



Safety Instructions for Ground Personnel in the Presence of a Helicopter - Intended for ground personnel and emergency services

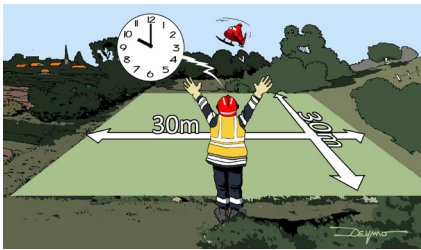
The presence of helicopters at a landing site requires increased vigilance to ensure personnel and operations site safety.

1 Radio procedure and individual protection



- Continuously monitor the air-to-ground frequency if available before the helicopter arrives at the landing site. If possible, never interrupt radio communication with the helicopter without prior agreement.
- Protect your eyes against flying debris and dust.
- Protect your ears from noise.
- Be visible, wear a safety jacket.
- Do not smoke (or use naked flames) near the helicopter.

2 Selecting the landing zone



- Minimal landing zone dimensions to be considered by Ground Personnel:
30 x 30 metres.
- Avoid dusty, sandy, loose or stony ground.
- Prefer hard and relatively flat surfaces, with ground obstacles less than 30cm in height.
- On the selected landing zone and its surroundings, make sure that no objects can become airborne, snapped or broken (for instance, partially opened or improperly locked windows and awnings).
- If possible, select an obstacle-free zone with upwind approach and landing axis.



Night operations:

- Comply with day operational instructions.
- Minimal landing zone dimensions to be considered by Ground Personnel:
100 x 50 metres.
- Do not direct light at the helicopter during approach and landing and take-off!
- At night the visual and sound perceptions are different, do not be surprised.

3 Helicopter approaching

- Personnel signalling the helicopter should wear personal safety equipment (high visibility jacket, helmet, gloves, glasses, etc.).
- An authorised person should if available be in contact with the helicopter (VHF, FM, GSM network, etc.) during the approach.
- This person should stand downwind with arms in the air and keep most of the landing zone clear in front of him or her.
- Signal their position to the pilot with gestures (time-dial system).
- Signal the pilot of any dangers near the landing zone (cables, antennas, other aircraft, drones, paragliders, etc.).
- During final approach, kneel on one knee, keep arms up in V-shape, do not move and keep permanent visual contact with the pilot.
- No other person, object or vehicle is to be in the landing zone!



4 Helicopter landing



Keep the landing zone clear!

Helicopter downwash can lift up and blow a surprising variety of objects! Downwash can propel gravel and stones over 40 metres: Do not park any vehicle in the helicopter approach trajectory or near the touch down point.

- Make sure that no object can be propelled by the downwash in and near the landing zone.
- Personnel located near the landing zone should button shirts, lock pockets and avoid wearing loose pieces of cloth such as caps, scarfs, etc.
- Use protective eyewear against downwash-related projections.

5 Operating near the helicopter

- Rotors turning:
 - During hoisting operations, wait for the skids or the cable to touch the ground to discharge static electricity accumulated by the aircraft.
 - Wait for the explicit **CLEARANCE** by the mechanic or the pilot (thumb up) before approaching the helicopter!
- In all circumstances, always approach the helicopter facing the **FRONT** side in order to:
 - **Keep the crew in sight at all times;**
 - Approach the helicopter rotors only when cleared by the crew;
 - Following landing, approximately 2 minutes are necessary for the rotors to come to a complete stop. Until that occurs, staff and vehicles should remain at a safe distance.
 - **At all times, please follow the crew's instructions.**
 - Never approach a helicopter from behind – **DANGER ZONE**
 - In that zone, the crew cannot see you (and you cannot see them).



Bend down and do not run when approaching the helicopter!
If you carry long objects, always carry them horizontally to avoid hitting the blades.

Beware of tilts and banks as they reduce ground-to-blade distances!
Always approach the helicopter downstream.



Never throw anything at or near the helicopter!

Even innocent objects can become lethal projectiles.

Above all, it is important to **avoid any rush.**

When the aircraft is leaving the zone, do not move until the take-off has been completed (unless otherwise instructed).

6 Start-up phase

- Stay in the pilot's line of sight to signal them in case of an emergency.
- Keep an eye on the surroundings of the landing zone.
- All movements of personnel and vehicles are forbidden until the helicopter has taken off.