NSW Rogaining Association

GUIDELINES FOR COURSE-SETTERS ON TECHNICAL STANDARDS

Version 1, 24/11/95.

1. INTRODUCTION

The IRF (International Rogaining Federation) manual "Organising a Rogaine" provides a thorough description of all aspects of course-setting. This document forms a briefer list of key points, with some local (NSW) variations.

2. PLANNING THE COURSE

Organisers are encouraged to be individual in their style of course, except for the State Championships, where conventions should be observed (but even they could be broken, if competitors are warned). But a few points to note:

2.1 Terrain
Competitors often like a mix of open country (for night-time walking) and bushland. Really thick scrub (lantana, blackberries, sword grass.) is best avoided.

2.2 Size
Depends greatly on vegetation and hilliness, but, the really elite (i.e World Champion!) competitor might cover 100 km in a 24 hr event (including, say, 20 km roads), perhaps 60 km in a 12 hr (distance = actual route, measured on map, not straight lines between checkpoints, which could be about 20% less). So, if you want a 24 hr course to be just doable, then 50 checkpoints, an average 2 km apart would suffice. This might cover an area of 10 km x 15 km. The larger the course, the more work and chance of error.

2.3 Map Scale
For a 24 Hr, scale 1 :50,000 has advantage of being smaller, but 1 :25,000 is still OK.

2.4 Hash House
Essential- road access even after heavy rain (unmade surfaces become impassably muddy after a few cars, especially if on a slope).
Ideally - central to course, open, attractive environs (e.g. by lake, or creeks ...), large hall or shed. If Hash House must be at a course extreme, a second soup kitchen may be needed (a major exercise).

2.5 Course Layout
Several routes in/out of hash-house encourages meal and rest breaks.

3. DOCUMENTATION

The paperwork you will need (and should copy from previous events):

1. Landowner visiting letter,
2. NPWS (Waterboard, etc.) letter requesting access.
3. Entry form
4. Mail-out to entrants - details on getting to event, etc.
5. Indemnity Form (with car registration).
6. Course-setter's notes - at event.
7. Checkpoint list

4. MAP REPRODUCTION AND QUALITY

Pre marked maps are much preferred - colour photocopying or digitising of a colour master cheap enough nowadays. This ensures control circle location is accurate, whereas overlays have produced errors of up to 2 mm. Copying a copy is very unwise - resolution drops markedly.

5. CONTROL LOCATION

5.1 Procedure

Three steps are strongly advised: Setting, Checking and Hanging. At setting, tapes are hung at the very spot the flag is to be hung. At checking (by someone else), the spot and visibility etc are checked. If found unsatisfactory and reset, the new control must be checked. Everything should be rechecked during flag hanging, ideally by someone else again. (The Manual advocates "vetting" after checking but admits that the vetter can also hang the flags).

5.2 Quality Control

Quality control by written notes and checklists is recommended to minimise the chance of inaccuracy or error. An A4 page form is available, a "History Sheet" for each control, with spaces to be filled in at each phase of setting. The most fundamental points recorded are distances and bearings to distinct map features, enabling accurate control mapping. Each page should be slipped into a plastic cover and stored sequentially in a ring binder. It is a good way to pass on messages to later checkers/hangers, and can save much time in helping find a checkpoint (even for flag collection).

5.3 Accuracy

In olden days, a control location was only stated as within a 100 m square, but with premarked maps becoming the standard, each control can be considered specified as a dot on the map (the centre of the marked circle) or an 8 digit grid reference (say 10 m accuracy). There will always be some error between the dot on the map and the actual flag location. How small should that error be? In essence, competitors must be able to find the flag without

having to hunt around for more than a few minutes, if they navigate well to the control location. More precisely:

> "Each checkpoint should be located such that it is possible to navigate at night, with the aid of compass and pace counting (of realistic accuracy), sufficiently close to the checkpoint that finding the marker presents little or no difficulty. This should be the case if the course-setters can map the location with reasonable certainty, say to within 40 m (less in thick bush), using just these aids."

[In gory detail: If the control is at a point feature, like "the knoll" or "the creek junction", then providing the flag is hung at the correct point, there is essentially no error. The flag should be visible from the location, and an error of 40 m would be unforgivable. If the control is on a linear feature, like a spur, its position must be determined by distance measurement from a point feature (e.g. a summit) on the map. (Bearing to a distant feature can be used as a check by setters, but the bearing may be impossible to take at night for competitors.).
Suppose good pace-counting is considered accurate to 15%, then the error could be 40 m over a distance of 270 m. If a control is placed at an object like a dam or ruin not on a linear feature, requiring a bearing as well as pace-counting, then if the bearing is accurate to 10^0 and the pace-counting to 15%, then the error could be 40 m over a distance of just 170 m. Neither setters nor competitors can locate the control accurately enough if the above distance limits are broken.]

5.4 Flag Placement
If on a linear feature, the flag should be set right on the feature, e.g. in the gully bed. The control should not be set where the feature is too broad to be well defined (a forested spur where the spur line uncertainty exceeds 15 m). The flag should be visible from 15 m from most directions, unless the clue warns otherwise - avoid hanging the flag against wide tree trunks!

Red electrical tape is the recommended marker, wrapped in two (or more) bands, each at least 250 mm wide, and tied (not just stick against itself, it can falloff).

5.5 Control Safety
Avoid dangerous spots, e.g. near cliff edges. If view warrants placement near cliffs, warn of their location in clue and preferably on map.

5.6 Naming
Recommended format for control naming is

Number, Location(i.e. Feature), Clue, Grid Reference (8 digits)

Number - a very worthwhile convention is for the control value to equal the control number with zero replacing the last digit (e.g. control 43 is worth 40). To help competitors quickly find a control number on the map, controls of the same value can be numbered from N to S. Value usually indicates degree of difficulty (either physical or navigational, both proportional to time), but can be biased towards scenic/historic value etc.

Location - Use "The" if the feature is on the map, or "A" otherwise. Feature such as: spur, watercourse (if blue line shown), gully, summit (2 or more enclosing contours), knoll (otherwise), junction of...,ruin, dam, ... Use map names if present (e.g. "Mt Ulandra" summit).
Clue - Optional. Use if visibility poor (e.g. "10m S of a 20 m boulder") or for safety warnings, e.g. "Cliff 50 m NE of control, impassible". Can give offsets to flag (e.g. if there is no tree at summit, but use discouraged), i.e. distance and magnetic bearing to flag from feature (dot on map) e.g. 60 m @ 240^0.

6. WATER DROPS

Water drops must be carefully planned, depending on season and fresh water availability on the course. They should never run dry, and so a refilling program should also be planned.

Water drops should be numbered (e.g. WI, W2, W3), marked on map, described in a list as for controls, location taped and checked as for controls.

To indicate typical amounts, here was the water usage at the 1994 Oz Champs, noon start on a hot day, 266 competitors. There were 5 water drops plus a pub. By 3.30 pm, about 90 visitors to W2 had used 100 litres. From noon to 10 p.m., 130 litres were taken from the more distant W3 and about 460 litres from all drops. Only 100 litres was taken (total from all drops) between 10 p.m. until 5 a.m, and another 200 litres from 5 a.m. until noon. In all, about 760 litres was taken by 266 competitors, i.e. 3 litres per person over the 24 hours. Pub consumption not known.