Australian Government

Assessment Requirements for AVIY0046 Execute advanced aeroplane manoeuvres and procedures

Release: 1

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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 and performance criteria 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
- applying relevant aeroplane aeronautical knowledge
- applying relevant legislation and workplace procedures
- communicating effectively with others when executing advanced aeroplane manoeuvres and procedures
- compensating for the secondary effects of controls
- completing relevant documentation
- conducting short take-offs and landings
- conducting steep turns, including:
  - straight and level
  - descending
- entering and recovering from stall conditions, including:
  - incipient stall
  - stall with full power
  - stall without power applied
- conducting stall during:
  - straight and level flight
  - climbing
  - descending
  - approach to land configuration
  - turning
- 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 prioritising workload
- maintaining compliance with regulatory requirements

- modifying activities depending on workplace contingencies, situations and environments
- monitoring and anticipating operational problems and hazards and taking appropriate action
- monitoring functions of fuel systems
- monitoring work activities in terms of planned schedule
- operating electronic communications equipment to required protocol
- performing pre-manoeuvre checks in accordance with regulatory requirements and manufacturer procedures
- reading, interpreting and following relevant regulations, instructions, procedures, information and signs
- recognising flight situations that may require advanced manoeuvres and procedures, and applying the necessary techniques
- recognising single-engine incipient spin conditions
- recovering from single-engine incipient spins, including:
  - straight and level
  - climbing turning
- reporting and/or rectifying identified problems promptly in accordance with regulatory requirements and workplace procedures
- selecting and using relevant equipment
- selecting and using required personal protective equipment (PPE) conforming to industry and WHS standards
- sideslipping an aeroplane including:
  - straight sideslip
  - sideslipping turn
  - recovery actions
- using instruments to monitor aeroplane performance
- 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 and performance criteria and include knowledge of:

- aerodynamic and aeroplane operational considerations related to slow flight, sideslipping, stalling, spinning, steep turns, upset aeroplane states, including:
  - symptoms of approach to stall and throughout the stall, manoeuvre until recovery
  - relationship between angle of attack and stall
  - effects of weight, ‘g’ force and angle of attack
- dangers of unbalanced flight
- principle of stick and control and the point of stall
- priority given to reduce angle of attack during stall manoeuvres
- loss of height in relation to available height and energy state

- technique of converting excess speed to height
- technique of converting excess height to speed
- symmetrical and rolling 'g' force limitations
- higher stall speeds when aeroplane is turning
- effects on fuel, pitot and flap systems
- application of pre-manoeuvre checks in accordance with regulatory requirements and manufacturers procedures
- Cival Aviation Safety Regulation (CASR) Part 61 Manual of Standards (MOS) Schedule 3 Aeronautical Knowledge relevant to aeroplane operations
- contents of the aircraft flight manual (AFM)/pilot's operating handbook (POH)
- day visual flight rules (VFR) criteria
- effects of 'g' forces
- effects of a sideslip on aeroplane performance
- effects of maximum rate and minimum radius turns
- effects of sideslipping on aeroplane on fuel, pitot and flap systems
- environmental conditions that represent visual meteorological conditions (VMC)
- functions and effects of all aeroplane controls
- ground hazards associated with minimum ground roll operations
- hazards of unbalanced flight
- in a Defence context, relevant Defence Orders and Instructions
- increased induced drag during a steep turn
- increased stalling speed in a steep turn
- local and published noise abatement requirements and curfews
- operational circumstances where steep turns are required
- principles of aerodynamics
- procedures and techniques for short take-offs and landings
- procedures and techniques for sideslipping an aeroplane
- procedures and techniques for turning an aeroplane steeply
- procedures for recovering from stalls and spins
- procedures for short take-offs and landings
- recognising stall and incipient spin conditions
- relevant sections of aeronautical information package (AIP)
- relevant sections of CASRs and Civil Aviation Orders
- relevant WHS and environmental procedures and regulations
- take-off and landing performance chart calculations
- windsock and other indicators used to determine wind velocity.

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.

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