

## **Navigation RFI responses**

SGT Tony Robertson published a navigation article in Smart Soldier 64. In it he discussed navigation equipment, converting bearings and navigation exercises. We also provided navigation tips that Army Lessons had collected over many years. In closing this article, an RFI was sent out to Army, asking soldiers to share their own navigation lessons. This article provides the responses we received.

## **Dead reckoning versus reference to prominent landmarks when dismounted**

*WO2 Darrin Neale*

While both techniques are taught, each has advantages and disadvantages depending on the terrain. In open country with good visibility, reference to prominent landmarks navigation check points work best. It does not have to be an exact point, it can be as vague as “when I’m between those two hills” or “I’m aiming for the north slope of that feature”. These are enough to ensure you remain on track and can quickly refer to a map for exact position, your position or relative to your position.

In close country or with reduced visibility, dead reckoning legs should be kept short and have an obvious end point to reduce wandering. A navigation check is essential when using dead reckoning, as it reduces errors from pace counting and almost eliminates that moment of cold dread when you realise you have lost count.

## **Get competent at navigation, be confident in those skills, and thoroughly plan.**

*CPL Lee Newham*

The main navigation advice that I teach my soldiers is to be competent with your compass and pace counting, and trust the facts. I’ve often seen soldiers become ‘geographically embarrassed’ by second guessing their bearings and paces and choosing their ‘gut’ feeling.

An operational example I give to them is from my experience in Afghanistan during Operation SLIPPER. I was the sniper team leader and we had just begun operating in an AO that was unfamiliar terrain for us, Khaz Uruzgan. The mapping product we had available to us wasn’t the greatest and didn’t truly capture the relief of the terrain we were working in. One of our first jobs was to conduct a 12km foot infil by night to establish an Observation Post to provide overwatch to patrols that would be conducted the following day. Through thorough mission preparation, as a team, we developed our route in and established exactly what our bearings and distances would be between checkpoints of our navigational route. This route had us traversing through valleys and re-entrants in extremely mountainous terrain. Moving through this terrain by night, we could have easily become confused as features that looked correct by the mapping product weren’t alligned to our planned bearing and paces, and that could have easily led us astray if we had relied on our ‘gut’ feel. Being able to adapt to the terrain within our plan, and incorporating the required bearing and paces of the adaptive route kept us on track. As a result, we were able to navigate to our final location efficiently and effectively, without getting lost. Doing so would have resulted in mission failure.

## **Use pace counting beads**

*MAJ Cam Jamieson*

I have worn pace counting beads on my webbing for decades and find they are a great aid to navigation by day and night. They remove doubt over paces counted, and they continue to work regardless of the hour and terrain. They can be used by feel without the need for white or red light,

require no batteries and are not affected by mountainous/close terrain where GPS signals can be a problem. They make no sound and are not affected by electronic warfare.

Of concern to me is that I sometimes get asked by soldiers, most sincerely, if my pace beads are prayer beads. I believe every soldier should know what they are, have a set and be confident to use them in conjunction with their knowledge of their own paces required across different types of terrain.

### **Put in the hours to be good at navigation. Start early.**

*PTE Gregory Shepherd*

I have never had problems with navigation. I put this down to my early experiences.

1. Family – Mum and Dad liked to go camping. We saw maps and compass in use.
2. Cubs/Scouts/Venturers – Encourage your children to try out this organisation, where map and compass use gets covered.<sup>1</sup>
3. Go bushwalking – As a teenager I joined an organised bushwalk or camp every Christmas holidays, where we walked and covered a lot of territory over a week. Map and compass work was essential in learning to read the terrain and picking the right track.

I realize this is not directly relevant to what you are trying to teach soldiers now, but if we (I'm well passed having kids) can get soldiers to take their families out and about, it will reap benefits for our future Army. The soldiers that struggled the most in my Reserve units were the ones who had had no exposure to the map and compass and who had usually had never left urban areas.

*War story warning!!* One training exercise, we had to patrol a set route with each section also tasked to establish an ambush site. The section commander who confidently relied (solely) on his GPS ended up walking his team seven kilometres too far and missed out on the ambush phase. His batteries went flat and he didn't notice. Seven kilometres was a long way to make a mistake when the total route length was 13 kilometres.

### **Try rogaining.**

*CAPT Aiden Frost*

One of the best ways I've found to practice navigation is to join in on Rogaining. Check out [www.rogaine.asn.au](http://www.rogaine.asn.au), then find the links for your state or territory associations. These events are civilian run and take anywhere from six hours to 24 hours. Checkpoints are placed, with different values depending on the difficulty to reach and find. You are given a 1:25 000 map with contours and checkpoints marked 20 minutes before you set off so that you can plan a route, and the team that gets the most points over the period and gets back to the start without penalties wins.

You need to plan and navigate effectively to score well. You can take a MILS compass, run a navigation data sheet and treat it like a military exercise, although you will be wearing civilian attire.

It is a brilliant time out and you can exercise all of your navigation skills.

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<sup>1</sup> <https://scouts.com.au/>

## **Conclusion**

This article contains great tips for navigation. The first three submissions provide advice that you can directly apply to your next navigation task. The following two submissions advise that sitting around waiting for someone to teach you navigation may not be the best course of action. Get off your backside and get out there. Imagine the knowledge you will develop from these experiences and the expertise you can gain from civilians who spend a lot of leisure time navigating.

*Army Lessons will send each of these members a military history book as thanks for taking the time to submit their thoughts on navigation.*