

# Helicopter Safety

PRE EMPLOYMENT TRAINING FOR:



**B L U E C O L L A R G R O U P**

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# The Pilot Is In-Charge

- Your pilot is the authority on safety procedures regarding helicopter travel.
- Listen to the pilot's directions.
- If your pilot says it is time to go - stop what you are doing and head to the landing site.



# Helicopter Safety Rules

- **NEVER** throw any object from the helicopter. Secure all baggage .
- No movement inside aircraft once seated.
- Leave doors closed. Wait for “all clear” before removing seatbelt and unloading.
- Re-buckle seatbelts and hang up headsets before departing helicopter.
- **NEVER** bring bear spray or aerosols into the cab of the helicopter, secure and store in cargo hold.



# Passenger Responsibilities

- These guidelines must be followed any time you are in a helicopter:
  - Follow the pilot's instructions
  - Keep clear of flight controls – knobs and handles
  - Secure any loose items (don't set things on the floor of the helicopter unsecured)
  - Once seated, do not move around (unless directed by the pilot)
  - Ensure your seatbelt is securely fastened, unbuckle it only when directed to do so



# Communications Responsibilities

- As a passenger, you may have communications through a headset and microphone connected to the intercommunications system
- Even if not connected to ICS you should be part of the team by being observant and relaying information that is important.



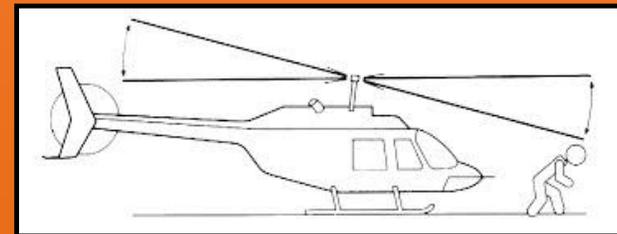
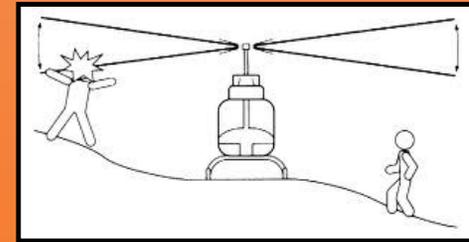
# Working Around Helicopters

- Stay clear of the landing area during approach and departure of aircraft
- Always remain in view of the pilot – maintain eye contact with the pilot
- Secure all boxes/objects, both empty and full, outside of the landing zone.
- Remove all debris and other objects to outside of the landing zone and securely tie down
- Secure personal equipment. No empty water jugs, loose hats, glasses or clothing. Close day bags and securely store flagging tape.



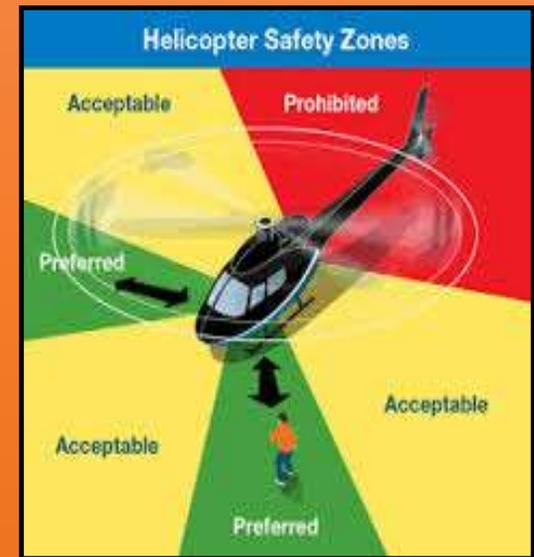
# Working Around Helicopters (Continued)

- **ALWAYS** approach/depart from the front and down slope (lower side) of the aircraft!
- **NEVER** approach the tail section!
- Keep your head down, approach/depart from a crouched position



# Working Around Helicopters (Continued)

- Carry tools and long objects parallel to the ground and never above your head
- Do not run
- Ensure your hat/helmet is secured to your body
- Protect your eyes from rocks and debris that may fly toward you



# Entry and Exit

- Prior to boarding or exiting, ensure you have the OK from the pilot. Always use controlled deliberate movements near to and on helicopters.
- One person will open and hold the door (so it doesn't fly open) until all people are seated. This person will enter and firmly close AND secure the door.
- Fasten your seatbelt and put on the headset.
- Double check that the door is closed properly and signal the pilot that you are ready.
- Exiting is the same but in reverse.
  - Make sure the seatbelts are done up.
  - Headsets are returned to their original position.
  - The door is secured prior to letting the pilot know you are all clear.



# The PERFECT landing site or zone

Ideally a landing site or zone will be:

- At LEAST 50m x 50m.
- Clear of debris including gear, garbage, boxes, tarps, brush/branches, people, and vehicles
- Marked with paint, flagging (if allowed), or landmarks
- Clear from ground to sky without branches or forest canopy
- Has someone in charge of the zone, communicating with the pilot by radio
  - Any materials must be stored outside of the 50m x 50m landing site and secured with tie downs and multiple heavy logs.
  - If terrain or helipad does not permit materials to be outside of the landing site, secure with more tie downs and logs so there is **NO CHANCE** material will be blown loose.
  - The location of the material **MUST** be communicated to the pilot.



# What Does 50m x 50m Look Like?

- 50 m is the length of an Olympic sized swimming pool.
- 50 m is ~**7** Super Duty F350 pick-ups long, and ~**19** wide.
- Try pacing out 50m in camp. Your plot cord has a 2 m marker on it. See how many steps it takes to walk 2 m, and then take that number of steps 25 times.
- OR measure what taking a 1 meter step feels like and then do that 50 times.



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Photo By: Molly Florian



Photo By: Heather Chartrand



# Garbage Transport



Close Lid =



When transporting garbage in the helicopter, all boxes will be folded or accorded and folded inside another closed box. A box of folded boxes will not be left unsecured. All plastic and wrappers will be tightly secured, sealed and tied if necessary.

When transporting garbage in a cargo net, boxes will lay flat on the net and be secured and ready to sling.



# Garbage Left at the Block

Remember to weight down garbage that is being left on the block, so there is NO chance of anything being blown away! Always use more than you think you need. Boxes will be stacked in a neat, flattened pile with a sufficient number of logs or other heavy material extending to the edge, or preferably over the edge, to weigh it down.



# Tarps



Tarps can easily be swept up by the helicopter and need to be securely weighted down. Always add more weight than you think you need!



The “roll and rope” technique is an excellent way to transport tarps when travelling by helicopter. Less surface area means less chance of being swept up.



# Transporting Gear



It is important to transport gear in a way that there is NO chance of anything being blown away. This is a recommended example of how to achieve this:

1. Empty your bags. Remove loose flagging tape, plastic wrappers, old gloves, etc.
2. Pack outside compartment into the back-bag compartment.
3. Pack that, along with the straps, into the opposite outside compartment to form a ball.
4. Wrap silvacool bag around planting bag ball.
5. Place shovel inside and pull draw string to close. Wrap draw string around shovel handle to secure, if necessary.

**Close day bag, put away loose clothing, hats, coffee tumblers, water bottles or glasses. Store ALL flagging tape securely.**

**Make sure all of your personal gear is heavily secured as the helicopter approaches. Loose objects can easily be swept up by the rotor wash and damage the helicopter.**



# Rotor Wash

- Rotor wash can be extreme!
- Ensure the landing site is clear of debris or materials that are not weighed down. Safe Operating Practice is to securely store any materials outside of the **50m x 50m** landing site.
- *Protect eyes from gravel, dirt, and debris. Rotor wash can even take your breath away!*



# Pre-Flight Safety Briefing

- All passengers must be given a pre-flight safety briefing by the helicopter pilot the first day flying on each project.
- Make sure you understand and if you don't know, **ASK!**
- The briefing will include instructions relating to:
  - The pilot
  - The aircraft
  - The area of travel
  - Effect of your movement on the aircraft
  - Emergency procedures



# Pre-Trip Planning

- Weather - plan for all types of it! Ensure you have appropriate clothing to stay dry and warm and make sure you have a hat, sun block, and enough food/water.
- Ask your supervisor what you will do in an emergency; ask them about survival kits and who is responsible for bringing them along.
- **Check in - know the procedure!**  
**Who knows when you are coming back? Will they know what to do if you don't arrive on time?**



## Pre-Trip Planning (Continued)

- **Know** - where you are going! What is your destination, where did you start? Write down the coordinates.
- **Know** - on which frequency the pilot will be communicating. Test it before you take off.
- **Know** - what the Emergency Response Procedures/Plans are; ensure they are specific to the trip. Where is the first aid equipment, who has the survival kit?
- Discuss with your supervisor what the **PLAN** is, where it is written down, what gear you will need, how much it can weigh, how long you will be gone for, and what you should generally expect.

This information should be covered by your crewboss during the morning tailgate meeting.



# Survival Kit Contents

- Tarp
- Rope
- Survival blanket
- Foldable saw
- Flashlight
- Matches and fire starter
- Survival candles
- Water purification tablets
- Food (meal replacement bars, chocolate bars, and candy)
- Playing Cards

The survival kit, crew boss essentials kit, and radio should always be left with the last group, in case the pilot chooses not to fly another trip.



## Left on the Site

- If a helicopter cannot fly due to weather or equipment problems, the crew will need to walk out or spend the night.
- Refer to the emergency plan and follow it – communicate with a radio.
- Spending the night – follow the emergency plan with the survival kit and communicate with radio.
- Walking out – follow the emergency plan with planned routes indicating departure time and expected arrival time.



# Cargo Loading

- Only **TRAINED** and **DESIGNATED** personnel will load cargo.
- This person will know the hand signals and be communicating with the pilot by radio.
- Slings will be picked up/dropped off outside of the 50mx50m landing zone.



Helicopter incidents can be dangerous, costly, and may impact daily planning. To mitigate the occurrence of incidents, it is important to be prepared and knowledgeable of safe practices for working around helicopters. It is your role to ensure you are comfortable with the training you have received, to ask questions if you are unsure, and to follow the safe operating procedures on a daily basis.

**This will help lead to a safe and incident free season!**

