Planning the Orange Course

Introduction
This article assumes that you are familiar with the contents of the articles on planning White and Yellow courses.

The aim of the Planner should be to provide courses that show a clear progression in the use of orienteering skills, and we are now on to 'Technical Difficulty 3'. This level is experienced by most orienteers as the Orange course; JM3/JW3 courses at Regional Events; and M12A/W12A, M14B/W14B at National Events. All of these are in effect the same course, so for the purposes of this article I shall refer to them as the Orange course.

Note: 'Technical Difficulty 3' is also the level of skill required to complete the Red course, and the M/W21 Novice courses at Regional / National Events. The same principles apply when planning these courses, just over longer distances.

What are we trying to test for the Orange course competitors?
Many Orange course competitors will be youngsters who have mastered the basic skills of the Yellow course so are already able to follow line features such as paths, ditches, walls, and distinct vegetation boundaries. They should also be used to leaving paths to visit controls close to them. Combined with the fact that they will probably have encountered taped routes when there haven't been sufficient line features around they should by now be used to going through the forest for short distances, all be it with something to guide them.

The next step is to provide more of a challenge - requiring competitors to venture into the woods unguided, but with something to rescue them at the other end so that they are not left wandering aimlessly if they make a mistake. Hence the Orange course introduces the basic use of a compass to allow short cuts through the forest between line features, but with nothing on the ground to follow. However the competitors are still likely to be quite small - M/W12A competitors will still only be ten at the start of their first year - so keep them out of 'unfriendly' areas of brashings or brambles.

The Orange course is also often the starting point for adult beginners or family groups. They may have done some walking with an Ordnance Survey map, and will probably have more confidence about heading into the woods than children. However their lack of 'orienteering' skills can lead to over-confidence so again we want to try and stop them getting too lost.

What skills are we trying to test?
The technical difficulty of a course is based on the skills needed to successfully complete it. For the Orange course these are:

- Corner cutting.
- Basic use of a compass to allow short cuts through the terrain between two line features.
- Navigating a short leg on a rough compass bearing to a control on or in front of a collecting feature.
- Simplification of legs with several Decision Points.
- Making simple route choice decisions.

It must be possible to complete the course with just the skills learnt on the White and Yellow courses and those above. If not, then the course is too hard and needs re-planning.

In particular, those progressing from a Yellow course will not yet have needed to interpret contours. These are introduced at this stage, but recognition of contour features is begun by using them as control sites. They are not yet required for navigation between controls - a skill which is introduced at the next level.

A good Orange course will test all of the skills listed above. This can be achieved by varying the legs and using the terrain to test perhaps one or two skills on each leg. The challenge should reward those who have mastered the skills, whilst not penalising too heavily those who still rely mainly on their Yellow course skills to complete the course.

What should the Orange course not be?
- The Yellow course with just some controls missing - although in some cases Yellow controls can be used to provide good legs.
- A Yellow standard course with control features just further off the paths.

Furthermore, if the majority of the legs are only of Yellow standard, with only one or two of Orange, then it is not a good course as it is unlikely to be testing all the skills identified. Making the Orange course too easy gives a false sense of achievement. A real problem if the competitor then experiences a correctly planned course in more testing terrain.

How long should the course be?
Guidance on the Orange course length is given in two ways. As a ratio of 0.25 of an imaginary M21L course, or within the range 2.5 to 3.5 km. With most M21L courses being somewhere between 10.0 km and 14.0 km the result should be the same.

For the Orange course, like the White and Yellow, it is important that the course is of the correct Technical Difficulty rather than exactly matching the calculated length ratio. However, although a small variation is acceptable it should always be within the length range stated.

Planning the course
The basic shape of the course will normally follow distinct line features such as tracks, paths, fences, walls, rivers, large ditches and very distinct vegetation boundaries (e.g. forest / open land), so that relocation in the event of a mistake is relatively easy. Controls should either be on the line features, or on prominent point or contour features which can easily be found from an attack point on a line feature close to the control. A route along line features to the attack point should be possible. This will allow the less experienced to navigate much of the course along these features.

Controls should be relatively frequent on the Orange course, although with legs of different lengths to test the different skills. A typical Orange course will have between 10 and 15 controls on it, with legs of between 100m and 400m.

The Start
It is usual to use the same start as that for the White and Yellow courses, so that competitors are able to quickly get their bearings. The Orange course will often start with a quite easy leg or two to give confidence before leading on to plenty of proper Technical Difficulty 3 controls.
Map1: Typical first control on the Orange course. It can be attacked directly, or via control Y1 on the Yellow course.

Map2: Another good first control, this time on a distinct vegetation boundary.

Corner cutting
The simplest thing for Juniors to start to do, particularly in good runnable forest. This gets them off the paths and into the forest with a safe feature to aim at. It allows the less experienced to cut only a small part of the corner, or even stick to the paths entirely, whilst rewarding those with the confidence to take a more direct route.

Map3: A simple leg which sends the competitor through the woods.

Map4: An excellent opportunity to cut the corner when coming off the end of one of the ditches.

Basic use of compass to allow short cuts through the terrain between two line features
This is an extension to the corner cutting concept, and also allows planners to avoid the problem encountered with the Yellow and White courses when there is no line feature connecting two parallel paths. On the Orange course there is no need for tapes. If the terrain is reasonable to cross then a route between two distinct line features tests out the competitor, rewarding those tackling this type of problem quickly and with confidence, but not too difficult for the rest if tackled slowly.

Map5: A corner to cut on this leg, or the alternative of going round the paths.

Map6: A leg offering the choice of a short cut on a rough compass bearing along the planting line or a long track run

Navigate a short leg on a rough compass bearing to a control on or in front of a collecting feature (a collecting feature is a large feature beyond a control which, when reached, confirms to the competitor that he or she has completely passed through an area of ground. A collecting feature is usually a line feature.)

Those progressing from a Yellow course will not yet have encountered the use of a compass for navigating to a control site, and at this stage accurate use of the compass should not be required. Precise distance judgement (i.e. accurate pace counting) should also not be necessary. There should be a distinct attack point (i.e. a point on a line feature close to the control where the competitor can begin their final approach to the control), and the feature on the map should be clear on the ground. e.g. if a path junction is to be used as the attack point there should not be other small paths around that have not been mapped.

The collecting feature should ensure that the time it takes to relocate, and therefore the cost of any error, should be small.

Map7: Using a re-entrant as a control site, with the path below it as a collecting feature

Off-line features from the Yellow course can often be used by having the Orange course leg approaching the control through the forest. The path which the Yellow course follows then provides the required collecting feature.
Simplification of legs with several Decision Points
This should test the ability to simplify the map reading, for example ignoring minor junctions and focusing just on the largest features. Whilst careful map reading will get you there in the end, reading the fine detail over the first part of the leg is not necessary.

Make simple route choice decisions
With longer legs it is acceptable to have perhaps four or five decision points along the route. What we are doing here is to introduce navigational route choice problems - which way shall I go as well as what should I follow? Perhaps give the option of an easy route following paths or a slightly more difficult but shorter route requiring navigation along ditches or cutting through the forest.

The Finish
As for the White and Yellow courses it is important to ensure that the finish is easily located and that there should be no possibility of a competitor being unable to find the finish after they have visited their last control.

Control Codes and Control Descriptions
Hopefully Planners will by now have learnt not to sequence controls on any courses. The next problem encountered is having adjacent controls with similar codes such as 137, 157 and 187, or groups such a 243, 244, 245. This has probably led to more unnecessary disqualifications over the years than anything else. Orienteering is not about tricking the competitor to miss-punch, so please allocate control numbers to controls such that similar / consecutive / easily confused numbers are nowhere near each other.

End result
If your Orange course follows all the principles outlined in this article then you should have some very satisfied customers who will eventually move on to the Light Green course which I will cover in more detail in the next article.

Credits:
Map extracts courtesy of Alison Sloman (Hawkbatch); Mike Elliot (White Downs); Mike Hampton (Hay Wood); Bruce Bryant (Bentley Woods). Planners - Andy Hemsted (British Schools Championships); Ian Ditchfield (National Event 1); Melanie Elkington (West Midlands Schools Championships); Liz Furness (Regional Event & FCC Final).

References:
• Course Planning by Graham Nilsen
• British Orienteering Rules
• British Orienteering Appendix B - Course Planning
all of which can be found on the British Orienteering web site under Events / Regulations.

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