



Australian Government

AVIH4012 Plan a flight under night visual flight rules

Release: 1

AVIH4012 Plan a flight under night visual flight rules

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 plan a flight under night visual flight rules (NVFR), in compliance with the relevant regulatory requirements of the Civil Aviation Safety Authority (CASA) and national operating standards.

It includes determining aircraft NVFR 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 recreational, 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.

Use for Defence Aviation is to be in accordance with relevant Defence Orders, Instructions, Publications and Regulations.

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.

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| 1 Determine aircraft meets requirements for NVFR flight | 1.1 Aircraft requirements for NVFR 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 NVFR 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 NVFR flight | 3.1 Charts suitable for intended NVFR 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, aerodrome 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 Suitability of aerodrome lighting for night operations is determined |
| | 4.2 Curfew requirements are complied with |
| | 4.3 Duration of flight is determined |
| | 4.4 Holding, alternate and reserve fuel requirements due to weather, navigation aid availability and aerodrome lighting are determined in accordance with operational requirements |

	4.5	Total fuel requirements are calculated
5 Make flight notification	5.1	Flight notification is prepared for planned NVFR 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

This unit replaces and is equivalent to AVIH4012A Plan a flight under Night Visual Flight Rules (NVFR).

Links

Companion Volume implementation guides are found in VETNet -

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

Assessment Requirements for AVIH4012 Plan a flight under night visual flight rules

Modification History

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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
- calculating fuel requirements
- communicating effectively with others
- completing relevant documentation
- determining alternate aerodrome 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)/occupational health and safety (OHS) 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 clothing and equipment conforming to industry and WHS/OHS 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:

- aerodrome and en route holding procedures
- aerodrome lighting and curfew requirements for night operations
- aircraft fuel planning including holding, alternate, fixed reserve and usage rates
- airspace requirements and procedures under night visual flight rules (NVFR) conditions
- critical point and point of no return
- documents required to be carried on a night visual flight
- factors affecting en route performance, range and endurance
- icing conditions and hazards
- in an Australian Defence Force (ADF) aviation context, relevant Defence Orders and Instructions
- limit of NVFR operations in a single-engine aircraft
- limitations and errors of navigations aids/systems
- meteorological considerations for a NVFR flight
- NVFR and procedures
- NVFR cruising levels, selection and hazards
- NVFR route planning requirements
- pilot medical fitness and qualifications necessary for night visual flight
- privileges of NVFR 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 NVFR and flight planning requirements
- relevant WHS/OHS and environmental procedures and regulations
- requirements for an alternate aerodrome
- requirements for in-flight progress reports
- requirements for submission of flight notification and 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

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.

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