



Australian Government

AVIY4058 Pilot a helicopter during external load operations

Release: 1

AVIY4058 Pilot a helicopter during external load operations

Modification History

Release 1. This is the first release of this unit of competency in the AVI Aviation Training Package.

Application

This unit involves the skills and knowledge required to pilot a helicopter during external load operations, in compliance with relevant regulatory requirements of the Civil Aviation Safety Authority and national operating standards.

It includes planning and preparing for external load operations, conducting pre-flight briefings, and operating the helicopter during external load operations. It also includes managing abnormal and emergency situations, and conducting post-flight activities.

This unit addresses aviation technical skill requirements (physical, mental and task-management abilities) related to aircraft operational duties of flight crew, and contributes to safe and effective performance in complex aviation operational environments.

Operations are conducted as part of recreational, commercial and military aircraft activities across a variety of operational contexts within the Australian aviation industry.

Work is performed independently or under limited supervision within a single-pilot or multi-crew environment.

Licensing, legislative, regulatory or certification requirements are applicable to this unit.

Use for Defence Aviation is to be in accordance with relevant Defence Orders, Instructions, Publications and Regulations.

Pre-requisite Unit

Not applicable.

Competency Field

Y – Aircraft Operation and Traffic Management

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

PERFORMANCE CRITERIA

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1 Plan and prepare for external load operations

- 1.1 External load tasking requirements are identified
- 1.2 External load is secured, stabilised and rigged in accordance with workplace procedures
- 1.3 External load procedure, equipment and personnel required for task are determined
- 1.4 Helicopter performance data is interpreted and calculated to ensure suitability of aircraft for external load operations
- 1.5 Outbound and return flight routes are planned
- 1.6 Secure and stable load preparations are arranged
- 1.7 Load-lifting equipment strength and suitability are assessed

2 Conduct pre-flight briefings

- 2.1 Requirements of load task are explained and confirmed
- 2.2 Personnel responsible for inspecting load-lifting equipment for serviceability and security are identified
- 2.3 Communication and hook-up procedure is explained
- 2.4 Hook-up person and hook-up procedure is specified
- 2.5 Departure, transit, approach, termination and load release procedures are explained
- 2.6 Emergency procedures are explained and confirmed
- 2.7 Pilot vertical reference (long line) procedure is explained
- 2.8 Crew and ground support personnel are briefed on all aspects of external load operation
- 2.9 Seating is adjusted to ensure full exercise of flight controls and ability to scan instrument panel
- 2.10 Helicopter performance data is interpreted and calculated to ensure suitability of aircraft for operations
- 2.11 Aircraft is configured for external load operations and

- security of internal equipment is arranged as required
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| 3 Operate helicopter | 3.1 | Functional and safety checks on role equipment are performed, and defects are reported |
| | 3.2 | Fuel and cargo load combinations to achieve task are calculated |
| | 3.3 | Adequacy of power margin and directional control are determined |
| | 3.4 | Stable hover over load during hook-up/delivery procedures is maintained |
| | 3.5 | External load is lifted and transported to a separate location and placed at a specified position |
| | 3.6 | External load is monitored and appropriate actions are taken to ensure load security and stability during flight |
| 4 Manage abnormal and emergency situations | 4.1 | Helicopter control is maintained |
| | 4.2 | Abnormal and/or emergency situations are identified and managed |
| | 4.3 | Load is jettisoned when flight safety is compromised or load stability is uncontrollable |
| 5 Conduct post-flight activities | 5.1 | Operating procedures and outcomes of flight are reviewed and analysed |
| | 5.2 | Effectiveness, efficiency and performance of equipment is analysed and reported |
| | 5.3 | Inspection, servicing and stowage of equipment is organised |

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Unit Mapping Information

This unit replaces and is equivalent to AVIY4058A Pilot a helicopter during external load operations.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=4725260a-0af3-4daf-912b-ef1c2f3e5816>