

Schedule 8 Tolerances

The following Table of Contents is for guidance only and is not part of the Schedule.

Table of Contents

SECTION 1:	FLIGHT TOLERANCES	682
Table 1:	Aeroplane general flight tolerances – private level.....	682
Table 2:	Aeroplane general flight tolerances – professional level	683
Table 3:	Helicopter general flight tolerances – private level.....	685
Table 4:	Helicopter general flight tolerances – professional level	687
Table 5:	Instrument approach tolerances.....	689
Table 6:	Gyroplane class rating tolerances – private	690
Table 7:	Gyroplane class rating tolerances – professional.....	691
Table 8:	Aerobatics	692
SECTION 2:	ENGLISH LANGUAGE PROFICIENCY RATING SCALES	693

SECTION 1: FLIGHT TOLERANCES

Table 1: Aeroplane general flight tolerances – private level

Applicability

1.1 The flight tolerances in this subsection apply to the following licences and ratings:

- (a) recreational pilot licence;
- (b) private pilot licence;
- (c) aircraft class rating;
- (d) Night VFR rating.

2. Requirements

2.1 A person is required to perform flight manoeuvres within the flight tolerances mentioned in this table to be assessed as competent in the associated unit of competency.

3. Flight tolerances

Flight path or manoeuvre		Flight tolerances
Taxing aircraft		±1.5 metres of centreline
Nominated heading		±10°
Climb airspeed		-0 / +5 kts
Level off from climb and descent		±150 ft
Straight and level	Altitude	±150 ft
	IAS	±10 kts
Power descent airspeed		±10 kts
Glide		-5 / +10 kts
Turns		Angle of Bank ±5°
Turns onto nominated headings		Heading ±10°
Steep Turn		Heading ±10°
		Height ±150 ft
Final approach airspeed		-0 / +5 kts
Landing	Touchdown	±120 m
	Centreline tracking	±2 m
Asymmetric flight	Heading – initial	±20°
	Heading - sustained	±5°
	IAS	-0 +5 kts
Limited panel instrument flying	Heading	±15°
	IAS	±10 kts or ±M0.02
	Height	±200 ft

Table 2: Aeroplane general flight tolerances – professional level**Applicability**

1.1 The flight tolerances in this subsection apply to the following licences and ratings:

- (a) commercial pilot licence;
- (b) multi-crew pilot licence;
- (c) air transport pilot licence;
- (d) pilot instructor rating;
- (e) instrument rating;
- (f) private IFR rating;
- (g) flight examiner rating;
- (h) aerial application rating;
- (i) low-level rating;
- (j) aircraft type rating.

Requirements

2.1 A person is required to perform flight manoeuvres within the flight tolerances mentioned in this table to be assessed as competent in the associated unit of competency.

Flight tolerances

Flight path or manoeuvre		Flight tolerances
Taxing aircraft		±1.5 metres of centreline
Nominated heading		±5°
Climb airspeed		-0 / +5 kts
Level off from climb and descent		±100 ft
Straight and level	Altitude	±100 ft
	IAS	±10 kts or ±M.02 Not below minimum approach speed.
Power descent		±10 kts
Glide		-5 / +10 kts
Turns		Angle of Bank ±5°
Turns onto nominated headings		Heading ±5°
Steep Turn		Heading ±10°
		Height ±100 Ft
Final approach airspeed		-0 / +5 kts
Landing	Touchdown	±60 m For ATPL, within the published touchdown zone relevant to the runway landing distance available.
	Centreline tracking	±2 m
Asymmetric flight	Heading – initial	±20°
	Heading – sustained	±5°
	IAS	-0 +5 kts
Limited panel instrument flying	Heading	±15°
	IAS	±10 kts or ±M0.02

Flight path or manoeuvre		Flight tolerances
	Height	±200 ft

Table 3: Helicopter general flight tolerances – private level**Applicability**

1.1 The flight tolerances in this subsection apply to the following licences and ratings:

- (a) recreational pilot licence;
- (b) private pilot licence;
- (c) aircraft class rating;
- (d) NVFR rating.

Requirements

2.1 A person is required to perform flight manoeuvres within the flight tolerances mentioned in this table to be assessed as competent in the associated unit of competency.

Flight tolerances

Flight path or manoeuvre		Flight tolerances
Hover		±1 metre of hover point
Ground taxi/hover taxi and manoeuvring		±1 metre of track
		±5° of nominated heading
		±20% of nominated height
Climbing		-0 +5 kts nominated IAS
Level off from climb and descent		±100 ft of nominated altitude
Straight and level	Altitude	±100 ft
	IAS	±5 kts
	Heading	±5° of nominated heading
Power descent	IAS	±5 kts
	Heading	±5° of nominated heading
Turns	Angle of bank	Angle of bank ±5°
	Altitude	±100 ft of nominated altitude
Exit turn onto a heading	Initial	±15° of heading
	Sustained	±5° of heading
Level speed in IMC – U/A recovery		Not less than V_{min} IMC
Final approach airspeed		-0_+10 kts
Landing (normal)		Within a 5 metre diameter circle of nominated point
Multi-engine – 1 engine disengaged	Heading	±5° of nominated heading
	IAS	±10 kts of nominated speed/not below approach speed for configuration
Control helicopter during advanced manoeuvres – steep turns	altitude	±100 ft
	speed	±5 kts
	Exit on specified heading	±15° initially, then ±5°
	Nominated heading	±15° initially, then ±5° thorough to min descent of 500 ft

Flight path or manoeuvre		Flight tolerances
Autorotation – single engine helicopter	Heading	±5° Able to turn into the last known wind direction and maintain heading within tolerance
	IAS	±5 kts From recommended minimum rate of descent airspeed
Advanced manoeuvre – autorotative flight	Descent at nominated heading	±5°
	Manufacturer's recommended speed	±5 kts
	Steep turn altering heading	360° using 45° bank
	Best range speed and minimum descent rate	±5 kts
	Distance from the nominated touchdown or termination point	±25 m
Advanced manoeuvre – power recovery	Rotor RPM	Within limitation
	Nominated minimum descent altitude	+100 /-0 ft
	Climb speed	±5 kts

Table 4: Helicopter general flight tolerances – professional level**Applicability**

1.1 The flight tolerances in this subsection apply to the following licences and ratings:

- (a) commercial pilot licence;
- (b) multi-crew pilot licence;
- (c) air transport pilot licence;
- (d) pilot instructor rating;
- (e) private IFR rating;
- (f) instrument rating;
- (g) flight examiner rating;
- (h) aerial application rating;
- (i) low-level rating;
- (j) aircraft type rating.

Requirements

2.1 A person is required to perform flight manoeuvres within the flight tolerances mentioned in this table to be assessed as competent in the associated unit of competency.

Flight tolerances

Flight path or manoeuvre		Flight tolerances
Hover		±0.5 metre of hover point
Ground taxi/hover taxi and manoeuvring		±1 metre of track
		±5° of nominated heading
		±20% of nominated height
Climbing		-0 +5 kts nominated IAS
Level off from climb and descent		±100 ft of nominated altitude
Straight and level	Altitude	±100 ft
	IAS	±5 kts
	Heading	±5° of nominated heading
Power descent	IAS	±5 kts
	Heading	±5° of nominated heading
Turns	Angle of bank	Angle of bank ±5°
	Altitude	±100 ft of nominated altitude
Exit turn onto a heading	Initial	±15° of heading
	Sustained	±5° of heading
Level speed in IMC – U/A recovery		Not less than V_{min} IMC
Final approach airspeed		-0, +10 kts
Landing (normal)		Within a 5 metre diameter circle of nominated point
Multi-engine – 1 engine disengaged	Heading	±5° of nominated heading
	IAS	±10 kts of nominated speed/not below approach speed for configuration
Control helicopter during advanced manoeuvres – steep turns	Altitude	±100 ft
	Speed	±5 kts

Flight path or manoeuvre		Flight tolerances
	Exit on specified heading	$\pm 15^\circ$ initially, then $\pm 5^\circ$
	Nominated heading	$\pm 15^\circ$ initially, then $\pm 5^\circ$ thorough to min descent of 500 ft
Autorotation – single engine helicopter	Heading	$\pm 5^\circ$ Able to turn into the last known wind direction and maintain heading within tolerance
	IAS	± 5 kts From recommended minimum rate of descent airspeed
Advanced manoeuvre – autorotative flight	Descent at nominated heading	$\pm 5^\circ$
	Manufacturer's recommended speed	± 5 kts
	Steep turn altering heading	360° using 45° bank
	Best range speed and minimum descent rate	± 5 kts
	Distance from the nominated touchdown or termination point	± 25 m
Advanced manoeuvre – power recovery	Rotor RPM	Within limitation
	Nominated minimum descent altitude	+100 /-0 ft
	Climb speed	± 5 kts

Table 5: Instrument approach tolerances**Applicability**

1.1 The flight tolerances in this subsection apply to the following licences and ratings:

- (a) instrument rating;
- (b) multi-crew pilot licence;
- (c) air transport pilot licence.

Requirements

2.1 A person is required to perform flight manoeuvres within the flight tolerances mentioned in this table to be assessed as competent in the associated unit of competency.

Flight tolerances

Parameter	Tolerance
2D approach Lateral Path Tracking	$\pm 5^\circ$ of nominated track using azimuth guidance
	$\pm \frac{1}{2}$ scale deflection of nominated track using lateral course deviation indicator guidance
	Within the RNP value specified for the published minimum altitude
	± 2 nm of a DME or GNSS arc
3D Approach Lateral Path Tracking	As above for the lateral path guidance being used
3D Approach Vertical Path	$\pm \frac{1}{2}$ scale deflection or $+/- 75$ ft for RNP BARO VNAV procedure
	For an RNP LPV transients associated with aircraft configuration changes above $+1/2$ scale are acceptable Transients associated with aircraft configuration changes above $+75$ ft are acceptable
Minimum Altitude	$+100$ ft, -0 ft at published minima descent altitude Missed approach initiated not below decision altitude

Table 6: Gyroplane class rating tolerances – private**1 Applicability**

1.1 The flight tolerances in this subsection apply to the following licences and ratings:

- (a) recreational pilot licence;
- (b) private pilot licence;
- (c) aircraft class rating;
- (d) NVFR rating.

2. Requirements

2.1 A person is required to perform flight manoeuvres within the flight tolerances mentioned in this table to be assessed as competent in the associated unit of competency.

3. Flight tolerances

Flight path or manoeuvre		Flight tolerances
Ground taxi/hover taxi and manoeuvring		±1.5 metres of track/centreline
		±10° of nominated heading
Climbing	Best rate	-0 +5 kts of nominated airspeed
	Best angle	±5 kts of nominated airspeed
	Heading	±5° of nominated heading
Level off from climb and descent		±100 ft of nominated altitude
Straight and level	Altitude	±100 ft
	IAS	±10 kts
	Heading	±10° of nominated heading
Power descent Airspeed/Autorotation	IAS	±10 kts
	Heading	±10° of nominated heading
	Rate of descent	±150 ft/min
Turns	Angle of bank	Angle of bank ±5°
	Altitude	±100 ft of nominated altitude
Exit turn onto a heading	Initial	±15° of heading
	Sustained	±10° of heading
Final approach airspeed		±5 kts
Touchdown		±2 metres of centreline
Landing (normal)		±50 metres of selected touchdown point

Table 7: Gyroplane class rating tolerances – professional**Applicability**

1.1 The flight tolerances in this subsection apply to the following licences and ratings:

- (a) commercial pilot licence;
- (b) pilot instructor rating;
- (c) instrument rating;
- (d) private IFR rating;
- (e) flight examiner rating;
- (f) aerial application rating;
- (g) low-level rating;
- (h) aircraft type rating.

Requirements

2.1 A person is required to perform flight manoeuvres within the flight tolerances mentioned in this table to be assessed as competent in the associated unit of competency.

Flight tolerances

Flight Path or Manoeuvre		Flight tolerances
Ground taxi and manoeuvring		±1.5 metres of track/centreline
		±10° of nominated heading
Climbing	Best rate	-0 +5kts of nominated airspeed
	Best angle	±5 kts of nominated airspeed
	Heading	±5° of nominated heading
Level off from climb and descent		±100 ft of nominated altitude
Straight and level	Altitude	±100 ft
	IAS	±5 ts
	Heading	±5° of nominated heading
Power descent Airspeed/Autorotation	IAS	±10 kts
	Heading	±10° of nominated heading
	Rate of descent	±150 ft/min
Turns	Angle of bank	Angle of bank ±5°
	Altitude	±100 ft of nominated altitude
Exit turn onto a heading	Initial	±15° of heading
	Sustained	±10° of heading
Final approach airspeed		-±5 kts
Touchdown		±2 metres of centreline
Landing (normal)		Within a 100 metre of selected touchdown point

Table 8: Aerobatics**Applicability**

1.1 The flight tolerances in this subsection apply to the aerobatics endorsements.

Requirements

2.1 A person is required to perform flight manoeuvres within the flight tolerances mentioned in this table to be assessed as competent in the associated unit of competency.

Flight tolerances

Manoeuvres	Parameter	Tolerances
Looping manoeuvres	Nominated line feature	$\pm 10^\circ$
	Nominated airspeed	± 10 kts
	Entry and recovery heights	± 100 ft
Rolling manoeuvres	Nominated airspeed	± 10 kts
	Direction	$\pm 10^\circ$
	Altitude	± 100 ft
Stall turn-hammerhead	Nominated air speed	± 10 kts
	Nominated line feature 180°	$\pm 15^\circ$