



Australian Government

AVIF0048 Undertake aircraft underwater escape and survival

Release: 1

AVIF0048 Undertake aircraft underwater escape and survival

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 undertake aircraft underwater escape and survival in compliance with relevant regulatory requirements of the Civil Aviation Safety Authority (CASA) and national operating standards.

It includes preparing for aircraft ditching, undertaking escape from an aircraft, conducting rescue recovery processes and controlling survival hazards.

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 across a variety of operational contexts within the Australian aviation industry.

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

Pre-requisite Unit

Not applicable.

Competency Field

F – Safety 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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|--|--|
| 1 Prepare for aircraft ditching | 1.1 Nature and extent of aircraft situation is communicated and acknowledgment confirmed |
| | 1.2 Personal items within the cabin are secured prior to ditching in accordance with workplace procedures |
| | 1.3 Restraint devices and survival equipment are checked, fastened and secured prior to ditching |
| | 1.4 Primary and secondary egress routes, exits and equipment are located |
| | 1.5 Brace position is adopted in accordance with workplace procedures |
| 2 Undertake escape from an aircraft | 2.1 Spatial orientation is conducted in accordance with workplace procedures |
| | 2.2 Egress points are located in accordance with workplace procedures |
| | 2.3 Exits are jettisoned and cleared in accordance with workplace procedures |
| | 2.4 Restraint devices are released in accordance with workplace procedures |
| | 2.5 Aircraft is egressed in accordance with workplace procedures |
| | 2.6 Water surface is cleared in accordance with workplace procedures |
| 3 Conduct rescue recovery processes | 3.1 Safety equipment is deployed in accordance with workplace procedures |
| | 3.2 Position indicating and signalling devices are deployed |
| | 3.3 Rescue recovery techniques are applied in accordance with workplace procedures |
| 4 Control survival hazards | 4.1 Potential hazards are identified and controlled in accordance with workplace procedures |
| | 4.2 Swimming techniques with a life jacket are applied |
| | 4.3 Hypothermia management techniques are employed |
| | 4.4 Raft boarding and righting techniques are employed |

4.5 Emergency supplies and equipment are managed

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 Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to AVIF0038 Undertake aircraft underwater escape and survival.

Links

Companion Volume Implementation Guides are found in VETNet' -

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

Assessment Requirements for AVIF0048 Undertake aircraft underwater escape and survival

Modification History

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements, performance criteria and range of conditions on at least one occasion and include:

- adapting to differences in aircraft, role and personal protective equipment and operating environment in accordance with workplace procedures
- applying hypothermia prevention, reduction and management techniques
- applying precautions and required action to minimise, control or eliminate identified hazards
- applying rescue recovery techniques
- communicating and collaborating effectively with others
- employing life jacket swimming, raft boarding and raft righting techniques
- identifying and correctly using relevant safety equipment, including one or more of the following:
 - flares
 - life jackets
 - life rafts
 - position locating beacons
 - restraint devices and harnesses
 - strobe lights
- monitoring and anticipating operational problems and hazards and taking appropriate action
- operating emergency and safety equipment in accordance with workplace procedures
- performing inverted and submerged aircraft escape techniques
- performing safe swimming techniques, including:
 - group safety
 - individual safety
 - surface clearing techniques
- releasing restraint devices and egressing aircraft
- reporting and/or rectifying problems, faults or malfunctions promptly in accordance with workplace procedures
- securing all personal items, restraint devices and survival equipment prior to ditching.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements, performance criteria and range of conditions and include knowledge of:

- aircraft escape hazards, including:
 - cold shock
 - environment
 - sea state
 - weather
- aircraft egress and exit systems
- aircraft escape techniques in an inverted and submerged aircraft, including:
 - blocked exit
 - primary exit
 - secondary exit
- emergency equipment deployment and operation
- hazards when exiting aircraft during emergency situations
- how to identify and operate equipment required to undertake aircraft underwater escape and survival, including:
 - flares
 - life jackets
 - life rafts
 - position locating beacons
 - strobe lights
- manufacturer instructions for equipment used for aircraft underwater escape and survival
- regulations, legislation, workplace policy and procedures in relation to aircraft underwater escape and survival
- rescue and recovery techniques
- restraint devices including flight crew harnesses or passenger seatbelts
- risks that exist when undertaking aircraft underwater escape and survival, and related risk control procedures and precautions
- safe swimming techniques, including:
 - group safety
 - individual safety
 - surface clearing techniques.

Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the

time of assessment.

Assessment must occur in workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated workplace operational situations that replicate workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment must include access to:

- a range of relevant exercises, case studies and/or simulations
- applicable documentation, including workplace procedures, regulations, codes of practice and operation manuals
- relevant materials, tools, equipment and PPE currently used in industry.

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