Australian Government

AVIH0004 Implement instrument flight rules planning 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.

Application

This unit involves the skills and knowledge required to implement instrument flight rules (IFR) planning procedures, in compliance with the relevant regulatory requirements of the Civil Aviation Safety Authority (CASA), national and international civil aviation operating standards

It includes assessing instrument flight planning needs, determining aircraft instrument flight requirements, identifying operational flight documentation, preparing charts and instrument flight plans. It also includes selecting instrument flight routes, determining operational requirements, releasing an instrument flight plan, and providing extended twin-engine operations (ETOPS) flight planning and flight support.

This unit addresses aviation technical skill requirements (physical, mental and task-management abilities) related to route planning and navigation duties of flight dispatch personnel, 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 as a single operator or within a team 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	PERFORMANCE CRITERIA
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1 Assess instrument flight planning needs	1.1 Operator flight planning objectives and factors contributing to and or influencing these objectives, are defined
	1.2 Conflicting flight planning objectives including commercial and safety imperatives are identified
	1.3 Direct operating costs of a flight plan including fuel, resourcing, engineering, navigational and ground handling factors are considered and assessed for applicability to flight plan
	1.4 Relationship between different flight planning objectives including minimum fuel, maximum speed and thrust, minimum cost and varying operational requirements is determined and applied
	1.5 Value of flight plan in establishing track, distance, heading, speed, times, optimum route, altitudes, contingency planning, fuel consumption and reserves, is assessed
	1.6 Value of flight plan to air traffic services in establishing reporting points, flight information region crossing and coordination, pre-departure clearances, and traffic flow coordination, is assessed
	1.7 Appropriate state and operator authorisations are obtained to plan and manage a range of instrument flight operation types including scheduled, non-scheduled, charter, ferry, training, test and publicity flights
	1.8 Instrument flight planning process is applied while assessing a wide range of planning factors including type of flight, weather, aircraft type, availability and performance, crew, payload, schedule, departure, enroute and destination requirements, state based air service requirements, briefing, flight plan delivery and filing
	1.9 International Civil Aviation Organization (ICAO) air traffic flight plan format, filing, and performance based navigation requirements are determined and applied to instrument flight planning processes

2	**Determine aircraft instrument flight requirements**	2.1	Aircraft requirements for instrument flight are determined
		2.2	Flight and navigation instruments, including minimum electrical lighting, navigation equipment, minimum equipment lists and any other requirements fitted to the aircraft are identified and assessed to ensure they are suitable and acceptable for instrument flight
3	**Identify operational flight documentation**	3.1	Essential operational documentation applicable to instrument flight type is identified for use by flight crew
		3.2	Applicable information contained in documents for flight planning and management is interpreted and applied
		3.3	Aircraft library requirements including operating manual suite, aeronautical information publications, logbooks and other relevant flight documents are identified
4	**Prepare charts and instrument flight plans**	4.1	Charts suitable for intended instrument flight are identified, selected and prepared
		4.2	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
		4.3	Meteorological, airways facilities, aerodrome and Notice to Airmen (NOTAM) information applicable to planning and conducting a flight is obtained, interpreted and applied
		4.4	Navigation information applicable to flight planning is obtained, interpreted and applied
5	**Select instrument flight routes**	5.1	Factors contributing to selecting optimum track, great circle track and minimum time track are identified
		5.2	Minimum time track on upper air charts is plotted
		5.3	Preferred minimum time track is determined and modified as required
		5.4	Fuel quantities more than minimum fuel are routinely considered and cost of carriage is assessed and determined in context of overall flight plan
6	**Determine operational requirements**	6.1	Suitability of aerodrome for instrument flight operations is determined
		6.2	Operational constraints are complied with

	6.4	Holding, alternate and reserve fuel requirements due to weather, navigation aid availability and aerodrome lighting are determined in accordance with operational requirements
	6.5	Total fuel requirements are calculated
7 Release an instrument flight plan	7.1	All required safety conditions, limitations and regulations are met and gross error check is performed
	7.2	Flight crew briefing information is collated including meteorological information, airport status, navigation aids, communication facilities, aircraft equipment and deviations, and reasons for flight plan submission
	7.3	An ICAO air traffic instrument flight plan is compiled, filed and managed for changes, delays and cancellation purposes
	7.4	Scheduled or unscheduled flights are re-cleared (re-filed) as required, based on revised flight information, using fuel saving techniques and varying operational requirements
8 Provide extended twin operations flight planning and flight support	8.1	Extended twin-engine operations (ETOPS) planning considerations and regulatory requirements are determined and applied to instrument flight planning activities
	8.2	ETOPS approval processes for regular passenger transport (RPT) or charter operations are understood and implemented where necessary
	8.3	System redundancy levels appropriate to ETOPS are identified and applied to ETOPS instrument flight planning activities
	8.4	ETOPS communication and navigation requirements between aircraft and relevant agencies and aids are determined and applied to ETOPS instrument flight planning activities
	8.5	Required ETOPS take-off, destination and alternate aerodrome requirements are assessed for suitability and recorded within flight planning and flight crew operational documentation
	8.6	Actual or forecast weather conditions for duration of planned flight are assessed for ETOPS planning purposes
	8.7	Aircraft performance data is interpreted and applied to ETOPS instrument flight planning activities

8.8 Relevant flight support information and assistance is provided to pilot in command (PIC) for ETOPS flight planning and normal flight situations

8.9 Relevant flight support information and assistance is provided to PIC during abnormal or emergency ETOPS situations

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

Companion Volume implementation guides are found in VETNet - https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=4725260a-0af3-4daf-912b-ef1c2f3e5816