducted.

It is a condition of Practical Examiner accreditation and Test Site status that all Test Site personnel, including the Test Site Coordinator, Practical Examiner, and Proctor, cooperate fully with the NCCCO auditor during the audit process.

Practical Examiners who have been audited and have been notified that an additional audit is required, will be responsible for the expenses incurred by NCCCO for the additional audit. Any practical exams conducted by the Examiner will not be scored until NCCCO has been reimbursed for the incurred expenses.



Test Site Setup

ARTICULATING CRANE OPERATOR

PRE-TEST CANDIDATE BRIEFING AREA

This area must be located so that waiting candidates are unable to observe testing procedures. It must be provided with:

- NCCCO candidate instruction materials, including a written description of the examination (Candidate Handbook) and copies of the Test Site Layout (CAD)
- Operator's manuals and load charts for all cranes to be tested on
- A computer or DVD player and television for candidates to watch the CCO Practical Exam video (up to 24 hours before the Practical Exam)
- An indoor facility suitable for the Pre-Test Briefing of exam candidates, to include:
 - Sufficient tables and chairs to seat candidates for the Pre-Test Briefing
 - Head table or podium at the front of the room
 - Registration table
 - Quiet, well-lit, surroundings with a comfortable temperature
 - Easy access to unlocked rest rooms stocked with sufficient supplies
 - Easy access to a water fountain
 - Large signs prominently posted to make candidates aware of the location of the test

ZIGZAG CORRIDOR

The Zigzag Corridor is composed of a PVC-pole barrier with one tennis ball placed on top of each pole.

POLES

Poles are made of 1½-inch inner diameter, white PVC pipe (SCH 40), 36 in. long, painted orange or red on top 12 in. (one inside splice per 3 ft. pole permitted; outside splices of PVC pipes NOT permitted; see page 8 for illustration).

The poles must be mounted on a pole base made of two ¾-inch, CDX-grade (or better) plywood glued together, cut 12 in. long with ends cut square. As an alternative to plywood, high density polyethylene (HDPE) or equivalent, may be used to construct the pole bases. This material must meet the following requirements:

- Weight: 5 lbs. (±10 percent)
- Nominal dimensions: 12 in. × 12 in. × 1½ in. (±½ in.)

The weight must be spread evenly across the base. Pole bases may be coated with a protective finish if desired, so long as they continue to meet the stated design and construction parameters.

Pole bases must be placed as indicated on the Test Site Layout (CAD). A taut, longitudinal string line must be placed on the ground under the centerline of each pole base. A cut concrete line may be used in lieu of a string line.

To assist the Examiner and Proctor in restoring the Zigzag Corridor between tasks, the tennis balls may be attached to the pole by means of 12 in. long nylon string. The string must be attached between 2 in. and 8 in. from the top of the pole and to the tennis ball as illustrated on page 8.

During the test, the string loops must face towards the outside of the corridor to avoid the string being snagged on the Test Weight. If the string does become snagged during a test, the Examiner must stop the test, restore the corridor to its original condition, and direct the candidate to restart the task.

HURDLE

The hurdle is constructed of two poles (similar to corridor poles) with notches cut out to hold PVC pipe in a horizontal position. The notches on the poles must be centered and must not exceed 1 in. wide and ½ in. deep. The horizontal PVC pipe (SCH 40) must have a 1 in. inner diameter, with a length of 6 ft. ± 1 in. for Articulating Boom Cranes and a length of 7 ft. ± 1 in. for Articulating Boom Loaders.

DESIGNATED AREA CIRCLES

All circles must have a 4 ft. outside diameter with a clearly marked inside line at least 2 in. wide; they must be located per the Test Site Layout (CAD). The suggested method of marking the circles is a thin, durable, 4 ft. outside diameter rubber mat that secures to the ground and is of a color that contrasts distinctly with the ground surface.

RECTANGLES

On the ABL course, the Truck Bed and Corral rectangle are 6 ft. × 10 ft., with a minimum 2 in. wide line inside the rectangle. The suggested method of marking the rectangles is spray paint or tape of a color that contrasts distinctly with the ground surface around the inside perimeter. These rectangles must be precisely located per the Test Site Layout (CAD).

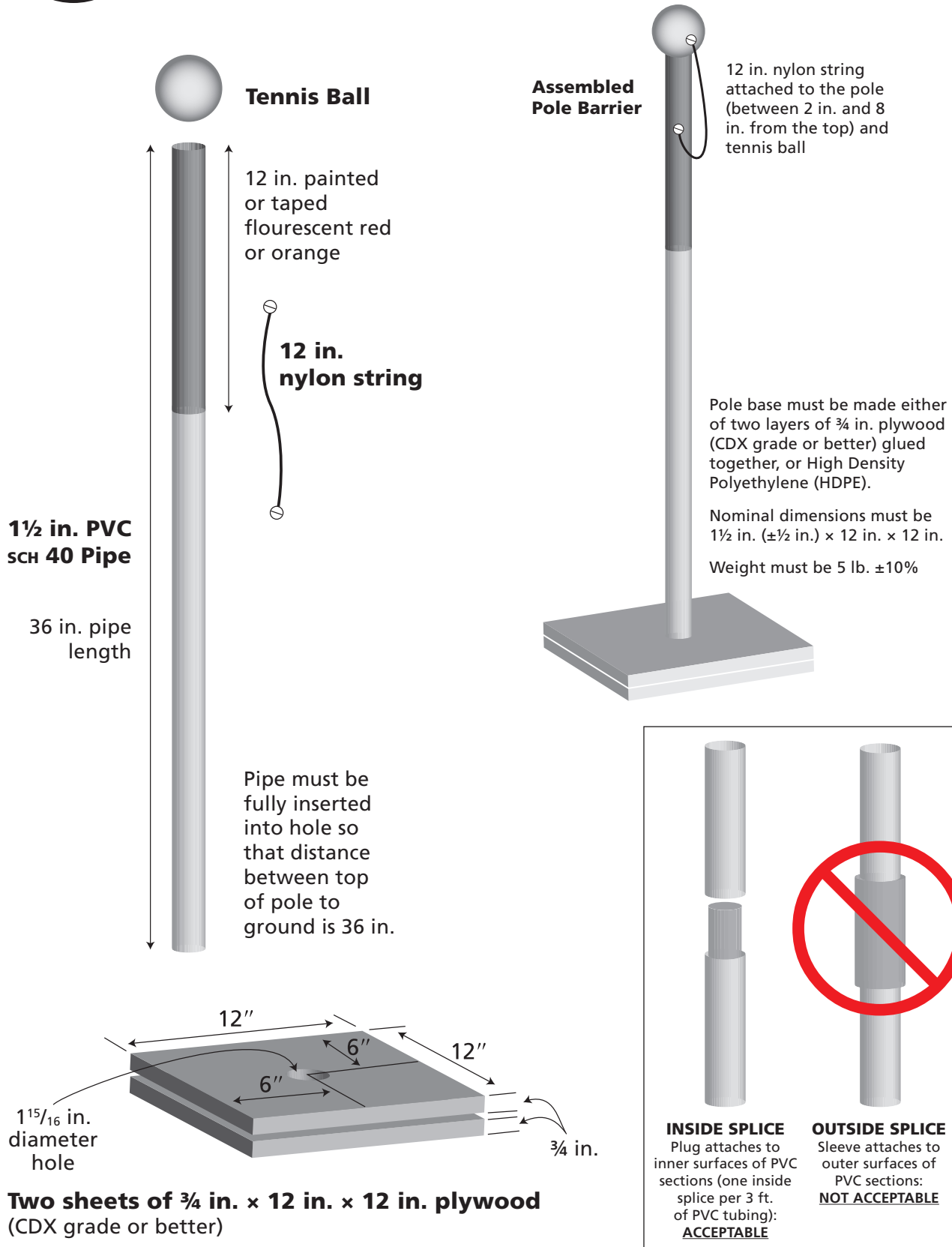
LEVEL

All parts of the Test Site must be level and free of debris, stored materials, surface irregularities, or hazards such as overhead power lines that could interfere with test maneuvers. No obstructions may be within 5 ft. of a practical test course in any direction.



Pole Barrier Construction

ARTICULATING CRANE OPERATOR





Articulating Crane Operator TEST SITE COORDINATOR FORMS

- **Test Site Application**
- **Test Site Coordinator Agreement**
- **Practical Test Administration Summary Form**
- **Candidate Application—Practical Examination**
- **Detailed Score Report Request Form**
- **Security Requirements Report**
- **Permanent Test Site Application**

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Test Site Application

PRACTICAL EXAMINATION—ARTICULATING CRANE OPERATOR

Please type or print neatly.

HOST COMPANY REPRESENTATIVE		TEST SITE NUMBER	
HOST COMPANY NAME		COMPANY REP EMAIL	
HOST COMPANY MAILING ADDRESS			
CITY	STATE	ZIP	COUNTRY
COMPANY REP OFFICE PHONE	COMPANY REP MOBILE PHONE		<input type="checkbox"/> This is a Secure Test Site. (Submit completed Security Requirements Report.)
TEST SITE ADDRESS (Physical address of where the crane(s) will be set up; P.O. Boxes not acceptable)			
CITY	STATE	ZIP	COUNTRY
CHECK BOXES AS APPROPRIATE			
<input type="checkbox"/> \$50 Site Fee for _____ (year) enclosed <input type="checkbox"/> \$50 Site Fee for _____ (year) already paid <input type="checkbox"/> This is my first test administration			
TEST SITE COORDINATOR NAME		TEST SITE COORDINATOR PHONE	
TEST SITE COORDINATOR EMAIL			
PRACTICAL EXAMINER NAME		PRACTICAL EXAMINER EMAIL	

The Test Site Coordinator or Company Representative assumes total responsibility for the following items:

1. Selection of cranes and verification that at all times during the testing process the cranes are in compliance with federal and state OSHA requirements and the current ASME B30 standard
2. Verification that candidate's application for the Practical Exam is complete
3. Abiding by NCCCO Practical Test Site Audit requirements

SIGNATURE	DATE
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METHOD OF PAYMENT FOR TEST SITE FEE

Do not send cash.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Personal check enclosed	<input type="checkbox"/> Employer check enclosed	<input type="checkbox"/> Money order enclosed	<i>Please do not staple your check or money order.</i>
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If paying by credit card, please complete the following information:

CREDIT CARD NUMBER		EXPIRATION DATE	
NAME (Print as it appears on card)	SIGNATURE (on card)	SECURITY CODE*	

* Three- or four-digit code located on the card.

Email credit card receipt to: _____

Checks and money orders should be payable to: NCCCO

Please send application and payments to:

National Commission for the Certification of Crane Operators
 Western Regional Office
 5250 S. Commerce Drive, Suite 100, Murray, UT 84107
 Phone: 801-363-2693 / Fax: 801-363-3806 / Email: ejones@nccco.org



Test Site Coordinator Agreement FOR CCO PRACTICAL EXAMINATIONS

Thank you for your application to be a Test Site Coordinator for CCO Practical Examinations. Test Site Coordinators play a critical role in the CCO examination process, from the initial site application, through the collection and submission of candidate applications to NCCCO, to serving as liaison with the Examiner on test day. To ensure a smooth administration of CCO certification exams, it is critical that Test Site Coordinators fulfill their duties in a competent and professional manner. Please review the following Agreement and sign below where indicated, acknowledging that you have read and understood this Agreement and that, should your application be successful, you agree to abide by all of its provisions. NOTE: If your employment or affiliation changes from the company/organization listed below, you must complete and execute this form anew.

As a Test Site Coordinator for CCO Practical Examinations, I certify and acknowledge that:

1. I will not disclose (nor cause to be disclosed) to anyone outside of NCCCO any confidential information I obtain as a result of my participation as a Test Site Coordinator in the CCO certification program, including, without limitation, the content of any examination.
2. I have read all applicable NCCCO policies and procedures, particularly those detailed in the Practical Examination Test Site Coordinator Handbook, and I agree to be bound by the same.
3. I have read NCCCO's Criteria for Practical Test Sites and agree to prepare all Test Sites in accordance with the general directions set forth therein.
4. I agree to provide authorized personnel with access to the Test Site on test day and to remain (or arrange for my designated representative(s) to remain) at the Test Site throughout the test administration.
5. If I arrange for one or more representatives to remain at the Test Site, I agree to explain the responsibilities and obligations of a Test Site Coordinator to such persons and to ensure their compliance therewith.
6. I understand that the site for which I am a Test Site Coordinator may be audited by NCCCO and that I am required to cooperate fully with the NCCCO Auditor.
7. I agree to meet all applicable deadlines for submitting the Practical Test Site Application and Data Sheet with all necessary supporting crane documentation.
8. I agree to ensure that all Candidate Applications I submit are complete and in compliance with stated NCCCO policies and procedures, including any required payments.
9. I agree to pay any and all fees that are due in a timely fashion, including any additional fees I may incur by submitting incomplete or late applications.
10. I agree not to make, and not to knowingly allow any other person to make, any material misrepresentation or omission of fact in any document I submit to NCCCO.
11. I am acting on my own behalf and/or on behalf of the company or organization set forth below, and I am not acting to circumvent a prior NCCCO suspension or revocation.
12. I agree to conduct my affairs with NCCCO, any Examiner, clients, and candidates in a professional manner, according to accepted codes of business conduct.

I understand that non-compliance with any of these provisions may result in the revocation or suspension of my status as a Test Site Coordinator for CCO Practical Examinations. I agree that any questions or other matter arising under this agreement will be governed by and construed in accordance with the laws of the State of Virginia, without regard to choice of law rules. All actions and proceedings arising out of or relating directly or indirectly to this agreement will be filed and litigated exclusively in any state court or federal court located in the State of Virginia. I expressly consent to the jurisdiction of these courts.

SIGNED		DATE	
NAME		EMAIL	
COMPANY/ORGANIZATION			
ADDRESS			
CITY	STATE	ZIP	COUNTRY
TELEPHONE		CELL	

Please complete and submit to:

National Commission for the Certification of Crane Operators, Western Regional Office
5250 S. Commerce Drive, Suite 100, Murray, UT 84107
Phone: 801-363-2693 / Fax: 801-363-3806 / Email: ejones@nccco.org



Practical Test Administration

SUMMARY FORM—ALL PROGRAMS

Please type or print neatly.

SUBMITTER'S NAME			
SUBMITTER'S CELL PHONE	SUBMITTER'S EMAIL	PRACTICAL EXAM SITE NUMBER	
PRACTICAL EXAM SITE LOCATION (STREET ADDRESS)			
CITY	STATE	ZIP	COUNTRY
TEST SITE COORDINATOR NAME			
TEST SITE COORDINATOR CELL PHONE		TEST SITE COORDINATOR EMAIL	

Dates Testing Occurred (range) First date: _____ Last date: _____

Practical Examiner Name	Practical Examiner Accreditation Number

Number of candidates tested: _____

Number of Practical Exams administered: _____

Did you submit the Site Report? (Not required for Signalperson test administrations or permanent test sites)

Yes No

Did you submit the Crane/Digger Derrick Report? (Not required for Mobile Crane, Rigger, or Signalperson test administrations)

Yes No

Did you submit all candidate applications and fees?

Yes No

How are you submitting candidate photos? _____

Tests administered in which programs? (Check all that apply):

- Mobile Crane Operator
- Tower Crane Operator
- Overhead Crane Operator
- Articulating Crane Operator
- Digger Derrick Operator
- Service Truck Crane Operator
- Dedicated Pile Driver Operator
- Drill Rig Operator
- Rigger
- Signalperson

PRACTICAL TEST ADMINISTRATION SUMMARY FORM (CONT'D)

LIST ALL CRANES/DIGGER DERRICKS/DEDICATED PILE DRIVERS USED DURING THIS ADMINISTRATION PERIOD:

Crane Type (e.g., "TLL")	Make	Model	Serial Number

PAYMENT SUMMARY

Total Examination Fees Enclosed: \$ _____




Updated CCO Card Fees Enclosed: \$ _____

Detailed Score Report Requested*: \$ _____ (\$50.00 if requested)

Total Fees Enclosed: \$ _____

**Separate Detailed Score Report Request Form must be submitted for processing. Payment may be provided either here or on separate form.*

METHOD OF PAYMENT (Do not send cash.)

   Personal check enclosed Employer check enclosed Money order enclosed *Please do not staple your check or money order.*

If paying by credit card, please complete the following information:

CREDIT CARD NUMBER EXPIRATION DATE

NAME (Print as it appears on card) SIGNATURE (on card)

SECURITY CODE*

* Three- or four-digit code located on the card.

Email credit card receipt to: _____

Checks and money orders should be payable to: NCCCO

Please return this Practical Test Administration Summary Form along with all candidate applications, fees, photos, and score sheets to:

NCCCO—Testing Services Department
 1960 Bayshore Blvd.
 Dunedin, FL 34698

Phone: 727-449-8525
 Fax: 727-461-2746
 Email: jwarner@nccco.org



Candidate Application

PRACTICAL EXAMINATION—ARTICULATING CRANE OPERATOR

Please type or print neatly.

FULL LEGAL NAME <small>(as shown on driver's license)</small>		First	Middle	Last	Suffix (Jr., Sr., III)
CCO CERTIFICATION NUMBER (if previously certified)	DATE OF BIRTH	CANDIDATE ID: <small>(if previously tested)</small>			
MAILING ADDRESS					
CITY		STATE	ZIP	COUNTRY	
PHONE	CELL	EMAIL			
COMPANY/ORGANIZATION			COMPANY PHONE		
COMPANY MAILING ADDRESS					
CITY		STATE	ZIP	COUNTRY	

INDICATE WITH A CHECK THE CRANE TYPE(S) YOU WISH TO BE TESTED ON:

- Articulating Boom Crane (ABC)
 Articulating Boom Loader (ABL)

TEST SITE AT WHICH YOU INTEND TO TAKE THE PRACTICAL EXAMINATION

TEST SITE COORDINATOR NAME	PE SITE #:		
PHONE	EMAIL		
TEST SITE ADDRESS			
CITY	STATE	ZIP	COUNTRY

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 expressly consent to NCCCO's release of any information consistent with NCCCO's Information Release policy. I have received a copy of the NCCCO Candidate Handbook, have read it, and agree to be bound by it. I agree to be bound by all NCCCO policies and procedures, as they may be amended from time to time, including without limitation those posted at nccco.org. 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 designation and I will continue to comply with those requirements. I further attest that I am physically and mentally capable of safely operating equipment on the day of the Practical Examination. I understand and agree that any personal injury and/or property damage resulting from or caused in any way by my participation in the CCO Practical Examination is not and shall not be the responsibility of NCCCO. I understand that if at any point during my certification period I fail to meet any of the requirements outlined above, or if matters arise that can affect my capability to continue to fulfill certification requirements, I must report it to NCCCO immediately and agree to cooperate with any subsequent investigation regarding such matters.

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

THIS AREA FOR NCCCO USE ONLY:

- Articulating Boom Crane (ABC)
 Articulating Boom Crane w/Winch (ABW)
 Articulating Boom Loader (ABL)

CANDIDATE APPLICATION (CONT'D)

PRACTICAL EXAMINATION—ARTICULATING CRANE OPERATOR

CCO CERTIFICATION CARD

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

Please email a digital color photo (without hat or sunglasses) to **photos@nccco.org** and label it with your full name and birth date. Enclose with your application form any required payment based upon the information listed below.

A 1 3/8" X 1 3/4" passport color photo may be substituted for a digital photo; if submitting a passport photo, please give it to your Test Site Coordinator.

PRACTICAL EXAMINATION FEES




Check the box next to the Practical Exam(s) for which you are registering.

Practical Examination Fees:

- One Articulating Crane Type: \$60
- Two Articulating Crane Types: ... \$70
- Updated/replacement card: \$25
- One Articulating Crane type (current CCO-certified Mobile Crane Operator, or new candidate registering for Mobile Crane exams at same time): \$50
- Two Articulating Crane types (current CCO-certified Mobile Crane Operator, or new candidate registering for Mobile Crane exams at same time): \$60

METHOD OF PAYMENT FOR CANDIDATE EXAMINATION FEES

Do not send cash.

- 
 - 
 - 
 - Personal check enclosed
 - Employer check enclosed
 - Money Order enclosed
- Please do not staple your check or money order.*

If paying by credit card, complete the following information:

CREDIT CARD NUMBER	EXPIRATION DATE
NAME (Print as it appears on card)	SIGNATURE (on card)
	SECURITY CODE*

* Three- or four-digit code located on the card.

Email credit card receipt to: _____

Checks and money orders should be payable to: **NCCCO**

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



Detailed Score Report Request Form FOR CCO PRACTICAL EXAMINATIONS

If you wish to receive a Detailed Score Report on candidates taking the CCO examination(s), please fill out this form and submit it, along with a \$50 processing fee, to NCCCO when you return your test administration materials for each administration:

NCCCO—Testing Services Department
1960 Bayshore Blvd.
Dunedin, FL 34698

Phone: 727-449-8525
Fax: 727-461-2746
Email: jwarner@nccco.org

You must submit this form for each test administration. Scores are the property of the candidate, and his/her consent must be obtained before NCCCO can release the scores to a third party. Please have the candidate sign under the release statement below.

Please type or print neatly.

NAME OF REQUESTOR		PHONE	
COMPANY NAME		REQUESTOR'S EMAIL	
MAILING ADDRESS			
CITY	STATE	ZIP	COUNTRY
TEST SITE NUMBER	TEST DATE	SIGNATURE	

CANDIDATE RELEASE STATEMENT

Notice to Candidate: By signing this form, you are giving your permission to the National Commission for the Certification of Crane Operators (NCCCO) to release the details of your test scores directly to the person listed above as the "Requestor."

CANDIDATE NAME (printed)	DATE OF BIRTH*	CANDIDATE RELEASE SIGNATURE
1.		
2.		
3.		
4.		
5.		
6.		
7.		

*Date of birth required to assure correct candidate identification.

METHOD OF PAYMENT FOR DETAILED SCORE REPORT REQUEST

Do not send cash.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Personal check enclosed	<input type="checkbox"/> Employer check enclosed	<input type="checkbox"/> Money order enclosed	<i>Please do not staple your check or money order.</i>
--------------------------	--------------------------	--------------------------	--	--	---	--

If paying by credit card, please complete the following information:

CREDIT CARD NUMBER	EXPIRATION DATE	SECURITY CODE*
NAME (Print as it appears on card)	SIGNATURE (on card)	

* Three- or four-digit code located on the card.

Email credit card receipt to: _____

Checks and money orders should be payable to: **NCCCO**

DETAILED SCORE REPORT REQUEST FORM (CONT'D)

TEST SITE NUMBER	TEST DATE	NAME OF REQUESTOR
------------------	-----------	-------------------

CANDIDATE RELEASE STATEMENT

Notice to Candidate: By signing this form, you are giving your permission to the National Commission for the Certification of Crane Operators (NCCCO) to release the details of your test scores directly to the person listed above as the "Requestor."

CANDIDATE NAME (printed)	DATE OF BIRTH*	CANDIDATE RELEASE SIGNATURE
8.		
9.		
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27.		
28.		
29.		
30.		
31.		
32.		

*Date of birth required to assure correct candidate identification.



Security Requirements Report

PRACTICAL EXAMINATIONS

A secured test site is a site that requires additional security clearance or security procedures for off-site personnel. If the Test Site Application indicates that the test site is a secure facility, please complete this form and submit it with the Test Site Application.

Please type or print neatly.

SECURITY CONTACT REPRESENTATIVE		PE TEST SITE NUMBER (OBTAIN FROM TEST SITE COORDINATOR)	
HOST COMPANY NAME			
HOST COMPANY MAILING ADDRESS			
CITY	STATE	ZIP	COUNTRY
SECURITY CONTACT PHONE		SECURITY CONTACT EMAIL	
TEST SITE ADDRESS (Physical address of where the crane(s) will be set up; P.O. Boxes not acceptable)			
CITY	STATE	ZIP	COUNTRY

1. Does the site have a secured entrance? Yes No
2. If the site has multiple entrances, which entrance should testing personnel and/or NCCCO staff and Auditor use to access testing location? _____
3. What type(s) of credentials or proof of training are required to gain access to the site? _____
4. How much time is required for a security review? _____
5. Can security reviews be performed in advance of testing personnel and/or NCCCO staff and Auditor arriving at secure site? Yes No
6. Does the site have other site-specific requirements or protocols? (Describe below or attach written security policy.)

SECURITY CONTACT SIGNATURE	DATE
----------------------------	------

Please complete and submit to:

National Commission for the Certification of Crane Operators, Western Regional Office
5250 S. Commerce Drive, Suite 100, Murray, UT 84107
Phone: 801-363-2693 / Fax: 801-363-3806 / Email: ejones@nccco.org

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Permanent Test Site Application

PRACTICAL EXAMINATIONS

Please type or print neatly.

HOST COMPANY REPRESENTATIVE	PE TEST SITE NUMBER		
HOST COMPANY NAME			
HOST COMPANY MAILING ADDRESS			
CITY	STATE	ZIP	COUNTRY
HOST PHONE	HOST EMAIL		
TEST SITE ADDRESS (Physical address of where the crane(s) will be set up; P.O. Boxes not acceptable)			
CITY	STATE	ZIP	COUNTRY

Programs this site is registered for:

- | | | | | |
|---|---------------------------------|---------------------------------------|--|--|
| <input type="checkbox"/> Mobile | <input type="checkbox"/> Tower | <input type="checkbox"/> Overhead | <input type="checkbox"/> Articulating | <input type="checkbox"/> Service Truck |
| <input type="checkbox"/> Digger Derrick | <input type="checkbox"/> Rigger | <input type="checkbox"/> Signalperson | <input type="checkbox"/> Dedicated Pile Driver | <input type="checkbox"/> Drill Rig |

Cranes/digger derricks/dedicated pile drivers/drill rigs registered to this test site (operator programs only):

MAKE/MODEL	SERIAL NUMBER	MAX RATED CAPACITY (TONS)

If additional space is needed, please continue on the back side of this application.

The Test Site Coordinator or Company Representative assumes total responsibility for selecting equipment and verifying that at all times during the testing process the equipment is in compliance with federal and state OSHA requirements and current applicable industry standards.

By signing this application, I understand as Test Site Coordinator or Company Representative that this site is a permanent site in which the course, cranes/digger derricks/pile drivers/drill rigs, and Test Site Coordinator have not changed within the last 12 months. I also agree to abide by all NCCCO Practical Test Site policies and procedures. I understand that by signing this application, NCCCO will conduct an audit of the test site prior to the site being granted permanent status and that if at any time within 12 months the course, cranes/digger derricks/pile drivers/drill rigs,, or Test Site Coordinator change, this site will no longer be considered permanent and a new application for permanent status will be required.

SIGNATURE	DATE
NAME	EMAIL

Please complete and submit to:

National Commission for the Certification of Crane Operators, Western Regional Office
 5250 S. Commerce Drive, Suite 100, Murray, UT 84107
 Phone: 801-363-2693 / Fax: 801-363-3806 / Email: ejones@nccco.org



Articulating Crane Operator TEST SITE COORDINATOR—ARTICULATING BOOM CRANES

- **Photographs**
- **Sample Test Site Layout (CAD)**
- **Test Site Layout Instructions**
- **Crane Selection and Setup**
- **Ready Reference Checklist**
- **Site Report**
- **Crane Report**

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Photographs

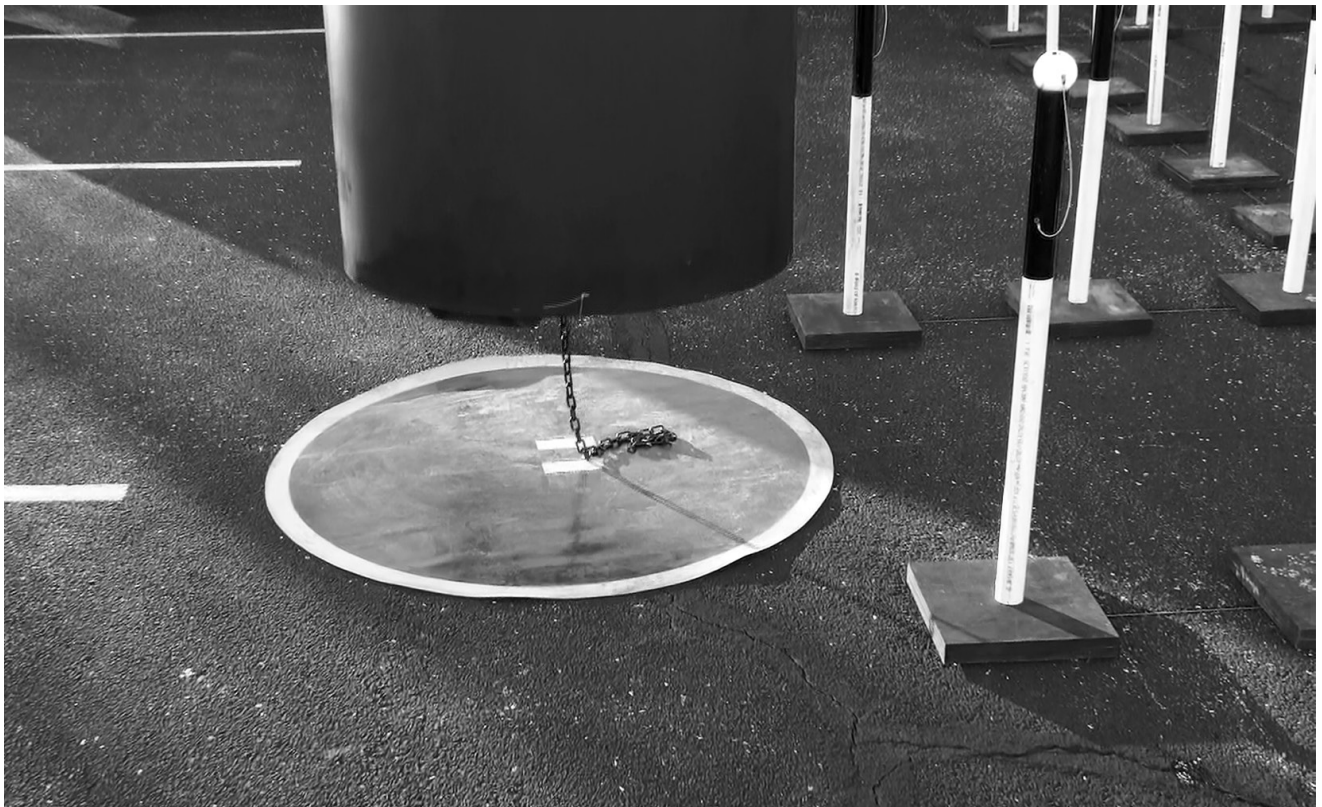
ARTICULATING BOOM CRANES



Corridor poles



Hurdle



Designated Area



PHOTOGRAPHS (CONT'D) ARTICULATING BOOM CRANES

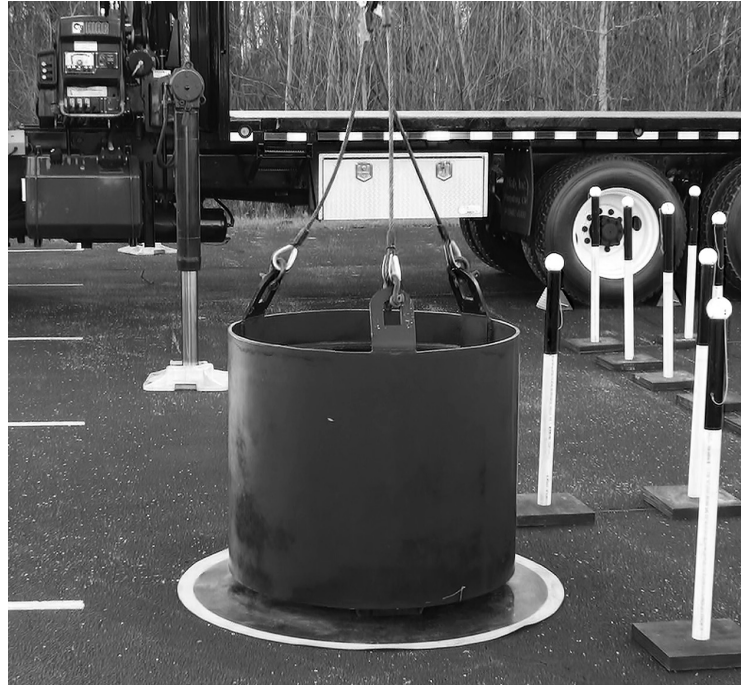
TEST WEIGHT

One example of a suitable Test Weight is this 30 in. piece of 36 in. diameter pipe.

Any specially fabricated structural components that are part of the load-supporting system must be designed and fabricated in accordance with the requirements of the current applicable industry standards.

MEASURING THE COURSE

All elements of the test site must be laid out in accordance with the Test Site Layout (CAD). The Test Site Coordinator is responsible for carefully checking all dimensions prior to the arrival of the Practical Examiner.



Test Weight



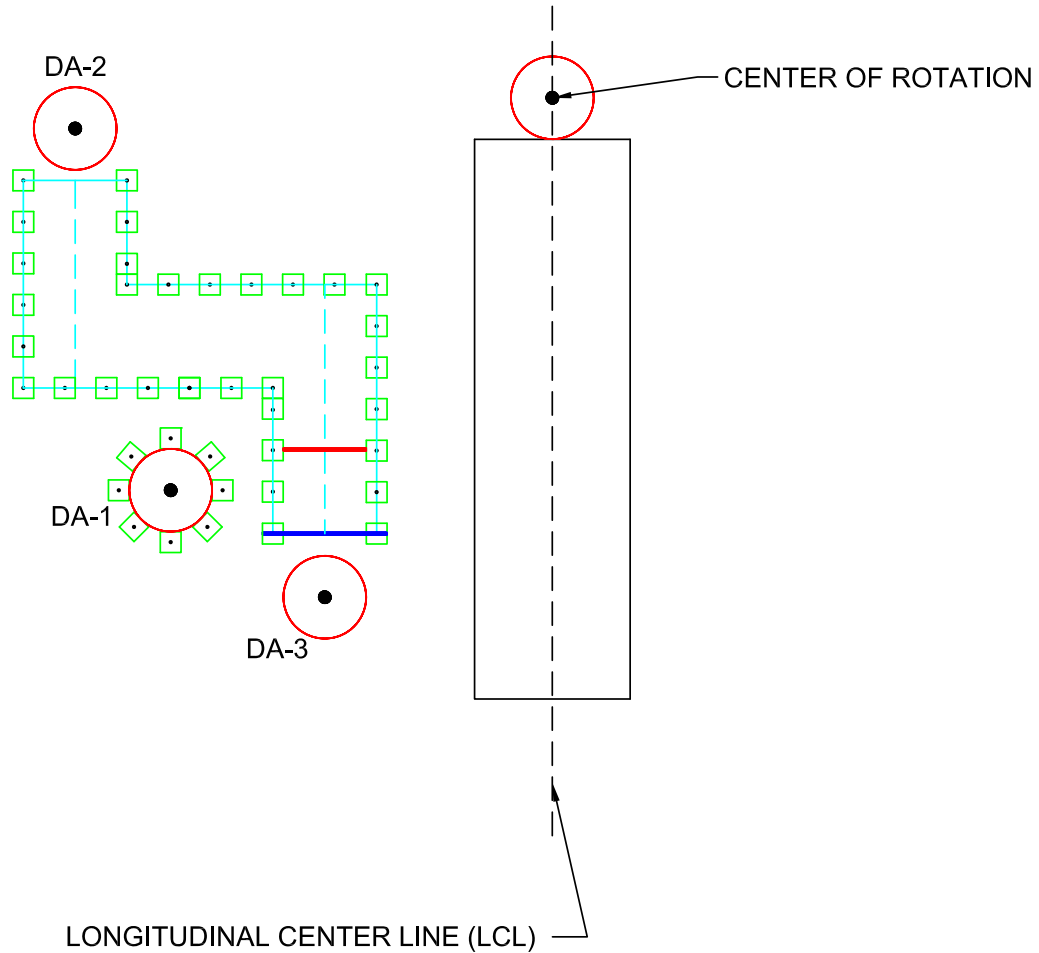
Examiners measuring Designated Area



Sample Test Site Layout (CAD)

ARTICULATING BOOM CRANES

This a typical sample of an ABC Crane Practical Test Layout. It is not to be used in an actual test situation.



ARTICULATING BOOM CRANE LAYOUT (ABC #2)
Boom Radius \geq 30ft
Auxiliary Stabilizer Span (if equipped) $<$ 14'

SAMPLE
ARTICULATING
CRANE
ABC #2



Test Site Layout Instructions

ARTICULATING BOOM CRANES

Using the CAD drawing and other information provided by NCCCO, it is the Test Site Coordinator's responsibility to lay out the test site. It is extremely important that all test equipment (corridor poles, Test Weight and Designated Areas, etc.) be placed exactly as indicated on the CAD drawings. Failure to do so could result in the test administration being declared invalid and the need to start over.

Before the Practical Examiner can begin testing, he/she will verify the site is laid out correctly using the Site Report for the appropriate crane type. Different versions of the Site Report form can be found in the appropriate sections of this handbook. Test Site Coordinators are strongly encouraged to use this form to verify that they have followed the site layout directions correctly.

There are various ways to begin the process of laying out the Test Site, but we recommend the following procedure:

1.	CHECK FOR OBSTRUCTIONS	Ensure there are no obstructions (on the ground or overhead) that could interfere with the safe operation of the crane during the test. No obstructions may be within 5 ft. of a practical test course in any direction.
2.	PLAN TEST SITE & MARK CENTER OF ROTATION	Survey the test area and ensure there is sufficient level space for the truck, stabilizer span, and full course. Identify the ideal location of the center of rotation of the crane. Clearly mark this point on the ground, and begin building the course.
3.	LOCATE CENTERLINES	Run a string line down the longitudinal centerline. From this line, measure out two parallel lines: the center of the first and last legs of the Zigzag Corridor. Along the original string line, indicate the actual center of rotation for the truck.
4.	LAY OUT PARALLEL ZIGZAG SIDES	Using the string-lined longitudinal centerline and the centerlines of the first and last legs of the Zigzag Corridor, mark the four sides of the Zigzag Corridor that run parallel to the string line, according to the Test Site Layout (CAD).
5.	LAY OUT PERPENDICULAR ZIGZAG SIDES	Using the mark at the center of rotation, determine the location of the hurdle. Use the location of the hurdle to determine the remaining perpendicular boundaries of the Zigzag Corridor. Once all the boundaries of the Zigzag Corridor have been marked, string line out the Corridor, and place the poles along the Corridor as shown on the Test Site Layout (CAD). Also place the hurdle and hurdle poles in the correct position.
6.	LOCATE ZIGZAG START & STOP CIRCLES	Using the information on the CAD, mark the center points of Designated Areas 2 and 3.
7.	LOCATE POLE CIRCLE	Mark a line from the Farthest Corner (FC) point to the center of Designated Area 3. Using information on the Test Site Layout (CAD), determine the position of Designated Area 1 along the previously drawn line.
8.	MARK DESIGNATED AREAS	Mark each designated area with a circle spanning 4 ft. in outside diameter, with a minimum 2 in. wide inside line.
9.	SET UP POLE CIRCLE	Ensure there is an appropriate area to serve as the Designated Area for Test Weight and Pre-Task Familiarization Period, as illustrated on the Test Site Layout (CAD).
10.	MARK DENOTATION LINE	Mark the denotation line according to the Test Site Layout (CAD).
11.	POSITION TRUCK	With the assistance of a spotter, drive truck into place over the longitudinal centerline. Use plumb bobs to precisely position the truck.



Crane Selection and Setup

ARTICULATING BOOM CRANES

CRANE SELECTION

Articulating boom cranes used for testing must meet the following criteria:

- **For ABC #1 CAD**—Crane must have a boom radius of 22–30 ft. and no auxiliary stabilizers; recommended minimum test area: 40 ft. × 50 ft.
- **For ABC #2 CAD**—Crane must have a boom radius of 30 ft. or more with an auxiliary stabilizer span of up to 14 ft.; if so equipped, auxiliary stabilizers must be extended; recommended minimum test area: 45 ft. × 55 ft.
- **For ABC #3 CAD**—Crane must have a boom radius of 34 ft. or more and be equipped with an auxiliary stabilizer span of 14–32 ft.; auxiliary stabilizers must be extended; recommended minimum test area: 55 ft. × 55 ft.

COMPLIANCE

All cranes used on CCO Practical Examinations must be in compliance with federal and state OSHA requirements and the current ASME B30.22 Standard.

STABILIZERS

All stabilizers must be fully extended and set. This includes all main and auxiliary stabilizers if so equipped.

BLOCKING

Matting or cribbing installed if necessary to provide a sound foundation for the crane. A spirit level (minimum length 1 ft.) must be available for the candidates to verify the crane level condition prior to beginning their testing.

CONTROLS

Test crane may be operated from a manual station, top seat control station, or radio/remote control. All controls must be in working condition. For remote controls, ensure batteries are fully charged and enough extra batteries are available to complete all scheduled tests.

MANUAL EXTENSIONS

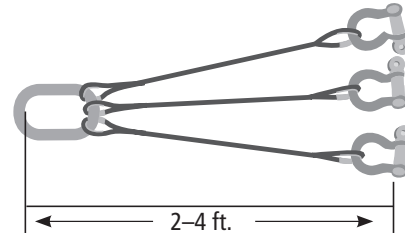
No manual extensions may be used during the exam.

TEST WEIGHT RIGGING

The Test Weight rigging used to connect the Test Weight to the crane must meet the following criteria:

- Total rigging length 2–4 ft. (3 ft. recommended); total rigging length is measured from load-bearing point to load-bearing point
- Three sling legs
- Recommend use of bridle

- Recommend sling angles of 60 degrees (minimum 30 degrees required)
- Can be easily attached and detached from the crane
- Meets current applicable industry standards



TEST WEIGHT

The gross load (which includes the weight of the Test Weight and any rigging and ancillary equipment in place on the crane) must not exceed 75 percent of the rated capacity at the farthest radius indicated on the Test Site Layout (CAD).

These weights must be verified by a weight ticket, crane's load indicating device (LMI, RCI, RCL), or other type of certification documenting the actual load weight. This document must be available to the Examiner.

The Test Weight must:

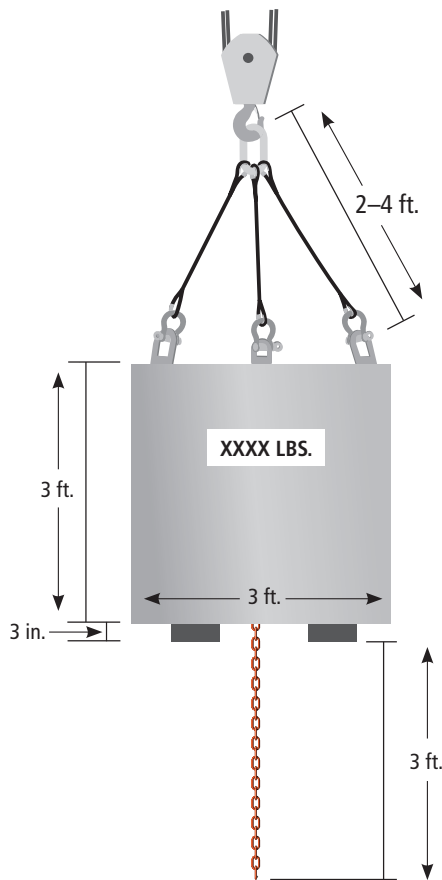
- Weigh between 400 and 1,000 lb.
- Be cylindrical in shape, with the same diameter from top to bottom
- Have a continuously smooth surface from top to bottom
- Have a diameter of 3 ft.
- Have a height between 2 ft. and 5 ft.
- Have a chain extending from bottom center of the Test Weight; the chain must be a 3 ft. length of 3/8- or 5/16-inch chain, painted orange or red
- Have three points of attachment on the top of the Test Weight with picking ears mounted inside the Test Weight, or if mounted on the outside of the Test Weight the bottom of ears are at least 3 ft. 6 in. above the bottom of the weight

TEST WEIGHT CONSTRUCTION

So long as the requirements for Test Weight design are adhered to, Test Site Coordinators are free to select the most convenient materials and methods available to them.

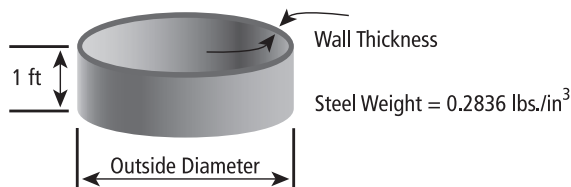
Pipe has a major advantage over other materials in that it has a smooth surface and is perfectly cylindrical, two of the main requirements for NCCCO Test Weights.

TYPICAL TEST WEIGHT CONSTRUCTION



If the weight of the Test Weight is expected to change from time to time to accommodate different types and sizes of cranes, consider selecting steel pipe and filling it with loose material (e.g., steel slugs) that can be varied according to specific test requirements. The following diagram and chart are provided for Test Sites selecting this option.

PIPE DIAGRAM



The *Pipe Weight Thickness Chart* provides weights for given steel pipe wall thicknesses and outside diameters.

PIPE WEIGHT THICKNESS CHART (WEIGHT FOR 1 LINEAR FOOT OF PIPE)

OUTSIDE DIAMETER	PIPE WALL THICKNESS			
	1/4"	3/8"	1/2"	3/4"
2'0"	63 lbs.	95 lbs.	126 lbs.	186 lbs.
2'6"	80 lbs.	119 lbs.	158 lbs.	235 lbs.
3'0"	96 lbs.	143 lbs.	190 lbs.	283 lbs.
3'6"	112 lbs.	167 lbs.	222 lbs.	331 lbs.
4'0"	128 lbs.	191 lbs.	254 lbs.	379 lbs.

For pipe lengths longer than 1 ft., multiply the weight given in the table times the pipe length in feet.

Example: Pipe weight for a 4 ft. diameter × 3/4 in. wall thickness pipe × 4½ ft. high = 379 lbs. × 4½ ft. = 1,706 lbs.

All load-supporting components must be assembled in accordance with proper rigging practice and working load limits for hardware utilized.

Any specially fabricated structural components that are part of the load-supporting system must be designed and fabricated in accordance with the requirements of current applicable industry standards.

RECOMMENDED TEST WEIGHT DESIGN

NCCCO has some recommendations for construction of Test Weights suitable for use in CCO articulating crane Practical Exams. The Test Weight should have three attachment points, and the rigging should measure 2-4 ft. from load-bearing point to load-bearing point. The weight of the Test Weight should be adjustable, so additional weight can be added, as necessary. The chain should attach from the top and run through a tube to come out through the bottom. Finally, there should be four 3 in. tall rubber feet on the bottom of the Test Weight.

RECOMMENDED TEST WEIGHT CONSTRUCTION





Ready Reference Checklist

ARTICULATING BOOM CRANES

YOU WILL NEED THE FOLLOWING FOR EACH CRANE TO BE TESTED ON:

- A Test Weight 400–1000 lb. including rigging—verified by a weight ticket, crane’s load indicating device (LMI, RCI, RCL), or other type of certification documenting the actual load weight available to the Examiner—cylindrical in shape, 3 ft. in diameter, and 2 ft.–5 ft. in height
- Length of 3/8- or 5/16-inch chain, painted orange or red, measuring 3 ft. long from the bottom center of the Test Weight
- Test Weight rigging has three sling legs (use of bridle recommended), 2–4 ft. in length (3 ft. recommended); recommend 60 degree sling angles (minimum 30 degrees required)
- Picking ears are mounted inside the Test Weight, or if mounted on the outside of the Test Weight the bottom of ears are at least 3 ft. 6 in. above the bottom of the weight
- PVC pipe, white, 1½ in. (SCH 40), sufficient to make 40 three-foot-long poles [34 poles needed for ABC #1 course]
- PVC pipe, white, 1 in. diameter, sufficient to make a 6 ft. ± 1 in. long hurdle
- ¾-inch, CDX-grade (or better) plywood or high density polyethylene (HDPE)*, sufficient to create 40 pole bases, each 1½ in. (± ½ in.) × 12 in. × 12 in.
- 40 tennis balls [34 Balls needed for ABC #1 course]
- Minimum 6 ft. long horizontal obstruction pole made of 1 inch inner diameter PVC pipe (SCH 40)
- 40 ft. of nylon string, to attach tennis balls to poles (optional) [34 ft. needed for ABC #1 course]
- 80 1¼-inch, zinc-plated (galvanized) screws or equivalent to secure nylon string to tennis balls and poles (optional) [68 screws needed for ABC #1 course]
- 300 ft. string line, brightly colored (for Zigzag Corridor and Test Site Layout use) **NOTE: chalk line may NOT be used**
- Spirit level to verify levelness (minimum 1 ft. length)
- Paint (orange or red) for painting the tops of the poles and chain **NOTE: red electrical tape may be used for the poles**
- Rubber mats or paint to mark the circular Designated Areas (If marking circles, designated areas, or other parts of a course on plywood or mats, the borders must be marked with materials with a flat, uniform surface and a lip variance not to exceed 3/4 in. Any materials used may not interfere with the free movement of the pole bases.)
- 2 in. wide (minimum) clearly visible, durable tape or other material to mark the rectangular Designated Areas and denotation lines
- Handheld wind speed indicator (anemometer)
- One 50 ft. tape measure
- Stopwatches and clipboards for Examiner(s) and Proctor(s); multifunction devices such as cell phones and wristwatches are not acceptable
- Two-way communication devices for top seat operator station
- If using remote controls, sufficient batteries to conduct all Practical Exams

*EQUIPMENT SOURCES

NCCCO does not endorse or recommend specific vendors of any equipment, but the following sources may help you find required materials and equipment:

- **HDPE bases:** House of Plastics (part number HOP01-055), 2580 S. Orange Blossom Trail, Orlando, FL 32805, 407-843-3290, plastics@hopu.com

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Site Report

PRACTICAL EXAMINATION—ARTICULATING BOOM CRANES

NCCCO has established specific conditions and guidelines that each Practical Examination Test Site must adhere to. This *Site Report* is designed to ensure these conditions are met. The Examiner is required to perform a site inspection prior to the start of the first examination and complete the *Site Report* form. The Examiner must arrive at the Test Site in sufficient time to verify, by measuring with a tape, the accuracy of the course layout with respect to the NCCCO Test Site Layout (CAD). The Examiner must also conduct a visual inspection of the crane for proper setup prior to testing any applicant. This *Site Report* must be presented on demand to any Practical Test Auditor.

If using more than one course at this test site, please fill out a Site Report for each course.

Please type or print neatly.

TEST SITE	DATE
NAME OF TEST SITE COORDINATOR	
CAD LAYOUT USED: <input type="checkbox"/> ABC #1 <input type="checkbox"/> ABC #2 <input type="checkbox"/> ABC #3 <i>(Please check only one)</i>	

Check the following items for compliance:

PRE-TEST CANDIDATE BRIEFING AREA

An indoor facility suitable for the Pre-Test Briefing of exam candidates, including:

- Sufficient tables and chairs to seat all candidates for the Pre-Test Briefing
- A DVD player and television or computer for candidates to watch the CCO Practical Exam presentation
- A location so that waiting candidates are unable to observe other candidates being tested

Candidate materials available:

- A written description of the examination (*Candidate Handbook*)
- A plan view of the Test Site Layout (CAD)
- Operator’s manual and load chart(s) for all cranes that will be used for testing

TEST SITE SETUP

- Entire course is level within five percent of true level
- Zigzag Corridor has no more than a 6 in. maximum change in elevation
- Test Site is free of debris, stored materials, surface irregularities, or hazards such as overhead power lines that could interfere with test maneuvers
- Zigzag Corridor set up on asphalt, concrete surface, or firm and compacted sand, dirt, or gravel (free of vegetation) with a sufficiently uniform surface to permit the poles to stand vertical and slide freely; *grass surfaces are not acceptable*
- No obstructions are within 5 ft. of the Test Site in any direction

Using the Test Site Layout (CAD), verify the following measurements:

- Distance from the center of rotation of the crane to the center of Designated Area 1 (± 1 in.)
- Distance from the center of rotation of the crane to the center of Designated Area 2 (± 1 in.)
- Distance from the center of rotation of the crane to the center of Designated Area 3 (± 1 in.)
- Distance from the longitudinal centerline to the near leg of the Zigzag Corridor (± 1 in.)
- Width of Zigzag Corridor is 5 ft. ($\pm \frac{1}{2}$ in.)
- Length of all six sides of the Zigzag Corridor ($\pm \frac{1}{2}$ in.)
- Distance between consecutive poles (2 ft. $\pm \frac{1}{2}$ in.)
- Clearly marked denotation line located correctly, as per Test Site Layout (CAD) ($\pm \frac{1}{2}$ in.)

SITE REPORT (CONT'D)

PRACTICAL EXAMINATION—ARTICULATING BOOM CRANES

Test Site #: _____

PAGE 2 of 3

POLES

- 40 poles (33 for ABC #1 course), made of 1½ in., white PVC pipe (SCH 40), each 36 in. long (one inside splice per 3 ft. pole permitted; outside splices of PVC pipes NOT permitted; see page 8 for illustration)
- Top 12 in. painted or taped orange or red
- Mounted to a platform made of two layers of ¾-inch, CDX-grade (or better) plywood or high density polyethylene (HDPE), cut into 12 in. squares
- Two poles notched for hurdle; notch not to exceed 1 in. wide and ½ in. deep
- 6 ft. long (± 1 in.) hurdle made of 1-inch inner diameter PVC pipe (SCH 40)
- A taut, longitudinal string line placed on the ground under the centerline of each pole base, per CAD. A cut concrete line may be used in lieu of a string line; no other materials are acceptable.
- 40 tennis balls (33 for ABC #1 course)
- Spare poles, bases, and tennis balls available

DESIGNATED AREAS

- Designated Areas 1, 2, and 3 have outside diameter of 4 ft.
- Clearly visible perimeter line (2 in. minimum width), marked inside all Designated Areas.
- If marking circles, designated areas, or other parts of a course on plywood or mats, the borders must be marked with materials with a flat, uniform surface and a lip variance not to exceed ¾ in. Any materials used may not interfere with the free movement of the pole bases.

TEST CRANES

- Crane has a current annual inspection with supporting documentation
- Crane is set up and leveled in the location specified, ready for operation with engine running, in accordance with the manufacturer's recommendations
- All stabilizers fully extended and set
- A taut string placed on the ground through the longitudinal centerline of the crane
- Clearly marked center of rotation

TEST WEIGHT

- Gross weight 400–1,000 lb., verified by a weight ticket, crane's load indicating device (LMI, RCI, RCL), or other type of certification documenting the actual load weight available to the Examiner
- Cylindrical in shape with no protruding edges
- The outside diameter of the Test Weight is 3 ft.
- Between 2 ft. and 5 ft. in height
- Picking ears are mounted inside the Test Weight, or if mounted on the outside of the Test Weight the bottom of ears are at least 3 ft. 6 in. above the bottom of the weight
- Method of attachment: Test Weight rigging has three sling legs, 2–4 ft. in length (load-bearing point to load-bearing point), and is attached to the top inside of the Test Weight, recommend 60 degree sling angles (minimum 30 degrees required)
- A length of 3/8- or 5/8-inch chain extends from the bottom center of the Test Weight
*Note: To measure the chain length, attach the Test Weight to the crane hook. Raise the Test Weight until the chain barely touches the ground and measure from the lowest edge of the Test Weight to the ground. **This length must be 36 in.***
- Chain is painted orange or red

SITE REPORT (CONT'D)
PRACTICAL EXAMINATION—ARTICULATING BOOM CRANES

Test Site #: _____

PAGE 3 of 3

MANUAL EXTENSIONS

- No manual extensions may be used during the exam

BLOCKING

- Blocking or cribbing, as necessary, to provide a sound foundation for the crane

REMOTE CONTROL

- If using remote control, sufficient batteries to conduct all Practical Exams

TEST WEIGHT RIGGING

- All load-supporting components must be assembled in accordance with proper rigging practice and working load limits for the hardware utilized. Any specially fabricated structural components that are part of the load supporting system must be designed and fabricated in accordance with the requirements of the current applicable industry standards.

TEST COURSE SETUP

- The Practical Examiner whose signature appears at the end of this Site Report attests that he/she has set up the course. (Check only if the Practical Examiner has set up the test course.)
- The Examiner must have the following items for conducting the Practical Exam:
 - Two stopwatches (*not* multifunction devices such as cell phones/wristwatches)
 - Clipboard
 - Anemometer (wind meter)
 - Pen or pencil
 - Spirit level (1 ft. minimum)
 - Measuring tape (50 ft. minimum)
 - Test Site Layout (CAD)
 - Proctor
 - Verbatim instructions
 - Notification of test email (new test sites if applicable)
 - Personal protective equipment
 - Two-way communication devices (for top seat operator's station)

Deviations from the above-noted requirements are not allowed without written consent from the NCCCO Western Regional Office.

PRACTICAL EXAMINER ATTESTATION (EXAMINER SIGNATURE REQUIRED)

I attest that this is a true and accurate report of the above named Test Site.

SIGNATURE OF EXAMINER	DATE
PRINTED NAME OF EXAMINER	EXAMINER ACCREDITATION NUMBER

This Site Report is to be completed by the Examiner prior to each testing session and sent with Candidate Score Sheets to:

NCCCO—Testing Services Department
1960 Bayshore Blvd.
Dunedin, Florida 34698

Phone: 727-449-8525
Fax: 727-461-2746
Email: info@nccco.org



Crane Report

PRACTICAL EXAMINATION—ARTICULATING BOOM CRANES

NCCCO has established specific safety conditions and guidelines that each practical exam must follow. This Crane Report is a verification tool used to ensure that all testing parameters are within strict, safe working conditions. Before testing is conducted, the crane being used for testing must have its own unique report filled out. This report should be completed in ink, signed by the Examiner, and sent with the site report to: NCCCO—Testing Services Department, 1960 Bayshore Blvd., Dunedin, FL 34698.

REMINDER: *Each crane used must have a separate report filled out.*

TEST SITE NUMBER		DATE
NAME OF TEST SITE COORDINATOR		
NAME OF PRACTICAL EXAMINER		
CRANE OWNER/COMPANY NAME		
CRANE OWNER/COMPANY POINT OF CONTACT		PHONE NUMBER
MAKE & MODEL OF CRANE	SERIAL NUMBER	
MAX. RATED CAPACITY (LB.)	MAX. BOOM RADIUS (FT.)	IS CRANE EQUIPPED WITH AUXILIARY STABILIZERS? <input type="checkbox"/> YES <input type="checkbox"/> NO
MAIN STABILIZER SPREAD (FT.)	AUXILIARY STABILIZER SPREAD (FT.)	

TEST SITE LAYOUT USED:

<input type="checkbox"/> ABC #1: Boom Radius 22–30 ft. <i>If using ABC #1, provide next load chart rating beyond 22 ft.:</i>		
BOOM RADIUS (ft.)	CAPACITY (lb.)	MAXIMUM ALLOWABLE LOAD WEIGHT
<input style="width: 100px; height: 20px;" type="text"/>	➔ <input style="width: 100px; height: 20px;" type="text"/>	X .75 = <input style="width: 100px; height: 20px;" type="text"/> LB.
<input type="checkbox"/> ABC #2: Boom Radius 30 ft. or greater; Auxiliary Stabilizer span less than 14 ft. (if equipped) <i>If using ABC #2, provide next load chart rating beyond 30 ft.:</i>		
BOOM RADIUS (ft.)	CAPACITY (lb.)	MAXIMUM ALLOWABLE LOAD WEIGHT
<input style="width: 100px; height: 20px;" type="text"/>	➔ <input style="width: 100px; height: 20px;" type="text"/>	X .75 = <input style="width: 100px; height: 20px;" type="text"/> LB.
<input type="checkbox"/> ABC #3: Boom Radius 34 ft. or greater; Auxiliary Stabilizer span 14–32 ft. (must be equipped) <i>If using ABC #3, provide next load chart rating beyond 34 ft.:</i>		
BOOM RADIUS (ft.)	CAPACITY (lb.)	MAXIMUM ALLOWABLE LOAD WEIGHT
<input style="width: 100px; height: 20px;" type="text"/>	➔ <input style="width: 100px; height: 20px;" type="text"/>	X .75 = <input style="width: 100px; height: 20px;" type="text"/> LB.

NOTE: *Gross Load (Test Weight+Rigging) used must be less than Maximum Allowable Load Weight calculated above.*

GROSS LOAD USED IN TESTING	<input style="width: 100px; height: 20px;" type="text"/> LB.
----------------------------	--

<i>I attest that this is a true and accurate report of the crane and test weight being used for testing.</i>			
EXAMINER SIGNATURE	PRINTED NAME OF EXAMINER	EXAMINER'S ACCREDITATION #	DATE



Articulating Crane Operator TEST SITE COORDINATOR—ARTICULATING BOOM LOADERS

- **Photographs**
- **Sample Test Site Layout (CAD)**
- **Test Site Layout Instructions**
- **Crane Selection and Setup**
- **Ready Reference Checklist**
- **Site Report**
- **Crane Report**

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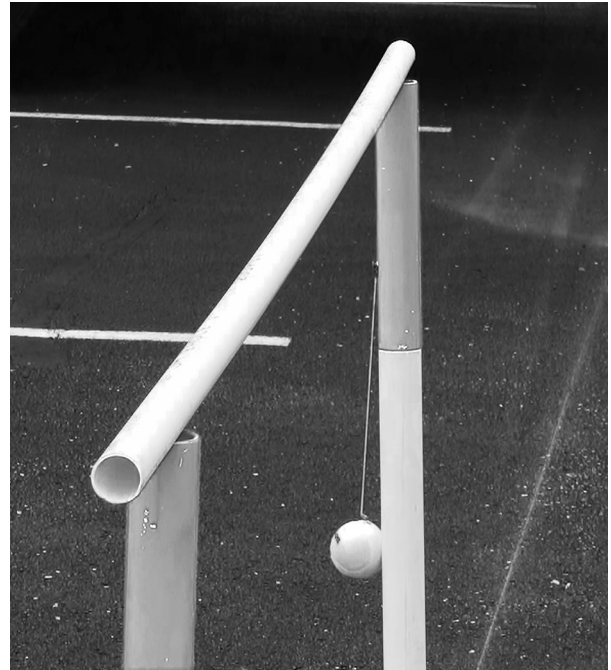


Photographs

ARTICULATING BOOM LOADERS



Corral poles



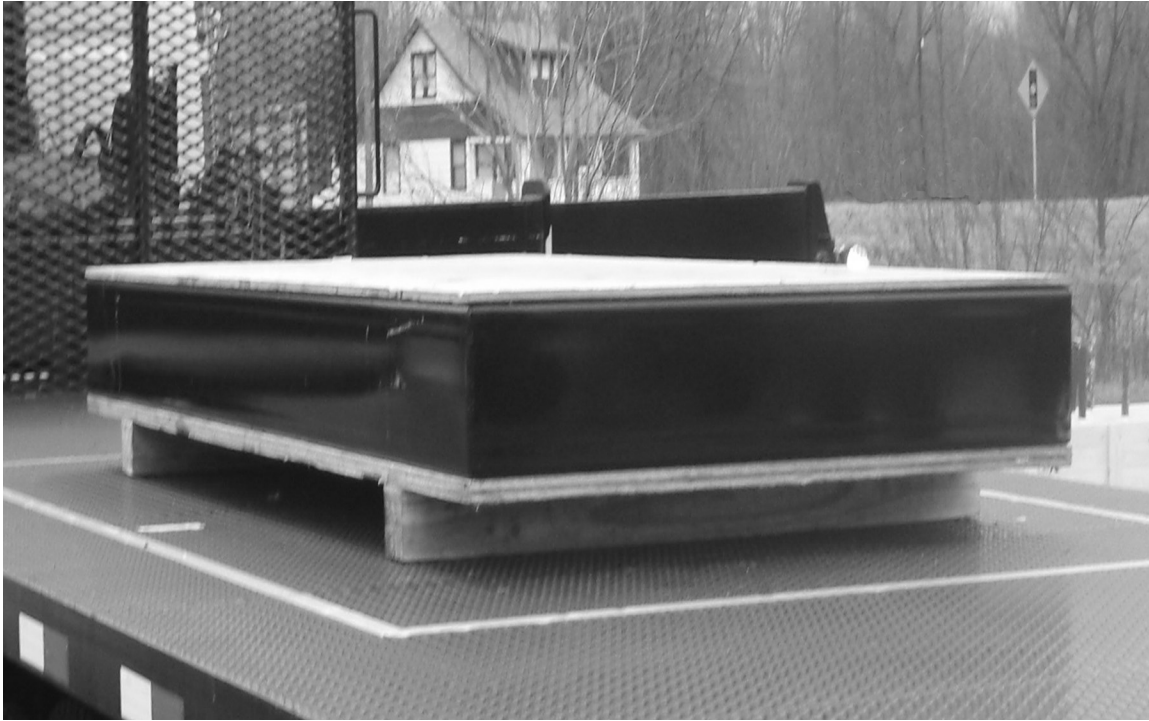
Hurdle



Corral



PHOTOGRAPHS (CONT'D) ARTICULATING BOOM LOADERS



ABL Test Weight



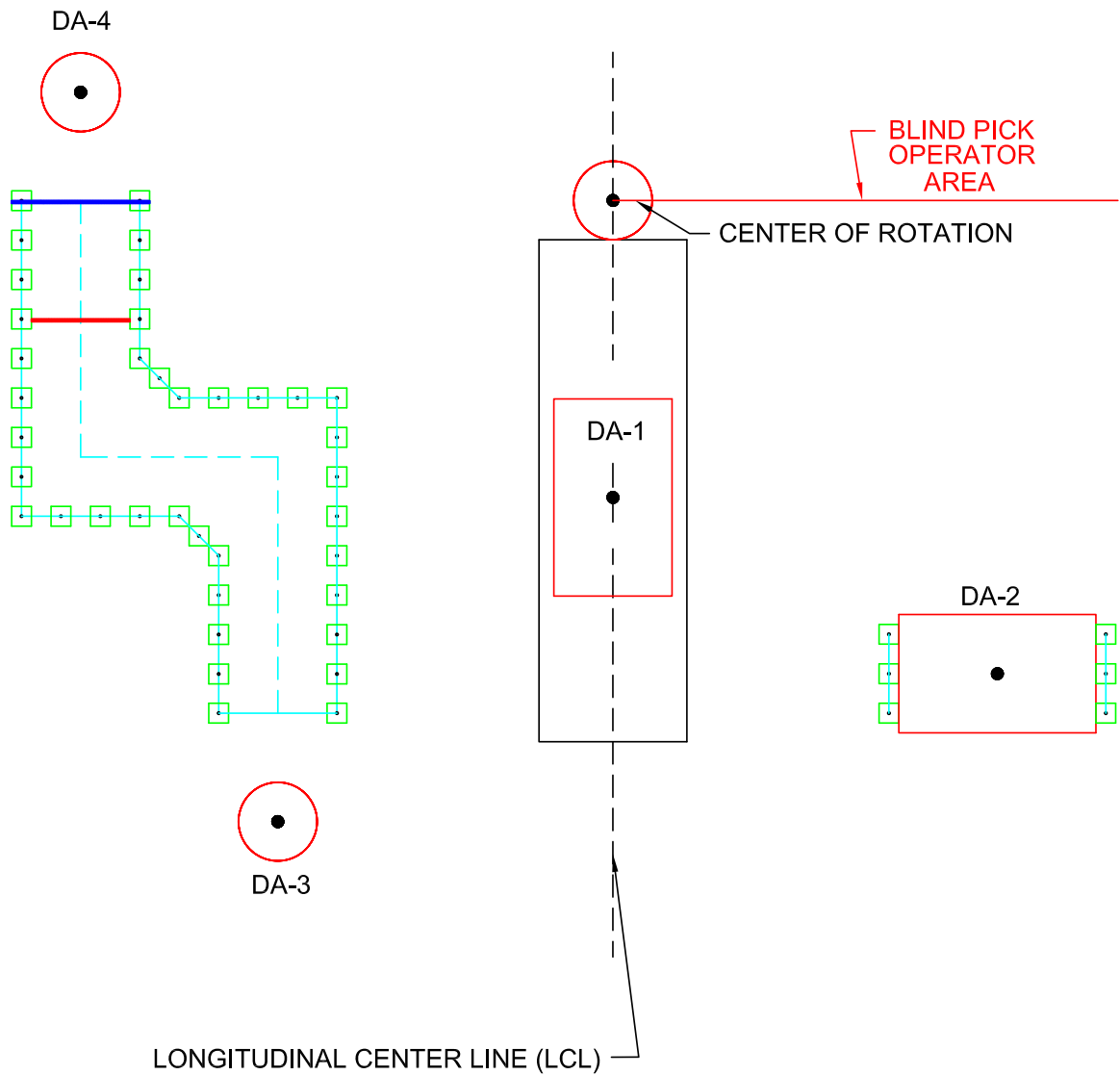
Examiners measuring length of Zigzag Corridor



Sample Test Site Layout (CAD)

ARTICULATING BOOM LOADERS

This a typical sample of an ABL Crane Practical Test Layout. It is not to be used in an actual test situation.



ARTICULATING BOOM LOADER LAYOUT (ABL)
Boom Radius \geq 40ft

SAMPLE
ARTICULATING
CRANE
ABL



Test Site Layout Instructions

ARTICULATING BOOM LOADERS

Using the CAD drawing and other information provided by NCCCO, it is the Test Site Coordinator's responsibility to lay out the test site. It is extremely important that all test equipment (corridor poles, Test Weight and Designated Areas, etc.) be placed exactly as indicated on the CAD drawings. Failure to do so could result in the test administration being declared invalid and the need to start over.

Before the Practical Examiner can begin testing, he/she will verify the site is laid out correctly using the *Site Report* for the appropriate crane type. Different versions of the *Site Report* form can be found in the appropriate sections of this handbook. Test Site Coordinators are strongly encouraged to use this form to verify that they have followed the site layout directions correctly.

There are various ways to begin the process of laying out the Test Site, but we recommend the following procedure:

1.	CHECK FOR OBSTRUCTIONS	Ensure there are no obstructions (on the ground or overhead) that could interfere with the safe operation of the crane during the test. No obstructions may be within 5 ft. of a practical test course in any direction.
2.	PLAN TEST SITE & MARK CENTER OF ROTATION	Survey the test area and ensure there is sufficient level space for the truck, stabilizer span, and full course. Identify the ideal location of the center of rotation of the crane. Clearly mark this point on the ground, and begin building the course.
3.	LOCATE CENTERLINES	Run a string line down the desired location for the longitudinal centerline of the truck's center of rotation. From this line, measure out two parallel lines: the center of the first and last legs of the Zigzag Corridor. Along the original string line, indicate the actual center of rotation for the truck.
4.	LAY OUT PARALLEL ZIGZAG SIDES	Using the string-lined longitudinal center line, and the center lines of the first and last legs of the Zigzag Corridor, mark the four sides of the Zigzag Corridor that according to the Test Site Layout (CAD) run parallel to the string line.
5.	LAY OUT PERPENDICULAR ZIGZAG SIDES	Using the mark at the center of rotation, determine the location of the hurdle. Use the location of the hurdle to determine the remaining perpendicular boundaries of the Zigzag Corridor. Once all the boundaries of the Zigzag have been marked, string line out the Corridor, and place the poles along the Corridor as shown on the Test Site Layout (CAD). Also place the hurdle and hurdle poles in the correct position.
6.	LOCATE ZIGZAG START & STOP CIRCLES	Using the information on the CAD, mark the center points of Designated Areas 3 and 4. Mark both of these Designated areas with a circle spanning four foot outside diameter, with a two inch wide inside line.
7.	LOCATE AND MARK RECTANGULAR DESIGNATED AREA	Using the string-lined longitudinal center line, mark the outer two sides of Designated Area 2 that run parallel to the string line. Use the center of rotation to also mark the outer two sides of Designated Area 2 that run perpendicular to the string line. String line out the two parallel lines as shown on the CAD.
8.	MARK SIDES OF DESIGNATED AREA	Mark the A and B sides of Designated Area 2, as shown on the CAD, measured to the outer edges. Also place the poles around Designated Area 2 as indicated.
9.	MARK BLIND PICK OPERATOR LINE	Clearly mark area as per CAD.
10.	LOCATE AND MARK TRUCK BED DESIGNATED AREA	Use the CAD to determine the placement of Designated Area 1, and clearly mark its boundary (measured to the outer edges).
11.	POSITION TRUCK	With the assistance of a spotter, drive truck into place over the longitudinal centerline. Use a plumb bob to precisely position the truck.



Crane Selection and Setup

ARTICULATING BOOM LOADERS

CRANE SELECTION

Articulating boom loaders used for testing must have a boom radius of 40 ft. or more. The recommended minimum test area is 70 ft. × 60 ft.

COMPLIANCE

All cranes used on CCO Practical Examinations must be in compliance with federal and state OSHA requirements and the current ASME B30.22 Standard.

TEST WEIGHT

The gross load (which includes the weight of the Test Weight, fork assembly, and rotator) must not exceed 75 percent of the rated capacity at the farthest radius indicated on the Test Site Layout (CAD).

These weights must be verified by a weight ticket, crane's load indicating device (LMI, RCI, RCL), or other type of

certification documenting the actual load weight. This document must be available to the Examiner.

As illustrated in the ABL Test Weight Specifications diagram below, the Test Weight must:

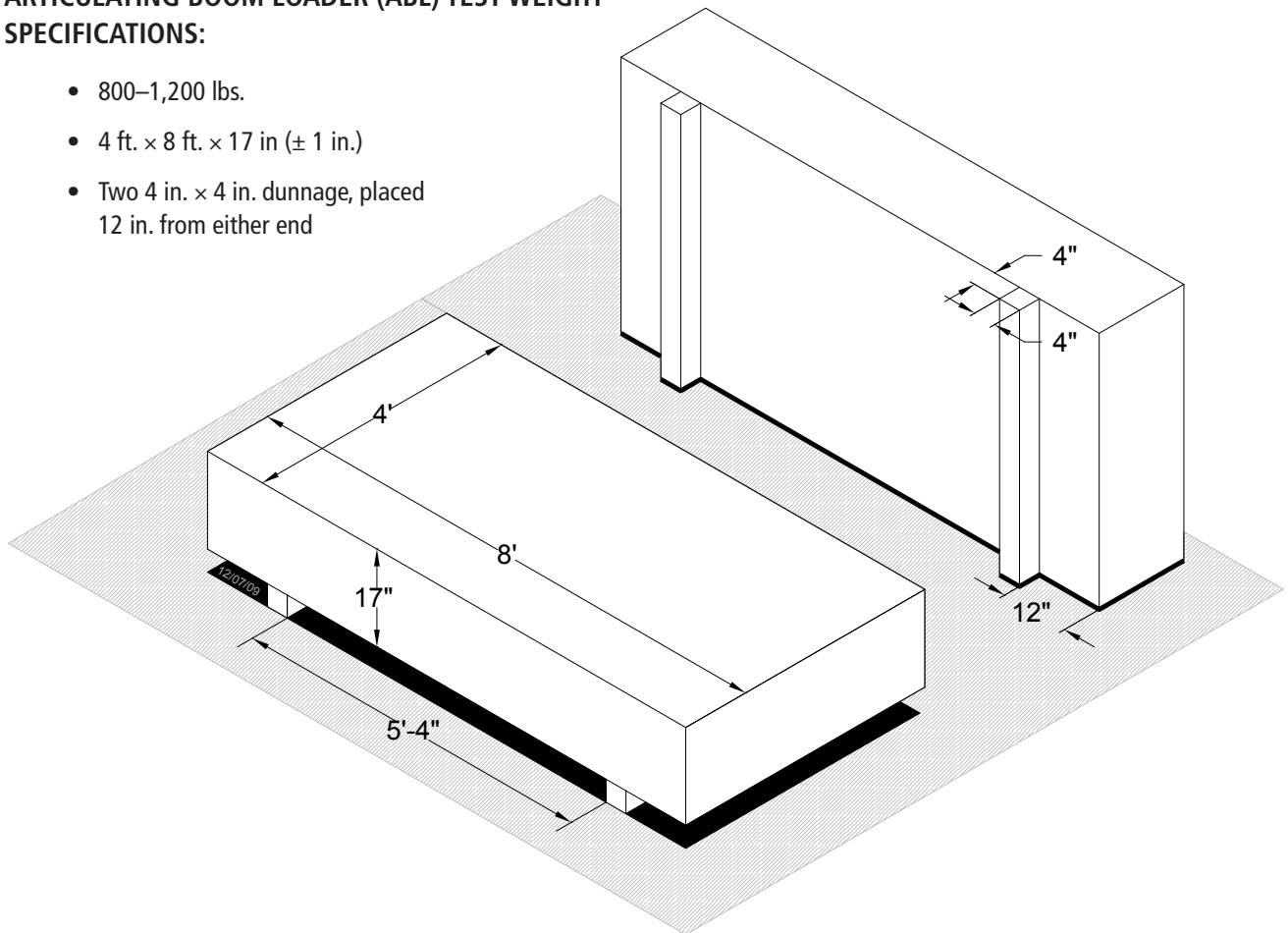
- Weigh between 800 and 1,200 lbs.
- Be 4 ft. × 8 ft. × 17 in. (± 1 in.)
- Have two 4 in. × 4 in. dunnage attached, 12 in. from outside edge of the Test Weight to outside edge of each dunnage

TEST WEIGHT CONSTRUCTION

So long as the requirements for Test Weight design are adhered to, Test Site Coordinators are free to select the most convenient materials and methods available to them.

ARTICULATING BOOM LOADER (ABL) TEST WEIGHT SPECIFICATIONS:

- 800–1,200 lbs.
- 4 ft. × 8 ft. × 17 in. (± 1 in.)
- Two 4 in. × 4 in. dunnage, placed 12 in. from either end



FORK AND ROTATOR

The fork assembly and rotator must be in compliance with the current ASME B30.20 standard, *Below the Hook Lifting Devices*.

Fork tines must be adjusted and set with a spread between 36 in. and 62 in. from outside edge to outside edge.

Attached to the bottom of the fork assembly must be a 2 ft. length of 3/8- or 5/16-inch chain, painted orange or red.

STABILIZERS

All stabilizers must be fully extended and set. This includes all main and auxiliary stabilizers if so equipped.

BLOCKING

Matting or cribbing installed if necessary to provide a sound foundation for the crane. A spirit level (minimum length 1 ft.) must be available for the candidates to verify the crane level condition prior to beginning their testing.

CONTROLS

Test crane may be operated from a manual station, top seat control station, or radio/remote control. All controls must be in working condition.

For remote controls, ensure batteries are fully charged and enough extra batteries are available to complete all scheduled tests.



Ready Reference Checklist

ARTICULATING BOOM LOADERS

YOU WILL NEED THE FOLLOWING FOR *EACH* CRANE TO BE TESTED ON:

- A Test Weight 800–1,200 lbs., 4 ft. × 8 ft. × 17 in., with 4 in. × 4 in. dunnage attached to the bottom 12 in. from outside edge of Test Weight to outside edge of dunnage
- Length of 3/8- or 5/16-inch chain, painted orange or red, measuring 2 ft. long from the bottom of the fork assembly
- PVC pipe, white, 1½ in. (SCH 40), sufficient to make 40 three-foot-long poles
- ¾-inch, CDX-grade (or better) plywood or high density polyethylene (HDPE)*, sufficient to create 44 pole bases, 1½ in. (± ½ in.) × 12 in. × 12 in.
- 44 tennis balls
- 7 ft. (± 1 in.) long horizontal obstruction pole made of 1 inch inner diameter PVC pipe (SCH 40)
- 44 ft. of nylon string to attach tennis balls to poles (optional)
- 88 1¼-inch zinc-plated (galvanized) screws, or equivalent, to secure nylon string to tennis balls and poles (optional)
- 300 ft. string line, brightly colored (for Zigzag Corridor and Test Site Layout use) **NOTE: chalk line may NOT be used**
- Spirit level to verify levelness (minimum 1 ft. long)
- Paint (orange or red) for painting the tops of the poles and chain **NOTE: red electrical tape may be used for the poles**
- Rubber mats or paint to mark the circular Designated Areas (If marking circles, designated areas, or other parts of a course on plywood or mats, the borders must be marked with materials with a flat, uniform surface and a lip variance not to exceed 3/4 in. Any materials used may not interfere with the free movement of the pole bases.)
- 2 in. wide (minimum) clearly visible, durable tape or other material to mark the rectangular Designated Areas and denotation lines
- Handheld wind speed indicator (anemometer)
- 50 ft. tape measure
- Stopwatches and clipboards for Examiner(s) and Proctor(s); multifunction devices such as cell phones and wristwatches are not acceptable
- Two-way communication devices for top seat operator station
- If using remote controls, sufficient batteries to conduct all Practical Exams

EQUIPMENT SOURCES

NCCCO does not endorse or recommend particular vendors of any equipment, but the following sources may help you find specific required materials and equipment:

- **HDPE bases:** House of Plastics (part number HOP01-055), 2580 S. Orange Blossom Trail, Orlando, FL 32805, 407-843-3290, plastics@hopu.com

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Site Report

PRACTICAL EXAMINATION—ARTICULATING BOOM LOADERS

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If using more than one course at this test site, please fill out a Site Report for each course.

Please type or print neatly.

TEST SITE	DATE
NAME OF TEST SITE COORDINATOR	
CAD LAYOUT USED: <input type="checkbox"/> ABL	

Check the following items for compliance:

PRE-TEST CANDIDATE BRIEFING AREA

An indoor facility suitable for the Pre-Test Briefing of exam candidates, to include:

- Sufficient tables and chairs to seat candidates for the Pre-Test Briefing
- A DVD player and television or computer for candidates to watch the CCO Practical Exam presentation
- A location so that waiting candidates are unable to observe other candidates being tested

Candidate materials available:

- A written description of the examination (Candidate Handbook)
- A plan view of the Test Site Layout (CAD)
- Operator's manuals and load charts for all cranes to be used in testing

TEST SITE SETUP

- Entire course is level within five percent of true level
- Zigzag Corridor has no more than 6 in. maximum change in elevation
- Site is free of debris, stored materials, surface irregularities, or hazards such as overhead power lines that could interfere with test maneuvers
- Zigzag Corridor set up on asphalt, concrete surface, or firm and compacted sand, dirt, or gravel (free of vegetation) with a sufficiently uniform surface to permit the poles to stand vertical and slide freely; *grass surfaces are not acceptable*
- No obstructions are within 5 ft. of the Test Site in any direction

Using the Test Site Plan, verify the following measurements:

- Distance from the center of rotation of the crane to the center of Designated Area 1 (± 1 in.)
- Distance from the center of rotation of the crane to the center of Designated Area 2 (± 1 in.)
- Distance from the center of rotation of the crane to the center of Designated Area 3 (± 1 in.)
- Distance from the center of rotation of the crane to the center of Designated Area 4 (± 1 in.)
- Distance from the longitudinal centerline of the crane to the near leg of the Zigzag Corridor (± 1 in.)
- Width of Zigzag Corridor is 6 ft. ($\pm \frac{1}{2}$ in.)
- Length of all six sides of the Zigzag Corridor ($\pm \frac{1}{2}$ in.)
- Distance between consecutive poles (2 ft. $\pm \frac{1}{2}$ in.)
- Clearly marked denotation line located correctly, as per Test Site Layout (CAD) ($\pm \frac{1}{2}$ in.)

SITE REPORT (CONT'D)

PRACTICAL EXAMINATION—ARTICULATING BOOM LOADERS

Test Site #: _____

PAGE 2 of 3

POLES

- 44 poles, made of 1½-inch, white PVC pipe (SCH 40), each 36 in. long (one inside splice per 3 ft. pole permitted; outside splices of PVC pipes NOT permitted; see page 8 for illustration)
- Top 12 in. painted or taped orange or red
- Mounted to a platform made of two layers of ¾-inch, CDX-grade (or better) plywood or high density Polyethylene (HDPE), cut in 12 in. squares
- Two poles notched for hurdle; notch not to exceed 1 in. wide and ½ in. deep
- 7 ft. long (± 1 in.) hurdle made of 1-inch inner diameter PVC pipe (SCH 40)
- A taut, longitudinal string line placed on the ground under the centerline of each pole base, per CAD. A cut concrete line may be used in lieu of a string line; no other materials are acceptable.
- 44 tennis balls
- Spare poles, bases, and tennis balls available

DESIGNATED AREAS

- Clearly visible 2 in. minimum wide perimeter line, marked inside all Designated Areas
- Designated Areas 1 and 2: 6 ft. x 10 ft. rectangles, measured to outer edges
- A taut string placed on the ground on both sides of Designated Area 2, per CAD
- Designated Areas 3 and 4: circles with an outside diameter of 4 ft.
- Clearly visible line marked for Blind Pick Area
- If marking circles, designated areas, or other parts of a course on plywood or mats, the borders must be marked with materials with a flat, uniform surface and a lip variance not to exceed ¾ in. Any materials used may not interfere with the free movement of the pole bases.

TEST CRANE

- Crane has a current annual inspection with supporting documentation
- Crane is set up and leveled in the location specified, ready for operation with engine running, in accordance with the manufacturer's recommendations
- A taut string placed on the ground through the longitudinal centerline of the crane's center of rotation
- Clearly marked center of rotation
- Wheel chocks placed properly

TEST WEIGHT

- Gross weight: 800–1,200 lbs., 4 ft. x 8 ft. x 17 in., with two 4 in. x 4 in. properly secured dunnage attached 12 in. from outside edge of Test Weight to outside edge of dunnage
- A length of 3/8- or 5/16-inch chain attached from center of fork assembly
Note: To measure the chain length, close the fork and attach the chain to the center of the fork assembly. Raise the Test Weight until the chain barely touches the ground, and then measure from the lowest point of the fork assembly to the ground. This length must be 24 inches.
- Chain is painted orange or red

BLOCKING

- Blocking or cribbing, as necessary, to provide a sound foundation for the crane

FORK ASSEMBLY, INCLUDING ROTATOR

- Meets the requirements of current ASME B30.20 standards
- Fork tines span set between 36 in. and 62 in.

REMOTE CONTROL

- If using remote control, sufficient batteries to conduct all practical exams

SITE REPORT (CONT'D)
PRACTICAL EXAMINATION—ARTICULATING BOOM LOADERS

Test Site #: _____

PAGE 3 of 3

TEST COURSE SETUP

- The Practical Examiner whose signature appears at the end of this Test Site Report attests that he/she has set up the course. (Check only if the Practical Examiner has set up the test course.)
- The Examiner must have the following items for conducting the Practical Exam:
 - Two stopwatches (*not* multifunction devices such as cell phones/wristwatches)
 - Clipboard
 - Anemometer (wind meter)
 - Pen or pencil
 - Spirit level (1 ft. minimum)
 - Measuring tape (50 ft. minimum)
 - Test Site Layout (CAD)
 - Proctor
 - Verbatim instructions
 - Notification of test email (if applicable, new test sites only)
 - Personal protective equipment
 - Two-way communication devices (for top seat operator's station)

Deviations from the above-noted requirements are not allowed without written consent from the NCCCO Western Regional Office.

PRACTICAL EXAMINER ATTESTATION (EXAMINER SIGNATURE REQUIRED)

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SIGNATURE OF EXAMINER	DATE
PRINTED NAME OF EXAMINER	EXAMINER ACCREDITATION NUMBER

This Site Report is to be completed by the Examiner prior to each testing session and sent with Candidate Score Sheets to:

NCCCO—Testing Services Department
 1960 Bayshore Blvd.
 Dunedin, Florida 34698

Phone: 727-449-8525
 Fax: 727-461-2746
 Email: info@nccco.org



Crane Report

PRACTICAL EXAMINATION—ARTICULATING BOOM LOADERS

NCCCO has established specific safety conditions and guidelines that each practical exam must follow. This Crane Report is a verification tool used to ensure that all testing parameters are within strict, safe working conditions. Before testing is conducted, the crane being used for testing must have its own unique report filled out. This report should be completed in ink, signed by the Examiner, and sent with the site report to: NCCCO—Testing Services Department, 1960 Bayshore Blvd., Dunedin, FL 34698.

REMINDER: *Each crane used must have a separate report filled out.*

TEST SITE NUMBER		DATE
NAME OF TEST SITE COORDINATOR		
NAME OF PRACTICAL EXAMINER		
CRANE OWNER/COMPANY NAME		
CRANE OWNER/COMPANY POINT OF CONTACT		PHONE NUMBER
MAKE & MODEL OF CRANE	SERIAL NUMBER	
MAX. RATED CAPACITY (LB.)	MAX. BOOM RADIUS (FT.)	IS CRANE EQUIPPED WITH AUXILIARY STABILIZERS? <input type="checkbox"/> YES <input type="checkbox"/> NO
MAIN STABILIZER SPREAD (FT.)	AUXILIARY STABILIZER SPREAD (FT.)	

TEST SITE LAYOUT USED:

ABL (Boom Radius 40 ft. or greater)

Provide next load chart rating beyond 40 ft.:

BOOM RADIUS (ft.)	➔	CAPACITY (lbs.)	× .75 =	MAXIMUM ALLOWABLE LOAD WEIGHT
<input style="width: 100px; height: 20px;" type="text"/>		<input style="width: 100px; height: 20px;" type="text"/>		<input style="width: 100px; height: 20px;" type="text"/> LB.

TEST WEIGHT BEING USED (lbs.)	+	WEIGHT OF FORK (lbs.)	+	WEIGHT OF ROTATOR (lbs.)	=	GROSS LOAD
<input style="width: 100px; height: 20px;" type="text"/>		<input style="width: 100px; height: 20px;" type="text"/>		100		<input style="width: 100px; height: 20px;" type="text"/> LB.

NOTE: *Gross Load used must be less than Maximum Allowable Load Weight calculated above.*

<i>I attest that this is a true and accurate report of the crane and test weight being used for testing.</i>			
EXAMINER SIGNATURE	PRINTED NAME OF EXAMINER	EXAMINER'S ACCREDITATION #	DATE



NCCCO Information Release Policy

A. Definitions

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

B. Policies

1. It shall be the policy of NCCCO to provide Releasable Information pertaining to individuals who have successfully passed one or more NCCCO examinations. It shall also be the policy of NCCCO to provide Releasable Information pertaining to such individuals on its website using such protocols as may be established. In addition, it shall be the policy of NCCCO to provide information, as appropriate, concerning individuals who have been sanctioned, suspended or revoked from participation in NCCCO's programs, using such protocols as may be established.
2. Releasable Information may be released to a Third Party who makes a written request, including by electronic correspondence. Generally, Releasable Information will be released within one business day from actual receipt of a written request.
3. If a Third Party requests information concerning an individual who has not taken or successfully passed an NCCCO examination, NCCCO may release a statement confirming that, as of a given date, the individual does not appear on NCCCO's list of successful candidates in one or more categories of certification.
4. If an applicant or certificant is under formal sanction, suspension, or revocation by NCCCO, then NCCCO may release a statement to that effect to any persons and by any reasonable means, including by means of a list published on the NCCCO website. In addition, if an individual applicant or certificant is under formal investigation, sanction, suspension, or revocation by NCCCO, then NCCCO may release a statement concerning the status of the applicant or certificant to any Third Party and to any jurisdiction that requires or accepts CCO certification as a basis for satisfying

requirements to work in the jurisdiction. Any such statement to a Third Party or jurisdiction may identify the applicant or certificant, the certifications affected, the actions taken, and the effective dates of any such actions.

5. If an accredited Practical Examiner, authorized Test Site Coordinator, listed Training Provider, or other authorized participant in NCCCO's programs ("Authorized Participant") is under formal sanction, suspension, or revocation by NCCCO, then NCCCO may release a statement to that effect to any persons and by any reasonable means, including by means of a list published on the NCCCO website. In addition, if an Authorized Participant is under formal investigation, sanction, suspension, or revocation by NCCCO, then NCCCO may release a statement concerning the status of the Authorized Participant to any persons and by any reasonable means, including by means of a list published on the NCCCO website. Any such statement may identify the Authorized Participant, the credentials or capacities affected, the actions taken, and the effective dates of any such actions.
6. If a Third Party seeks information other than the foregoing information, generally, absent a subpoena or similar legal process, such information will not be released. However, in the course of business, as circumstances reasonably warrant, NCCCO reserves the discretion to release information other than the foregoing information.
7. Certain situations may require or warrant the immediate verbal confirmation of an individual's certification status or other Releasable Information in response to a written or verbal request. Under such circumstances, NCCCO may provide such immediate verbal confirmation, at its discretion. When such a verbal confirmation is provided, it shall be NCCCO's policy to follow up with a written confirmation.
8. It shall be the policy of NCCCO to discuss score-related and test-specific matters only with a candidate or a candidate's authorized legal representative.
9. NCCCO will release Releasable Information about an individual upon receipt of a written request (including electronic correspondence) from that individual. NCCCO may release information other than Releasable Information about an individual, at its discretion, upon receipt of a signed, notarized, written request from that individual. In addition, NCCCO will release information other than Releasable Information about an individual when required by a legal authority of competent jurisdiction under a duly-issued subpoena, subject to any objection, or as otherwise required by law.



Summary of Changes

TEST SITE COORDINATOR HANDBOOK—ARTICULATING CRANES

Following approval by the appropriate NCCCO committees, Commissioners, and/or Board of Directors, the following substantive (non-editorial) changes have been made to the *Articulating Crane Test Site Coordinator Handbook* (major programmatic changes covered in Test Site Coordinator Bulletins are in **bold**):

Changes made 08/18:

<i>Page(s)</i>	<i>Section</i>	<i>Change</i>
3	Criteria for Test Sites	<ul style="list-style-type: none"> Added that the pole corridors must be free of vegetation.
5	Permanent Test Sites	<ul style="list-style-type: none"> Added that an annual full site report is required for permanent test sites.
7, 31, 34, 45, 48	Hurdle	<ul style="list-style-type: none"> The horizontal hurdle pole for Articulating Boom Crane and Articulating Boom Loader practical exams must be made of 1 in. inner diameter (SCH 40) PVC pipe.
7, 8	Pole Barrier Construction	<ul style="list-style-type: none"> Removed requirement to use screws to attach string to poles and tennis balls
33, 47	Site Report	<ul style="list-style-type: none"> Added that the Zigzag Corridor must be free of vegetation.

Changes made 03/18:

<i>Page(s)</i>	<i>Section</i>	<i>Change</i>
5, 19	Score Reporting	<ul style="list-style-type: none"> Test Site Coordinators now automatically receive Pass/Fail Reports for both written and practical exams at no charge. A Pass/Fail Report Request Form is no longer required to be submitted.
14	Practical Test Administration Summary Form	<ul style="list-style-type: none"> Moved \$50.00 fee for Detailed Score Report Request from mandatory to optional charge.
15	Candidate Application	<ul style="list-style-type: none"> Updated Candidate Attestation Statement
51	Information Release Policy	<ul style="list-style-type: none"> Added the NCCCO Information Release Policy

Changes made 09/17:

<i>Page(s)</i>	<i>Section</i>	<i>Change</i>
7, 34, 48	Poles	<ul style="list-style-type: none"> Added that a cut concrete line may be used in lieu of a string line; no other materials are acceptable.
11, 12, 20, 21	Test Site Coordinator Forms	<ul style="list-style-type: none"> Updated return address to NCCCO's new Murray, UT, address
13-14	Practical Test Administration Summary Form	<ul style="list-style-type: none"> New form must be returned along with all candidate applications, fees, photos, and score sheets

IMPORTANT CONTACT INFORMATION



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