Foot Orienteering - Relay Courses

Relay courses are in two main formats, forest relay and sprint relay. In South Australia the club relays alternate each year between a forest relay and an urban relay which is close to sprint format depending on the location.

Forest relays in general terms have 3 team members and sprint relays are mixed with 2 men and 2 women. However the SA club relays are 2 person relays with each team member running 2 legs, making a 4 leg relay overall, with the exception of the Easy course in which each team member runs only one leg each.

General Characteristics of Relays

All relay courses are Mass Start, although different courses may have different mass starts at major events. First past the post wins (excluding MP and DNF on any leg of course).

The Arena and Finish area needs to consider the following

1. A location for the map graveyard
2. Start location for the mass start that allows all runners clear access onto their course
3. A change over areas with a clear route to the map graveyard
4. Location for a spectator control or controls, and/or a run through the arena
5. A control that is near to or visible to the arena so waiting team members and any commentary team will know when a team member has run through. Preferably this is in the latter half of a course.

Relays should be fun to run but also fun to watch, both for the awaiting team members and any other spectators.

Course Formats

Forest Relays are closer to Middle Distance than Long Distance format, however having some longer legs with route choice can lead to splitting of competitors. Obstacles or areas of reduced visibility may also lead to separation of runners. Sprint relays follow the style of sprint courses, again with some longer legs to encourage different route choice and splitting of competitors. However in both cases splitting is enhanced by the use of forking.

Control sites must be fair in all aspects, and the descriptions unambiguous. Doglegs should be avoided so outgoing runners do not show incoming runners the route into a control.

Handing out the Maps

Common practice is for the first leg runners to line up in number order and be given their maps, with runners on the expected faster course at the front. This may be in or near to a map graveyard if used. Other maps are either

1. On numbered stakes in a graveyard
2. On a series of “clothes lines” one for each leg. Again the team numbers need to be visible

Volunteers are needed to help direct runners to their allocated team/course map

Forking requirements

All courses (except the Easy course) have some forking, although for reasons of fairness the last part of a leg should be the same for all runners on that leg, and commonly on the last leg a greater part of the course is common.

The actual forking depends on the number of team members, for a 3 person relays, some controls need 3 forks, for 2 person just 2 forks. All teams must complete all forks on their allocated courses.

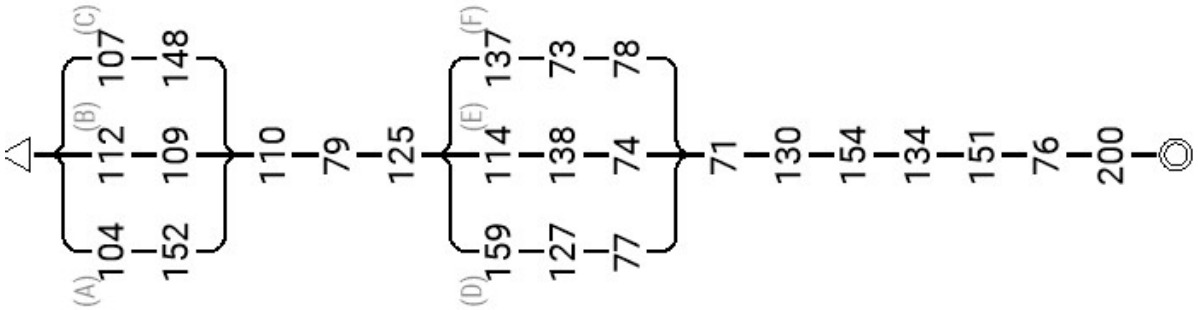
Generally forking occurs from the start to split competitors from the mass start. To increase the separation a forking section should have 2 to 3 forked controls, before competitors re-join at a common control. Controls on a fork should preferably be on different features (depending on proximity), not visible to each other, and have distinctly different control numbers. The expected running time on a series of forks between two common controls should be similar, although getting each leg on a fork similar may be difficult.

Overall you should aim for a set of forking controls for the same control number on a course (i.e. 104, 112 and 107 in example 1 below) to be of similar difficulty, and a sequence of forking controls be of similar length and climb.

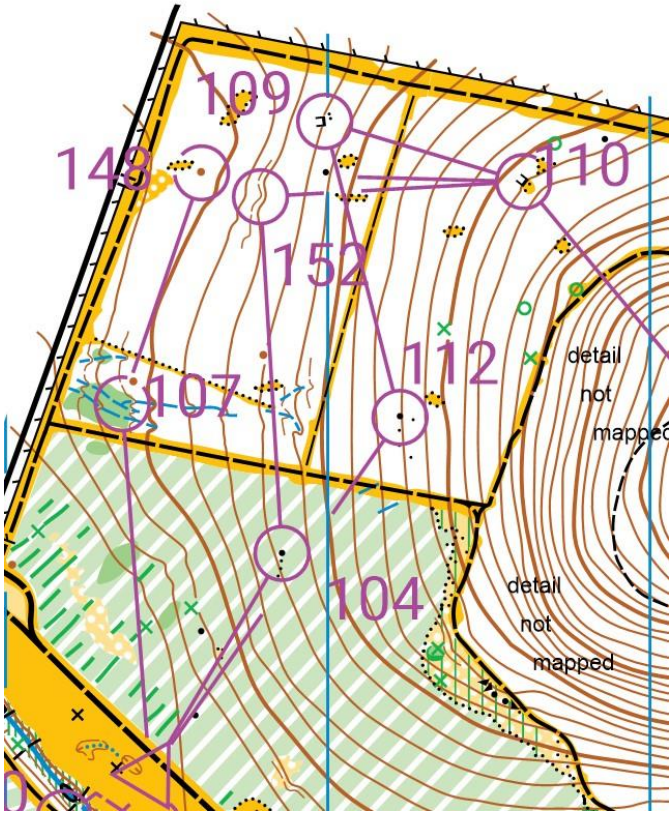
Once courses and the course forking is planned, and teams are entered, then the process to allocating each leg runner in each team to a course variation is required. You must ensure that all teams do all the course variations. The process to allocate course variations to team members is not discussed here.

Some examples are below, these are mostly from 3 person team relays.

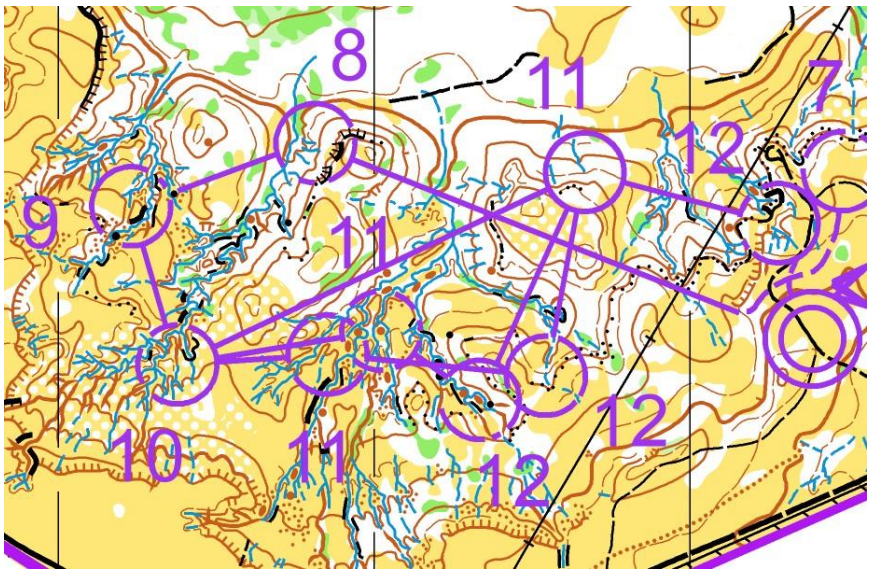
1. Shows the controls on a course with the 2 forked sections separated by 3 common controls, with the last part of the leg common. In this example runners doing one fork, can then be separated from others doing the same initial fork, by being allocated different forks after the common controls. This means runners cannot follow each other as easily over the whole course.



2. A course with 2 forks after the start. Control 104 is probably harder than 107 and 112, the teams on the first leg have a slight advantage in having this control as several teams from the mass start will be going to that control. 107 with the option of a track run may be faster than 112. This is example is form the 2018 schools relays.

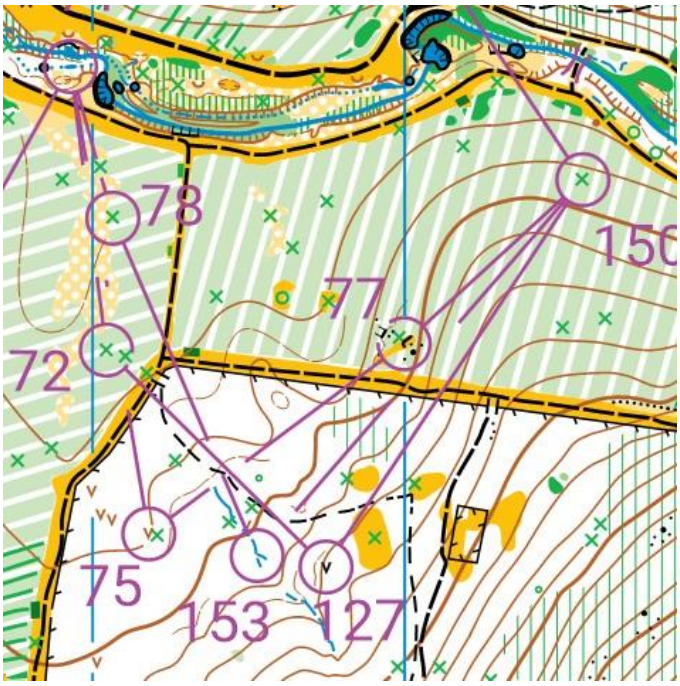


3. This example is a 3 team relay from the 2018 Australian Relay Championships and is the last part of a course. After Control 7 and the run through, Legs 1 and 2 have forking for controls 11 and 12, and then visit the last 2 common controls (OCAD has also labelled these 11 and 12) whilst no forking is present for the last leg runners on this course (controls 8 to the Finish)



4. A second example from the Australian School Championships again where the forking is for teams of 3. In this case the forking for one set of legs with controls 77 and 75 is quite

different to the other 2. In part this reflects the limited control sites available in the section at the end of this forking to the common control after the 2nd forking.. Although controls 72 and 78 are on the same feature they are some distance apart and in different settings with 72 near the track.



5. A Sprint Relay example from WOC 2021 so this is a 4 person relay, with the women on legs 1 and 4, and the men on 2 and 3 (longer course on the second loop). Each fork only has two controls (allows for the 2 women and 2 men being head to head). The control lists shows the forking in detail, with 1, 2 or 3 controls on each forked section between common controls. Only one control on forks between common controls seems more common in sprint than forest relays.

1st loop
START
1 2 4 3
42 31 42 31 37 46 37 46
39
1 2 4 3
32 41 32 41
40
1 2 4 3
56 54 56 54
49
50
1 2 4 3
36 48 36 48
60
1 2 4 3
45 33 45 33
69
100

2st loop
ARENA
1 2 4 3
52 38 34 51 43 55 35 35 58 44
57
M4
1 2 4 3
55 43
90
1 2 4 3
53 47 53 47 47 53 47 53
97
100
FINISH

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