



Australian Government

Department of Education, Employment and Workplace Relations

AVIM5003A Conduct flight training

Revision Number: 1

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Modification History

Not applicable.

Unit Descriptor

Unit Descriptor

This unit involves the skills and knowledge required to plan, conduct and review flight training in an aircraft or approved flight simulator. 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 compliance with the relevant licence and aircraft rating requirements of the Civil Aviation Safety Authority (CASA); relevant airspace control requirements; and aircraft control principles and regulations.

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

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

Work is performed under limited supervision.

This unit of competency is nominally packaged at Diploma.

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 Plan flight training	1.1 Trainee's records are reviewed, including confirmation of appropriate pre-requisite training and performance 1.2 Training objectives based on performance/assessment are identified in accordance with workplace procedures 1.3 An appropriate lesson plan is developed and/or reviewed, including remedial training if required 1.4 Potential threats and errors are identified, including those associated with simulation of abnormal or emergency procedures or aircraft mishandling by trainee, and suitable countermeasures are planned 1.5 Availability of suitable flight training resources is confirmed 1.6 Suitability of environmental conditions is determined
2 Conduct pre-flight briefing	2.1 Trainee's mental and physical preparation for flight training is confirmed 2.2 Trainee's underpinning knowledge required for the flight exercise is checked 2.3 Trainee is briefed on the training objectives, performance/assessment criteria and the actions required during the flight 2.4 Trainee is briefed on how the flight will be conducted to meet the training objectives 2.5 Threat and Error Management issues applicable to the proposed flight are discussed and trainee's responsibility for managing relevant Threat and Error Management issues (airmanship) is confirmed 2.6 Trainee's understanding of the training objectives, underpinning knowledge, handling techniques and planned flight scenario is confirmed
3 Conduct airborne training	3.1 Hand-over/take-over procedures for control of aircraft are implemented 3.2 Complex tasks are introduced in manageable segments 3.3 Segmented tasks are integrated progressively in accordance with established workplace procedures 3.4 Instructions are provided in a clear, concise and timely manner 3.5 Coordinated control inputs are made using accepted techniques 3.6 Manoeuvres are performed to specified standards utilising appropriate instructional techniques 3.7 Trainee is provided with sufficient practice 3.8 Interventions are made where appropriate to assist trainee's progress or to maintain flight safety

ELEMENT	PERFORMANCE CRITERIA
4 Manage trainee performance	3.9 Trainee's cognitive load is assessed, monitored and managed 4.1 Trainee's strengths and development needs are identified 4.2 Feedback is provided to assist trainee in achieving the required standard 4.3 Additional instruction and demonstration as necessary to assist trainee is provided and is varied accordingly 4.4 Trainee is encouraged to develop self-assessment skills 4.5 Trainee's aviation skills are developed 4.6 Training events are recorded for debriefing and assessment where required
5 Manage the flight	5.1 Responsibilities as Pilot-in-command (PIC) are managed for the safe operation of the aircraft 5.2 Situational awareness is maintained while providing instruction 5.3 Threats and errors are identified and managed 5.4 Intervention to recover the aircraft is applied if an undesired aircraft state is not managed by trainee 5.5 Crew Resource Management (CRM) principles are applied
6 Conduct post-flight actions	6.1 Trainee's achievement against the training objectives for the lesson and associated performance criteria is assessed 6.2 Significant details of trainee's performance are clearly and accurately debriefed 6.3 Threat and Error Management issues encountered during the flight are discussed 6.4 Trainee is briefed on the details of the next training event 6.5 Results for the flight are recorded and post-flight administration is completed in accordance with workplace procedures 6.6 Relevant staff are kept informed about trainee's progress
7 Review training	7.1 Training effectiveness is evaluated with relevant stakeholders 7.2 Final session outcomes are evaluated against desired session outcomes 7.3 Review and reflection on instructional performance is conducted 7.4 Adjustments to delivery, presentation and content of training are identified and incorporated where appropriate

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 sections of national and state or territory regulatory requirements and codes of practice
- Relevant OH&S and environmental procedures and regulations
- Instruction, questioning, engaging and motivating learners
- Performing and learning complex skills including cognitive and developmental issues and observational learning
- Cognitive basis of airmanship, situational awareness, captaincy, prioritisation, load shedding and decision making
- Rate of learning, enforced automaticity and the foundations of expertise
- Instructor professionalism including interpersonal skills, implications of being a role-model, self-reflection and self-managed professional development
- Effective use of a course of training, curricula/syllabus and lesson plans
- Training and assessment standards
- Debriefing and feedback techniques
- Transfer of control (hand-over/take-over or follow-through) drills and procedures
- Principles of flight
- Crew Resource Management (CRM) principles
- Techniques for introducing tasks in manageable segments to avoid overloading a trainee and principles for integrating task segments
- Appropriate use of scenario-based training in flight instruction
- Application of risk management principles to emergency procedure simulations in flight
- Checklists for single pilot or multi-crew operations as applicable
- Common student errors and suggested suitable remedial instruction
- Operational concept of Threat and Error Management in relation to flight training in terms of:
 - managing threats
 - managing errors
 - managing undesired aircraft state
- Procedures and strategies for developing trainee Threat and Error Management skills
- Task prioritisation system to assist the development of trainee task management skills in terms of:
 - aircraft control
 - navigation

REQUIRED KNOWLEDGE AND SKILLS

- communication
- Suitable procedures for making decisions in-flight and for developing trainee decision making skills
- Goal fixation effects on good decision making
- Three types of stress likely to affect trainee performance and methods of assisting trainees to cope with stress:
- physical
- physiological
- psychological
- Requirements for completing relevant documentation
- Principles, purpose and location of controls, monitoring devices, and systems
- Procedures to be followed in the event of an emergency

Required skills:

- Demonstrate procedures and manoeuvres to the required skill level while giving effective flight instruction
- Demonstrate effective briefing and de-briefing skills to a representative range of trainees
- Demonstrate appropriate level of responsibility for student progress and welfare
- Communicate effectively with others when conducting flight training
- Conduct timely assessment of learning and performance
- Evaluate instructional effectiveness and develop strategies for continuous improvement
- Readily identify errors in the performance of flight manoeuvres and suggest a variety of effective strategies for improvement
- Manage an environment that fosters learning
- Demonstrate flight instructor role modelling
- Apply Crew Resource Management (CRM) skills applicable to flight training and the role of the instructor in assisting the trainee to develop these skills
- Maintain levels of situational awareness and methods of developing and monitoring trainee situational awareness skills in terms of:
- monitoring current environmental factors
- evaluating their possible effects on the flight
- anticipating the need for alternative actions
- Read and interpret instructions, regulations, procedures and other information relevant to flight training
- Interpret and follow operational instructions and prioritise work
- Complete documentation related to flight training
- Adapt appropriately to cultural differences in the workplace, including modes of behaviour and

REQUIRED KNOWLEDGE AND SKILLS

interactions with others

- Promptly identify, report and/or rectify any problems that may occur when conducting flight training in accordance with regulatory requirements and workplace procedures
- Apply precautions and required action to minimise, control or eliminate hazards that may exist during flight training
- Monitor work activities in terms of planned schedule
- Modify activities dependent on differing workplace contingencies, situations and environments
- Work systematically with required attention to detail without injury to self others, or damage to goods or equipment
- Adapt to differences in equipment and operating environment in accordance with standard operating procedures
- Select and use required personal protective clothing and equipment conforming to industry and OH&S standards
- Implement OH&S procedures and relevant regulations
- Identify and correctly use equipment required to conduct flight training

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:
- developing an appropriate lesson plan based on performance/assessment of training objectives
- identifying potential threats and errors, including those associated with simulation of abnormal or emergency procedures or aircraft mishandling by trainee, and planning suitable countermeasures
- pre-flight briefing covering all aspects of the training event being undertaken including Threat and Error Management issues
- implementing hand-over/take-over procedures for control of aircraft
- intervening where appropriate to assist trainee's progress or to maintain flight safety
- recording and debriefing of training events
- managing Pilot-in-command (PIC) responsibilities
- maintaining situational awareness whilst providing instruction
- applying Crew Resource Management (CRM) principles
- debriefing significant details of trainee's performance including any Threat and Error Management issues encountered
- recording results for the flight and post-flight administration in accordance with workplace procedures
- reviewing and reflecting on instructional performance

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

EVIDENCE GUIDE**Method of assessment**

- applicable documentation including workplace procedures, regulations, codes of practice and operation manuals
- 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.

Flight training, using a suitable training aircraft or approved synthetic flight trainer, leads to the issue of a:	• flight crew licence • rating or endorsement
Flight training and aircraft operation are conducted in accordance with:	• regulatory requirements • safe operational practices • administrative procedures associated with authorising and recording flight training and maintaining training records
Approved flight simulator includes:	• full motion simulator • flight training device • synthetic training device • virtual reality training system • single, multiple or team operator simulator • simulator • part-task simulator • desktop simulator • operating system • associated simulator computer hardware and software
Workplace procedures may include:	• company procedures • enterprise procedures • organisational procedures • standard operating procedures • manufacturers guidelines • established procedures • workplace instructions • in Defence context, relevant Defence Orders and Instructions
Suitable flight training resources may include:	• aircraft • approved flight simulator • debriefing rooms • classrooms
Environmental conditions may include:	• weather • hazards and threats such as power lines and masts • terrain • birds/wildlife • other airspace operations

RANGE STATEMENT

Instructional techniques may include:

- demonstrate, direct and monitor
- follow me through

Trainee's cognitive load may be affected by:

- lack of preparation
- physical discomfort
- anxiety
- fatigue
- unreasonable expectations
- apathy
- impatience
- inadequate demonstration
- task complexity
- inadequate opportunity to practice
- inadequate fault analysis
- information overload
- outside pressures

Training events may include:

- aircraft sorties
- simulator sessions

Significant details of trainee's performance may include:

- strengths
- deficiencies
- remedial actions
- self-awareness and insight
- self-management

Relevant stakeholders may include:

- management staff
- instructional staff
- maintenance staff
- logistics staff
- administrative staff
- trainee

Unit Sector(s)

Not applicable.

Competency field

Competency Field

M - Training and Assessment