BC/Washington Crane Operator Certification Recognition Pilot Project

Project Summary Including Evaluation Results

(Final Report April 23, 2014)

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PROJECT SUMMARY

The British Columbia Association for Crane Safety (BCACS) partnered with the International Union of Operating Engineers (IUOE) and the Asia Pacific Gateway Skills Table (APGST) to conduct the Washington State Crane Operator Certification Recognition for B.C. project.[1] The project's ultimate objective was to develop mechanisms that would allow mobile crane operators from Washington State (WA) to work in B.C. by satisfying certification and regulatory requirements before arriving in B.C., through recognition of their WA certification credentials, or a combination of the two scenarios.

The project was split into three phases:

1.0 Phase 1 - Conduct a feasibility study

The objective of Phase 1 was to conduct a feasibility study to determine the differences in the certification standards, process, and policies; and the desire / interest of WA and B.C. stakeholders to participate in a crane operator certification recognition mechanism. Phase 1 was completed July, 2012. The Project Committee concluded that establishing recognition mechanisms appeared to be feasible and that the project should proceed.

2.0 Phase 2 - Development of crane operator certification recognition mechanisms

Phase 2 was separated into four areas of activity:

Phase 2.1 – Detailed Gap Analysis of WA State Certification Standards

Phase 2.2 – Reciprocity and Recognition Research

Phase 2.3 – Industry Consultations

Phase 2.4 – Recognition Mechanisms

Information for Phase 2 was gathered through documentary research, through meetings with key individuals representing standards and certification agencies on both sides of the border, and through an analysis of the competency testing tools and systems of the certifying agencies in WA State.

[1] The project is governed by a Project Committee comprised of representatives from BCACS, IUOE, WorkSafeBC (WSBC), the Construction Labour Relations Association of B.C., the Industry Training Authority of B.C. (ITA), crane operator employers, Asia Pacific Gateway Skills Table, and the B.C. Ministry of Jobs, Tourism and Innovation. The Project Committee engaged the services of North Pacific Training & Performance Inc. as consultant for this project.

The comparative analysis of the examination and practical standards of the four certifying agencies shows that there is considerable overlap between the competency testing standards for WA and B.C. Phase 2 was completed May, 2013.

3.0 Phase 3 - Pilot the crane certification recognition mechanisms

The goal of the pilot phase is to develop and demonstrate effective protocols, processes and tools for establishing the certification recognition process for certified WA crane operators to work in B.C. The pilot phase will:

- Pilot the implementation of the gap certification mechanisms
- Include a limited number of certified US crane operators
- Evaluate the effectiveness of the certification equivalency recognition mechanisms
- Monitor the performance of the successful candidates for a fixed period

The pilot phase commenced June 2013.

3.1 Summary of beta practical crane levelling examination at Washington state crane operator certifying agency practical examination sites

CIC, NCCCO, and OECP participated in the application of the BCACS practical crane levelling examination. Each agency volunteered a certified practical examination site, an independent certified examiner, and two appropriate operators for the beta examination. The instructions to the examiner and the examiner observation sheet (score sheet) were supplied to each agency. These examination documents were successfully tested and revised based on feedback of all participants with all three examination locations. BCACS was present for each examination.

CIC, NCCCO, and OECP have agreed to administer the BCACS Practical Crane Levelling Examination as approved by BCACS, for Phase 3 purposes. In order to participate in Phase 3, an operator(s) will have to have successfully completed the BCACS Practical Crane Levelling Examination as administered by one of CIC, OECP, and/or NCCCO.

3.2 Rigger qualification/certification requirement

CIC, NCCCO, and OECP have agreed to share an operator's rigger qualification/certification status with BCACS as appropriate for Phase 3 purposes.

In order to participate in Phase 3, a crane operator will need one of: Qualified Rigger – Advanced Certification (CIC); Qualified Advanced Rigger (IUOE/OECP); Level 2 Certified Rigger (NCCCO).

3.3 Level of crane operator information available from US certifying agencies for verification purposes

Item: name; registration number; crane type certified for; expiry date; rigger signal person; qualification/certification; expiry date

3.4 WorkSafeBC approval of certification recognition mechanisms

On November 21, 2013 the BC regulator, WorkSafeBC, confirmed that all questions and concerns regarding the scope and implementation of the certification recognition mechanisms used to address identified differences in both the theory and practical examinations of the certification process in BC and those employed by CIC, NCCCO, and OECP had been answered and that BCACS could now proceed into the observation and evaluation phase of the pilot.

4.0 Phase 3 – Pilot Implementation

The ability for employers and operators to learn about the availability of the pilot and sign up to participate in the pilot was made available on the BCACS website as of November 26, 2013. There was a dedicated Pilot Project section on the website with information for both employers and operators. Operator admission to the pilot was closed off as of March 31, 2014.

Operators applied for the BC Equivalency Certification based on their existing CIC, NCCCO, or OECP crane operator certification. Operators submitted the BC Equivalency Certificate Application Package as made available for download from BCACS at www.bcacs.ca. This application is the standard BC Equivalency Certification Application Form as used by applicants from existing Canadian jurisdictions.

Protocols were established with all three US certifying agencies (CIC, NCCCO, OECP) for the purpose of validating submitted US crane operator credentials. One protocol was online and two were by direct phone contact with the respective certifying agency.

4.1 Operator and employer participation

Employers and operators engaged successfully in the pilot. Employers were assisted at various stages in the pilot process, from working towards LMO's, to offering employment, to applying for work visas, to having operators provisionally certified through the pilot process and operating a crane in BC.

Operators were successfully communicated with and were very committed to completing both pre-pilot requirements and requirements to assist with the evaluation of the pilot itself. Operators completed various certification and pilot testing requirements, accepted employment offers and obtained provisional equivalency certification.

Where an operator had an identified certification gap, the pilot project gap mechanism was applied. For example, the BCACS practical crane levelling exam and/or verification, and the requirement for Advanced Rigger/Rigger Level 2 and/or verification signoff.

Four companies participated in the pilot along with one individual operator. There were a total of eleven operators in the pilot. All operators were lattice boom certified. USA certifying agencies represented in the pilot were CIC, NCCCO, and OECP. At the pilot entrance cut-off date, there were a number of companies that had committed to participate and had not yet hired operators for projects that they had in BC. At any given time, there were a number of operators in the pilot stream at various stages.

4.2 Observation and Evaluation

Each operator has an online BCACS crane operator logbook that enables them to fill in and keep track of operating details, equipment operated, lifts performed, hours worked, geographic location and conditions. The built-in capability of the logbook allows the operator to invite others to follow them whether that's other operators or company management. These features were utilized in the review of each logbook and subsequent discussion with the operator and each respective employer.

Each operator and respective employer representative also participated in a pilot survey. Logbook summaries and survey results form part of the pilot record moving forward.

4.3 BCACS - USA Agencies Ongoing Certification Alignment

An annual certification comparison meeting will take place between BCACS and each of CIC, OECP, and NCCCO respectively to ensure any changes in respective certification programs are communicated and accounted for within the scope of the necessary competency standards as established by the BCACS for crane operator certification in BC.

APPENDIX 1: Washington State Certifying Agencies

There are four agencies that provide crane operator certification programs and services in Washington state. All four agencies operate on a national basis in the United States. The four agencies are: The Operating Engineers Certification Program (OECP), Crane Institute Certification (CIC), The National Commission for the Certification of Crane Operators (NCCCO), and The National Center for Construction Education and Research (NCCER).

1.0 Operating Engineers Certification Program

The Operating Engineers Certification Program (OECP) is an independent, non-profit organization formed to provide members of the International Union of Operating Engineers (IUOE) a means to obtain a valid and reliable certification that accurately assesses their competence in craning operations. The program is managed by a Board of Directors primarily comprised of IUOE members and individuals representing major employers of crane operators. OECP offers NCCA accredited certifications.

1.1 OECP Mobile Crane Operator Certifications:

- Lattice Boom
- Telescopic Boom

2.0 Crane Institute of America Certification

Crane Institute of America Certification (CIC) is an independent certifying organization. CIC's nationally accredited certification programs include crane operator, rigger, signalperson and crane certifier/inspector.

CIC has joined its expertise in the crane industry with the assessment expertise of 4ROI, based in Minneapolis, Minnesota. 4ROI responsibilities include the ongoing validity and reliability of the written and practical exams and provide support for the exam administration process.

2.1 CIC Mobile Crane Operator Certifications:

- Lattice Boom Crawler
- Lattice Boom Carrier
- Large Telescopic Boom – Over 75 Tons
- Medium Telescopic Boom – 21 to 75 Tons
- Small Telescopic Boom – Under 21 Tons

3.0 National Commission for the Certification of Crane Operators

The National Commission for the Certification of Crane Operators (NCCCO) is an independent, not-for-profit organization incorporated in January 1995 to establish and administer a nationwide program for the certification of crane operators. An NCCCO certification card is issued to those who meet eligibility requirement and pass written and practical exams demonstrating fundamental knowledge of and skill in safe operations.

NCCCO is accredited by both NCCA and ANSI. Most NCCCO certification programs—Mobile, Tower, and Overhead Crane Operator, Signalperson, and Rigger Level I—are accredited by ANSI to the ISO/IEC 17024 International Standard for organizations that certify personnel.

3.1 NCCCO Mobile Crane Operator Certifications:

- Lattice Boom Crawler
- Lattice Boom Truck
- Telescopic Boom – Fixed Cab
- Telescopic Boom – Swing Cab

4.0 National Center for Construction Education and Research

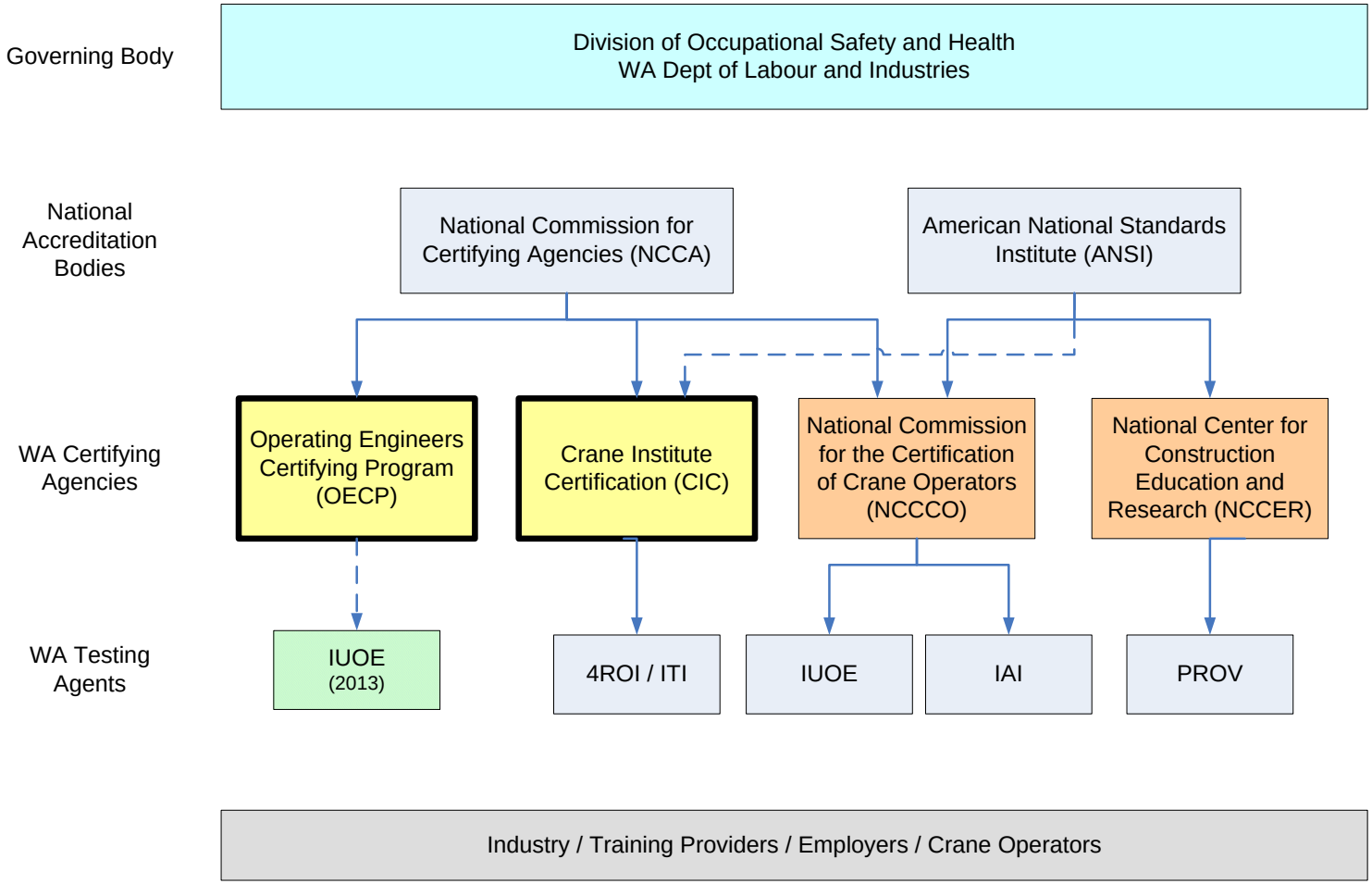
NCCER is a not-for-profit education foundation created in 1996 as The National Center for Construction Education and Research. NCCER is headquartered in Alachua, Florida, and is affiliated with the University of Florida's M.E. Rinker Sr. School of Building Construction.

NCCER's Crane Operator Certification Program is accredited by the American National Standards Institute (ANSI) under the ANSI/ISO IEC 17024 for the following scopes: Industrial/ All Purpose Crane, Rubber Tire Truck Mount Crane and Rough Terrain/All Terrain Crane.

4.1 NCCER Mobile Crane Operator Certifications:

- Lattice Friction Crawler
- Lattice Friction Rubber Tire
- Lattice Hydraulic Crawler
- Lattice Hydraulic Rubber Tire
- Telescopic Boom Crawler
- Telescopic Boom Rubber Tire

Crane Operator Licensing Structure in Washington State



APPENDIX 2: BC / WA Licensing Standards Comparison Matrix

Key Component of Standards	BC	NCCCO	CIC	NCCER	OECP
Standards Structure	Competency Based (ITA / Red Seal Model)	Job Tasks and Objectives (similar to BC model)			
Program Structure	Common Core plus Crane Type	Common Core plus Crane Type	Common Core plus Crane Type	Mobile Crane Levels 1, 2 and 3 with Specialties	Per Crane Type
Examination and Assessment Development Processes	Professionally developed with industry SMEs	Professionally developed and validated with involvement of volunteer industry SMEs (very similar to BC model)			
Practical Assessments	Worksite	Assessment Centre	Assessment Centre and Worksite	Assessment Centre	Assessment Centre
Multiple Choice Theory Exams	ITA / Red Seal guidelines for questions	Multiple-choice, 4 options (very similar to BC model)			
Examination Administration and Scoring	ITA / Red Seal for theory examinations. FHG CraneSafe for practical assessments	Independent agency for both exams and assessments			Provided in-house
Competency Standards Review Cycle	ITA / Red Seal guidelines of 5 years	5 years per ANSI standard	5 years per NCCA standard	5 years per ANSI standard	5 years per NCCA standard
Exam Item Review Cycle	ITA guidelines (informal)	6 month item reviews, based on data Annual submission of item analysis results and revisions			
Complaint Processes	ITA 'Blue Sheets' and BCACS formal processes	Formal processes as required by ANSI / NCCA	Formal processes as required by NCCA	Formal processes as required by ANSI	Formal processes as required by NCCA
Provide Training	NO	NO	YES (CIA)	YES	YES (related organization)

APPENDIX 3: BC / WA Standards Certification Policy and Processes Comparison Matrix

Policy / Process Factor	BC	WA
National Accreditation	None (Red Seal for Mobile Crane – for larger lattice boom cranes)	Required by legislation (NCCA and ANSI in WA)
Credential Issuer	FHG CraneSafe	Certifying Agency
Training Model	ITA approved apprenticeship courses are available and subsidized. Training participation is not mandatory. Challenge process is available.	Apprenticeship training is available. Training participation is not mandatory. Challenge process is available.
Seat-time Requirement (hours)	Variable (only for some crane types)	2,000 hours for all crane types
Enforcement	WorkSafeBC inspectors	WA Labor and Industry inspectors
Renewable Credentialing	Planned but not implemented to date	5 year re-certification required

APPENDIX 4: Pilot Project Questionnaire Responses and Logbook Screenshots

4.1 Operator Feedback

Operator feedback, in terms of the concept of equivalency, the experience in obtaining the BC equivalency credential, and the pilot in general was very positive. A compilation of the operator questionnaire responses is attached as item 4.1.1 in this appendix.

4.2 Employer Feedback

Employer feedback, in terms of the process of obtaining a BC Equivalency Certificate and the pilot in general, was very positive. A compilation of the employer questionnaire responses is attached as item 4.2.1. in this appendix.

4.3 Skills Evaluation Checklist

Each employer participating in the pilot project independently evaluated the skills and knowledge of the operator participating in the pilot project. The evaluation was carried out using a BCACS standardized skills and knowledge checklist that reflected the competencies contained within the Mobile Crane Operator – Lattice Boom Friction Crane ITA/BCACS Program Outline and as utilized in the ITA/BCACS Challenge Application process. All operators demonstrated competence as per the checklist. A sample checklist is attached as item 4.3.1 in this appendix.

4.4 BCACS Online Logbook Screenshots

The participating pilot operators utilized the BCACS online logbook to enable the pilot evaluation to track and record operating information over the course of the pilot. The operators compiled 5,823 operating hours over the duration of the pilot. Sample pilot operator logbook screenshots from the BCACS online logbook are attached as item 4.4.1. in this appendix.

4.1.1 Compilation of Operator Questionnaire Responses

1. **What would you have liked to have known before you came to work in BC?**
    - Nothing, whether working in BC or in the USA it's very similar
    - I didn't know the worksites in BC were all long sleeves so I packed all t-shirts but I don't know if that pertains to BCACS
    - Nothing, I worked in BC for years before there was any certification and owned a crane company in BC, so I was quite familiar with working in BC.
    - There were lots of ins and outs and confusion with union reciprocity issues between the US and Canadian union. It had to do with the health and wealth welfare pension funds and transferring funds between Canada and US. In the end out of frustration I went ahead and transferred to the Canadian union which I think was a good move. I can't really think of any other problems but this problem doesn't really involve BCACS, it was more of a union problem.
    - N/A I did a lot of research ahead of time.
    - What would be required for me to operate in BC.
    - I probably would have liked to be a little bit better informed on the currency exchange. Other than that, I don't know, there haven't been any unpleasant surprises, overall a pleasant experience.
    - I would've liked to prepare for Advanced Rigging.
    - I would like to have more knowledge about BC Ministry of Transportation Commercial Transport Rules and Regulations.

2. **How was the experience in obtaining your BC equivalency credential?**
    - A challenge, I don't understand the difference between having certification in BC and having it in the USA. There should be worldwide certification. There is very little difference between working in the USA and in BC, only very small differences in the small things.
    - The process was pretty lengthy but my company made it really easy.
    - My company did the paperwork and legwork, so it was pretty easy.
    - Seamless. Lynn Gould was very helpful; she walked us through all of the steps, and there was no lack of timely assistance.
    - No problems really, I had a little trouble with the test but made it through fine.
    - No problem, once everyone figured out the logistics, the process was really simple.
    - Okay
    - Efficient and straight to the point couldn't ask for anything better.
    - Once it was over it was fine, seemed to be not well thought out.

- I learned a lot.
- This has been a great experience. The information I've received was great. Thank you.

3. General comments/suggestions related to the pilot?

- No comment (2).
- That a US and a Canada crane ticket should go hand in hand. The crane book, test and cranes are the same. Since I already did the two tests, I don't understand why I still have to get my Red Seal.
- The Red Seal program is very similar to our certification. It would be really nice if there could be a North American credential that is recognised all over North America. I really appreciate what you guys are doing with the pilot project; I think it's a good thing.
- I want to say it's kind of about time. I'm glad to know that BC recognizing NCCCO. I wish that Canada had a national certificate because it would just make things so much easier. Once more thing, it's a bit disheartening to know that in BC, operators don't have to renew their certification. With the NCCCO, we have to renew every 5 years and it's scary to think that a 25 year old kid can pass his certification, go fishing for 15 years and then come back and still operate a crane with no verification – people forget things.
- This was a good move in recognizing an experienced operator. It wasn't very nice to come to Canada as a trainee and have to be supervised while being an experienced operator. I appreciated this project because it took away a lot of the shakiness for coming to operate in BC.
- When the program gets initiated, this program would be better handled through the union. It would be easier in the future if the operators can go to their Local in their country and get everything taken care of right there in one afternoon.
- Thank you very much for all of the hard work in testing and recognizing the certification from the USA you all did. It's not very nice to have your credentials not recognized especially when you've been operating for so many years, so I really appreciate what you all have done.
- Overall a good experience.
- I thought it was worthwhile to take the leveling practical.
- Thank you for all that you have done.

4.2.1 Compilation of Employer Questionnaire Responses

1. **What process do you use to validate a new operator?**
    - Documentation – training certificates
    - Years of experience completing tasks
    - Qualifications on different types of cranes
    - Background check from previous employers
    - On site evaluations from site manager
    - Safety
    - Work history, written test, field practical

2. **Did the process of obtaining a BC Equivalency Certificate contribute to your internal validation process? If so, how?**
    - Red Seal Journeyman crane Operators from out of province must obtain BC Equivalency Certificate Requirement from (BC Safe).
    - The program will help us get our operators a better understanding of BC crane laws and will benefit in the process of getting their Red Seal.
    - No

3. **Any cultural issues that others considering a similar work experience should know about? For example, metric conversion, being responsible for rigging, etc.**
    - Holders Credentials recognized by site manager (knowledge).
    - Metric Conversion would help a lot in BC Crane test.
    - None

4. **General comments/suggestions related to the pilot?**
    - Operators that have interprovincial Red Seal Certificate should be allowed to operator in all provinces in Canada.
    - The pilot program seems to be off to a great start.
    - No

4.3.1 Sample Skills and Knowledge Checklist

BC Association for Crane Safety
595 Burrard St.
PO Box 48883 Bentall
Vancouver, BC V7X 1A8
Tel: 604-336-4699
Fax: 604-336-4510
info@bcacs.ca

BC/Washington Crane Certification Recognition Pilot Project
Skills and Knowledge Checklist

Please fill in and fax or email back to BCACS.

Operator name _____ Company _____

Form completed by _____ Date _____

Tel _____ Email _____

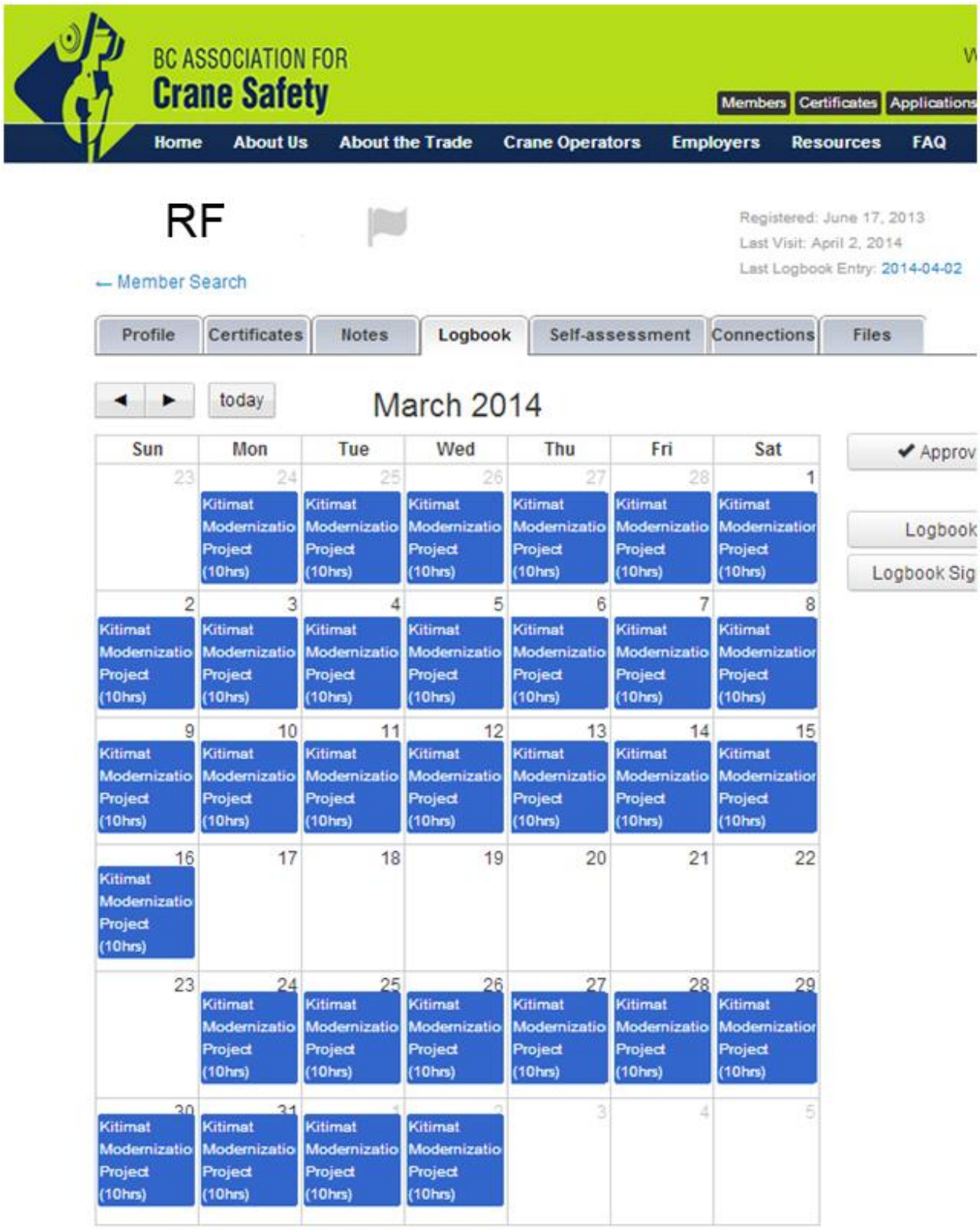
By checking "yes" or "no", indicate in the "Employer's Response" column whether the operator has demonstrated competence for each of the following during the period of employment with your organization. Put N/A for not applicable.	Employer's Response	
	Yes	No
Safety		
Demonstrate knowledge of safe working practices for crane operators		
Demonstrate knowledge of power line hazards and high voltage equipment		
Comply with WorkSafeBC Occupational Health and Safety Regulation (OHSR)		
Communications		
Demonstrate knowledge of personnel involved in crane operations		
Demonstrate knowledge of hand signals		
Demonstrate knowledge of radio communications		
Demonstrate knowledge of workplace communications		
Use hand signals in the workplace		
Use radio communications in the workplace		
Communicate information clearly and check for understanding in the workplace		
Cranes		
Demonstrate knowledge of terminology related to craning and craning concepts		
Demonstrate knowledge of hoisting terminology, functions and systems		
Demonstrate knowledge of regulatory requirements pertaining to cranes		
Demonstrate knowledge of crane components and attachments		
Demonstrate knowledge of engines and ancillary systems		
Demonstrate knowledge of power transfer		
Use crane components and attachments for mobile cranes in the workplace		
Rigging and Lifting Theory		
Demonstrate knowledge of lifting theory and forces		
Demonstrate knowledge of slings (all types), rigging hardware, materials, inspection and capacity cards		
Demonstrate knowledge of wire rope hoist line construction and inspection		
Use rigging hardware and tools in the workplace		

4.3.1 Sample Skills and Knowledge Checklist (Cont'd)

Hoisting Fundamentals		
Demonstrate knowledge of determining load weights using fundamental math functions and calculations		
Demonstrate knowledge of determining the capacity of a crane using load charts		
Interpret load charts and load study drawings to configure crane for workplace operation		
Transportation and Delivery		
Demonstrate knowledge of BC Ministry of Transportation – Commercial Transport rules and regulations		
Demonstrate knowledge to assemble, set up to operate and disassemble a mobile crane at a worksite		
Prepare and transport a mobile crane to a worksite following all highway and traffic rules and regulations		
Demonstrate knowledge to prepare a mobile crane for transport and/or travel		
Site Planning and Crane Positioning		
Demonstrate knowledge of accurate site assessment tools		
Demonstrate knowledge to locate and safely position a crane		
Conduct an accurate site assessment and safely position a crane in the workplace		
Crane Operations		
Demonstrate knowledge of pre-operational requirements in crane operations		
Demonstrate knowledge of crane operations		
Demonstrate knowledge of lifting plans and rigging for cranes		
Demonstrate knowledge to leave a mobile crane unattended		
Conduct pre-operational inspections of mobile cranes and equipment in the workplace		
Conduct safe crane set-up according to manufacturer's specifications		
Operate a mobile hydraulic crane 80 tonnes and under to lift and place loads in the workplace		
Leave a mobile crane unattended		
Maintenance and Service		
Maintain an equipment logbook to retain a permanent written record of maintenance and repairs		
Demonstrate knowledge of inspecting engines, monitoring devices and hydraulic systems		
Demonstrate knowledge of servicing and maintenance procedures		
Complete mobile crane maintenance checklists (engine on/engine off) and maintain engines to manufacturer's specifications		
Perform routine inspections and maintenance of hydraulic systems on mobile cranes		
Inspect monitoring devices and control mechanisms on mobile cranes		
Perform service on engine cooling systems on mobile cranes		
Hydraulic Unlimited Tonnage		
Demonstrate knowledge of hydraulic boom crane structure, components and assembly		
Demonstrate knowledge of hydraulic boom crane load charts and load calculations		
Operate a hydraulic boom crane safely according to manufacturer's specifications and all regulations		
Lattice Boom Hydraulic Crane		
Demonstrate knowledge of lattice boom hydraulic crane structure, components and assembly		
Demonstrate knowledge of lattice boom hydraulic crane load charts and load calculations		
Operate a lattice boom hydraulic crane safely according to manufacturer's specifications and all regulations		

Note: Collection and protection of personal information on this form is in accordance with the provisions of the *Freedom of Information and Protection of Privacy Act*.

4.4.1 Sample BCACS Online Logbook Screenshots



Logbook Summary for

JC

2000-01-01 to 2014-04-08

Date Range to Summ
from to
2000-01-01 2014-04-08
Print

Overall Totals

	Operating Hours		Other Hours		Total Hours	
	Total	Approved	Total	Approved	Total	Approved
Hydraulic (Unlimited Tonnage)	630	0	0	0	630	0
	630	0	0	0	630	0

Totals by Employer

BANTREL CONSTRUCTORS

	Operating Hours		Other Hours		Total Hours	
	Total	Approved	Total	Approved	Total	Approved
Hydraulic (Unlimited Tonnage)	630	0	0	0	630	0
	630	0	0	0	630	0

BC ASSOCIATION FOR
Crane Safety

Welcome, **Patricia J**
My Dashbo

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GD

Registered: January 12, 2012
Last Visit: March 31, 2014
Last Logbook Entry: 2014-03-23

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March 2014

Help

Sun	Mon	Tue	Wed	Thu	Fri	Sat
23	24	25	26	27	28	1
2 Edmonton (0hrs)	3 Edmonton (18hrs)	4 Terrace (10hrs)	5 BC Hydro's Northwest Transmission Line, Terrace (12hrs)	6 BC Hydro's Northwest Transmission Line, Terrace (12hrs)	7 BC Hydro's Northwest Transmission Line, Terrace (8hrs)	8 BC Hydro's Northwest Transmission Line, Terrace (12hrs)
9 BC Hydro's Northwest Transmission Line, Terrace (12hrs)	10 BC Hydro's Northwest Transmission Line, Terrace (12hrs)	11 BC Hydro's Northwest Transmission Line, Terrace (12hrs)	12 BC Hydro's Northwest Transmission Line, Terrace (12hrs)	13 BC Hydro's Northwest Transmission Line, Terrace (12hrs)	14 BC Hydro's Northwest Transmission Line, Terrace (12hrs)	15 BC Hydro's Northwest Transmission Line, Terrace (12hrs)
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23 BC Hydro's Northwest Transmission Line, Terrace (4hrs)	24	25	26	27	28	29

Entry Details

✔ Approve

Date: March 5, 2014
Hours: 12 operating

Project: BC Hydro's Northwest Transmission Line,Terrace (McGregor Construction)

Crane: Stiff Boom, 33 ton national mounted on a peterbuilt (2012)

Lifts:
- Evaluated on the operation of 33 ton national, loading spools of wire onto tensioner,

Notes: On site orientation with Valard,sister company. Head out to project location from camp. one hour drive each way for BC Hydro's Northwest Transmission Line

BC Association for Crane Safety
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PO Box 48883 Bentall
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