Modification history

| Release | Comments |
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| Release 1 | This version released with [FWP Forest and Wood Products Training Package Version 2.1. |

| FWPHAR3222 | Use on-board computer systems for forwarder |
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| Application | This unit of competency describes the skills and knowledge required to use on-board computer technology and software for forwarders to optimise loading processes, after processing and extraction, in a commercial forest harvesting environment.  The unit applies to individuals who work as forwarder operators. Operators generally work under broad direction to complete routine activities related to harvesting operations and take responsibility for their work.  No occupational licensing, legislative or certification requirements apply to this unit at the time of publication. |
| Prerequisite Unit | Nil |
| Unit Sector | Harvesting (HAR) |

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| Elements | Performance Criteria |
| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| 1. Start up and shut down the on-board computer | 1.1 Start up the on-board computer and respond to display prompts by pressing the appropriate buttons  1.2 Edit settings in work mode display to update information about operator and the start and end of the shift  1.3 Check that a connection exists between the weight scale and the Bluetooth modem  1.4Use mouse buttons and keyboard to shut down the weight scale system and computer |
| 2. Create an active site file | 2.1 Use menus and fields to create a new site, select, disable or add tree assortments to the new site, press button to complete file set up  2.2 Use work mode feature and icons to view basic information about machine, engine and auxiliary functions  2.3 Use quick adjustment menu and/or the setting mode to select and adjust parameter values for machine movements  2.4 Return to work mode display and select option to start new load |
| 3. Register load / production information | 3.1 Identify on window screen that GPS system is active, to ensure it runs correctly, and report faults to appropriate personnel in line with organisational procedures  3.2 Start loading operations and use registration button and software functions, to register and edit load or production parameters according to machine configuration and equipment profile  3.3 Use the weight scale menu to set-up or edit the weight factors and default volumes of a maximum full load for specific tree assortments  3.4 Use work mode display and system messages to view information about loading and standard machine operation according to load parameters and machine configuration |
| 4. Calibrate machine weight scale | 4.1 Use calibration menu and methods to conduct regular reference calibration of Active Load Space pressure sensors and ensure accuracy of weighing measurements  4.2 Use calibration menu and methods to conduct regular dynamic and static reference calibration of the boom weight scale and ensure accuracy of weighing measurements  4.3 Regularly check and reset grapple to the ‘zero point’, by using reset button on the keyboard panel  4.4 Check the static calibration factor for possible changes in weight scale calibrations  4.5 Identify and report faults and errors related to the on-board computer system |
| 5. Manage production data | 5.1 Use software menu, sub-menus and display prompts to end production site file and save on a data storage device  5.2 Transfer files between computers or via mobile devices and applications |

| 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. | |
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| Skill | Description |
| Learning | * develop knowledge of weight factors to optimise loading processes in a forest harvesting environment |
| Reading | * interpret user manual for machine’s on-board computer system * interpret pre-set information in the computer files * interpret software’s data display and measures |
| Oral Communication | * interact verbally and non-verbally with technical personnel using communication means to remediate computer errors or resolve matters with electronic files and data |
| Numeracy | * navigate software menus, files and fields * interpret file variables including weight factors and volumes of load |
| Navigate the world of work | * identify and describe own skills, knowledge and experience within context of job role * understand main tasks, responsibilities and boundaries of own role |
| Interact with others | * use appropriate vocabulary, including technical language directly relevant to role * use modes of communication suitable to purpose to confirm and clarify understanding * communicate and report operational task and safety information to relevant personnel * participate in conversations relevant to role by responding and explaining as required |
| Get the work done | * identify routine problems and implement standards solutions according to workplace guidelines, or * recognise and respond to routine problems * take responsibility for planning, sequencing and prioritising tasks and own workload for efficiency and effective outcomes * plan and organise own work activities and resources |

| Unit Mapping Information | | | |
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| Code and title current version | Code and title previous version | Comments | Equivalence status |
| FWPHAR3222 Use on-board computer systems for forwarder | Nil | New Unit | No equivalent unit |

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| Links | Companion Volume Implementation Guides are found in VETNet - <https://vetnet.education.gov.au/Pages/TrainingPackages.aspx/Pages/Home.aspx> |

| TITLE | Assessment requirements for FWPHAR3222 Use on-board computer systems for forwarder |
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| Performance Evidence | |
| An individual demonstrating competency must satisfy all the elements, performance criteria and foundation skills of this unit. There must be evidence that, on at least one occasion, the individual has:   * created an active site file for loading operation * registered load and production information at start of loading operation * set-up and/or edited the weight factors and default volumes settings * used software settings and calibration methods to conduct accurate calibrations of the weight scale and sensors * edited parameters value for machine movements * ended production and saved and transferred file for the production site by using a data storage system or email or mobile devices. | |

| Knowledge Evidence |
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| 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:   * components of wireless weighing system and its mode of operation * software and files used with on-board computers, including basic features and applications * navigating on-board computer menus, sub-menus and fields * fields and data inputs required to start the loading operation * setting-up and editing the weight factors and default volumes of a maximum load for a variety of tree assortments * settings and methods for editing parameter values for machine movements * methods to calibrate the weighing system and improve accuracy of measurements * factors that affect accuracy of the weighing measurement * ending production and saving and transferring files using a data storage system or mobile app * methods to identify faults related to the on-board computer system and GPS. |

| Assessment Conditions |
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| Assessment of this unit of competency must take place under the following conditions:   * physical conditions: * skills must be demonstrated in a logging site or an environment that accurately represents workplace conditions * resources, equipment and materials: * simulator or loader equipped with on-board computer and weighing system * data storage system or mobile system/app for the purpose of saving and transferring production files * personal protective equipment required in harvesting operations * specifications: * access to user manual for the on-board computer system   Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards. |

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