



WORDS & PHOTOS STEVE ROCK

TOURING WITH TECHNOLOGY

For his three-week coast-to-coast tour across France, CTC member **Steve Rock** swapped paper maps for a smartphone, a charger, and apps

According to Memory-Map, it should be off to the left here,' I thought to myself as I pedalled along a sweeping curve on what seemed to be the Ranville bypass in Normandy. After crossing Pegasus Bridge, it seemed appropriate to pay my respects at the 'Cim Brit' marked near the centre of the village. I had followed a road sign for Cimenterie, but now I was wondering where it was. I came to a road junction, and just off to the right was... a cement works.

I was riding coast to coast across France, from Caen to Cannes, to celebrate my imminent 60th birthday, navigating solely by smartphone. I've used Memory-Map on my PC since 2003, printing out audax routes on

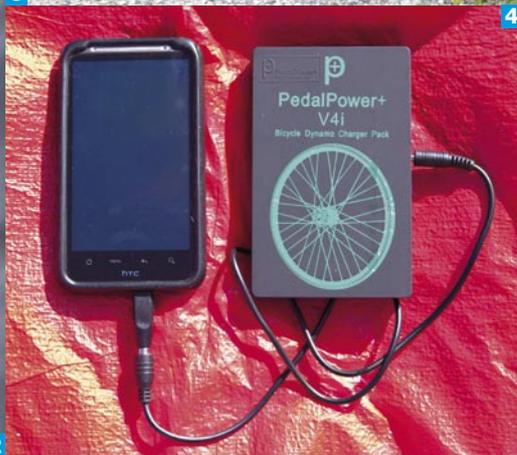
waterproof paper to clip on top of the bar bag. The appearance of an Android app and a special offer on 1:100,000 IGN mapping for the whole of France opened the possibility of paper-free navigation. Could I cross France relying just on my phone?

ON-SCREEN SOLUTIONS

Planning the route was conceptually simple: draw a line on the map from A to B (or C to C in this case), and then tweak it to avoid major roads and massive climbs. The first couple of tweaks were easy enough: visit Chartres to see the cathedral, then cut across and follow the Loire upstream until it got too hilly. Threading the route from the Loire to the Rhône through the lumpy bits between Lyon

and St Étienne was the trickiest part.

After many hours poring over Memory-Map on my desktop PC, I had turned the route into something I was happy with, aided by searches on the camping-municipal.org website and much thumbing of the Guide Officiel. As well as showing total distance, ascent and descent for a planned route, Memory-Map also shows estimated time. This uses a customisable, cycling version of Naismith's Rule (which will be familiar to hikers). I used figures of 20 km/h, 0.5 minutes per 10m ascent and -0.1 minutes per 10m descent. I verified them with some local rides in and out of the Thames Valley, carrying milk bottles full of water in my Ortliebs in lieu of camping kit.



In the photos
1 Col de Rousset in the Vercours
2 Super-i-Cable 'black box'
3 A camping load meant avoiding the biggest hills
4 The V4i battery pack provided backup power
5 Steve at the Gorges de Verdun

Memory-Map was my first choice for planning the route for France, but I also experimented with ViewRanger. This is a GPS app for smartphones that is free to download and can be used with either free open source maps or premium mapping from the usual agencies such as OS. A neat feature of ViewRanger is being able to plan a route online using its website, then download the route by synching the phone with the website. The website will trace the route between two points automatically, which is a lot faster than clicking on every bend in the road. By exporting the GPX file from ViewRanger on the phone and importing it to Memory-Map, I could get the route I had traced on the ViewRanger website as an overlay on Memory-Map's French IGN map on the phone.

DYNAMO POWER

To return home from Cannes, I had booked myself on the weekly sleeper train. So I really did need to get there

“WHEN I DID GO WRONG, THE PHONE GOT ME BACK TO THE ROUTE WITHOUT BACKTRACKING”

on time. Chartres for a rest day made good sense, as it would come after three days cycling. I planned another in the Vercors and one in Dignes-les-Bains.

After some research, I decided to buy a SON28 dynohub for my front wheel and some clever electronics from PedalPower+. These promised to keep my phone charged without recourse to mains electricity. An electronic 'black box' called the Super-i-Cable provides voltage regulation to allow the dynohub output to be fed to the phone, and a limited amount of battery storage. Pedalpower+ recommended that I also buy a V4i battery pack. This is slightly larger than an audio tape cassette (remember them?) and can be charged from the dynohub via the black box or direct from the mains. It allows up to four recharges of a typical mobile phone.

I strapped the black box to my top tube and put the battery pack in a pocket inside my bar bag. The standard Ortlieb mobile phone waterproof bag is designed to fit on top of a bar bag in portrait mode, but does not allow space for a charging cable to be connected. Instead I made a wooden cradle for the phone so that it would fit in an Ortlieb map pocket in landscape mode. With cunning adjustment the charging cable would

get around the Velcro fastening without letting water in.

NAVIGATING THROUGH FRANCE

So how did it go? I arrived in Cannes on schedule, though not without some learning events along the way. I camped where I had planned each night, except for in the wilds of Haute Provence. The municipal campsite was closed up and looked like it had been moribund for a couple of years. Out of water, with no other sites nearby and night falling, I carried on to the next village, where I found an open bar.

After the first Orangina, I asked 'Est-ce qu'il y a un site du camping près d'ici?' As far as I could understand it, the answer from one of the ladies working there was along the lines of 'No, but I have a room you can rent.' This turned out to be a holiday apartment in the basement of the family's wooden farm house. Following the lady and her husband's van to it for 2km from the bar was fairly exhausting, but the apartment was perfect. I had my best night's sleep of the trip.

As Adam Ruck says in his book *France on Two Wheels*, 'it is not the hill climbs that get you, but the wind'. I had imagined that French weather in May would be fairly benign – a few showers early on maybe, but gradually >



› getting sunnier and warmer. Maybe sometimes, but not the same year that southern Britain was experiencing its wettest summer on record.

Another issue, which I should have remembered from rides at home, is that planning a route on Memory-Map underestimates actual distance, because the plotted route leaves out the wiggles of the road. I should have

“THE DYNOHUB AND THE BLACK BOX PROVIDED ENOUGH POWER TO RUN THE PHONE’S GPS”

added 10% to the estimates for wiggles and a further 5% for detours and occasional navigational errors.

Other than that, navigating using a map on the phone was good. I did not take many wrong turnings, though it was usually necessary to stop in shade in order to see the phone's display. When I did go wrong the phone was particularly useful in helping me get back on route without going back to the point of the error. Although IGN's 1:100k mapping shows the main Departmental roads in yellow, it does not distinguish between minor D roads and unclassified roads, some which were quite steep. I learned the hard way that a dashed line on one side of the road does not mean 'unfenced' on IGN but 'unsurfaced'. One rough section broke a spoke; another had me walking for a mile.

RECHARGING MY BATTERIES

Using GPS all day meant the phone was out of battery by early afternoon. The dynohub and the black box generally provided enough power to run the GPS, but not to recharge the battery at the same time. This is where the battery pack came in handy, as it can store enough energy to recharge the phone three or four times. An overnight recharge of the battery pack in a campsite sanitaire's shaver socket every third or fourth night did the necessary. This arrangement was mostly fine for me in France,



but I would be wary of relying on it somewhere more remote.

The Memory-Map app crashed frequently on my phone and did not auto-rotate between portrait and landscape modes, although those might be issues with my particular phone (HTC Desire HD). On days when the sun came out, the phone appeared to overheat and shut down when I was using it on top of the bar bag. This has also happened in the UK, although rarely.

I thought the build quality of the Pedalpower+ equipment was poor. The various connector cables provided did not fit well, so frequently the phone or the battery pack were not charging when they should have been. I bought a new connector at a phone shop in Digne-les-Bains, which helped, but this should not have been necessary.

When I got to the Mediterranean, the wind was blowing sea spray right across the coast road, but it didn't dampen my sense of achievement. Around 1,000 miles in three weeks, and not a paper map in sight.

In the photos
6 The DIY cradle was to accommodate the power cable
7 Note the hub's double spade connector

MOBILE COMPUTING

THINGS I DID WITH MY PHONE

- Navigated, mainly with Memory-Map
- Kept in touch via Twitter, Facebook and email
- Stored travel documents, route itinerary and profiles, and notes en route with Evernote
- Checked weather using free apps from La Chaîne Météo and Météo France
- Looked up unfamiliar words using Larousse's dictionary app (£4.99)
- Had the British Red Cross First Aid app just in case (free)
- Listened to music stored on the phone
- Listened to The News Quiz online
- Checked things on websites
- Took photos
- Made a few phone calls

MEMORY-MAP OR VIEWRANGER?

Memory-Map advantages:

- Plan on PC, with large screen
- Licensed for multiple devices you own (e.g. PC, tablet, phone)
- View profile while planning
- Naismith's Rule calculation

ViewRanger advantages:

- Semi-automated route planning on ViewRanger website
- Can use free open-source mapping
- Off-route alarm
- More stable (on my phone)
- BuddyBeacon allows you to record your route (and post photos and Tweets) on the web as you travel

ONLINE RESOURCES

memory-map.co.uk – Multi-platform digital mapping software

ViewRanger.com – Free to download GPS app for smartphones

camping-municipal.org – French municipal campsites

travellingtwo.com – Publishes the online Bicycle Traveller magazine

nabendynamo.de/english – Makers of SON dynohub

pedalpower.com.au – Official Pedalpower+ site

ffestiniogtravel.com – Experts in railway travel itineraries and tickets

evernote.com – Synchronises between the various phone and PC platforms