

Title	Plan and rig an elevated support system for a cable harvesting operation		
Level	4	Credits	15

Purpose	<p>This unit standard is intended for people involved in a cable yarder operation who are responsible for planning and rigging elevated support systems.</p> <p>People credited with this unit standard are able to: demonstrate knowledge of the use of elevated support systems for cable harvesting operations; plan the rigging of an elevated support system; rig an elevated support system; and demonstrate knowledge of an elevated support system rescue.</p>
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Classification	Forestry > Forest Harvesting Operations
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Available grade	Achieved
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Prerequisites	Unit 1269, <i>Plan, prepare for, and carry out line shifts in a cable harvesting operation</i> , or demonstrate equivalent knowledge and skills.
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Guidance Information

- 1 This unit standard refers to a tailtree and a tailspar. A tailtree becomes a tailspar once it is topped (the head of the tree cut).
- 2 Legislation relevant to this unit standard includes the Health and Safety at Work (HSW) Act 2015; the Resource Management (National Environmental Standards for Plantation Forestry) Amendment Regulations 2018; and any subsequent amendments.
- 3 References
Approved Code of Practice (ACOP) for Safety and Health in Forestry Operations, December 2012, available from <https://worksafe.govt.nz/>.
 New Zealand Forest Owners Association, *Forest Practice Guides* (2019), and any subsequent amendments, available from <https://www.nzfoa.org.nz>.
- 4 Definitions
Accepted industry practice – approved codes of practice and standardised procedures accepted by the wider forestry industry as examples of best practice.

Worksite procedures refer to documented 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, quality assurance procedures, housekeeping standards, procedures to comply with legislative and local body requirements.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of the use of elevated support systems for cable harvesting operations.

Performance criteria

1.1 The purpose of elevated support systems in cable harvesting operations is explained in accordance with accepted industry practice.

Range earthworks, ground clearance, deflection, yarding distance.

1.2 Different types of elevated support systems and situations where they would be used are described in accordance with accepted industry practice.

Range tailspar, intermediate supports, single spar, double spar, leaning spar.

1.3 Elevated support systems are explained in terms of planning requirements.

Range planning locations, identifying suitable trees to be left standing, considering anchoring methods, checking system compatibility, personnel required.

Outcome 2

Plan the rigging of an elevated support system for a cable harvesting operation.

Performance criteria

2.1 A profile of the proposed rigging system is drawn in accordance with accepted industry practice.

Range tower, tail anchors, supports, deflection, payload.

2.2 Trees are chosen, marked, and left standing in terms of the elevated support system's requirements.

Range location, deflection, accessible, able to be guyed in position.

- 2.3 Elevated support system is assessed in terms of the suitability of the tree selected.
- Range tree height, tree size, tree form, branching characteristics, topping, ground conditions around tree, guyline anchoring.
- 2.4 Resources required to rig the tailspar are assembled and transported to the site in accordance with worksite procedures.
- Range resources may include but is not limited to – blocks, block strops, guylines, wire rope clamps, support jacks, skyline extension, chainsaw suited to tree size, safety chain, pass block, rigging rope, two sets of climbing harnesses and spurs, a second climber, tensioning device, personal protective equipment, first aid kit, means of communication, felling equipment, rescue gear.
- 2.5 The risks specific to rigging up elevated support systems are identified, and methods to control them are explained in accordance with accepted industry practice.
- Range evidence of four risks and a control method for each is required.

Outcome 3

Rig an elevated support system for a cable harvesting operation.

Performance criteria

- 3.1 Guyline anchors and tailhold anchors are selected, and trees felled as required, in accordance with the accepted industry practice and worksite procedures.
- Range anchor trees, hazardous trees, inclination of wire ropes.
- 3.2 Tailtree is climbed and branches trimmed to the required height in accordance with accepted industry practice.
- Range safety requirements, using harness and spurs, secured to the tailtree, safe use of chainsaw up a tree, suitable chainsaw, stubs left to retain the block strops in position.
- 3.3 Tailtree is topped in accordance with accepted industry practice.
- 3.4 Guylines are prepared and attached to the rigging rope on the ground, and hoisted into position up the tailspar, in accordance with accepted industry practice.
- 3.5 Guylines are secured to the tailspar before being attached to the anchor in accordance with accepted industry practice.
- Range shackle or choker position up the tailspar, tensioned using wire rope clamping method or tensioning device.

- 3.6 Blocks and wire rope elevated support mechanism are hoisted into position and connected to pre-set strops in accordance with accepted industry practice.
- Range strops set first, in lead with line of pull.
- 3.7 Strawline or skyline extension is set in support mechanism in preparation for use in accordance with accepted industry practice.
- 3.8 Equipment used in the rigging-up of the tailspar is removed from around the elevated support system.
- 3.9 Rigging rope is secured to prevent accidental snagging when stems are being extracted in accordance with accepted industry practice.
- 3.10 The elevated support system is tested under tension before operations commence in accordance with accepted industry practice and worksite procedures.

Outcome 4

Demonstrate knowledge of an elevated support system rescue.

Performance criteria

- 4.1 Equipment needed for an elevated support system rescue is explained in accordance with accepted industry practice.
- 4.2 The steps involved in an elevated support system rescue are explained in accordance with accepted industry practice.

Planned review date	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	5 December 2000	31 December 2012
Review	2	22 May 2008	31 December 2012
Review	3	8 December 2011	31 December 2017
Review	4	10 December 2015	N/A
Review	5	23 January 2020	N/A
Rollover	6	26 April 2024	N/A

Consent and Moderation Requirements (CMR) reference	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 if you wish to suggest changes to the content of this unit standard.