HELICOPTER MANAGEMENT

1. Introduction

Helicopters are a unique form of aircraft characterised by flexibility in flight and near vertical ascent and descent. This allows them to land virtually anywhere and this often requires variable flight paths.

Helicopters are often used for services that are of benefit to communities.

Helicopter operations require flexibility, as they can be required to fly over residential areas or specific areas that are rarely or never flown over by other aircraft.

2. Altitudes

At most airports or helipads, standard departure and arrival procedures ensure that, if possible, twin engine helicopters should not fly over residential areas below 1500ft, however, normal flight is permitted down to 1000ft over residential areas. Lower levels will be only flown during landing and take-off.

Typical pattern altitude for helicopters, it is 500ft AGL.
Helicopters could fly opposite the airplane pattern direction

Occasionally, helicopters need to fly at lower levels. This could be, for example, for law enforcement, search and rescue, surveying or construction purposes. If a helicopter operator needs to fly below 500ft for private operations or aerial work operations, authorisation is required.

In addition, helicopters that are being used in response to an emergency are permitted to operate outside normal procedures, should the circumstances demand.

3. Management of Helicopter

3.1. Generalities

Helicopter operations should normally avoid the flow of fixed-wing aircraft to minimize overall delays.

Helicopters should avoid flying over other aircraft, vehicles, and personnel during air movement.

There is no specific written rule on how helicopters must avoid fixed wing traffic
Air traffic controllers however will often allow a helicopter to exit the normal pattern at any point to fly an approach directly to the requested landing point.

Note: It is possible to let a helicopter fly an approach to the taxiway parallel to the active runway while an airplane simultaneously flies an approach to the active runway (after mutual traffic information given). However, there will be many situations where faster/larger helicopters may be integrated with fixed-wing aircraft for the benefit of all concerned.

Each pilot operating a helicopter shall comply with any routes or altitudes specifically prescribed for helicopters by the local or national regulation prescription.

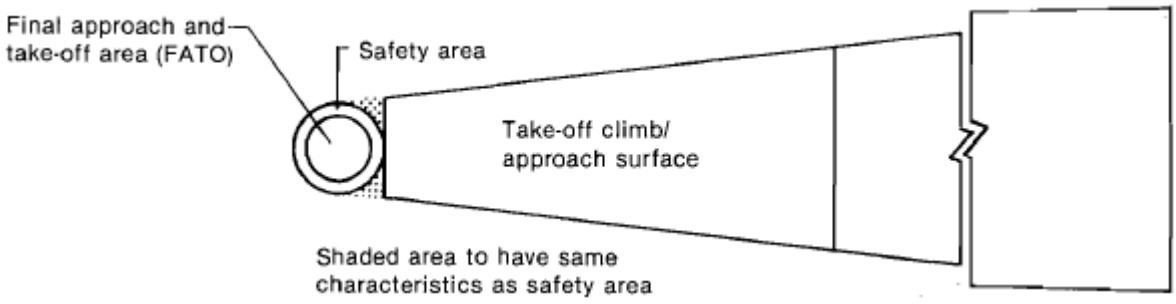
3.2. Landing and take-off operation

When approaching or departing, small helicopters do not normally use a runway. Helicopters are permitted to also fly direct to their touch down point as well as make approaches and departures directly from taxiways, ramps, or parking areas. Helicopters may operate from a designated specific helicopter landing area.

The tower is responsible for separating them from other traffic. The helicopter can fly a much closer pattern than other aircraft, and may stay on the other side of the runway from the typical pattern.

Helicopters may also operate straight in/out of the landing area, depending on wind and traffic.

A surface level heliport shall be provided with at least one FATO.
A FATO is an area over which a helicopter completes the approach manoeuvre to a hover or a landing, or commences any movement for the take-off manoeuvre.



Helicopters can also operate similarly to fixed-wing aircraft, taking off and landing using a runway, and following taxiways.

3.3. Ground operation

Air taxi is the preferred method for helicopter ground movements on airports provided ground operations and conditions permit.

Unless otherwise requested or instructed, pilots are expected to remain below 100 feet AGL.

The pilot is solely responsible for selecting a safe airspeed for the altitude/operation being conducted. Use of air taxi minimize downwash effect and expedite movement from one point to another.

Wheeled helicopters may taxi on the ground like aircraft.
Helicopters may either hoover taxi, where they fly in ground effect (below 25ft) at low speed.

Some airports may have marked spots on the taxiways or non-movement areas for helicopter operations.

Helicopters may be instructed to taxi towards a "non-movement" area for take-off that is not specifically designated for that activity, which could be a ramp at the airport or a location off-airport.
This will be up to the tower to provide clearance and the pilot to execute safely.

Note: ATC shall know if the helicopter is wheeled or not, in order to act accordingly.

3.4. Holding operation

The main management fault for an IVAO air traffic controller is to manage helicopter holding operation like a fixed wing aircraft !

If a helicopter pilot needs to cross a ‘controlled’ zone around an airport, it may be necessary for air traffic control to hold the helicopter in one place until it is safe.

ATC can ask that they stay over industrial areas, highways or over water, so as to minimize the impact to residential areas. We also ask that they limit the amount of time they hover and stay in a given area.

4. Noise

Helicopter operators will normally include advice on how to avoid noise sensitive areas by following unpopulated routes (for example, waterways) or areas with high ambient noise levels such as highways.

They usually advise that above residential areas, if possible, operators should:

- maintain a hover/circling altitude of at least 2000 ft (610 m),
- reduce speed
- observe low noise speed/descent settings
- avoid sharp manoeuvres
- vary routes
- use high take-off/descent profiles.