



**Australian Government**

# **AVIY0019 Manage abnormal aeroplane flight situations**

**Release: 1**

# **AVIY0019 Manage abnormal aeroplane flight situations**

## **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 manage abnormal aeroplane flight situations, in compliance with relevant regulatory requirements of the Civil Aviation Safety Authority and national operating standards.

It includes managing engine failure after take-off, performing forced landings following engine failure, conducting precautionary search and landing, and managing on-board abnormal and emergency situations.

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

Elements describe the essential outcomes.

### PERFORMANCE CRITERIA

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

#### **1 Manage engine failure after take-off**

- 1.1 Abnormal or failed engine indications are correctly identified
- 1.2 Control of aeroplane is maintained during emergency response procedures
- 1.3 Immediate actions are performed in accordance with pilot's operating handbook (POH)
- 1.4 Landing area within gliding distance is selected, and emergency procedures are performed in accordance with aircraft flight manual (AFM)/POH
- 1.5 Flight profile is flown, from which a controlled landing could be achieved
- 1.6 Air traffic services (ATS) or other agencies capable of providing assistance are advised of situation and intentions

#### **2 Perform forced landing following engine failure**

- 2.1 Partial or complete engine failure condition is correctly recognised and appropriate emergency response is identified
- 2.2 Control of aeroplane is maintained during emergency response procedures
- 2.3 Immediate actions are performed in accordance with POH
- 2.4 Recovery plan is formulated and explained, most suitable landing area within gliding distance is selected and aeroplane is manoeuvred to nominated landing area
- 2.5 Consideration is given to restarting engine as required, and engine is restarted as required
- 2.6 Optimal gliding flight profile is selected and flown, from which a controlled landing could be achieved
- 2.7 ATS or other agencies capable of providing assistance are advised of situation and intentions
- 2.8 Passengers and/or flight crew members are updated on flight situation and are advised to adopt emergency positions, time permitting

- |  |     |  |
|--|-----|--|
|  | 2.9 | Aeroplane is landed ensuring safest outcome if engine restart is not achieved  |
| <b>3 Conduct precautionary search and landing</b>          | 3.1 | Flight circumstances are assessed and appropriate decision to perform a precautionary landing is made  |
|  | 3.2 | Intentions are communicated to other traffic or agencies as required   |
|  | 3.3 | Aeroplane is configured for inspection flight profile  |
|  | 3.4 | Landing area is selected and inspected for approach, landing distance, surface, and obstacle clearance to ensure aeroplane could be landed safely    |
|  | 3.5 | Passengers and/or flight crew members are updated on flight situation and are advised to adopt emergency positions, time permitting                  |
|  | 3.6 | Aeroplane is landed and secured and passengers are managed as required   |
| <b>4 Manage on-board abnormal and emergency situations</b> | 4.1 | Control of aeroplane is maintained during emergency response procedures  |
|  | 4.2 | Abnormal and emergency situations are correctly identified and managed, in accordance with relevant emergency procedures and regulatory requirements |
|  | 4.3 | Appropriate emergency procedures are followed in accordance with AFM/POH and published procedures while maintaining control of aeroplane             |
|  | 4.4 | Requirement for emergency evacuation of aeroplane is identified  |
|  | 4.5 | Emergency evacuation of aeroplane is executed as required  |

## 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 not equivalent to AVIY4006B Manage abnormal aeroplane flight situations.

## Links

Companion Volume implementation guides are found in VETNet -

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