

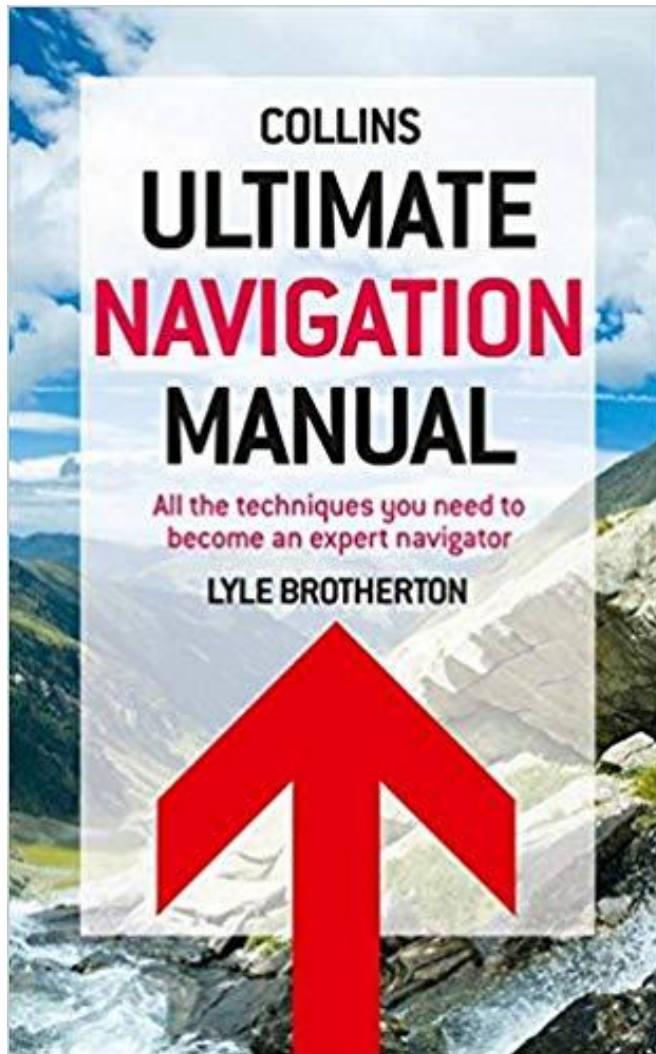


Experiences from a Night Navigation Course

David Watts



Ultimate Navigation School (UNS)



shaven
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www.shavenraspberry.com

HOW TO USE
Match the lines on the card to the contours on your map.

In the example below, using Index Contours on a 1:25 000 Map, the Slope Angle is 37° and the extra distance travelled per 100m climbed is 25m

SLOPE ANGLE ON 1:25 000 MAP	EXTRA DISTANCE PER 100m CLIMBED
20°	6m
27°	12m
32°	18m
37°	25m
41°	33m
45°	42m
49°	53m

GROUND TO AIR EMERGENCY SIGNALS

Signal	Meaning
Person lying on ground	Need Medical Assistance
Person with arms raised in a V	Do Not Attempt to Land Here
Person sitting on ground	Land Here
Person with arms raised in a circle	Yes
Person with arms raised in a V	No
Person with arms raised in a circle	All OK - Do Not Wait
Person with arms raised in a V	Pick Us Up

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Essential Tools for Serious Navigators

TIMING CARD

DISTANCE	SPEED				
	2 kph	3 kph	4 kph	5 kph	6 kph
50 m	1' 30"	1'	0' 45"	0' 36"	0' 30"
100 m	3'	2'	1' 30"	1' 12"	1'
200 m	6'	4'	3'	2' 24"	2'
300 m	9'	6'	4' 30"	3' 36"	3'
400 m	12'	8'	6'	4' 48"	4'
500 m	15'	10'	7' 30"	6'	5'
1,000 m	30'	20'	15'	12'	10'

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Essential Tools for Serious Navigators

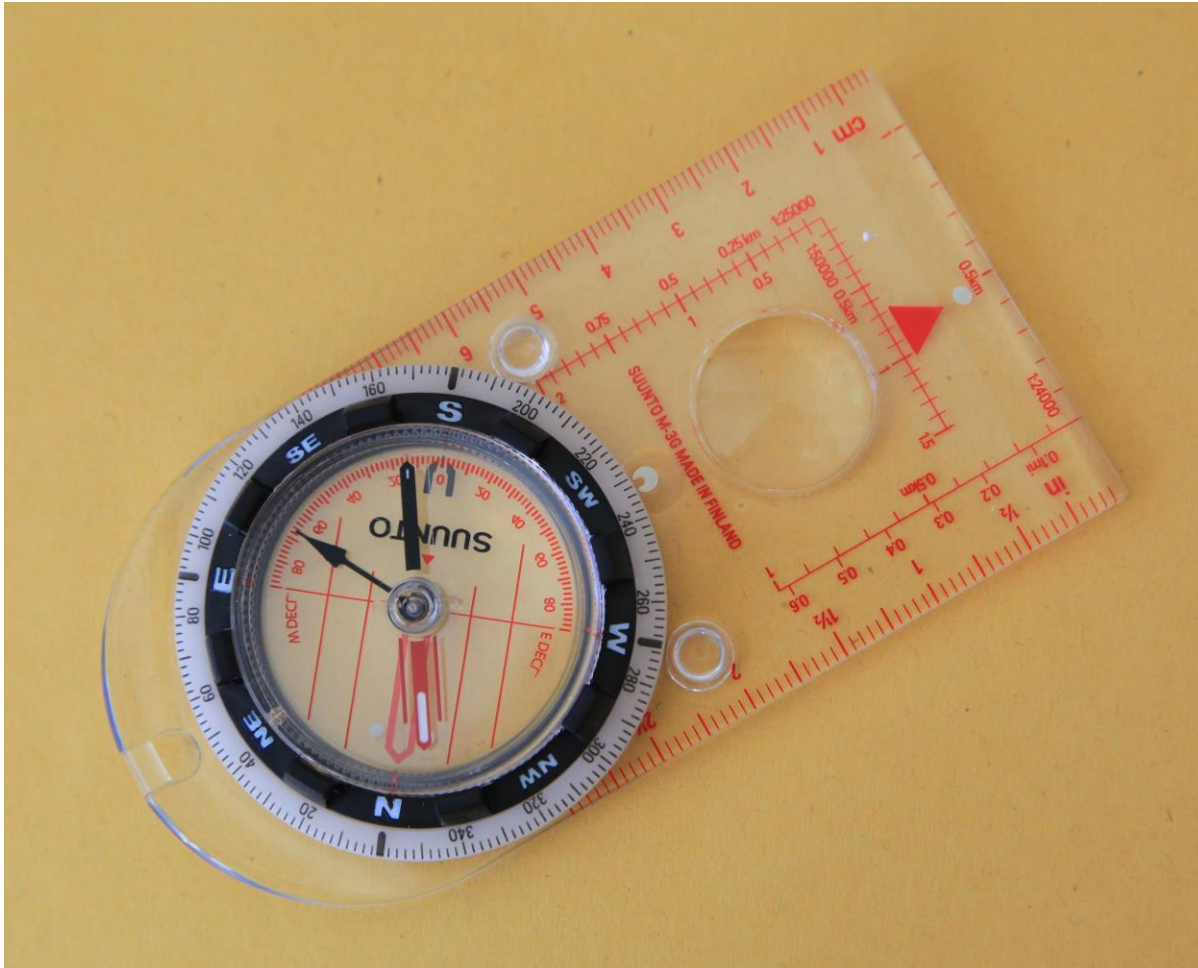
Course Venue



Course Overview

- 2 evenings (Friday and Saturday)
- Meet in pub around 4pm to discuss plans
- Drive a short distance to start of walk
- Circular walk, practising various navigation techniques (approx. 5 hours)
- Return to pub before last orders!
- Focused on using map and compass (i.e. no GPS devices)

Compass



- Base plate with rulers & scales
- Luminous markings

Headtorch



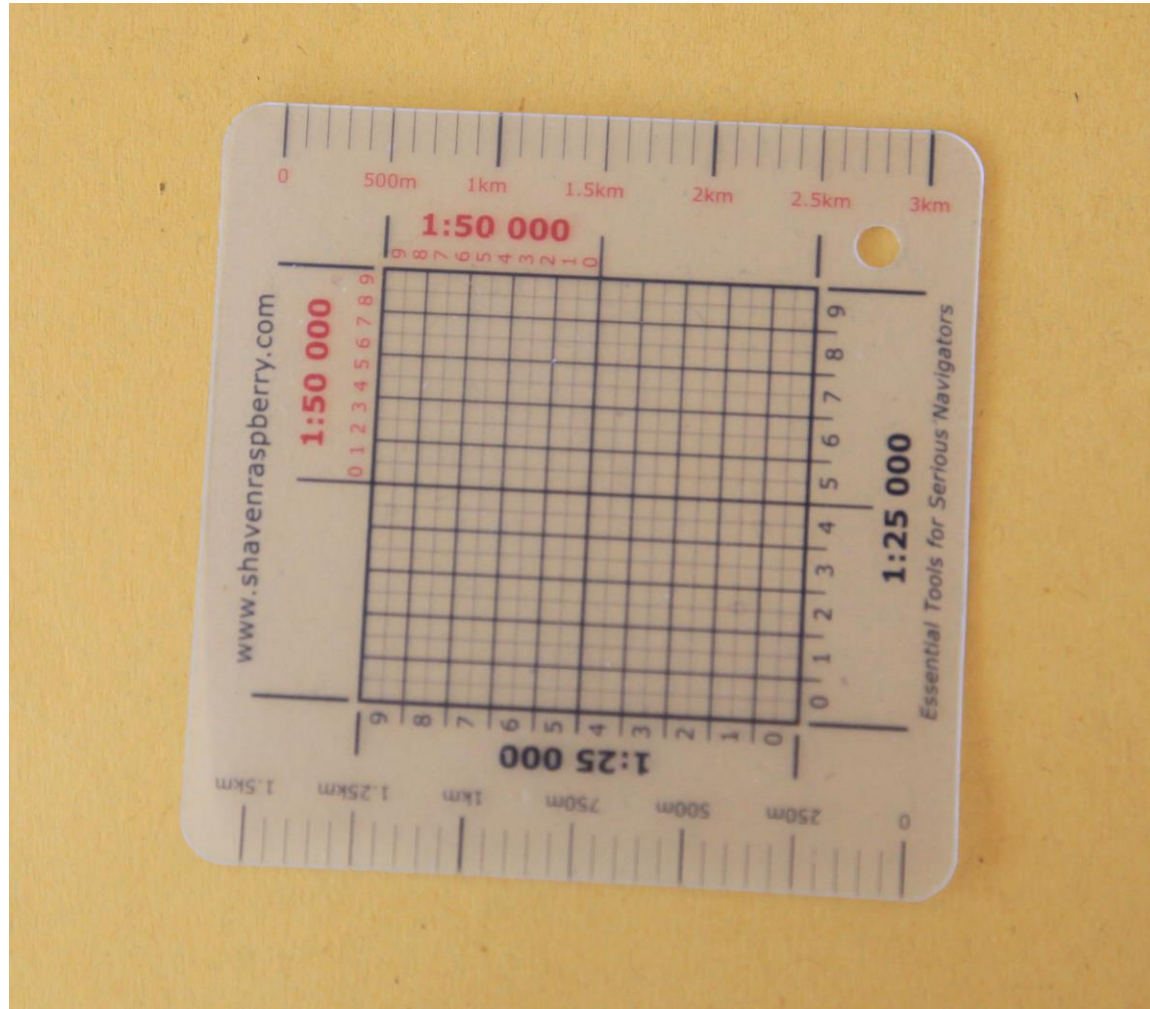
- LED Lenser H14R.2
- Need a good headtorch
- Red/green light an advantage
- Need a spare headtorch
- Need spare batteries

Pacing



- Pacing is the most accurate method of measuring distance walked
- Toggles on compass cord easiest way to keep track of 100m stages
- 5 – 10 extra double-paces per 100m at night

Measuring Distances

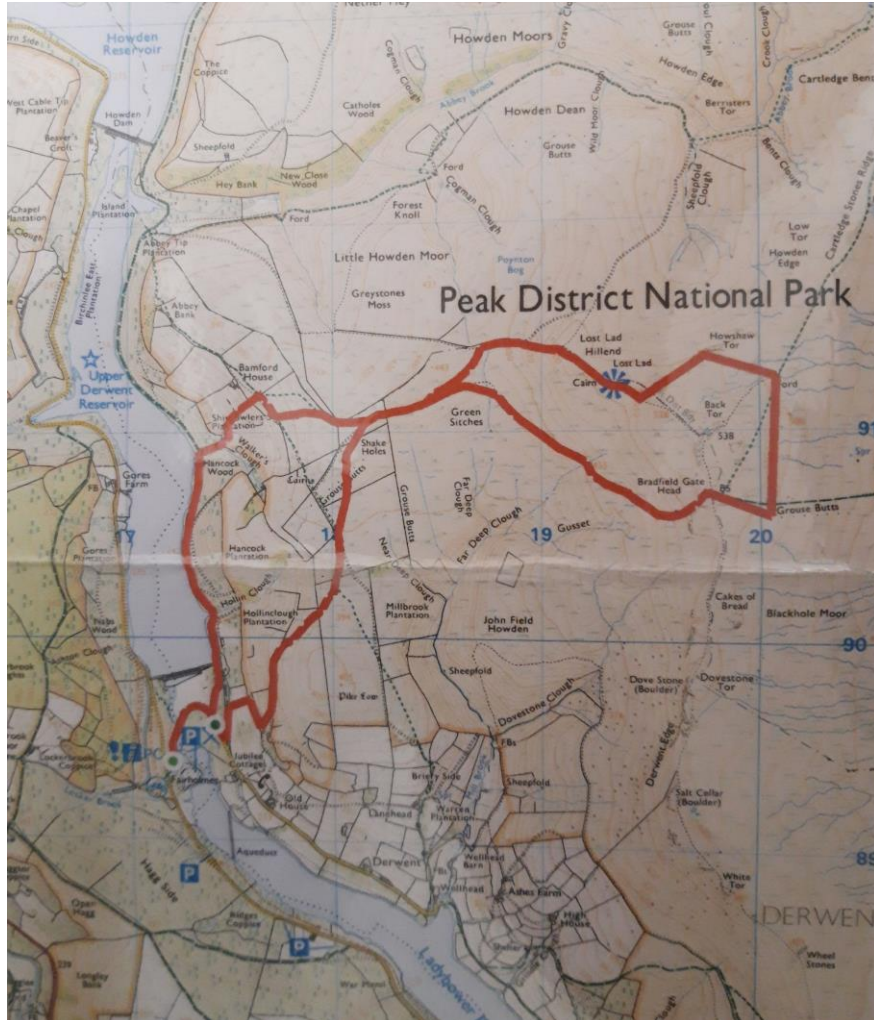


- Grid Tool
- Good for accuracy
- For 25K and 50K maps
- Keep with compass

Keeping Warm

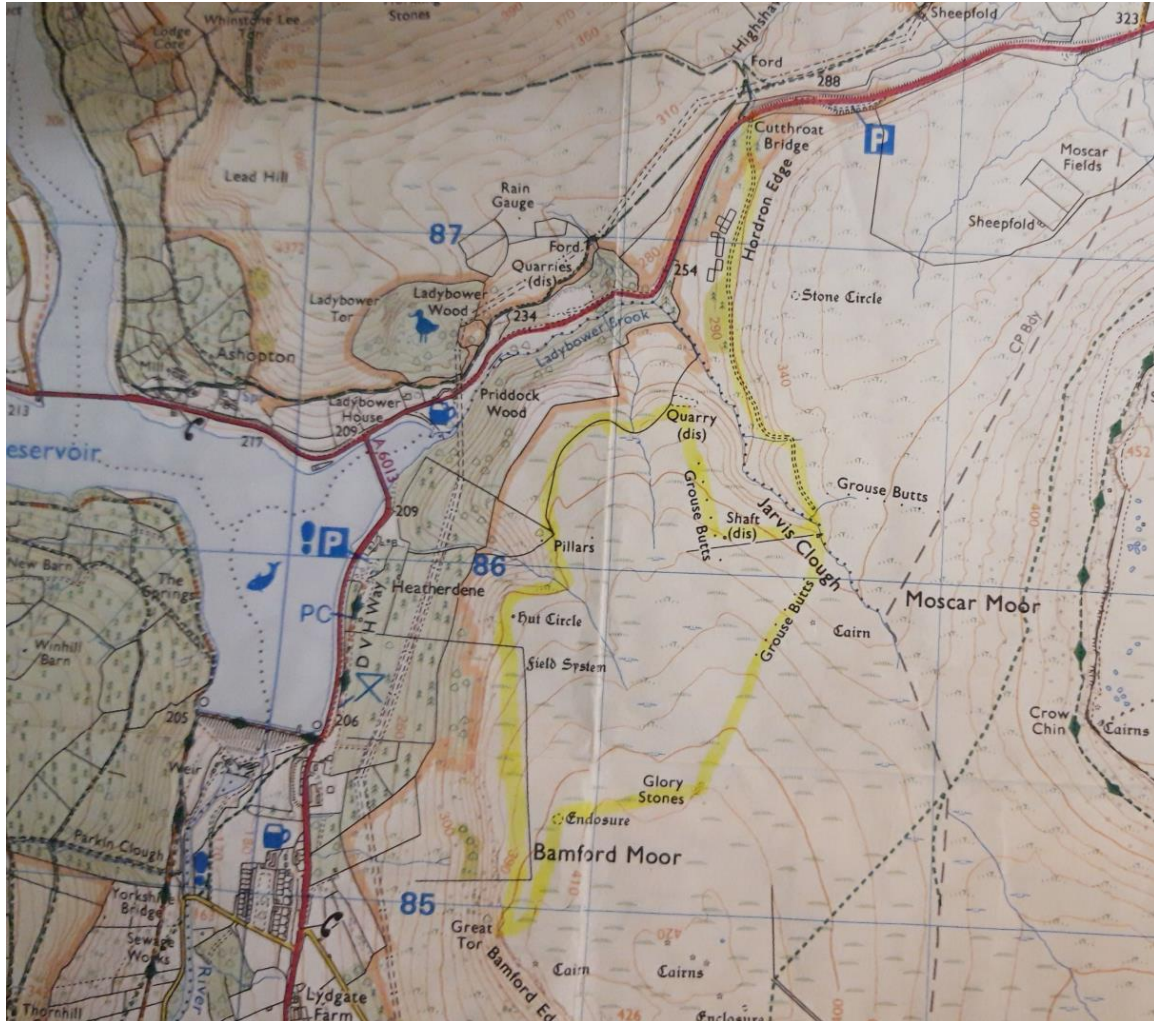
- Will be moving slower with frequent stops to look at the map
- Need to keep warm so as to concentrate on navigation!
- Plenty of warm clothes, hats, several pairs of gloves etc.
- Hot drink and plenty of food (more calories needed to keep warm)
- Group shelter useful in bad weather

Mark Route On Map



- Do for planned night walks
- Easier to keep track of location

Large Features



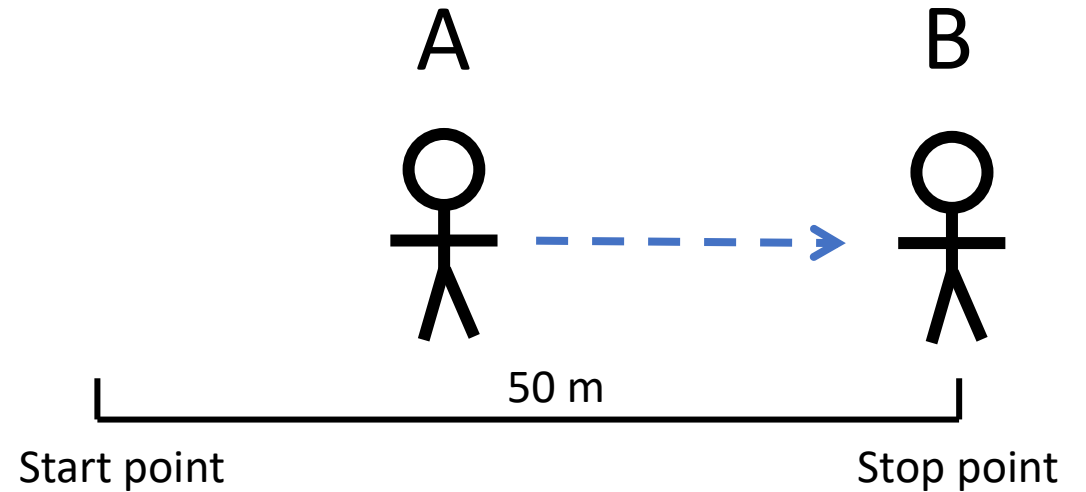
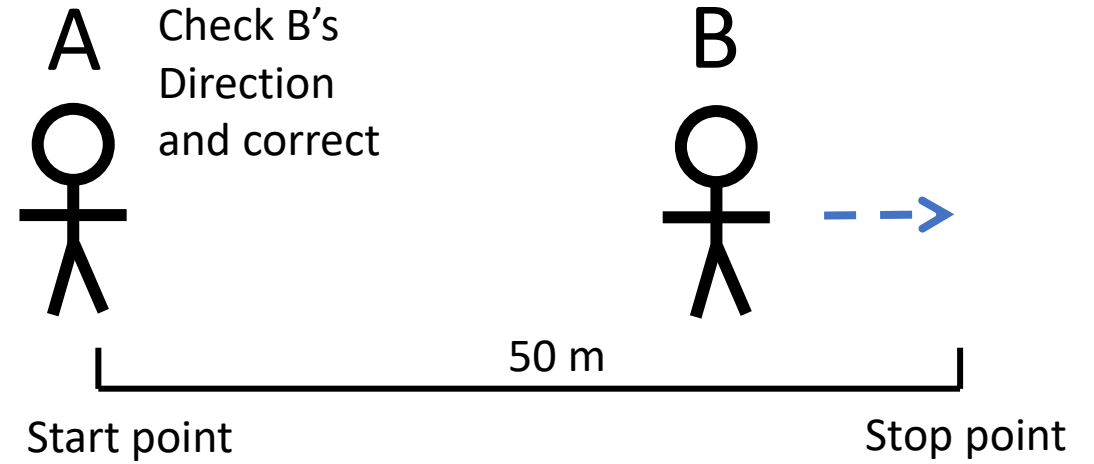
- Use large features at night
 - Good paths/tracks
 - Walls
 - Edge of forest
 - Rivers
 - Change of contours
- Don't use small features
 - e.g. hut circles
- Use paths whenever possible
 - Be flexible

Short Distance between Attack Points

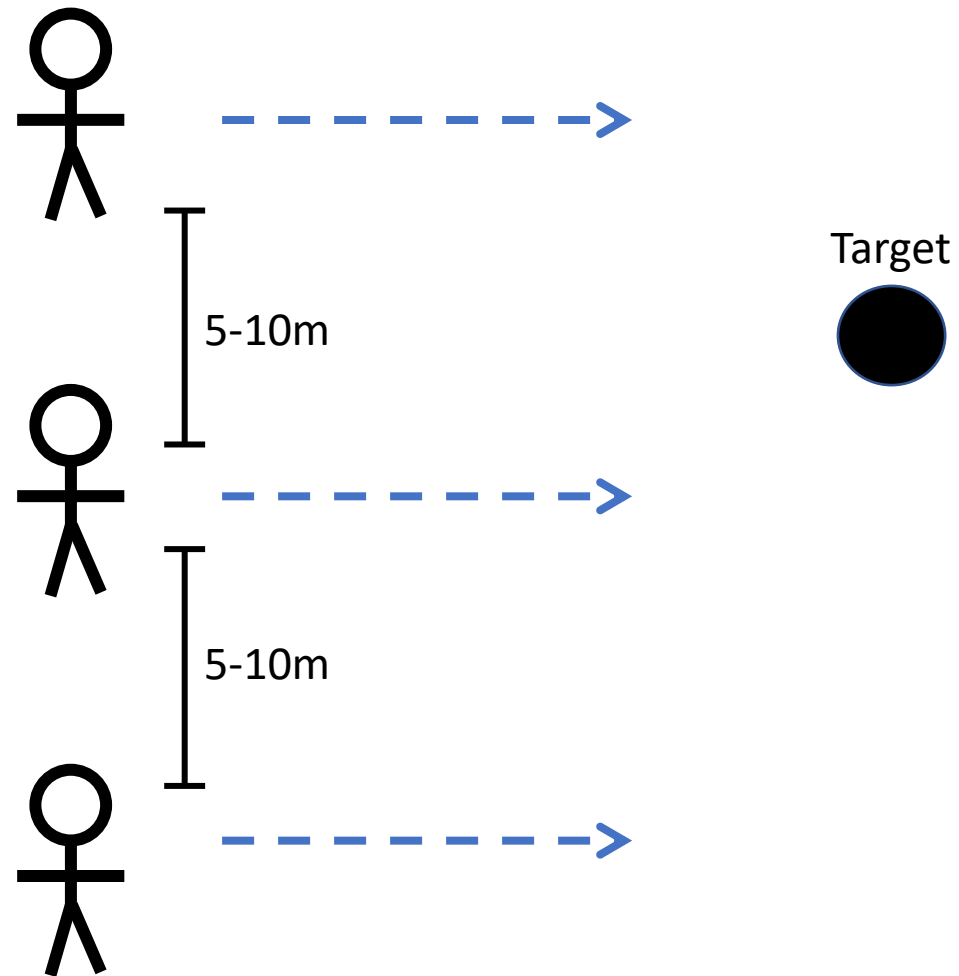
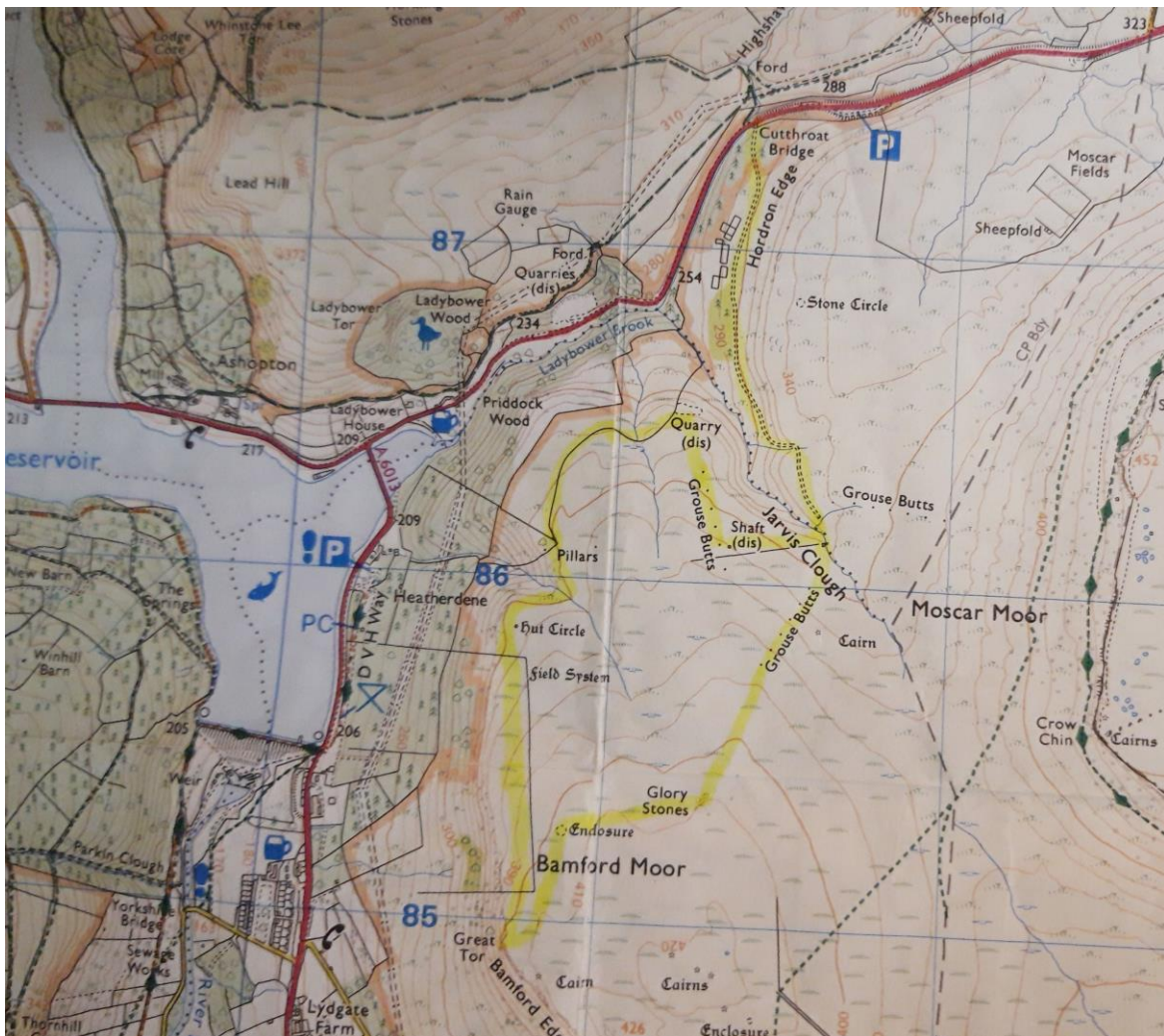


- Essential to use short legs
- E.g. 250m
- Reduces margin for error
- If go wrong, not far to retrace
- Use 5Ds all the time

Leap-Frogging

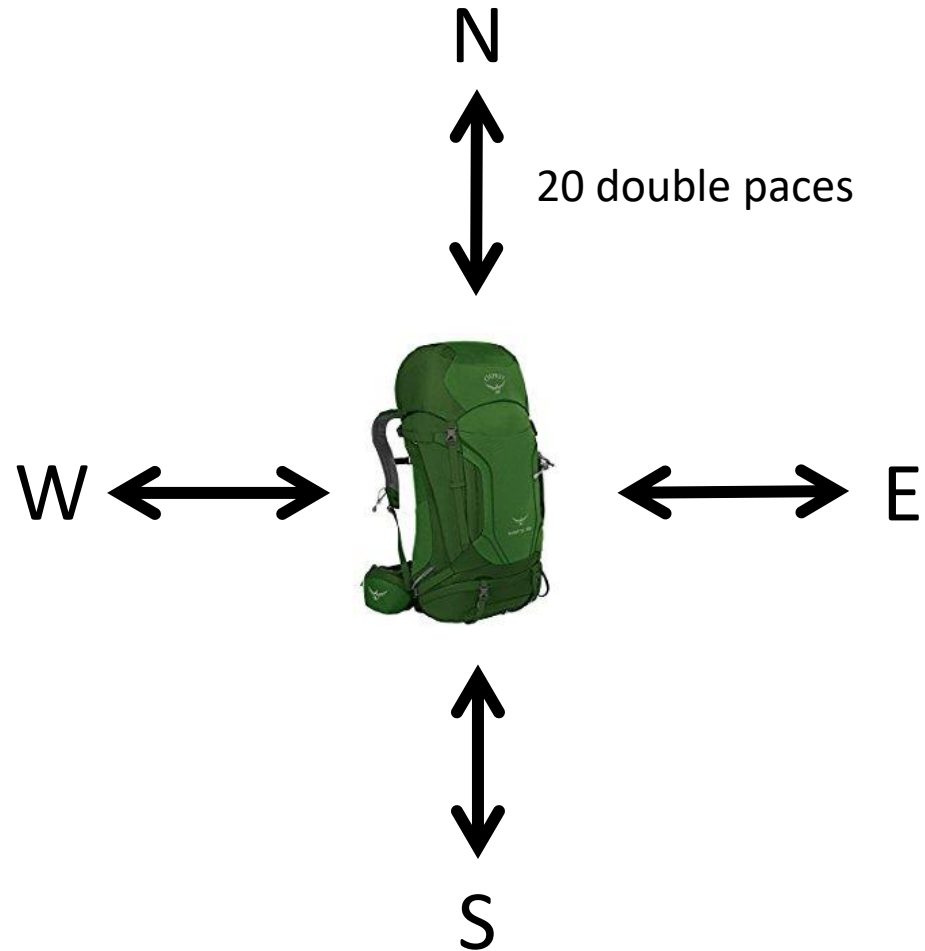


Search Techniques

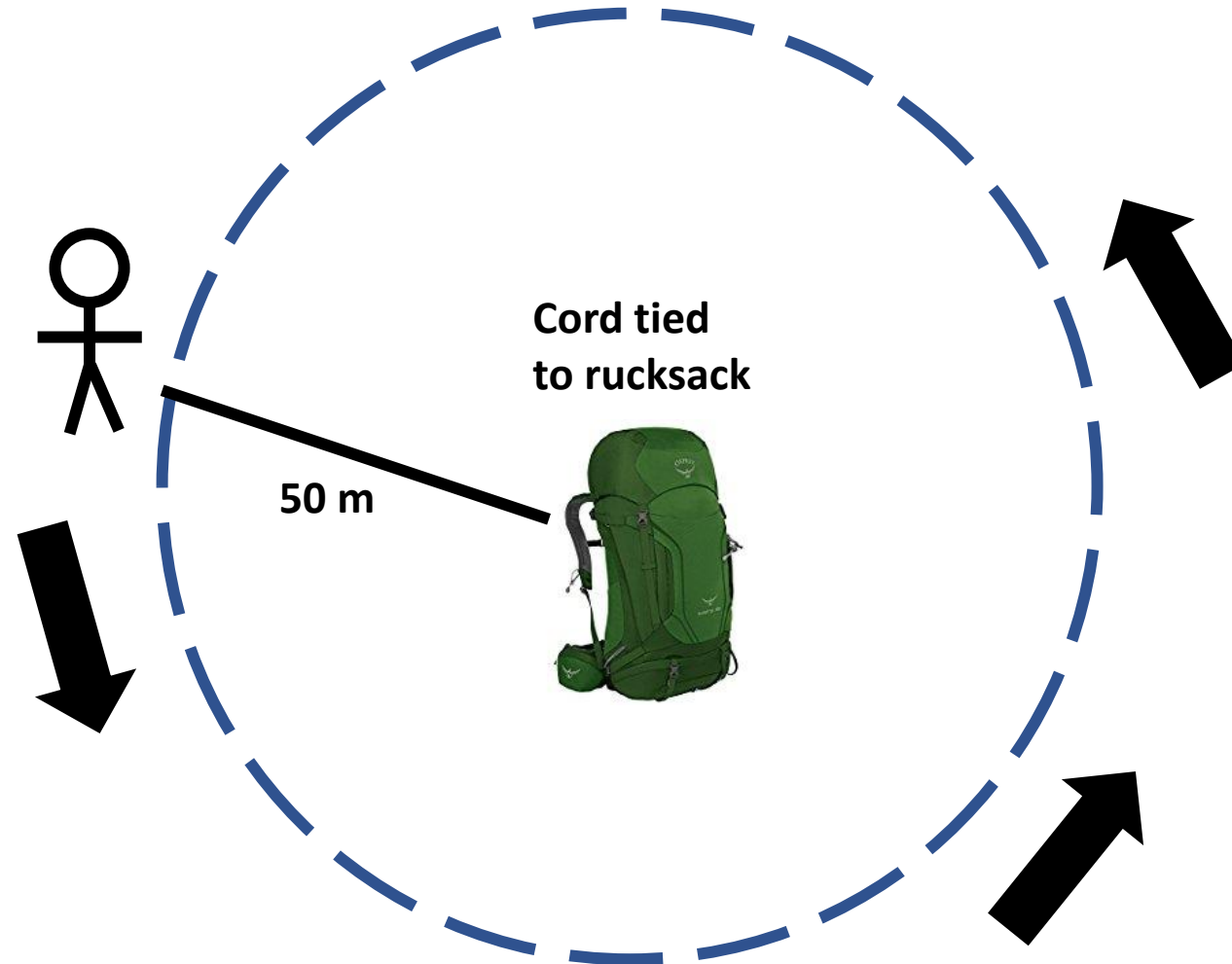


Search Techniques (1 or 2 persons)

Build up a picture of what is around you



Search Techniques (1 person)



Build up a picture of what is around you

Miscellaneous

- Don't always need headtorch; close one eye when turning on headtorch to see map
- Takes approx. 8 minutes for eyes to start adjusting to darkness
- Drawing a line between the two ends of a crescent moon points south
- In an emergency give the police a PINT: Place, Incident, Name, Time
- Backup equipment: Altimeter, GPS, Smartphone, phone power pack, OS Locate app
- Download maps to phone as these will be the most up to date available

The End

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