Australian Government

AVILIC0004 Licence to operate a commercial helicopter

Release: 2

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Modification History

Release 2. This is the second release of this unit of competency in the AVI Aviation Training Package.

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 obtain a commercial pilot licence (helicopter) in compliance with relevant regulatory requirements of the Civil Aviation Safety Authority (CASA) and national operating standards.

It addresses the following competency standards in the Civil Aviation Safety Regulations (CASRs) Part 61 Manual of Standards Instrument:

Common standards

- communicating in the aviation environment
- perform pre- and post-flight actions and procedures
- operate aeronautical radio
- manage fuel
- manage passengers and cargo
- non-technical skills 1 (manage a safe flight)
- non-technical skills 2 (recognise, direct and manage threats and errors).

Navigation and instrument flying standards

- radio navigation – en route
- full instrument panel manoeuvres
- limited instrument panel manoeuvres
- operate at a controlled aerodrome
- operate at non-towered aerodrome
- operate in controlled airspace
- operate in Class G airspace.

Aircraft rating standards: helicopter category

- control helicopter on the ground
- control helicopter in lift-off, hover and landing
- taxi helicopter
- take-off helicopter and approach to hover
- control helicopter in normal flight
- control helicopter during advanced manoeuvres

- manage abnormal situations and emergencies – helicopter.

If the Manual of Standards is amended after the publication of this unit of competency, the delivery of the unit must be in accordance with the latest Manual of Standards as published by CASA.

This unit addresses aviation non-technical skills and knowledge requirements (mental, social and personal-management abilities) related to commercial pilot duties and contributes to safe and effective performance in complex aviation operational environments.

This unit addresses aviation technical skills and knowledge requirements (physical, mental and task-management abilities) related to commercial pilot duties and contributes to safe and effective performance in complex aviation operational environments.

Operations are conducted as part of commercial or 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

LIC – Licensing

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 Communicate in an aviation environment	**1.1** Effective face-to-face communication techniques are applied in accordance with general English language principles
	1.2 Aeronautical radio is operated using appropriate operational communication aviation phraseology and terminology

2	**Perform pre- and post-flight actions and procedures**	**2.1**	Pre-flight actions and procedures are completed
		2.2	Pre-flight inspection is performed
		2.3	Post-flight actions and procedures are completed
3	**Operate aeronautical radio**	**3.1**	Radio equipment is operated
		3.2	Radiotelephone equipment malfunctions are managed
		3.3	Aircraft transponder is operated during normal, abnormal and emergency situations
4	**Manage fuel**	**4.1**	Fuel plan requirements are determined
		4.2	Fuel system is managed
		4.3	Aircraft refuelling procedures are correctly completed
5	**Manage passengers and cargo**	**5.1**	Passengers are managed
		5.2	Passengers are aided and assisted as required
		5.3	Cargo is managed
6	**Manage a safe flight**	**6.1**	Effective lookout is maintained
		6.2	Situational awareness is maintained
		6.3	Situations are assessed and effective decisions made
		6.4	Task priorities are set and tasks managed
		6.5	Effective communications and interpersonal relationships are maintained
7	**Recognise, direct and manage threats and errors**	**7.1**	Threats are recognised and managed
		7.2	Errors are recognised and managed
		7.3	Undesired aircraft states are recognised and managed
8	**Navigate aircraft**	**8.1**	Documents and flight plans are prepared

		8.2	Airspace procedures are complied with while navigating
		8.3	Departure procedures are conducted
		8.4	Aircraft is navigated en route to waypoint or destination
		8.5	Aircraft is navigated at low level and in reduced visibility
		8.6	Lost procedure is performed as required
		8.7	Diversion procedure is performed as required
		8.8	Instrument navigation systems are used to navigate under visual flight rules (VFR) or instrument flight rules (IFR)
		8.9	Arrival procedures are executed
9	**Control helicopter on the ground**	**9.1**	Engine is started and stopped
		9.2	Rotor is engaged and stopped
		9.3	Main rotor disc and anti-torque system are controlled
10	**Control helicopter in lift-off, hover and landing**	**10.1**	Aircraft is lifted off to hover and hover checks are performed
		10.2	Helicopter is hovered in cross and tail wind conditions
		10.3	Turns around the mast are performed
		10.4	Turns around the nose and tail are performed
		10.5	Sidewards and backwards flight manoeuvres are performed
		10.6	Aircraft is landed from the hover
		10.7	Mishandled landings are managed
		10.8	Mishandled lift-offs are managed
11	**Taxi helicopter**	**11.1**	Air taxiing manoeuvres are performed
		11.2	Air transiting manoeuvres are performed

12	**Take off helicopter and approach to hover**	**12.1** Pre-take-off checks are carried out
		12.2 Aircraft take-off is performed
		12.3 Approach to hover is performed
		12.4 Go-around procedure is performed
13	**Control helicopter in normal flight**	**13.1** Helicopter is climbed while maintaining indicated airspeed (IAS) for cruise climb and best angle of climb (Vx) or best rate of climb (Vy)
		13.2 Straight and level flight is maintained
		13.3 Helicopter in descent is conducted under varying combinations of direction, speed and aircraft configuration
		13.4 Helicopter is turned from a known heading to a nominated heading, track or geographical feature
		13.5 Helicopter is controlled at any speed within approved flight envelope
		13.6 Helicopter circuits and approaches are performed
		13.7 Airspace requirements are complied with
14	**Control helicopter during advanced manoeuvres**	**14.1** Helicopter is turned steeply through level flight and descending flight profiles
		14.2 Autorotative flight is performed
		14.3 Helicopter is landed on and lifted off sloping ground
		14.4 Helicopter is landed, manoeuvred and taken off within confined areas
		14.5 Limited power take-off, approach and landings are executed
15	**Manage abnormal situations and emergencies**	**15.1** Forced landing from level flight, after take-off or on approach is managed
		15.2 Engine failure at the hover or during taxi is managed
		15.3 Tail rotor malfunction is managed

		15.4	Jammed flight control system is managed
		15.5	Flight in adverse aerodynamic conditions is managed
		15.6	Helicopter operating system malfunction is managed
16	**Operate using full instrument panel**	**16.1**	Serviceability of flight instruments and instrument power sources is determined and monitored
		16.2	Full instrument panel manoeuvres are performed
		16.3	Upset situations and unusual aircraft attitude recovery is performed using full instrument panel
17	**Operate using limited instrument panel**	**17.1**	Attitude indicator and stabilised heading indicator failures are recognised
		17.2	Limited instrument panel manoeuvres are performed
		17.3	Upset situations and unusual aircraft attitude recovery is performed using limited instrument panel
		17.4	Visual flight is re-established
18	**Navigate using radio navigation aids and systems**	**18.1**	Radio navigation systems are operated and monitored
		18.2	Aircraft is navigated using navigation aids and systems
19	**Operate at non-towered aerodromes**	**19.1**	Preparations for non-towered aerodrome operations are conducted
		19.2	Aircraft is taxied at non-towered aerodrome or landing area
		19.3	Non-towered aerodrome or landing area departure is performed
		19.4	Non-towered aerodrome or landing area arrival is performed
20	**Operate in Class G airspace**	**20.1**	Aircraft is operated in Class G airspace
		20.2	Correct tolerances are applied and maintained
		20.3	Aircraft radio procedures are implemented as required
		20.4	Operations are conducted in accordance with suitable

		charts
		20.5 Correct actions are performed in abnormal operations and emergencies
21	**Operate at a controlled aerodrome**	**21.1** Preparations for controlled aerodrome operations are conducted
		21.2 Aircraft is taxied at controlled aerodrome
		21.3 Controlled aerodrome departure is performed
		21.4 Controlled aerodrome arrival and landing are performed
22	**Operate in controlled airspace**	**22.1** Aircraft is operated in controlled airspace
		22.2 Airways clearance requirements are complied with
		22.3 Tracking and altitude tolerances are maintained when operating on an airway clearance
		22.4 Separation standards are applied between instrument and visual flights within controlled airspace
		22.5 Abnormal and emergency response actions are implemented as required
		22.6 Air traffic control (ATC) directions, instructions and requirements are adhered to within controlled airspace

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.

Non-essential conditions may be found in the AVI Aviation Training Package Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to AVILIC0002 Licence to operate a commercial helicopter.

Links

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