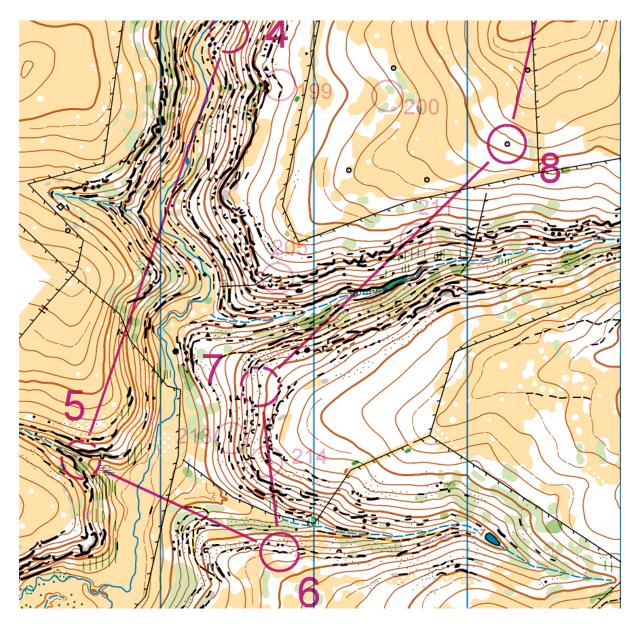
Setters' Corner

OST 5: Course 3 - leg 6 to 7 (same leg featured in Courses 1 & 2)

What was behind your thinking in setting the leg?

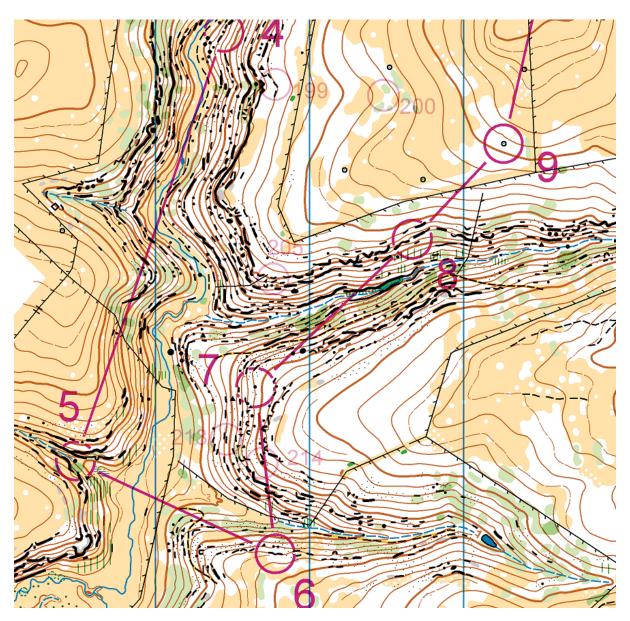
While planning Course 3 for the OST event, we wanted to include physically challenging legs without all the distance/climbs that Courses 1 & 2 must endure. In the process of planning Course 3, leg 6-7 went through the most development, undergoing three stages of evolution to reach its final form.

The original plan was to lead competitors to the western edge of the spur between the two gullies, to control 7 as shown below:



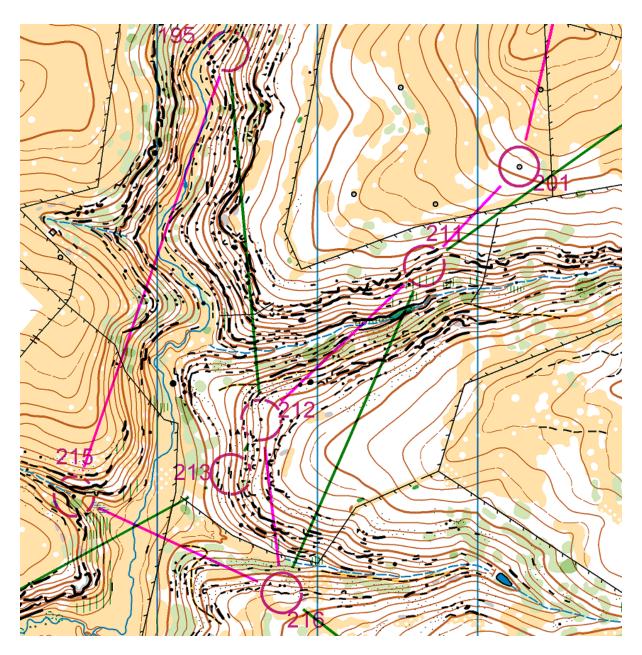
The leg as originally planned, with control 7 in a different place

Our controller, Sue Hancock, pointed out that the leg from 7-8 in that scenario may as well have another control added to force competitors to somehow negotiate the deep gully rather than avoid it, so we added in another control, shown as 8 below:



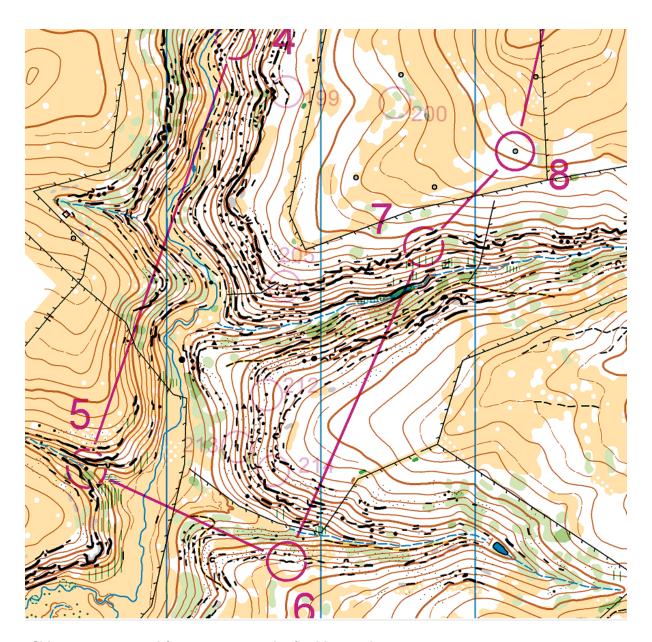
## New control 8 added

On further reflection, Sue pointed out a clash between Courses 1 & 3, whereby entrants in these two courses would approach SI box 212 (control 7 on map above) from two different directions:



Course 3 in pink, course 1 in green, converging from opposite directions at SI box 212

We decided the easiest fix for that potential problem was to remove 212 from course 3 altogether, which left us with an interesting, though unplanned, route choice conundrum in the new leg 6-7:

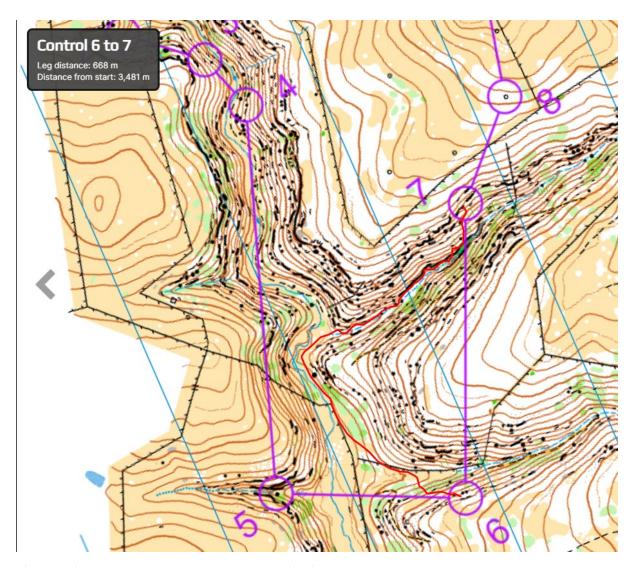


SI box 212 removed from course 3 - the final leg evolves

Now competitors had more options to get from 6-7:

- Go west: drop down northwest to the main gully, skirt the end of the spur, then either up the northern gully or up the end of the northern spur to reach control 7
- Go direct: drop into the southern gully, climb over the spur along a bearing or fence line and drop into the northern gully, then climb up to control 7
- Go east: skirt around the heads of both gullies to avoid steep climbs
- Go mad: combinations of the above

Livelox reveals a subset of competitors' choices on Course 3. Most avoided climbing as much as possible and chose to drop out to the west, skirt around the base of the spur, then follow up the northern gully with a final climb to the control, as demonstrated by the route choice shown in red here:



Second fastest split time route on the leg for Course 3: 11:46

At least a couple of competitors on Course 3 chose either a direct over-the-spur, or eastern avoid-the-gullies route, but their split times rank near the longer end of the leg results. No doubt this was due to lingering at the water drop at control 6 after dibbing, before pressing on with their route choice.

We were so pleased with this leg that we included it on Courses 1 & 2 as well. An analysis of Livelox shows that the fastest competitors on Course 1 chose the direct over-the-spur route, with the very fastest coming in at 7:59 for the leg. Undoubtedly the direct route choice was the shortest distance, but tackling the extra climb is surely a costly decision if a body isn't feeling up to it late in the course.

As setters we were surprised and delighted to learn that despite careful route planning, a challenging leg can crop up serendipitously through a process of addressing other problems. But all this may be academic—it won't be long before we have AI designing courses for us.