

WILL
YOUR
LAPTOP...

FREEZE TO DEATH?

Maybe you thought our tests weren't so tough. Explorer Gary Rolfe explains what happens to everyday tech when it's cold enough to instantly freeze boiling water

What problems tend to occur with technology when it's very cold?

"Water forming on defrosting equipment is a problem. Starting laptops used to be absolute agony – fear of condensation had me eating my fists. I've had laptops short out and cause irreversible damage if I've dared to turned them on too soon.

"Also, as anyone who's used a mobile phone in the cold will know, LCD screens become sluggish at low temperatures. LCDs are a layer of liquid crystal between two plates of glass. As the displays become

colder, the liquid crystal solidifies and its electrical properties change, causing the display to fade and slow.

"My tent is cramped with laptop taboos. They're all

there: condensation; dog hair; the cold; and copious amounts of food being eaten, with sticky hot drinks on the go. Hermetically sealed laptop keyboards are useful for people like me, who tend to drop what they eat, and dribble what they drink."

Why would you need a laptop out in the Arctic anyway?

"Efficiency is key because every single task is mine to do. I'm always on the look-out for new technology to blend with the ancient skill of driving dogs. I'm very fussy about what I use: the lives of my dogs and myself depend on it.

"For example, a laptop is essential for managing the complicated inventory involved in a polar expedition. And then there's keeping in touch with friends and family via email, updating my web site with photos and accounts of my travels. However, powering up a laptop in these Arctic conditions can be tricky."

What's the biggest test you've put a laptop through?

"Last February my ToughBook CF-18 survived 51° below zero on the Mackenzie River – that's twice as cold as the summit of Everest. It was cold enough for me to throw a mug of boiling water into the air and watch it instantly burst into ice crystals. I spat watching it freeze and fall.

"The laptop fired less than two hours after being warmed up. It may not sound good, but that's impressive."

British-born Gary is 38 and has clocked up over 10,000 miles by dog team in the Arctic.

For more information visit Gary's site, www.garyrolfe.com.

Gary, laptop and dogs on the Mackenzie River, in the Arctic. Here it is cold enough to throw a mug of boiling water into the air and watch it instantly freeze.

Gary uses his laptop to work out expedition logistics, download pictures from his camera, and to keep in touch with the outside world.



Picture courtesy of garyrolfe.com