

The School For
Mountain Leadership

HELICOPTER RESCUE TRAINING HANDOUT No 1 : PERSONNEL HOISTING

*This training handout may be freely reproduced
and distributed in an unaltered form.*

NEED MORE INFO?

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This training handout is an aide-memoire for students who have completed the appropriate training. Do NOT attempt these techniques without proper training – getting it wrong can be lethal!

One of the main attractions of using helicopters as a rescue tool is their ability to deliver a rescuer to almost anywhere. Sometimes this is relatively easily achieved by landing the aircraft. However, the aircraft is often unable to land and rescuers have to be put onto the ground by hoisting (winching) them down out of the aircraft to be retrieved later by the same method.

To do this procedure safely the rescuer must have their equipment correctly configured.

Equipment required:

Per aircraft:

- ✓ 1 x Safety rig for rescuers to clip into.
- ✓ 1 x Safety sling to tie the stretcher in with.

Per rescuer:

- ✓ 1 x Sit or full-body harness rated for rock climbing, rescue or work at height
- ✓ 1 x Helmet rated for rock climbing or work at height
- ✓ 1 x Eye protection suited for a high wind environment
- ✓ 1 x Ear protection
- ✓ 1 x Backpack containing rescue equipment as well as kit to survive, navigate and move.
- ✓ 2 x Cow's tails (dynamic rope preferred)
- ✓ 2 x Twist-lock carabiners (steel preferred)
- ✓ 1 x Sling for backpack
- ✓ 1 x Carabiner for backpack

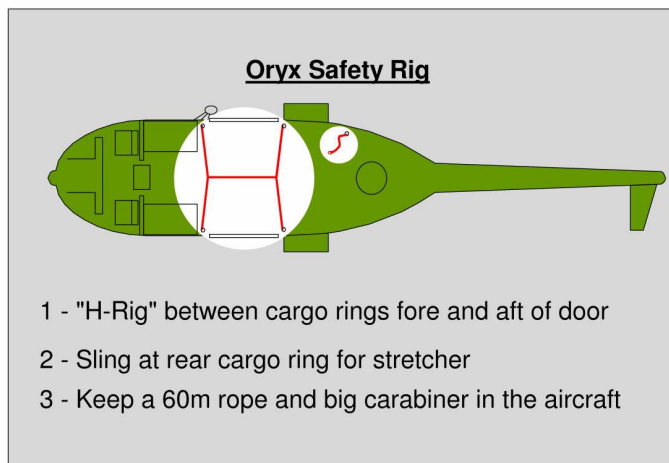
Principles

- ✓ Unless you're on the ground you are always connected to the aircraft, either via the hoist hook, the safety rig or both.
- ✓ Situational awareness is vital. Stay alert and aware of what is happening around you.

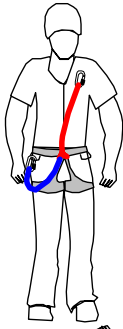
Aircraft safety rig

In this illustration we use a SAAF Oryx simply because this is the most widely used rescue aircraft in South Africa.

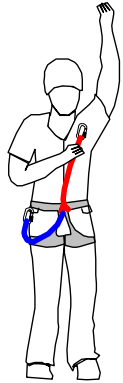
Rescuers will clip in to the horizontal cross-bar of the 'H' rig in the aircraft. The sling in the back of the aircraft is used to secure the stretcher.



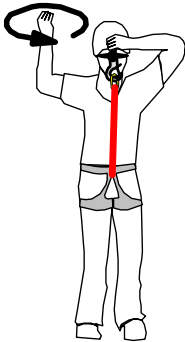
Personal configuration



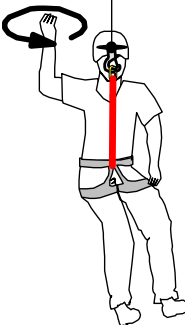
The rescuer configures his equipment with a short sling for hoisting and a long sling for attaching to the safety rig. (Backpack omitted for clarity)



Once the next rescuer to be hoisted is ready he indicates who he is by lifting one arm above his head.



When the rescuer gets the hoist-hook he attaches it to the carabiner on his sling and pulls the assembly tight against his harness, then indicates to the engineer to hoist upward. He maintains the tension on the assembly until he is off the ground



After the initial lift (done using the aircraft) the rescuer inspects his connection and, if satisfied, indicates that the engineer may hoist him up to the aircraft

On reaching the aircraft the rescuer turns his back to the door and sits on the floor. He passes his backpack in then connects his personal safety to the safety rig before unclipping from the hoist hook from his harness and moving away from the door.

Please contact us at the above addresses for further information.
