

Know your sport: Techniques - CAR(E) and RAG

Recently this 'Know Your Sport' section has been used to provide some general guidance on aspects of the sport. From the structure of events, to pictorial control descriptions and night orienteering. We now turn to look at some aspects of techniques — how you can improve your performance during an event. Dave Rogers, the club and region's Coaching Officer has helped provide this material.

Take CAR(E) and use RAG at your next race

This month we will look at CAR(E) and RAG and using these techniques to help with your route choices during your races.

How do you select a route? When you're standing at the start looking towards the first control what goes through your mind? Do you have a plan or a standard approach? Or, is it more a case of racing off from the start and then stopping and looking at the map?

CAR(E)

Top orienteers use techniques to make every leg of their race a lot simpler. CAR(E) is an example of one of these techniques. We can define CAR(E) as follows:

CAR(E) = Control, Attack Point, Route, (Execute)

For each leg of your race, you follow the same sequence of Control, Attack Point, Route, Execute:

- **Control** – focus on your next control.
- **Attack point** - identify potential attack points and choose one.
- **Route** - working backwards from the control and the attack point, choose your route.
- **Execute** - carry out your chosen route to your identified attack point and do not deviate or change your mind. This is key - many errors occur in orienteering races due to competitors changing their mind or not sticking to their planned route.

With practise, you will be able to carry out steps 1., 2., and 3. very quickly and it will become automatic.

You can practise CAR(E) by looking at online tools such as **RouteGadget** (BKO past events <http://www.bko.routegadget.co.uk/rg2/> or for other clubs go to the main Route Gadget page at: <http://www.routegadget.co.uk/> or websites such as the **World of O** (<http://worldofo.com/>). Choose an event and course and practise the CAR part of CAR(E) for each leg of the course and then review your route choices and attack point selections by seeing what runners at the event actually did.

RAG

Another useful technique that all orienteers can use during races is RAG. RAG is also known as **traffic lighting** and stands for **Red – Amber – Green**. RAG refers to the different speeds the competitor goes during each of their legs and also the different levels of technical focus needed.

- **Green** – top gear, travelling smoothly, quickly and confidently in the right direction along your chosen Route - low level of technical focus needed
- **Amber** – middle gear, slowing down as approaching your Attack point or gathering speed when leaving the control and heading off on the next leg - moderate level of technical focus needed
- **Red** – low gear, slow speed, within the Control circle, making sure coming into the control from the right side and using any Catching feature - high level of technical focus needed



Clearly, the idea is to stay on Green for the greatest % of the route, and down shifting through

Amber and Red, and then upshifting through Red and Amber and back to Green, as efficiently as possible.

So, in summary, at your next event why not try CAR(E)+RAG?

In the week before the race, practise CAR using online tools and websites

- From the Start of Race – What will you be doing? - Plan ahead, stay focussed and use CAR (E) on every leg
- Manage the Physical and Technical balance throughout each leg with RAG
- After your race, analyse what you did, how consistently you used CAR(E) and RAG, and how often your route choice was optimum.

Traffic Light Exercise: Pick a recent course that you ran, and draw your route in three colours: Green for the parts where you ran without much attention to the map and at good speed, orange for parts where you had to give some attention to the map and red for the parts where you put a lot of attention to the orienteering (e.g. and probably slowed down significantly, based on your technique). Approximately what percentage of the course and what percentage of time did you spend on each Green, Amber or Red? Do the same exercise for your next few races and see if applying CAR(E) increases your Green percentage values and reduces your Amber and Red percentage values.

RAG in action

Here is an example of a leg where RAG could have been used effectively. It is taken from the CompassCup heat in January in the New Forest.

- **Green:** Leaving Control 10, there is a stream to be crossed and, further on, a major path. The forest is 'white' and runnable. By running fast and heading slightly to the left of the direct route, little navigation is needed. When you get to the major path, turn right.
- **Amber:** You may not be certain where you had hit the path, so more caution is needed. Take the left fork and turn left at the rough open.
- **Red:** Now to navigate carefully to the control. There is little to 'catch' you if you miss it so a slow and careful approach is best.

The lower map shows the routes of the 7 competitors who added their routes onto Routegadget. 5 of them do drift left from the direct route, one appears to have gone more direct and one took a more careful route and appears to have navigated using features to the south - the latter is a careful choice but would not have allowed such fast running.

