

Orienteering for the Military

The following statement is an extract from:

2018DIN07-103 – Authority for Army Orienteering (UK)

Message: Orienteering can be used to develop many of the qualities that are essential in a good soldier

At its most demanding, orienteering provides the challenge of navigating over complex and rough terrain whilst running at speed; combining navigational skill and aerobic fitness. To be competitive at this level, an orienteer must train regularly, not only to build up physical speed and stamina, but also to improve their 'mental' skill. The skills required of a good soldier are very similar to that of an orienteer: the use of a compass, the ability to estimate distance and interpret the ground, whilst continually making multiple decisions.

During an orienteering event a soldier must be confident in their ability, maintain concentration, make decisions under pressure, and sustain a single-minded determination to overcome any setbacks and mistakes. Soldiers taking part in orienteering benefit from:

- An improved cardiovascular fitness and stamina;
- An increased self-confidence and self-awareness;
- An improved ability to make rapid decisions whilst under physical duress;
- Superior map reading skill: learning to 'read' the terrain and 'feel' their movement through it;
- And a further developed sense of team cohesion.

Lt Col Chris Huthwaite RA
Chairman Army Orienteering Association (AOA)
3/2/2020

The document that follows is a guide to the resources on the website BetterOrienteering.org to assist military personnel in developing their orienteering skills.

Orienteering for the military

How Better Orienteering website can help you develop your navigation skills

Duncan Bayliss, Wrekin Orienteers, 2020

Disclaimer: This short introduction is not official in anyway

This introduction to the Better Orienteering website and resources is written by an experienced civilian orienteer with comments from other experienced orienteers, some of whom have military experience. It is simply intended to help military personnel use the resources on Better Orienteering to effectively learn and improve navigation skills that are applicable in a range of scenarios.

Orienteering and the military have a long association. Orienteering as a sport originated with the Swedish military using orienteering activities as training. Many top level orienteers in the UK have been in the military and it is certainly an advantage to have an employer who expects you to maintain a high level of fitness and navigation skills.

Orienteering helps military personnel develop and practice at least 2 key transferable skills:

- 1 The ability to move confidently and accurately through terrain without having to constantly stop to read the map
- 2 The ability to read the map and terrain so as to use them to your tactical advantage

You can never have too much practise at navigation and you can always get better. Navigation skills must be learnt systematically and practised regularly to ensure they will work reliably under pressure. It can't be emphasised enough that all practise of navigation is beneficial.

It is important to remember that whilst orienteering helps you develop a core Tool Kit of Navigation Skills, there are many other aspects to navigation that are not practised by doing orienteering which are important in other military contexts. The Better Orienteering website only covers orienteering skills. You must think about how you apply the skills developed by orienteering and adapt them appropriately to other scenarios.

What stages will your navigation development go through?

You can think of your navigation skills as developing through broadly 3 stages:

- 1 Basic Navigation Routine** - Understanding how to navigate consistently and reliably
- 2 Building a Tool Kit of Navigation Skills** - Expanding the range of navigation skills you can utilise effectively
- 3 Testing your navigation under pressure** - Applying and adapting your navigation to a range of scenarios under physical and other stress

We will look at each of these in turn.

1 Basic Navigation - Understanding how to navigate consistently and reliably

This includes:

- Understanding the map
- Learning a reliable navigation routine with map and compass
- Gaining experience of moving through different types of terrain

Action:

- Download the Better Orienteering Summary. It is web-linked back to the Better Orienteering website. When you click on a link in the summary it takes you to the relevant section of the website. Some direct links to the website are also included in this document.

<https://betterorienteering.files.wordpress.com/2019/12/better-orienteering-summary-v3-3.pdf>



- Review the **Beginner** section <https://betterorienteing.org/beginner/> and **Basic Navigation Routine** section <https://betterorienteing.org/basic-techniques/> and download the Basic Navigation Routine summary. It is scaled for easy smartphone use: <https://betterorienteing.files.wordpress.com/2019/06/basic-navigation-routine-v3-2019.pdf>
- Understand the concepts in the **10 Elements of orienteering** videos from the Irish Orienteering Association <https://vimeo.com/91937213>
- Complete several orienteering courses of at least Orange level

Suggested target speed = inside 15 minutes per kilometre e.g. complete 3 km Orange course inside 45 minutes

Draw your route on afterwards in red pen

List where you made mistakes and use the split times you get printed out when you download at the finish, to estimate the time you lost

Write down (on the back of the map is a good place) what you would do differently next time to avoid repeating the same mistakes

Show your route and analysis to a more experienced orienteer and seek their input on what you can do next to improve

2 Building a Tool Kit of Navigation Skills - Expanding the range of navigation skills you can utilise effectively

Once you can do the basics of navigation reliably you can expand the range of concepts you can use to navigate effectively.

This includes:

- understanding how to plan routes
- understanding how to maximise your chances of executing reliably the route you have planned
- developing relocation strategies to deal with making mistakes and getting “lost”

Action:

- Review the **Intermediate Skills** section of Better Orienteering <https://betterorienteing.org/intermediate-techniques/>

- View and understand the 9 **Get Up to Speed videos** by SLOW.

<http://slow.org.uk/british-orienteering/get-up-to-speed-videos/>

You can find them in the Intermediate section and view all 9 videos from the YouTube playlist from the first video you view.

- Complete several Green or Blue level orienteering courses to develop and apply your skills

Suggested target speed = complete the course inside 12 minutes per km. This is a challenging standard to aim for that requires fitness and reliable navigation.

Orienteering speed varies a lot with different terrain.

As a rule of thumb, if you are a competent navigator and reasonably fit you should be able to get inside 10 mins per km on most UK orienteering races. It can take many orienteering races to get your navigation up to this speed.

- Analyse your route afterwards as per the Basic Navigation section above, but also note which Intermediate skills you used and which ones you could have used to navigate more effectively, avoid errors or complete the course more quickly
- Develop the ability to identify a navigationally safe route vs a more difficult but quicker route
- Learn how to identify reliable Attack Points
- Improve your distance estimation
- Speed up your relocation from errors

3 Testing your navigation under pressure - Applying and adapting your navigation to a range of scenarios

At this point your needs for military navigation start to become more distinct from those needed to become a champion orienteer, although there is some overlap. More advanced orienteering skills are always useful for any navigation, but you must think through and practice the skills in different ways for military use.

This includes:

- Improving your ability to visualise terrain from the information on the map and interpret what it means tactically
- Understanding and applying more advanced navigation strategies. Understanding them and actually applying them under pressure are quite different matters!

- Testing your navigation under different types of pressure, and applying it to other scenarios (more specific to the military)
- Navigating with other tasks to undertake at the same time and with other people involved in team activities. This includes effective communication of route choices, resolving differences of strategy and understanding others' level of navigation skills and ability to use them and what you can require of them

Action:

- Review the **Advanced** and **Beyond Advanced** sections but identify how far and in what way these concepts are applicable to a range of military navigation scenarios and how you can adapt those skills for use in those scenarios
- Understand how to anticipate navigation errors and managing the situation when they happen e.g. effective relocation (and team management)
- Understand navigation risk in the context of other risks
 - eg the risk of not being able to reliably follow a route or find a fixed point and then relating this to other risks you are facing
 - e.g. identifying the safest route vs the fastest or riskier route choices and knowing when to take the more risky route
- Mentoring a less experienced navigator and helping them to navigate more reliably and quickly, with clear improvement over a series of orienteering races
- Further test your navigational skills by a range of strategies. Some of these you can do yourself, others will be part of your training:
 - Doing more and longer races and learn how oxygen debt and tiredness and re-fuelling with food and water affect your ability to navigate
 - Competing with a pack on to increase the physical challenge and thus the stress on your navigation. Even a 7-10 kilo pack adds a significant extra challenge to your oxygen debt and thinking
 - Orienteering at night. This develops your ability to follow fine detail on the map (Always take a spare torch and extra batteries to civilian night orienteering races)
 - Orienteer/undertake navigation exercises on different scales of map and poorer quality maps, learning how to take account of out of date or poor quality mapping, which is a very different scenario to very accurate and up to date orienteering maps

E. Doing navigation exercises for extended periods. This requires managing tiredness and pacing yourself and can involve effective teamwork in navigation. Develop understanding of the value of planning, checking and reviewing an extended route and the trade-offs involved in route choices

e.g. 5 mins gained from a tiring risky route can mean 30 minutes lost later due to tiredness leading to poor decision-making

Keep doing orienteering races

Whilst undertaking other navigation challenges and training, it can help to keep returning to doing orienteering races. It lets you practice core skills and helps you think about how to apply those skills elsewhere.

What Better Orienteering does not cover

Other navigation training, not covered by the Better Orienteering website, can extend your navigation skills and your ability to apply them in many different contexts and scenarios This includes understanding when and how to adapt your navigation skills for different contexts e.g.:

in mountains

in urban areas,

in unsafe territory/ evasion.

This involves relating your navigation skills to other aspects of navigation such as:

- Understanding how others move through a landscape
- Visibility of you and others
- Traceability of your movements
- Vulnerability and route choice
- Plan and back-up plan
- Exit and extraction
- etc

These and other considerations and how to train for them are all outside the remit of Better Orienteering website.

Conclusion

This introduction to the Better Orienteering skills website has shown you how you can think about your development of navigation skills in 3 stages. These can be summarised in different words as:

1 Basic Navigation Routine - Master the basics of map reading

2 Building a Tool Kit of Navigation Skills - Learn and apply a range of navigation skills that will make your navigation quicker and more reliable

3 Testing your navigation under pressure - Test your navigation under pressure in various scenarios and connect your skills to other activities

This summary has:

- linked you to instruction videos to understand navigation skills.
- pointed you to convenient skills summaries to download to a smartphone.
- explained how you can track your progress in developing skills by analysing your route after orienteering races.
- suggested how you can further develop and apply these skills by undertaking other navigation based tasks such as night orienteering.