

ST\_V1\_3071

Name of Breaker Out	Date of Birth	Date

#### **INSTRUCTIONS**

This tool can be used as a **benchmark** to assess the **current competency** of a **Breaker Out** and help prepare them for **assessment**. It can be used by a **Foreman, Contractor** or a **Head Breaker Out**. When carrying out assessments, refer to the **Approved Code of Practice** or the **Best Practice Guidelines** for correct answers.

The assessment includes **Practical Observations**. Refer to the **Approved Code of Practice** and the **Worksafe Best Practice Guidelines for Safe Retreat Positions in Breaking Out** for guidance on what to look for in the practical assessment. The **FITEC/Competenz Best Practice Guidelines for Cable Logging** can also be referenced for more detail on breaking out practices.

#### 1) GENERAL KNOWLEDGE

This section tests the Breaker Out's knowledge about the task being performed. It is based on elements in unit standards 23001 and 24567. Ask the breaker out the questions, summarise the answers and tick them if you think they are correct.

Tally up the number of ticks and allow one point for each tick. The notes in italics are references to where the correct information can be sourced and the number of correct answers required. Use these to assess the breaker out's General Knowledge.

Questions	Breaker Out's Answers: Use $\checkmark$ or $X$	Score
What type of extraction machines are used for cable logging? (Evidence Requirement 1.2, 23001. Minimum of two machine types required.)		
What type of terrain best suits cable logging systems? (Evidence Requirement 1.3, 23001. Minimum of one answer required.)		
Describe the working ropes on your yarder and explain what they are used for? (Evidence Requirement 2.1, 23001. Minimum of two and up to four possible working ropes, depending on the yarder being used. All must be described.)		
Explain what factors affect the size of payload in your operation? (Evidence Requirement 2.3, 23001. Minimum of one factor required.)		



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## 1) GENERAL KNOWLEDGE (Continued)

Questions	Breaker Out's Answers: Use 🗸 or 🗶	Score
Describe the butt rigging or carriage on your yarder and explain how it works? (Evidence Requirement 2.1, 23001. Two answers required – a description and an explanation.)		
Explain what a bight in a rope is and where it is most likely to occur? (Evidence Requirement 2.1, 23001. Two answers required.)		
Describe an extraction cycle and explain the elements involved? (Evidence Requirement 2.1, 23001. Five elements involved – at least four must be described.)		
Describe the type of strops being used and explain the advantages and disadvantages of them. (Evidence Requirement 2.7, 23001. One description, two explanations required.)		
What factors have to be taken into account when selecting a drag? (Evidence Requirement 2.5, 23001. Up to three factors. At least two required.)		
Explain the clean-up requirements for the current setting. (Evidence Requirement 2.3, 23001. At least one answer required.)		
Explain how to correctly attach strops to stems or logs in various head and butt-pull situations, using either chain or wire rope strops. (Evidence Requirement 2.1, 24567. Up to three attachment methods. At least two must be explained.)		



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### 1) GENERAL KNOWLEDGE (Continued)

Questions	Breaker Out's Answers: Use ✔ or ✗	Score
Explain how you can use stropping techniques to lift a stem over, or pull it out from behind, an obstacle. (Evidence Requirement 2.2, 24567. Three techniques required.)		
	TOTAL SCORE FOR GENERAL KNOWLEDGE:	

#### 2) CODE OF PRACTICE

This section tests the knowledge breaker out's knowledge about Section 12 in the Approved Code of Practice for Safety & Health in Forest Operations. Ask the breaker out the questions and score the answers according to accuracy and content. Some rules are covered in later sections so to avoid duplication they are not all included here: E.g. Finding a Safe Retreat Position has its own section later in the assessment.

NOTE: This assessment can be done by verbal questioning or allowing the breaker out to write in the answers. Don't worry about spelling mistakes or incorrect grammar as the content is the important component.

Questions	Breaker Out's Answers: Use ✔ or ✗	Score
What are the two main responsibilities of the Head Breaker Out? (Rule 12.2.8, ACoP. Two responsibilities required.)		
What qualification does the head breaker out have to hold? (Rule 12.2.9, ACoP.)		
How far away from ropes should the breaker outs be during outhaul? (Rule 12.2.11, ACoP. Two possible answers. At least one required.)		
What rope movements or rope positions should breaker outs never position themselves under? (Rule 12.2.12, ACoP. Five answers required.)		
Explain the conditions that have to be met before a breaker out can enter the hook up area? (Rule 12.2.13, ACoP. Three conditions needed.)		



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## 2) CODE OF PRACTICE (Continued)

Questions	Breaker Out's Answers: Use ✔ or ¥	Score
How far from the butt end of a stem can a strop be safely attached? (Rule 12.2.14, ACoP. One answer required.)		
How far from the head end of a stem can a strop be safely attached? (Rule 12.2.15, ACoP. One answer required.)		
What must the loader operator check before clearing the chute? (Rule 12.2.17, ACoP.)		
Explain what should be done if a gut hook or long butt has been attached. (Rule 12.2.16, ACoP. Two possible answers. At least one required.)		
What should the yarder operator do when the Breaker Outs are in under the rigging? (Rule 12.2.18, ACoP. One answer needed.)		
What must all breaker outs be doing before the "go ahead" signal is given? (Rule 12.2.19, ACoP. One answer required.)		
Explain how your crew deals with a fouled drag. (Rule 12.2.20, ACoP. One answer required.)		
	TOTAL SCORE FOR CODE OF PRACTICE:	

## **3) BREAKING OUT HAZARDS**

Questions	Breaker Out's Answers: Use 🗸 or 🗴	Score
What are the main hazards associated with breaking out logs or stems in a cable logging operation?		
(Evidence Requirement 1.3, 24567. Four main hazards required.)		



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## 3) BREAKING OUT HAZARDS (Continued)

Questions	Breaker Out's Answers: Use ✔ or ✗	Score
What hazards arise from wire ropes and rigging when breaking out? (Evidence Requirement 3.4, 23001. Four possible hazards from wire ropes and rigging. At least two required.)		
What are the main hazards associated with the terrain when breaking out? (Evidence Requirement 3.4, 23001. Three common terrain hazards. At least two required.)		
What are the common hazards with backline anchors when breaking out? (Evidence Requirement 3.4, 23001. Three common backline anchor hazards. At least two required.)		
What are the main hazards associated with other operations when breaking out? (Evidence Requirement 3.4, 23001. Two possible answers. One required.)		
	TOTAL SCORE FOR BREAKING OUT HAZARDS:	



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### 4) HEALTH HAZARDS - BREAKING OUT

Can the Breaker Out identify health hazards associated with Breaking Out?		
Instructions	Breaker Out's Answers: Use ✔ or ¥	Score
What are the main health hazards likely to affect breaker outs? (Twelve possible answers. At least six required.)	Breaker Out's Answers: Use 🗸 or X	Score
	TOTAL SCORE FOR HEALTH HAZARDS:	



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### 5) SAFE RETREAT POSITION

Questions	Breaker Out's Answers: Use ✔ or ✗	Score
How do you determine what your Safe Retreat Position(s) (SRPs) are for the day? (Rule 12.2.22, ACoP. One answer required.)		
What factors do you have to take into account when determining your SRP? (Rule 12.2.22, ACoP. Five factors required.)		
If you don't follow the procedures to establish a SRP, what is the default process? (Rule 12.2.22, ACoP. Two parts to the rule required.)		
How does your crew ensure that the extraction crew knows the process? (Rule 12.2.23, ACoP. One answer required.)		
Where should the breaker out(s) be facing before signalling the yarder operator? (Rule 12.2.24, ACoP. One answer required.)		
What should you do if you see an upset condition occurring? (Evidence requirement 1.4, 24567. One answer required.)		
Check today's Breaking Out plan: Does it meet all of the above requirements? Has everyone involved signed it? Is there anything missing? (Yes or No)		
	TOTAL SCORE FOR SAFE RETREAT POSITION:	



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### 6) COMMUNICATION

Questions	Breaker Out's Answers: Use 🗸 or 🗴	Score
What are the minimum requirements of a cable logging communication system? (Rule 12.2.1&2, ACoP. Two requirements.)		
Who is responsible for signalling the yarder operator? (Rule 12.2.4, ACoP. One answer.)		
What are the audible and verbal signals used to indicate an emergency situation? (Rule 12.2.5, ACoP. Two answers required.)		
What are the recognised audible and verbal signals for go ahead on mainrope? (Rule 12.2.5, ACoP. Two answers required.)		
What are the recognised audible and verbal signals for go ahead on tailrope? (Rule 12.2.5, ACoP. Two answers required.)		
What are the recognised audible and verbal signals for stop a moving rope? (Rule 12.2.5, ACoP. Two answers required.)		
What are the recognised signals for slack mainrope or feed slack out? (Rule 12.2.5, ACoP. Two answers required.)		
If you want tailrope slack, what are the audible and verbal signals used? (Rule 12.2.5, ACoP. Two possible ways of signalling.)		
If you want to hold the tail or clamp the carriage and pull in on the mainrope, what are the signals? (Rule 12.2.5, ACoP. Two possible ways of signalling.)		
If you want to raise the skyline, what are the recognised signals? (Rule 12.2.5, ACoP. Two possible ways of signalling.)		



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## 6) COMMUNICATION (Continued)

Questions	Breaker Out's Answers: Use ✔ or X	Score
If you want to lower the skyline, what are the recognised signals? (Rule 12.2.5, ACoP. Two possible ways of signalling.)		
If you want strawline sent out, what are the signals you can use? (Rule 12.2.5, ACoP. Two possible ways of signalling.)		
If you want to signal that the drag is broken out and all clear for inhaul, what is the signal? (Rule 12.2.5, ACoP. One signal.)		
If you want to warn the landing of an approaching drag, what is the signal? (Rule 12.2.5, ACoP. One possible signal.)		
What should be done if the communication system fails? (Rule 12.2.7, ACoP. One answer required.)		
	TOTAL SCORE FOR COMMUNICATION:	



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### 7) LINESHIFTS

Ask the Breaker Out questions about the lineshifting procedures and if a lineshift occurs during the period of observation, observe the tasks being carried out. Confirmation of skills and experience may be sought from the Head Breaker Out or the Foreman.

Questions	Breaker Out's Answers: Use 🗸 or 🗴	Score
What are the breaker out's responsibilities when preparing for a lineshift? (Evidence requirement 4.1, 24567. Two possible answers. One required.)		
What are the breaker out's responsibilities when carrying out a lineshift? (Evidence requirement 4.1, 24567. Up to three possible answers. Two required.)		
What are the breaker out's responsibilities after a lineshift? (Evidence requirement 4.1, 24567. Three possible answers. One required.)		
Did the breaker out carry out the assigned tasks and were they done safely and efficiently? (Evidence requirement 4.4, 24567.)		
Was the breaker out (and others that the breaker out may have been responsible for) in a safe position during the lineshift? (Rule 12.2.26, ACOP.)		
	TOTAL SCORE FOR LINESHIFTS:	



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### **Practical Assessment**

### 8) PROTECTIVE EQUIPMENT

Check the Breaker Out's PPE to make sure it meets industry standards and is being used:

- If the item is available and meets the standard, put a "\( \varphi''\) in the box. If it is not available or doesn't meet the standard, put a "\( \varphi''\) in the box.
- If the item meets the standard, "✓" the box. If it doesn't meet the standard, "X" the box.
- If the item is worn or used correctly, put a "v" in the box. If it isn't worn, or is worn incorrectly, put a "x" in the box.
- Tally up the ticks and enter the score in the RHS column.
- Add the scores together to get a total for Protective Equipment.

Mandatory Personal Protective Equipment: Use 🗸 or X	Required	Meets Standard	Correctly Used	Score
Safety helmet	Required			
Hi vis top/vest/coat	Required			
Safety footwear (good condition)	Required			
Gloves	Required			
Communication or RT	Required			
First Aid Kit (small kit with BO crew)	Required			
Adequate means of hydration	Required			
Leggings	Optional			
	TOTAL SCOP			

• If the Breaker Out is required to use a chainsaw for any reason, check that the extra PPE is available and worn, and add the scores to the PPE total.

Mandatory Personal Protective Equipment when using a chainsaw	Required	Meets Standard	Available and used	Score
Leg protection	Required			
Ear protection	Required			
Eye protection	Required			
		TOTAL SCORE IF US		

Any xs in the black "Required" rows of PPE questions = NC.



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### 9) DEMONSTRATING SAFE WORK PRACTICES

Observe the Breaker Out working for up to eight cycles and check the following by observing tasks and asking questions to confirm that work procedures seen are normal practice. Only tick boxes when the candidate is observed doing the task (e.g. feeding slack may not happen every drag). Sample size is about 10% of daily cycles: i.e. 6 – 8 cycles. **Any more than two xs in a gray row = NC.** 

Cycle Number: Use ✔ or ×	1	2	3	4	5	6	7	8	Score
Description of observation	v/x	v/x	v/x	v/x	V/X	v/x	V/X	v/x	Add up all ticks
Does the BO stand clear of moving ropes during outhaul?									
Distance away from ropes									
Does the BO wait for the "stop" signal before moving in to hook up?									
Does the BO take care when moving in to hook up?									
Does the BO stand in a safe position when sorting the strops?									
Does the BO stand clear while slack is fed?									
Does the BO follow the Instructions of HBO?									
Does the BO attach strops safely, correctly and efficiently?									
Does the BO stand clear if the rigging is repositioned?									
Does the BO assist others when necessary?									
Does the BO walk out to the designated SRP									
Distance to safe retreat position									
Does the BO stand behind the HBO when the "go ahead" is given?									
Does the BO face the drag before the signal is given									
Does the BO watch the drag during inhaul or until it is out of sight?									
If required, does the BO send clear and concise signals?									
Does the BO warn other people of hazards in drag?									
	то	TAL SCO	RE FOR D	EMONST	RATING S	AFE WOR	KING PRA	ACTICES:	
If the BO stands closer than 15m from moving ropes during outhaul, the result is					NC				
If the SRP distance is less than that specified in the Breaking Out Plan, the result is:					NC				



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#### **10) SUMMARY PAGE**

### **INSTRUCTIONS**

At the completion of the assessment, tally up the scores in each section and compare with the maximum possible score. The difference between the Breaker Out's score and the maximum possible score will show where they need to brush up on their knowledge of the rules, recommended practices and practical skills. Divide the Breaker Out's score by the maximum score possible to get the BO's percentage.

If the Breaker Out's percentage is below the minimum required percentage in any category, the Breaker Out has not met the standards and needs training in that particular category. If the Breaker Out's overall score is below 65%, the pre-assessment test result is Not Competent (NC). Use this information positively to bring the breaker out up to the required level.

Note that skills highlighted in black have minimum values that must be attained. If any of these values are not met, the result will be NC even though the breaker out may have achieved over the 65% threshold in the total score.

Knowledge Questions	Breaker Out's Score	Maximum Score Possible	Breaker Out's %	Minimum % Required
1) General Knowledge		34		70%
2) Code of Practice		21		85%
3) Breaking Out Hazards		16		70%
4) Health Hazards – Breaking Out		12		50%
5) Safe Retreat Position		12		100%
6) Communication		26		65%
7) Lineshifts		10		60%
RESULT OF KNOWLEDGE QUESTIONS:		131		70%

Practical Skills	Breaker Out's Score	Maximum Score Possible	Breaker Out's %	Minimum % Required
8) Protective Equipment		22		60%
9) Demonstrating Safe Work Practices		120		55%
RESULT OF PRACTICAL SKILLS TEST:		142		60%

Overall Result	Breaker Out's Score	Maximum Score Possible	Breaker Out's %	Minimum % Required
Total score; Knowledge and Practical Skills tests		273		65%
RESULT OF PRE-ASSESSMENT TEST: (Circle t	PASS	NC		