



**Australian Government**

# **AVIY0086 Manage abnormal situations and emergencies - helicopter**

**Release: 1**

# **AVIY0086 Manage abnormal situations and emergencies - helicopter**

## **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 application of skills and knowledge required to manage abnormal and emergency helicopter flight situations in compliance with relevant regulatory requirements of the Civil Aviation Safety Authority (CASA) and national operating standards, specifically H7 Manage abnormal situations and emergencies – helicopter.

It includes managing a forced landing from level flight after take-off or on approach, managing an engine failure at the hover or during taxi, managing a tail rotor malfunction, and managing a jammed flight control system. It also includes managing adverse aerodynamic conditions and managing a malfunction of the helicopter operating systems.

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

Elements describe the essential outcomes.

### PERFORMANCE CRITERIA

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

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| <b>1 Manage a forced landing from level flight</b>                   | <p><b>1.1</b> Engine failure is identified correctly and control of helicopter maintained</p> <p><b>1.2</b> Helicopter in autorotative flight is established and maintained</p> <p><b>1.3</b> Balance is maintained</p> <p><b>1.4</b> Rotor revolutions per minute (RRPM) is controlled within limitations</p> <p><b>1.5</b> Suitable landing area is selected</p> <p><b>1.6</b> Appropriate radio transmissions are made if time permits</p> <p><b>1.7</b> Emergency checks are performed</p> <p><b>1.8</b> Passengers are briefed as appropriate</p> <p><b>1.9</b> Autorotative landing is performed and helicopter is secured</p> |
| <b>2 Manage engine failure during take-off and on final approach</b> | <p><b>2.1</b> Engine failure is identified correctly and control of helicopter is maintained</p> <p><b>2.2</b> Helicopter in autorotative flight is established and maintained</p> <p><b>2.3</b> Skids are maintained parallel to direction of travel</p> <p><b>2.4</b> Autorotative landing or power termination is performed and helicopter is secured</p>   |
| <b>3 Manage engine failure during hover or hover taxi</b>            | <p><b>3.1</b> Engine failure is correctly identified during hover, yaw and drift are controlled, and controlled touchdown is performed</p>   |

- 3.2** Engine failure is correctly identified during hover taxi, yaw and drift are controlled, skids are maintained parallel to direction of travel, controlled touchdown is performed and ground-slide is controlled
- 4 Manage tail rotor malfunctions**
- 4.1** Tail rotor malfunction is correctly identified during flight, control of the helicopter is maintained, a suitable landing area is selected, helicopter is manoeuvred to a position where the safest landing is ensured and the helicopter is landed
- 4.2** Tail rotor malfunction is correctly identified during hover, control of the helicopter is maintained, a suitable landing area is selected and the helicopter is landed
- 5 Manage jammed flight control systems**
- 5.1** Jammed flight controls are correctly identified
- 5.2** Any objects that are causing the jam are located and removed
- 5.3** Control of the helicopter is maintained and the malfunction is rectified, if applicable
- 5.4** Helicopter is manoeuvred to the safest landing area available
- 6 Manage helicopter systems malfunctions**
- 6.1** Control of the helicopter is maintained
- 6.2** The system malfunction is identified and confirmed
- 6.3** The malfunction is managed appropriately
- 6.4** The system is isolated where applicable
- 6.5** Emergency procedures are performed

## 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 AVIY0064 Manage abnormal and emergency helicopter flight situations.

## Links

Companion Volume Implementation Guides are found in VETNet' -  
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=4725260a-0af3-4daf-912b-ef1c2f3e5816>