Modification history

Release	Comments
Release 1	This version released with FWP Forest and Wood Products Training Package Version 7.0.

FWPHAR2XXX	Operate a simulated forest machine
Application	This unit of competency describes the skills and knowledge required to use a forestry machine simulator for practicing work methods before learning to operate real equipment. This unit does not provide technical skills and knowledge that enable a person to operate a forestry machine in the workplace but rather provide foundation skills in forestry machine operations. This unit does not include the use of on board computing functions. The unit applies to entry level workers who intend to pursue further training and work as forest machine operators in a forest or plantation setting. No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.
Prerequisite Unit	Nil
Unit Sector	Harvesting and Haulage

Elements	Performance Criteria
Elements describe the essential outcomes.	*Performance criteria describe the performance needed to demonstrate achievement of the element.*
1. Prepare to operate a simulated forest machine	1.1 Review simulator activity requirements and, where required, seek clarification from simulator supervisor 1.2 Complete operator log in
2. Conduct pre-operational service and safety checks on a simulated forest machine	2.1 Assess personal, machine and site hazards in simulated work site 2.2 Complete virtual walk round and inspection of forest machine to identify forest machine components, service points and faults 2.3 Confirm the setup for the base machine in the simulation environment to meet activity requirements
3. Operate simulated forest machine	3.1 Identify forest machine simulator controls and functions 3.2 Select and use simulator controls to drive forest machine including gear selection, steering, acceleration and reversing 3.3 Use simulator controls to demonstrate basic machine crane functions according to simulator activity requirements 3.4 Demonstrate use of forest machine attachments and functions as required 3.5 Optimise position of forest machine and select the correct angle and alignment of boom and attachments during the simulated operation 3.6 Respond to the variation in production targets, tree type, slope and terrain characteristics during simulation 3.7 Respond to on-screen and instructor advice and take corrective actions as required
4. Review personal use of simulated forest machine	4.1 Review personal performance data on operation of forest machine simulator 4.2 Participate in debriefing on operation of forest machine simulator with simulator supervisor

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Oral Communication	• Use appropriate vocabulary including technical language directly relevant to role
Numeracy	• Interpret numerical and graphical information shown on forest machine simulator displays

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FWPHAR2XXX Operate a simulated forest machine	Not applicable	New unit	Not applicable

Links	Companion Volumes, including Implementation Guides, are available at VETNet: https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47

TITLE	**Assessment requirements for FWPHAR2XXX Operate a simulated forest machine**

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has used simulator to demonstrate operation of one type of forest machine in four different harvesting scenarios.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:
- types, uses, capacity of forest machines
- pre-operational checks for forest machines including service points
- basic components of forest machines
- forest machine hand controls and functions
- operator techniques for safe and efficient operations of forest machines
- basic machine alignment and boom geometry
- basic terminology related to forest machine operations
- basic effects of slope, weather and terrain conditions on forest machine stability and operation
- basic work site and communication requirements
- hazardous or safe working zones in forest machine operations
- health and operational hazards or risks related to forest machine operations
- personal protective equipment required in forest machine operations.

Assessment Conditions

Assessment of the skills in this unit of competency must take place under the following conditions:
- physical conditions:
  - skills must be demonstrated in a simulated environment that represents forest machine operation
- resources, equipment and materials:
  - forest machine simulator.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links	Companion Volumes, including Implementation Guides, are available at VETNet: https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47