

<b>Title</b>	<b>Establish an anchor for a cable-assisted forestry machine</b>		
<b>Level</b>	<b>4</b>	<b>Credits</b>	<b>5</b>

<b>Purpose</b>	<p>This unit standard is intended for workers in a forestry operation who are required to position anchors for cable-assisted machines or who are training to become cable-assisted machine operators.</p> <p>People credited with this unit standard are able to: demonstrate knowledge of the operating principles of the cable-assisted system, and factors affecting the safe positioning and security of the anchor; and establish an anchor for a cable-assisted machine.</p>
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<b>Classification</b>	Forestry > Forest Mechanised Harvesting
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<b>Available grade</b>	Achieved
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### Guidance Information

- Assessment against this unit may be carried out on either integrated systems using static anchors, or on dynamic systems using an anchor machine. Candidate's evidence should relate to the type of system used at their worksite.
- Before assessment against this unit standard candidates must have demonstrated competency with operation of the machine to be used in the assessment. Competency is as defined in the Approved Code of Practice for Safety and Health in Forestry Operations available at [www.worksafe.govt.nz](http://www.worksafe.govt.nz).
- Definitions
 

*Accepted industry practice* – approved codes of practice and standardised procedures accepted by the wider forestry industry as examples of best practice.

*Cable-assisted machine* – any forestry machine using an anchor, winch and rope system to provide tractive assistance when operating on slopes.

*Operational plan* – any plan detailing how operational tasks will be carried out. Examples of operational plans include: harvesting plans, felling plans, extraction plans.

*Workplace procedures* – procedures used by the organisation carrying out the work and applicable to the tasks being carried out. They may include but are not limited to – standard operating procedures, site safety procedures, equipment operating-procedures, codes of practice, quality management practices and standards, procedures to comply with legislative and local body requirements.
- All activities and performance criteria must be carried out in accordance with accepted industry practice.

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## Outcomes and performance criteria

### Outcome 1

Demonstrate knowledge of operating principles and anchoring of the cable-assisted system.

#### Performance criteria

- 1.1 The operating principles of the cable-assisted system are described, and the benefits are stated.
- 1.2 The type of anchor used on site and acceptable anchor set-ups are described in accordance with workplace procedures.
- 1.3 The main cause of system failure in cable-assisted operations is stated and the importance of the anchor placement in preventing this is explained.
- 1.4 Anchor alarms are identified, and their function is explained.

### Outcome 2

Demonstrate knowledge of factors affecting the safe positioning and security of the anchor.

#### Performance criteria

- 2.1 Hazards, risks and risk control measures for the establishment of an anchor are stated.
- 2.2 Factors that contribute to most anchor failures are listed.  
  
Range may include but is not limited to – anchor machine placement, anchor machine size, stump selection, ground conditions, lack of testing for stability prior to use, working outside of system capacity; evidence of three factors is required.
- 2.3 The effect of misalignment of the anchor on anchor security once a load is put on the rope is explained.
- 2.4 The impact of the departure point of the cable from the anchor on anchor security is explained.
- 2.5 The effect of ground conditions on the anchoring operation and anchor security is explained.
- 2.6 Situations and events which may damage or compromise the anchor are identified and explained.

- 2.7 The impact of topography on access to and from the felling face for establishing the anchor and positioning the cable-assisted machine is explained.

### Outcome 3

Establish an anchor for a cable-assisted machine.

#### Performance criteria

- 3.1 Areas to be harvested using a cable-assisted machine are identified from the operational plan.
- 3.2 The reasons for anchor positioning are explained in accordance with the operational plan.
- 3.3 Procedures for establishing an anchor are explained, and the criteria for assessing satisfactory placement are listed in accordance with workplace procedures.
- 3.4 Anchors are established and tested in accordance with the operational plan and workplace procedures.

<b>Planned review date</b>	31 December 2028
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#### Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	26 October 2017	N/A
Review	2	25 June 2020	N/A
Rollover	3	26 April 2024	N/A

<b>Consent and Moderation Requirements (CMR) reference</b>	0173
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

#### Comments on this unit standard

Please contact Muka Tangata - People, Food and Fibre Workforce Development Council [qualifications@mukatangata.nz](mailto:qualifications@mukatangata.nz) if you wish to suggest changes to the content of this unit standard.