The Rogaine Setting & Vetting Process

by Nick Lethbridge

August 2014

volume 1 : the Process



Process Task Summary :

For a detailed task list -- with timing -- see the end of this volume of the manual.

1.0 Stage One : Agree Where to Set a Rogaine

- 1.1 Tell the Committee of Your Plans
- 1.2 Select the General Area to be Considered
- 1.3 Visit the Potential Competition Area
- 1.4 Volunteer to Set a Rogaine
- 1.5 Checkpoint One : An Event in this Area is Approved

2.0 Stage Two: Gain Area Access, Draw the Base Map

- 2.1 Ensure the Area is Available for a Rogaine
- 2.2 Follow the Rogaine Mapping Process
- 2.3 Evaluate the Hash House Site
- 2.4 Create the Base Rogaine Map
- 2.5 Checkpoint Two : The Base Map is Approved

3.0 Stage Three : Create the Rogaine Course and Competition

- 3.1 Begin with Armchair Setting & Vetting
- 3.2 You Need to Know Before You Go
- 3.3 Set then Vet in the Field
- 3.4 Allocate Values (Scores) to Controls
- 3.5 Prepare Competition Documents
- 3.6 Advertise the Event, Attract Competitors
- 3.7 Checkpoint Three : Competition Map is Approved

4.0 Stage Four : Prepare for the Days of the Competition

- 4.1 Prepare the Control Markers
- 4.2 Print Competition Documents
- 4.3 Attend Pre-Event Volunteers' Meeting
- 4.4 Hang the Control Markers
- 4.5 Checkpoint Four

5.0 Stage Five : Help Manage the Event and the Competition

- 5.1 Set Up the Event Site
- 5.2 Countdown to the Start of the Competition
- 5.3 Start the Competition
- 5.4 Oversee the Competition
- 5.5 Complete the Competition
- 5.6 Announce the Competition Results
- 5.7 Clean Up the Hash House Site
- 5.8 Checkpoint Five : Provide Feedback on Competition Quality & Success

6.0 Stage Six : Tidy up, Put away, Kick Back

6.1 Complete the Post-Event Essentials

- 6.2 Enjoy the Post-Event Event
- 6.3 The End : Now Read the Useful Information in Appendices

Appendices :

A1 Levels of Rogaine Event A Standard Rogaine Event Levels

A2 Overview of Setter and Vetter Roles Responsibilities of Setters include Responsibilities of Vetters include

- A3 Setting and Vetting Sequence
- A4 Setters, Vetters... and All the Other People
- A5 Useful Online Reference Material
- A6 Standards for Control Descriptions

Introduction

Important Note: *Allow yourself plenty of time !* Start soon, work steadily, enjoy it all :-) It's not all work. It does take time. Some of your work will need to wait -- politely -- on the efforts of others. Start early and allow yourself time to *enjoy* your rogaine setting and vetting.

The Setting & Vetting team

A Rogaine is set by a team: at least two setters *plus* at least two vetters. Two of each so that they can support each other in their work. The team approach also allows a less experienced setter or vetter to work with and learn from a more experienced person.

The setters set... and the vetters check that the setting is accurate and fair. Those are the responsibilities. Actual work may be shared -- as long as all work is first done -- and then independently checked by another member of the team.

What skills are required by setters and vetters ? Team members must be fit enough to take part in a rogaine... Setting and vetting requires a similar level of effort if not more. You also need spare time to be dedicated to the task -- over several months.

Most importantly... At least one setter must be an experienced rogainer -- who has a clear understanding of, What Makes a Rogaine.

What makes a Rogaine ?

Rogaining is the sport of long distance cross-country navigation. Rogaining is also a recreational activity, which aims to support and encourage people to develop respect for and enjoyment of rural and forest environments. A rogaine provides challenging enjoyment to serious athletes and enjoyable challenge to less serious participants.

The focus of a rogaine is on *navigating to controls*. The controls are not hidden. They are placed in the competition area and the locations marked on the competition map. There is both challenge and enjoyment in getting from control to control.

Each competing team chooses its own path, following its own sequence of controls. Within several hundred metres of each control the participants expect to find accurately mapped features. Between controls the map may be less accurate.

It is largely up to the team to interpret the map and then to adjust that interpretation as they find what is actually there. This does not mean that the map is not accurate... Rather, there is no guarantee of accuracy but there is an expectation of a better degree of accuracy around each control location.

Other "map and compass" sports may allow competitors to identify the best course purely from the map. Rogaining maps provide less detail. A rogainer plans what they consider to be an effective route. This route will be adapted as the rogainer discovers the actual conditions in the competition area.

Is this process the only allowed process ?

The setting & vetting process in this manual attempts to present the best ideas from rogaining in Western Australia. And no, it is not perfect.

- It is possible that I -- the author -- have made a mistake. The original manual, the WARA Setters & Vetters manual, provided perhaps 30% of the current material. Some of it was contradictory ! I may have introduced new errors.
- I may have described tasks that do not work in other parts of the world.
- I have made the process prescriptive, with clear statements of what "must" be done. This is simpler -- especially for the beginner setter -- than offering options where the setter has no clear basis for selection.
- This is not an "official" manual. It may be recommended by Rogaine Associations. Experienced rogainers have provided comments and input. The actual words and ideas are those of the author.

There is no need to follow this exact process. If you do follow this process you will have a good chance of setting a good rogaine. If you decide to not follow the process -- please let me know what you did, and why, and how successful it was. The process is always open to improvement !

Other useful information

This Setters & Vetters manual is a *process*, it is written to be followed from Stage One through to The End. As far as possible, information is provided as it is needed. (Please contact the author if you find a problem with the sequence !) Extra -- yet still very useful -- information is provided in appendices, after the end of the process.

If you're new to setting & vetting -- or new to rogaining -- read the appendices before you start setting. If you are an old hand -- read the appendices and email the author if you see room for additions, improvements or information which could be better placed in another section.

Copyright and related matters

Rogaine Setters & Vetters Manual (c) Nick Lethbridge August 2014

This manual may be used with no further permission, in part or in total, by anyone anywhere, as long as it is not used for profit and as long as this original source is acknowledged. If, however, you want to make changes -- such as corrections, improvements or adaptations for local use -- please contact the author by email to [**nickleth at gmail dot com**]. Where possible, I will use your comments and suggestions to improve the quality of this manual -- for every rogainer.

The author of this manual is Nick Lethbridge. The core of the practical material was gathered by WARA, the Western Australian Rogaining Association, for a local Setters & Vetters manual. The material has been expanded, corrected, condensed, rewritten, generalised, focussed and resequenced. WARA provided the inspiration, the author takes full responsibility for the usefulness, useability, accuracy and universality of this manual.

Send an email to [**nickleth at gmail dot com**] if you use this manual. Where are you setting a rogaine ? How useful is the manual ? I would like to make this manual as useful, as useable and as *universal* as possible. So that as many people as possible can enjoy the process of creating a good rogaine. Because *rogaining is fun ! --* both for competitors and for the creators of the event.

Now read on -- and start setting...

1.0 Stage One : Agree Where to Set a Rogaine

... Start this [42/24/8/6] months before the event.

Note on this process manual

If you want to set a rogaine -- follow this process. Starting from here.

Lines in large font -- such as "Tell the Committee of Your Plans", below -- are what you should do. In general: start at the top and work your way down. Then go on to the next page.

Paragraphs in normal print -- such as this one -- are comments and explanations. Read them if you need them. And if you have no need for explanations -- please read them anyway and provide feedback to the author: via email to [**nickleth at gmail dot com**]

Note on timing

The timing of the start of your effort depends on the level of the event that you plan to set:

- World event: start 42 months -- or more -- yes, really ! -- before the event
- **National**: at least 24 months before
- **Major**: at least 8 months before
- **Minor**: up to 6 months before

This timing is shown -- for example at the top of this section -- as *Start this* [42/24/8/6] *months before the event.* Start early... and reduce the panic at the end.

Setting is simple... but there is a lot to be done. This manual guides you through the process. You also need a good understanding of what makes a *good rogaine*. This manual covers as much as possible. Practical experience as a rogaine competitor is also -- for setters -- absolutely essential.

So, step one:

1.1 Tell the Committee of Your Plans

You have a keen desire to set a rogaine... You are ready to volunteer.

Because this is a "setters and vetters" manual you are, in fact, ready to volunteer to provide a rogaine "competition". Setters and vetters provide the competition. Your Association provides the event to wrap around your competition. Setters work closely with other members of the Association. So your first step is to liaise with the Committee for your Association.

Contact the Committee for your Association. If you are in a "new" rogaine country -with no Association -- form an informal Committee and contact the IRF. Let the Committee (or IRF) know that you are prepared to volunteer to set a rogaine. This step may be done sooner or later. The sooner it is done, the more support you will have. If you leave it too late, all available dates may have been taken by other setters.

1.2 Select the General Area to be Considered

You are prepared to set a rogaine. Where will the rogaine be set ? You may have an area in mind or you may simply be ready to volunteer to set.

There is no need -- yet -- to visit the area ! You may work from maps, aerial photos, memory, advice, experience in similar areas... The essential *Visit to the Potential Competition Area* will be done next.

If you have no particular area in mind... get ideas, advice and opinions from previous setters and from other rogainers. Check the records of past rogaines set by your Association. Ask your Committee to suggest an area.

Check maps and aerial views. Use the maps and satellite imagery available on the web. Look for large areas which are lightly populated. Avoid areas with visible significant hazards. (Avoid, for example, vertical mountains, deep quarries, busy industrial areas, major population centres and artillery ranges.)

Consider your personal preferences: As setters you will visit the area many times. Will you enjoy visiting the area ? Will you enjoy the many journeys to and from the area ? Make sure that you are comfortable with the idea of setting a rogaine in the selected area.

Also consider the cost to the Association and to yourself: the further you travel on each site visit, the more it will cost. A long drive is expensive. It also takes a lot of time that could be better spent setting and vetting. You may need to spend nights away from home: this can be a burden... or a holiday.

Do your best to identify a suitable area -- but don't stress. At "checkpoint one" your choice of rogaine area will be checked by a Committee responsible for long-term standards and success of rogaining. You are ready to volunteer to do a lot of work. But:

You are not alone !

Look for an area with less landholders

Effort Increases with larger numbers of landholders.

Who owns the land ? More importantly: who *controls access* to the land ? Who is able to give you permission to hold a rogaine on the land ? How many "landholders" are there likely to be ?

Landholders: The people who have the authority to allow you to use the land. They may be land owners or land managers. They may be different to the people who actually occupy, live on or use the land. Landholders may be government agencies or businesses or individuals.

At this stage it is enough to look at maps and aerial views to get a rough idea of the number of separate properties. Look, for example, for houses: the more houses, the more landholders.

Select an area with as few landholders as possible. Dealing with a large number of landholders of small properties will add significantly to the workload of organising the rogaine. Avoid areas that have been subdivided into many small properties.

ROGAINE SETTING & VETTING

Seeking approval in such an area could be a nightmare, mapping the small out-ofbounds areas difficult, and rogaining may not be practical.

Okay: Your local laws may allow access to some of the private land, during daylight, without specific permission from landholders. You may be organising a Minor event, with no night-time navigation. Good manners -- and the reputation of rogaining -- suggests that you should still let landholders know that several hundred people could be crossing their property.

However : If your ideal area has many landholders -- and you believe that you can manage the landholder communication -- go for it ! WRC 9 (2010) in Cheviot, New Zealand required dealing with more than 60 landholders. And dealing with, apparently, all the people who lived in Cheviot... It was a very successful event. Though an event coordinator did put in writing that, in hindsight, dealing with over 60 landholders was an immense challenge with considerable risks.

Give preference to an area with just a small number of landholders. But if there is a large number of landholders -- in an ideal rogaine area -- then the area is worth considering. Just remember that dealing with a large number of landholders will require a large and continuous effort. If you are ready and willing, it may be worth the extra effort.

Include a mixture of suitable terrain

Identify suitable terrain with a mix of land types, to provide interest and a variety of challenges for all levels of competitor.

Your choice of terrain -- forest or farmland, flat or hilly, thorny, dense or open forest -- is important. Very taxing terrain should be limited so that participants are not forced to visit it but do so by choice. The terrain should be such that "social rogainers" and the less physically capable can do a shorter course without undue difficulty.

The most popular courses have a mix of forest and farmland, of hills and gentle slopes. Courses entirely in forest or farmland may be set and well accepted. A mixture of farm and forest offers greater challenges for route choice. This is good !

An UpsideDown rogaine -- where most of the event takes place during darkness -- requires more open terrain. Many novice and intermediate rogainers will attempt their first night navigation during this event. A suitable area has open vegetation or is predominantly farmland.

Be aware of seasonal changes, try to visit the area in the same season a year before your event date. What you see in one season may change before your event date.

From the time of your first visit to the event site to the date of the actual event there will be many changes to both the forest and farm terrain. An area that seems ideal in summer might be water-logged in winter. Dry waterbeds can change into raging torrents and become impassable by car and foot. That fabulous hash house site by the watercourse may turn into a quagmire.

Lambing ewes, crops and the possibility of spreading noxious weeds may make farmers reluctant to give permission to use their land at particular times of the year. A perfect knoll in a bare paddock may become surrounded by crops.

Local resident landholders and Land Management Officers are good sources of information about the condition of an area at the time of your event.

Check the distance from major cities

Is the event area within reach of a major access road ? an international airport ? a major city ?

The distance that participants have to travel to the event is important. For a Major or Minor event, the number of competitors begins to go down if it takes more than a couple of hours to travel to the event. Competitors are willing to travel further for a National or World event.

If the event is a significant distance from any major city (say, more than three hours travel) then the Committee should be advised well in advance. The Committee may decide to organise coach transport. A coach service to and from the event site is almost expected for National and World events.

If the area is within reach of several major cities, consider the location of your event site in relation to each of the cities. Also consider which city is home to most rogainers. An area close to a "rogaining" city may easily attract plenty of competitors. The Committee may decide to organise a publicity drive in a "non-rogaining" city.

You should not reject an event site simply because it is a long distance from anywhere. One of the delights of rogaining is being able to explore different regions across your state, your country and the world.

Identify possible hash house locations

Look for large clear areas big enough for camping, admin and parking. Try to identify more than one possible hash house site. When you ask landholders for permission to use their land for the hash house -- the first few may turn you down.

If you are working purely from maps and aerial views, your possible hash house locations are likely to be more "hopeful" than "possible". This is particularly true in an area which is all forest with no open farmland. Be prepared to visit the area to check whether "hopeful" sites may in fact be "possible" hash house locations.

Eliminate areas with no access

Competitor vehicles need to drive to the hash house site. There must be at least one good track or road from the nearest major road, to the final hash house location. You will check this later, on visits to the area.

It must be possible to drive a rented car or bus to the hash house site. Rental agreements often stipulate that the rented vehicles must be driven only on "gazetted" roads, that is, roads which are recognised and maintained by a government agency. There should be one or more gazetted roads to -- at least -- the edge of the rogaine area.

You, and other members of your local Association, may have your own cars... be familiar with public transport... have arrangements for car-pooling. Visitors to your area may not be familiar with local driving conditions or other transport options. Be prepared to provide advice to visitors, on the various ways to reach the event site. This is especially important for National and World events.

Do not use an area if all possible hash house locations are accessible only by experienced hikers or mule trains.

Look for a good network of tracks

Setters need access throughout the map area, for hanging controls, distributing water drops and conducting safety patrols. Look for a good internal road or track network. Getting into and around the event site is important. Look for good road access but few major roads through the event area. Consider vehicle access for setters and vetters from the hash house, across the event area.

Look for a usable area of a suitable size and shape

As a rough guide for a Standard 24 hour rogaine, look for 240 sq km to be mapped at 1:50 000 onto an A3 sheet. (More variation is acceptable for a Minor rogaine.)

Note: This process may refer to maps using metric distances, printed on A3 paper at 1:50 000 scale with 5m contour intervals. Other options are acceptable. If you're using a different set of map options, simply translate quietly to yourself.

Note 2: When working in complex terrain it may be tempting to create your map at a larger scale. That is, drawn so that it is possible to include more detail on your map. You may be being confused by other sports, where every detail must be shown on the map. A rogaine map is drawn at a scale close to the metric 1:50 000. An essential rogaine skill is to interpret the map as it applies to the actual terrain.

Note 3: Contour intervals, however, may vary. Select a contour interval which gives good detail -- without contour lines being so crowded together as to be unreadable. Use the same contour interval across the entire map. The preferred contour interval is -- for simplicity -- the one which comes with the bought map data. If it is impossible to find or draw a suitable contour interval, find another area to be mapped.

You may have already eliminated some land within your selected area. Check that the remaining area is large enough for your event. Is it large enough to challenge the fastest competitors ? Is the mappable area large enough for the duration of your event ?

How large is "large enough"? Top competitors can cover more than 100 km in a 24 hour rogaine. Distance covered depends on both the terrain -- how hard or easy it is to travel from point to point -- and on the competitors who will enter your event. There is no clear answer to "how large"...

The size of the area needed will vary. Generally the area ranges from 120 sq km for a small 12 hour rogaine to 240 sq km for a 24 hour event. Six hour events may get by with less than 80 sq km. Successful events have been held on smaller areas which feature steeper terrain or dense vegetation. At a scale of 1:50 000:

- 12 and 24 hour events mapped at 1:50 000 will fit on an A3 page, including credits and a legend. This allows for an area of up to 240 sq km.
- 6 hour events could fit on an A4 page, including credits and a legend. This allows for an area of up to 100 sq km.

Is the map area roughly rectangular ? The proportions should approximate an A3 or A4 sheet of paper (or whatever is your local standard for map sheets).

The proportions of the map area must be suitable for printing -- with all associated legends, logos, scales and so on -- on either an A4 or A3 sheet. That is, on standard paper sizes for your part of the world. Maps can be expensive to print on non-standard sheet sizes. Larger sheets are awkward to deal with in the field.

You do not need a huge area to run a successful event. Having a large number of controls in a smaller area can help create a situation where route choice for participants is a complex problem and their chosen routes will vary enormously. There are other advantages in having a smaller map area. You may not need to contact as many landowners, and patrolling roads and inspecting water drops can be easier.

Sketch the competition map boundaries

"Competition map boundaries" are the outer edges of the competition area. Competitors who go beyond the competition map boundaries -- are really lost. Select boundaries that will be clear -- to the competitors, on foot, during the event.

Where possible, use major linear features such as roads, railways and rivers to be the boundaries of your competition map. (Your map will include a hundred metres or so beyond these boundaries. There will be no controls outside these boundaries.) Clear boundaries will assist "lost" competitors as they are unlikely to cross a major feature and walk off the map.

Define boundaries which result in the hash house being near the centre of the map. A hash house site in the centre of the map allows greater choice for competitors doing loops in and out of the hash house site. If you have more than one possible hash house site, try to extend your boundaries so that all possible sites are well within the map area. (Or be prepared to eliminate possible hash house sites which would be too close to the edge of the map area.)

Begin with broad boundaries enclosing an area which is larger than required. As you contact landholders -- and gain approval or refusal -- and identify the actual hash house site -- you will adjust the map boundaries.

Check the moon, set a date

You may be proposing to set an event which has already been scheduled. In that case, your event date is predetermined. If you need to propose the date -- check the moon.

A rogaine is always held at the weekend immediately before or immediately after a full moon. Select a general date then look for the nearest full moon. The Geoscience Australia web page [www.ga.gov.au] provides astronomical information... or just look on a good calendar.

The weather also has an effect on a rogaine. Consider the likely weather at the proposed date. In hot climates, longer rogaines are generally held in winter. In cold climates, summer rogaines are more common.

1.3 Visit the Potential Competition Area

... Do this before you formally suggest setting in the area.

Identify key landholders

Identify key landholders, the people who control access to the major portion of the area. Who is able to give you permission to hold a rogaine on the land ? It may be an individual or a business or a government agency. Identify landholders for enough land to allow you provide a rogaine. (Later, you hope that they are agreeable.)

Some local councils can provide landholder information. They may charge a small fee for the information.

In some cases you will be able to identify the people who own the land -- and find that they are different from the people who live on the land. You will (most likely) need to contact both owner and occupier, to get permission and to be polite.

At this stage there are several reasons to identify landholders:

- You -- or another rogainer -- may have dealt with a landholder before. Previous dealings may encourage you to set in this area -- or to move elsewhere.
- While in the area you may meet a landholder. They may be suspicious of you as you peer at their land over their fences ! It may help your informal meetings if you know who to expect to meet.
- You may want to go off public roads to look at the land. If the land is privately owned (and for some government-owned land) you will need prior permission from the landholder. You may also need to borrow keys or get combination lock codes. And to tell landholders when you are likely to be on their land.

Visit the (or each) potential rogaine area

Having selected one or several possibilities for your event area, visit each area to check that the terrain, the forest and farmland are as you expected -- and suitable. You may find that large areas of farm will be under crop (particularly Spring through to Autumn), the undergrowth in the forest may be too thick or parts of the map may have been made unusable by clear-felling or other development such as sub-division.

Get a feel for the land itself. Does it look suitable for a rogaine ? Will you enjoy the several visits required as you set the rogaine ? If you were a competitor, would you like the look and feel of the competition area ?

Evaluate potential hash house sites

Wander around each potential hash house area. Is it a pleasant spot to be ? Will the various rogaine helpers enjoy being there ? (Will they be overcome by the smell of the abattoir next door ?!) Is the area safe -- right to the limits of the camping and parking areas ? Is there plenty of clear ground, to separate cars from campers ?

At this stage you are not seeking permission to use a particular site for a hash house. You are simply checking the site as part of your evaluation of the entire area. However, if you meet a landholder, you may mention that a rogaine requires a hash house area and that this place is just what you would need... The response may help in your evaluation of the suitability of the site !

Confirm that each hash house site is accessible for cars

For each potential hash house site, drive slowly -- or walk -- along the access road. Travel from the nearest sealed road to the site. Check for obstacles to any vehicles. Consider the largest (highest, widest, longest) vehicles: the truck carrying essential rogaine equipment, buses, caravans. If the event may need chemical toilets to be delivered, the truck driver may be unused to driving along rough, narrow roads. Check for low overhanging branches, narrow gaps between trees, and sharp bends -- all will be difficult for the equipment truck and for any rogainers with caravans or campervans.

Can obstacles on the access road be easily removed? (Set a date to remove the obstacles !) If the only access road will include obstacles -- then the potential hash house site is no longer suitable.

Check that there is road access for all vehicles:

- The road into the hash house must be suitable for small cars, large cars, campervans, buses and trucks which will carry equipment required for the event.
- Consider the smaller vehicles, such as cheap rental cars. Look out for rough or rocky track sections, deep ruts, soft mud. Remember that firm ground may become soft mud after rain !
- Consider road access in the worst possible wet weather, for participants and heavy vehicles driving to the hash house site.

And then: will the access road still be safe as several hundred tired rogainers drive home again ? Try to imagine the access road on a wet weekend with 200 cars and buses travelling in -- then out again -- on the same track.

Tracks that are solid in dry weather can be boggy or covered in huge puddles during the wet months. Seek advice from locals.

Look for potential patrolled roads

During the competition, competitors may get lost or otherwise in trouble. Setters and vetters patrol the competition area by car, to provide assistance if required. (And to refill containers at water drops, and to generally be aware of conditions in the area.) These patrols follow a set route, following a pre-determined -- and mapped -- set of "patrolled roads".

Identifying patrolled roads is done very early in the course planning process.

On your first -- and subsequent -- visits to the competition area, check potential patrolled roads. Check their condition and be sure that they are safe for night patrols. In particular: do the (potential) patrolled roads connect to the (potential) hash house site ?

The roads will also be used after the event by volunteer control collectors. The majority of volunteers who will collect controls will have two wheel drive vehicles. Safety patrols may be done in two wheel drive vehicles. Keep this in mind as you check the condition of potential patrolled roads.

You are looking for roads which -- in the ideal situation -- form a loop from the hash house, around the map, about one third of the way in from the map edge towards the hash house. A driveable network of tracks is the minimum requirement.

Contact the Landholders ?

At this stage you are looking for a suitable area for a rogaine. You may be looking at several possible areas. You are not yet ready to commit to one particular area. It is too soon to spend a lot of time looking for landholders...

Nevertheless, it never hurts to make contact.

ROGAINE SETTING & VETTING

If you meet landholders, tell them why you are in the area. They may have good suggestions ! If you are staring across someone's property -- and you see someone staring back -- good manners indicate that you say hello. And discuss rogaining (or farming, or forestry) -- if they are interested.

At this stage you are not ready to ask for permission to use land for a rogaine. You are in the area to look at the land. Try to make positive impressions with any landholders whom you happen to meet. And let them know why you are looking over their land.

Most importantly: Do not enter private property without prior permission ! On initial site visits, keep to public roads and tracks. Just *look* at the land around. (However, if the area is one large block of "Keep Out, Private Property" -- you will need to enter the property just to look. In this case, contact the landholder *before* you visit.)

1.4 Volunteer to Set a Rogaine

Tell the Committee that you are ready to set a rogaine. Tell them the area that you plan to use and the date that you have selected. Be prepared to negotiate on either area or date or both... The Committee is responsible for providing a balanced series of rogaines; you will be setting one event of the series.

With a nod from the Committee, move on to the next step.

1.5 Checkpoint One :An Event in this Area is Approved

... Allow enough time to get Committee approval [36/18/6/3] months before the event.

Note on timing

The timing of this checkpoint depends on the level of the event that you are setting:

- World event : 36 months before the event
- National event : 18 months before
- **Major event** : 6 months before
- Minor event : 3 months before

You -- the setter -- provide information early enough for the relevant Committee to make its decision before the relevant deadline.

Requesting approval to plan a rogaine

Depending on the level of the event, there will be several stages. Both you -proposing an event -- and the various Committees providing support, need to be aware of the time constraints in the *Schedule for Setters & Vetters*. This checkpoint requires involvement of several groups:

- setters who are proposing to create the rogaine competition (this is you !)
- the Committee of your Association

- for a National or World event proposal, the Committee for your National Association
- for a World event proposal, the Committee of the IRF

You know where and when you want to set a rogaine competition... Now you need to fit in with the standards, schedules and expectations of the relevant rogaining Associations. Your Association will also need to commit resources to the *event* of which your rogaine *competition* will be one part. You need to "sell" your event area !

Different levels of rogaine events will require different levels of approval. At this stage you have found a suitable area and you are willing to commit the time required to organise a rogaine competition. You are seeking approval to have a rogaine, set in your selected area, formally fitted in to the relevant rogaining event calendars. You will ask the Committee to approve the area, the date -- and you as setter.

Whatever the level of the event, support means that you will be responsible for setting and vetting. You will work with the other setters and vetters and liaise with other event organisers. The Committee will be responsible for other aspects of the event, including gaining support from other rogaine event organisers. The Committee may also suggest people who are willing to join your setting and vetting team.

For any level of event: gather basic information

Prepare this information:

Your name and contact details
 ... plus names of other people (most likely other setters) who plan to work with you
 optional, on outling of the setters' & vetters' combined experience of

... optional: an outline of the setters' & vetters' combined experience of setting, vetting and competing in rogaines

• Date of the proposed event

... a standard rogaine will normally start on a Saturday

... if the event is already in the Association schedule: which scheduled event are you proposing to set

... for a non-scheduled event: what benefits will flow from your proposed event

Planned location

... sketch map showing map boundaries and possible hash house sites

... approximate map area and usable area

... locate the area within a broader map (for example as a location on an online mapping system)

• Terrain summary

... major terrain types and the approximate proportion of each

- Season and phase of the moon, during the event ... hint: a standard rogaine begins five days or less before or after a full moon; nothing else is acceptable
- Additional details: anything else of possible interest to the Committee ... if you plan a non-standard event: describe the (proposed) unique features

This information forms your "competition proposal".

Gain committee approval for your proposal

Pass your competition proposal to the Committee. That is, to the Committee for your own Association. The Committee will support your proposal, or reject it, or suggest changes.

With Committee approval, the next step will depend on the level of the event:

- for a Minor or Major event -- go down the page to *After Checkpoint One Approval*
- for a National or World event -- help the Committee to gather extra information

Otherwise, you may accept the changes and gain Committee approval, or negotiate the changes, or start all over again, or give up (for now).

For a national or world event: provide extra information

A National or a World event requires approval from the National Association. A World event requires further approval from the IRF. Gaining these approvals is the responsibility of the Committee for your local Association. Your only involvement as setter is to provide information on your setting, vetting and rogaining experience. (Other involvement is as a willing member of your Association !) However, you do have to wait on the necessary approvals before you launch into full-scale setting efforts.

The Committee will prepare the information For Any Level of Event (as above) plus:

- Your Association name and website link
- Names of setters (including you) and vetters who have already volunteered ... with a statement of the combined experience of setters and vetters, in setting, vetting and competing in rogaines
- Name and contact details for the Event Manager, the overall organiser of the rogaine event (you want to set the competition; you are unlikely to also be Event Manager)

... Event Manager's experience as a competitor in rogaines ... Event Manager's experience -- or Association's experience -- in organising rogaines

- Names and relevant experience of the Association in entry management, event admin, hash house, camp management and other key event areas ... if the individuals who will fill key roles are already known, they are named and there is a summary of their relevant experience
- Description of Control Punching System and Result Computing Software
- Expected weather at the time of the proposed event
- Related events which may be of interest (such as earlier events on similar terrain, or major orienteering events)
- Transportation and Accommodation information ... location of nearest access point (eg major airport or other transport hub, existing transport options to the event site) ... name of nearest towns for accommodation before and after the event
- Statement that the race will be run in accordance with the IRF Rules

• Additional details: anything else of possible interest to the National Committee or IRF

All of this information goes into an "event proposal".

Gain national committee approval

Your Association Committee will pass the event proposal to the National Committee. (If your own Association is, in fact, the National Association, then all you are doing is returning to the Committee with extra detail of the proposal.) The National Committee will approve your proposal, or reject it, or suggest changes.

With National Committee approval, the next step will depend on the level of the event:

- for a National event -- go down the page to *After Checkpoint One Approval*
- for a World event -- move to the next task and help your Committee to gather extra information

Otherwise -- with no National approval -- your Committee may accept the changes and again request National Committee approval, or negotiate changes, or start all over again, or give up (for now). Or your Committee may suggest that you set your competition as a local, Major or Minor event.

For a world event: provide information as required

A World event requires approval from the IRF. Gaining this approval is the responsibility of the Committee for your local Association. Your only involvement as setter is to provide information on your setting, vetting and rogaining experience. (Other involvement is as a willing member of your Association !) However, you do have to wait on the necessary approvals before you launch into full-scale setting efforts.

Details provided to IRF will be all of the detail *For a National or World Event* (above), plus:

- known restrictions on visiting the area (eg visa requirements for people from other countries)
- "tourism" details -- reasons for visiting -- for the event area and for your country

Gain IRF approval for a world event

Your Association Committee will pass the event proposal to the IRF (or to its nominated supervising committee). The IRF will approve your proposal, or reject it, or suggest changes. With IRF approval -- go down the page to *After Checkpoint One Approval*. Otherwise, your Committee may accept the changes and again request IRF approval, or negotiate changes, or start all over again, or give up (for now).

After checkpoint one approval: continue setting

With approval to set and vet, gather your team of setters and vetters. Get a firm commitment from (at least) your fellow setters -- then move on to the next task of setting.

Your task is to prepare a good rogaine competition. The Committee will begin arrangements for the other necessary activities of the event, including publicity, entry management, admin and hash house. Closer to the event date you will be required to provide a "teaser" article, to "sell" the event to potential competitors.

2.0 Stage Two: Gain Area Access, Draw the Base Map

... Start this is soon as possible. Perhaps speak with Landholders -- but avoid formal requests to use land until you have Checkpoint One approval.

2.1 Ensure the Area is Available for a Rogaine

Who contacts the Landholders ?

It is the setter's responsibility to get permission from landholders -- the people who control access to land in the area -- to use their land for a rogaine. Other people may help but the setter must make sure that it is done. In nearly every case, you need to meet with the landholders.

Alternatively: your Association (or your setting team) may delegate a non-setter to deal with Landholders. Or the Association may have one person to make all contacts with, for example, Government agencies or a large private Landholder.

No matter who makes contact -- it is the setter's responsibility to ensure that appropriate permission has been granted before using any land for a rogaine.

Identify (most of) the Landholders

Identify the landholders. Who is able to give you permission to hold a rogaine on the land ? It may be an individual or a business or a government agency. Get names -- or organisation names -- addresses and phone numbers. Some local councils can provide landholder information. They may charge a small fee for the information.

There are three major groups of possible landholders:

- private owners
- corporations
- government agencies

There are sections below on special considerations for each group.

You can begin contacting landholders before you have all of the names. Landholder contacts may take a long time. It is better to start soon, while you continue tracking down the last landholders. You may be able to get landholder contact information while talking to their neighbours.

In some cases you will identify the people who own the land -- and find that they are different from the people who live on the land. You will (most likely) need to contact both owner and occupier, to get permission and to be polite.

Record what you already know about Landholders

You must contact each and every landholder and request access to their land. You will need to remember who you have already contacted. You also need to remember what was discussed -- and what was agreed ! Prepare to keep records.

Before your first contact, start a record for each and every landholder, owner or occupier. Record basic contact details:

- their name, phone number, postal address and email address
- match the landholder to their property

Record what information you already have. Add to it (and correct it) as you meet with the landholders. Also be prepared to record:

- landholder's partner's name and children's names (don't be nosey ! but record the information if you get it)
- whether they wish to be contacted every time you (or others) visit their property

For each visit with a landholder you will record:

- date, who was there, what was discussed, what was agreed
- and what was *dis*agreed !

Keeping a record of each meeting is good manners for private landholders. It may be essential for corporate and government landholders.

Carry these landholder records with you in the field. Keeping this information will:

- assist you when dealing with landholders -- not everyone can keep the names of all those new acquaintances in their head (great if you can but embarrassing if your memory fails)
- assist you when sending thankyou letters or copies of the event map to landholders after the event
- be a huge time saver for setters who may wish to re-use your event area at a later date
- be useful for vetters, who may not be as familiar with the area or landholders as the setters.

Setting and vetting can be very rewarding as you meet some great people. Many rogaines are held in previously used areas because of the good relationships the Association has formed with government and private landholders.

Prepare to contact key Landholders first

However much you enjoy travelling and meeting people, approaching numerous landholders can easily become a tedious business. To help you do this efficiently, you should make a rough ranking of landholders.

- 1. Those critical for the event to proceed. Large and/or central holdings and those with a potential hash house site
- 2. Land important for the creation of a well-balanced course, then
- 3. Other land.

Begin your contacts with landholders for large and critical areas within the competition area; these are the people whose permission is essential to your event.

Some landholders will be contacted on their property. Others will require a visit to an office -- which may or may not be close to the rogaine area. This will affect your contact plans.

It is also worth giving early attention to those landholders who are most likely to refuse permission such as corporations with plantations or public land where conservation areas are involved.

Be thorough in your Landholder contacts

Usually you will be outsiders to the district in which you will hold the event. It is always best to let local people know in the most open way who you are and what you are doing. Even if they have never had a rogaine held on their land, many landholders are aware of rogaining, especially if events have been held on their friends' and relatives' properties. The continued existence of rogaining depends upon its good reputation. A thorough approach to obtaining landholder permission is essential for preserving that reputation.

As mentioned earlier... keep records of every landholder contact ! Record each landholder visit and what was discussed or decided.

Do not enter a property in anticipation of receiving permission. While this may seem harmless, it is presumptuous and may affect your chances of obtaining access.

Any land belonging to an uncontactable or unwilling landholder must be declared out of bounds. Without permission anyone entering will be trespassing.

Prepare to meet Landholders

Bring a map !

Bring the best map that you have of the area. If you have a rogaine map, bring it. Bring several copies. Use them to mark up what you find. In particular -- mark property boundaries, competition map boundaries and out of bounds areas.

Finding out who owns or is currently managing a property can be a problem, so allow yourself plenty of time. You may approach landholders directly by visiting houses and asking for permission and for information about adjoining properties. This is time-consuming. It is also unreliable because some property holders are not able to define their own boundaries on a map.

Be prepared to explain the following as you ask for permission. After you have obtained permission, ensure that the following are clear:

- The setting and vetting process in simple terms
- When you and the vetters are likely to visit the site
- That you will tape or mark the control sites and these will be replaced with the actual checkpoints (control markers) on the weekend or week before the event date
- Ask the landholder to please not disturb the tapes, markers or controls
- On the weekend of the event there will be lots of activity particularly around the hash house / base camp area

• On the Sunday of the event weekend the controls will be removed by volunteer members, not necessarily yourself

Is there a potential hash house site on a Landholder's property ? While you are asking permission to use the land -- be prepared to ask whether the hash house could be on the property.

Try to identify any leading figures in the community. Their identities are often made apparent when people respond to your request by asking whether certain locally prominent people have given their permission. Once the approval of community leaders has been obtained, permission from others generally follows quickly.

Remember the property owner is doing you a favour. Do not expect a landholder to return phone calls or to have the time to write letters back to you.

Ask for permission from each and every Landholder

The remaining steps in this section are all to do with contacting landholders. Although it is written as a series of tasks -- each task is relevant to each contact with each landholder.

- Landholders are the people who are able to give you permission to use the land for a rogaine. They may be owners or managers. They may live on the land... or not.
- There may be people who own the land -- and different people who actually live on or manage or use the land. You may need permission to use the land -- and to cross the land while setting and vetting -- from both owner and occupier / manager.

Visit -- or contact -- each and every landholder. Ask for permission to use their land for a rogaine.

It is useful to know whether the landholder is the owner or a manager of the property. If a property is managed by someone other than the owner, ask whether it is necessary to also get access permission from the owner.

Getting landholders' permission to access their property is an essential but timeconsuming task. Remember that it is not our land. Permission must be obtained before progressing with any further action on that land. Allow plenty of time for landholder contacts. There may be a large number of private landholders to contact, Government and corporate landholders may be thorough -- and slow -- in their responses.

When talking with landholders, try to avoid rogaine-centric terminology, or, clearly explain our terminology. You may want to call the hash house the "base camp" and refer to the controls as "checkpoints". Take a control marker and an old event map that shows out of bounds areas. The landholder will find it easier to understand rogaining if they can see what is going to happen. You will find it easier using a rogaine map to explain what rogaining is. Have a sample map with a typical course marked on it, so that they can see that not everyone will be going to every control.

Make it clear to the landholder that giving permission is entirely up to them -- if they do not wish to, then you fully understand. If you have enough landholders in the area, then you can tell them that the event will still proceed, but that their property will be marked as out of bounds. You will still need to confirm with them their property boundaries so that you can mark them as out of bounds. Occasionally, landowners will not give permission, but may still let you cross their land to set, hang, and collect controls. They may also allow you to use a corridor, down a farm

track or fence line, so you can connect to isolated properties where you do have access permission.

Invite the local landowners to the hash house for dinner and to compete in the event. Event entry is free for landholders.

Confirm the emergency services contact details with landholders. Landholders are a good source for this information. It also reassures them that rogaining has a careful and well-prepared organisational process.

Ask whether the landholder wishes to be informed each and every time you intend visiting their property. Provide the landholder with a description of the vehicles you are likely to be using, and when you are likely to be visiting, for example, only on weekends over the next two months.

Provide assurances to Landholders

Naturally, all landholders will want to know about the nature of the event and it is important to give an accurate description of it. Be prepared to discuss any and all of the following with both landholders and with people who live on or use the land.

- The Association is a not-for-profit volunteer recreational sporting organisation (or whatever your Association actually is !), including many social and family groups.
- The Association has adequate public liability insurance. Be prepared to explain this and to show a copy of the current insurance certificate and details.
- Landholders' homes and surrounding grounds will be marked as out of bounds, to avoid disturbing residents and dogs.
- Not all the teams competing will cross a particular tract of land during the event. Perhaps only a few teams may do so. This is especially true if the land is far from the hash house.
- Any part of the property can be declared out of bounds (lambing, crops, prize bulls, weeds) at the request of the Landholder.
- The event organisers will be careful to not cause damage as they drive across the property. Where possible they will drive on tracks. They will not drive their vehicles through stubble in the hot and dry months due to the risk of starting a fire.
- All participants will be on foot, and in teams of between 2 and 5 people.
- Teams choose their own routes and are quickly dispersed over a wide area.
- The rules state that participants will be instructed to leave gates as found (open or closed) and to cross fences with care.
- Participants will not bring dogs, other pets nor firearms with them.
- Smoking cigarettes and lighting fires is not permitted outside of the hash house area.
- The only fire permitted is the hash house fire which is controlled by the organisers.

Once given, such assurances must be strictly enforced. The Association routinely sets out appropriate conditions in rogaine competitor information forms. Give the

landholder a copy of the rules or rogaining and a rogaining pamphlet. (IRF print some glossy explanatory pamphlets.)

Extra considerations for private owners

Farmers may be living on their own land, as both resident and landholder. Many farms have residential tenants on the property; you may need to contact the land owner in order to get permission to use their land. Whether a resident is the landholder or a tenant, it is polite to speak to them, to inform them of the event.

- Mark all homes -- and surrounding grounds -- to be mapped as out of bounds.
- While on site look for a boundary which will be clear to a tired competitor, on foot, at night. A fence is best, a road or track may be suitable. Extend the out of bounds area to those clearly identifiable boundaries.

Ask all landholders to identify their property boundaries on your map and to give the names of their neighbours. Do this even if they have refused your request for permission as you need to confirm the areas that will be marked as out of bounds. (Unless of course they are particularly hostile.)

Many landowners will have difficulty reading your map -- they usually have their own property maps which have different scales, orientation, style and displayed features. It pays to check with adjacent landowners -- if both point to the same boundary, then you are fine, otherwise a bit more investigation may be required to confirm the actual boundary.

Verbal approval from private landholders is adequate and written approval -- from the landholder -- is not normally required, unless you feel there are special circumstances, such as approval from an absentee owner. You will still write to the landholder, confirming what has been agreed.

Extra considerations for government agencies

The most important thing you need to know about seeking government approval is to start early, and do not expect that approval will be received quickly or according to your schedule. You should have your hash house and event area approved at least four months before the event date. (Or even earlier, for national and world events.) As part of this process you will become aware of any out of bounds areas imposed by the government agency providing the approval.

You may find that you need to deal with a local manager -- but that they need to deal, in turn, with a manager based outside the area. Be polite -- and be patient.

If you are having difficulties in dealing with or understanding the requirements of government agencies then contact your Committee; they may have a Government Liaison Officer. This person will be able to assist you to translate government terminology, to explain the likelihood of your application being successful and to help with the submission of any necessary application forms.

Extra considerations for corporate owners

It is sometimes difficult to obtain permission from absentee owners or corporate owners.

It is likely that corporate owners will require details of your Association's public liability insurance. This should be included in your correspondence to corporate land owners. Contact the Treasurer if insurance is an issue.

You should obtain in writing any corporation requirements regarding the Association's insurance and any documentation that the Association needs to sign. Approval to use the land must be in writing -- not verbal. In the past problems have been encountered with corporations asking for additional insurance information from the Association and threatening to withdraw permission only days before an event, even though verbal approval was received several months beforehand.

Remember that a corporation may be a vast bureaucracy. There may be complex rules -- or you may be requesting something that is absolutely new. Be polite -- and be patient.

Identify out of bounds areas

As you contact landholders you will also be finding areas which will be on the edge of or within the map area -- but out of bounds to competitors. (Which normally means, also out of bounds to setters and vetters.) These areas will all be marked on the competition map. For now, keep clear records.

Remember: It is the *landholder* who decides which areas are out of bounds ! For competition reasons you may *extend* an out of bounds area. If a landholder suggests that an area is out of bounds -- then it is out of bounds.

An out of bounds area may be right on the edge of the competition area. It is still worth marking as "out of bounds" -- rather than as off the competition map. It reminds competitors of the differences between "lost off the map" and "trespass".

Out of bounds areas are *not* drawn to be a navigational challenge for competitors. They are areas which rogainers have been specifically asked to avoid. The competition map must ensure that the out of bounds areas are clearly defined.

While on site -- possibly accompanied by the landholder -- look for boundaries which will be clear to the competitor, on foot, at night, during the competition. Look for boundary features such as fences, roads, clearly visible creeks.

If there is no clear boundary feature -- *extend* the out of bounds area to a suitable feature. It is better to lose an area of the map, than to risk accidental access into an out of bounds area. Good relations with landholders is essential to the long-term success of rogaining.

Look for a hash house site

On each site visit -- and while talking with landholders -- remember that you will need a site for the hash house. The hash house needs road access and permission. If you or a landholder identify a potential hash house site, confirm the requirements to *Check a Potential Hash House Site* (described below). There may be several possible sites and you are able to select the best. Or, if the site matches requirements, you may reach agreement then and there.

If a landholder seems particularly generous or enthusiastic then they are a good candidate for hosting the hash house site. For landholders of potential hash house sites

• explain what will be happening at a hash house site

• provide assurances regarding impact on land, behaviour of competitors and your Association's public liability insurance

The hash house fire

Is an open fire a part of your planned hash house setup ? If so...

When seeking permission from a landowner to locate the hash house on their property, you should discuss the hash house fire. Fires make landowners nervous, especially during the dry months. Explain the following:

- The hash house or camp fire is under the strict control of organisers and this is the only permitted fire
- During dry months fire restrictions may apply
- If there is a local volunteer fire association they may be willing to be on duty at your camp.

Farmers may know of a good supply of accessible firewood that you could use, and may even offer to collect or stockpile it for you. You could plan your hash house location so it is adjacent to a good supply of firewood.

Contact local emergency services

Find out the location of and contact details for the nearest emergency services including: hospitals, police, fire brigade, after hours medical services. You can look in a local phone directory, ask the local council or look on a local area website.

On a visit to the area -- contact the local emergency services. Let them know that a rogaine is being held in their area... just in case.

- tell the emergency services about competition dates and times, numbers of competitors and where they will be driving and walking
- tell them that Setters and Vetters will also be visiting, several times

Confirm the approval to use land for a Rogaine

After you have approval, write a confirming thankyou letter -- to each landholder. In the letter include the dates of the event and your own contact details. You may also include a draft competition map. This will show the landholder that their neighbours are also allowing access to rogainers. It also reassures landholders that out of bounds areas are clearly marked.

2.2 Follow the Rogaine Mapping Process

... As soon as you have confirmed access to the competition area

Develop the competition map in this order

Create the "base map" with map boundaries and known out of bounds areas

- this is before you set any controls
- the base map is a rogaine map, drawn to standards for a rogaine map

• map the hash house site, patrolled roads and water drops

Checkpoint Two: confirm that the area -- and base map -- are suitable for the planned rogaine

Plan the course from the map (this is "armchair setting")

- note that hash house, patrolled roads and water drops have already been set
 -- and approved -- as part of the base map
- each water drop becomes a control site
- locate other (potential) control sites

Add course details to the base map. The map is now the (first, draft, rogaine) "competition map"

Setters visit the site, checking, moving, adding and removing control locations and noting required map changes

• this is "fieldwork"

Update the competition map with changes to control site locations and other observations (such as road changes, new or missing earthworks and buildings)

• there may be several site visits by setters, resulting in a series of map updates

Vetters then do their fieldwork, using the latest version of the competition map -- and no other map

Vetters may suggest other map changes; these must be agreed by the setters before being implemented on the current copy of the competition map -- which will now be as close as possible to the map which will be issued to competitors

Follow the guidelines (described later) to allocate values (scores) to each control location

Create final control description sheet and other competition documentation

Checkpoint Three: confirm that the competition detail matches the required standards

Always use the current Rogaine map

Standard topographic maps are useful for initial reconnaissance work, defining property, map and out of bounds boundaries. These maps should *not* be used for setting. Instead, use a draft version of the competition map. There will often be significant differences between different maps of an area, and it makes sense to plan with the map the participants will eventually use.

Be very careful that there is just one (draft) version of the competition map in use at any time. For every site visit -- by setters or vetters -- provide the current (that is, the latest) version of the draft competition map. Make changes to the master copy of only the current map. Have just one person ("the Cartographer") making changes and distributing printed copies of the current map.

Give one person full responsibility for drawing the map

Nominate one person to be "the Cartographer". Normally this will be one of the setters. This one person is responsible for competition map creation and for implementing *all* subsequent updates and corrections. Setters and vetters suggest

changes, to controls and to the map, but only the Cartographer will make the necessary changes to the map.

Having just one Cartographer ensures that there will always be one and only one "current" version of the competition map. All map changes will go through the Cartographer. The Cartographer will provide printed maps for each site visit.

Other setters and vetters may use a mapping package and a *copy* of the competition map. This is good for learning, and useful for documenting required changes. Only the Cartographer will update the competition map.

Use a standard mapping package

Setters use a standard map drawing package which is especially written for use with rogaine maps. (Or, at least, for use with orienteering maps.) There are (currently, at May 2014) two main options. Suitable mapping packages are named in *Standards for a Rogaining Map*, towards the end of this manual.

There will be map package expertise and advice available within your Association or from other rogainers. The completed map will be kept, in its standard electronic format, and made available to setters in the future who may re-use your event area.

Use of a standard mapping package and purchase of digital map data is an essential part of the setting and vetting process.

Follow Rogaine map technical characteristics

See the *Standards for a Rogaining Map*, in the *Appendices* volume. Most importantly, you are drawing a *rogaine* map and must use *rogaine map* standards.

This manual is written as though all rogaine maps are

- printed on a single sheet of paper
- printed on an A3 sheet (or A4 for a six-hour rogaine)
- drawn at 1:50 000 scale

These standards are suitable for the available paper, units of measure, available map data and common terrain of Western Australia. They may be changed for other areas.

Avoid the need for at-the-event map corrections !

It should be the goal of every setting and vetting team to produce a map that does not require any at-the-event map corrections, although sometimes this is beyond their control. While setting and vetting, be on the lookout for any map details that need correcting. New buildings, drains, earthworks and tracks can be added to the map during the setting and vetting process. Similarly, demolished buildings, overgrown or missing tracks and vague watercourses can be easily removed from the map.

2.3 Evaluate the Hash House Site

Allow for time and weather

The time required for preparing the course is anything from two to 24 months, from approaching the first landholder up to the time of the event. The weather -- and field

conditions -- when doing fieldwork may be completely different to that expected for the event itself. Allow for this when selecting the hash house site.

Select the hash house site

On earlier visits to the competition area you looked for potential hash house sites. Now you select *the* hash house site. First confirm that

- landholder permission to use the site has already -- definitely -- been given
- the site is central to the competition area... or, there is no better site available
- there is good all-weather road access

Then, on site...

If possible, locate the hash house in a scenic location. Competitors -- and volunteers -- will enjoy a rogaine even more, if there is a memorable hash house site.

Confirm that the appropriate landholder is still happy for you to use the site.

Consider the following:

- a central (to the map) location is best, particularly for 24 hour events
 - a hash house in a corner of the map can make course planning by participants awkward, particularly for social and family teams which visit the hash house and plan multiple loops into and out of the hash house site
- the hash house site should not adjoin an out of bounds area as this limits the directions that competitors can leave and enter the hash house; it would also increase the possibility of participants unknowingly crossing through an out of bounds area
- proximity to major highways and busy roads: these provide good access for participants and organisers
 - for security reasons -- avoid hash house sites visible from major roads
- road access for the truck as well as cars and buses: no tight corners nor low branches overhanging the road
- access to suitable patrolled roads (see later section)
- time of year: for events in warmer weather the participants and volunteers will appreciate a location with some shade
- soft ground is preferable for hammering in tent pegs (but not too soft !)
- good drainage is required for all events, but especially for winter and spring events
- a level site is preferable for campers and essential for the hash house and admin tents
- availability of firewood for the hash house fire
- hash house sites in farmland during events in dry seasons can be extremely dusty, in wet seasons they can be muddy

- for a dry season event with farmland for your hash house, give preference to an area that has a good coverage of grass
- areas that were cropped in the previous season may be dusty
- campsites in forests can become distributed over a wide area
 - look for plenty of open space and natural barriers to prevent campers from spreading too far
 - consider the people who are camped at the outer limits and how far they have to walk (or limp) to the Hash House or Administration
- avoid hash house sites that conflict with other recreation groups such as tourist locations and picnic grounds

Sketch the layout of the hash house site

Get an approximate idea of how the site could be laid out. Where will you locate the:

- administration tent
- catering area and hash house tent
 - for example, the WARA hash house tent requires an area of 6 x 9 metres for the tent itself, with a perimeter of another 3 metres: a total of 12x15 metres of flat ground
- portable toilets, if required
 - if you have a site with permanent / fixed toilets, allow for this when locating the meals, eating and sleeping areas
- hash house fire and eating /meeting / socialising area
 - bearing in mind the prevailing wind (considering both fire and toilets)
- camping area and car parking for 200 cars and camping for 500 people without damaging native (or other) vegetation

Ensure access to potential patrolled roads

Event maps must include a network of patrolled roads. The purpose of these is to provide a location for sick or injured competitors to be collected from if they are unable to walk back to the hash house. Look for potential patrolled roads running in a loop from the hash house, around the map area and back to the hash house site.

Confirm the hash house location

If all of the above is satisfactory -- you have a hash house location !

Is there a distinct *mapped* feature near the middle of the hash house area ? Record this, to be the centre of the hash house triangle when you create the rogaine map.

2.4 Create the Base Rogaine Map

... Start at least three weeks before Checkpoint Two

Convert map data to a Rogaine map

When you have approval to access all (or most of) the land you require, contact the Committee, to obtain base map data for your event area. (Your Association may already hold the data from a previous rogaine, or new data will be bought.) Load this data into the mapping package to create the base map. This map is the basis for all further setting and vetting.

The map data will (most likely) be "topographic". It is used to create a "rogaine" map, drawn according to the *Standards for a Rogaine Map*. This is the first draft of the "competition map".

All further setting and vetting is done using the current version of this competition map.

In essence, a "rogaine" map is a topographic map with some adaptations to support navigation, on foot, from control to control. There is sufficient detail to allow effective route planning. There is an expectation that competitors will need to adapt their route to suit actual conditions found on the course. Not every detail need be mapped; this is to simplify the map and the mapping process. The map will *not deliberately* confuse competitors.

See the *Standards for a Rogaine Map* section, near the end of this manual. In particular, note that the *Standards* include standard colours for features on a rogaine map.

Include these details on the base map

The rogaine base map includes (explanations are below):

- contours, roads and tracks, water features -- as provided with the purchased map data
- fences and farm / forest boundaries -- as provided with the purchased map data
- any changes to the above which have already been found necessary
- magnetic north / south lines
- all known out of bounds areas
- edge of the competition area

This is the base map for all further work on this rogaine. It is the first version of the "rogaine" map -- the first version of the map that will be used by competitors. You set and vet the event using this *rogaine* map -- so that you can understand what is possible (and not possible) for a competitor navigating using only your competition map.

Allow space for other map requirements

Consider the layout of your printed map. Most rogaine maps are printed on an A3 (or local equivalent) sheet. Six hour events may fit on A4 (that is, half the printable area of an A3 sheet).

Note: A3 and A4 are standard sheet sizes for paper. Other sheet sizes for your map are also acceptable.

Consider where to place the map title, legend, logos and other elements of the final map. See *What Must be on a Rogaine Map* in the *Standards for a Rogaine Map* sections for a complete list of "non-map" items. Avoid problems and wasted effort by planning the overall map layout before setting controls.

- For "non-map" items which are not yet available, create a shaded area of suitable size and shape.
- Add all required non-map items and adjust map boundaries to fit on the printed (A3 or A4) map sheet.

Map the roads and tracks

By default, every road and track that comes with the purchased map data, goes onto the base map.

- you may remove any or all road names; later, you may choose to show the names of patrolled and major roads
- use standard rogaine symbols: there are specific symbols for various levels of road and track; these will need to be distinguished during site visits

Map the fences and farm / forest boundaries

As with roads and tracks: if the purchased data includes fences, include them on the base map.

Even if a fence is clearly an "internal" fence rather than a property boundary -- it may turn out to be a farm / forest boundary. The competition map will include fences which are property boundaries, or which are farm / forest boundaries. Fences which define an out of bounds area will also be on the competition map.

Start the base map with all fences which are included with the purchased map data. As you visit the event site, you will note fences which can be removed from the map.

Draw magnetic north / south lines

Draw north / south lines on the base map. Draw only *magnetic* north / south lines. The lines are spaced at 3cm or 4cm, that is, 1.5km or 2km apart.

Map all out of bounds areas

The following areas will be marked as out of bounds on your map:

• Any area which the property owner or manager has said is to be out of bounds.

- Homesteads, houses, other occupied dwellings -- plus the "living space" around them.
- Hazards, such as mine shafts and hazardous cliffs.
- Paddocks and fields for which access has been denied due to crops, bulls or other reasons.
- Any property or area shown on your map for which access permission was denied or was not sought.

Include indications of out of bounds areas which are just outside the competition area, as per the *Map to the Edge of the Competition Area* section below

Important note: Each out of bounds area must be clear to a competitor, on foot, in the dark. This means that the boundaries of each out of bounds area must be a physical "linear" feature such as a fence, track or watercourse. Where necessary *extend* the out of bounds area to provide a clear physical boundary.

Any out of bounds area may need to be changed and corrected as you visit the site and develop the competition map.

Map to the edge of the competition area

Where the competition area is limited by an out of bounds area, map about 500m actual (1cm map) from the map edge into the out of bounds area. This is to make it clear -- to competitors -- that they must not stray off the map into the out of bounds area.

Where there is a linear feature (such as a road, river or fence) at the edge of the competition area, map about 500m beyond the linear feature. Features "outside" the competition area will help competitors to be certain that they really are at the edge of the map.

Where the competition area is bounded by public land, simply stop drawing the map. You will (later) avoid placing controls which encourage competitors to leave the map area.

Map enough detail to avoid confusion

Rogaine setters are updating a topographic map, not drawing an entirely new map. What is mapped must be accurate, however, a rogaine map is *not* a "wysiwyg" (what you see is what you get) map. Essential map details are described above. Other details are added at the setter's discretion. However, when deciding what to include -- and not include -- on your map, always remember: It is the objective of the setters to assist the participants and not to mislead them.

See also, This is Not Orienteering on the Standards for a Rogaine Map pages.

Place the hash house on the map

Draw the hash house triangle on the feature that you identified as the centre of the hash house site. A distinct "hash house feature" is helpful for new (and other) rogainers. At least at the start of the event, they know where they are.

Map the patrolled roads

Event maps must include a loop (or network) of patrolled roads. The purpose of these is to provide a location for sick or injured competitors to be collected from if they are unable to walk back to the hash house. Select patrolled roads:

- preferably including a loop: from the hash house, around the competition area, then back to the hash house
- there may also be there-and-back tracks which will bring the patrol to otherwise isolated areas of the map

Patrolling roads is time-consuming. Make sure that you pick a patrolled road network that is easy to drive around using roads that are readily identifiable by the competitors. (And by the patroller !) Look for roads or tracks which are shown (on your base map) as being relatively "major" and continuous. Don't have too many patrolled roads, or you will spend the whole rogaine driving around. An ideal circuit would involve: out from the hash house, once around the map -- nearer the edge of the map than the hash house -- then back to the hash house.

Set water drops

A "water drop" is a control site where the setters will provide fresh drinking water for competitors. The basic water drop is a number of clean plastic containers filled with water, plus a funnel. Competitors are able to refill the water containers that they carry on the course.

How many water drops do you need for your event?

- In general, five or six water drops are needed for any event.
- You may need fewer -- or none, for a Minor event set in an urban area with plenty of public water supplies.
- Every event needs water but hot and dry events need more.
- A small number of large-volume water drops will be easier to manage but will reduce competitors' navigation options.
- Natural water sources -- such as flowing streams -- may be available. Can you guarantee that the water is safe to drink ? Water drops are better.
- A setter or vetter must check the water drops for water levels and for injured participants at least every few hours, so easy vehicle access is extremely important.

Set water drops which are easily accessible from the patrolled roads. The best water drop locations are at controls on the patrolled roads. This avoids the need to carry heavy water containers cross-country. Setters and vetters will check and refill water containers as part of the regular safety patrols.

Avoid placing water drops on the edge of the map. Many teams will never reach any edge of the map. Water drops need to be placed where they will be of benefit to a large number of competitors. If all of your patrolled roads are at the edge of the map -- re-think your selection of patrolled roads.

Each water drop will also be at or very near to an "average or better" points value control site. During fieldwork you may decide to set a water drop as an "offset" control. The water drop will be on the mapped and circled feature with the control hung at the offset location. For now, just mark the water drop location.

From now on use only the Rogaine map

From now on, the Cartographer updates the base map to create draft versions of the competition map. The latest draft will be used by setters, updated, then provided to vetters for control vetting. The draft competition map should have no more -- and no less -- detail than the final competition map; vetters (in particular) need to navigate as closely as possible to competition conditions.

In practice, the timing of setters' and vetters' field-checking may overlap. Each time that you (setters or vetters) are preparing for fieldwork, make sure that you have the current version of the competition rogaine map from the Cartographer.

2.5 Checkpoint Two : The Base Map is Approved

\dots [24/13/4/2] months before the event

Get committee approval for your base map: as a rogaine map and as being suitable for the proposed competition.

Note on timing

The timing of this checkpoint depends on the level of the event that you are setting:

- World event: 24 months before the event
- National: 13 months before
- Major: 4 months before
- Minor: 2 months before

You -- the setter -- provide information early enough for the appropriate Committee to make its decision before the relevant deadline.

Gather event information

Update -- if necessary -- the information provided to the Committee for Checkpoint One. Add a copy of the current base map.

Gain committee approval for the base map

Provide current information to the Committee:

- all information from *Checkpoint One*, updated where necessary
- a copy of the current base map

The Committee will approve your information, or reject it, or suggest changes. With Committee approval, move on to *After Checkpoint Two Approval*. Otherwise, you may accept the changes and gain Committee approval, or negotiate the changes, or re-work what you have done. (Or give up... though that would be the least-favoured action.)

The people who are involved in this step will depend on the level of the event:

• for a Minor or Major event, you (the setter) provide the information to the Committee of your own Association

- for a National event, your Association provides the information to the event Committee nominated by your National Association
- for a World event, your Association provides the information to the event Committee nominated by the IRF

If a National or World event is rejected, it may still be run as a Minor or Major event -- if your own Committee approves.

After Checkpoint Two approval: continue setting

Carry on with the next task of creating the competition. The Committee will continue organising the event.
3.0 Stage Three : Create the Rogaine Course and Competition

... Start as soon as possible after Checkpoint Two approval You have a rogaining map. To make a competition, you need a course... you need controls. Time for "armchair setting"...

- Armchair setting: sitting in a comfortable armchair, in the comfort of your own home. With a printed copy of the base map and a pencil, mark the various details needed for a course. It all looks good -- sitting in your armchair, looking at the map. Later, you will go to the competition site and see if it all looks as good in reality... Just as competitors know that a rogaine map is just a map, the setters and vetters can begin to set and vet from their armchairs but must go on site to make sure that it will work.
- **Fieldwork**: is the continuation of your course creation... on the competition site. On-site, you will hang markers at each confirmed control site. You will also look for better control sites -- possibly on unmapped features -- and add further detail to control descriptions. While looking out for any required changes to the master map.

At the current stage -- armchair setting -- you are working almost entirely from the newly created base map. You have no guarantee of the exact detail that you will find at any proposed control site. You have visited the competition area, met landholders, identified a hash house site and patrolled roads. But you were not looking for control sites.

This is what you will do now -- from your armchair:

- identify mapped features which may be suitable control sites
- spread controls across the map area

When you check the actual site you may find that a proposed site is impossible to reach due to dense undergrowth. Or so open that there is nothing to support a control marker. Or incorrectly mapped. Or unsuitable for any one or more reasons. Or good - but there is an even better control site close by. Armchair setting is essential... and fieldwork is just as essential.

Note for later: If there is "nothing to support a control marker" you may decide to use the location anyway. You may choose to bring or build a control support.

- You are adding to the work load for yourself and for the control collectors
- The control *must* hang at adult eye height
- The punch must be accessible -- without getting down on hands and knees
- Do not use a support which may fall (or be knocked) over

Just choose a better control site.

3.1 Begin with Armchair Setting & Vetting

... Allow two weeks immediately after Checkpoint Two First, the setters meet, and do their armchair setting.

Decide if you will set a particular style of event

You may prefer to set an event with plenty of controls closely set. Or less controls, spread far apart. Perhaps you like to set groups of controls, with relatively large distances between each group. Your controls may be on strong contour features or on subtle features close by the more major features. Perhaps you like to set controls on unmapped, more interesting features. You look for scenic controls. Or you prefer the challenge of climbing steep hills rather than long distances...

Whatever you like to find in a rogaine -- this is your chance to do it yourself. Your own preferences can set the "style" of the rogaine.

Associations may be tolerant of the individual's influence on the style of the course. However, you should respect the established conventions of the sport. Any deviation from the norm should be presented to the Committee before you finalise your plans. You can influence the style of an event by your selection of the event area as well as the location, spacing, quantity and value of controls.

Set limits on the number of controls to be set

A typical rogaine will have between 60 and 100 controls. Check with your Committee, the Association may have a limited number of control markers. This will set the maximum number of controls that you can set.

Plan for more controls rather than less. Some controls may be rejected during setting and vetting.

Make allowances if this is an "Upside Down" Rogaine

An "upside down" rogaine runs throughout the night, with just a few hours of daylight after sunrise. Typically, an upside down rogaine runs from 8 pm to 8 am. Special consideration must be given when setting an upside down event. Many novice and intermediate rogainers will try night navigation during this event. When setting an upside down event bear this in mind -- set slightly less difficult controls, mostly in open vegetation or farmland.

Select potential control sites

Armchair setting identifies *potential* control sites. Fieldwork will result in these being accepted, rejected or modified.

More importantly, armchair planning gives you a spread of controls across the map. If you later reject a control site -- you will be on the lookout for a replacement in the same area.

Examine aerial / satellite views of your event site. The aerial views may reveal features that you can use, such as exposed rock, and will also show you which areas are cleared and which are forest. (Forests and clearing may have changed since the photos were taken. This is one of the many things which you will check on site visits.)

At armchair setting, all controls will be located on distinct -- mapped -- features. This includes contour features (knolls, spurs, gullies), identifiable points on linear features (tracks and watercourses) and large point features (dams or ponds or buildings). Depending on what you can read from your map -- or see on aerial views -- or found on earlier visits, you may also consider that a control could be any one or more of these:

- interesting to travel to
- a challenge to navigate to
- physically challenging
- offers a nice view when you get there
- at an interesting location, such as a historical site
- simply be needed to fill a gap between more interesting controls

To satisfy both elite and social rogainers, provide a mixture of controls. For example, not all will be physically challenging, not all will offer a nice view.

Spread controls across the map

You may use one of many methods to spread your control sites. Most experienced setters have a favourite method that they insist is the best. One method is simply to pick the locations you prefer at spacings according to the terrain. Other setters overlay a grid on the map and pick the best site in each grid section. Or use a larger grid and place three to five controls in each grid section. You then look at the result and make any adjustments that seem to be necessary.

There is no need to evenly cover the map with controls. Controls may be set in groups. Within each group, controls are relatively close together. There is a larger spacing between each group. Competitors are then set the challenge of planning for group-to-group travel, as well as the control-to-control course within each group.

The distance between controls is up to you. Typically controls are at least 1km and no more than 4km apart, with average separation between 1 and 2 km. Think of "time to travel" rather than "distance apart". If vegetation or contours will *halve* the rogainer's speed then the distance apart is effectively *doubled*. If your map has a range of contours and vegetation, consider "time to travel" as you spread controls across the map.

The most challenging course for both setter and participant is one that offers no obvious single route choice. Avoid "holes" in the distribution of the controls. You may need to fill any gaps with a control that is not navigationally challenging, such as one on a track bend. Also try to avoid obvious loops, such as around an out of bounds area.

Do not consider control values at this early stage.

Remember: A Rogaine requires Rogaine controls

On the surface, rogaining is similar to orienteering -- yet there are many differences. The principles of control site selection are different for each sport. In particular, rogaine teams set their own course: the one set of rogaine controls must allow good course selection for a wide variety of abilities. Carefully follow the principles in this rogaine setters and vetters process manual.

Be aware of out of bounds areas

Do not locate controls in ways that would encourage teams to take short cuts through out of bounds areas.

Keep controls away from map edges

Avoid setting controls too close to the edge of the map. The diagram *Controls too close to edge of map* shows examples of bad control placement: control GC is very bad. It is at the edge, with no catching feature. (That is, no clear feature that will "catch" a participant who heads past GC and off the map.)

Avoid setting controls where a feasible route choice runs close to the edge. Participants can be lured off the edge of the known world and can easily become lost. Controls near the edges are acceptable if there is a catching feature such as a major road, railway or river running between the checkpoint and the edge of the map. Leave at least 500 metres (1cm at 1:50 000) between the map edge and controls.

By one interpretation of the previous paragraph, control GM (in the diagram) is bad; by another interpretation -- with Wazza Rd as a catching feature -- it is acceptable. To be acceptable, GM must be on the west side of Wazza. Better yet, move the control to the nearby dam / pond (the small solid blue square, touching the edge of the current control circle).

Note: If you are reading this on a black & white printout, you may want to check the diagram on an online, colour copy.



Controls too close to edge of map

Set some controls close to the hash house

Always set three to six controls near the hash house -- within one or two kilometres -- in various directions. Controls close to the hash house should tend to be relatively closer together and navigationally easier. This

• enables teams who do not want to walk long distances the opportunity to visit several controls

- assists novice teams, as they are less likely to become lost walking between their first few controls; Consider that many novices have no appreciation for distances on the map nor how long it will take to walk these distances. After visiting a few controls they should develop a better feel for the map.
- helps break up the crowds that occur around close-in controls at the start of an event
- offers tactical route choices -- several ways out, then several ways back -- for teams returning to the hash house then going out again
- offers an extra challenge to teams which choose to cover the course with no intermediate visits to the hash house; they will need to plan how to collect all controls which surround the hash house
- enables teams to visit different controls if they choose to do loops in and out of the hash house

Decide which controls near the hash house will attract a lot of teams at the start. These will need two or three punches and intention sheets. Make a note of these: onsite you will need to hang a control marker plus streamers for each extra punch-plusintention sheet.

Note: Each team will record its visit to a control by use of an electronic or cardbased "punch". They also record where they *intend* to go, by writing time, team number and intended next control on the "intention sheet". This is a safety precaution, to help locate a team which fails to return at the end of the event.

Check that the "course length" is suitable

• **Course Length** is the minimum distance which would need to be travelled in order to get all of the controls.

The objective is to set the event such that the top teams will visit a significant proportion, but not all, of the controls. The distance teams can travel will vary depending on factors such as the steepness of the terrain and the vegetation. Top teams can travel well over 100km in a 24 hour event, 60km in a 12 hour event, and 35km in a 6 hour event.

So the necessary course length will depend on control locations, distance between controls, terrain, vegetation... and on who enters your event... and on the weather...

Plan to set a course which seems to be... long enough. To be safe, plan to make it longer than long enough. If in doubt, ask an (another) experienced rogainer who is familiar with the competition area.

So how will you measure the length of the course ? Roughly... When you have armchair-set all controls, quickly sketch a course which captures all of the controls. And measure that course.

Having decided that it is impossible to know how long is long enough, follow these steps:

- Set a *maximum course length* for your rogaine: 150km for a 24 hour event, 80km for a 12 hour.
- Is your terrain steep, complex or just difficult to get across ? Go for a test walk or run and estimate a different distance.
- Is your vegetation thick and impenetrable ? Go for a test walk or run and estimate a different distance.

- Are you expecting "elite" rogainers to enter ? If not, adjust the distance downwards. 110km may be enough for a Major 24 hour competition.
- Think of a smaller distance, for the *minimum acceptable course length*. This may be 80km for a 24 hour -- depending on terrain, vegetation and expected level of competitors.
- Sketch a course to collect every control. Make it a good course though not necessarily a "best" course. This is a rough approximation. Measure the straight line *course length*.
- Is your course length between the estimated maximum and minimum ? Great ! But if you want to add a few more good controls -- do it.
- Use the available map area to add or remove controls until your course length is within (or above) the range. That is, until your course seems to be, "long enough".
- Less controls may be easier (or quicker) to set. More well-placed controls will provide more challenge for faster rogainers.
- Be flexible -- the correct answer is only available after the event.

Allocate a control code to each control

This is the first step of creating the control description sheet.

Allocate a unique code to each potential control.

The initial, course planning codes that you assign to your control sites will be temporary. Use double-*letter* codes rather than numbers. That is, code your proposed controls as AA, AB, AC and so on. There are several reasons for this:

- The final, competition, numeric control code indicates the value of each control: the higher the control number, the higher the control value. When you are planning your control sites you do not know and you should not care about the points values that will be allocated.
- Your Association can create (or may already have) special "setting controls" showing letter codes.
- There will be less confusion when you have to convert your course planning control codes to the actual control *numbering* system used for the event: Letters are for planning, numbers are for real.

Use letters for setting & vetting, numbers for competition. At this point you are still armchair setting.

Write the control descriptions



Map with sample controls

Note: In the diagram above, control circles and codes are shown in black. On the final competition map, control codes and circles will be red. Between course setting and competition, letter codes will be replaced with number codes. Changing the colours may help manage this transition -- or it may simply add confusion. It's an old diagram; you should be using *red*, from planning to competition.

A control location must be described in a manner that makes sense to the casual reader and which follows the *Standards for Control Descriptions*. (The description must also be consistent with both the map and the ground. This is checked, again, as part of your fieldwork.)

During armchair setting, controls are described for the mapped features that are circled. Sometimes a control circle will include two or more of the same feature. If you can clearly describe which feature is the control, then that is okay. For example:

- the CA circle contains two small gullies, the plan is to hang the control in the *eastern* of the two gullies
- there are two watercourse junctions inside the CB control circle, the control will be in the *western* junction.

Big important note about control descriptions !

The standard format for control descriptions is, "feature, extra detail". When you look at the map you can see a feature -- but you cannot tell whether it is, for example, "rocky". The "extra detail" is not on the map. Okay, "south east side" may be (sort of) on the map -- but that exact placement will be done as a result of a visit to the control site. When on site you will look at (in the AB example) the dam / pond and see that "south east side" is the preferred or only place to hang the actual control.

"Extra detail" is added as a result of fieldwork.

It is also possible to hang a control on a feature which is not mapped. So how can you identify an unmapped feature at this "armchair setting" stage ? You can't ! When you do fieldwork, you may see an unmapped feature which is the ideal spot to hang a

ROGAINE SETTING & VETTING

control... That is when you will decide to add a new control on an unmapped feature. Or to move a control from a mapped to a more suitable but unmapped feature. Have a look at the sample control descriptions, below, based on *Map with sample controls*, above. Then read *Standards for Control Descriptions* to see how the descriptions may change before being used in the competition.

And Read This Smaller Note, Equally Important: In the *Sample Control Descriptions* below, controls CA and CB appear to already have some "extra detail": The *eastern* gully, The *western* watercourse junction. This is not "extra detail". There are multiple, similar features within the circle. The "eastern" and "western" are necessary for the complete description for the mapped feature. As described in the previous section.

Use the standard control description format

The control letters used refer to the map in the diagram *Map with sample controls*, above. The "extra detail" will be added based on what you find, later, during fieldwork. Finally, control *letters* will then be replaced with control *numbers*... ready for the competition.

Control Code	Mapped feature [, then extra detail]	Extra intention sheet
AA	The spur	no
AB	The dam	2
AC	The saddle	1
BB	The knoll	no
BC	[nothing there: you want to fill a gap and hope to find "a" feature during on-site planning]	no
BD	The watercourse junction	no
CA	The eastern gully	no
СВ	The western watercourse junction	no

Every control description is described as "The [mapped feature]". Read *Standards for Control Descriptions* now, to see why this is significant. If you remember seeing an unmapped feature that will be a good control location, there may be "An [unmapped feature]".

And definitely read *Standards for Control Descriptions* (below) *before* you go on site for fieldwork.

Vetters do armchair vetting

When setters have completed their armchair setting, they provide vetters with a draft control list and the draft competition map. The map is the current competition map with out of bounds areas plus hash house, patrolled roads, water drops and proposed

controls. Vetters can *not* use a map with hand-drawn control sites ! Only by giving the vetters a copy of the exact map you intend to use -- complete with printed control circles -- can the vetters do their job satisfactorily. Accuracy is of paramount importance and will be checked by the vetters.

The draft control list should read as the final control description list is intended, other than: controls are still identified by letter codes, every control feature is "The", there is no "extra detail", and there are no point values.

Without going out in the field, the vetters begin vetting:

- Check that the scale bar is correct. Look (for example) for two points which are a known distance apart. Or a distance that can be measured off another map. Measure and compare with the distance measured by use of the scale bar.
- Check that magnetic north lines are aligned correctly. Magnetic north varies by date and location.
- Check the location of the hash house on the map. Is it central ? Does the map show a good access road ? Are there several controls well placed close to the hash house ?
- Check the map for patrolled roads. Are they mapped ? Do they provide a circuit that includes most areas of the competition area ?
- Ensure that there are sufficient water drops, suitably placed, for the event and season.
- Does the map indicate any obvious hazards, such as busy roads, sheer cliffs, deep rivers ? Are all hazards clear of controls and (or) enclosed within out of bounds areas ?
- Check the overall distribution of controls, and the distribution in relation to the hash house.
- Check each control description against the map. Are mapped features described as "The" feature and unmapped features described as "A" feature ?
- For mapped features, the control circle must be centred on the mapped feature; the control description must correctly describe that feature. The description must describe (within the circle) *only* the one control feature.
- Check that no control is poorly located due to out of bounds areas or the edge of the map.
- Check that no control appears to be a bingo control. (A "bingo" control is one which will be found by luck rather than by navigation. In the *Map with sample controls* diagram, BC looks like a bingo control. If fieldwork finds that the control would be hidden in thick undergrowth then it is definitely a bingo control.)
- Check the overall "fairness" of the event. In particular, confirm that there seems to be enough challenge for the best competitors, and enough close-in controls for the most casual competitors.
- Ensure that the style, balance and length of the course are appropriate to the event.

Vetters provide a written list of issues identified during their armchair planning. If necessary, setters and vetters get together to discuss and resolve all issues. This is done before either setters or vetters go to the competition site for fieldwork.

Be prepared to repeat armchair setting and vetting until setters and vetters are satisfied with the armchair plan.

All setter / vetter issues must be resolved before beginning fieldwork checking of the controls. (In practice -- for less important events -- setters may be doing fieldwork before vetters have done armchair vetting.)

3.2 You Need to Know Before You Go

... Understand all of this before you begin fieldwork This section contains general rules and suggestions which apply to all of your fieldwork. The section applies to both setters and vetters. The notes include general safety considerations, communication tips and a reminder of changing weather patterns.

There are hints on placement of controls which *must* be followed for every control. Plus guidelines for some special types of controls and control features.

There is also a section on use of a GPS during setting and vetting. A GPS may be used -- but only in very specific circumstances. The GPS section describes the ways in which a GPS may be used to support your setting and vetting.

Remember that weather varies over time !

The time required for preparing the course is anything from months to years, from approaching the first landholder up to the time of the event. The weather -- and field conditions -- when doing fieldwork may be completely different from that expected for the event itself. Allow for this when preparing for fieldwork, when selecting a hash house site and when selecting locations for controls.

Always be safe on site

Always consider your own safety and the safety of your fellow setters and vetters. You will be moving all over the selected rogaine area. This is, most likely, in a remote area. Take all reasonable precautions to ensure that you all return safely.

- Tell someone back home that you will be fieldworking in the countryside. Tell them where, and when you expect to return.
- As far as possible, go on site in pairs. If you do separate know where your co-setter-vetter will be and agree when and where you will meet again. Then be there, at the agreed time !
- Carry a mobile phone. If mobile phone reception is weak or is not available all over the event site, consider carrying a CB radio or similar.

Setters and vetters must report any serious accidents or incidents (that is, a near miss) to the Association's Safety Officer. (Or to the Committee.) You may be asked to fill in an accident report form, which should be returned to the Safety Officer.

Maintain communication ability while on site

Rogaines are often set in relatively remote areas. (For many competitors that's one of the attractions of the sport.) Mobile phones may not work at the event site. You may be able to get hold of a satellite phone to take with you while doing fieldwork.

Satellite phones and UHF CB radios are useful for communication and safety while setting and vetting, and during the event. The radios tend to be less effective in very hilly or heavily forested terrain. In some regions the radios can be used via a repeater which greatly improves their range.

If using CB radios, please behave responsibly particularly when using the repeaters. Talk to the farm and forestry workers about what channels they are using. Many landholders use the same UHF CB radio channels for their work and for fire alerts.

There will be times when you don't want to be heard by the landholders, and times when you may wish to contact them by radio. You never know who is listening. Always be polite !

Remember why GPS use must be limited

Competitors will not have a GPS and so they won't know the exact distance that they have walked away from a track. They won't know the exact bearing to a nearby point feature. Competitors won't know their exact latitude and longitude... Setters and vetters minimise the use of a GPS because they need to be sure that controls can be found using only the competition map and a compass.

Inappropriate use of your GPS could lead to a disastrous control site. Just because your GPS says "X" marks the spot, it isn't necessarily a fair control site. It is quite possible that your GPS is correct when the map contours and other data near the control site are not. As an example, the GPS may be useful to show that you are on the correct spur, but you should position the control circle on your map in relation to the contours actually on your map.

A map may not be absolutely accurate. There are several valid reasons for differences between a map and reality. Remember that competitors will search for control locations based on the rogaine competition map. Do not let the accuracy of a GPS reading blind you to differences between map and reality. (And if a section of reality has shifted, do not use it as a control location.)

You can use your mapping package to get GPS coordinates for a feature on your map. The coordinates may, however, be wrong. The base map may have been accidentally shifted or the datum could be wrong. If you want to match GPS coordinates to your map -- first use your GPS to record the coordinates of a couple of distinctive features such as road intersections. Then go back to the map and compare GPS coordinates to map coordinates.

However... yes, another however: Even road intersections may be wrongly mapped. If you look online at a composite view of "map" and "satellite", it is obvious that actual road locations do not always match where they are mapped. River edges vary over time so the real river may not match the mapped river. On farms, fences and buildings may be moved to suit the farmer, but the map data is unchanged. Be very careful if attempting to align your map to your GPS !

If you using a GPS, do not use it as the only means of determining your position during fieldwork. More specifically -- do not use a GPS to locate a control site.

Use a GPS only in these acceptable ways

Once you have located a control site -- using only map, compass... and brain -- you can use the GPS to record coordinates for the location. Then, when you return home, confirm you selected the correct feature. Remember that this is only as good as the accuracy of the map and its correspondence to your GPS...

You can improve your map using a GPS receiver. New tracks, road realignments, new buildings and new earthworks can be located by GPS then added to your map. Your mapping package may be able to interface directly with a GPS receiver, or import GPX files (a common GPS data format) which are readily created by the GPS. (Remember: map, accuracy, match to GPS, etc etc...)

You can set your GPS to track all of your movements during fieldwork. When you return home, overlay the GPS track on the rogaine map. Look for problems:

- You were driving along a track, or following a watercourse, but the GPS track does not follow the track or watercourse.
- You placed a marker at a control site but the GPS shows that you were not actually at the control site.

These and similar problems indicate possible errors with where you thought you were, or with the mapping of a feature, or with your GPS. Identify and correct the appropriate error.

Another way to use a GPS in the field is for a rough check of your relative location:

- 1. Standing at a confirmed control location, use your map to calculate the "offset" to the next control that you want to set or vet. The offset is distance and bearing from where you are to where you want to be. Measure the offset off your rogaine map. You may be able to point the GPS and read off the bearing.
- 2. Use the offset to record a new waypoint in your GPS. Now put the GPS away.
- 3. Travel to the next control, using only navigational tools available to competitors (map, compass, watch and brain).
- 4. When you are satisfied that you have found the next control location -- use your GPS to confirm your location. The GPS offset may only be accurate to within 100m or more... depending on the scale of the map that you used to measure the distance. This is enough to confirm that you are, at least, on the correct hill.
- 5. If the GPS indicates that you are not at the correct location, then you are at the wrong location for this control... or you were at the wrong location for the previous control. Or you made a mistake calculating the offset.

This method is useful for a quick double-check of your location. It is rough enough to ensure that you still rely on map and compass navigation, as you should.

Once you are absolutely certain that you have hung your control marker at the correct location -- record the location as a GPS waypoint. This can help with control hanging and control collection. It may also be used to (roughly) confirm the accuracy of the control circle on your final map.

3.3 Set then Vet in the Field

... Start at least two months before Checkpoint Three Armchair setting is complete. Setters and vetters are ready for fieldwork: go to the rogaine area and locate the actual control sites. Follow this process...

Yes, there will be some overlap. For example, checking out of bounds areas and the actual condition of tracks will be done while checking nearby controls. The sequence of steps may be varied, just a little. For example, you may want to check access roads near the hash house site before sketching the site layout.

The important thing is, to use this process as a checklist: make sure that you do every task in the process. Both setters and vetters should read the entire section: whatever is done by the setters will be checked by the vetters.

The process shows a clear sequence of completing the setting before starting the vetting. In practice you may, for example, set on half the map then allow that half to be vet, while you continue with setting the other half. Just be certain that for each control, setting is done before vetting.

How much time is needed ?

How much time is needed for field work ? That depends...

Experienced setters and vetters may set and vet many controls in one day. (If this is you, do not sacrifice accuracy for speed.) Some people move faster, for longer, than others.

Some rogaines have a good track network. Or open farmland which is suitable for driving. There will be less time spent moving from control to control. (Balanced by extra time at each control, to confirm that you are not lost after an easy drive.)

Is the area full of tourists, hikers, stock or wild animals ? All of these may convince you to set fast and late -- to reduce the risk of control markers going missing. Or you may be able to spend the occasional weekend setting and vetting, throughout the year, with little risk of control markers being lost.

A key question is: How much time do you have for setting ? Some rogaine sites are accessible year round. Others (private land, for example) are accessible for a limited time before the event. You may have to rush -- or you may be able to pace yourself.

Fit and experienced setters in open country may be able to set 40 or more controls in one day. Or ten in a day may be optimistic. Set yourself a target. Start early. Adjust the target if necessary.

Prepare to go on site

Whenever you are in the field, take a list of the landowners with you. If you are challenged by a forest or farm worker you will be more credible if you can name the person who has given you permission to access the land.

Schedule several site visits. Allow time for extra, unscheduled visits.

Before each visit, plan the approximate route that you will follow. This could be as simple as, grouping all control sites and visiting all sites in one group before moving on to the next group. Look for groups of controls with a clear access route: drive into the group area, walk and drive within that area, then drive to the next group area.

Make sure that your routes will lead you to visit every control on the course ! You will be making notes at each control. At the end of the day -- make sure that no control has been overlooked.

Allow enough setting time to add several unscheduled site visits.

Your fieldwork will include each of the steps below.

Continuously compare the map to reality

It is the goal of every setting and vetting team to produce a map that does not require any on-the-competition-day map corrections, although sometimes this is beyond their control. While you are on site, always be on the lookout for any map details that need correcting. New buildings, ponds or dams, and new major tracks can be added during the setting and vetting process. Demolished buildings, overgrown or missing tracks and vague watercourses can easily be removed.

Look for water in watercourses

A watercourse is where water would flow, if water were flowing !

It is very common in Western Australia to have watercourses marked on the map that only exist in the imagination of the photogrammetrist who created the map. Other areas may have similar problems.

To call a control site "The (or a) watercourse" there should be some visible sign of the passage of water. If you wish to use a site where the watercourse shown on the map is not easily visible in the field, it would be fairer to call the location a gully and to delete the blue line of the watercourse from the map.

Consider, though, that water may flow during setting and not during the competition. And vice versa.

Re-check the hash house site

On an early site visit, check the hash house site against the criteria of the earlier section, *Evaluate the Hash House Site*.

While you are fieldworking on the competition site, confirm that you:

- Have identified a well-placed location for your hash house (the location is level, central, accessible)
- Have checked access roads (vehicles from small cars through to large trucks will be able to reach the hash house)
- Have considered how the site could look on competition days (wet, dry, hot, cold, rutted, crowded, and so on)
- Are all (setters and perhaps vetters) satisfied that it is a good site for the hash house
- Have definite permission to use the site

then locate the site accurately on your rogaine map. If possible, centre the hash house triangle on a clear feature near the centre of the area. This will give the competitors a clear starting point for their navigation.

Sketch the hash house site layout

While you are at the hash house site, make a sketch map of the hash house area layout. For example, sketch where you will put the Hash House, Administration and First Aid tents. Where will the fire / eating / relaxation area be? And the chemical / portable / temporary toilets? Will you offer separate areas for tents and campervans ? What tracks (within the hash house site) will be kept clear for access by trucks, competitors and patrol cars ?

This sketch map will be essential when you discuss site set-up at the pre-event meeting.

Some factors of the many to be considered:

- Competitors finishing their courses may be running towards admin. Place admin so that incoming competitors do not have to weave their way through crowds, fires, hash house and all the hash house equipment.
- Plan for separation of vehicles from pedestrians, especially around the hash house and administration areas.
- Allow parking for setters and vetters, with easy access for driving in and out on the regular safety patrols.

Locate the hash house fire, plan for fuel

During the event, will you be providing a hash house fire ? The hash house fire provides a warm and welcoming focus for competitors and volunteers. The hash house fire is the only fire which may be allowed on the event site. You will need sufficient fuel to keep the fire going for the duration of the event.

Be sure that you are allowed to have a fire during the event. Check with both the landholder and the local fire service.

The hash house site landholder, or a local farmer, may be able to help you find a ready source of fuel. Be certain that you are allowed to use the fuel that you find. Be prepared to carry the fuel, stack it and possibly cut it before or during the event.

Include both fire and fuel storage on your hash house sketch map. Fuel must be stored close by the fire but not so close that it will accidentally catch fire.

Check all out of bounds areas

While fieldworking, confirm the locations of out of bounds areas. Are they all mapped ? Are they accurately mapped ? Are there clear boundaries -- clear to a rogainer, on foot, in the dark -- on all sides ?

Out of bounds boundaries must be clearly identifiable in the field. The edges should be -- for example -- fences, or roads, or rivers, or distinct gullies. If not, consider extending the out of bounds area to the nearest clear boundary. It is better to have an out of bounds area larger than necessary, rather than risk competitors accidentally straying into the actual out of bounds area.

Competitors are penalised for entering an out of bounds area. The real penalty is that the Association has not respected the rights of the Landholders.

Check the roads and tracks

As you visit the event site -- carrying copies of the competition map -- keep an eye out for roads and tracks which may need to be remapped. Look out for actual roads which do not match the map. Look out for "roads" which should be mapped as "tracks" and vice versa. In particular, check the roads and tracks which may become patrolled roads: are they safe for night-time driving ?

During your site visits, drive along each patrolled road at least once, checking the condition.

Check each and every control site

It is best for at least two members of the setting team to travel to each proposed control site. This is safer and you will have another setter with whom to consult. Do not be easily swayed by the opinion of another setter. Feel free to argue as much as you like. Take it as a guide that the more you disagree about a particular site, the more likely it is that it will be difficult for a competitor to navigate to, especially at night.

Check the location of each and every control

Consider the safety of competitors: When field-checking a control site, always consider how safe it would be to locate at night. What seems safe during daylight hours may present problems during the night. If in doubt, put a warning on the control description sheet of any hazards at or near the control.

Having seen the actual location, you may reject a site which was selected during armchair mapping -- and relocate the control to a nearby point. The new control could be on a mapped feature which is, in reality, a better control location. Or the new control site could be unmapped, so you move the control from "The" feature to "A" (preferred) feature.

Do not place a controls on "An" unmapped feature that is not clearly visible. Do not use "A" feature which does not have a nearby attack point. Do not use, for example, "An indistinct track junction" which is so indistinct that competitors could walk over it -- without noticing it -- at night. Do not use "A bare rock surface" in an area where there are no nearby, distinct map features to assist competitors in locating the unmapped rock surface.

When using "A" feature as a control -- confirm that it should not be mapped. If the feature is as distinct as other mapped features, you may choose to add it to the map. (It may have been overlooked by the original mappers, or created since the original mapping.) There is, however, nothing wrong with a control on "A" clearly visible feature. A wrecked car or a unique tree could be a good control feature but neither would be mapped on a rogaine map.

A control that is navigationally challenging is not the same as a "bingo" control. A bingo control is found purely by good fortune and not by the navigation skills of the competitors. Controls located on extremely broad features, unmapped track features or in thick forest are likely to be bingos.

Be very certain: are you really there yet ?

When setting, unlike competing, your location will not be confirmed by the presence of a control marker. Check your position in as many ways as possible:

- While you are approaching the control site, check that visible features match those on the map.
- Confirm that the control feature is the right shape and in the correct orientation.
- Use pace counting from a nearby unmistakable location to locate the control position, especially if the control is not on a point feature.
- Use contours from another distinct feature to check that the location is at the right height.
- Look at surrounding features and confirm that they match mapped features.
- If possible, leave by a different route and continue checking as you go.

Be especially wary of parallel or similar features. For example, make sure that you really are on the track you think you're on. If you are on a hill with many knolls be sure you have the correct knoll. Similarly, be careful if you have set a control in an area of complex watercourse junctions or spurs that all have the same orientation.

If approaching the area in a motor vehicle do not be too reliant on the odometer. Remember you travel faster in a car and it is easy to lose contact with where you are. Be especially wary of parallel features and make sure that the track you are driving on is indeed the one on the map.

Should you use a GPS to check your position ? See the earlier section on acceptable ways to use a GPS (*Use a GPS Only in These Acceptable Ways*). Do *not* use a GPS as the main or only means of locating a control site. Remember that you are placing controls which must be found by people who will not be allowed to use a GPS.

Check that the control site was worth finding

A control should be rewarding to visit in ways other than the allocation of points. As you check sites consider whether or not the site is:

- interesting to travel to
- a challenge to navigate to
- physically challenging
- offering a nice view when you get there
- at an interesting location, such as a historical site
- simply be needed to fill a gap between more interesting controls

If a control satisfies *none* of the above, there may be a nearby alternative location which is better.

When placing your control sites remember that the bulk of rogainers are not elite athletes and that the event must be enjoyable for all participants. Elite athletes may prefer a challenge, social rogainers may prefer interest. Your task is to provide a variety of controls so that your rogaine provides a mixture of both challenge and interest.

Check that the location is suitable as a control site

The checkpoint location -- and surrounding approaches -- must be mapped correctly.

The area around the control must be free from hazards such as cliffs and electric fences. Any potential hazards must be included on the control description. If there are hazards, then consider an alternative control site.

A control site must be a sufficient distance from any property, natural feature or environment which may suffer from the passage of competitors, such as a fragile habitat, rare flora or crops.

Controls must be at precise locations and not be ones which you find by good fortune (known as bingo controls). Searching for controls on broad knolls, broad spurs or in broad gullies can be frustrating, particularly at night.

Both the approach to and the location of the control should be free of overly thick vegetation. Walking or fighting through thick vegetation is slow and unpleasant. Controls in thick vegetation are often bingo controls: the control will be hard to see and it will be difficult to follow a straight bearing towards the control location.

The control location must not encourage participants to break any rules of rogaining.

The control can be located without undue difficulty or danger, especially during the night.

Mark each control location

Use surveyors tape and an Association (or other) setting control to mark the exact point (fence, tree, whatever) at which you intend to hang the control. Don't use plastic dinner plates as these break down due to ultraviolet light exposure. Paper plates turn into pulp. Don't hang just a setting control, hang tape as a backup.

Use several different colours of surveying tape. Use at least a metre of tape, and have some loose tape to drift in the breeze or hang in the open. Don't make it too hard for the vetters !

Write the control setting code, your initials, the date of the event and "WARA" (or your own Association's name) on the surveying tape. If you are not using the Association's setting controls, then write the setting code on whatever you are using. (During setting, use letter codes. These will be replaced by number codes when actual controls are ready to be hung.)

Alternatively: your Association may have more durable markers. Use whatever is suitable, whatever will be easy to find again. Attach it firmly so that it is likely to still be there when it is time to replace it with the actual control.

Decide where to hang the control

You are certain that you are at the correct feature. Now, where exactly do you hang the control ?

The control must be located so that it is easily visible at the feature described: once a competitor finds the feature, the control must be visible.

- Ideally, the control should be hung on a small living tree where you can wrap the control around the trunk of the tree. This helps competitors find the control because it is visible from any side of the tree. It will also stop the control from twisting or blowing away in strong winds and help prevent the breakage of pencils or other recording technology.
- Hang the control at eye height for an adult. Make this the eye height of a *taller* adult, so that the control is, if possible, visible above surrounding rocks and vegetation.
- Hang the control so that the control punch may be attached within easy reach. Make sure that this is within easy reach of a *shorter* adult. Consider both height above the ground and "stretch" distance across (for example) a barb-wire fence.
- The control must be hung in the open so that any team which navigated accurately to the feature can be assured of quickly finding the control. This is especially important for teams searching for controls at night.
- The control must be safe to approach for at least 10m from all directions. For example, no dangerous cliff edge next to the control.
- The recording device (control punch) must be easily accessible from at least a 180 degree arc. For example: a control punch may be placed next to an unclimbable fence -- as long as there is clear access to the punch on its own side of the fence.
- If the control site is in a field or paddock that may have stock, make sure that you tie the setting control marker and tape up high so they won't get eaten.
- At some locations, such as in a public area, it may be necessary to hang the control a short distance (up to 100m) from the named feature. See the section on *Offset Controls*, below.

Some controls will have more than one control recording device. (That is, more than one card punch or electronic equivalent.) Controls near the hash house -- where a crowd of competitors will converge near the start of the event -- need two or even three recording devices. For these controls:

- First hang the setting marker and its streamers (surveyors tape).
- Then hang streamers where each extra device will be: in clear view of each other, with room for separate queues at each, at least 3m apart.
- Ensure that there is room for a queue of competitors -- with no need to push back through the queue after punching.
- Check that *each* device location satisfies the criteria from the first part of this section.

Remember that the challenge of a rogaine is to navigate to control features. *Not* to find a hidden control marker.

Map controls on farm dams and ponds according to size

For small farm dams and not very large ponds the control circle is centred on the middle of the dam or pond regardless of what side the control is hung on. Consider that the symbol for a small dam is 1mm wide, which is 50 metres on a 1:50 000 map. If the dam is either greater than 50 metres wide or is large enough to have its actual shape drawn on the map, you centre the control circle on the appropriate side of the dam.

Use offset controls only if necessary

This kind of control is used to hide the control from public view or where there is no suitable place to hang the control at the described feature. Do not overuse this style of control. It is often preferable to find another location.

The checkpoint description must include the offset -- that is, a bearing and a distance -- to the control from the feature. The distance must be less than100m and the bearing is degrees magnetic. In all cases the information is given in this format: "*feature*, then *distance* at *bearing* degrees".

For example:

Control Code	Map feature, then extra detail
34	The track crossing, then 50m at 275 degrees

The control circle on the map is drawn centred on the specified *feature* and not the actual location of the control. In the example above, the control circle is centred on the track crossing.

Rogaining Technical Regulations state that the magnetic bearing and distance must be provided for controls that are more than 10m from the described position.

Describe the control location

The proposed control site must be describable using common topographic or rogaining terms.

- Alternatively, clearly describe a visible, possibly man-made, unmapped feature that is clearly visible and located at the site. If there is more than one of the feature in the control circle, describe "your" feature so clearly that it may be identified without searching.
- If you cannot clearly identify "your" feature -- do not use this control location.
- See *Standards for Control Descriptions* towards the end of this manual.

Having placed the tape take careful note of the following.

- The setting code (AA, AB, AC...) for the control site.
- Alter your proposed control description if necessary. When the control is on a broad feature, you should supply extra directional information in your control description. Such as "The broad knoll, southern part". The use of broad features is not encouraged, but sometimes you have no alternative.

- Other features may also need extra detail. For example, on a creek which is difficult to cross you may have a control, "The creek bend, west side". This allows competitors to plan their approach via the west side of the creek.
- Look for other descriptive information about the site that wasn't known during armchair setting. eg Is the site rocky ?
- Pay attention to whether the checkpoint is on a mapped feature or an unmapped feature. eg Is it *a* knoll, or *the* knoll ?
- Confirm or change the location of the control circle on the map. Your control tape must be at the centre of the circle on the map. Be very precise in locating the control circle on the desired feature. One millimetre on a 1:50 000 map represents 50m. Be accurate !

It is especially important *not* to mark attack points or convenient access tracks using tapes or other means. Mark only the control site. Allow vetters to find their own way to the site, using only information which will be available to competitors.

It is vitally important to make all notes and map corrections while you are at the control location. (Okay, you won't exactly be making map corrections. You will be carefully noting corrections which need to be made to the master copy of the rogaine map.) After a weekend of visiting a large number of control sites you will have trouble remembering fine details.

Update the competition map

Remember when you return home to send all of your map changes to the Cartographer, the one person responsible for updating the "current" version of the competition map.

Ensure that the hash house is accurately marked (by the Cartographer) on your OCAD master map.

Ensure that there are no controls within a finalised, possibly extended, out of bounds area !

Finally -- with controls possibly changed, added and removed -- recheck the course length. Re-read *Check that "Course Length" is Suitable* in *Armchair Setting & Vetting* for notes on the required course length.

Setters hand-over to vetters

It is most important that the setters and vetters do not discuss the details of controls in advance of vetting. Prior knowledge can weaken the vetters' objectivity and independence.

Setters provide the following for the vetters:

- A printed copy of the most current competition map available, with control locations printed on the map. The map must be the one that competitors will use, with the same out of bounds, fences, tracks and corrections. Ideally, the map layout should be complete. At the very least the setters should be able to explain which areas of the map will be used for titles, legends, sponsors logos and other essentials.
 - Vetters will not accept a map with hand-drawn control sites. The role of vetters is to vet the exact map and control descriptions that will be given to competitors.

- A printed list of control descriptions.
 - This should be the final competition descriptions -- with extra space for vetters' comments on each control.
 - Controls will still be lettered rather than numbered and there will be no point values.
- A list of landholders and a map of their property boundaries. It is very useful to know whose property you are on and to be able to refer to the landholder by their name.
- For farmland events, if you intend to remove internal fences from your competition map (this is recommended) then the map you provide to the vetters should also have the fences removed.
- The setters should try to provide useful information to the vetters on how to travel through and between farms, but should not give hints on how to find controls.

Under no circumstances should the vetters be provided with GPS coordinates of the control sites. In this way the vetters have the best possible chance of doing their job properly. They will be vetting with the latest version of the competition map with only the information which will be available to competitors.

Vetters do armchair vetting

The vetters begin their vetting before going out in the field. This was covered in *Vetters do Armchair Vetting*, in the *Armchair Setting & Vetting* section.

If the vetters have issues with the map or controls or control descriptions, report this to the setters. Do not go on site until the issues are resolved.

Prepare to go on site

Plan the approximate route that you will follow. This could be as simple as, grouping all control sites and visiting all sites in one group before moving on to the next group. Look for groups of controls with a clear access route: drive into the group area, walk and drive within that area, then drive to the next group area. Do this independently of the setters !

Setting and vetting fieldwork may overlap. In that case, setters will give vetters control site information only for sites which have already been set (that is, checked on site and marked by the setters). Plan you site visits accordingly...

Make sure that your route will cover every control that you must vet ! You will be making notes at each control. At the end of the day -- make sure that no control has been overlooked.

Schedule several site visits. Allow enough vetting time to make even more unscheduled site visits.

The vetters take the current draft competition map and control descriptions provided by the setters, spare surveying tape, marker pens, notebook or a clipboard and paper with them into the field. They should not forget their normal rogaining gear including a compass, first aid, water, gaiters and whistle.

Do fieldwork on site

The vetters do more than just find the markers left by the setters. They must carefully check all the aspects of the setters' work. This includes checking the accuracy of the map and reporting any necessary corrections, overall design of the course and distribution of water drops. Vetters inspect the whole course through the eyes of a competitor, looking for any problems and ensuring that the course and controls are fair and safe. Consider all routes the competitors may use to reach each control.

When field-checking a control site, always consider how safe it would be to locate at night. What seems safe during daylight hours may present problems during the night. If in doubt, put a warning on the control description sheet of any dangers at or near hazardous control.

All notes, control description changes and map corrections should always be made in the field as soon as the need arises. Do not rely on "mental" notes.

As with setting, it is strongly recommended that vetters travel together for safety. Having another vetter nearby is useful if any discussion regarding a control site is required. Allow time for reasonable discussion and comment.

Vetters need to judge whether the control site is fair, not just find the site marked by the setters. First navigate to the proposed site using only the competition map and compass. Remember that vetters must navigate on the same basis as competitors. Decide whether the setters' marker is correctly located by considering a range of factors such as

- The control site marker is in the correct location. Use all possible means to do this: take bearings, pace count from attack points and look at the contours and features on the map.
- The description correctly and concisely describes the actual control location.
- The control is clearly visible: once the competitor has found the feature described on the control description sheet, they should be able to see the control.
- The location of each control and its immediate surroundings are sufficiently well mapped so as not to mislead competitors.
- The location of the control ensures that it will be visible for competitors approaching from various directions. Hanging the control around the trunk of a small and isolated tree that is in a reasonably clear area is ideal.
- Any threat to the safety of participants has been minimised.
- Any threat to flora and fauna or property has been minimised and participants are not encouraged to enter out of bounds areas or break any other rules of rogaining.
- The marked location is not on the wrong one of several parallel features. If the feature is one of many similar features (such as knolls or watercourses) in an area, make doubly sure that the correct feature is taped.
- The control should not be a "bingo" control found only by good fortune.
- The control can be located at night without undue difficulty.

Vetters should walk the likely routes that competitors will use between the hash house and the innermost controls. Keep in mind that these inner controls will be visited by: large numbers of competitors at the start of the event; by competitors who are young or are less fit; and by competitors either rushing to get ahead of the pack or rushing back to avoid being late. If any hazards are found, then the control should be moved or the competitors informed in the event information notes.

Keep the use of your motor vehicle to a minimum when vetting. A vehicle will deprive the vetter of the sense for the physical difficulty of the course, an aspect which the vetter should assess, and it is easy to be deceived when navigating by car.

A control site should not be accepted just because it was found easily, as it is not necessarily correct. If the vetters take a long time to verify a control position, then the control location may be too difficult. The vetters must be satisfied that each checkpoint is correct and this will require the same thoroughness as is required of the setters.

Any control sites in dispute (other than descriptive changes) or sites not located by the vetting team must be revisited by members of first the setting and then the vetting teams.

If the control site is too difficult to locate, too vague or too physically difficult to reach then it is a poor control site and should be abandoned.

Vetters do not move a control site. Vetters may believe that a control is badly located. They may find a "preferred" location. Vet the "set" location -- and suggest to setters that it be moved. Setters may then re-set, in which case vetters will vet the new location. However...

... Vetters may -- while still on site -- be able to contact the setters. Setters may agree that the control should be moved. Vetters may then move the control. Setters will update the map and the control description -- and *setters* will subsequently re-vet that control.

Be sure that both setters and vetters have visited the control -- in its agreed and mapped position -- before the map is finalised and controls are hung.

Reconsider the overall course

Vetters now have an understanding of the vegetation, terrain and other conditions in the competition area. They can now re-check the overall course.

- Check the overall fairness of the event.
- Check that the style, balance and length of the course (*Check that "Course Length" is Suitable* in *Armchair Setting & Vetting*) are appropriate to the event.
- Check for any unwanted problems or safety hazards which could affect competitors.

Do each of these independently of the setters.

Vetters provide feedback to setters

After doing the fieldwork, the vetters provide the course setters with a written summary of suggested changes. The vetters make themselves available to discuss the suggested changes.

Plan to repeat the setting and vetting process for any controls that need to be changed.

The vetters have an equal level of authority to the setters, and the setters act upon their advice. If a disagreement about a control cannot be resolved, that control site should be deleted or moved.

The most reliable and effective way for the vetter to report back to the course setter is to present a set of written notes as a basis for discussion. For example:

Control code	Feature	Extra detail	Vetter's comment
AA	The spur		ОК
AB	The summit	eastern part	OK. Nice view. Suggest high value control.
AC	The spur	rocky	Circle should be 100m further east. See attached map for correct location.
AD	The watercourse junction		Control circle on taped location is wrong. Correct location believed to be 300m upstream.
AE	A power pole. E45678	40m at 180 degrees	OK. But suggest using knoll to the SE instead of offset control.

This should be followed by any remarks relevant to safety and to the course in general.

Repeat all of the above until complete

If the vetters have made any changes -- especially if they dared to move a setters' control marker ! -- then the changes must be rechecked. Every control must have been checked and confirmed -- in its final location -- by both setters and vetters.

When setters go back on site to check changes made or suggested by vetters, the setters now act as vetters. That is, the "setters" go back on site and "vet" the new data.

And if this results in more changes... Repeat until Complete.

Each control must have been checked and confirmed -- in its final location -- by both setters and vetters.

3.4 Allocate Values (Scores) to Controls

... Four weeks before Checkpoint Three

Change course to competition

All the parts have been created for a good course, including map, hash house, patrolled roads, controls. You are ready for rogainers to enjoy a pleasant exercise in cross-country navigation. Now it is time to add both challenge and competition: to allocate a value to each control.

The setters allocate the values of controls after the course is fully set and vetted. The challenge is to set an event where the distribution of controls and their values are balanced in such a manner that there are no obvious route choices.

The vetters review and comment on the values assigned to the controls by the setters. Vetters are not involved with the initial allocation of control values, as this may be detrimental to their ability to view the course from a competitor's perspective.

The most challenging course for both setter and competitor is one that offers no obvious single route choice. This can be achieved in part by careful balancing of the control values.

Setters set then vetters vet

Setters do the following tasks (allocate control values, and so on). Then vetters -independently -- vet what has been done. It may be necessary to revisit parts of the competition area, to confirm decisions. Repeat each step until setters and vetters reach agreement. Then ensure that all is correctly recorded on the map and the control description sheet.

Work within the allowed range of control values

Your Association may use an electronic control punching system. Or a standard control card. There may be a standard computer system for recording scores at each event. Any of these could restrict the control numbers that you may use. Otherwise:

- Control *numbers* range from 10 to 109. Each number is used, at most, once. That is, each control number is unique. There is no need to use every possible control number.
- Control *values* are allocated in multiples of ten: each control will have a value of 10, 20, 30, 40, 50, 60, 70, 80, 90 or 100 points. Control numbers match the "decade" of the value. There are ten possible control numbers for each control value. For example:
 - Controls numbered 10 through to 19 are each worth ten points.
 - Controls numbered 40 to 49 (inclusive) are each worth 40 points.

What control values should you use ?

- There is no need to use all controls. A good rogaine can use anywhere from 60 to 100 controls.
- Spread the control scores across the entire range, from 10- and 20-point controls, to 90- and 100-pointers.
- There is no need to include all -- or any -- controls from within each decade.
- Low-score controls add to the navigational challenge: is it worth going extra distance for "just a few" points.
- The "tens" decade (controls 10 to 19) is good to use for a "really easy" loop of controls along tracks near the hash house; this would be good for juniors and novices. Otherwise the tens decade may be dropped.
- There may be more controls in the middle decades, the 50s, 60s and 70s. This way, average course planning will lead to an average score.
- Always include several "hundred-pointers", that is, controls numbered in the 100 to 109 range. Competitors gain great satisfaction from finding a hundred-pointer. If you can't identify several controls which are worth one hundred points -- perhaps your competition site does not offer sufficient challenge. (It may still be suitable as a Minor event.)
- Some experienced rogainers believe that ten- and twenty-point controls (numbered from 10 to 29) are not worth finding, so not worth placing. These people have lost their understanding of rogaining and may be ignored.

There are special considerations for control values for water drops:

- A water drop is always at or very close to a control.
- Water drop controls each need to be worth 40, 50 or 60 points. This makes them worth visiting. If water drops were worth only 10 points, over-competitive teams could ignore them and risk dehydration.
- A water drop is at an easy-to-*find* location -- for safety reasons. Competitors must have no trouble *finding* a water drop.
- Water drops earn their control value because of their distance from the hash house. They are near patrolled roads, which are nearer the edge of the map than the hash house. Competitors need to walk a reasonably long way to reach a water drop.
- A water drop may be at an "offset" control. This is to keep the control marker out of sight of passing members of the public. Do not use this as an excuse to add "extra technical difficulty" to the control.
- An example of a water drop which is "very close to" a high point control is shown on the diagram *Water drop close to a control*. The high-value control ensures that the water drop is also worth a visit. The "obvious" attack point for the control is the water drop but there is still a navigational challenge.



Water drop close to a control

Allocate control values based on control attributes

There are no strict rules governing the number of points that should be allocated to a particular checkpoint. You may value the controls in any way you wish. Here are some options to consider for the overall competition:

- **Difficulty weighting**: This puts the emphasis on the difficulty of reaching a checkpoint. The top of a steep hill, an isolated location or a place that can be found only by skilful navigation may be given a high value. The final score will indicate the team's skill, speed and stamina. This weighting is considered for each control: more difficult controls are worth more points.
- **Perimeter weighting**: This is based on the idea that distance from the hash house is a factor in the difficulty of visiting a checkpoint. Inner controls are worth less while the outer controls are worth more. This method tends to prevent competitive teams from visiting the hash house during the event. They would rather spend their time at the high-scoring edges of the map. It also inflates the scores of the higher ranking teams. Distance from the hash house certainly adds to the difficulty -- or time -- associated with a control. Balance high points on the perimeter with some high points closer in.
- **Central weighting**: This method places a very high value on some inner controls. This allows the competitive teams to find profitable routes in and out of the hash house during the event. Also it tends to inflate the scores of the lower scoring teams. They are able to gain high scores without too much distance to travel. A high point control must always present a challenge. A high point control near the hash house could -- for example -- be at the top of a high but walkable hill.
- To encourage novice teams and those with children, a single 100 point control is often placed reasonably close to the hash house. See previous point on "central weighting" but scale the challenge to allow for children.
- Scenic weighting: This gives higher value to locations of high scenic quality or historical interest. The intention is to lure teams to these places to enhance their enjoyment of the event. A small number of scenic, high point controls are good for any rogaine -- if you are lucky enough to have scenic locations in your competition area.
- Water drops: Placing water drops with controls with higher values encourages participants to visit water drops. From a duty of care perspective this is important, especially in warm weather. All water drops must be no more than 200m from a control. Water drop controls will have

values of 40, 50 or 60 points -- somewhat higher than would be allocated if they were not with a water drop.

You can use a mixture of these methods, all for the same rogaine. Your choices will affect the style of the rogaine.

Check control values based on possible route choices

Having decided the appropriate value for each checkpoint, you will need to make adjustments to correct any unwanted bias towards any part of the course. Both setters and competitors want a rogaine with no obvious route choices.

Avoid having courses with obvious route choices:

- A series of controls around an out of bounds area is an obvious and visible route choice.
- A series of high value controls is a less obvious "obvious" route choice. Teams will tend to travel from high value to high value and ignore low value controls which are slightly off the "obvious" route.
- An obvious route choice leads to a procession of rogainers who follow the same basic circuit. Teams will then be able to find controls by following other teams rather than by using their own navigation.
- An obvious route choice takes away an important aspect of rogaining -- choosing an efficient route during course planning. Each team has a different view of "an efficient route". Distribute control values to ensure that route choice is a challenge.
- An obvious route can lead to uneven usage of water drops, with many teams following each other through a single water drop. This may cause the "popular" water drops to run dry.

Check your earlier decisions on controls which will require extra punches and intention sheets. Those close to the hash house -- and with high points values -- will attract a crowd at the start. These controls will need extra punches and intention sheets. If you change the extra-punch controls -- be very careful when hanging the extra punches: At least 3m apart, clearly visible from each other, enough room for a queue at each punch. If possible, go on site again to set and vet streamers to mark where the extra punches will be hung.

Finalise water drops

Check that water drops are still well-located. Confirm on the current map:

- Placed at control locations with a suitably high score
- Accessible for placing and replacing water, on or very near to patrolled roads
- Out of bounds areas have not made the water drops less accessible to competitors

Check that water drops are correctly mapped. If necessary, update the master map.

Check that water drops are listed on the control description sheet.

There are also a number of event-related water drop possibilities that are considered at this point.

- Does your Association use reusable or disposable water containers ? Reusable containers need to be cleaned and filled for each event but are lighter to remove because the water may be poured away. Disposable containers -- bottled water bought for each event -- have a known quality of water and unopened containers may be stored for the next event.
- Is there a need for an event official to stay at a water drop during the event ? If so, you could consider -- especially in cold weather -- adding hot tea and coffee to the water drop offerings. This is seldom considered and would need to be coordinated with the hash house suppliers.

Finalise fruit (etc) drops

Fruit drops are optional. Fruit will be supplied by the hash house organiser but delivered to the fruit drops by setters and vetters. The fruit may delivered after the event has started. A fruit drop will always be with a water drop.

As a setter you may choose to surprise competitors with various items -- the "etc" of the heading -- at "random" controls. That is, you select the controls but competitors are not told which controls have surprise items. Regular surprise drops have been lollies (sweets) and garden chairs. Make sure that lollies are sealed against weather, insects and scavengers. Avoid wrappers which may be accidentally dropped on the course. Garden chairs are rarely used, difficult to transport and extremely well received.

Record -- for setter and vetter use -- which controls will be fruit drops and surprise controls. Do not mark it on the map nor on the control description sheet ! Check that each fruit drop is also a water drop. Check that each surprise control is accessible for last minute delivery of the surprise items.

Update the map and the control description sheet

Keep a record of each "setting" *letter* code and its new "competition" *number* code. Keep this list for when you hang the actual controls. Remember that you wrote the letter code on the streamers making each control site... As you hang the numbered control marker you will check that it is at the correctly lettered location.

Update the map with the numeric control codes. Update the control description sheet with control numbers and points values.

Changes to the map or the control description sheet are done by setters and checked by vetters. Ensure that setters and vetters always work with the current master copy of map and control descriptions.

3.5 Prepare Competition Documents

... As soon as controls are set & vet & valued

Identify a map printing company

Does your Association regularly print competition maps with a particular printing company ? Contact the company and let them know that you will be needing maps printed.

• Ask the company what they will need from you

• Tell the company when you expect to deliver the master map. This will be very soon after event entries close.

If your Association does not use a regular printing company -- find a printing company -- now !

Printing description sheets on waterproof or water-resistant paper is compulsory for National and World events, optional for Major and Minor events. If you will print on waterproof / resistant paper, make sure that your map printing company can do this. Or find a company that can.

Complete the competition map

The Cartographer updates the map to become the (final, actual, rogaine) competition map. This map must be as correct as possible.

The map must be "correct" even if -- as mentioned much earlier -- it may not be entirely accurate. "Bought" data -- especially contours -- may be impossible for the Cartographer to update accurately. The map must be "correct" in that, for example, a control on "The knoll" will be centred on "The knoll" on the map -- even if a GPS would show that the actual knoll is 50m from where it is mapped. Remember that competitors will have the map... not a GPS.

It may be possible to update complex features -- such as contour lines -- from the bought data. Do you have the skills ? Do you have the time ? Does it add to the quality of the map ? Remember that a rogaine map is "as correct as possible" but is not guaranteed to be absolutely correct. When placing controls you will avoid locations where inaccuracies on the map will lead to a misleading control site.

Double-check the map against *Standards for a Rogaine Map*. Check the colours, scale -- and list of what must be on the map. Make sure that the competition map is clear and accurate. It is the objective of the setters to assist the competitors and not to mislead them.

Water drops are included on the map. Fruit drops (if used) are not specifically identified and are always with water drops. Other "surprise" drops -- such as lolly drops and chair controls -- are always with controls but not identified, other than as a control. Finding these controls is a lucky surprise for competitors.

This is your last chance to check your map. Check -- and double-check ! -- very carefully.

Find astronomical data

For the control description sheet you will need astronomical data during the competition period:

- end of daylight
- start of daylight
- moonrise
- moonset

Hours of daylight and moonlight are important information for course planning and are provided to the competitors on their control description sheet. Rather than sunrise and sunset, use the times for "civil twilight", that is, civil dusk and civil dawn. This will include some time when the sun is still not clear of the horizon but there is enough light to see clearly.

ROGAINE SETTING & VETTING

Why "civil" ? The military have their own dawn and dusk because they believe that they can see clearly even closer to true night. Sailors have nautical twilight, when the horizon is clear but objects are not. Civil twilight is more suited to rogaining. Rather than confuse competitors with fancy words, label these times as "End of Daylight" (time to use the torch) and "Start of Daylight" (pack the torch away).

You can obtain the sun and moon rise and set times from the Geoscience Australia web page (www.ga.gov.au), then link to *Earth Monitoring and Reference Systems, Astronomical Information*. This web page links to web page forms that will calculate the astronomical event times based on place names (or latitude and longitude) and a date.

The Geoscience web page will show daylight and moonlight hours for a calendar day. Be careful to get the correct day/date when reading times from these web pages. Remember that the sun will rise and the moon may set on the *second* day of a 24 hour event. The difference in moon rise / moon set from one day to the next is about 50 minutes.

Also be careful with daylight saving (summer / winter clock adjustments). Understand whether your twilight source has already adjusted twilight times for daylight saving times. Print astronomical data in the relevant -- shown on competitors' watches -- times.

Complete the control description sheet

So far, the "competition" control description sheet has -- for each control, in this order:

- 1. control code (numeric)
- 2. description (as "feature, extra detail")
- 3. the comment "(water)" -- if it is a water drop control
- 4. points value (matching the "decade" of the control code)

Also create a separate "control hangers' list" with:

- control code (numeric)
- control description (as "feature, extra detail")
- control value (matching the "decade" of the control code)
- setting control code (letters)
- how many *extra* control punches and intention sheets are to be hung (none, except at controls where crowds are expected to form a queue)
- any hints for quickly locating the control location (this may include GPS coordinates)

The competition control description sheet has all the information about controls that will be given to competitors. Now add *event* information:

- name of the event
- date of the event
- start and finish day and time
- opening and closing times of food service at the hash house
- astronomical data (see earlier section)

• the late finish penalty (10 points per minute or part minute, total loss of points after 30 minutes)

Optionally, you can add:

- the total number of controls used and total points
- list of water drop controls
- earliest fruit drop time, if fruit drops are provided.
- a list of patrolled roads. If not used, consider...
- ... or, a safety bearing, especially if there are no major linear features (major rivers, roads, train lines) on the map.

The control description sheet is printed on one side of a single A4 (or standard printer size) sheet of paper. Print the list of controls with their details as two or three columns in a landscape layout.

Producing the control description sheet should not be a major task. Use the control descriptions created and checked during the setting and vetting process. However... have all members of the setting and vetting teams proof read the control descriptions before printing !

If your event will be using a computer-based scoring system, send a copy of the control description sheet to the person responsible for that system.

Prepare for control collection

Control collection is an extremely important part of organising a rogaine. You are free to organise the control collection in any way you like. Although the method described below is only a suggestion, it is vitally important that control collection is organised such that:

- The water containers are brought back quickly as these must be loaded onto the truck to be taken away with the rest of the equipment. The truck driver has been working on the rogaine for up to 3 days, and it is unfair to make the driver wait for water containers after everything else is packed away.
- You will be able to track who is collecting which controls, when they left to collect them, what car they are driving and if they have returned.
- Suitable vehicles are used to collect controls.

While setting control markers, you may have marked each control location as a GPS waypoint. If you have waypoints for controls -- consider providing them to control collectors. Just print them out or write them down; collectors with a GPS unit can take the time to enter their waypoints into their own GPS units.

Here is one way to prepare for control collection:

- Group the controls into logical groups of 3 or 4 controls.
- Consider how to collect these controls. Will the collector walk to them from a road ? Do the collectors require basic or more advanced navigation skills ? Will there be difficult country to cross ? You will match volunteer skills to control collection difficulty.
- Does the collector need a four wheel drive vehicle ?

- In a group of controls which includes a water drop, collection must be simple, so that the water containers (with the controls) can be brought back quickly.
- Make a master collection map with the collection groups circled.
- Prepare a map for each control group. These maps should clearly show the controls for each group. Include any details or notes you feel are necessary. For a farm event this map could include fences that have been deleted from the competition map. Highlight the best route and attack point to retrieve the control. This information is not given out until after the event.
 - optional: for each control in the collection group, write the GPS coordinates
- Prepare an A4 (large) envelope as shown below

An A4 envelope is used to hold the detailed map for a control collection group. For each envelope:

- on the outside of the envelope write the control group identifier (A, B, C...)
- write the control numbers within this group
- write the requirements for collection (eg "water drop", "2wd okay, easy", "long walk, tricky navigation")
- put the map -- showing the relevant control group -- and any other useful notes, in the envelope
- for security, you may want to seal the envelope...

Print slips of paper that state something like "Thank you for volunteering to collect controls. At the end of the competition, please contact a setter to agree which controls you will be collecting. Before you go to collect controls, you must see a setter and obtain a detailed map and advice on collecting the controls. Controls are to be brought back to the hash house. If you can't collect your controls, please inform a setter." Print one or more slips per envelope.

On the day of the event, before the start of the competition, as teams volunteer to collect controls... setters record the team number of each team of volunteer collectors. (At event registration a competition *team* will volunteer to collect controls. If teams re-group for control collection -- write down the names of the people who actually go out to collect controls. If they get lost you will need to know exactly who is lost.)

After the event, as control collectors tell setters that they are ready to collect, setters record details of each collection team before the collectors set off to collect. As control collectors return -- with collected controls -- setters record their safe return.

Plan for the post-event event

Setters and vetters may organise a post-event get-together -- with an open invitation for all setters, vetters, supporters and competitors. This provides an informal opportunity for competitors to discuss the event, their route choices, navigation successes and injuries. The event should be soon enough after the event for memories to be fresh but late enough for exhaustion to have been overcome. There is more information in the section, *Complete PostEvent Essentials*, but *now* is when *Post-Event Event* details must be finalised.

ROGAINE SETTING & VETTING

The post-event event is an opportunity to thank all volunteers (again) and to hand out competition badges and awards which needed to be inscribed with the winners' names.

The event is usually held on the Friday evening following the rogaine. For national and international championships you may want to plan the post-event event for just a day or two after the event. This gives visiting competitors a chance to attend before they have to return home.

Post-event events held in winter will require a large under-cover area.

If you are providing a barbecue, it will need to be sufficiently large. A hash house barbecue may be available; contact the Committee if this is required.

If you are not able to organise a venue for the post-event event, contact the Committee for help.

Liaise with the Committee to ensure that you have selected a suitable date and venue. If necessary, finalise details at the pre-event meeting.

Details of the post-event event will be included with event directions.

Write event directions

This is the form letter that gets mailed (or made available) to the team contacts in the week prior to the event. (See the note at the end of this section.) The setter must give the Event Entries Coordinator accurate instructions for getting to the hash house site, the expected driving time -- from nearby population centres or transport hubs -- and any other instructions particular to the event. These details are required at least two weeks before the event. Or earlier, for National and World events. The directions will be copied and distributed by the pre-event Administration volunteers.

Clarity in giving these directions is essential. They must be sufficiently accurate for early arrivers (keen competitors, event volunteers, the equipment truck and possibly hire-toilet truck drivers) to get to the hash house site without the use of the rogaine direction signs. It is also possible that rogaine direction signs may be stolen or blown away. Provide carefully measured distances between all turns.

Take into account that people may be approaching the site from various directions. There may be interstate or international visitors who are not familiar with the area.

Estimated driving times should be exaggerated because the setters, who are familiar with the roads, take less time to travel to the site. A shortage of planning time before an event is a major frustration for participants.

Details of the post-event event (see previous section) are also required for the event directions.

Note: For National and World events, competitors may be travelling from interstate and overseas. They may be travelling (perhaps on holiday) for a week or more before the event. They will need to receive event directions before they leave their home address -- or event directions must be available online.

Send the Event Directions to the Event Entries Coordinator.

Print enough copies to hand out at the pre-event volunteers' meeting.

Write event information notes

Is there important information that competitors need to know as they plan their course ? Information that may affect them while on the course ? Something

significant that is not mapped -- or that needs to be emphasised, perhaps for safety reasons ? For example:

- mandatory watercourse crossing points, for safety or environmental reasons
- a road through the map area which is out of bounds
- scenic or historic points of interest

Write this as event information notes, a copy to be given to each team. The notes may be printed on the back of the control description sheet. At the event briefing you will remind competitors of this information -- and point out that the information is also in the event information notes.

Do not rely on all competitors hearing what is said at the pre-event briefing. Some of the participants will still be finishing their preparations or may be distracted. Any critical information that affects route planning or safety must be in printed form and given to competitors at registration. These notes may contain information on points of interest, history or scenery. They must certainly warn participants about potential hazards and their locations. Dangerous cliffs, electric fences, mine shafts, dangerous farm animals and other known hazards should be identified.

If there is information that participants need before they plan their course (eg electric fences, mine shafts or mandatory watercourse crossing points), then setters also provide this in the event information notes.

You can list the patrolled roads on these notes, they may also appear on the control description sheet. (And all patrolled roads will definitely appear on the map.)

Prepare for Landholder presentations

At the end of the event, the score-reading ceremony also provides the opportunity to introduce and publicly thank any landholders who may be present. You can also present the landholders with an Association souvenir, or a framed copy of the map. Remember to prepare these before the event !

3.6 Advertise the Event, Attract Competitors

... Before entries open

Prepare event publicity

The more "major" your event, the sooner you need to prepare publicity material. The more "major" your event, the more help you will have from other event organisers.

For National and World championships, some publicity material was prepared as soon as the event was given the formal go ahead (at checkpoint one). That material emphasised that the area is worth visiting. Now that controls have been set, it is time to prepare -- and publish -- more publicity material.

For *National* and *World* events, the Committee -- with assistance from setters and vetters -- will prepare and distribute publicity material. The publicity material describes why people would visit the area *and* why they would want to compete in the rogaine. For Major and Minor events, the setters write an *Event Teaser*...
Write an event teaser

Write an "Event Teaser" for your local Association newsletter and for other rogaine information distributors. Consider the event terrain, nearest access point for visitors, nearby towns for pre- and post-event accommodation. The teaser may be distributed via your local Association and (if relevant) via national and international rogaining bodies.

The aim of the event teaser is to emphasise the competition and participation aspects of the event, such as map, terrain and vegetation. Your Committee may add more tourist-oriented material for World and National events.

The setters are responsible for providing the newsletter editor with a half page article describing the rogaine competition. As well as adding a touch of humour, the article may contain the following:

- A factual description of the terrain and vegetation type (farm, grazed forest, open forest, thick undergrowth, anything else of interest).
- Any warnings, historical notes or peculiarities about the event.
- The proportion of the map that is relatively open ("easy running" !).
- The approximate travel times from the nearest major population centres.
- Name of the nearest town because some members will wish to book motelstyle accommodation, and also to help school and group leaders who bring large groups on buses. Do not reveal the actual hash house site.
- For National and World championships, add information of help and interest to visitors from other states and countries, such as nearest airport and transport hub.

Separate to the article for publication, provide the newsletter editor with the actual (or approximate) location of the hash house, or of the nearest town. This will be used to create a simple location map to accompany your article. The actual event site will not be revealed until Event Directions are published, about one week before the event. The location map allows competitors to plan an extended visit to the area.

The newsletter editor needs this information almost eight weeks before the event. (This allows for publication before event entries open.) Check the latest newsletter for the actual deadline date.

3.7 Checkpoint Three : Competition Map is Approved

... [8, 2, 2, 1] months before the event Get committee approval for the rogaine course and competition

Note on timing

The timing of this checkpoint depends on the level of the event that you are setting:

- World event: 8 months before the event
- National: 2 months before
- Major: 2 months before
- Minor: 1 month before

You -- the setter -- provide information early enough for the appropriate Committee to make its decision before the relevant deadline.

Gather event information

Update -- if necessary -- the information provided to the Committee for *Checkpoint Two*. Add a copy of the competition map and control description sheet.

Checkpoint Three is about "the competition". The competition is the rogaine map plus control locations, control values, water drops, patrolled roads... and the various other bits and pieces which give a purpose to the event. Are the controls located and valued to give a fair and challenging event, for all (anticipated) competitors ?

Gain committee approval for the competition

Provide current information to the Committee:

- all information from Checkpoint Two, updated
- a copy of the competition map and control description sheet

The Committee will approve your information, or reject it, or suggest changes. With Committee approval, move on to *After Checkpoint Three Approval*. Otherwise, you may accept the changes and gain Committee approval, or negotiate the changes, or re-work what you have done. (Or give up... at this stage this will most likely lead to a replacement setter.) The people involved in this step will depend on the level of the event:

- for a Minor or Major event, you (the setter) provide the information to the Committee of your own Association
- for a National event, your Association provides the information to the National Committee
- for a World event, your Association provides the information to IRF

The Committee will check for a competitive course and overall safety. "Safety" includes adequate and well-placed water drops, and no obvious hazards to competitors or other participants. National and World events will also be evaluated for the overall event organisation.

If a National or World event is rejected, it may still be run as a Minor or Major event -- if your own, local Committee approves.

After Checkpoint Three approval: carry on setting

Carry on with the next task of setting the competition. The Committee will continue organising the event around your competition.

4.0 Stage Four : Prepare for the Days of the Competition

... The pace quickens. timing is step by step

4.1 Prepare the Control Markers

... Four weeks -- or more -- before the event

Contact all Landholders to confirm event details

You are about to commit to each control location, to print the maps and hang actual control markers. Now is a good time for a final check with all Landholders !

Make a phone call, write a letter, or visit, whatever suits each Landholder. Thank them in advance for allowing use of their land. Confirm the date of the event and any other details which may be unclear. Mention that other Landholders are also supporting the rogaine. (No need to name names. This is to let the Landholder know that other people also support the event.)

Hope that no Landholder has changed their mind.

Pick up the control markers

Note: This section deals with control cards and manual punches. If your event will be using electronic control "punching" and computer-based recording of "punches" - adapt this section to suit.

Controls, intention sheets, new controls, extra intention boards, and the control repair kit can be obtained by contacting the Equipment Officer.

At least four weeks before the event, collect the controls, blank intention sheets and other necessities from wherever they are stored. Take them home -- or wherever you will be working on them -- and prepare the controls to be hung on the rogaine course.

If your Association does not already have a set of controls -- make sure that you have the full set of event controls (and associated equipment !) at least four weeks before the event.

Prepare the control markers

Prepare the controls three or four weeks before the event. Do not underestimate the time required to do this. This task can take up to 12 work-hours. Setters and vetters are responsible for preparing the control markers.

Each control has a working punch. Feel free to move the punches to different numbered controls to foil potential cheats.

The pencil:

• Ensure that each control has a pencil that is sharpened on both ends.

- Use soft (2B) pencils.
- Dispose of pencils with shattered leads.
- Tie the pencil to the control. Make a small notch around the circumference of the pencil between the two ends with a hacksaw or knife. If the string is tied around this notch it will be harder for the pencil to slip off the string. Ensure that the string is sufficiently long to allow the pencil to write on all parts of the intention sheet.
- Use masking tape to stick the pencil on to the control such that it will be on the outside of the control once it is opened up. This will help prevent pencil breakages. Do not use too much masking tape: just enough to hold the pencil in place. The first competitor will pull the pencil loose to use it.

The intention sheet is well taped to the control. Use lots of masking tape and make sure the tape goes over the top and bottom edges and partly on to the back of the control. Do not tape over where teams will be writing ! During the event the participants use these sheets to record their team number, time of visit and their next destination.

Attach lots of cord, such as venetian blind cord, for securely tying the control at its location.

Extra intentions boards with punches are required for controls close to the hash house. Ensure that the punch on the extra intention boards is identical to that on the control.

Bring the control repair kit with you to the event and when hanging controls, just in case it is required. The minimum "control repair kit" is spare cord, spare pencils, spare punches and lots of masking tape.

Attach reflectors -- if required

Do you use reflectors on controls ? If yes, check that reflectors are firmly attached. Add spare reflectors -- and means to attach them -- to the control repair kit.

Use of reflectors on controls depends on time of year, rogaine location, terrain, undergrowth... and Association standards and expectations. If in doubt, ask your Committee.

Western Australia, for example, tends to have open undergrowth, gentle hills and bright moonlight. Reflectors are not used.

You may believe that reflectors are not necessary because you can see clearly by the light of the car headlight which you carry as a head torch. The average rogainer may carry a cheap torch from a supermarket. This is another factor to consider.

Prepare master punch cards

Note: There will be an equivalent task -- preparing control punch data for Admin -- for electronic punching systems.

One at a time, punch three control cards with each control punch, in the correct square on each card. (For each control used in your event, that is.) (If you punch three cards at a time then the top card will be difficult to read.) These three punch cards are to be used as master punch cards by Administration during the event.

Hold all the cards up to the light, two at a time. Check that all punch patterns match.

Later ("on the day") you will bring these master punch cards to the event and give them to the Administration Leader.

Group control markers by control hanger

Do you know who (which setter or vetter) will be hanging which controls before the event ? If so, now is a good time to group the controls for each person. If you are very well organised, you could organise control hanging the same way you have organised control collection.

At the very least -- once the controls are ready for hanging -- keep an eye on them till you are ready to hang them !

4.2 Print Competition Documents

... At least two weeks before the event

Start as (or before) entries close

Note: The time required to print maps sets the actual -- latest -- time to start the following tasks. Talk to the map printer to get an idea of when you must supply master maps for printing. Allow for unexpected delays. Allow more "safety margin" for more "important" events. (Maps require specialist printing. Other information can be photocopied quite quickly.)

Event entry may end only two weeks before the event. If so... get an estimate of competitor numbers when you need to send the maps for printing. Contact the Event Entries Coordinator for actual or an estimate of competitor numbers.

Print the maps

For a small event of around 200 participants -- get a third more maps printed than the number of entrants. For a larger event of 400 or more competitors -- get a quarter more maps printed than the number of entrants. The excess maps are used by event volunteers who may go for a brief walk, by control collectors and by participants who have destroyed their own maps during the event. They may also be used (later) as teaching aids at training courses.

These numbers are suggestions. Offset printing has a high set-up costs so you may want to print more than you expect to need. (That is, if you don't yet know how many people will enter the rogaine.) With digital printing it is easier to print more copies if and when required. (That is, if you still have time before the event !)

Printers would prefer to see a "hard copy" of your map before printing, so send a paper copy of your map. This is particularly important if your map has any unusual fonts. You can also show the location and size for any additional graphics you wish to be added to the map, such as logos for Association and event sponsors, or other illustrations.

If possible, get the printer to run off a small number of maps before the main run. Then you -- and at least one other person -- check the map very carefully before the final print. Yes, printing is "cheap". But re-printing an entire set of maps is still a waste of resources.

The Association may have a preferred printer, ask the Committee.

Maps -- both paper and ink -- must be water resistant. The Committee can advise on what to use.

It is the responsibility of the setters to have the maps and control description sheets printed, and to take them to the event. The Association pays for the printing.

Print control description sheets

Setters have the control descriptions printed and brought to the event. The Association will pay for the cost of the printing. For a full event of 450 participants print 500 control description sheets.

For Major and Minor events, follow your Association standard practice. It is acceptable that control descriptions are photocopied, there is no need for them to be waterproof. Competitors will bring their own waterproof map bags -- if they want to.

For National and World events: print control descriptions on waterproof or waterresistant paper. Make sure the ink is also water-proof ! If this requires professional printing -- allow for the extra time that this will require. If rain is likely during the event, you (or your Association) may want to provide each competitor with a waterproof map bag.

Print event information notes

Setters have the event information sheets printed and brought to the event. They may be printed on the back of the Control Description Sheets. The Association will pay for the cost of the printing. For an event of 450 participants print 500 sheets. Control descriptions may be photocopied. There is no need for them to be waterproof.

4.3 Attend Pre-Event Volunteers' Meeting

... About two weeks before the event

(or earlier -- and often -- for a World or National event)

The setters and vetters attend the pre-event meeting that is hosted by the Committee about two weeks before the event. At this meeting they will meet the Hash House and Administration volunteers who are also essential for the success of the event.

Ask the Committee how many people are expected at the pre-event meeting.

Print enough copies of the Event Directions to distribute, one to each person at the meeting

Print perhaps six copies of the hash house layout sketch, enough for the key campsite organisers.

Then distribute copies at the meeting... !

This meeting should also be attended by the driver of the truck which will deliver event equipment (tents, barbecues, tables and so on). Discuss with the truck driver topics such as the event location, the expected time of arrival of the truck and the responsibility and placement of the direction and "event ahead" warning signs. (These signs are normally placed by setters and vetters.)

Discuss the layout of the hash house site with the volunteers, especially the truck driver and the Camp Manager. Where will the hash house, Administration and First Aid tents be placed ? Where will the fire be ? Distribute copies of the sketch map of the hash house site.

If you intend to provide fruit at the water drops inform the Hash House Leader so they can order extra fruit.

Provide the emergency services contact details to the Camp Manager and Administration Leader.

Arrange with the Camp Manager whether you want diesel, petrol or both taken to the event to help with road patrols.

The Committee will arrange the hire, payment, delivery and pick up of hire toilets. Arrange the following:

- Delivery (and collection) times for the toilets.
- Precise directions to the event. The toilets may be delivered before direction signs are in place.
- Name one setter / vetter or Camp Manager who will be responsible for toilet placement. This person knows where the toilets should be placed, will be able to make decisions if placement needs to be changed, and *will be available* as toilets are delivered to the event site.

The name and address of the people who will host the post-event event are included in the Event Directions. Make sure that the date and venue are confirmed with the Committee at the pre-event meeting.

Gather material to bring to the event

On the day of the event -- or even the day before -- you will need to give event material to the Administration Leader, to be passed on to competitors:

- maps
- control descriptions
- event information sheets

There will be other vital information to be handed over, including:

- three master punch cards (or electronic equivalent)
- directions and contact numbers for local police, medical facilities, fire and other emergency services

Also bring

- material prepared for management of control collection
- control repair kit (just in case)
- material prepared for landholder presentations

Gather all of this material and *remember to bring it with you* to the event !

... Plus all of your normal rogaining equipment.

Other essential items may be carried to events as part of the standard rogaine equipment. Make a list -- and be sure that it does get taken to the event:

- flashing green light and "Rogaine" signs (used to identify patrol cars)
- accident / incident forms
- air horn (to signal start of event)
- bullhorn and / or PA system

4.4 Hang the Control Markers

... In the two weeks before the event

Two weeks before: start hanging controls

The controls have been prepared and are being held where the setters can quickly access them. Setters and vetters agree who will be hanging which controls. Give the controls to the people who will hang them. Hang them...

Only the setters and vetters may hang controls, *not* other well-meaning volunteers. Setters and vetters have seen -- visited -- each control location, so there is little chance that they will hang a control at the wrong location.

In the two weeks before: hang the controls

Hang controls as late as possible, preferably just a few days or the weekend before the event. This reduces the chances of the controls being damaged or blown away by exposure to the weather. This also reduces the risk of a control being removed by a passer-by.

But allow enough time for repeat visits !

Ideally controls should be hung so that they are wrapped around the trunk of a tree or post. This prevents flapping in the wind. Controls hung in this manner are visible from all directions. Remember: *rogaining controls must be visible* ! Also, if the control falls -- slips down the trunk of the tree -- it is unlikely to be blown away.

• Important repetition: *Rogaining controls must be visible !* Clearly visible, from many directions, from many places within the control circle. If there is a chance that the control could slip out of sight -- tie it in place more securely.

When hanging controls in the field take the control repair kit, a good supply of spare 2B pencils, cord, masking tape, and intention sheets with you to do repairs.

If you are using electronic control "punching" then you will also need to bring the requirements for starting, attaching and possibly repairing or replacing the electronic "punches".

When hanging each control:

- The person hanging the control should place it in exactly the same position as the control site marker and then remove the tapes. Do not leave tape in the forest or on the farm. If you can't find the setting control don't hang the competition control. Discuss the missing control site marker with the other setters and vetters. A setter and a vetter then revisit the site together, resolve the problem and hang the control.
- Hang the control at the eye height of an adult. Make this the eye height of a *taller* adult, so that the control is, if possible, visible above surrounding rocks and vegetation.
- Hang the control so that the control punch is within easy reach. Make sure that this is within easy reach of a *shorter* adult. Consider both height above the ground and "stretch" distance across (for example) a barb-wire fence.
- Make sure that the control and the attached intention sheet are numbered according to the checkpoint you are putting out. That is, hang the control

described on the control description sheet... at the location indicated on the map... for that numbered control...

- Check that a sharpened pencil is attached. (Or the electronic punch equivalent.) Stick the pencil down with masking tape on the outside of the control to stop it flapping in the wind and breaking. Use enough tape to hold the pencil down, but not so much that it causes an undue delay for the first team arriving at the control.
- Check that the punch is securely attached.
- For controls with several intention sheets -- identified earlier, during setting -- where large numbers of teams are expected all at once -- make sure that the intention sheets are separated and that there is plenty of room for a long queue to each of the intention sheets. Setters should already have placed streamers at each of the places where a punch and intention sheet will be hung.
- Hang Patrol Signs (with space to show the time of last visit by the safety patrol) at the water drops. Patrol cars will have a marking pen for recording visits.

You may hang controls with help from a GPS

This is one time when you can use your GPS to find control locations ! The control markers have been placed and verified, using competition-style navigation. Now you have to replace the markers with actual controls. Provide a list of control locations with their GPS coordinates, to each person hanging controls. If they have their own GPS unit, the coordinates may simplify control hanging.

Note: Even if you use a GPS to simplify control hanging, it is still worthwhile thinking about the control location. It is never too late to identify a misplaced control ! But do not change any control location unless it has been independently checked and agreed by another setter or vetter... And remember that late changes will require a map correction before or at the event.

Remember: Rogaining controls must be visible

On the surface, rogaining is similar to other "map and compass" sports... yet there are many differences. The principles for hanging *rogaine* controls are specific. In particular, rogaine controls must be clearly visible from many directions within the control circle. Carefully follow the principles in this *rogaine* manual.

Deal with map corrections

Even at this last minute, you may discover that there are errors on the map. The most significant -- or the most likely -- are misplaced or mis-numbered controls.

Get three maps and clearly mark the corrections. These maps will be displayed on the day of the event.

Write a note to remind yourself to tell competitors -- at the Event Briefing -- that there are map corrections.

Write a note to be given to the Admin Leader, for Admin to tell competitors -- as they register -- that each competitor must check the map corrections.

4.5 Checkpoint Four

There is no Checkpoint Four ! Take a deep breath and move on to Stage Five.

5.0 Stage Five : Help Manage the Event and the Competition

5.1 Set Up the Event Site

... During the two days before the event (or earlier -- if necessary -- for a World or National event)

Two days before: gather all that you will need

What do you need to take with you on the day ? Well before the event you made a list. It includes:

- maps
- control description sheets
- event information sheets
- three master punch cards
- sketch map of the hash house site
- directions and contact numbers for local police, medical facilities, fire and other emergency services
- control collection maps and lists
- items for landholder presentations
- anything else that you could possibly need...
- plus all those things that you could possibly overlook.

Pack it all, ready to bring with you.

Then *remember* to bring it all with you !

One day before: load the equipment truck

If possible, be available to assist with the loading of the equipment truck. The truck is normally loaded around 4:30pm on Thursday prior to 12 hour and 24 hour events. For the Upside Down and 6 hour events the truck is loaded on either the Friday night or early Saturday morning, and it is unrealistic to expect you to be there. (Because you will be on site.)

The truck loading is an ideal opportunity to grab any equipment, water containers or signs you may need before the equipment truck will arrive at the event.

You may also want to carry the flashing green lights and Rogaine signs (used by patrol cars) and accident / incident forms. At least make sure that they are loaded onto the truck.

Check that the air horn (used to signal start and end of the event) and bullhorn (for the event briefing) are either on the truck or carried by you to the event. This is also a good opportunity to test that they work.

On the way in: place event direction signs

Place direction signs and "event ahead" signs as you drive in.

At least one setter or vetter places some of these signs on roads which are not on the road you drove in on. Other setters and vetters oversee site setting-up. Combine this with hanging any remaining controls and placing water drops.

The direction signs and Event Ahead signs must be in place as soon as possible. These can be placed as you drop off water and hang any last-minute controls.

Get to the event site before the competition begins

Now the fun starts !

Be at the hash house site the day before that event. That is, on the Friday, for a weekend event.

Position the chemical hire toilets

Ensure that someone, possibly a setter, vetter or the Camp Manager, is available to meet the truck carrying the toilets to the hash house site. That person must have the sketch of the hash house site layout. The toilet truck driver may -- for whatever toilet-hire reason -- require a different location for the toilets.

• At the pre-event volunteers' meeting, one person was specifically named to be responsible for toilet placement. Make sure that this person is available, on site, when the toilets are delivered !

The toilets must be positioned some distance from the hash house and Administration area, but convenient to (and downwind of) the camping area. Have the doors face away from the central hash house area.

After the toilets have been delivered, they are no longer the responsibility of the setters and vetters. The Administration team is responsible for the maintenance of the toilets and replenishment of toilet paper and hand-washing consumables (soap and water or hand-wash lotion).

Oversee site set-up

Note: Setters and vetters are responsible for setting up the hash house site. However, if you are lucky enough to have a Camp Manager for the event -- setters and vetters assist the Camp Manager. They need not perform these tasks themselves, however, they must ensure that they happen. Enlist the services of any rogainers who have arrived early.

Use the hash house sketch map as a guide. Better yet, work with the Camp Manager. The following must be set up:

- chemical hire toilets (see above)
- hash house tent
- administration tent

• first aid tent

For 12 hour and 24 hour events, the setters and vetters meet the equipment truck at the event site on the Friday before the event. The truck will arrive around noon, depending on where your event is located. For the 6 hour and upside down events the truck will arrive on the Saturday.

Setting up, erecting tents, placing direction signs, hanging any remaining controls and placing water drops makes this a very busy time for the setters and vetters. Don't underestimate how much work and time is required to set up the hash house site, so don't leave yourself too much work hanging controls at this stage. Have your entire setting and vetting team assist. Many hands make light work.

Get to know the hash house site

Once everything is set up, take some time to look around the hash house site so you will immediately know where things and people are when you need them. Where is the first aid box ? Where is the stretcher ? Where is the fire extinguisher ? Who is the first aid officer for the event ? Who else has first aid training ? Where are the CB radios or satellite phones ?

And for when night falls and safety patrols continue: where are the tents of all the other setters and vetters ?

5.2 Countdown to the Start of the Competition

... On the first day of the event

Give competition material to administration

The setters give the following essential items to the Administration leader:

- competition maps
- control description sheets
- event information notes, if these are needed
- a note to remind Admin volunteers to tell competitors that there are map corrections, if there are map corrections
- directions to and contact numbers for local police, medical facilities, fire and other emergency services
- three master punch cards

During event registration times, at least one setter or vetter stays near Admin, to allocate control collection groups. As teams volunteer to collect controls, it important that the control collector sees you write their name and team down and that you give them something saying that they are responsible for collecting a control group. (You earlier prepared a suitable "Thank you for volunteering..." slip of paper.) The volunteers will then be less likely to leave the rogaine without remembering to help.

Put map corrections on display

As soon as registration opens on Saturday, display any necessary map corrections. (There should be none but... just in case...) Have at least three copies of these -- that is, maps clearly showing corrections -- on tables borrowed from the Hash House. If rain is likely then trestle tables can be placed in the hash house tent.

Remind Administration to advise teams that there are map corrections and where they can be viewed.

Map corrections need to be specifically mentioned at the novice briefing.

Hang close and final controls

Are there some final controls to be hung ? Hang them well before the competition starts.

Is the hash house triangle on the map, centred on a particular feature ? Hang a spare control on that feature. In a wide-open site, this gives all teams a clear starting point for their navigation.

Deliver water (etc) to water (etc) drops

If you have included "surprise" drops -- the "etc" in the heading -- in your event -- now is your last chance to deliver the surprises. It is better to have dropped these at controls a day or more before the event.

The setters and vetters are the best people to look after the water drops because they know the correct locations and the easiest ways to approach each location.

For up to 400 competitors, in the West Australian climate, a water drop should initially have *at least* 80 litres of water. This is most easily handled in eight 10 litre containers. Small funnels are available from the equipment truck. Make sure there is at least one funnel at each water drop, as this will reduce the volume of water wasted through spillage.

Important notes:

- 80 litres is not enough water for an entire event. Safety patrols are carried out every few hours during the event. Each safety patrol will look for injured competitors -- and bring more water to each water drop.
- You may start with more water and have less need to refill. The regular safety patrols are still necessary.
- WARA owns a collection of 10 litre reusable water containers. Empty containers are brought back to be refilled from a large water tank which is brought to the hash house at each event. Your Association may buy water in disposable containers. Select a size which is easy to carry.

Record details of control collection volunteers

During registration at least one setter or vetter will be available to collect details of teams which have volunteered to collect controls. Controls are only collected after the event is finished. Before the event, setters discuss collection with each volunteer. This allows volunteers to suggest preferences (eg close to roads, close to hash house, requiring a long run...). It also provides a reminder that they have committed to collect controls.

On the day of the event, before the start of the competition, as teams volunteer to collect controls, setters:

- make a note of each volunteer team's number, contact name, vehicle type and registration number
- make a note of collection preferences, if any
- give the "thank you..." slip of paper -- but not the map and not the envelope -- to the team

Attend the novice briefing

An informal novice briefing session is organised by the Committee. Several setters and vetters should make themselves available to assist at the novice briefing. Firsttime rogainers are given advice on setting compass bearings, route choice and reading contours. The briefings are started half way between the registration opening time and the start of the event.

So for standard event start times, an Upside Down novice briefing is at 6:30pm, a 6 hour at 2:00pm, 12 hours at 8:30am, and 24 hours at 10:00am.

If there are map corrections, tell the person giving the Novice Briefing. They will then help the novices to deal with the corrections.

You, as Setter, may be introduced to the novices and asked to say a few words. Lost for words ? Try this as a starter: "Every competitor must carry a whistle. If you are in trouble on the course, blow your whistle. Make sure that your whistle is easily accessible. Now... everyone take out their whistle... [pause] ... and we'll all do a test whistle blow. On three... one, two, three, blow !"

Nominate a dispute jury

Various situations during the event may lead to a dispute based on the rules of rogaining. Prepare in advance and nominate a dispute jury which will be able to resolve any disputes.

For World, National and Major events there is a requirement for a formal jury to be decided upon before the start of the event. A default jury has been established and includes:

- the Association Technical representative
- National Association representatives
- local Committee members

Organisers of the event -- setters, vetters and knowledgeable Administration or Hash House volunteers, can supplement the jury.

It is preferable if the majority of jury members are not competitors at this event. This reduces conflict of interest within the jury. It also allows the jury to meet while the event is still in progress.

Provide the event briefing

Competitors gather 15 minutes before the start for a briefing. This will give the opportunity for any final advice, to acknowledge landholders, and remind competitors of a few of the rules.

General announcements are made by the Association president.

The setters must make event-specific announcements, which are mostly a repeat of what was written in the event information notes. Any last minute advice and details should be provided.

It is extremely important to inform the competitors of any map corrections. Don't assume the competitors have seen any corrections. Make regular announcements that corrections are required, and place the corrections at an obvious location near Administration.

Draw attention to any restricted access routes through out of bounds areas.

Make sure regular announcements are made indicating how much time is left before the start.

You could remind competitors to carry a whistle. Remind them of the procedures to signal a distress call, and what to do if they hear a distress call. If it suits your style, get everyone to take out their whistle and call for a test whistle blow. This is both worthwhile and enjoyable.

5.3 Start the Competition

Make every effort to ensure that your watch is set to the real time. A few hours prior to the event starting, use (for example) a GPS or the start of the radio news to set your watch.

If you have finished the speeches before the start time do not let the teams off early simply because you have run out of things to say. This causes absolute confusion for competitors who are still getting ready to start.

The event begins with the blowing of the air horn and the simultaneous popping of a champagne cork. Or something similar to give a sense of occasion.

5.4 Oversee the Competition

.. During the competition... all day... on each day of the event

Maintain the hash house fire

The only permitted fire at an event is the central hash house fire. This keeps competitors and others warm while they are resting near the hash tent and adds to the atmosphere of the event. Obtain enough wood in advance to last the whole night. Do not burn your timber supply on the Friday night before the event.

If conditions are particularly windy or dry then you will not have a hash house fire, due to the risk of the fire spreading out of control. For this reason hash house fires are not normally permitted for the events held in dry seasons. (This depends on your local climate !) Do not have a hash house fire if there is a fire ban active in the region of your event.

Patrol the patrolled roads

The purpose of the patrolled roads is to provide a mapped location for sick or injured competitors to be collected from if they are unable to walk back to the hash house. Have space in your vehicle for passengers. While patrolling in areas where competitors are likely to cross the road you should drive slowly with the windows down in case a participant calls or whistles.

As you patrol, be prepared to talk to competitors. If they request a lift back to the hash house -- remind them that this will result in team disqualification. If they still want a lift, give them a lift -- and deliver them to Admin to be disqualified. (Or to First Aid to be treated. Make sure that Admin know that the team has been returned.)

If a team is willing to talk, they may also appreciate a snack. Take with you -- and offer to competitors -- some light snacks. Jellybeans, sweets with no wrappers to be dropped, or cakes from the hash house are suitable.

When patrolling roads, make sure your car is fitted with a green flashing light or equivalent. These work from power supplied from your cigarette lighter socket. The intention of the flashing lights is to give rogainers, particularly juniors, confidence that an event official is driving the car they are waving down. Each patrol car should also have a clear ROGAINE sign displayed prominently in either the front or rear windows.

The patrolled roads must be patrolled every few hours regardless of weather conditions. Patrolling every three hours would be ideal, but circumstances may not allow this. Remember, however, that a seriously injured competitor may be waiting for assistance on one of the patrolled roads.

Maintain water drops

If the control locations or values suggest a limited number of very obvious route choices then there will be a procession of rogainers following the same circuit. Consequently, water drops on these routes will be visited by large numbers of people. A water drop at the half-way point of a circuit will be hit doubly hard, as rogainers travelling in opposite directions will visit the water drop at roughly the same time.

It is imperative that you patrol these roads and check the water drops every few hours regardless of the time or weather conditions. You may have put out so much water that checking water drops is -- in your opinion -- not essential. *The safety patrols are still essential.* So you may as well check water while on patrol.

Setters and vetters look after the water drops because they know the correct locations and the easiest ways to approach each location.

Water consumption is very high on warm or hot days in the afternoon period so you may have to visit water drops more frequently. Large groups of participants can move through a water drop and drain the water supply very quickly.

Within the last hours of an event, as you patrol the water drops you could retrieve some of the water containers. Use your judgement based on the weather and the proximity of the water drop to the hash house as to how many containers to leave. To prevent problems caused by the spillage from or breakage of a container, always leave at least two full water containers.

Underestimating the consumption of water can have serious consequences for competitors.

Report any accidents or injuries

The setters must report any serious accidents or incidents (that is, near misses) to the Safety Officer. You may be asked to fill in an accident report form, which should be returned to the Safety Officer.

Maintain safety and duty of care

Please take the above safety considerations seriously (patrols, water, reporting injuries) for the welfare of all participants and for the legal protection of yourself and the Association. An unfortunate but realistic feature of modern society is that people are becoming increasingly litigious.

Correct missing and misplaced controls

During the event, a missing or misplaced control is an unfortunate situation that will disadvantage teams who have fruitlessly searched for that control. For the safety of participants and so as not to spoil the event for all participants, when several experienced teams have reported that a control is missing or badly misplaced a setter or vetter should investigate immediately, and, if necessary, correct the situation.

Bring the control repair kit and some blank controls to the event just in case you have to make a new control.

If there are no spare controls or you do not have the control repair kit, replace the missing control with an intention board from an inner control. (That is, take a board from a control which has more than one intention sheets.) Mark the control site with some tape to make the intention board more obvious.

Record the new punch pattern to assist Administration. Although this is an Administration matter it is worth noting that Association policy is that teams who were unable to find the missing or misplaced control should be awarded the points for that control but no extra time allowance is given.

5.5 Complete the Competition

... Immediately after the competition

Announce the end of competition time

The truck horn or air horn (available from Administration) should be sounded 10 minutes before the end of the event, 5 minutes before the end of the event, and at the end of the event.

Check with Admin to find out if any competitors have still not returned. If competitors are still on the course -- or if you are not sure that everyone has returned -- sound the finish horn again at the end of the 30 minute penalty period.

Search for overdue teams

If your Association has a safety manual which includes search procedures -- follow the procedures. Essentially:

- do not collect any controls while teams are still missing
- check the campsite for news of the missing teams
- setters, vetters and other volunteers are allocated roads to patrol in search of missing teams
- arrange communication and a definite time for all searchers to return
- search roads for missing teams

If teams are still missing:

- again: do not collect controls, lost teams should wait at any control that they can find
- again: check the campsite, ask other competitors... when and where was the lost team last seen
- look for any control with the team number on the intention sheet... follow the team from control to control
- contact emergency services before nightfall and before bad weather arrives

If your Association does not have a safety manual which includes search procedures -- raise this at the next Committee meeting as a serious problem.

Resolve disputes

It is the responsibility of the Committee to resolve disputes. If no Committee member is available, dispute resolution becomes the responsibility of setters and vetters.

In all disputes, there is no alternative but to try to establish the truth and -- if an offence has been committed -- to penalise a team in accordance with the rules of rogaining. The basis for disqualification from an event will be a breach of the rules concerned with safety, cheating, or behaviour likely to bring the sport into disrepute.

Disputes could be a protest about a team's own score, or a protest against another team for breaching the rules of rogaining. A dispute is referred to a jury convened for the purpose of resolving it. All participants and officials are guided by a sense of fair play.

Anyone who might reasonably be perceived as benefiting from the jury decision should be disqualified from the jury. You may also need to change jury members if some people are not available.

Organise collection of control markers

No controls can be collected until all teams have returned safely. This is important as a lost team can use controls to relocate themselves. Administration will advise when all teams have returned.

At most events the majority, if not all, of the controls can be collected immediately after the finish of the event or the next morning for normal 12 hour events. However

it may be necessary to return to the site the following week or weekend to pick up the remainder.

Coordinating control collection is the responsibility of setters and vetters. Setters have already prepared a map for each group of controls. The map is in an envelope with any other helpful comments on those controls. At least two setters or vetters remain at the hash house site until all control collectors have returned safely. This can be a long wait !

After the event, as control collectors tell setters that they are ready to collect, setters:

- agree with each collecting team, which control group they will collect based on the collectors' experience and vehicle (and current state of exhaustion)
- write the team (their competition number) on the appropriate envelope -- or write collectors' names, if they are not a complete competition team
- write the name of the team contact on the envelope
- write car registration and description on the envelope
- give the map and any extra information (but not the envelope) to the control collectors
- write time departed (ie current time) on the envelope
- keep the (now empty) envelope

As control collectors return -- with collected controls -- setters:

- check that all controls in the group have been returned
- write time returned on the envelope
- put the envelope onto a "controls successfully collected" pile

It is the setters' responsibility to ensure that all collectors have returned safely and that all controls are collected. For various reasons there may be controls which are not successfully collected. If all else fails, setters will collect those controls, perhaps on another day.

Always make sure that at least one setter or vetter is waiting at the hash house until the last control collector has returned... or been otherwise accounted for.

5.6 Announce the Competition Results

... Thirty minutes after close of competition

(*if all goes well: no-one lost, all scores calculated*)

After the competition closes, there is a thirty-minute "penalty period" when late finishers receive their point score less a time penalty. Competitors are also allowed 30 minutes in which to question what they believe may be miscalculated scores.

Competition results are announced -- read out -- when they are ready but no sooner than 30 minutes after close of the competition.

Normally, results are read out by setters and vetters. Setters and vetters may not be available -- perhaps because they have to give priority to a search for missing teams. In this case, responsibility for reading out the results is passed to members of the Admin team.

After Administration has produced the results, setters and vetters read them out in ascending order, that is, from lowest score to highest. The position, team number,

team members, and score are announced. Announce any award winners. This procedure is time consuming, but it is in keeping with the philosophy that the efforts of all competitors deserve recognition regardless of their objectives or abilities.

Reading out several hundred names and scores is a difficult task for one person. Share the job around.

This ceremony also provides the opportunity to introduce and publicly thank the people who have helped in the Hash House and Administration as well as any landholders who may be present. Invite the landholders to congratulate or announce the winners. You can also present landholders with an Association windcheater or other souvenir, or a framed copy of the map.

5.7 Clean Up the Hash House Site

.. Once all results have been announced

Setters and vetters are normally the last to leave the event site. Before doing so they must make sure all control collectors have returned safely. They must also ensure that:

- the fire is extinguished, covered with dirt and made reasonably level
- hire toilets have been collected if need be
- the site is clean and free of litter
- all gates are closed and locked as required

5.8 Checkpoint Five : Provide Feedback on Competition Quality ↔ Success

... Within three days of the event

Provide quality assurance and feedback

This checkpoint is for post-event quality control and feedback. The event is not officially complete -- results are not final -- until this checkpoint is complete. Several groups of people are involved (for example, Admin Leader provides the complete results list). This section is written for the setters.

• Information is provided to the Committee

Setters provide event feedback: what went well, what did not

Setters write about the aspects of their setting experiences that stand out in their memories. This can be useful for future setters. What went well ? Do it again. What did not go well ? Try to find a better way.

This is (perhaps) a more formal version of the "Newsletter Post-Mortem" (see later).

The "lead" setter writes. Other setters and vetters may also write something if they want to.

Setters provide details of any protests and their resolution

The jury will nominate a jury member to provide this report; it may be a setter or vetter

For a National or World event, a National Committee representative provides a report on the competition and on the event.

- the report will focus on performance against published national rogaine standards
- the representative will have attended the event, either as competitor or as observer

For a World event, an IRF representative provides a report on the competition and on the event.

- the report will focus on performance against published international rogaine standards
- the representative will have attended the event, either as competitor or as observer

The committee checks the information provided

For a Major or Minor event, the Association Committee will accept or reject the event. If accepted, results are published as "final". If rejected -- the Committee considers that there were overwhelming problems with the competition -- then the event is said to be "informal" and no results are published.

For a National event, the National Committee will check the information. The Committee may accept the information and publish the final results, or downgrade the event to Major or Minor status (with no National champions), or not publish final results.

For a World event, the IRF will check the information. The IRF may accept the information and publish the final results, or downgrade the event to Major or Minor status (with no World champions), or not publish final results.

Regardless of Checkpoint Five: carry on with the next tasks

No matter what the outcome of checkpoint five, setters carry on to the next setting task.

6.0 Stage Six : Tidy up, Put away, Kick Back

... In the week after the event

6.1 Complete the Post-Event Essentials

No, you haven't quite finished. Complete these tasks in the week after the event:

Send a final thank-you to Landholders

Send a final thankyou to landholders for allowing access to their land. The thankyou could be a letter, phone call, email... whatever is appropriate.

The thankyou serves several purposes. It thanks the landholders ! It also leaves a good impression, which is good for future contacts, if another rogaine setter contacts the same landholders. A final contact provides good file closure for corporate and government landholders.

This final contact is also an opportunity for you to hear about any issues that landholders may have had. If there were any problems, you and the Committee will want to deal with them. The Committee will also want to ensure that similar problems have less chance of occurring in the future.

Write the newsletter post mortem

Setters are required to write an article describing their event. Describe what went well, what went wrong, give advice for future setters, and never let the truth get in the way of a good story. This will normally be expected by the newsletter editor one week after your event. The latest newsletter will include the absolute deadline for submission of your post-mortem article.

Collect the leftovers

There may be some items which -- for whatever reason -- were left behind at the event site. Be prepared for a last visit, to collect the leftovers. Better yet, make sure that nothing is left behind.

Claim expenses -- or not

An allowance is paid to setters and vetters to help offset costs incurred in organising and running the rogaine. Are you going to claim expenses? Even if you decide not to *-- tell the Treasurer*. That way, the event books can be closed.

The following expenses are paid for directly by the Association and are not included in the setter's expenses component.

- The purchase of digital mapping data if required.
- The printing of the event map.

• Any other printing for the event -- such as control descriptions and event information notes.

Ask the Treasurer how to arrange for payment. All materials paid for by the Association, especially maps and aerial photographs, should be returned to the Association for future use.

Receipts will be required for most expense claims. The expenses component includes items to plan and set the event as well as items to prepare the controls. This includes aerial photographs, pencils, marking pens, masking tape, telephone calls, postage, stationery, surveying tape, maps and so on.

Archive event information

A lot of work was required to identify the landowners, gain approval, and set and vet your event. This is especially true for events with significant numbers of landholders. To assist setters who may revisit your area it would be helpful if you would return any useful information to the committee. This would include copies of the finished map, council contacts, copies of correspondence with government agencies, control descriptions, aerial photographs, lists of landholders and their phone numbers, a map of the property boundaries. Just imagine if you were provided this information when you started your event. What a great head start !

Provide electronic (Word, Excel and mapping package) files to the Association's Archivist

Provide electronic (softcopy) and paper maps to the Map Librarian

Event information to be archived:

- master maps, control descriptions, event post mortem and complete competition results
- anything else which will be part of the "history" of your event
- Minor and Major event records will go to your Association
- National event records go to your Association and to the national Committee
- World event records go to your Association, to the national Committee and to the IRF

You may also provide the Archivist with interesting photos and informal anecdotes. If the Committee plans to distribute a post-event "press kit", your photos and stories may be used to add extra interest.

6.2 Enjoy the Post-Event Event

Attend the post-event event. Relax, kick back, bask in the glory of success -- and enjoy !

6.3 The End : Now Read the Useful Information in Appendices

This is the end of the process; useful reference information is in the separate Appendices volume

Process Task List -- with Timing :

The following is a list of every step to be covered -- every task to be done -- as you set and vet a rogaine. Start at the top and work your way down... There are some tasks which may be done in parallel but -- as far as possible -- this is a "simple" sequential process.

If you find a task which is out of sequence -- please send an email to the author, at [**nickleth at gmail dot com**]. I will make every effort to continuously improve the process and the manual. Your comments will help.

1.0 Stage One : Agree Where to Set a Rogaine

... Start this [42/24/8/6] months before the event.

- Note on this process manual
- *Note on timing*
- 1.1 Tell the Committee of Your Plans
- 1.2 Select the General Area to be Considered
 - Look for an area with less landholders
 - Include a mixture of suitable terrain
 - Check the distance from major cities
 - Identify possible hash house locations
 - Eliminate areas with no access
 - Look for a good network of tracks
 - Look for a usable area of a suitable size and shape
 - Sketch the competition map boundaries
 - Check the moon, set a date
- 1.3 Visit the Potential Competition Area
 - ... Do this before you formally suggest setting in the area.
 - Identify key landholders
 - Visit the (or each) potential rogaine area
 - Evaluate potential hash house sites
 - Confirm that each hash house site is accessible for cars
 - Look for potential patrolled roads
 - Contact the Landholders ?
- 1.4 Volunteer to Set a Rogaine
- 1.5 Checkpoint One : An Event in this Area is Approved
 - ... Allow enough time to get Committee approval [36 / 18 / 6 / 3] months before the event.
 - Note on timing
 - *Requesting approval to plan a rogaine*
 - For any level of event: gather basic information
 - Gain committee approval for your proposal
 - For a national or world event: provide extra information
 - Gain national committee approval
 - For a world event: provide information as required
 - Gain IRF approval for a world event
 - After checkpoint one approval: continue setting

2.0 Stage Two: Gain Area Access, Draw the Base Map

- ... Start this is soon as possible. Perhaps speak with Landholders -- but avoid formal requests to use land until you have Checkpoint One approval.
- 2.1 Ensure the Area is Available for a Rogaine
 - Who contacts the Landholders ?
 - Identify (most of) the Landholders
 - Record what you already know about Landholders
 - Prepare to contact key Landholders first
 - Be thorough in your Landholder contacts
 - Prepare to meet Landholders
 - Ask for permission from each and every Landholder
 - Provide assurances to Landholders
 - Extra considerations for private owners
 - Extra considerations for government agencies
 - Extra considerations for corporate owners
 - Identify out of bounds areas
 - Look for a hash house site
 - The hash house fire
 - Contact local emergency services
 - Confirm the approval to use land for a Rogaine
- 2.2 Follow the Rogaine Mapping Process

... As soon as you have confirmed access to the competition area

- Develop the competition map in this order
- Always use the current Rogaine map
- *Give one person full responsibility for drawing the map*
- Use a standard mapping package
 - Follow Rogaine map technical characteristics
- Avoid the need for at-the-event map corrections !
- 2.3 Evaluate the Hash House Site
 - Allow for time and weather
 - Select the hash house site
 - Sketch the layout of the hash house site
 - Ensure access to potential patrolled roads
 - Confirm the hash house location
- 2.4 Create the Base Rogaine Map
 - ... Start at least three weeks before Checkpoint Two
 - Convert map data to a Rogaine map
 - Include these details on the base map
 - Allow space for other map requirements
 - Map the roads and tracks
 - *Map the fences and farm / forest boundaries*
 - Draw magnetic north / south lines
 - *Map all out of bounds areas*
 - Map to the edge of the competition area
 - Map enough detail to avoid confusion
 - Place the hash house on the map
 - *Map the patrolled roads*
 - Set water drops
 - From now on use only the Rogaine map

2.5 Checkpoint Two : The Base Map is Approved ... [24/13/4/2] months before the event

- *Note on timing*
- Gather event information
- *Gain committee approval for the base map*
- After Checkpoint Two approval: continue setting

3.0 Stage Three : Create the Rogaine Course and Competition

- ... Start as soon as possible after Checkpoint Two approval
- 3.1 Begin with Armchair Setting & Vetting
 - ... Allow two weeks immediately after Checkpoint Two
 - Decide if you will set a particular style of event
 - Set limits on the number of controls to be set
 - Make allowances if this is an "Upside Down" Rogaine
 - Select potential control sites
 - Spread controls across the map
 - Remember: A Rogaine requires Rogaine controls
 - Be aware of out of bounds areas
 - *Keep controls away from map edges*
 - Set some controls close to the hash house
 - Check that the "course length" is suitable
 - Allocate a control code to each control
 - Write the control descriptions
 - Big important note about control descriptions !
 - Use the standard control description format
 - Vetters do armchair vetting
- 3.2 You Need to Know Before You Go

... Understand all of this before you begin fieldwork

- Remember that weather varies over time !
- Always be safe on site
- Maintain communication ability while on site
- Remember why GPS use must be limited
- Use a GPS only in these acceptable ways
- 3.3 Set then Vet in the Field
 - ... Start at least two months before Checkpoint Three
 - *How much time is needed ?*
 - Prepare to go on site
 - *Continuously compare the map to reality*
 - Look for water in watercourses
 - *Re-check the hash house site*
 - Sketch the hash house site layout
 - Locate the hash house fire, plan for fuel
 - Check all out of bounds areas
 - Check the roads and tracks
 - Check each and every control site
 - Check the location of each and every control
 - *Be very certain: are you really there yet ?*
 - *Check that the control site was worth finding*
 - Check that the location is suitable as a control site
 - Mark each control location

- Decide where to hang the control
- Map controls on farm dams and ponds according to size
- Use offset controls only if necessary
- Describe the control location
- Update the competition map
- Setters hand-over to vetters
- Vetters do armchair vetting
- Prepare to go on site
- Do fieldwork on site
- *Reconsider the overall course*
- Vetters provide feedback to setters
- *Repeat all of the above until complete*
- 3.4 Allocate Values (Scores) to Controls
 - ... Four weeks before Checkpoint Three
 - Change course to competition
 - Setters set then vetters vet
 - Work within the allowed range of control values
 - Allocate control values based on control attributes
 - Check control values based on possible route choices
 - Finalise water drops
 - Finalise fruit (etc) drops
 - Update the map and the control description sheet
- 3.5 Prepare Competition Documents
 - ... As soon as controls are set & vet & valued
 - *Identify a map printing company*
 - Complete the competition map
 - Find astronomical data
 - Complete the control description sheet
 - Prepare for control collection
 - *Plan for the post-event event*
 - Write event directions
 - Write event information notes
 - Prepare for Landholder presentations
- 3.6 Advertise the Event, Attract Competitors
 - ... Before entries open
 - *Prepare event publicity*
 - Write an event teaser
- 3.7 Checkpoint Three : Competition Map is Approved
 - ... [8, 2, 2, 1] months before the event
 - Note on timing
 - *Gather event information*
 - Gain committee approval for the competition
 - After Checkpoint Three approval: carry on setting

4.0 Stage Four : Prepare for the Days of the Competition

- ... The pace quickens. timing is step by step
- 4.1 Prepare the Control Markers
 - ... Four weeks -- or more -- before the event
 - Pick up the control markers

- Prepare the control markers
- Attach reflectors -- if required
- Prepare master punch cards
- Group control markers by control hanger
- 4.2 Print Competition Documents
 - ... At least two weeks before the event
 - Start as (or before) entries close
 - Print the maps
 - Print control description sheets
 - Print event information notes
- 4.3 Attend Pre-Event Volunteers' Meeting
 - ... About two weeks before the event (or earlier -- and often -- for a World or National event)
 - *Gather material to bring to the event*

4.4 Hang the Control Markers

- ... In the two weeks before the event
 - Two weeks before: start hanging controls
 - In the two weeks before: hang the controls
 - You may hang controls with help from a GPS
 - *Remember: Rogaining controls must be visible*
 - Deal with map corrections
- 4.5 Checkpoint Four

5.0 Stage Five : Help Manage the Event and the Competition

- 5.1 Set Up the Event Site
 - ... During the two days before the event (or earlier -- if necessary -- for a World or National event)
 - Two days before: gather all that you will need
 - One day before: load the equipment truck
 - On the way in: place event direction signs
 - Get to the event site before the competition begins
 - *Position the chemical hire toilets*
 - Oversee site set-up
 - Get to know the hash house site
- 5.2 Countdown to the Start of the Competition

... On the first day of the event

- Give competition material to administration
- *Put map corrections on display*
- Hang close and final controls
- Deliver water (etc) to water (etc) drops
- Record details of control collection volunteers
- Attend the novice briefing
- *Nominate a dispute jury*
- *Provide the event briefing*
- 5.3 Start the Competition
- 5.4 Oversee the Competition
 - ... During the competition... all day... on each day of the event
 - Maintain the hash house fire
 - Patrol the patrolled roads

- Maintain water drops
- *Report any accidents or injuries*
- Maintain safety and duty of care
- Correct missing and misplaced controls
- 5.5 Complete the Competition
 - ... Immediately after the competition
 - Announce the end of competition time
 - Search for overdue teams
 - *Resolve disputes*
 - Organise collection of control markers
- 5.6 Announce the Competition Results
 - ... Thirty minutes after close of competition (if all goes well: no-one lost, all scores calculated)
- 5.7 Clean Up the Hash House Site
 - ... Once all results have been announced
- 5.8 Checkpoint Five : Provide Feedback on Competition Quality & Success ... Within three days of the event
 - *Provide quality assurance and feedback*
 - Setters provide event feedback: what went well, what did not
 - Setters provide details of any protests and their resolution
 - The committee checks the information provided
 - Regardless of Checkpoint Five: carry on with the next tasks

6.0 Stage Six : Tidy up, Put away, Kick Back

... In the week after the event

- 6.1 Complete the Post-Event Essentials
 - Send a final thank-you to Landholders
 - Write the newsletter post mortem
 - Collect the leftovers
 - Claim expenses -- or not
 - Archive event information
- 6.2 Enjoy the Post-Event Event
- 6.3 The End : Now Read the Useful Information in Appendices