

# NIWAsafe HAZARD ALERT

- Stop** *What am I about to do?*
- Think** *What could go wrong?*
- Act** *How can I do it safely?*

## Secure tool bags when working at height

### Immediate Required Action

- Tool bags must be secured to a suitable rope by a **safety (twist snap lock) carabiner** that is appropriately weight rated. It requires two distinct motions to release the carabiner.

### Incident Details – falling object

Two NIWA technicians were working at height, on a weather station mast carrying out maintenance tasks. One technician was working at the top of the 10m mast using a tool bag, the second technician was working about 3m from the bottom. The tool bag dropped from height after the hook connecting the bag to a rope and pulley became disconnected from the rope. The tool bag, weighing approximately 10kg, hit the technician below as it fell. Although initially stunned by the impact, the technician was able to safely descend the mast. The technician has recovered and returned to work. WorkSafe NZ have been notified.

### What could have happened?

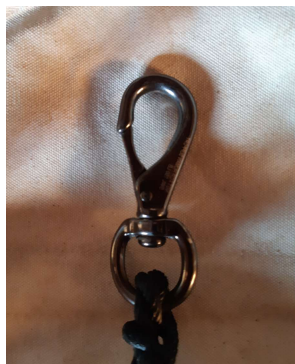
- In slightly different circumstances, a serious injury could have occurred requiring emergency evacuation. A worse injury was prevented by the team following working at height practices and the technician wearing a climbing helmet and being securely attached to the mast with a double lanyard.

### Factors

- Tool bag design – the gate of the clip was able to open unintentionally.
- Procedure – a technician was working in the drop zone of the technician above.

### Recommendations for Improvement

- Completion of immediate action – tool bags secured with safety carabiner must be used.
- A Safe Operating Procedure (SOP) will be developed specifically for working on all weather masts accessed by NIWA staff, including a method for creating a 'drop zone' for falling objects.



Tool bag and spring-loaded clip used



Recommended tool bag