AHCARB307A Climbing Techniques – Advanced Form

Prerequisite competency completion		
Has the candidate successfully completed the **prerequisite unit** requirements of AHCARB307 Use advanced climbing techniques?	**Yes/No (Y/N)**	**Signed (Initialled)**
AHCARB312 Use standard climbing techniques to access trees		
AHCARB311 Tie, dress, set and finish arborist knots		

Required forms completion		
Has the candidate successfully completed the **required forms?**	**Yes/No (Y/N)**	**Signed (Initialled)**
AHCARB302 Tree inspection form		
AHCARB307B Advanced climbing log record		
AHCARB311 Knots identification form		
AQF 3C Risk assessment form		
AQF 3E Tools and equipment form		
AQF 3F Work operations form		
Note: Hazard identification and risk control, Emergency preparation and Site assessment are incorporated in AQF 3C Risk assessment form. Equipment and PPE check form is incorporated in AQF 3E Tools and equipment form. Work communications, Work site operations and Work records are incorporated in AQF 3F Work operations form. AHCARB306 Aerial rescue form is not required for completion of this unit.		

Mandatory Equipment (as a minimum)		
Has each of the mandatory equipment items been used to gather evidence for assessment?	**Yes/No (Y/N)**	**Signed (Initialled)**
single rope technique (SRT) climbing kit		
standard climbing kit (double line)		
harness		
chaps – required where appropriate for task		
climbing friction hitches		
high decibel whistle		
personal protective equipment (PPE)		
first aid and emergency kit		
rescue kit		
traffic management kit		
trees		

Knowledge Evidence		
Has the candidate successfully completed the **Knowledge Evidence** requirements by demonstrating knowledge of each of the line items below?	**Yes/No (Y/N)**	**Signed (Initialled)**
climbing equipment/tree access equipment		
harness selection		
selection of climbing equipment		
selecting of triple locking carabiners		
use of triple locking carabiners		
use of harness and lanyard		
ropes		
types of climbing ropes:		
– dynamic and static ropes		
uses of climbing ropes:		
– rope characteristics		
hold, release and grip attributes of rope		
climbing/access/ascension techniques		
tree access techniques:		
– single rope techniques		
– double rope techniques		
controlled descent operations		
controlled removal of access equipment		
advanced climbing techniques:		
– change-overs		
– redirects using slings and anchors		
– belays using slings and anchors		
– multiple line selection to access trees and tree parts		
– multiple line selection to perform tree operations		
– uni-ascenders (or other mechanical rope-grab)		
– foot and hand ascenders		
– other ascension devices as required		
– use of micrograbs (or other belay devices)		
– use of grigris (or other belay devices)		
– use of micro-pulleys		
climbing risk assessment		
strength requirements		

suitability requirements		
branch weight		
appropriate method of tree access		
selection of climbing or EWP access		
team discussion on tree access method		
team feedback on tree access method		
estimation of tree height		
low risk access routes		
safe working limits		
estimation of load		
safe working limits of ropes		
safe working limits of equipment		
low risk anchor points		
* It is an industry requirement that assessment included the following item:		
– rope angles and radii *		
friction hitches		
determine limits of friction hitches		
determine relative advantages of friction hitches		
determine disadvantages of friction hitches		
types of friction hitches:		
– Tautline		
– Blake's		
– Prussik		
– Klemheist		
– Valdetain		
– French Prussik		
– specialised variations		
spurs & gaffs		
preparation of climbing spurs		
preparation of gaffs		
defects of climbing spur components		
wear of climbing spur components		
gaff tip profile dimensions		
use of gaff gauges		
gaff tip cutting edge sharpening procedure		
defined angle of gaff gauge use		

climbing spur adjustment method		
correct operator fit		
accessing tree using climbing spurs		
use of climbing spikes/spurs (with gaffs) of various lengths		
spur separation		
clearance distance between spurs and ropes		
Performance evidence		
The candidate must be observed ascending and descending trees using advanced tree climbing practices.		
Has the candidate met the performance evidence requirement?	**Yes/No (Y/N)**	**Signed (Initialled)**
Has the candidate been observed ascending and descending trees using advanced tree climbing practices?		
Has the candidate successfully demonstrated the **Performance Evidence** requirements of the unit of competency AHCARB307 Use advanced climbing techniques**, and as per listed line items below?**	**Yes/No (Y/N)**	**Signed (Initialled)**
appropriate method for accessing tree – climbing or using an EWP – through discussion with work team		
determining location of above-and-below-ground services		
undertaking a site-specific risk assessment by identifying work health and safety hazards and assessing risk		
confirming first aid and rescue personnel, equipment and procedures		
ensuring work team member present, capable, willing and equipped to assist or perform aerial rescue operations		
preparing and carrying out pre-operational and safety checks, on ropes, harnesses, tools and equipment		
selecting and using personal protective equipment and safety equipment		
recording and implementing work health, safety, site, environmental and traffic control measures		
selecting harness and appropriate equipment for climbing		
inspecting tree to determine low risk access route through discussion with work team and seek feedback		
estimating tree height and load in relation to safe working limits of ropes and equipment		
determining the hold, release and grip attributes of rope		
selecting and using static and dynamic rope as required		
selecting and using triple locking carabiners		

determine limits, relative advantages and disadvantages of friction hitches including: Tautline, Blake's, Prussik, Klemheist, Valdetain, French Prussik and specialised variations		
tying, dressing, setting and finishing climbing knots and hitches		
communicating with work team during operations using voice, hand and whistle signals		
maintaining awareness of power line safe approach distances and vegetation clearances		
selecting low risk anchor points in accordance with strength, suitability requirements and branch weight		
accessing and ascending tree using low risk access route with harness and lanyard		
ascending using single rope, double rope and selected friction hitch as required		
ascending using uni-ascenders (or other mechanical rope-grab) and foot ascenders as required		
using micrograbs, grigris (or other belay devices) and micro-pulleys as required for access and tree operations		
demonstrating ability to carry out change-overs		
setting up redirects and belays using slings and anchors		
selecting multiple lines to access trees and tree parts		
selecting multiple lines to perform tree operations		
descending tree in a controlled manner		
removing all access equipment in a controlled manner		
cleaning and storing climbing equipment		
cleaning and storing personal protective equipment		
use of industry standard-terminology to describe climbing and the work environment		

Assessment conditions		
It is an industry requirement that delivery of training and assessment in this unit provides for the explicit conditions of work team capability for aerial rescue operations. It is an industry requirement for competency in this unit that assessment must include a log record of **two hundred (200)** hours of advanced climbing.		
Have the assessments incorporated the assessment conditions and met the industry requirements for competency in this unit **as per listed line items below?**	**Yes/No (Y/N)**	**Signed (Initialled)**
Has the assessment provided for work team capability for aerial rescue?		
Has the candidate successfully completed the Log Record requirements of of **two hundred (200)** hours of advanced climbing?		
Assessment may be conducted in a simulated or real work environment; however, determination of competency requires the application of work practices under work conditions.	**Yes/No (Y/N)**	**Signed (Initialled)**
Have assessments been demonstrated consistently over time?		
Have assessments been demonstrated in a suitable range of contexts?		
Have assessments been demonstrated with a productivity-based outcome?		
Have assessments been demonstrated with multiple assessment events and reports?		
Assessor Declaration		
Assessors must satisfy current standards for RTOs in the assessment of arboriculture units of competency. **Has assessment been conducted only by persons who have:**	**Yes/No (Y/N)**	**Signed (Initialled)**
• **arboriculture vocational competencies at least to the level being assessed?**		
• **current arboriculture industry skills directly relevant to the unit of competency being assessed?**		

Assessor name	**Assessor qualification**	**Year**	**Full Signature**

Competency Determination	
This section determines the skills and knowledge required to climb trees with ropes, harnesses and specialist equipment using advanced techniques for the purpose of mobility around the required sections of trees for work positioning.	**Competent /Not yet competent**
The candidate is competent in climbing trees with ropes, harnesses and specialist equipment using advanced techniques for the purpose of mobility around the required sections of trees for work positioning.	

Competency Assessment Completion		
Assessor name	**Date**	**Full Signature**