



Australian Government

Department of Education, Employment and Workplace Relations

A VIW3005B Operate aircraft push-out tug

Revision Number: 1

AVIW3005B Operate aircraft push-out tug

Modification History

Not applicable.

Unit Descriptor

Unit Descriptor

This unit involves the skills and knowledge required to operate an aircraft push-out tug at a commercial airport. This includes conducting pre- and post-operational checks, positioning the tug and coupling it to the aircraft, and safely operating the tug to assist the manoeuvring of the aircraft. Types of aircraft push-out tug and related terminology may vary from airport to airport. Generic performance criteria provided in this unit may therefore need to be adapted, as required, to accommodate the operating procedures recommended by the manufacturers of the aircraft push-out tug concerned. Licensing, legislative, regulatory or certification requirements are applicable to this unit.

Application of the Unit

Application of the Unit

Work must be carried out in accordance with workplace procedures and the relevant regulatory requirements of the Civil Aviation Authority and other relevant regulatory authorities.

Use for ADF Aviation is to be in accordance with relevant Defence Orders and Instructions and applicable CASA compliance.

Work is performed under some supervision usually within a team environment.

Work involves the application of operational procedures and safety regulations to the operation of aircraft push-out tugs at relevant commercial airports across a variety of operational contexts within the Australian aviation industry.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

Employability Skills This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1 Conduct pre-operational checks on the tug	<p>1.1 Pre-operational checks of the tug are conducted in accordance with workplace procedures and manufacturers instructions</p> <p>1.2 Fluid levels are topped up where required in accordance with workplace procedures and manufacturers specifications</p> <p>1.3 Faults and malfunctions are identified and appropriate action is taken to rectify and/or report the fault/malfunction in accordance with workplace procedures and regulatory requirements</p>
2 Operate tug	<p>2.1 Tug is manoeuvred to aircraft and positioned in preparation for aircraft ground manoeuvres and/or push-out operations in accordance with workplace procedures, local instructions and relevant regulatory requirements</p> <p>2.2 Tug is coupled to the aircraft in accordance with workplace procedures and regulatory requirements</p> <p>2.3 Tug is operated in accordance with workplace procedures, OH&S regulations and manufacturers instructions</p> <p>2.4 Aircraft ground manoeuvres and/or push-out of aircraft are conducted in accordance with directions of the ground engineer and aircrew in accordance with workplace procedures, local instructions and regulatory requirements</p> <p>2.5 At completion of required operations, tug is uncoupled from aircraft in accordance workplace procedures and regulatory requirements</p> <p>2.6 At the completion of all scheduled activities, tug is manoeuvred to and parked in storage bay/area in accordance with workplace procedures</p> <p>2.7 Tug is shut down and stored</p>
3 Conduct post-operational checks of tug in accordance with workplace procedures and manufacturers instructions	<p>3.1 Any faults and malfunctions are identified and appropriate action is taken to rectify and/or report the fault/malfunction in accordance with workplace procedures and regulatory requirements</p> <p>3.2 Where applicable, tug is refuelled and fluid levels topped up in accordance with workplace procedures, relevant regulatory requirements and manufacturers instructions</p> <p>3.3 Hazards associated with the operation of the tug are recognised and appropriate precautions are taken in accordance with OH&S regulations and workplace hazard management strategies</p> <p>3.4 Equipment log or other required documentation is completed in accordance with workplace procedures, local instructions and regulatory requirements</p> <p>3.5 Instructions for the next operation are obtained and the tug is</p>

ELEMENT

PERFORMANCE CRITERIA

driven to the next scheduled location in accordance with workplace procedures, local instructions and regulatory requirements

Required Skills and Knowledge

REQUIRED KNOWLEDGE AND SKILLS

This describes the essential knowledge and skills and their level required for this unit.

Required knowledge:

- Relevant sections of Civil Aviation Safety Regulations and Civil Aviation Orders
- Relevant OH&S and environmental procedures and regulations
- Principles of tug operation as required by the relevant licensing authority
- Features and differences in operating characteristics for various types of aircraft push-out tugs in operation at Australian airports
- Workplace procedures for operating an aircraft push-out tug
- Layout of airport and location of aircraft gates and equipment storage areas
- Relevant local instructions pertaining to tug operation
- Manufacturers instructions for checking and operating the tug concerned
- Risks that exist when operating a tug and related risk control procedures and precautions
- Problems that may occur when operating a tug and appropriate action that should be taken in each case

Required skills:

- Communicate effectively with others when operating aircraft push-out tug
- Read and interpret instructions, regulations, procedures and other information relevant to aircraft push-out tug
- Interpret and follow operational instructions and prioritise work
- Complete documentation related to aircraft push-out tug
- Operate electronic and radio communication equipment to required protocol
- Work collaboratively with others when operating aircraft push-out tug
- Adapt appropriately to cultural differences in the workplace, including modes of behaviour, communications and interactions with others
- Promptly report and/or rectify any identified problems that may occur when operating aircraft push-out tug in accordance with regulatory requirements and workplace procedures
- Implement contingency plans for unexpected events that may arise when operating aircraft push-out tug
- Monitor work activities in terms of planned schedule
- Monitor and anticipate operational problems and hazards and take appropriate action
- Apply precautions and required action to minimise, control or eliminate hazards that may exist when operating aircraft push-out tug
- Adapt to differences in equipment and operating environment in accordance with standard operating procedures

REQUIRED KNOWLEDGE AND SKILLS

- Select and use required personal protective equipment conforming to industry and OH&S standards
- Work systematically with required attention to detail without injury to self or others, or damage to goods or equipment
- Implement OH&S procedures and relevant regulations
- Modify activities dependent on differing workplace contingencies, situations and environments
- Identify and correctly use equipment required when operating aircraft push-out tag

Evidence Guide

EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required knowledge and skills, the range statement and the assessment guidelines for this Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

- The evidence required to demonstrate competency in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria of this unit and include demonstration of applying:
 - the underpinning knowledge and skills
 - relevant legislation and workplace procedures
 - other relevant aspects of the range statement

Context of and specific resources for assessment

- Performance is demonstrated consistently over a period of time and in a suitable range of contexts
- Resources for assessment include:
 - a range of relevant exercises, case studies and/or other simulated practical and knowledge assessment, and/or
 - access to an appropriate range of relevant operational situations in the workplace
 - In both real and simulated environments, access is required to:
 - relevant and appropriate materials and equipment, and
 - applicable documentation including workplace procedures, regulations, codes of practice and operation manuals

Method of assessment

- Assessment of this unit must be undertaken by a registered training organisation
- As a minimum, assessment of knowledge must be conducted through appropriate written/oral tests
- Practical assessment must occur:
 - through activities in an appropriately simulated environment at the registered training organisation, and/or
 - in an appropriate range of situations in the workplace

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance.

Aircraft push-out operations may be carried out:

- in any allowable operating and weather conditions
- in accordance with regulatory and operational requirements

Performance may be demonstrated in:

- actual push-out operations at an airport
- appropriately simulated push-out operations

Type of aircraft push-out tug may include:

- electric battery-operated tugs
- diesel engine tugs

Dependent on the type of organisation concerned and the local terminology used, aircraft push-out tugs may be referred to by a variety of terms, including but not restricted to:

- aircraft push-back tug
- tow tug (aircraft)
- aircraft tow motor
- aircraft tow tractor
- push back power unit (PPU)

Aircraft towing manoeuvres may include but are not restricted to:

- the push-out of an aircraft from a gate
- transport of an aircraft to/from a hanger
- movement of an aircraft around an airport
- movement of a defective aircraft

Hazards that may exist when operating an aircraft push-out tug may include but are not restricted to:

- other vehicles in the vicinity of the aircraft
- personnel in the vicinity of the aircraft
- jet blast
- noise
- dust

Personal protective equipment may include but is not restricted to:

- hearing protection
- safety gloves
- safety footwear
- protective clothing

Pre-operational checks may include:

- fluid levels (where applicable)
- battery charge (where applicable)
- fuel level where applicable
- visual inspection for faults or defects

Persons consulted during tug operations may include:

- other members of the baggage handling and ramp teams
- aircrew
- aircraft schedulers
- supervisors, team leaders and managers
- ground support staff

RANGE STATEMENT

Dependent on the type of organisation concerned and the local terminology used, workplace procedures may be referred to as:

Information/documents may include:

Applicable regulations and legislation may include:

- technical staff
- company procedures
- enterprise procedures
- organisational procedures
- established procedures
- standard operating procedures
- licence requirements of relevant regulatory authorities
- local instructions relevant to aircraft tug operations
- workplace procedures and instructions and job specification
- OH&S and environmental protection regulations
- tug operational checklists
- pre- and post-operation checklists
- tug logs/records
- emergency procedures
- flight schedules and gate allocations
- relevant Civil Aviation Safety Regulations and Civil Aviation Orders
- manufacturers specifications and instructions for the tug being operated
- induction and training materials
- conditions of service, legislation and industrial agreements including workplace agreements and awards
- relevant licence requirements of the pertinent licensing authority
- local instructions
- relevant OH&S legislation
- relevant environmental protection legislation
- relevant Australian Standards
- industrial relations and workplace compensation legislation

Unit Sector(s)

Not applicable.

Competency field

Competency Field

W - Equipment and Systems Operations