Boom Boat Operator Assessment

Assessment	This document can be used:
	For gathering evidence in a training environment,
	As a competency check of knowledge on an existing worker; or
	As part of a summative assessment.
Candidate Name	
Assessor Name	
Date of Assessment	
Summary of	☐ The candidate met all outcomes of the worker assessment
Assessment	☐ The candidate has NOT met all outcomes of the worker assessment
	☐ Gap training plan developed
Date of Reassessment	
Summary of	☐ The candidate met all outcomes of the worker assessment
Reassessment	☐ The candidate has NOT met all outcomes of the worker assessment
Instructions	Complete the assessment with the candidate, adding notes to justify your decisions.
	Ensure the first page of this document is completed (all fields).
	Develop a gap training plan for practical deficiencies if required.
	 Use the same form for reassessment (if applicable), only reassessing the areas where gaps exist.
	 Conduct the competency conversation before conducting the practical assessment.

Note: This worker assessment covers the technical components of a specific role. For general knowledge and a complete picture of a worker's competency, BC Forest Safety recommends the optional Basic Forest Worker competency profile and assessment tools that can be found at www.bcforestsafe.org.

Part 1 - Competency Conversation

General Instructions

To conduct a competency conversation, ask the worker the questions in this first part of the assessment to determine if they understand the knowledge components of their role.

It is acceptable to rephrase the question in a way that the worker understands, but the worker cannot be given hints to the correct answer.

The assessment should not be used as a training opportunity; instead, any deficiencies identified in this assessment should be collected into a gap training plan and addressed with the worker later.

Important Note: Do not conduct competency conversation while operating equipment.

Training and Assessment Rubric

Assessment Instruction

- **S** This means that the candidate must supply all responses listed, as the knowledge is **safety** critical or important.
- **B** This means the candidate must at a minimum verbalize the **bolded** responses, and additional responses are further proof of competence.
- **P** The candidate must give a **percentage** of responses correctly to reasonably show competence in the area.

Boom Boat Operator Assessment

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1091 - Describe Regulations, Legislation and Certifications related to Marine Vessels

Locator	Questions				
1.1	Who has jurisdiction over s	mall commercial vessels in	Canada?		
	☐ Transport Canada				
	Assessment Instruction: S				
	Assessment	☐ Outcome met	☐ Outcome not met		
1.1	What are three things the co	ollision regulations apply to	?		
	☐ Safe crossing situation	ns / right of way protocols			
	\square Head on situations (av	voidance)			
	☐ Lights				
	☐ Sound signals				
	Assessment Instruction: P – 3	from list			
	Assessment	☐ Outcome met	☐ Outcome not met		
1.2	What does every employee situation where they feel un	_	they come across a		
	☐ Right to refuse unsafe work				
	Assessment Instruction: S				
	Assessment	☐ Outcome met	☐ Outcome not met		
1.2	Who does a worker report a	n unsafe condition to?			
	☐ Supervisor or employe	er			
	Assessment Instruction: S				
	Assessment	☐ Outcome met	☐ Outcome not met		

1.3	Name four things that are in that apply to small vessels.	•	rkSafeBC OHS regulation	
	☐ Compliance with regul	ation		
	☐ Safety Standards			
	☐ Vessel operation			
	☐ Communication			
	☐ Vessel preparation			
	\square Maintenance and insp	ection		
	☐ Anti-skid covering			
	☐ Lighting			
	Assessment Instruction: P – 4	from list		
	Assessment	☐ Outcome met	☐ Outcome not met	
2.1	What are the minimum certi	fication requirements for op-	peration of a boom boat?	
	☐ SVOP (Small Vessel (Card)	Operator Proficiency) or PCO	C (Pleasure Craft Operators	
	☐ Small domestic vessel	basic safety (formally A3)		
	☐ Radio Operator Certific	cate – Marine commercial (RC	DC-M) if VHF on board	
	☐ Marine level 1 First Aid with transportation endorsement			
	Assessment Instruction: S			
	Assessment	☐ Outcome met	☐ Outcome not met	
3.1	What are the factors used to	o determine vessel registrat	ion?	
	☐ Type of vessel			
	☐ Size (tonnage and len	gth)		
	☐ Vessel use (commerci	al vs. personal)		
	☐ Number of passengers	5		
	☐ Voyage classification ((area of operation)		
	Assessment Instruction: S			
	Assessment	☐ Outcome met	☐ Outcome not met	

1136 - Describe Marine Vessels, Navigation and Safety

Locator	Questions			
1.2	What must be filled out on a	a timecard for a boom boat?		
	☐ Service checklist			
	☐ Safety inspection			
	☐ Start up & shut down t	imes		
	Assessment Instruction: S			
	Assessment	☐ Outcome met	☐ Outcome not met	
2.1	What are common aids to n	avigation on a boom boat?		
	☐ Communication device	e		
	☐ Compass			
	Assessment Instruction: S			
	Assessment	☐ Outcome met	☐ Outcome not met	
3.1	Name the basic safety equip	oment on a marine vessel.		
	☐ Fire extinguishers			
	☐ Life jackets			
	☐ Three flares or waterp	roof flashlight		
	☐ Man overboard float			
	☐ Heaving lines			
	☐ Sound devices			
	☐ Anchor and rode			
	☐ Bailing devices			
	☐ Life rafts			
	☐ Re-boarding devices			
	Assessment Instruction: S			
	Assessment	☐ Outcome met	☐ Outcome not met	

3.2	What are three common hazards related to operating a boom boat?			
	☐ Overhead			
	☐ Pinch			
	☐ Mechanical failure			
	☐ Inclement weather			
	☐ Log boom			
	Assessment Instruction: P – 3	from list		
	Assessment	☐ Outcome met	☐ Outcome not met	
3.3	Is there a requirement to pro	ovide aid to a vessel in disti	ress?	
	☐ Yes			
	Assessment Instruction: S			
	Assessment	☐ Outcome met	☐ Outcome not met	
3.3	What would prevent an ope	rator from assisting another	r vessel in distress?	
	\square Putting your vessel or	passengers in jeopardy		
	Assessment Instruction: S			
	Assessment	☐ Outcome met	☐ Outcome not met	
3.5	What are four factors that c	an affect the stability of a ve	essel?	
	☐ Cargo size and distrib	ution		
	☐ Total weight of vessel	including fuel		
	☐ Passengers and crew			
	☐ Weather			
	☐ Sea conditions			
	\square Water trapped on decl	<		
	☐ Boat design			
	Assessment Instruction: P – 4	from list		
	Assessment	☐ Outcome met	☐ Outcome not met	

1140 - Describe Boom Boat

Locator	Questions			
1.1	What are the requirements to	for working in confined spac	ces in British Columbia?	
	\square Pre-entry testing and i	nspection (venting)		
	☐ Hazard assessment			
	Assessment Instruction: S			
	Assessment	☐ Outcome met	☐ Outcome not met	
1.2	What is required when lock	ing out a marine vessel?		
	☐ De-energized and tag	ged out at battery disconnect		
	Assessment Instruction: S			
	Assessment	☐ Outcome met	☐ Outcome not met	
2.1	What should be included in	a pre-work / orientation me	eting?	
	Operating condition of	vessel		
	☐ Hazard assessment			
	\square Location of personal s	afety equipment (working and	present)	
	☐ Lifesaving equipment			
	☐ Roles and responsibilities			
	☐ Work plan for the day/project			
	☐ Check in procedures			
	☐ ERP			
	Assessment Instruction: S			
	Assessment	☐ Outcome met	☐ Outcome not met	
2.2	What are the three basic ele	ements of an Emergency Re	sponse Plan (ERP)?	
	\square Who to contact in eme	ergency		
	☐ How to contact them			
	☐ How to request higher to worksite)	level of support (GPS coording	nates, methods, and routes	
	Assessment Instruction: S			
	Assessment	☐ Outcome met	☐ Outcome not met	

2.2	Name at least five compone	ents of an ERP.		
	☐ Contact numbers or ra	adio channel / frequency		
	☐ Designated First Aid			
	☐ Location of nearest hospital			
	☐ Helicopter landing coo	ordinates		
	☐ Muster points / staging	g area		
	☐ Communication protoc	cols for emergencies		
	☐ Location of emergency	y response equipment and Fir	st Aid	
	☐ Specific coordinates o	f worksite		
	Assessment Instruction: P – 5	from list		
	Assessment	☐ Outcome met	☐ Outcome not met	
3.1	What are five common safe	work procedures for boom	boat operators?	
	☐ Emergency procedure	s		
	☐ Refuelling procedures			
	☐ Check in procedures			
	☐ Confined space proce	dures		
	☐ Lock out procedures			
	☐ Three-point contact pr	ocedures		
	☐ Securement procedures for deck equipment (tow lines, swifter wires, ropes, boom chains)			
	Assessment Instruction: P – 5	from list		
	Assessment	☐ Outcome met	☐ Outcome not met	

3.2	What are ten hazards assoc	iated with assisting barges	and flow handling?
	☐ Being attached to the	barge	
	\square Run over by the barge	•	
	☐ Pulled under by the ba	arge	
	☐ Contact and no contact	ct points on barge	
	☐ Pinch points		
	☐ Poor visibility		
	☐ Under powered		
	☐ Unsecured gear		
	\square Slips, trips and falls		
	☐ Sudden movement		
	☐ Uncovered or unguard	led hatches	
	☐ Icing		
	☐ Falling overboard		
	☐ Weather		
	☐ Overhead (bundles)		
	☐ Gun barrels		
	☐ Winches		
	☐ Fire		
	☐ Flooding		
	Limbs		
	☐ Engine noise		
	☐ Emissions		
	☐ Log teeth		
	Assessment Instruction: P – 1	0 from list	
	Assessment	☐ Outcome met	☐ Outcome not met

3.3	What are two things that an operator should consider when coiling wires?					
	☐ Watch for jaggers					
	☐ Proper coiling technique	ues				
	\square Stowed and tagged fo	r each				
	Assessment Instruction: P – 2	2 from list				
	Assessment	☐ Outcome met	☐ Outcome not met			
3.4	What are two things that must be considered when completing sorting procedures on a boom boat?					
	☐ Species					
	☐ Sort recognition					
	Assessment Instruction: S					
	Assessment	☐ Outcome met	☐ Outcome not met			

Part 2 – Practical Assessment

General Instructions

To conduct the practical assessment, monitor the worker in a variety of situations to determine if they can consistently perform the skill components of their role in a safe and effective manner. Once confident that the worker can conduct the skills consistently, mark the outcome met. If the worker cannot consistently perform the skills required, add this component to the gap training plan.

Remember not to distract the operator when conducting the practical assessment.

Training and Assessment Rubric

Outcome Not Met (ONM)

Skills: Can complete the task but only with direct instruction and supervision, may lack consistency in application.

Knowledge: Does not understand what they are doing, or are not aware of a knowledge deficiency, or need guidance and support.

Attributes: Displays limited or no professional attributes including being fit for work, prepared for the day, working in an organized manner, achieving work outcomes, or lacks in consistency.

Outcome Met (OM)

Skills: Consistently completes the task using safe work practices multiple times in a variety of contexts.

Knowledge: Has a solid grasp of underpinning knowledge, consistently applies it, and can explain it.

Attributes: Consistently displays professional attributes including being fit for work, prepared for the day, working in and organized manner and achieving work outcomes.

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A) PREPARE FOR THE DAY	ОМ	ONM	N/A
Arrived on time			
Clothing for conditions			
 Layered clothing appropriate for the elements and working conditions 		_	
Nutrition and water			
 Adequate food for the day 			
 Sufficient hydration for work and weather conditions 			
Not noticeably impaired			
 Candidate is not obviously physically or mentally impaired (by drugs, alcohol, personal situations, fatigue) 			
Fit for work			
 Candidate is physically able to do the task 	_		_
3-point contact on and off vessel			
 Able to move around vessel 			
Able to perform simple maintenance			
Logbook filled out correctly (if required)	П		
Engine hour meter readings			
Departure and arrival times			
 Number of passengers 			
Voyage plan (if required)			
Timecard filled out correctly (if required)			
Service checklist			
Safety inspection			
Start up and shut down times			
Personal supplies			
• PPE			
 Sunglasses 			
• Food			
Water			
Appropriate clothing			
Change of clothing			

B) PREPARE FOR VOYAGE	ОМ	ONM	N/A
Locate fire extinguisher			
Locate battery disconnect switch			
Locate and inspect bilge pumps			
Locate thru-hull shutoff valve			
Locate electrical shutoff for lights			
First-Aid equipment			
Spotlight working			
Safety equipment			
Life jackets			_
Man-Overboard float and floating line			
• Flares			
Sound devices (whistle, air horn)			
Flashlight			
Anchor with appropriate line and chain			
Knife			
Navigation and Communication equipment	П		П
Marine charts			
Compass			
Communication devices			
Radar			
• GPS			
Plotter			
Sounder			
• AIS			
Sufficient fuel			
Fluids and Oil levels	П	П	П
• Oil			
Coolant			
Hydraulics			
Marine gear oil (transmission)			

Check for leaks			
Check belts			
Pike pole			
Peavey and Axe			
Adjust and grease stuffing			
Communication plan	П	П	П
Check in procedures (method and frequency)			
C) OPERATE VESSEL	ОМ	ONM	N/A
Departure temperature			
 Engine brought to specifications before starting 			
Minimum and maximum idle times (owners manual)			
Water and Oil temperature			
Within acceptable range	Ιп		П
 Ability to remedy common issues (stop boat, engage in reverse to clear water intake) 			
Communication equipment			
Communication devices			
Check-in			
Maintain 360-degree visual checks			
Follow Safe Work Procedures (SWP)			
Optimal and acceptable engine operating parameters			
Sort and combine logs, following SWP	П		П
Species			
Sort recognition			
Coil wires, as per SWP	П		
 Jaggers 			
Coiling techniques			
Stowed and tagged for each boom			

Assist barge (as per SWP)

D) COMPLETE TASKS	ОМ	ONM	N/A
Manoeuvre boat			
Enough water in landing location			
 Looks for obstructions and obstacles 			
 Assessing current and tide by visual means such as birds, floating debris, kelp 			
Other vessels in area			
Shut down and secure boat (use of knots)			
Clove hitch			_
Bowline			
Two round turns two half hitches			
Double clove hitch			
Complete documentation			

This is the last page of the assessment.

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Printed copies are considered uncontrolled and may be outdated. Current versions are available from the BCFSC. Refer to https://www.bcforestsafe.org/node/2823 for more information. Feedback is welcomed and may be sent to training@bcforestsafe.org







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