AVIY4054 Conduct hoisting operations
AVIY4054 Conduct hoisting 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 conduct hoisting operations, in compliance with relevant regulatory requirements of the Civil Aviation Safety Authority and national operating standards.

It includes preparing for hoisting operations, performing hoisting operations, responding to hoisting emergencies and abnormal situations, and concluding hoisting operations.

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

<table>
<thead>
<tr>
<th>ELEMENTS</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
</table>

© Commonwealth of Australia, 2019
Australian Industry Standards
Elements describe the essential outcomes. Performance criteria describe the performance needed to demonstrate achievement of the element.

1 Prepare for hoisting operations

1.1 Hoisting equipment is prepared and checked

1.2 Helicopter safety hazards are identified using established procedures

1.3 Aircraft power availability is calculated

1.4 Wind speed and direction are determined

1.5 Approach and overshoot paths are determined

1.6 Hoisting location and surrounds are checked for suitability

1.7 Hoist is prepared and checked for correct operation

1.8 Hoisting operation plan is developed and communicated to flight crew

2 Perform hoisting operations

2.1 Helicopter is manoeuvred to the most appropriate hover position to perform safe hoisting operations

2.2 Hoisting accessories/equipment items are checked and attached to hoist hook

2.3 Aircraft operational/control checks are conducted as required

2.4 Flight crew situational awareness of hoisting operation and aircraft flight performance is maintained using appropriate voice and/or non-verbal communication procedures

2.5 Passengers are deployed/dispatched, monitored, retrieved and secured to achieve operational requirements

2.6 Stores are deployed/dispatched, monitored, retrieved and secured to achieve operational requirements

2.7 Aircraft hoist system is operated in accordance with equipment operating procedures

3 Respond to hoisting emergencies and abnormal situations

3.1 Hoisting emergencies and abnormal situations are identified, diagnosed and communicated to other flight crew

3.2 Hoist emergency or remedial actions are undertaken to maintain safety of flight and/or to complete hoist operations

4 Conclude hoisting operations

4.1 Hoisting accessories/equipment items are removed from hoist hook and stowed
4.2 Hoist is secured and checked for serviceability

4.3 Aircraft maintenance documentation is completed

**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.

Hoisting operations must include one or more of the following:

- hi-line transfer
- litter kit/equipment deployment/redeployment
- personnel deployment/redeployment
- rescue equipment deployment/redeployment
- stores deployment/redeployment
- double lift harness
- emergency slings
- extension strop
- hi-line transfer equipment
- rescue litter
- rescue net
- rescue sling/strop
- rope harness sling
- single rescue sling
- stretchers
- transfer equipment and message bag
- aircraft electrical/mechanical failure
- aircraft malfunction
- aircraft system failure
- communications equipment failure
- fouled cable
- fouled hoist
- hoist equipment malfunction
- hoistee incapacitation
- intercom system failure during hoisting operations
- operator incapacitation
• runaway hoist

Unit Mapping Information
This unit replaces and is equivalent to AVIY4054A Conduct hoisting operations.

Links
Companion Volume implementation guides are found in VETNet -
https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=4725260a-0af3-4daf-912b-ef1c2f3e5816