



Australian Government

**Assessment Requirements for AVIY5037
Conduct a 2D distance measuring
equipment global navigation satellite system
instrument approach**

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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
- applying precautions and required action to minimise, control or eliminate identified hazards
- applying relevant aeronautical knowledge
- applying relevant legislation and workplace procedures
- communicating effectively with others
- completing relevant documentation
- determining conditions permitting descent below minima
- determining distance measuring equipment (DME) or global navigation satellite system (GNSS) arrival applicable minima for aircraft
- identifying and correctly using relevant equipment
- implementing contingency plans
- implementing work health and safety (WHS)/occupational health and safety (OHS) procedures and relevant regulations
- interpreting a DME or GNSS arrival chart
- 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 communications equipment to required protocol
- performing systematic scan techniques
- 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 clothing and equipment conforming to industry and WHS/OHS standards
- setting local or area barometric pressure adjusted for sea level (QNH) at appropriate stages of flight

- 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:

- abnormal operations and/or emergencies during a DME or GNSS arrival including:
 - navigation aid failure
 - loss of GNSS receiver autonomous integrity monitoring (RAIM)
 - GNSS RAIM warning
 - disparity between VOR/NDB track and GNSS track indication
- CASR Part 61 Manual of Standards Schedule 3 Aeronautical Knowledge relevant to instrument flight operations
- cause and magnitude of typical GNSS errors
- conditions and limitations for manoeuvring within a DME or GNSS arrival sector
- conditions required to transition to and operate in the mode of operation for a GNSS/non-precision approach (NPA), and associated course deviation indicator (CDI) sensitivity and RAIM protection provided
- DME or GNSS arrival missed approach
- DME or GNSS arrival procedures and limitations in all classes of airspace
- effect of each type of RAIM prediction on operational requirements
- effects of availability or otherwise of barometric altimeter-aiding on RAIM availability and prediction
- effects of satellite unserviceability on reliability of each type of prediction
- emergency procedures
- factors that adversely affect the conduct of a GNSS/NPA, and suitable pilot procedures to minimise such effects
- GNSS operating procedures for navigation tasks
- GNSS operational and serviceability checks
- GNSS system fundamentals and principles of operations
- GNSS warnings and messages
- human factors limitations associated with using GNSS equipment
- loss of radio communication during a DME or GNSS arrival procedure
- minimum obstacle clearance criteria during a DME or GNSS arrival missed approach procedure
- mode of operation required during each segment of a GNSS/NPA

- operating procedures for GNSS equipment that reduce or eliminate errors
- operating procedures that provide safeguards against GNSS navigational errors
- operation of electronic communications equipment
- operational requirements that apply to planning a flight on the basis of conducting a RNAV (GNSS) procedure at the destination
- parameters applicable to RAIM warnings in the en route, terminal and approach modes
- pilot responsibilities when DME or GNSS arrival is conducted outside controlled airspace
- prediction limitations that apply to availability of approach RAIM at the destination or alternate aerodrome
- procedure for joining the circuit from a DME or GNSS arrival
- procedures for adjusting controls to optimise equipment operation
- procedures for managing and controlling hazardous situations
- radio procedures for a DME or GNSS arrival
- relevant sections of national and state/territory regulatory requirements and codes of practice
- relevant WHS/OHS and environmental procedures and regulations
- requirements applicable to pilots and equipment for GNSS operations
- requirements for completing relevant documentation
- sources of information on differences in equipment and related standard operating and servicing procedures
- steps involved in planning work activities
- tracking tolerances, automatic way-point sequencing, CDI sensitivity and RAIM availability parameters for entry, RAIM availability and approach segments.

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the *Standards for Registered Training Organisations* current at the time of assessment.

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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.

Assessment must occur in workplace operational situations. Where this is not appropriate, assessment must occur in simulated workplace operational situations that reflect workplace conditions.

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 personal protective equipment currently used in industry.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=4725260a-0af3-4daf-912b-ef1c2f3e5816>