

FLIGHT REVIEWS PRIVATE (HELICOPTER) PILOT (CAR 5.91)

FLIGHT REVIEWS - HELICOPTER

Private (helicopter) pilot require the same biennial flight reviews as for Private (aeroplane) pilots (CAR 5.91).

As private (helicopter) pilot you must not fly a helicopter as pilot in command unless, within the period of 2 years immediately before the day of the proposed flight, you have satisfactorily completed a helicopter flight review conducted only by an appropriate person (as defined in CAR 5.91 sub regulation 8) and an this person has made the appropriate endorsement in your log book.

You are taken to have completed a helicopter flight review if within the period of 2 years immediately before the day of the proposed flight you have:

- passed a flight test conducted for the purpose of the issue of a helicopter pilot licence or the issue, or renewal, of a helicopter pilot rating; or
- satisfactorily completed a helicopter proficiency check; or
- satisfactorily completed helicopter conversion training given by the holder of a grade of flight instructor (helicopter) rating that authorises him or her to conduct helicopter flight reviews;

CASA may approve a synthetic flight trainer for the above purposes.

Note: Operational standards for synthetic flight trainers are set out in the documents titled "FSD1—Operational Standards and Requirements—Approved Flight Simulators" and "FSD2—Operational Standards and Requirements—Approved Synthetic Trainers" that are published by CASA.

RECENT EXPERIENCE REQUIREMENTS (CAR 5.92)

1. A private (helicopter) pilot must not fly a helicopter as pilot in command if the helicopter is carrying any other person unless:
 - A. if the flight is undertaken in daylight—the pilot has, within the period of 90 days immediately before the day of the proposed flight, carried out at least 3 circuits while flying a helicopter as pilot in command or as pilot acting in command under supervision or in dual flying; and
 - B. if the flight is undertaken at night—the pilot has, within the period of 90 days immediately before the day of the proposed flight, carried out at least 3 circuits at night while flying a helicopter as pilot in command or as pilot acting in command under supervision or in dual flying.
- Note: Under regulation 5.40, a person must not fly as pilot acting in command under supervision unless he or she holds a commercial pilot licence or an air transport pilot licence.
2. For the purposes of this regulation, a person carries out a circuit while flying a helicopter if the person:
 - A. takes-off in the helicopter from an aerodrome; and
 - B. flies the helicopter around the aerodrome in accordance with the traffic pattern for the aerodrome; and
 - C. lands the helicopter at the aerodrome.

3. In this regulation:

aerodrome means a place that aircraft may land at, or take off from, in accordance with regulation 92.

RECENT EXPERIENCE REQUIREMENTS (CAR 5.92) (CONTINUED)



HOT REFUELLING (CAO 20.10)

In this section, 'hot refuelling' means the refuelling of a helicopter with its engine or engines running.

Hot refuelling of a helicopter may take place with its rotor or rotors rotating.

Hot refuelling of a helicopter must not be carried out unless authorised by its operator.

The operator of a helicopter who authorises hot refuelling of that helicopter must include in the operations manual:

- the operational circumstances in which hot refuelling may take place; and
- the procedures to be followed during hot refuelling; and
- the requirements and instructions, if any, set out in the helicopter's flight manual that relate to hot refuelling; and
- if applicable, the instructions to ensure fuel quality as required for the purposes of CAO 20.10 sub-paragraph 7.2 (b).

As hot refuelling requires the compliance with an operations manual, this is generally a commercial operation and therefore will not be covered in this document.

INSTRUMENTS REQUIRED FOR PRIVATE VFR OPERATIONS (CAO 20.18)

The flight and navigation instruments required for private VFR operations are:

- an airspeed indicating system;
- a pressure altimeter with a readily adjustable pressure datum setting scale graduated in millibars;
 - i. a direct reading magnetic compass; or
 - ii. a remote indicating magnetic compass and a standby direct reading magnetic compass; and
- an accurate timepiece indicating hours, minutes and seconds. This may be carried on the person of the pilot or navigator.

Note that helicopters engaged in VFR regular public transport, charter or aerial work operations must also be equipped with:

- a slip indicator; and
- an outside air temperature indicator when operating from or to a location at which ambient air temperature is not available from ground-based instruments.

SPECIAL VFR

By day, when VMC does not exist, the ATC unit responsible for a CTR may authorise, at pilot request, a Special VFR flight in the CTR, or in a CTA next to the CTR for the purpose of entering or leaving the CTR, provided that:

- A. the Special VFR flight will not unduly delay an IFR flight; and
- B. the flight can be conducted clear of cloud; and
- C. the visibility is not less than 800M (for helicopters); and
- D. A helicopter will be operated at such a speed that the pilot has adequate opportunity to observe any obstructions or other traffic in sufficient time to avoid collisions; and
- E. the flight can be conducted in accordance with the requirements of CAR 157 with regard to low flying.

ALTERNATE REQUIREMENTS (HELICOPTERS)

When operating a helicopter under the VFR, and the use of the helicopter VMC is permissible at the destination, the pilot in command must provide for a suitable alternate aerodrome when either of the following conditions is forecast at the destination:

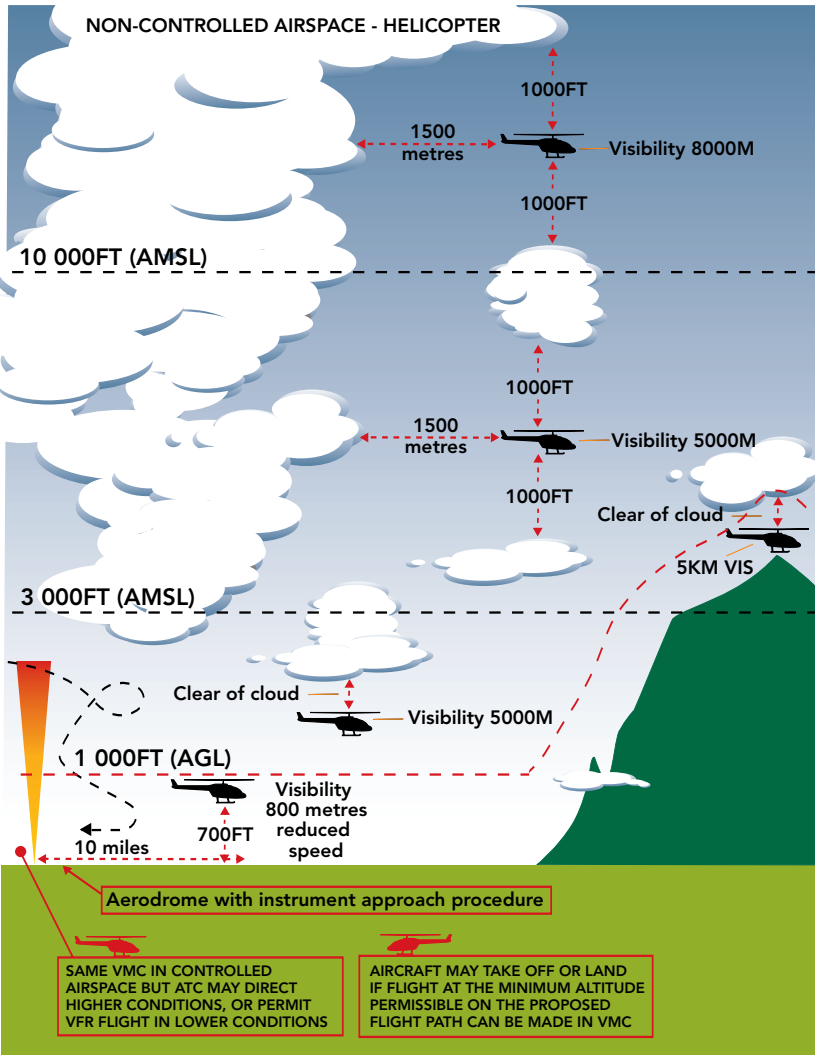
- A. cloud - more than 4/8ths of below 1,000FT; or
- B. visibility - less than 3,000M

For helicopters operating under the VFR at night, the alternate minima are a ceiling of 1,500 FT and a visibility of 8KM.

For VFR helicopter operations by day, the alternate minima are the same as for night unless the additional conditions specified in the above paragraphs are met.

When these additional conditions are met, the alternate requirements are as shown in the above paragraphs.

VMC - OUTSIDE CONTROLLED AIRSPACE



AERODROMES

USE OF AERODROMES (CAR 92)

1. An aircraft shall not land at, or take-off from, any place unless:
 - A. it is an aerodrome established under the Air Navigation Regulations; or
 - B. the use of the place as an aerodrome is authorised by a licence granted under CASR Part 139 (Licensed Aerodrome); or
 - C. the place is a Defence Force aerodrome for which CASA has authorised civil operations in accordance with section 20 of the Act; or
 - D. the place is suitable for use as an aerodrome and the aircraft can land at, or take-off from, the place in safety, having regard to all the circumstances of the proposed landing or take-off (including the prevailing weather conditions),

CIRCUIT HEIGHT

By convention, helicopters are flown at a circuit height of 800FT AGL.

The following circuit heights apply to other aircraft:

- jets, 1500AFT AGL
- piston/turbo prop, 1000FT AGL;

Circuit heights for aerodromes which have specific requirements are published in ERSA.

HELICOPTER OPERATIONS - AT AERODROMES AND IN HELICOPTER ACCESS CORRIDORS AND LANES

GENERAL

The procedure in this section apply to all helicopters operating in the vicinity of aerodromes and in helicopter access corridors and lanes, in accordance with the provisions of CAR's 92,157,163 and 166.

TAXIING

For all helicopters, maximum use of the "air transit" procedure should be made to expedite traffic movement and flow about an aerodrome.

All helicopters may use "air taxiing" procedures as required. However, wheeled helicopters, where practicable, are encouraged to "ground taxi" on prepared surfaced to minimise rotor wash and its effects.

At night a helicopter should not taxi via routes which do not meet the physical dimensions and lighting requirements specified in CAAP 92-2(0).

TAKE-OFF/ DEPARTURE

At controlled aerodromes, helicopters may be granted a take-off clearance or instructed to report airborne, as appropriate, from any area nominated by ATC or the pilot, and assessed by the pilot as being suitable as a HLS.

AERODROMES (CONTINUED)

Helicopters taking off/ departing must proceed in accordance with ATC instructions.

Subject to clearance, a turn after take-off may be commenced when the pilot considers that the helicopter is at a safe height to do so.

Unless requested by the pilot take-off clearance will not be issued for a helicopter if the tailwind component exceeds 5KT.

Prescribed exit "gates" and associated standard routes and/or altitudes may be provided to facilitate the flow of helicopter traffic. Procedures for their use will be promulgated in ERSA. Use of these "gates" is not mandatory. Helicopters may, subject to an ATC clearance, revert to the standard traffic procedure applicable to aeroplanes. This option may be more appropriate when operating larger helicopters.

At night a helicopter should not take-off other than from a site which conforms with the requirements specified in CAAP 92-2(0). Any illuminated runway or illuminated taxiway of dimensions commensurate with the size of the helicopter landing site applicable to the helicopter, in accordance with CAAP 92-2(0), is considered to meet the requirements of CAAP 92-2(0).

At a controlled aerodrome a pilot may take-off from any area which is assessed as being suitable as a HLS.

When the pilot elects to conduct the take-off from outside the flight strip of the runway in use by aeroplanes, the helicopter take-off path must be outside that flight strip.

Before take-off, the helicopter is to be positioned to the appropriate side of the runway in use so that the turn after take-off does not cross the extended centre line of that runway. The pre take-off position of the helicopter will be by air transit or by taxiing as appropriate.

The turn after take-off onto the desired departure track may be commenced when the pilot considers that the helicopter is at a safe height to do so. If the resultant departure track conflicts with the aeroplane traffic pattern, the helicopter should remain at 500FT above the surface until clear of that circuit pattern. Where this procedure is not practicable on environmental grounds, the helicopter is to adopt the standard departure procedure applicable to aeroplanes.

Pilots of radio equipped helicopters must broadcast intentions on the appropriate frequency before take-off.

HELICOPTER ACCESS CORRIDORS AND LANES

The following procedures for operations within promulgated helicopter access corridors and lanes apply:

- A. maximum IAS of 120KT;

AERODROMES (CONTINUED)

- B. helicopters must operate under VFR, usually not below 500FT above the surface by day subject to flight over populous areas. Restrictions are the limitations published in ERSA for authorised corridors by night;
- C. "see and avoid" procedures must be used;
- D. formation flights are restricted to line astern with the lead aircraft responsible for maintaining separation from other traffic in accordance with sub paragraph c;
- E. a traffic advisory service is available in access corridors;
- F. a radar advisory service may be given at designated aerodromes;
- G. a continuous listening watch on the appropriate ATS frequency in access corridors or broadcast frequency in lanes is mandatory;
- H. two-way operations are conducted with all traffic keeping to the right of the central geographical/topographical feature(s) as detailed in ERSA;
- I. the pilot-in-command has the responsibility to ensure that operations are confirmed within the boundaries of the corridor or lane;
- J. the limits of corridors and lanes must be adhered to, with any transitional altitude requirements maintained within an accuracy of $\pm 100\text{FT}$;
- K. a helicopter not confirming its operations to an access corridor will require ATC clearance and while outside the corridor, will be subject to separation standards as applied by ATC.

Note: Subject to environmental noise considerations, the imposition of limitations on those types of helicopters which exceed the noise limits specified in ICAO Annex 16 Vol 1 may be necessary.

ARRIVALS

At a controlled aerodrome, prescribed entry "gates" and associated standard routed and/or altitudes may be provided to facilitate the flow of helicopter traffic. Procedures for their use will be promulgated in ERSA. Use of these "gates" is not mandatory. Subject to the receipt of an ATC clearance, helicopters ,may, if required, conform to the standard traffic procedures applicable to aeroplanes.

This option may be more appropriate when operating larger helicopters.

Unless requested by the pilot, a landing clearance will not be issued for a helicopter if the tailwind component exceeds 5KT.

At night a helicopter should not land at a site other than one which conforms with the requirements specified in the latest issue of CAAP 92.2. Any illuminated runway or illuminated taxiway of dimensions commensurate with the size of the helicopter landing site applicable to the helicopter, in accordance with CAAP 92.2, is considered to meet the requirements of CAAP 9.2.

AERODROMES (CONTINUED)**CIRCUIT PROCEDURES**

At controlled aerodromes and specific operating procedures applicable to the helicopter traffic pattern will be detailed in ERSA. The following generally applies:

- A. where possible, helicopter circuit traffic will be separated from the aeroplane traffic pattern by the use of contra- direction circuits, outside of and parallel to the flight strip of the runway in use, and at a lower altitude than other traffic, but not below 500FT above the aerodrome elevation; or
- B. when separated circuit patterns are not practicable, helicopters may utilise the same traffic pattern direction as other traffic, and will normally operate inside and at a lower altitude than the traffic, but not below 500FT above the aerodrome elevation.

At non-towered aerodromes the following circuit operating procedures apply;

- A. helicopters may be operated on contra-direction circuits and parallel to the aeroplane traffic pattern at a lower altitude than that traffic; but not below 500FT above the aerodrome elevation. The landing site associated with the helicopter circuit is to be positioned outside the flight strip of the runway in use so the helicopter circuit traffic does not cross the extended centre line of that runway;
- B. if the procedure outlined in sub paragraph A, is not practicable the helicopter circuit patterns should be flown inside and parallel to the aeroplane traffic and at lower altitudes, but not below 500FT above aerodrome elevation. The landing site associated with the helicopter circuit must be positioned outside the flight strip of the runway in use so that the helicopter circuit traffic does not cross the extended centre line of that runway; or
- C. the helicopter must follow the standard aeroplane traffic pattern and, in this case, may use the flight strip area of the runway in use;
- D. the pilots or radio equipped helicopters must broadcast their intentions and listen out for other traffic on the appropriate frequency.

LOW FLYING (CAR 157)

1. An aircraft must not fly over:
 - A. any city, town or populous area, at a height lower than 1000 feet; or
 - B. any other area at a height lower than 500 feet.
2. A height specified above is the height above the highest point of the terrain, and any object on it, within a radius of 300 metres; from a point on the terrain vertically below the aircraft.
3. Paragraph 1 (A) does not apply in respect of a helicopter flying at a designated altitude within an access lane details of which have been published in the AIP or NOTAMS for use by helicopters arriving at or departing from a specified place.
4. Paragraph 1 does not apply if:
 - A. through stress of weather or any other unavoidable cause it is essential that a lower height be maintained; or
 - B. the aircraft is engaged in private operations or aerial work operations, being operations that require low flying, and the owner or operator of the aircraft has received from CASA either a general permit for all flights or a specific permit for the particular flight to be made at a lower height while engaged in such operations; or
 - C. the pilot of the aircraft is engaged in flying training and flies over a part of a flying training area in respect of which low flying is authorised by CASA under sub regulation 141 (1); or
 - D. the pilot of the aircraft is engaged in a baulked approach procedure, or the practice of such procedure under the supervision of a flight instructor or a check pilot; or
 - E. the aircraft is flying in the course of actually taking-off or landing at an aerodrome; or
 - F. the pilot of the helicopter is engaged in:
 - a search; or
 - a rescue; or
 - dropping supplies in a search and rescue operation; or
 - operation for the purposes of, the Australian Federal Police or the police force of a State or Territory; and
 - engaged in law enforcement operations; or
 - the pilot of the helicopter is engaged in an operation which requires the dropping of packages or other articles or substances in accordance with directions issued by CASA.

OVER WATER FLIGHTS

LIFE TACKERS

Each occupant of a helicopter operating to or from an off-shore landing site located on a fixed platform or vessel shall wear a life jacket during the entire flight over water regardless of the class of operation or the one-engine-inoperative performance capability of the helicopter.

HELICOPTER FLOTATION SYSTEMS (COMMERCIAL OPERATIONS)

- A single engine helicopter engaged in passenger carrying charter operations shall be equipped with an approved flotation system whenever the helicopter is operated beyond autorotative gliding distance from land. However, when following a helicopter access lane prescribed in AIP-ERSA, or when departing from or landing at a helicopter landing site in accordance with a normal navigation procedure for departing from or landing at that site, an approved flotation system is not required.
- A single engine helicopter engaged in regular public transport operations shall be equipped with an approved flotation system whenever the helicopter is operated beyond autorotative gliding distance from land.
- A multi-engine helicopter engaged in passenger carrying charter or regular public transport operations over water and which is not operated in accordance with one-engine-inoperative accountability procedures shall be equipped with an approved flotation system.

FLIGHTS OVER THE WATER

Aircraft engaged in PVT, AWK or CHTR operations, and which are normally prohibited by CAR 258 from over-the water flights because of their inability to reach land in the event of engine failure, may fly over water subject to compliance with the conditions in this section. These conditions are additional to the requirements for flight over land.

(Different requirements apply to that the case of passenger-carrying CHTR operations. The distance between successive land areas suitable for an emergency landing must not exceed 50NM. In the case of helicopters, a fixed platform or a vessel suitable for an emergency landing and located adjacent to land may be considered acceptable for this requirement.)

There is no limitation for PVT, AWK or freight-only CHTR operations.

Each occupant of the aircraft must wear a life jacket during the flight over the water unless exempted from doing so under the terms of CAO 20.11.

A meteorological forecast must be obtained.

VFR flights are required to submit a SARTIME flight notification to ATS or leave a Flight Note with a responsible person.

OVER WATER FLIGHTS (CONTINUED)**SAR ALERTING**

- A. VFR flights may choose to operate on reporting schedules for the over-water stages of a flight. Schedules may be arranged before commencing the over-water stage and terminate on completion of the crossing.
- B. VFR aircraft not equipped with radio which will enable continuous communication, or not radio equipped, must carry a survival beacon as prescribed in CAO 20.11, for the over-water stages of the flight.

Helicopters must be fitted with an approved flotation system unless exempted under the terms of CAO 20.11.

Helicopters operating in accordance with the approval given must comply with the VFR, except that in the case of helicopters operating below 700FT above water by day, the flight visibility must not be less than 5,000M and the helicopter must be flown at a distance equal to or greater than 60M horizontally and 500FT vertically from cloud, unless track guidance is provided by an approved operating radio navigation aid and the helicopter is equipped with a complimentary system.

