



Australian Government

AVIF2014 Undertake aircraft underwater escape and survival

Release: 1

AVIF2014 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 evacuation from an aircraft, conducting rescue recovery process, and controlling survival hazards.

This unit addresses aviation non-technical skill requirements (mental, social and personal-management abilities) for flight crews and passengers, 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 and Instructions.

Pre-requisite Unit

Not applicable.

Competency Field

F – Safety 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 for aircraft ditching	1.1 Nature and extent of aircraft situation is communicated and acknowledgment is confirmed 1.2 Personal items within the cabin are secured prior to ditching 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
2 Undertake evacuation from an aircraft	2.1 Spatial orientation is conducted 2.2 Egress points are located 2.3 Exits are jettisoned and cleared 2.4 Restraint devices are released 2.5 Aircraft is egressed 2.6 Surface is cleared
3 Conduct rescue recovery process	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
4 Control survival hazards	4.1 Potential hazards are identified and controlled 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.

- | | |
|---|---|
| Restraint devices must include one or more of the following: | <ul style="list-style-type: none">• flight crew harnesses and restraint devices• operational contingency loading equipment• passenger seatbelts |
| Survival equipment must include one or more of the following: | <ul style="list-style-type: none">• emergency breathing system• life jackets |
| Surface clearing must include: | <ul style="list-style-type: none">• splashing the surface to clear oil/fuel |
| Safety equipment must include: | <ul style="list-style-type: none">• flares• life jackets• life rafts• position locating beacons• strobe lights |
| Position indicating and signalling devices must include: | <ul style="list-style-type: none">• flares• position locating beacons• strobe lights |
| Rescue recovery techniques must include one or more of the following: | <ul style="list-style-type: none">• hoisting• rescue vessel |
| Potential hazards must include one or more of the following: | <ul style="list-style-type: none">• cold shock• environment• sea state• weather |
| Swimming techniques with a life jacket must include: | <ul style="list-style-type: none">• group• single |
| Hypothermia management techniques must include: | <ul style="list-style-type: none">• group help• help position for single person heat retention |
| Emergency supplies and | <ul style="list-style-type: none">• positioning equipment• survival equipment |

equipment must include:

Unit Mapping Information

This unit replaces and is equivalent to AVIF2014A 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 AVIF2014 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.

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 equipment and operating environment in accordance with standard operating procedures
- applying hypothermia prevention, reduction and management techniques
- applying knowledge of aircraft escape hazards:
 - cold shock
 - environment
 - sea state
 - weather
- applying precautions and required action to minimise, control or eliminate identified hazards
- applying rescue recovery techniques
- communicating effectively with others
- completing relevant documentation
- employing life jacket swimming, raft boarding and raft righting techniques
- employing position indicating and signalling devices:
 - flares
 - position locating beacons
 - strobe lights
- identifying and correctly using relevant equipment:
 - emergency breathing systems
 - flares
 - life jackets
 - life rafts
 - position locating beacons
 - restraint devices and harnesses
 - strobe lights
- implementing operational contingency loading emergency procedures as required in a Defence context
- implementing contingency plans

- implementing work health and safety (WHS)/occupational health and safety (OHS) procedures and relevant regulations
- modifying activities depending on workplace contingencies, situations and environments
- monitoring and anticipating operational problems and hazards and take appropriate action
- monitoring work activities in terms of planned schedule
- operating emergency equipment
- operating safety equipment
- performing aircraft egress and exit operation
- performing inverted and submerged aircraft escape techniques
- performing life jacket swimming techniques
- performing safe swimming techniques:
 - surface clearing techniques
 - individual safety
 - group safety
- reading, interpreting and following relevant instructions, regulations, procedures, information and signs
- 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
- selecting and using required personal protective clothing and equipment conforming to industry and WHS/OHS standards
- working collaboratively with others
- working systematically with required attention to detail without injury to self, others or damage to goods or equipment.

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 egress and exit systems
- aircraft escape techniques:
 - primary exit
 - secondary exit
 - blocked 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:

- emergency breathing systems
- flares
- life jackets
- life rafts
- position locating beacons
- restraint devices and harnesses
- strobe lights
- inverted and submerged aircraft escape techniques
- manufacturer instructions for equipment used for aircraft underwater escape and survival
- operational contingency loading emergency procedures as required in a Defence context
- regulations, legislation, organisational policy and procedures in relation to aircraft underwater escape and survival
- relevant WHS/OHS and environmental procedures and regulations
- rescue and recovery techniques
- risks that exist when undertaking aircraft underwater escape and survival, and related risk control procedures and precautions
- safe swimming techniques:
 - surface clearing techniques
 - individual safety
 - group safety
- workplace procedures for undertaking aircraft underwater escape and survival.

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the *Standards for Registered Training Organisations* current at the time of assessment.

As a minimum, assessment must satisfy applicable regulatory requirements, which include requirements in the *Standards for Registered Training Organisations* current at the time of assessment.

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.

Assessment must occur in workplace operational situations. Where this is not appropriate, assessment must occur in simulated workplace operational situations that reflect workplace conditions.

Resources for assessment must include access to:

- a range of relevant exercises, case studies and/or simulations
- acceptable means of simulation assessment
- applicable documentation including workplace procedures, regulations, codes of practice and operation manuals

- relevant materials, tools, equipment and personal protective equipment currently used in industry.

Links

Companion Volume implementation guides are found in VETNet -

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