

From Pentad to GPS Route

By Ian Riddell

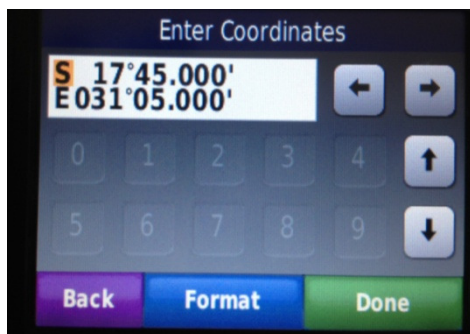
Establishing the whereabouts of the boundaries of the pentad you are birding can be tricky, especially if you are in a fairly featureless area or in woodland or bush. Even with a map in hand this will be difficult in these circumstances but a GPS makes it a simple matter.

Here are instructions for saving a pentad into a GPS as a route – it is a bit of a process but is in some detail for those who don't use their GPS in depth. I have only tried this on a Garmin but the principles may be similar with other makes. With some GPSs it may be possible to import an overlay grid but this is not possible on mine, which is a Nüvi with a preloaded topographical map. Having the map is *really* useful.

The pentad

This example stores pentad **1745_3105** in Harare which covers from roughly Borrowdale shops in the top left corner to the northern part of Haka in the bottom right corner. Remember that a pentad is named after the coordinates of the **top left corner**, thus **17°45'S 31°05'E** are those coordinates. Moving clockwise to the top right corner you remain on the same longitude (north-south) but add 5 minutes to the latitude (east-west) so **17°45'S 31°10'E** is the next point. The bottom right becomes **17°50'S 31°10'E** with 5 minutes added to longitude, and moving 5 minutes west the bottom left is **17°50'S 31°05'E** with 5 minutes *subtracted* from latitude.

Adding waypoints



Step 1. First you will need to save the 4 corners of the pentad as waypoints. Press **Where To?** and scroll down to **Coordinates**; press **Coordinates**. This will show your present location if your GPS is 'live' and invite you to **Enter Coordinates**. It will also show **Format** at the bottom of the screen and either **hddd°mm.mmm** or **hddd°mm'ss.s"** will do. The first is degrees and decimal minutes and the second degrees, minutes & seconds. Since pentads are named in degrees and minutes, I will use the first format.

Step 2. **Enter Coordinates** as **S 17°45.000'** and **E 031°05.000'** then press **Done** and **Save**. The next screen asks you to enter a name – best to use the coordinates, thus 1745-3105. The point will be saved to **Favourites**. Press **Back** once to return to **Enter Coordinates** and enter **S 17°45.000'** and **E 031°10.000'** and repeat the steps above; repeat all for **S 17°50.000' – E 031°10.000'** and **S 17°50.000' – E 031°05.000'**. You now have saved 4 points and named them accordingly.

Tip! To manage Favourites I have created a new folder called **Pentads** to store these. Press **Help**, **Favourites**, **Organising Your Favourites** for instructions on creating new folders.

Create a route

Step 3. Press **Where To?** and scroll to **Custom Routes**. Press and at the bottom of the screen press **New**.

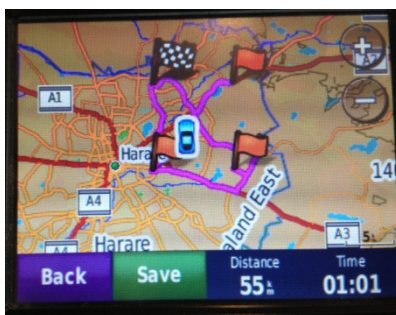
⚠ Note that some GPSs limit the number of routes you can store – mine does 10 – so you may have to delete a stored route to make room. If you already have 10 the **New** button does not appear.

If it does the next screen asks for **Add New Start Point**. Press and go to **Favourites**; if you have stored your waypoints in a separate folder in Favourites press on that. Press **1745-3105** and **Select**; you are returned to the route screen and press **Add New End Point**. Repeat the above with **1745-3105** as your end point.

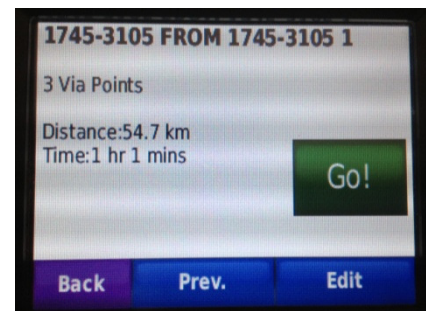
Your route screen will show these two with a **green** symbol with a +. Press the symbol, move to your waypoints and select **1745-3110**, press **Select**. The point is added; then press the **blue** ↓ arrow to move to the green symbol which places the next point below this and add **1750-3110**, then repeat adding **1750-3105**. Your route should follow the sequence around the square you can scroll up and down to check this. Press **Next**. NB. Don't worry about the pic here – I did the route anticlockwise!



Get the route in order

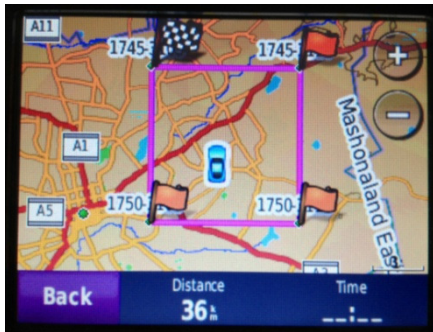


Step 4. Your route is calculated and you will be horrified to see that your highlighted route zigzags via roads to join 4 flags instead of showing a square pentad– don't panic just yet!



Press **Save**. 1745-3105 will show as a route – press it and your route screen appears as **1745-3105 FROM 1745-3105**. Press **Edit** and scroll down to **Recalculate** – on the **Route Preference** screen select **Off Road** and **OK**. Press **Back** then **Prev**.

The pentad route now shows as a square!



Use the route

Step 5. Press **Where To?** and go down to **Custom Routes**. Press **1745-3105** and **Go!** **Would you like to navigate to the start of the Custom Route?** will appear – press **No**. If you are already in the square your position will show and as you move around you will see the boundary in relation to your position. You are set to go Atlassing without worrying about being out of the area – zoom in or out as suits – but zoom in when you approach a boundary and you will know when you exit the pentad.

Happy Atlassing!

Keep track of what's happening on the Sabap2 Zimbabwe Facebook page and write to Sabap2zim@gmail.com