

Adventure Activities Licensing Service

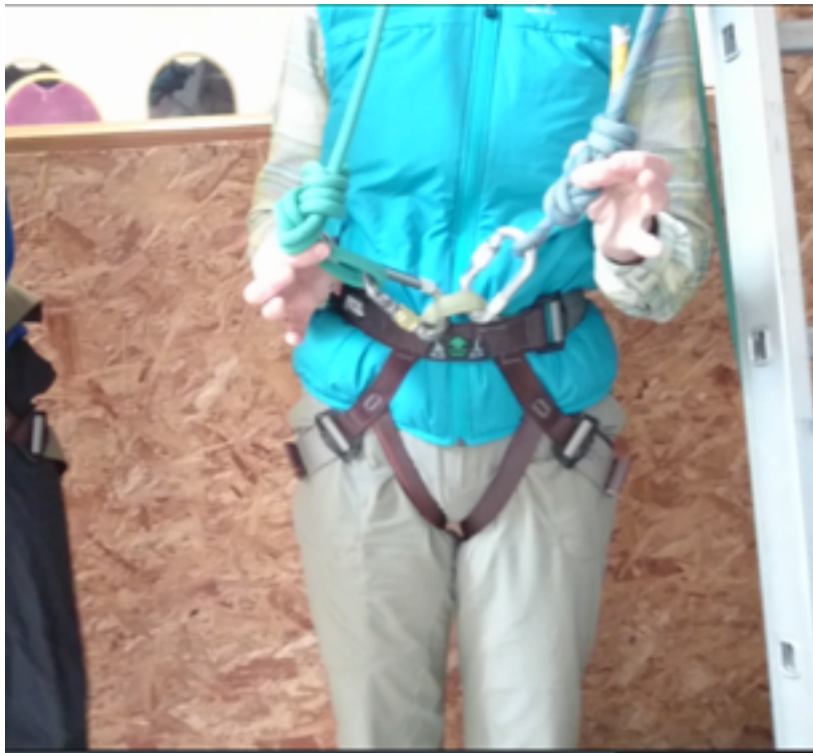
Info Log: August 2016

Mis-clipped karabiners on a zip wire

The Issue

In April 2016 a young girl fell 2m from a short indoor zip wire when the instructor incorrectly clipped the zip wire trolley lanyard onto her harness. The girl was taken to hospital but released later, uninjured. The instructor in charge was very experienced and has led this activity many times before.

Normal operation – the participant is attached to the safety rope (blue rope) at ground level and is belayed up a ladder to a ledge where the participant themselves clips the karabiner on the end of the zip wire trolley lanyard (green rope) into their own harness loop. This is easily checked by the instructor from ground level (as seen in Picture 1 below). Both karabiners are clearly seen attached separately in the harness central loop.



Picture 1 – showing the correct way for the two karabiners to be attached to a harness (reconstruction at ground level).

On the day of the accident – the last child of the group was nervous and so when she was at the top of the ladder and in the starting position she was unable to attach herself to the zip wire trolley lanyard. The instructor locked off the safety rope and climbed up to the child whilst keeping herself safe, to attach the zip wire trolley lanyard to the child's harness. Unfortunately she

clipped the karabiner of the trolley lanyard (green rope) across and behind the safety rope karabiner (blue rope) as shown in Picture 2 below.



Picture 2 – showing the karabiner on the trolley lanyard (green rope) has been clipped across and behind the karabiner on the safety rope (blue rope).

The instructor returned to the ground and the child set off along the zip wire, but fell to the ground a little way from the start as the trolley karabiner slid over the safety rope karabiner, as shown in picture 3 below.



Picture 3 – showing how the trolley lanyard karabiner begins to slip over the safety rope karabiner.

It continued to slip over the knot of the safety rope and thus became ineffective and the child consequently fell.



Picture 4 – showing the trolley lanyard karabiner completely slipped over safety rope karabiner and safety rope knot.

The Outcome

After investigations the Environmental Health Officer considered that this had been a human error accident and that there had been no breach of safety regulations.

The procedure has been modified by using a smaller karabiner on the trolley lanyard and a larger karabiner on the safety rope, to prevent a similar occurrence.