



Australian Government

AVIW0019 Operate aircraft push-out tug

Release: 1

AVIW0019 Operate aircraft push-out tug

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 operate an aircraft push-out tug in compliance with relevant regulatory requirements of the Civil Aviation Safety Authority (CASA) and national operating standards.

It includes conducting pre-operational checks on a tug, operating tug and conducting post-operational checks of tug.

This unit addresses aviation technical skill requirements (physical, mental and task-management abilities) related to equipment and system operations of ground operations personnel 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 as a single operator or within a team environment.

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

Pre-requisite Unit

Not applicable.

Competency Field

W – Equipment and Systems Operations

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 Conduct pre-operational checks on a tug

- 1.1** Personal protective equipment (PPE) is selected and used in accordance with workplace procedures
- 1.2** Pre-operational checks of tug are conducted in accordance with workplace procedures and manufacturer instructions
- 1.3** Fluid levels are topped up as required
- 1.4** Equipment faults and malfunctions identified during pre-operational checks are rectified or reported in accordance with workplace procedures and regulatory requirements

2 Operate tug

- 2.1** Tug is manoeuvred to aircraft and positioned in preparation for aircraft ground manoeuvres or push-out operations in accordance with workplace procedures
- 2.2** Tug is coupled to aircraft in accordance with workplace procedures
- 2.3** Tug is operated in accordance with workplace procedures and manufacturer instructions
- 2.4** Hazards associated with operating tug are identified and appropriate precautions are taken in accordance with work health and safety (WHS)/occupational health and safety (OHS) regulations and workplace hazard management strategies
- 2.5** Aircraft ground manoeuvres and/or push-out of aircraft are conducted in accordance with directions of ground maintenance personnel and aircrew
- 2.6** Tug is uncoupled from aircraft at completion of required operations
- 2.7** Tug is manoeuvred to allocated parking or storage area at completion of scheduled haulage activities and is shut down

3 Conduct post-operational checks of tug

- 3.1** Post-operational checks of tug are conducted in accordance with workplace procedures and manufacturer instructions
- 3.2** Equipment faults and malfunctions identified during

post-operational checks are rectified or reported in accordance with workplace procedures and regulatory requirements

- 3.3** Tug is refuelled and fluid levels are topped up in accordance with workplace procedures and manufacturer instructions
- 3.4** Equipment log or operational documentation is completed in accordance with workplace procedures, local instructions and regulatory requirements

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 equivalent to AVIW3005 Operate aircraft push-out tug.

Links

AVI Training Package Companion Volume Implementation Guide available on VET Net: - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=4725260a-0af3-4daf-912b-ef1c2f3e5816>

Assessment Requirements for AVIW0019 Operate aircraft push-out tug

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 equipment and operating environment in accordance with standard operating procedures (SOPs)
- applying precautions and required action to minimise, control or eliminate identified hazards, including:
 - dust
 - jet blast
 - noise
 - other vehicles in the vicinity of aircraft
 - personnel in the vicinity of aircraft
- applying relevant legislation and workplace procedures
- communicating effectively with others
- completing relevant documentation
- conducting pre-operational checks, including:
 - battery charge
 - fluid levels
 - fuel level
 - visual inspection for faults or defects
- conducting aircraft ground manoeuvres, including one or more of the following:
 - movement of a defective aircraft
 - movement of an aircraft around an airport
 - push-out of an aircraft from a gate
 - transport of an aircraft to/from a hanger
- identifying and correctly using relevant equipment
- implementing contingency plans
- implementing work health and safety (WHS) procedures and relevant regulations
- interpreting and following operational instructions and prioritise work
- modifying activities depending on workplace contingencies, situations and environments
- monitoring and anticipating operational problems and hazards and taking appropriate action

- monitoring work activities in terms of planned schedule
- operating electronic and radio communications equipment to required protocol
- reading, interpreting and following relevant regulations, instructions, procedures, information and signs
- reporting and/or rectifying identified problems promptly in accordance with regulatory requirements and workplace procedures
- selecting and using required personal protective equipment (PPE) conforming to industry and WHS standards, including:
 - hearing protection
 - protective clothing
 - safety gloves
 - safety footwear
- working collaboratively with others
- working systematically with required attention to detail without injury to self or 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:

- emergency procedures
- features and differences in operating characteristics for various types of aircraft push-out tugs in operation at Australian airports
- layout of airport and location of aircraft gates and equipment storage areas
- manufacturer instructions for checking and operating tug concerned
- people to consult about tug operations, including:
 - aircrew
 - aircraft schedulers
 - ground support staff
 - other members of baggage handling and ramp teams
 - supervisors, team leaders and managers
 - technical staff
- principles of tug operation as required by relevant licensing authority
- problems that may occur when operating a tug and appropriate action that should be taken in each case
- relevant Australian Standards
- relevant information/documents, including:
 - conditions of service, legislation and industrial agreements, including workplace agreements and awards
 - flight schedules and gate allocations
 - induction and training materials

- licence requirements of relevant authorities
- local instructions relevant to aircraft tug operations
- manufacturer specifications and instructions for tug being operated
- pre- and post-operation checklists
- tug logs/records
- tug operational checklists
- workplace instructions and job specification
- relevant local instructions for tug operation
- aircraft push-out tugs, including one or more of the following:
 - aircraft push-back tug
 - aircraft tow motor
 - aircraft tow tractor
 - push back power unit (PPU)
 - tow tug (aircraft)
- aircraft push-out tug, including:
 - diesel engine tugs
 - electric battery-operated tugs.
- relevant sections of Civil Aviation Safety Regulations (CASRs) and Civil Aviation Orders related to ground operations
- relevant WHS and environmental procedures and regulations
- risks that exist when operating a tug and related risk control procedures and precautions
- selection and correct fitment of PPE
- workplace procedures for operating an aircraft push-out tug.

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 this is not appropriate, assessment must occur in simulated workplace operational situations that reflect 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
- acceptable means of simulation assessment
- 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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