InfoLog Entry: Reverse polarity in compasses!

June 2013.

The issue:

There have been a number of recent, well verified reports of compasses reversing their polarity when kept next to mobile 'smart' phones. That is, the 'north' end of the compass will point south. Yeh, really! This seems to be a new phenomena and its extent is still, we believe, being explored. See for example Nigel Williams article in *The Professional Mountaineer*, Issue 1 March 2013. The result for the unwary could be disastrous.

The outcome.

- Check which devices *you* carry have a significant effect on the needle of *your* compass: there is still some ambiguity about exactly which devices will have this effect. Transceivers, digital cameras, GPS, etc?
- 2. Keep your compass separate from these devices. This is likely to be counter-intuitive since the top flap of your rucksack or the inside pocket of your jacket may seem to be the sensible place to carry both.
- 3. Follow basic map and compass teaching: estimate roughly what direction you expect to walk in after taking a bearing. Then check that this corresponds to what taking the bearing actually suggests. Finally make sure the *ground* (as you see it or feel it underfoot) corresponds to what you expected from the map. Is it going up, down, sloping left-to-right or right-to-left etc as you predicted?