Australian Government

AVIY4015 Control helicopter in normal flight

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 control a helicopter in normal flight, in compliance with relevant regulatory requirements of the Civil Aviation Safety Authority and national operating standards.

It includes climbing a helicopter, maintaining straight and level flight, descending a helicopter, and turning a helicopter. It also includes controlling a helicopter at any speed, performing circuits and approaches, and complying with airspace requirements.

This unit addresses aviation technical skill requirements (physical, mental and task-management abilities) related to aircraft operational 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

Y – Aircraft Operation and Traffic Management

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	**Climb helicopter**	1.1	Adjustments are made to attitude and power to achieve an increase of altitude at normal, maximum rate (V_Y), maximum angle (V_X) and cruise climb flight configurations from straight and level flight
		1.2	Appropriate altimeter settings are set
		1.3	Helicopter is maintained in balanced flight during adjustments to attitude and power
		1.4	Power is maintained as altitude increases
		1.5	Helicopter is levelled off from climb at nominated altitude
		1.6	Lookout is maintained during climb using a systematic scan technique at a rate determined by traffic density, visibility and terrain
		1.7	Situational awareness is maintained
2	**Maintain straight and level flight**	2.1	Attitude and power are adjusted to achieve a constant height, heading and speed while remaining in balanced flight
		2.2	Lookout is maintained using a systematic scan technique at a rate determined by traffic density, visibility or terrain
		2.3	Natural horizon is used as primary attitude reference
		2.4	Altitude is maintained within allocated height band
3	**Descend helicopter**	3.1	Attitude and power are adjusted to enter and maintain a descent from straight and level flight
		3.2	Helicopter is levelled from a descent at a nominated altitude
		3.3	Lookout is maintained using a systematic scan technique at a rate determined by traffic density, visibility or terrain
		3.4	Clearance ahead and below is maintained
		3.5	Air traffic control (ATC) altitude restrictions are observed
		3.6	Design limits are not exceeded during helicopter descent

	3.7	Appropriate altimeter settings are set
	3.8	Situation awareness is maintained at all times during helicopter descent
4 Turn helicopter	4.1	Attitude and power are adjusted to enter and maintain turns at varying rates from level, climbing and descending flight to achieve nominated tracks
	4.2	Helicopter is rolled out from the turn to achieve nominated heading or geographical feature alignment
	4.3	Helicopter balance and trim are ensured as required
	4.4	Lookout is maintained in direction of turn and above or below using a systematic scan technique at a rate determined by traffic density, visibility and terrain
	4.5	Engine operating limits are not exceeded
5 Control helicopter at any speed	5.1	Attitude and power are adjusted, accelerated or decelerated to manoeuvre helicopter at any specified airspeed within the flight envelope while maintaining balanced flight
	5.2	Height awareness is maintained at all times and appropriate adjustments are made as required
	5.3	Wind conditions are monitored and appropriate allowance is made
	5.4	Helicopter is suitably controlled to ensure it is operated within its design limits
6 Perform circuits and approaches	6.1	Circuits are joined and conducted in accordance with aeronautical information publication (AIP) and/or local procedures at normal and low altitude appropriate to the helicopter type
	6.2	Due allowance is made for wind and all appropriate checklist items are completed when performing circuits and approaches
	6.3	Radiotelephone procedures are followed during circuit operations
	6.4	Approach path applicable to helicopter type is intercepted and maintained while remaining clear of other traffic
	6.5	Lookout is maintained during circuits and approaches using a systematic scan technique at a rate determined by traffic

		density, visibility and terrain
	6.6	Conflicting traffic is recognised and appropriate responses are made
	6.7	Right of way rules are applied and compliance with these rules is maintained
	6.8	Weather conditions are monitored and appropriate responses are made
	6.9	Fuel status is monitored and appropriate responses are made
	6.10	Helicopter approach is conducted to establish hover or to conduct a landing at the nominated termination point
7 Comply with airspace requirements	7.1	Suitable aeronautical charts are interpreted and used to maintain airspace compliance requirements
	7.2	Circuit departure is performed
	7.3	Helicopter is maintained within a specified area and/or track while complying with air traffic requirements, controlled or restricted airspace conditions or limitations and reacting to factors that affect the safe progress of a flight
	7.4	Orientation is maintained to geographical features with the aid of suitable charts and maps
	7.5	Circuit join is performed

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 AVIY4015B Control helicopter in normal flight.

Links

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