Kiteboarding Rescue Procedures

Kiteboarding is a growing sport that is becoming more popular than windsurfing. Rescue of injured or incapacitated kiteboarders comes with many challenges; however, with proper training and practice, a rescue team can maintain positive control of the situation and facilitate an effective rescue.

October 27, 2009, Tofino, BC

Canadian Coast Guard crew was tasked to assist a kite boarder in difficulty in the surf zone off Tofino. The crew accidentally entangled their motors in the kite lines and lost propulsion and steerage. The vessel ended up aground and all persons were luckily unharmed.
Self-rescue

All kiteboarders are taught self-rescue as part of basic training. In most situations a kiteboarder will be able to retrieve and stow the kite’s lines, position himself close to the kite and await recovery. Kiteboarders are also taught to drag themselves to shore using their kite. Only if the kiteboarder is seriously injured or incapacitated will a rescue team need to intervene.

Kiteboarding Equipment

It is important to understand the equipment involved. This includes a kite, lines, a control bar, a harness and a board.

1. The Kite

The kite is made of ripstop polyester material and holds its shape thanks to an inflatable leading edge and struts. A kite generally has four lines connecting it to the control bar.

2. The Lines

Lines are made of Spectra or Dyneema (ultra-high molecular weight polyethylene) which is 15 times stronger than steel. Kite lines typically have a breaking strength of 600lb, are very thin, are roughly 25 meters long (80 feet) and float.

DANGER: Because the lines float and have a high breaking strength, they present a clear fouling danger to propellers and jets (see the Tofino incident on page 1).
DANGER: Because lines are thin and have a high breaking strength, do not attempt to control the kite or the lines by wrapping them around your hand – there is a high danger of cuts.

3. The Bar

The control bar has a central main line that connects to the front kite lines; and two lateral lines that connect to the rear kite lines. The control bar is attached to the kiteboarder’s harness with the chicken loop. Additionally, a safety leash generally connects one of the ends of the control bar to a ring on the side of the harness.

Both the chicken loop and the safety leash have quick release mechanisms allowing the kiteboarder or a rescuer to disconnect the bar and lines from the kiteboarder. See page 6 for operation of these quick releases.

The handles at each end of the control bar include “clips” allowing the kiteboarder to rapidly stow the lines by winding them around the bar.
4. **The Harness**

The harness is typically strapped to the kiteboarder with a Velcro waist strap. The spreader bar with the harness hook is attached onto the harness with two metal buckles which often have safety clips to avoid unintentional detachment.

Harnesses generally have a grab loop attached to the back allowing for easy retrieval of a boarder from the water.
5. The Board

Kite boards are typically not attached to the kiteboarder: the boarder’s feet simply slip into straps on the board, and there is no tether line attaching the kiteboarder to the board.
Approaching and Recovering a Kiteboarder in Distress

When approaching a kiteboarder it is always important to Stop, Assess and Plan (SAP). Kiteboarding takes place in windy environments, possibly in shallow water and possibly close to shore. Do not become a part of the incident.

1. **Upwind Approach**

Contrary to most rescue approaches, kiteboarders need to be approached from upwind since the kite, lines and board will be downwind of the kiteboarder.

2. **Depowering the Kite**

The kiteboarder will generally have disconnected the control bar’s chicken loop from the harness, and in doing so have depowered the kite. If the kiteboarder is unconscious or incapacitated and the control bar is still attached to the harness, it can generally be removed from the harness hook simply by pulling it out of the hook on the harness.

If there is tension on the kite lines and the chicken loop cannot be removed from the harness hook, the kite can be depowered by using the chicken loop quick release. Pull the quick release on the main line by the chicken loop in the direction of the red arrow, this will open the chicken loop.
3. **Releasing the kite**

Kiteboarders will generally want to retrieve their expensive kite and will therefore stay connected to the kite with the safety leash. If the kite is impeding the rescue it can be released by disconnecting the safety leash by pulling the red connector away from the kiteboarder.

4. **Removing the harness**

It is often easier to recover the kiteboarder without removing the harness, by using the grab loop on the back. If the harness must be removed: disengage any safety clips that might prevent the opening of the main spreader bar buckles. Open one of the spreader bar buckles. Open the Velcro waist strap.
5. **Retrieving the kite**

If the kite needs retrieving, start upwind and grab the control bar. Staying close to the water, wind the lines around the clips at both ends of the bar.

When the lines are fully stowed, approach the kite mid-span and grab it so the leading edge is facing up (see picture on the next page). Locate the deflation valves – typically on the leading edge close to the mid-span, and possibly on each strut. Deflate the kite and immediately fold it to avoid fouling propellers or jets.
With thanks to the members of Squamish Wind Sports and Philippe Cabanne of AirTime Board Sports for their input. Thanks to KiteboardingEvolution.com for the diagrams.

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