

TLILIC0005 - Licence to operate a boom-type elevating work platform (boom length 11 metres or more)

Pre-learning questionnaire

(Student cohort: candidates with relevant industry experience)

Student Name:

Student instructions:

- You must complete the following questions prior to coming to CTG for classroom learning.
- The assessor will ensure you have completed these questions before attending the class.
- The assessor will review these questions and answers in the classroom as part of teaching-learning activities. Submit the completed pre-learning questionnaire to the trainer.
- You may use additional papers (if writing down answers), if required. Attach the additional sheets with this pre-learning questionnaire. Correctly identify the question numbers on the additional sheets.

PRE-LEARNING QUESTIONS

1.	You have gained your High-Risk Work licence to operate an EWP in your workplace. Before you can do so, name two (2) things your employer must provide.	☐

2.	If you fail to work safely in accordance with your licence class, name two (2) actions that could be taken by WorkSafe.	☐

3.	All workers, including EWP operators, have a duty of care when in the workplace. Name two (2) relevant duty of care requirements.	☐

4.	Name three (3) responsibilities of an employer to ensure the health and safety of employees in his workplace.	☐

8.	Identify five (5) things <u>other than hazards</u> you should take into consideration and plan for to ensure safe operation of the EWP.	☐
1.		
2.		
3.		
4.		
5.		

9.

What is meant by a 'hazard'?

**10.**

What is meant by a 'risk'?

**11.**

Identify ten (10) hazards you should look for in the workplace before commencing EWP operations.



12.	Identify four (4) key people you could discuss workplace risks and hazards with prior to commencing EWP operations.	☐

13.	Why is it important to discuss workplace risks and hazards with key people in your workplace prior to commencing EWP operations?	☐

14.	Who should you contact to obtain information and advice on the voltage of overhead power lines in your work area before operating the EWP?	☐

15.	In relation to operating an EWP near overhead electric powerlines in Victoria, identify the minimum safe distances to be maintained from distribution lines (poles) and transmission lines (towers).	☐
Must include in your answer the minimum safe distances from distribution lines (poles) and transmission lines (towers) – both with and without a registered/qualified spotter. For example, Poles – x.x m with a registered/qualified spotter, y.y m without a registered spotter Powerlines on a pole: Powerlines on a tower: 		

16.	Identify two recommended actions, if you should operate an EWP closer than minimum safe distances near power lines.	☐

17.	There are a number of visual indicators used Australia-wide to identify the position of overhead power lines. Name three (3).	☐

18.	What five (5) steps must you follow to ensure your safety if the EWP you are operating makes contact with electric power lines?	☐

19. When should hazard controls be applied by the EWP operator?

☐

20. Complete the following table correctly identifying the Hierarchy of Risk Control. List them from best to worst and indicate what each level means.

☐

Hierarchy Level (from best to worst)	Action

21.	Your work area may be shared with pedestrians, site personnel, vehicles or other mobile plant. Identify three (3) control measures you should put in place before you start EWP operations.	☐
22.	What must you do to ensure safety when you are using the EWP at night or in dark areas?	☐
23.	What is meant by 'rated capacity' and where can the capacity for an EWP and any attachment be found?	☐
24.	The rated capacity of an EWP you are operating is 220kg. What is meant by this sentence?	☐

25. What is meant by live load, dead load and wind load?

☐

Live load:

Dead load:

Wind load

26. Identify four (4) different workplace communication methods to maintain contact in the workplace (between EWP operator and others at the worksite).

☐

27. When should an EWP operator decide on and chose the most appropriate communication methods related to EWP operations at the worksite?

☐

28.	Identify a situation when it would be appropriate to use hand signals to communicate when operating an EWP.	☐

29.	Identify a situation when it would be appropriate to use questioning techniques to communicate in relation to EWP operations.	☐

30.	Identify a situation when you might use signage to communicate when operating an EWP.	☐

31.	Identify a situation when it would be appropriate to use traffic warning systems to communicate during EWP operations.	☐

32.	Identify a situation when it would be appropriate to use two-way radios to communicate when operating an EWP.	☐

33.	When would it be appropriate to use written instructions to ensure appropriate communication in relation to EWP operations?	☐

34.	A colleague gave a confusing hand signal, when you were operating an EWP, which you were unclear about. What should you do?	☐

35.	When you check the logbook, List three (3) items you need to confirm.	☐

36.	Whose responsibility is to make sure that the EWP is inspected and ready for use?	☐

37.	Give one significance of performing pre-start inspection of checks on an EWP.	☐

38.	Identify seven (7) pre-start checks that should be performed before commencing EWP operations.	☐

39.	Ensure signage, data plate and safety decals are present and legible when performing pre-start inspections. Why?	☐

40.	List four (4) things that would indicate any structural damage to the boom or superstructure of the EWP you will be operating.	☐

41.	Theis the most important piece of protective equipment that an EWP operator uses.	☐

42.	Specify the use of each of the following pieces of safety equipment: - Safety harness/es and lanyard - Energy absorbers - Anchor point/s - Emergency retrieval systems	☐
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Types of Safety Equipment	One use of the equipment
Safety harness/es and lanyard	
Energy absorbers	
Anchor point/s	
Emergency retrieval systems	

43.

Operational checks are done once the EWP has been started. List four (4) operational checks you should carry out after you have started an EWP.

☐**44.**

Identify two (2) purposes of ground controls on an EWP.

☐**45.**

Identify two (2) purposes of the 'dead man' control on an EWP.

☐**46.**

It is important that throughout the operational checks you test the EWP to the full extent of its capabilities. Identify one reason for this.

☐

47.	It is important that you check all communication devices and their usability when performing EWP operations. When should you do this?	☐

48.	You tagged out an EWP when a fault was identified. As per recommendations, when could this out of service tag be removed and plant be reused?	☐

49.	What could be the impact of a ground surface of varying gradient (mix of slopes, ramps and flat surface) on EWP operations?	☐

50.	If you are required to set up the EWP on a concrete slab, what must you consider? Who or what can confirm this requirement/safety consideration?	☐

- Railway tracks
- Rough uneven or difficult terrain including sloping surfaces, uneven surfaces, steel decks and grates
- Soft soils
- Trench covers
- Water impacted ground

53.

Identify two (2) ways you could find the maximum wind speed in which EWP operations can be safely carried out.

**54.**

Identify two (2) things you must do if the wind speed in the area of EWP operations is more than what is specified for the EWP you are operating.



55.

List three (3) hazards associated with operating an EWP in windy conditions.

**56.**

What five (5) actions must you take when operating an EWP in heavy winds, lightening or rain?

**57.**

List five (5) actions you must take when operating an EWP in conditions of extreme heat or ultraviolet (UV) exposure.



58.

What may occur when setting up an EWP next to a recently excavated trench? At what distance should the EWP wheels or outriggers be positioned or set up to prevent this from happening?

**59.**

Identify four (4) things an EWP operator must consider when setting up an EWP near buildings.

**60.**

List three (3) additional precautions an EWP operator must take when operating the plant over a body of water.

**61.**

It is important that the EWP is set up level. How can this be checked?



62.

If the EWP has outriggers, identify two (2) things that can be used to support the outriggers to ensure the stability of the EWP.

☐**63.**

Pig-sty packing should be arranged so that each layer is at a angle to the one before.

☐**64.**

You are required to operate an EWP on a busy street. Identify two (2) things you should check with the local authorities before setting up the EWP or performing any work.

☐**65.**

Never raise or lower the boom over people. Why?

☐

66.

People near or around an EWP when it is operating could be injured in different ways.
List any two (2) risks for a person near or around an EWP.
What must be done to avoid this?



List any two (2) risks for a person near or around an EWP.

What must be done to avoid this?

67.

Identify three (3) recommended actions of an EWP operator when they observe someone entering the exclusion zone while an EWP is being operated in a work site.

**68.**

It is important to store the tools and equipment securely on the platform. Why? Give three (3) reasons.



69.

Identify four (4) things an EWP operator must consider before raising the platform.

**70.**

The path of movement of the boom needs to be as safe as possible. Identify four (4) considerations to ensure safety when deciding the path of movement of the boom.

**71.**

What could happen if you are operating an EWP and the engine fails or there is a problem with brakes and/or steering? List any three (3) possible issues.



72.

It is important that all EWP operators continually monitor boom and platform movements. Why?

☐**73.**

Can EWP be used as a crane in general circumstances to lift anything outside its platform?

☐**74.**

Can slings or other attachments be attached to the handrail or guard rails of an EWP in general circumstances?

☐**75.**

At what speed should you move a self-propelled EWP with an elevated platform?

☐

76.

Identify four (4) precautions or safety measures that should be applied when moving an EWP around a worksite.

**77.**

If the motor of the EWP cuts out when it was at height, the platform must be lowered to the ground. Identify three (3) ways to do this.

**78.**

If during the operations of the EWP, you feel the EWP platform drop, move or tilt. Identify four (4) things you should do.



79.

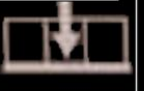
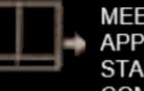
Identify seven (7) steps involved in shutting down an EWP after use.



Calculations and load plate reading

- Calculations must show the working (where appropriate)
- Use of calculators is acceptable and will be supplied by your assessor.

*Use this Data Plate to answer questions 1 –7.

MODEL	2019BEWP2			MAX		MAX
SERIAL NO.	208999			3'		3'
MAX PLAT HEIGHT	23.8m	GRADE ABILITY	30%	G.V.W.	15930 kg	THIS ELEVATION WORK PLATFORM MEETS OR EXCEEDS THE APPLICABLE REQUIREMENTS OF AUSTRALIAN STANDARD AS1418 PART 10 AS ORIGINALLY MANUFACTURED FOR THE INTENDED APPLICATIONS AND USE. OPTIONAL EQUIPMENT AS FITTED TO THIS MACHINE MEETS OR EXCEEDS THE APPLICABLE AUSTRALIAN STANDARD. COMPONENTS OF THIS MACHINE ARE MANUFACTURED FROM VARIOUS GRADES OF MILD AND HIGH STRENGTH STEELS. OPERATION, INSPECTIONS, MAINTENANCE, MODIFICATIONS OR REPAIRS SHALL BE CARRIED OUT IN ACCORDANCE WITH AS2550.10 AND THE MACHINE MANUALS.
MAX. WIND SPEED	12.5 m/s	RATED MAX. LOAD (SWL)	225 kg	MAX. NUMBER PERSONS	2	
MAX. EQUIP	75 kg	MAX. MANUAL SIDE FORCE	400 N			
						
YEAR OF MANUFACTURE	11 07		DATE OF COMMISSION	01 08		
SUBSEQUENT ANNUAL INSPECTIONS OR MAJOR REPAIRS:						

1.	What is the rated maximum load for this EWP?	☐
2.	You need to carry 75kg of equipment on the platform for a job of work. What is the maximum weight of people allowed on the platform in this case?	☐

3.	What is the maximum platform height for this EWP?	☐

4.	What is the maximum incline allowed for this EWP when the platform is in the raised position?	☐

5.	As per the weather forecast, it will be a windy day with wind speed of 13 m/s. Can you use this EWP? Give your reason.	☐

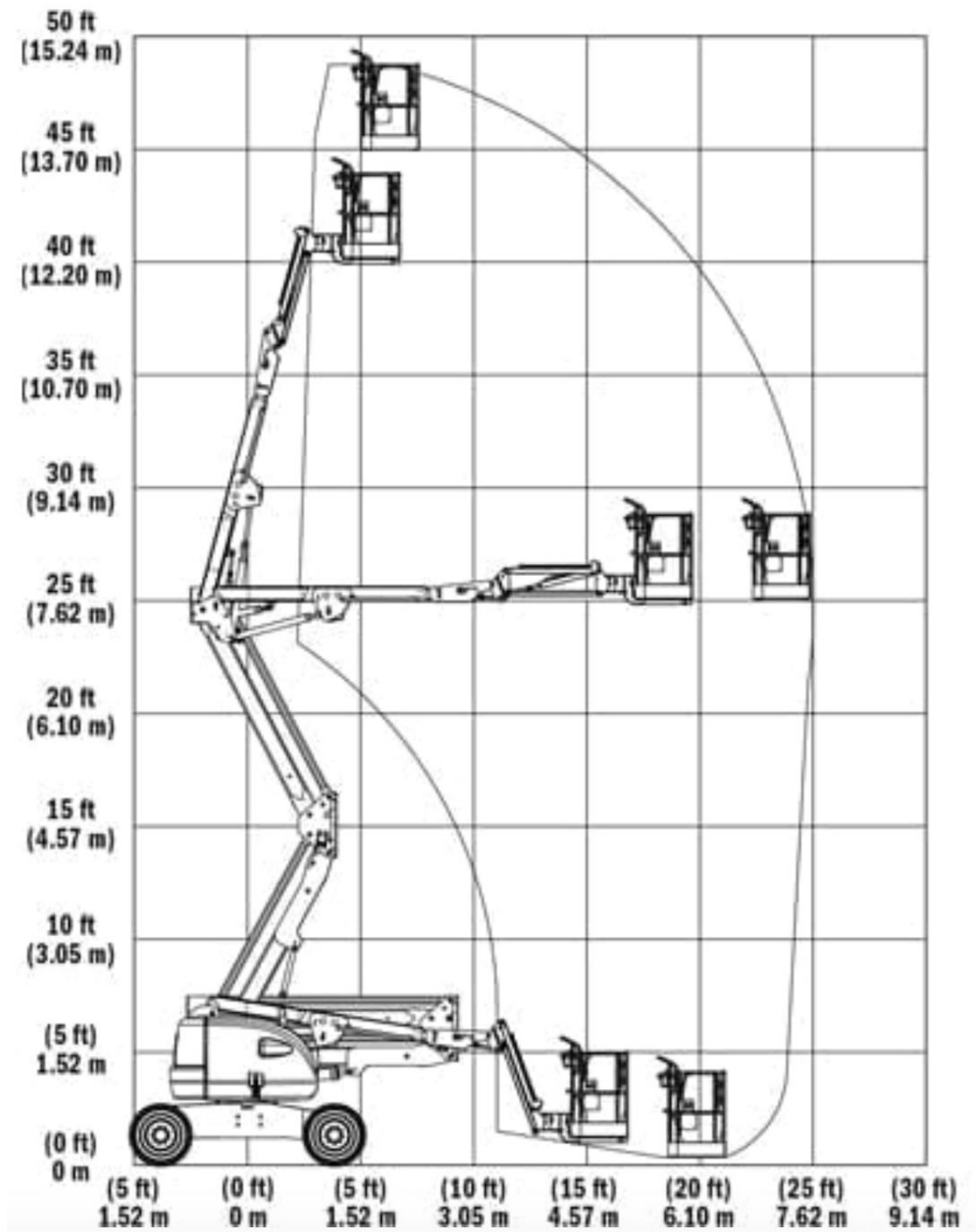
6.	If two people weighing 65kg and 85 kg are going to occupy this EWP, what is the safe weight of tools and other equipment they could carry?	☐

7.

You are about to use this EWP to paint a building. The paint being used weighs 20 kg per 18 litre drum. Other materials and equipment on the EWP weigh 15 kg. If you weigh 85 kg, how many drums of paint are allowed on the EWP on each lift?



Refer to the EWP Operating Envelope shown here and attempt to answer the accompanying questions (Q. 8 - 10).



8.	Can this EWP be used to paint a building with 10.7 m height where the EWP can be placed within 3.05 metres of the building?	☐

9.	Can this EWP be used to paint a building with 7.62 m height with the EWP positioned 7 metres from the job?	☐

10.	Can this EWP be used to paint a building with 10.7 m height with the EWP positioned 9 metres from the job?	☐