



**Australian Government**

# **AVIY0090 Pilot a helicopter during external load operations**

**Release: 1**

# AVIY0090 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 (CASA) Manual of Standards LL-SO Sling operations 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 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.

If the Manual of Standards is amended after the publication of this unit of competency, the delivery of the unit must be in accordance with the latest Manual of Standards as published by CASA.

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

## 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 Prepare and rig a sling load

1.1 External load tasking requirements are identified

1.2 External load is secured, stabilised and rigged in accordance with workplace procedures

#### 2 Plan external load operations

2.1 External load procedures, equipment and personnel required for task are determined

2.2 Helicopter performance data is interpreted and calculated to ensure suitability of aircraft for external load operations

2.3 Outbound and return flight routes are planned

2.4 Secure and stable load preparations are arranged

2.5 Load-lifting equipment strength and suitability are assessed

#### 3 Conduct pre-flight briefings for external load operations

3.1 Requirements of load task are explained and confirmed

3.2 Personnel responsible for inspecting load-lifting equipment for serviceability and security are identified

3.3 Communication and hook-up procedures are explained

3.4 Hook-up person and hook-up procedure are specified

3.5 Departure, transit, approach, termination and load release procedures are explained

3.6 Emergency procedures are explained and confirmed

3.7 Pilot vertical reference (long line) procedure is explained

3.8 Crew and ground loadmaster are briefed on all aspects of the load-lifting task

3.9 Seating is adjusted to ensure full exercise of flight controls and ability to scan instrument panel

- 3.10 Helicopter performance data is interpreted and calculated to ensure suitability of aircraft for operations
        - 3.11 Doors are removed and the security of internal equipment is arranged as required
- 4 Operate the aircraft during external load operations**
  - 4.1 Functional and safety checks on equipment are performed and defects reported
  - 4.2 Fuel and cargo load combinations to achieve task are calculated
  - 4.3 Adequacy of power margin and directional control are determined
  - 4.4 Stable hover over load during hook-up/delivery procedures is maintained
  - 4.5 External load is lifted and transported to a separate location and placed at a specified position
  - 4.6 External load is monitored and appropriate actions taken to ensure load security and stability during flight
  - 4.7 Excessive load swing during transit is avoided
- 5 Manage abnormal and emergency situations during external load operations**
  - 5.1 Helicopter control is maintained
  - 5.2 Abnormal and/or emergency situations are identified and managed in accordance with workplace procedures and aircraft flight manual (AFM) or pilot operating handbook (POH)
  - 5.3 Load is jettisoned when appropriate
- 6 Conduct post-flight activities for external load operations**
  - 6.1 Operating procedures and outcomes of flight are reviewed and analysed
  - 6.2 Effectiveness, efficiency and performance of equipment are analysed and reported

## 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.

Non-essential conditions may be found in the AVI Aviation Training Package Companion Volume Implementation Guide.

## **Unit Mapping Information**

This unit replaces and is equivalent to AVIY0069 Pilot a helicopter during external load operations.

## **Links**

Companion Volume Implementation Guides are found in VETNet' -

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