



Australian Government

AVIH0007 Operate remote pilot aircraft systems under night visual line of sight (NVLOS)

Release: 1

AVIH0007 Operate remote pilot aircraft systems under night visual line of sight (NVLOS)

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 remote pilot aircraft systems (RPAS) flight under night visual line of sight (NVLOS) in compliance with the relevant regulatory requirements of the Civil Aviation Safety Authority (CASA) and national operating standards.

It includes determining RPAS NVLOS flight requirements, obtaining and using operational documents, preparing NVFR flight plans, making flight notifications and programming navigation systems.

This unit addresses aviation technical skill requirements (physical, mental and task-management abilities) related to route planning and navigation duties of flight crew and contributes to safe and effective performance in complex aviation operational environments.

Operations are conducted as part of commercial and military aircraft activities across a variety of operational contexts within the Australian aviation industry.

Work is performed independently or under limited supervision within a single-pilot or multi-crew environment.

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

Pre-requisite Unit

Not applicable.

Competency Field

H – Route Planning and Navigation

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

- | | |
|---|--|
| 1 Determine aircraft meets requirements for NVLOS flight | 1.1 Aircraft requirements for NVLOS flight are determined |
| | 1.2 Flight and navigation instruments, minimum electrical lighting, navigation equipment and any other requirements fitted to aircraft are checked to ensure they are suitable and serviceable for NVLOS flight |
| 2 Obtain and use current operational documents | 2.1 Operational documents applicable to flight are obtained and checked for currency |
| | 2.2 Applicable information contained in documents for flight planning and management is interpreted and applied |
| | 2.3 Documents required for flight are stowed and their accessibility for pilot during flight is ensured |
| 3 Prepare flight plan for NVLOS flight | 3.1 Charts suitable for intended NVLOS flight are selected and prepared |
| | 3.2 Applicable information to prepare a flight plan that details tracks, distances, times, altitudes to be flown and fuel requirements to reach destination are obtained, analysed and applied |
| | 3.3 Hazards are identified, risks are assessed and hazard management is implemented |
| | 3.4 Meteorological, airways facilities, area of operation and Notice to Airmen (NOTAM) information applicable to planning and conducting a flight is obtained, interpreted and applied |
| | 3.5 Routes to optimise options in engine failure are planned |
| 4 Determine operational requirements | 4.1 Power requirements due to weather and navigation aid availability are determined in accordance with operational requirements |
| | 4.2 Total fuel requirements are calculated |

- | | |
|------------------------------------|---|
| 5 Make flight notification | 5.1 Flight notification is prepared for planned NVLOS flight |
| | 5.2 Completed flight notification is submitted |
| | 5.3 Flight notification acceptance is confirmed |
| 6 Program navigation system | 6.1 Data is prepared for transfer to approved airborne navigation system |
| | 6.2 Navigation data is loaded and checked |

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

No equivalent unit.

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 AVIH0007 Operate remote pilot aircraft systems under night visual line of sight (NVLOS)

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 aeronautical knowledge
- applying relevant legislation and workplace procedures
- calculating fuel requirements
- communicating effectively with others
- completing relevant documentation
- determining alternate landing area requirements and suitability for a night visual flight to a specified destination given relevant information, including Notice to Airmen (NOTAM)
- determining fuel quantity required for a night visual flight
- determining holding requirements due to weather, traffic or traffic advisory
- determining currency of operational documents
- determining meteorological forecasts required for a night visual flight
- determining whether a flight should proceed based on available meteorological forecasts
- extracting and applying relevant information from operational documents
- identifying and correctly using relevant equipment
- implementing contingency plans
- implementing work health and safety (WHS) and relevant regulations
- interpreting and following operational instructions and prioritising work
- interpreting meteorological forecasts
- interpreting navigation charts
- 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
- reading, interpreting and following relevant regulations, instructions, procedures, information and signs
- reporting and/or rectifying problems, faults and malfunctions promptly in accordance with workplace procedures

- selecting and using required personal protective equipment (PPE) conforming to industry and WHS standards
- selecting suitable navigation aids/systems
- 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:

- airspace requirements and procedures under night visual line of sight (NVLOS) conditions
- critical point (CTA) and point of no return (PNR)
- documents required to be carried on a night visual flight
- factors affecting en route performance, range and endurance
- icing conditions and hazards
- limit of NVLOS operations in a single-engine aircraft
- limitations and errors of navigations aids/systems
- meteorological considerations for a NVLOS flight
- NVLOS and procedures
- NVLOS cruising levels, selection and hazards
- NVLOS route planning requirements
- pilot medical fitness and qualifications necessary for night visual flight
- privileges of NVLOS rating
- procedures for flight plan amendments and revised estimates for a night visual flight
- relevant sections of Civil Aviation Safety Regulations (CASRs) and Civil Aviation Orders pertaining to NVLOS and flight planning requirements
- relevant WHS and environmental procedures and regulations
- requirements for an alternate landing area
- requirements for in-flight progress reports
- requirements for submission of flight notification and search and rescue watch (SARWATCH)
- specification of aircraft electrical lighting, radio communication and navigation equipment required for night visual flight
- specification of aircraft flight instruments required for night visual flight
- speed restrictions for night visual flight
- use of a navigational computer
- validity of a given meteorological forecast for a night visual flight.

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>