# USING YOUR SATNAV

*What the manufacturers don't tell you.*

Because on so many occasions my life has depended on this technology I have asked all of the specialists who I have met how to get the best out of my unit and this is their combined expert advice.

### Before you set off

- Make sure you have read **How to Hold a Satnav** (pp. 284–5).
- If you have moved regions verify you are using the correct map, map datum and coordinate/grid reference system.
- Mount on a shoulder strap according to aerial type (see p. 284).
- Switch on your receiver and leave it somewhere with a clear all-round view of the sky (the roof of your car is a good spot), ideally for 15 mins, to get a good fix and collect current almanac data for the entire constellation – which will give you better accuracy for 4 to 6 hours. With predictive ephemeris (Hotfix) the information gathered can be useful for up to several days, which greatly reduces acquisition times.
- Check the stated battery level at the outside temperature – warm cars and jackets can lead to a false reading suggesting more power remaining than there actually is!
- Conserve power – if you don't need the backlight turn it off, the sound too.
- Clear track log and journey statistics if your unit has not already auto-cleared them.
- Calibrate the barometric altimeter (if fitted).
- Depending on circumstances, calibrate the compass (see p. 299).
- Create a waypoint to mark your start.

### On your journey

- Give your waypoints simple names so you can both quickly and easily identify them. You can also sort them by the date they were created or edited.
- Keep your antenna dry – a film of water can interfere with satellite reception.
- If navigating in difficult terrain, such as a narrow mountain ridge, set your track recording interval to fine.
- For critical waypoints use the averaging function on your receiver (see p. 316).
- Shield the unit if you suspect multipathing.
- Set proximity alarms before you depart and at a minimum of 10 m if you are going to use them for critical areas.
- Satellites with a D in the bar are SBAS-enabled and therefore provide better accuracy – you need to have enabled your WAAS/EGNOS for this to work.
- If operating in areas of dense foliage such as the jungle, even dense pine forests, fit an external amplified aerial if your receiver accepts one.

### At the end of your journey

- Save and name your track if your receiver does not do this automatically.

## ↘ WARNING

Never use a portable car satnav to navigate outdoors, they are not waterproof, have short battery life and do not show contours.

- Disable the satnav to stop it recording and creating a spike back to your home or where you next turn the unit on.
- MR/SAR members: after an incident, if waypoints were created that may later be needed as evidence give your SD card to the incident commander.
- If you intend to use your receiver again in the next few days leave the batteries in it, as keeping the real-time clock running is helpful to improve acquisition times when predictive ephemeris can be utilised.
- If you will not be using your unit for more than a week, recharge or replace the batteries and do not put them back into the receiver until you next navigate.
- Upload tracks and waypoints to sharing sites for others to benefit.

## ↘ EXPERT TIPS

➔ Print this out and carry it with you at all times. A version of it in PDF is available at my website.

➔ Don't forget your lanyard, lithium batteries or backup navigational tools.