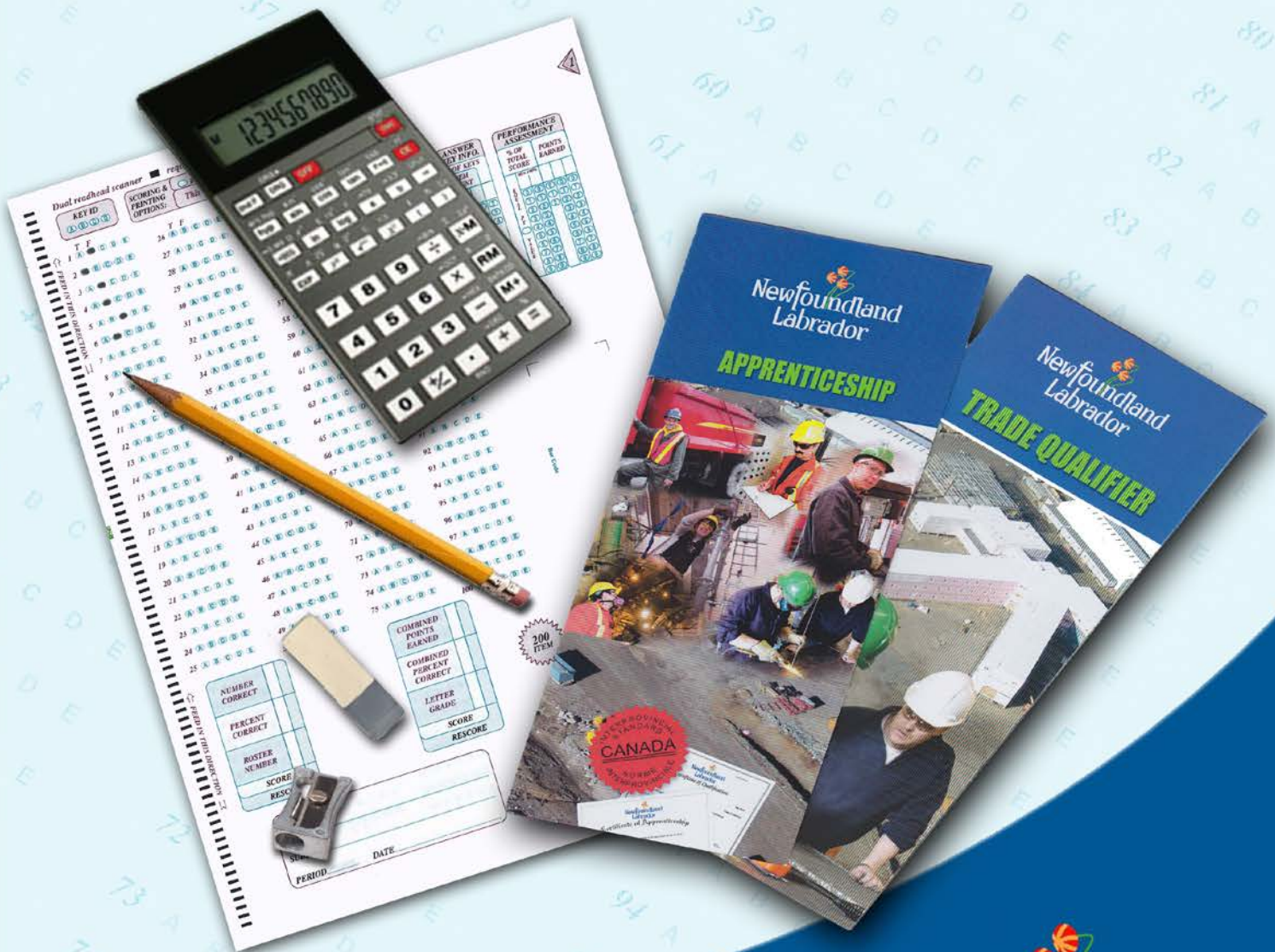


APPRENTICESHIP & CERTIFICATION

Study Guide Mobile Crane Operator



Apprenticeship and Trades Certification

Study Guide

Mobile Crane Operator

(Based on 2013 NOA)

Government of Newfoundland and Labrador
Department of Immigration, Population Growth and Skills

Version 9

Revised
April 2022

Table of Contents

Introduction	3
Exam Process	4
Before the Exam.....	4
During the Exam.....	4
After the Exam	4
Exam Format	5
Exam Content.....	9
Understanding the National Occupational Analysis (NOA)	9
Exam Breakdown	11
NOA Sub-tasks.....	12
Task Profile Checklist	13
Create a Study Plan	18
Resources - Websites	21
Resources - Booklist	22
Conclusion.....	23
Appendices:	
Appendix A: Regional Offices	24
Appendix B: Calculator Use	25
Appendix C: Answer Sheet Example	26

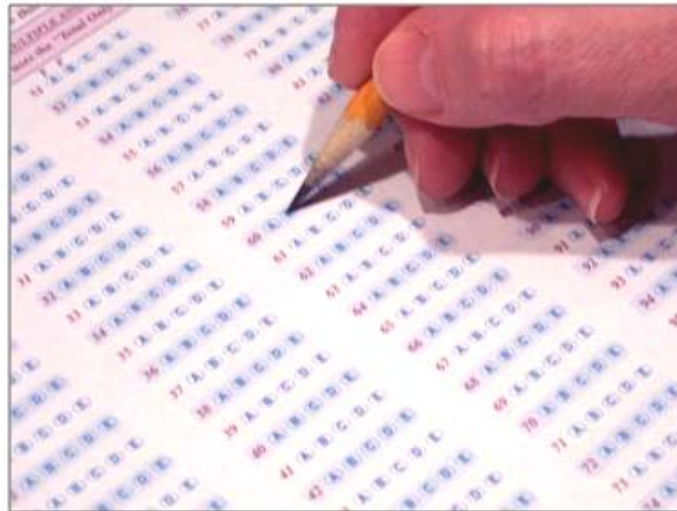
Introduction

This Study Guide has been developed by the Newfoundland and Labrador Department of Immigration, Population Growth and Skills, Apprenticeship and Trades Certification Division, to assist apprentices and trade qualifiers as they prepare to write the Inter-provincial (IP) Red Seal Exam. IP Exams are available for all Red Seal trades. For a list of Inter-provincial trades please refer to the Department of Immigration, Population Growth and Skills website: <https://www.gov.nl.ca/atcd/designated-trades/list-of-designated-trades/>

Some of the specific goals of this guide are:

- ⇒ to help you understand the skills and knowledge that might be covered on the exam
- ⇒ to help you identify your strengths and weaknesses
- ⇒ to provide organization and structure for a course of study
- ⇒ to provide a list of resources to help you with your study plan
- ⇒ to support and supplement the teaching and learning process

This study guide outlines the theoretical portion of the program. The intent is not to replace technical training provided under the guidance of instructors. Rather, it is a tool to be used in conjunction with formal training.



Exam Process

Before the Exam

You must contact the nearest Apprenticeship and Trades Certification Divisional office to make request to write the IP Red Seal exam (*See Appendix A for a list of regional offices*). Upon approval, the Apprenticeship Program Officer (APO) will notify you of your eligibility to write the exam, and provide you with scheduling information. If you require special accommodations due to a disability or language barrier, please contact your regional office for information on applying for this service.

During the Exam

You must bring:

- personal identification such as a photo or signature ID or valid Newfoundland and Labrador driver's license
- your notification letter

The following will be provided:

- Load Chart
- A calculator (*see Appendix B for calculator information*)
- All other items required such as pencils, scrap paper, etc.

Important Note:

Personal cell phones, calculators, or other electronic equipment are NOT allowed into the exam room. If you do bring them, they will be stored away and returned to you when you have completed the exam.

After the Exam

Results will be mailed to you approximately seven to ten days after completion of the exam. All necessary instructions and information will be provided in the results letter.

The percentage mark you obtained will be provided. You will also be given a section by section breakdown, showing how many questions were in each section, as well as the number of questions in each section you completed successfully.

If you are successful in obtaining a 70% or more on your exam, you will be issued a Newfoundland and Labrador Certificate of Qualification with a Red Seal endorsement.

Exam Format

All IP Red Seal exams are written in multiple-choice format. Each exam has between 100 and 150 questions. A multiple choice question consists of a stem (a complete question) followed by four options (A, B, C, D). The stem contains all the information necessary to answer the question. The options consist of the one correct answer and three “distracters.” Distracters are incorrect. (See Appendix C for a sample answer sheet).

Level 1 Knowledge and Recall

Questions at this level test your ability to recall and understand definitions, facts, and principles.

Level 2 Procedural and Application

Questions at this level test your ability to apply your knowledge of procedures to a new situation.

Level 3 Critical Thinking

Questions at this level test your ability to interpret data, solve problems and arrive at valid conclusions.

On the following pages, examples of each of the three types of questions are provided.

Level 1 Examples:

1. How is the weight of a load estimated?
 - A. Multiply length by circumference.
 - B. Multiply length by width.
 - C. Multiply volume by unit weight.
 - D. Compare it to other known lifts.



2. From whom does the crane operator accept notification that the power line has been de-energized?

- A. Signaler.
- B. Power company representative.
- C. Site engineer.
- D. Crane dispatcher.



3. What is the safe distance required for counterweight swing clearance?

- A. 1 ft.
- B. 2 ft.
- C. 4 ft.
- D. 6 ft.



Level 2 Examples:

1. After making several lifts from one spot, what step is followed?

- A. Check hydraulic oil.
- B. Check level.
- C. Check wind conditions.
- D. Check radius.



2. Prior to installing the upper works, what is done?

- A. Clean and lubricate splined shafts and roller bearings.
- B. Clean and lubricate splined shafts and horizontal travel shaft.
- C. Clean and lubricate splined shafts and clean turntable surfaces.
- D. Clean and lubricate splined shafts and expansion locking ring.



3. What two functions are done to increase radius and keep the load 1 foot off of the ground?

- A. Boom up and raise the load.
- B. Boom up and lower the load.
- C. Boom down and raise the load.
- D. Boom down and lower the load.



Level 3 Examples:

1. Given the following information:

- Three leg bridle sling, 1 in. wire rope
- L = 20 ft. sling length
- H = 15 ft. height from load to hook
- WLL = working load limit (Safe working load)
- Capacity = WLL (of single vertical hitch) x H/L x 2

What is the maximum capacity for this configuration?

- A. 9 000 lb.
- B. 13 500 lb.
- C. 24 000 lb.
- D. 27 000 lb.



2. What is the minimum number of parts of line required to perform the following lift?

- Load weighs 18 700 lb.
- 40 ton, 4 sheave block
- Block weighs 1 200 lb.
- Spreader bar weighs 650 lb. including slings
- Line pull is 6 300 lb.

- A. 2.
- B. 3.
- C. 4.
- D. 5.



3. What would be the result of angle type outriggers blocked up higher on one side of the truck than on the other?

- A. Uneven stress on the boom.
- B. Un-level platform.
- C. Tipping axis distance reduction.
- D. Truck more difficult to operate.



Source of questions:

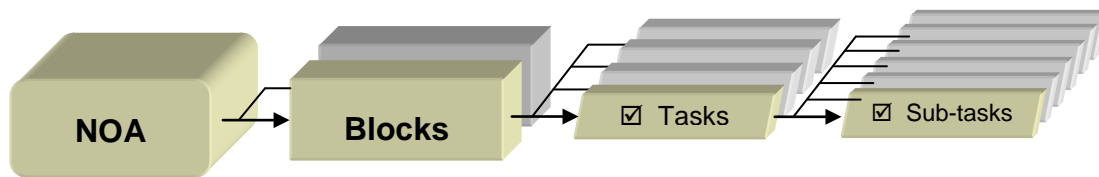
<https://www.red-seal.ca/eng/s.1mpl.2.2x.1mQ.5.2st.3.4ns.shtml?tid=148>

Exam Content

Understanding the *National Occupational Analysis (NOA)*

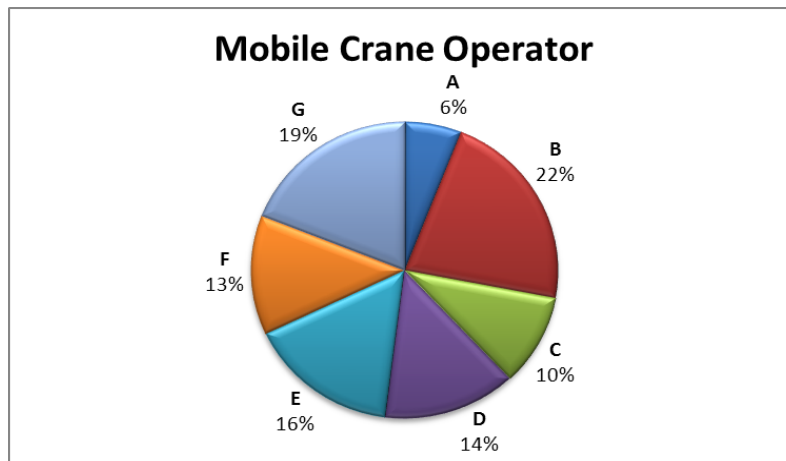
The NOA is a document used for Red Seal trades that describes the knowledge, skills and abilities required by a fully competent tradesperson working in that trade. The content for the IP Red Seal exam is based on the NOA. The NOA is an excellent tool to use as you study for the Red Seal exam. NOAs can be found at www.red-seal.ca.

NOA material is organized into major content areas called **BLOCKS**. The blocks are further broken down into **TASKS** and **SUB-TASKS**.



NOA Pie Chart

The NOA Pie Chart presents the block percentages in the form of a pie chart which tells you the approximate number of questions from each block. For example, 6% of the questions on the **Mobile Crane Operator** Exam will be based on **Block A**.



Block Titles			
Block A	Common Occupational Skills	Block E	Lift Planning, Site Preparation and Crane Setup
Block B	Hoisting Calculations	Block F	Crane Assembly, Disassembly and Transport
Block C	Crane Inspection and Maintenance	Block G	Crane Operations
Block D	Rigging		

Exam Breakdown

The **Mobile Crane Operator** IP Red Seal Exam has 110 questions. The following table shows a breakdown of the approximate number of questions that come from each NOA block. It is important to note that the number of questions can change at any time. When you are ready to write your exam, you may contact your regional office to verify the number of questions (See Appendix A).

		# of Questions
Block A	Common Occupational Skills	7
Task 1	Performs safety-related functions	
Task 2	Organizes work	
Block B	Hoisting Calculations	24
Task 3	Determines load weights	
Task 4	Calculates crane capacity	
Task 5	Performs rigging calculations	
Block C	Crane Inspection and Maintenance	11
Task 6	Performs pre-operational checks and regular inspections	
Task 7	Performs operational and continual checks	
Task 8	Performs minor crane maintenance	
Block D	Rigging	15
Task 9	Inspects, maintains and stores slings and hardware	
Task 10	Follows rigging procedures	
Block E	Lift Planning, Site Preparation and Crane Setup	18
Task 11	Performs pre-lift planning	
Task 12	Sets up crane	
Block F	Crane Assembly, Disassembly and Transport	14
Task 13	Loads and unloads components for transport	
Task 14	Drives cranes on public roadways	
Task 15	Assembles and disassembles lattice boom cranes	
Task 16	Assembles and disassembles telescopic boom cranes	
Task 17	Assembles and disassembles specialty equipment and attachments	
Block G	Crane Operations	21
Task 18	Performs common craning operations	
Task 19	Operates friction drive lattice boom cranes	
Task 20	Operates hydraulic drive lattice boom cranes	
Task 21	Operates telescopic boom cranes	
Task 22	Performs specialty craning operations	
Task 23	Secures crane	
	Total	110

NOA Sub-tasks

The following *NOA Task Profile Checklist* outlines the blocks, tasks and sub-tasks for your trade. The IP Red Seal exam is written to test your knowledge and abilities regarding the sub-tasks in the NOA. This chart can be used to review your current knowledge. You can review by placing a checkmark (✓) next to those you understand fully.

Place your focus on those you do not understand and study them until you are comfortable with the material. Think of possible questions in that particular content area.

The NOA also contains a list of “supporting knowledge and abilities” for each sub-task. They are the skills and knowledge you must have to perform a sub-task. The supporting knowledge and abilities identified under each sub-task will be very helpful as you review. The list can be found in the NOA for your trade.

**Task Profile Checklist
Based on 2013 NOA
Mobile Crane Operator**

Block A: Common Occupational Skills

Task 1: Performs Safety-Related Functions

Sub-Tasks

- Maintains a safe work environment
- Uses personal protective equipment (PPE) and safety equipment

Task 2: Organizes Work

Sub-Tasks

- Communicates with others
- Uses documentation

Block B: Hoisting Calculations

Task 3: Determines Load Weights

Sub-Tasks

- Identifies the weight
- Calculates weight

Task 4: Calculates Crane Capacity

Sub-Tasks

- Determines radius and crane configuration
- Interprets load chart

Task 5: Performs Rigging Calculations

Sub-Tasks

- Performs sling angle calculations
- Performs working load limit (WLL) calculations

Block C: Crane Inspection and Maintenance

Task 6: Performs Pre-Operational Checks and Regular Inspections

Sub-Tasks

- Inspects engine systems
- Inspects air systems
- Inspects electrical systems
- Inspects hydraulic systems
- Inspects chassis/car body and running gear components
- Inspects outriggers and counterweights
- Inspects boom components and attachments
- Inspects hoisting systems

Task 7: Performs Operational and Continual Checks

Sub-Tasks

- Checks operating controls
- Inspects monitoring and warning systems
- Monitors running lines, hoist lines and standing ropes
- Maintains gauges and warning systems

Task 8: Performs Minor Crane Maintenance

Sub-Tasks

- Changes oil and filters
- Greases crane
- Lubricates wire ropes
- Makes minor adjustments and replacements

Block D: Rigging

Task 9: Inspects, Maintains and Stores Slings and Hardware

Sub-Tasks

- Lubricates slings and hardware
- Identifies deficiencies in slings and hardware
- Disposes of damaged slings and hardware
- Stores slings and hardware

Block D: Rigging (Cont'd)

Task 10: Follows Rigging Procedures

Sub-Tasks

- Selects required rigging
- Rigs loads
- Monitors rigging

Block E: Lift Planning, Site Preparation and Crane Setup

Task 11: Performs Pre-Lift Planning

Sub-Tasks

- Participates in routine, engineered and specialty lift planning
- Evaluates risks and hazards

Task 12: Sets up Crane

Sub-Tasks

- Performs final site inspection
- Positions crane
- Completes setup

Block F: Crane Assembly, Disassembly and Transport

Task 13: Loads and Unloads Components for Transport

Sub-Tasks

- Loads crane and components
- Unloads crane and components

Task 14: Drives Cranes on Public Roadways

Sub-Tasks

- Performs pre-trip planning
- Prepares crane for transport
- Drives cranes

Block F: Crane Assembly, Disassembly and Transport (Cont'd)

Task 15: Assembles and Disassembles Lattice Boom Cranes

Sub-Tasks

- Installs tracks on car body (*lattice boom*)
- Installs house (*lattice boom*)
- Installs outrigger boxes (*lattice boom*)
- Installs boom base (*lattice boom*)
- Assembles boom and jib (*lattice boom*)
- Installs counterweights (*lattice boom*)
- Installs hoist lines, hook blocks and overhaul ball (*lattice boom*)
- Removes hoist lines, hook blocks and overhaul ball (*lattice boom*)
- Disassembles boom and jib (*lattice boom*)
- Removes counterweights (*lattice boom*)
- Removes boom base (*lattice boom*)
- Removes house (*lattice boom*)
- Removes tracks from car body (*lattice boom*)
- Removes outrigger boxes (*lattice boom*)

Task 16: Assembles and Disassembles Telescopic Boom Cranes

Sub-Tasks

- Installs outrigger boxes (*telescopic boom*)
- Installs main boom (*telescopic boom*)
- Installs hoist lines, hook blocks and overhaul ball (*telescopic boom*)
- Installs counterweights (*telescopic boom*)
- Installs swing-away jibs and inserts (*telescopic boom*)
- Removes swing-away jibs and inserts (*telescopic boom*)
- Removes counterweights (*telescopic boom*)
- Removes hoist lines, hook blocks and overhaul ball (*telescopic boom*)
- Removes main boom (*telescopic boom*)
- Removes outrigger boxes (*telescopic boom*)

Task 17: Assembles and Disassembles Specialty Equipment and Attachments

Sub-Tasks

- Assembles specialty equipment and attachments
- Disassembles specialty equipment and attachments

Block G: Crane Operations

Task 18: Performs Common Craning Operations

Sub-Tasks

- Configures load moment indicator (LMI)
- Mobilizes crane on jobsite

Task 19: Operates Friction Drive Lattice Boom Cranes

Sub-Tasks

- Operates friction drive crawler-mounted lattice boom cranes
- Operates friction drive truck-mounted lattice boom cranes

Task 20: Operates Hydraulic Drive Lattice Boom Cranes

Sub-Tasks

- Operates hydraulic drive crawler-mounted lattice boom cranes
- Operates hydraulic drive truck-mounted lattice boom cranes

Task 21: Operates Telescopic Boom Cranes

Sub-Tasks

- Operates crawler-mounted telescopic cranes
- Operates rubber-mounted telescopic cranes

Task 22: Performs Specialty Craning Operations

Sub-Tasks

- Operates piledriver
- Performs duty cycle operations
- Operates cranes on barges
- Performs multi-crane lifts
- Uses personnel hoisting equipment

Task 23: Secures Crane

Sub-Tasks

- Secures crane for short term
- Secures crane for long term

Create a Study Plan

As you prepare for your exam, it is important to plan a schedule. The following two tables will help you stay on track.

The first table is a **“Weekly Study Plan.”** In this table list the areas you will focus your study for each day. You should include items you need to review as well as items you need to study. Remember, more time will be needed for study in areas you find difficult, whereas you may only require review in areas you are more familiar with. As you work through the NOA sub-task list you can start to fill in this table.

The second table is a **“Study Time Table.”** It is important to create a study schedule where you determine the best days of the week and times of day for you to study.

Print several copies of these tables and fill out for each week of study. It is important to stick to your study schedule.

Weekly Study Plan for Week of: _____

	Area of Study 1	Area of Study 2	Area of Study 3	Area of Study 4	Area of Study 5	Area of Study 6
Mon.						
Tues.						
Wed.						
Thu.						
Fri.						
Sat.						
Sun.						

Study Time Table for Week of: _____

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
8:00 AM - 9:00 AM							
9:00 AM - 10:00 AM							
10:00 AM - 11:00 AM							
11:00 AM - 12:00 Noon							
12:00 Noon - 1:00 PM							
1:00 PM - 2:00 PM							
2:00 PM - 3:00 PM							
3:00 PM - 4:00 PM							
4:00 PM - 5:00 PM							
5:00 PM - 6:00 PM							
6:00 PM - 7:00 PM							
7:00 PM - 8:00 PM							

Resources - Websites

Study information can be drawn from a variety of sources. A sample list of study materials (websites and books) is provided below. These and other helpful resources may be found in a local college bookstore, on the Internet, or at your place of employment. You may also be able to borrow them from an apprentice or journey-person in your trade.

Study Strategies and Exam Preparation Guide

The *Study Strategies & Exam Preparation Guide* is meant to be used in conjunction with this study guide. It provides direction and information on such areas as study habits, test preparation and test taking techniques.

<https://www.gov.nl.ca/atcd/apprentices-youth/self-study/study-guides/>

Plan of Training (POT)

A *Provincial Plan of Training* details the full scope of learning for a particular occupation, including both technical training competencies and industry experiences necessary to write an IP Red Seal exam (and complete the requirements for Red Seal Certification), or to write a provincial examination. The Plan of Training is based on the NOA.

<https://www.gov.nl.ca/atcd/designated-trades/pots-aacs/>

Red Seal Website

National Occupational Analysis - The NOA is a document used for Red Seal trades that describes the knowledge and abilities required by a fully competent tradesperson working in that trade. The content for the IP exam is based on the NOA.

<https://www.red-seal.ca/>

Mobile Crane Operator PRACTICE Exam

This is **NOT** an IP exam. This is a practice exam provided by the Inter-provincial Standards Red Seal program. It was developed using similar question types to that of a Red Seal exam. The exam is intended to be used for self-assessment in preparation for writing an IP Exam.

<https://www.red-seal.ca/eng/s.1mpl.2.2x.1mQ.5.2st.3.4ns.shtml?tid=148>

Red Seal Exam Self-Assessment Guide

Use this self-assessment tool to rate your own understanding and experience with the tasks of the trade that are on the Red Seal examination:

https://www.red-seal.ca/_conf/assets/custom/docms/mco-exam_selfassessment_eng-20210920.pdf

Glossary of Terms

The Red Seal website also lists a Glossary of Terms which will be helpful in preparing for your IP exam:

http://www.red-seal.ca/trades/mobilecrane_op/2013n.4.1_.1ppb_gl.4ss.1ry-eng.html

Acronyms

The Red Seal website lists Acronyms which will be helpful in preparing for your IP exam:

http://www.red-seal.ca/trades/mobilecrane_op/2013n.4.1_.1ppc_.1cr.4nym-eng.html

Tools and Equipment

The Red Seal website lists Tools and Equipment which will be helpful in preparing for your IP exam:

http://www.red-seal.ca/trades/mobilecrane_op/2013n.4.1_.1pp.1_t.4.4ls-eng.html

Resources – Book List

The books listed below are sorted according to NOA blocks as referenced throughout this study guide. You can use this list to help you obtain information on specific topics. It is not necessary to use these books specifically, as you may find others that will be equally beneficial.

Book	Block A	Block B	Block C	Block D	Block E	Block F	Block G
IPT's Crane & Rigging Handbook	✓	✓	✓	✓	✓	✓	✓
Mobile Crane Manual, 1 st edition	✓	✓		✓	✓	✓	✓
Mobile Craning Today, 1 st edition	✓	✓		✓	✓	✓	
Occupational Health and Safety Act	✓		✓	✓			
Workplace Hazardous Materials Information System	✓						
Transportation of Dangerous Goods Act	✓						
CAN-CSA Safety Code for Mobile Cranes	✓	✓	✓	✓	✓	✓	✓
Rigging Manual		✓		✓			
Hoisting and Rigging Safety Manual		✓		✓	✓	✓	

If you wish to obtain any of the resources listed above, here is the reference information:

- IPT's Crane & Rigging Handbook*, IPT Publishing & Training Ltd., 2005, Garby, RG., ISBN 978-0920855010
- Mobile Crane Manual*, 1st edition, Construction Safety Association of Ontario, 1982, Dickie, D.E., ISBN 978-0919465091
- Mobile Craning Today*, 1st edition, Operating Engineers Training Institute of Ontario, 1988, Campbell, D.H., ASIN B0007BHT4C
- Occupational Health and Safety Act*, RSNL1990 Chapter 0-3, www.assembly.nl.ca/legislation/sr/statutes/o03.htm
- Workplace Hazardous Materials Information System*, Occupational Health and Safety Act, 1988, <http://www.hc-sc.gc.ca/ewh-semt/occup-travail/whmis-simdut/index-eng.php>
- Transportation of Dangerous Goods Act*, Agreement Respecting Administration of the Transportation of Dangerous Goods Act, Canada – Newfoundland and Labrador, 1992, www.tc.gc.ca/eng/tdg/clear-agreements-nf-353.htm
- CAN-CSA Safety Code for Mobile Cranes*, CSA for Occupational Health & Safety, ohs.csa.ca/standards/construction/cranes/dsp_Cranes.asp
- Rigging Manual*, Construction Safety Association of Ontario, ISBN 0-919465-09-9
- Hoisting and Rigging Safety Manual*, Construction Safety Association of Ontario, ISBN 978-0919465706

Disclaimer

Various external resources (websites, textbooks) have been listed in this study guide to assist an individual in preparing to write an IP Red Seal Exam. This does not mean the Department of Immigration, Population Growth and Skills, Newfoundland and Labrador endorses the material or that these are recommended as the best resources. There may be other resources of equal or greater value to an individual preparing for an IP Red Seal exam. The Department of Immigration, Population Growth and Skills has no control over the content of external textbooks and websites listed, and no responsibility is assumed for the accuracy of the material.

Conclusion

We hope this guide has provided you with some useful tools as you prepare for your IP Red Seal exam. If you have any questions regarding your IP Red Seal exam please contact your regional office (*see Appendix A for a list of regional offices*).

We appreciate your comments and feedback regarding the usefulness of this study guide. If you have any comments or suggestions, we welcome your feedback. The feedback form at the end of this guide can be used for this purpose.

Appendix A: Regional Offices

If you have any questions regarding your IP Red Seal exam, please contact one of the following regional offices:

Department of Immigration, Population Growth and Skills
Apprenticeship and Trades Certification Division
Toll Free: 1-877-771-3737

<https://www.gov.nl.ca/atcd/contact-us/staff-listing-and-office-locations/>

Corner Brook

1-3 Union Street
Aylward Building, 2nd Floor
Corner Brook, NL A2H 5M7

Telephone: (709) 637-2366
Facsimile: (709) 637-2519

Grand Falls-Windsor

42 Hardy Avenue
Grand Falls-Windsor, NL
A2A 2J9

Telephone: (709) 292-4215
Facsimile: (709) 292-4502

Clarenville

45 Tilley's Road
Clarenville, NL
A5A 1Z4

Telephone: (709) 466-3982
Facsimile: (709) 466-3987

St. John's

Confederation Building
P.O. Box 8700
St. John's, NL A1B 4J6

Telephone: (709) 729-5688
Facsimile: (709) 729-5878

Happy Valley – Goose Bay

163 Hamilton River Road
Burse Building
Happy Valley – Goose Bay, NL
A0P 1E0

Telephone: (709) 896-6348
Facsimile: (709) 896-3733

Appendix B: Calculator Use

The picture below shows a calculator with the same functions as the one you will be provided with during your exam. It is advisable to borrow or purchase one with similar functions so that you can familiarize yourself with it before you write your exam.



Appendix C: Answer Sheet Example

With your exam you will be given an answer sheet like the one below. When answering multiple choice questions be sure to fill the circle completely and fill the circle that corresponds to the question on the exam.

Dual readhead scanner required to score this sheet

KEY ID
 A B C D

SCORING & PRINTING OPTIONS:
 RESCORE MULTIPLE ANSWER SCORING
 This sheet always uses the "Total Only" scoring option.

1 T F A B C D E
 2 A B C D E
 3 A B C D E
 4 A B C D E
 5 A B C D E
 6 A B C D E
 7 A B C D E
 8 A B C D E
 9 A B C D E
 10 A B C D E
 11 A B C D E
 12 A B C D E
 13 A B C D E
 14 A B C D E
 15 A B C D E
 16 A B C D E
 17 A B C D E
 18 A B C D E
 19 A B C D E
 20 A B C D E
 21 A B C D E
 22 A B C D E
 23 A B C D E
 24 A B C D E
 25 A B C D E

26 T F A B C D E
 27 A B C D E
 28 A B C D E
 29 A B C D E
 30 A B C D E
 31 A B C D E
 32 A B C D E
 33 A B C D E
 34 A B C D E
 35 A B C D E
 36 A B C D E
 37 A B C D E
 38 A B C D E
 39 A B C D E
 40 A B C D E
 41 A B C D E
 42 A B C D E
 43 A B C D E
 44 A B C D E
 45 A B C D E
 46 A B C D E
 47 A B C D E
 48 A B C D E
 49 A B C D E
 50 A B C D E

51 T F A B C D E
 52 A B C D E
 53 A B C D E
 54 A B C D E
 55 A B C D E
 56 A B C D E
 57 A B C D E
 58 A B C D E
 59 A B C D E
 60 A B C D E
 61 A B C D E
 62 A B C D E
 63 A B C D E
 64 A B C D E
 65 A B C D E
 66 A B C D E
 67 A B C D E
 68 A B C D E
 69 A B C D E
 70 A B C D E
 71 A B C D E
 72 A B C D E
 73 A B C D E
 74 A B C D E
 75 A B C D E

76 T F A B C D E
 77 A B C D E
 78 A B C D E
 79 A B C D E
 80 A B C D E
 81 A B C D E
 82 A B C D E
 83 A B C D E
 84 A B C D E
 85 A B C D E
 86 A B C D E
 87 A B C D E
 88 A B C D E
 89 A B C D E
 90 A B C D E
 91 A B C D E
 92 A B C D E
 93 A B C D E
 94 A B C D E
 95 A B C D E
 96 A B C D E
 97 A B C D E
 98 A B C D E
 99 A B C D E
 100 A B C D E

ANSWER KEY INFO.
 # OF KEYS
 ITEM COUNT

0	0	0	2
1	1	1	3
2	2	2	4
3	3	3	5
4	4	4	6
5	5	5	7
6	6	6	8
7	7	7	9
8	8	8	9
9	9	9	9

PERFORMANCE ASSESSMENT
 % OF TOTAL SCORE
 POINTS EARNED

100 = 200%			
0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

Bar Code

NUMBER CORRECT
PERCENT CORRECT
ROSTER NUMBER
SCORE
RESCORE

COMBINED POINTS EARNED
COMBINED PERCENT CORRECT
LETTER GRADE
SCORE
RESCORE

200 ITEM

MARKING INSTRUCTIONS
 Use a No. 2 Pencil
 Fill oval completely
 Erase cleanly

STUDENT ID NUMBER

0	0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9

NAME _____
 SUBJECT _____
 PERIOD _____ DATE _____

Feedback Form

Study Guide – Mobile Crane Operator

Please answer the following:

- (1) This Study Guide is a useful tool for exam preparation.
 strongly agree agree disagree strongly disagree
- (2) The topics contained in the guide are arranged in a logical order.
 strongly agree agree disagree strongly disagree
- (3) The design and format of the guide caught my attention.
 strongly agree agree disagree strongly disagree
- (4) The instructions throughout the guide are clear and to the point.
 strongly agree agree disagree strongly disagree
- (5) The resources listed in this guide are suitable and valuable.
 strongly agree agree disagree strongly disagree
- (6) The guide should contain more information.
 strongly agree agree disagree strongly disagree

Suggested information/resources to include:

Additional Comments:

Please complete this form and return via fax or mail to the following:

Department of Immigration, Population Growth and Skills
Apprenticeship and Trades Certification Division
Standards and Curriculum Unit
45 Tilley's Road, Clarenville, NL A5A 1Z4
Fax: (709) 466-3987

