Title	**Position, secure, and plan the relocation of a swing yarder**		
Level	**4**	**Credits**	**18**

Purpose	This unit standard is intended for people employed in swing yarder harvesting roles in a commercial forestry operation. People credited with this unit standard are able to: plan and explain the set-up of a swing yarder to meet worksite requirements; prepare site for swing yarder set-up; prepare and attach guylines to anchor a swing yarder; raise the A-frame and boom on a swing yarder; plan and manage an A-frame and boom lowering operation; and plan the relocation of the swing yarder to another cable harvesting worksite.

Classification	Forestry > Forest Harvesting Operations

Available grade	Achieved

Guidance Information

1 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.

2 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.

3 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

Plan and explain the set-up of a swing yarder to meet worksite requirements.

Performance criteria

1.1 The personnel and equipment needed for the set-up are explained in accordance with accepted industry practice and worksite procedures.

Range equipment includes – machine system and capability.

1.2 The position of the swing yarder is planned and explained in accordance with accepted industry practice and worksite procedures.

Range landing layout, first drag, stem landing chute, anchors.

1.3 Features of suitable guylines are described in accordance with accepted industry practice.

Range includes but is not limited to – length, guyline extensions, diameter, strength, auxiliary equipment, method of connection.

1.4 Features of suitable guyline anchors are described in accordance with accepted industry practice.

Range availability, location, ground conditions, earth deadman, tie backs, twisters, multiple stump anchors, stump notching, stump age, size and condition, machine stability.

1.5 Guyline configuration and positioning of anchors are planned in accordance with worksite procedures.

Range vertical angles, anchor availability.

1.6 Methods for stabilising machine and raising A-frame and boom are explained in accordance with worksite procedures.

1.7 Procedure to reposition the machine on the same landing is explained in accordance with accepted industry practice and worksite procedures.

Range includes but is not limited to – risk management.

Outcome 2

Prepare site for swing yarder set-up.

Performance criteria

2.1 Initial site is selected on a prepared landing and the machine is positioned in accordance with accepted industry practice and worksite procedures.

Range includes but is not limited to – yarding direction, landing layout, landing operations, suitable stem landing area, clearance over edge of landing, effect on processing, anchors, machine stability.

2.2 The risks specific to setting up and securing the swing yarder are assessed and controlled in accordance with accepted industry practice.

2.3 The location and spacing of guylines is explained for the swing yarder being used in accordance with accepted industry practice.

Range anchor locations, uniformity, vertical angles.

2.4 Anchor points for guylines are planned, selected, and marked in accordance with accepted industry practice and worksite procedures.

Range stumps, provision for alternative anchors, allowing for subsequent swing yarder shifts.

Outcome 3

Prepare and attach guylines to anchor a swing yarder.

Performance criteria

3.1 Anchors are prepared in accordance with accepted industry practice.

Range may include – stumps, alternative anchors, mobile anchors; evidence of two is required.

3.2 Stumps are notched in accordance with accepted industry practice and worksite procedures.

3.3 Guylines are secured to anchors and/or extensions in accordance with accepted industry practice.

3.4 Guylines and wire ropes are positioned and tensioned in accordance with the manufacturer's recommendations.

Range sequence, spooled, balanced.

3.5 Set-up is checked and adjusted prior to machine operation in accordance with worksite procedures.

Range may include but is not limited to – locking dogs, locking pins, machine security, anchor security, guyline tension; evidence of five is required.

3.6 Anchors and guylines are checked for stability and safety for the initial drags and under full production loads.

3.7 Daily anchor and guyline checks are carried out and documented in accordance with accepted industry practice and worksite procedures.

Outcome 4

Raise the A-frame and boom on a swing yarder.

Performance criteria

4.1 A-frame and boom components are inspected and maintained prior to raising in accordance with accepted industry practice.

Range strawline in sheaves, guyline sheaves, shackles, hydraulic equipment, locking pins, boom raising line, A-frame guyline swivel.

4.2 Communication with crew members involved is established and their roles in the operation are clarified in accordance with worksite procedures.

Range positioning to perform assigned duties, adequately instructed and equipped, risk management.

4.3 Machine is levelled and stabilised, and ground conditions are checked, prior to raising the A-frame and boom in accordance with worksite procedures.

4.4 A-frame and boom are raised by directing crew members using hand or radio communication in accordance with accepted industry practice, manufacturer's requirements, and worksite procedures.

4.5 A-frame and boom raising operation is completed and the safety of crew members and machinery is maintained in accordance with worksite procedures.

Outcome 5

Plan and manage an A-frame and boom lowering operation.

Performance criteria

5.1 A-frame and boom lowering is planned in accordance with the manufacturer's requirements.

Range safety requirements, resources.

5.2 A-frame and boom are lowered in accordance with accepted industry practice, manufacturer's requirements, and worksite procedures.

5.3 The reason for inspecting A-frame and boom components and the critical items to inspect are explained in accordance with accepted industry practice and worksite procedures.

5.4 A-frame and boom component defects are described in terms of visual indications and likely locations.

Range cracks, wear, deformation, fatigue, corrosion, loose fasteners and fittings, low fluid levels, fluid leaks.

5.5 A-frame and boom components are inspected and their serviceability is determined in accordance with accepted industry practice.

Range includes but is not limited to – sheaves, shackles, ropes, A-frame and boom, fasteners, boom raising line, bearings, hydraulic equipment, swivel block, locking devices, fluids, guyline extensions, deadman strops.

5.6 The process to repair unserviceable A-frame and boom components is explained in accordance with manufacturer's requirements and worksite procedures.

5.7 The A-frame and boom certification process is explained in accordance with accepted industry practice and worksite procedures.

5.8 A-frame and boom certification is checked, and reinspection is arranged if necessary, in accordance with accepted industry practice and worksite procedures.

Outcome 6

Plan the relocation of the swing yarder to another cable harvesting worksite.

Performance criteria

6.1 Relocation of swing yarder is planned in accordance with accepted industry practice and worksite procedures.

Range may include but is not limited to – safety requirements, communication process, signage.

6.2 Swing yarder relocation is explained in terms of the resource requirements.

Range resources may include but are not limited to – transporters, personnel, pilot vehicle.

Planned review date	31 December 2028

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	8 December 2011	31 December 2017
Review	2	10 December 2015	31 December 2024
Revision	3	21 April 2016	31 December 2024
Review	4	23 January 2020	N/A
Revision	5	25 February 2021	N/A
Rollover	6	26 April 2024	N/A

Consent and Moderation Requirements (CMR) reference	0173

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.