



# ***Orienteering in Sweden***

# ***Håkan Carlsson***

- ✓ ***37 years old. Wife and 2 children***
- ✓ ***Lives in Örebro, Sweden***
- ✓ ***Orienteering since 9 years old***
- ✓ ***Since 1999 club leader OK Tisaren***
- ✓ ***2005 Started orienteering school***
- ✓ ***2008 National team trainer and development of elite environments***
- ✓ ***2011 Head Coach Swedish national team***
- ✓ ***Organiser of O-Ringen 2 times and Swedish champs once***
- ✓ ***Teacher in sports***
- ✓ ***Sports Psychologist (CBT)***





<http://www.youtube.com/watch?v=SX1rQdUI8-M>

# Subjects...

- Orienteering in Sweden
- How orienteering clubs work in Sweden
- How we teach orienteering from beginner to elite level
- The work with the national team and the athletes in the team
- Something about my leader philosophy

# Orienteering in Sweden - some facts...

- 75 000 registered orienteers
- 582 clubs
- 23 districts
- 600 competitions
- 400 000 starts

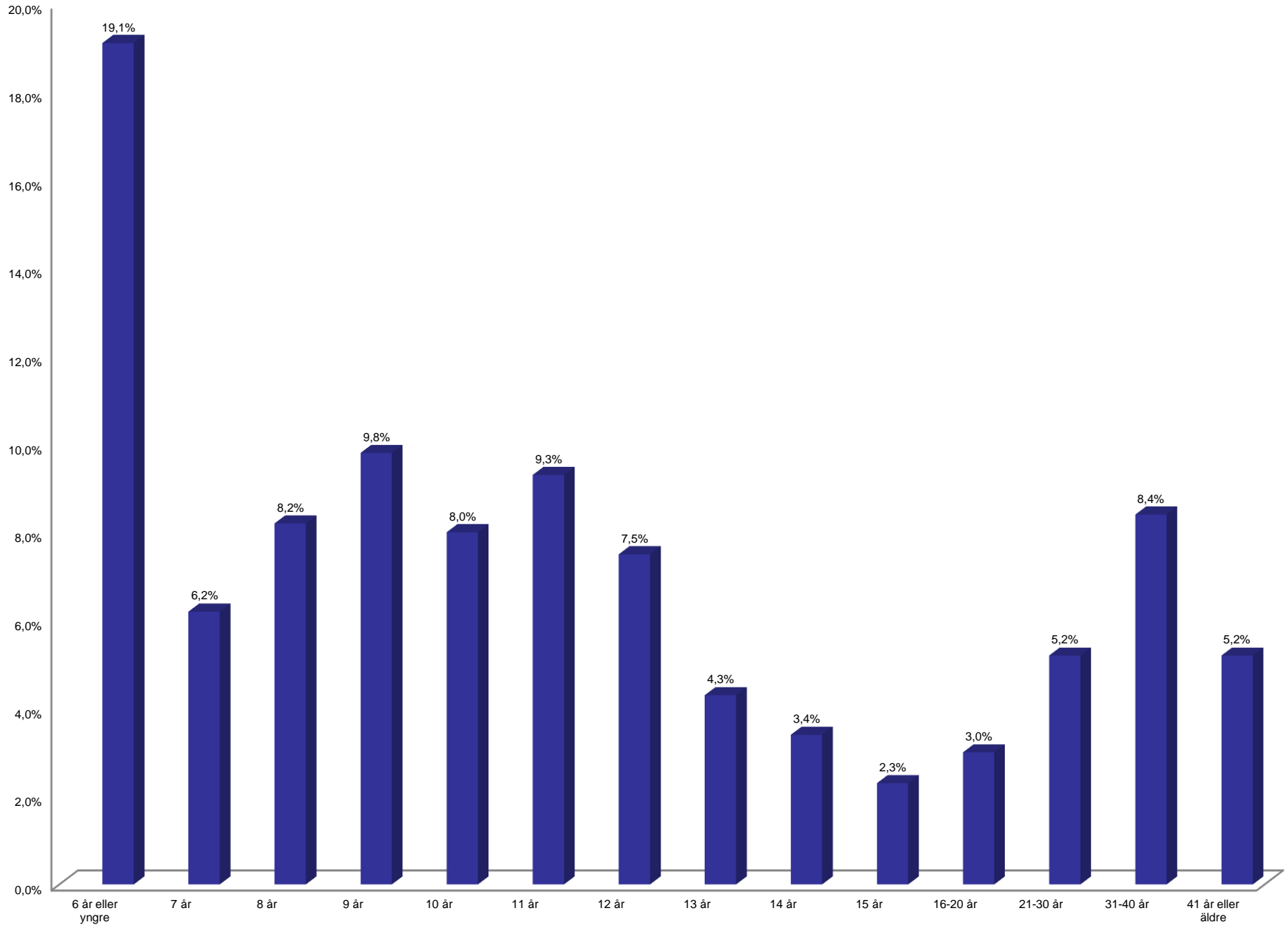


# Our goals

- Best national team in the world
- 1 % of Sweden registered orienteers in 2021
- 300 000 starts in public orienteering events
- Other types of membership
- Development of coaches at all levels



# When people start to do orienteering?



# O-Ringen – “The worlds greatest orienteering adventure”



<http://www.youtube.com/watch?v=5LTGb9S1MM>

**O-Ringen**



# Some facts about O-Ringen

- **Always week 30**, new place every year.
- 8 different competitions, the 5 days orienteering is the biggest one. Other events are youth relay, MTB-O, Trail-O, O-Ringen Open, O-Ringen Challenge, Training race , 3days.  
**Totally 150 classes**
- **More than a competition**, events, camping for more than 7000 persons etc.
- **110 000 starts** during the O-Ringen week 2014.
- **40 different countieys** attending.
- Total **>75 000 working hours organising**



**O-Ringen**

# ***Orienteering clubs in Sweden...***



# What are the "keys" to success in an orienteering club in Sweden?

- Basics
- Training
- Focus
- Social
- Coaches

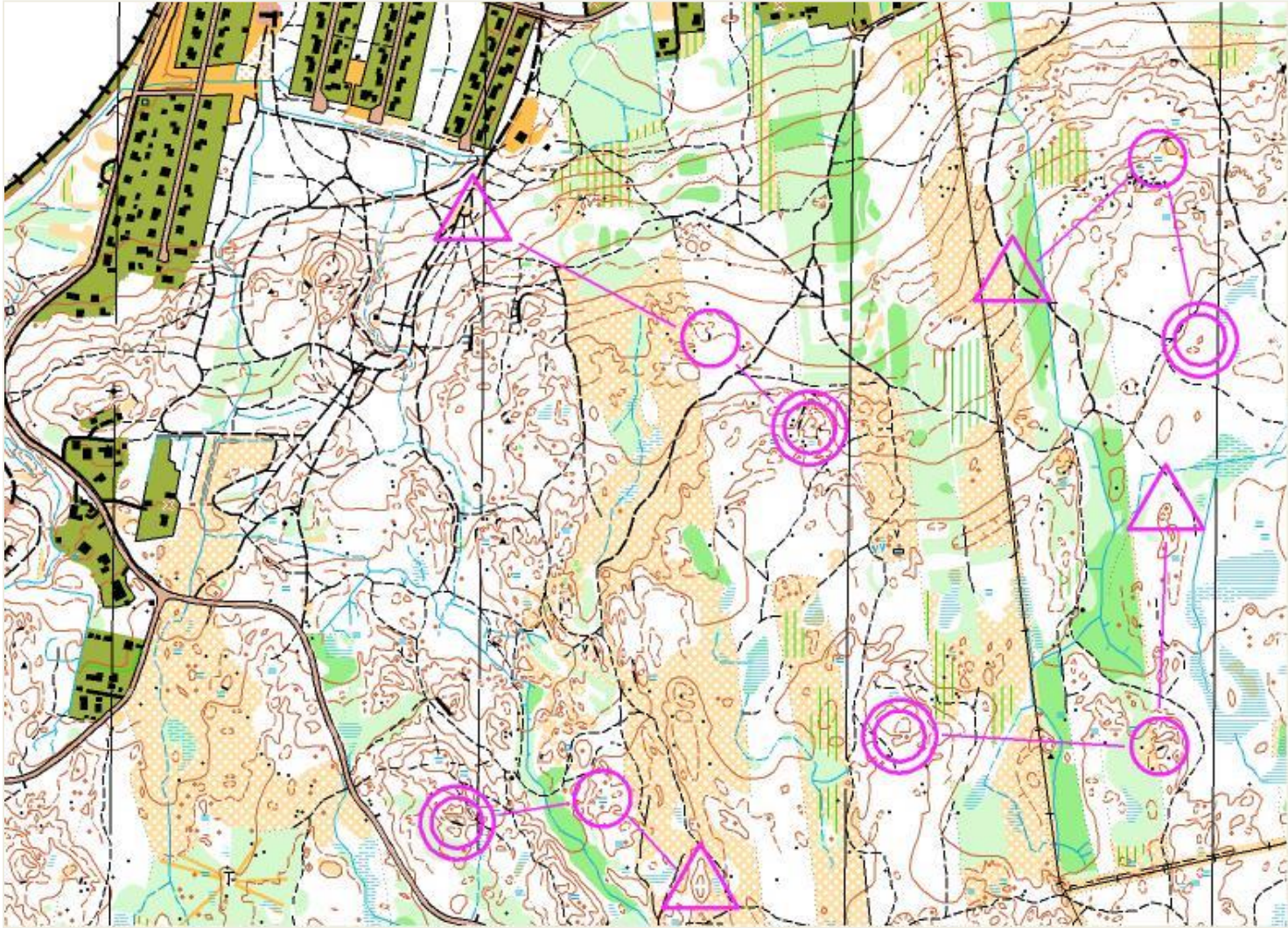


# Basics

- Terrain and maps
- Terrain close to "clubhouse"
- Close to clubhouse for many people
- A lot of kids starting to do orienteering
- Good leaders for every group
- Some people "burning" for orienteering



# Hunt-O



# Training

- Purpose, training, evaluation
- Quality, variation
- Follow each other, learn from the better



# Focus

- Important competitions
- Relays
- Individualization





# Social

- Other activities
- Other projects
- Camps
- "O-Gala"



# Coaches

- Pedagogic
- Flexible
- Humor
- Social
- Listen
- Doers
- Etc...



# ***Orienteering technique beginners level***



# The colors of Orienteering development steps

<b>6. Blue/black standard – The highest level</b> <ul style="list-style-type: none"><li>- Tactical thinking</li><li>- Very hard route choices</li><li>- Controls and legs “in the slope and the hills”</li></ul>	Elite-classes + all other classes HD 18 – 90
<b>5. Purple standard – Advanced level step 2</b> <ul style="list-style-type: none"><li>- The same Techniques but longer from obvious map reading points</li><li>- More and longer legs</li></ul>	HD 16
<b>4. Orange/Red standard – The important step, the step to become “advanced”</b> <ul style="list-style-type: none"><li>- Understanding all tools of orienteering<ul style="list-style-type: none"><li>- <b>Advance planning</b> – to gain flow</li><li>- <b>Attack points</b> – safer finding the controls</li><li>- <b>Extension</b> – safer and faster finding of the controls</li><li>- <b>Backwards thinking</b> – route choice</li><li>- <b>Pacing</b> – as a complement to reading the map that increases security</li><li>- <b>Tempo changing</b> – adapting running speed and accuracy in reading the map depending on the difficulty level</li><li>- <b>Simplification and structuring</b> – simplify and organize the map picture</li><li>- <b>Compass work, fine and rough</b> – adapting the level of accuracy depending on the difficulty level.</li></ul></li></ul>	HD 14 + all M-classes
<b>3. Yellow standard – The last step of the Beginners level</b> <ul style="list-style-type: none"><li>- Runability</li><li>- How to take a compass bearing – “rough orienteering”</li><li>- Easy contour orienteering – top of the hill or in the bottom of the depression</li></ul>	HD 12 <i>All 15 year old students in Sweden</i>
<b>2. White standard – Beginners level step 2</b> <ul style="list-style-type: none"><li>- More map symbols</li><li>- Route choice</li><li>- Short cuts</li></ul>	HD 10
<b>1. Green standard – Beginners level</b> <ul style="list-style-type: none"><li>- Understanding the map, through colors and symbols</li><li>- Have the map correctly orientated in relation to reality</li><li>- Line feature orienteering</li></ul>	



## *The problems in orienteering...*

- » Choice of terrain
- » Terrains variation and details
- » Controls position, symbols
- » How many different orienteering tasks on each leg

### **Orienteering tasks with map reading**

- » K 1-17 (K is short for Swedish *map reading*)

### **Orienteering tasks with route choice**

- » V 1-4 (V is short for Swedish *route choice*)

# The stair → K 1-17 + V 1-4

K is short for Swedish *map reading* and V is short for Swedish *route choice*

**K 17** Orienteering in areas with very much details

**K 16** Difficult contour-orienteering

**V 4** Difficult route choices

**K 15** Controls in areas with very few details

**K 14** Controls without something stopping you

**K 13** Generalization in longer legs of contour-orienteering

**K 12** Contour-orienteering, controls at easy contour-objects

**K 11** Longer legs of easy forest orienteering

**V 3** Length, runability and safety

**K 10** Short difficult orienteering, easy control points

**K 9** Easy contour-orienteering

**K 8** Easy forest orienteering with something stopping you

**K 7** Run through the forest with something stopping you

**V 2** Length and runability

**K 6** Run through open areas with something stopping you

**K 5** More difficult line object-orienteering

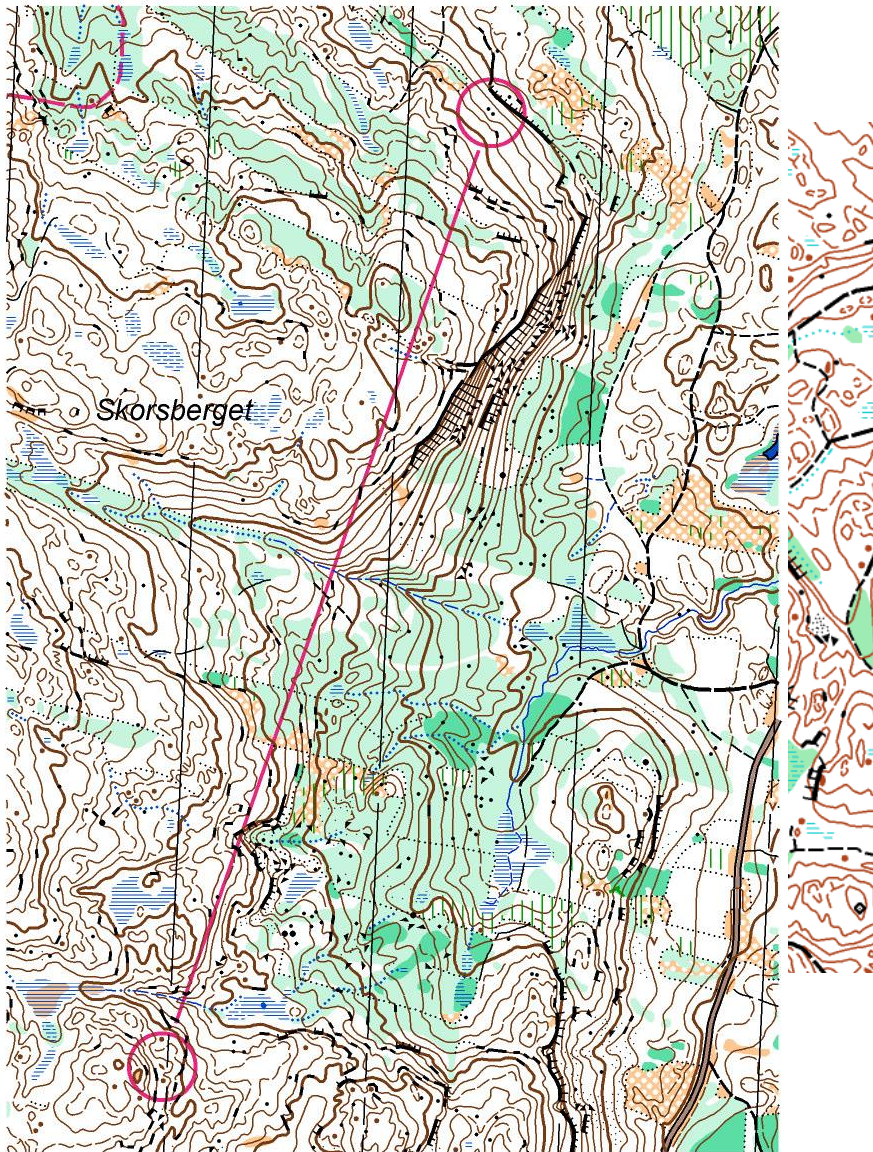
**K 4** Controls outside line objects

**V 1** Length

**K 3** Change of line object between controls

**K 2** Change of line object at the control

**K 1** Easy line object-orienteering, obvious direction



## *Route choice*

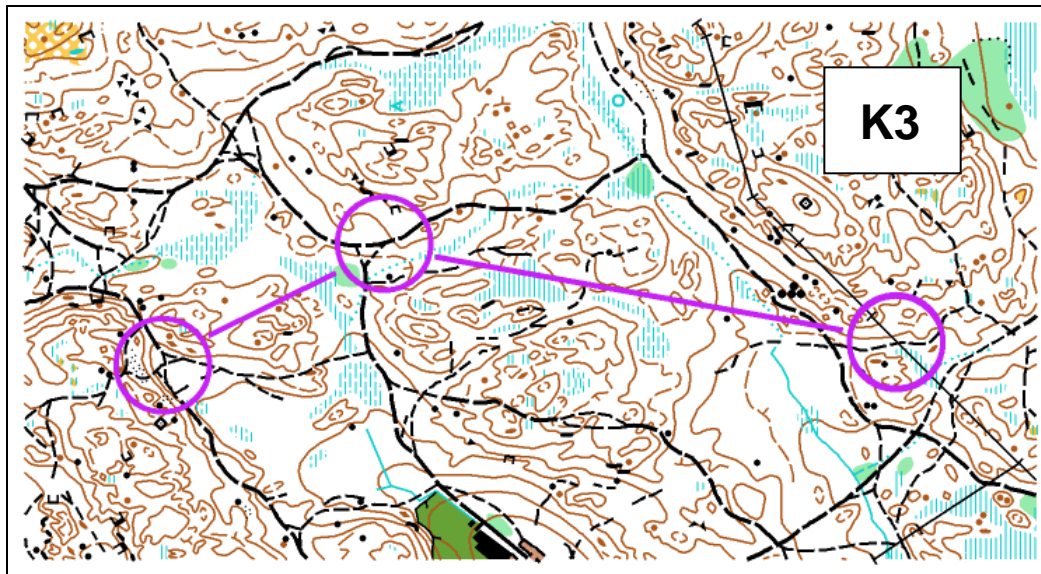
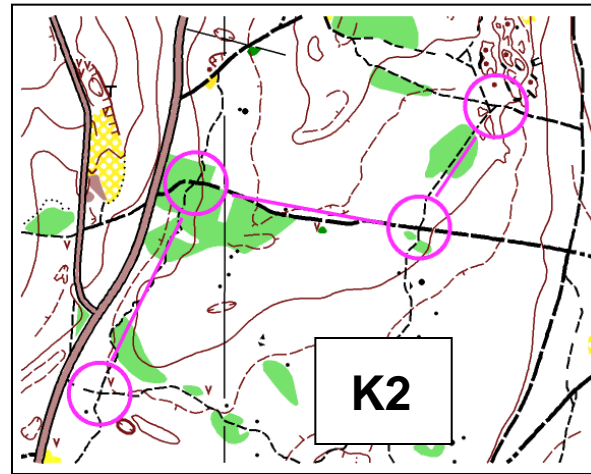
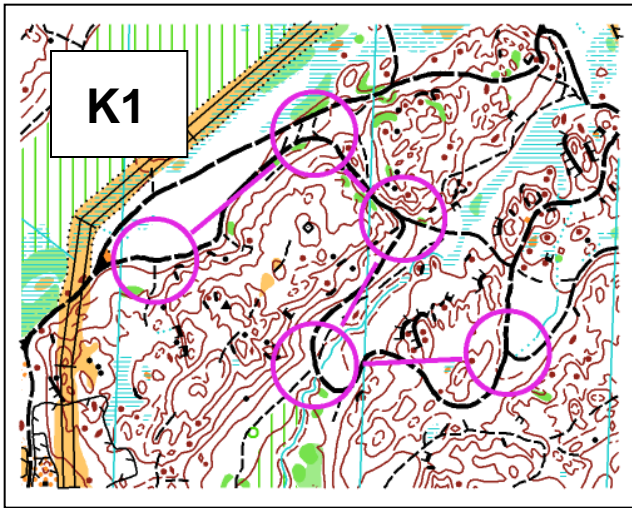
- 1 Length
- 2 Length and runability
- 3 Length, runability and safety
- 4 Every possible aspect

## *Green level*

### **Green standard – Beginners level**

- Understanding the map through colors and symbols
- Have the map correctly orientated in relation to reality
- Line feature orienteering





## *Green level*

### K1

- Clear line feature
- Obvious direction
- Orientate the map

### K2

- Changing line feature at the control

### K3

- Changing line feature during a leg



## *Understanding the map*

- ✓ The map is a small picture from above...
- ✓ "Bird perspective"



## *Understanding the map*

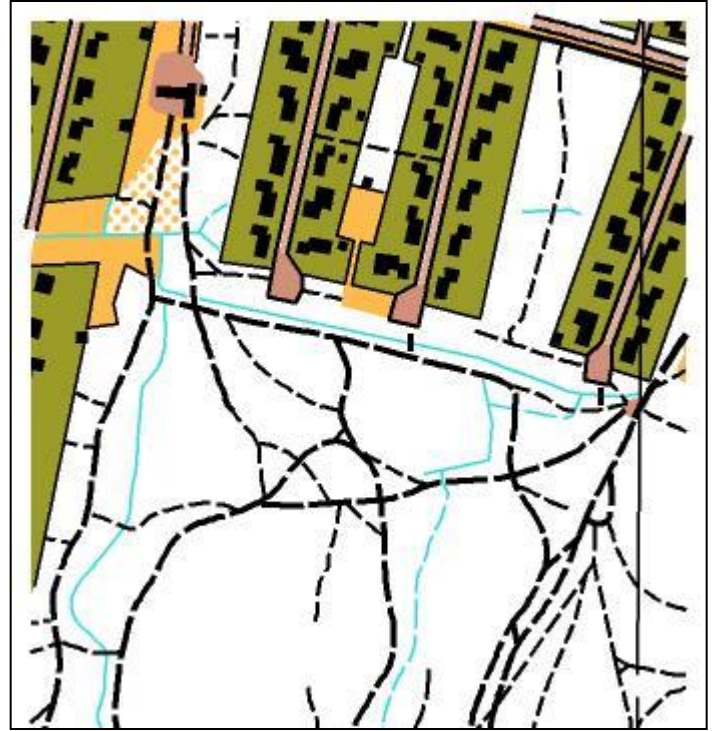
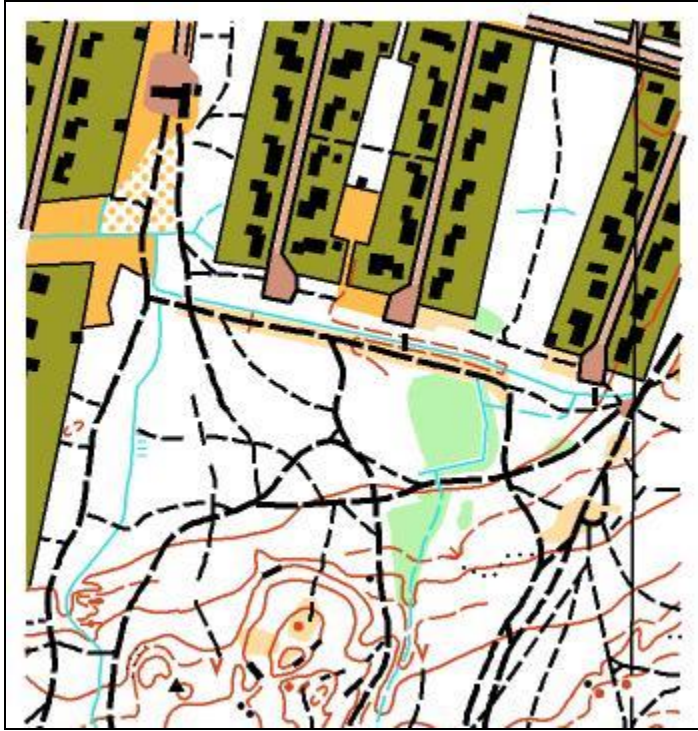
- ✓ Build a terrain from a map
- ✓ Treasure hunt
- ✓ Make your own small maps
- ✓ Models in Lego or Styrofoam

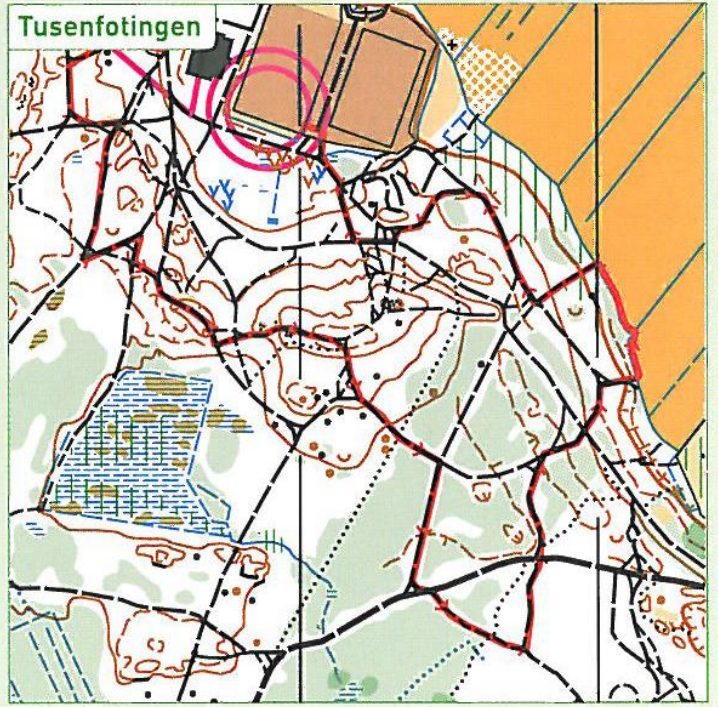
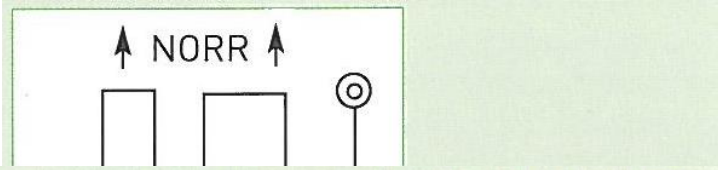


## *Understanding symbols on the map*



- ✓ "Loops"
- ✓ Relay with symbols
- ✓ Memory
- ✓ Map walking – meeting symbols in nature
- ✓ *Make the maps more easy, take the contours away ->*





## ***Orientate the map***

✓ "Labyrinth, maze"





## *Green level*

### **Conclusion**

- ✓ The control is placed on a line feature
- ✓ Now you are ready for the classes Acclimatization\* and U1

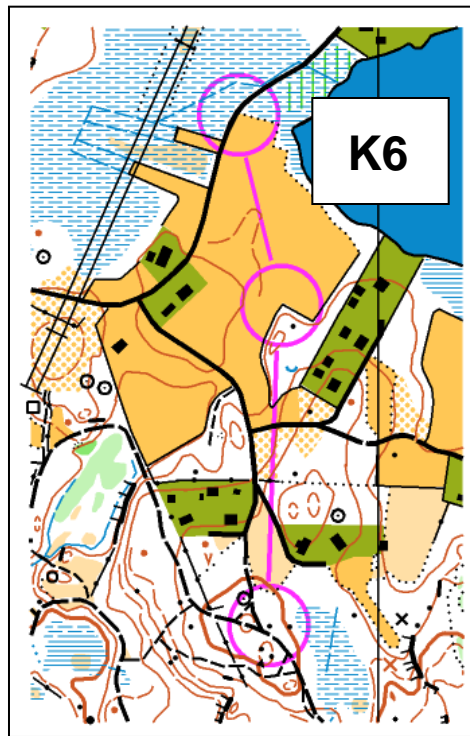
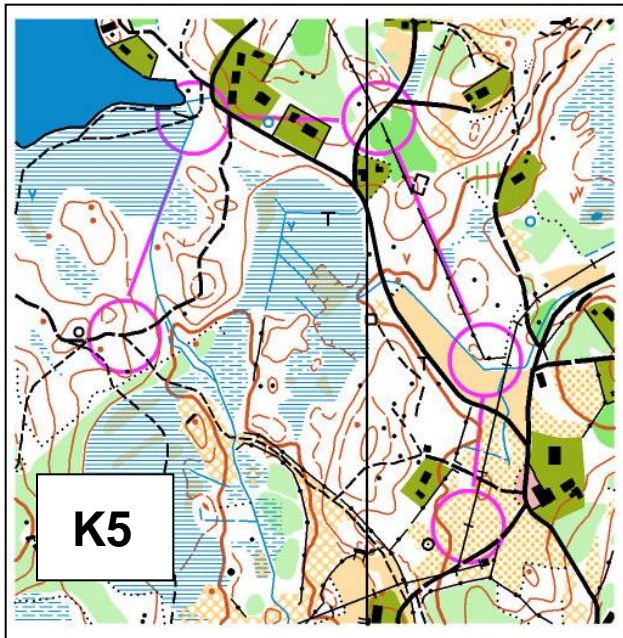
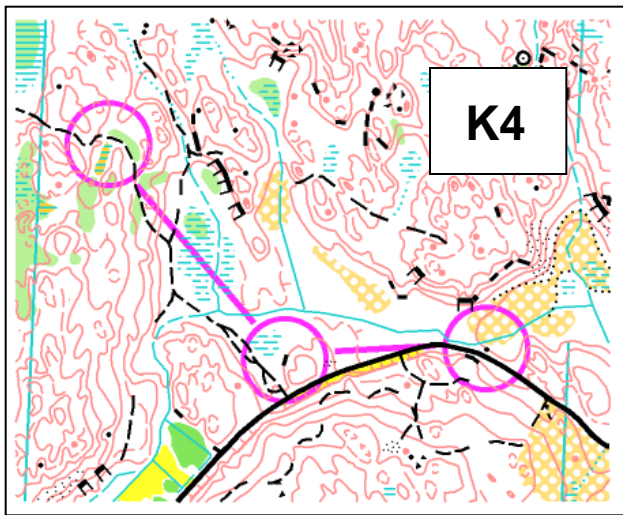
\* *Completed with happy and sad faces, no timing*

## *White level*

### **White standard – Beginners level step 2** HD 10

- More map symbols
- Route choice
- Shortcuts





## *White level*

K4 - Green standard + The control is placed beside the line feature

K5 - Less obvious line feature  
- Different kind of line feature

K6 - Shortcuts over open areas

V1 - Simple route choice  
- Only length



## ***White level***

✓ Be aware of objects beside the path....

*Warm-up with running at the track where you put out stuff beside the path (teddy bears, numbers, letters etc).*



## *White standard*

### **Conclusion**

- ✓ Increase of map symbols
- ✓ Control beside the line feature
- ✓ Starting to make short cuts
- ✓ Route choice

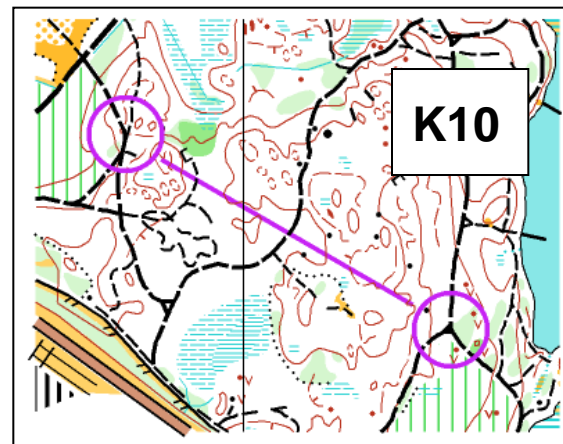
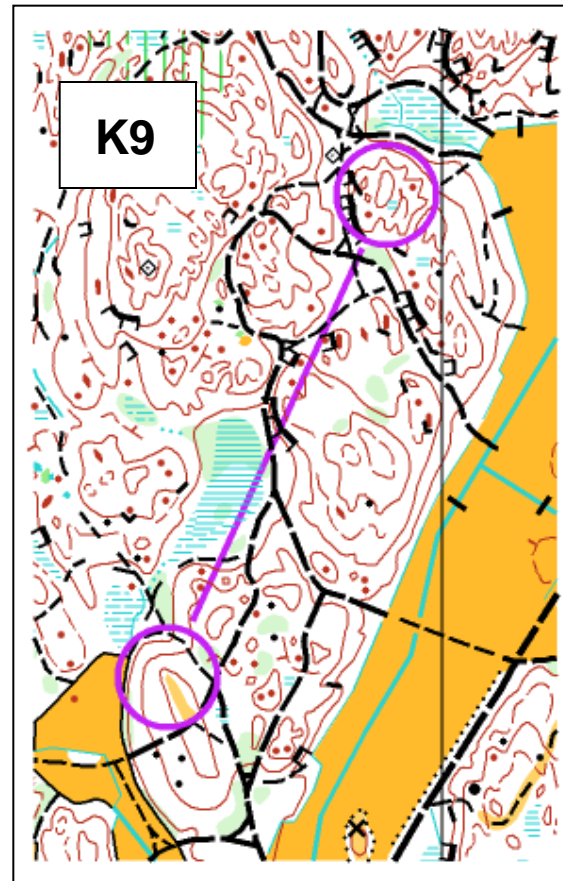
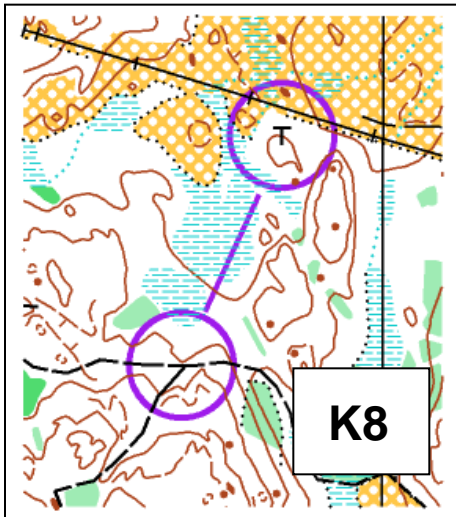
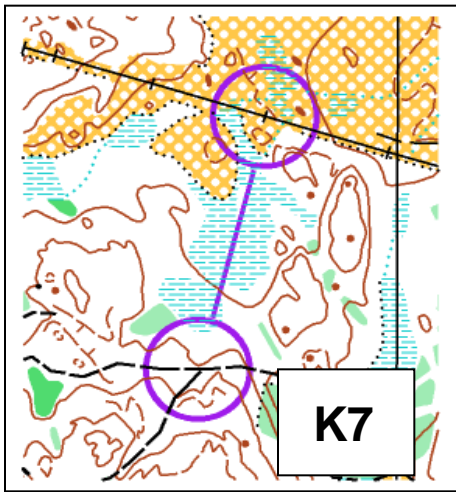
## *Yellow level*

### **Yellow standard – The last step of the Beginners level**

HD 12

All 15 year old  
students in Sweden

- Runability
- How to take a compass bearing – “rough orienteering”
- Easy contour orienteering – top of the hill or in the bottom of the depression



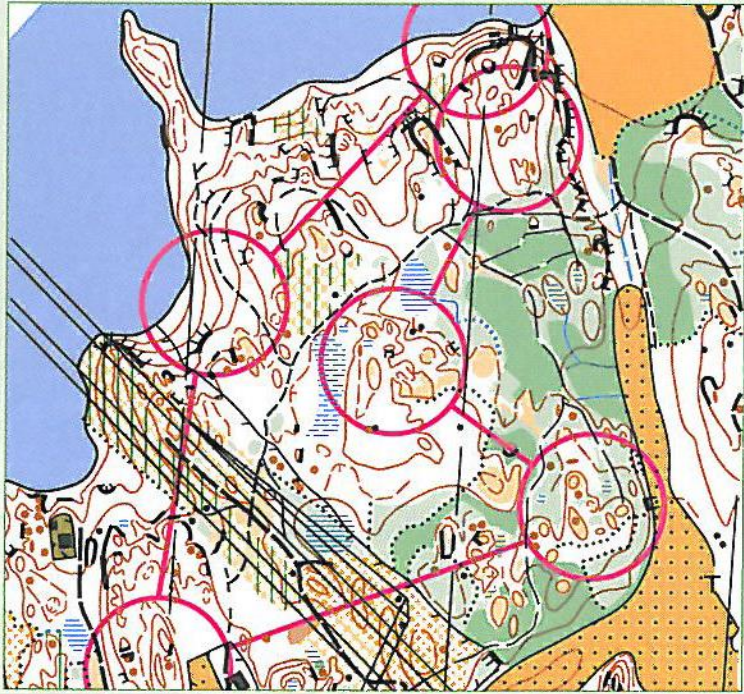
## *Yellow standard*

K7-8 - More about short cuts and cutting across but still with safe catching features

K9 - Understanding hills/depressions, when is it up and when is it down?  
Where is the highest point?

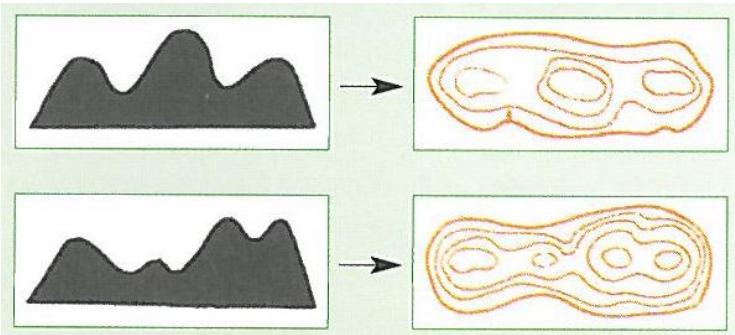
K10 - Simple contour orienteering

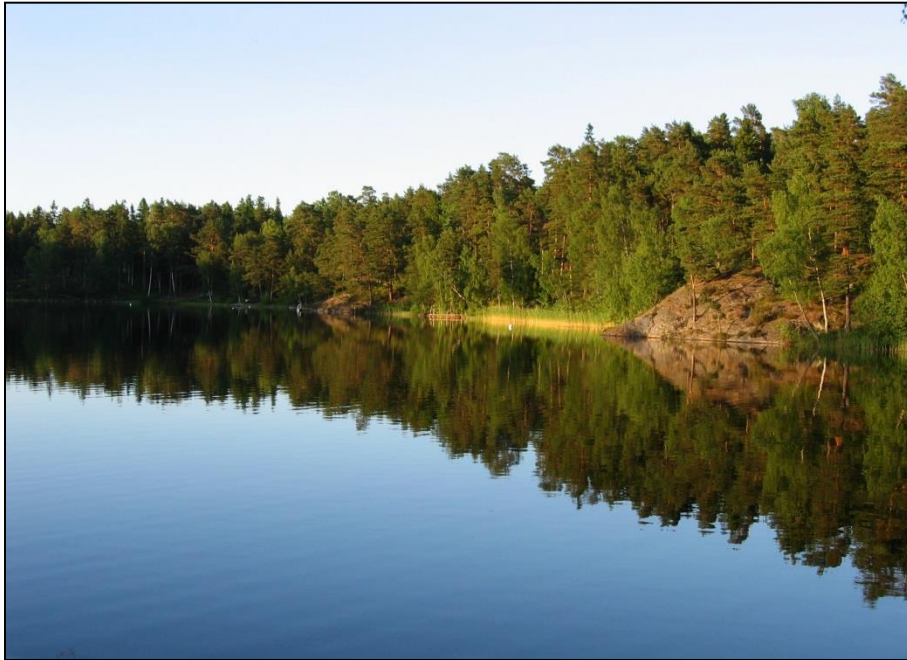
V2 - Length and runability



## *Contours*

- ✓ Map walk!
- ✓ Visit different contour-objects
- ✓ Check out up and down in the forest?
- ✓ Follow a contour line





## *Yellow level*

### **Conclusion**

When you handle the yellow level ...

- ✓ you are good at taking out a compass bearing, following a given direction.
- ✓ you feel safe when you do shortcuts and cutting across with catching features.
- ✓ understanding the highest and lowest point in the terrain.
- ✓ and all the things on green and white level.

# ***Orienteering technique advanced level***





# The colors of the advanced steps

## 6. Blue/black standard – The highest level

- Tactical thinking
- Very hard route choices
- Controls and legs "in the slope and the hills"

*Elite-classes  
+ all other classes  
HD 18 – 90*

## 5. Purple standard – Advanced level step 2

- The same Techniques but longer from obvious map reading points
- More and longer legs

*HD 16*

## 4. Orange/Red standard – The important step, the step to become "advanced"

- Understanding all tools of orienteering
  - **Advance planning** – to gain flow
  - **Attack points** – safer finding the controls
  - **Extension** – safer and faster finding of the controls
  - **Backwards thinking** – route choice
  - **Pacing** – as a complement to reading the map that increases security
  - **Tempo changing** – adapting running speed and accuracy in reading the map depending on the difficulty level
  - **Simplification and structuring** – simplify and organize the map picture
  - **Compass work, fine and rough** – adapting the level of accuracy depending on the difficulty level.

*HD 14 + all M-classes*

# Orange/red level

**Orange/Red standard – The important step,  
the step to become “advanced”**

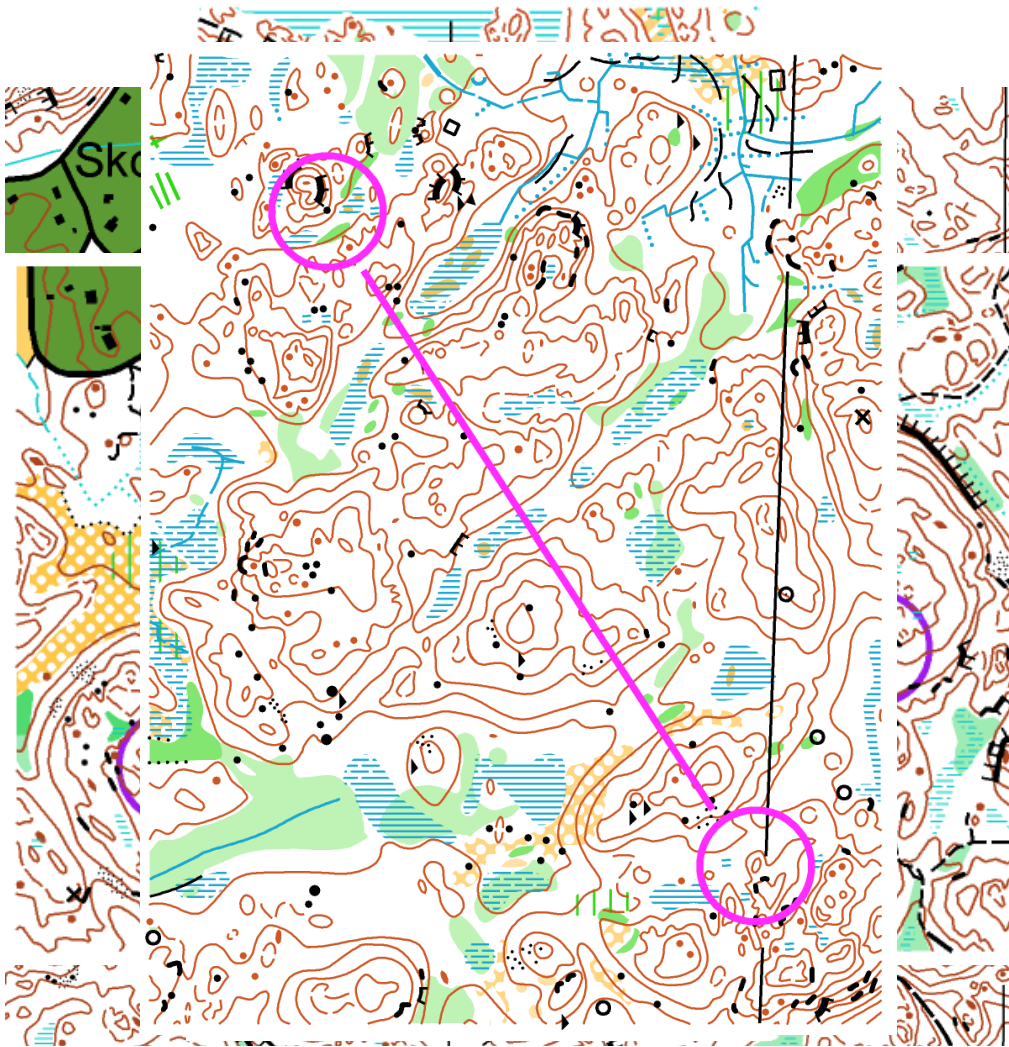
HD 14 + all M-classes

Understanding all tools of orienteering

- **Advance planning** – to gain flow
- **Attack points** – safer finding the controls
- **Extension** – safer and faster finding of the controls
- **Backwards thinking** – route choice
- **Pacing** – as a complement to reading the map that increases security
- **Tempo changing** – adapting running speed and accuracy in reading the map depending on the difficulty level
- **Simplification and structuring** – simplify and organize the map picture
- **Compass work, fine and rough** – adapting the level of accuracy depending on the difficulty level.

## *The big step from yellow to orange/red*

- ✓ You are leaving line features and moving to contour orienteering.
- ✓ Important with many O-technique sessions.
- ✓ Important with many repetitions of the same moment.
- ✓ Important with qualified coaches.
- ✓ Important with a plan when your lost - "Smart missing"

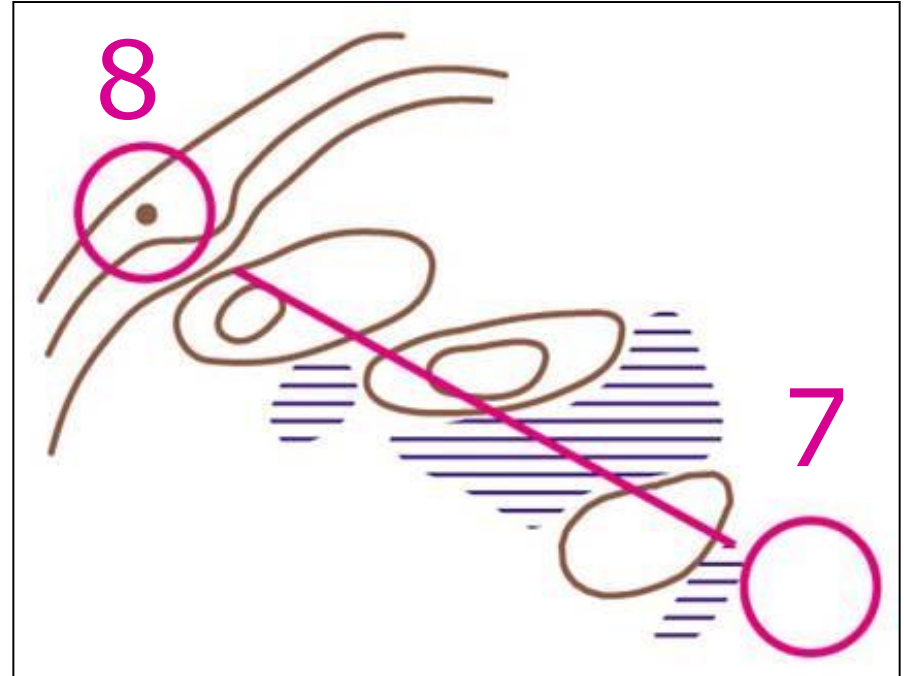
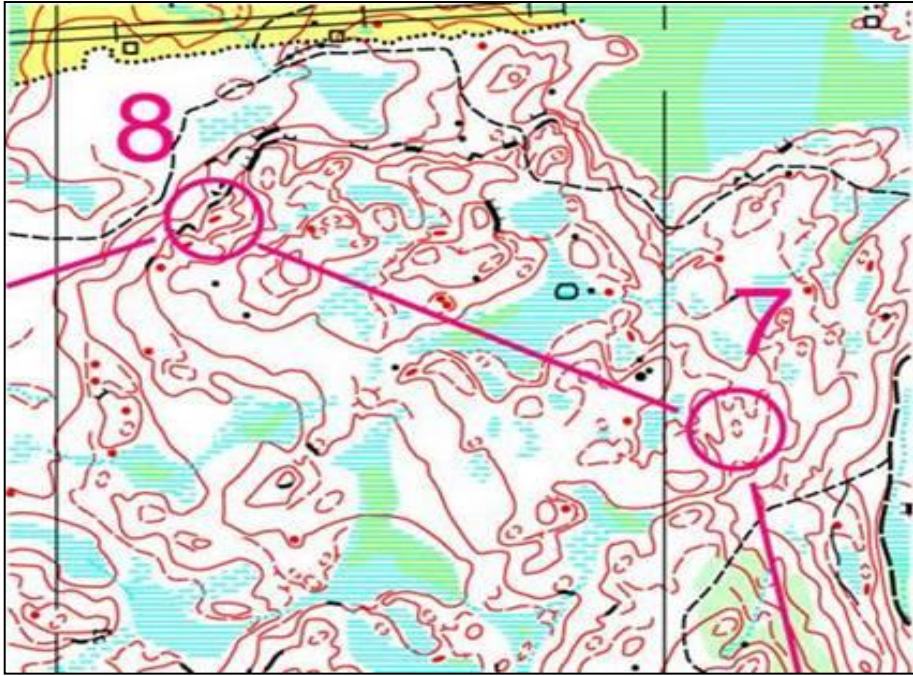


## *A orange/red course, can contain four new O-techniques*

**K3**

- » Length, runability and safety. Rough terrain with contours with steep gradients towards clear catching features.

## *Technique – Simplification and structuring*

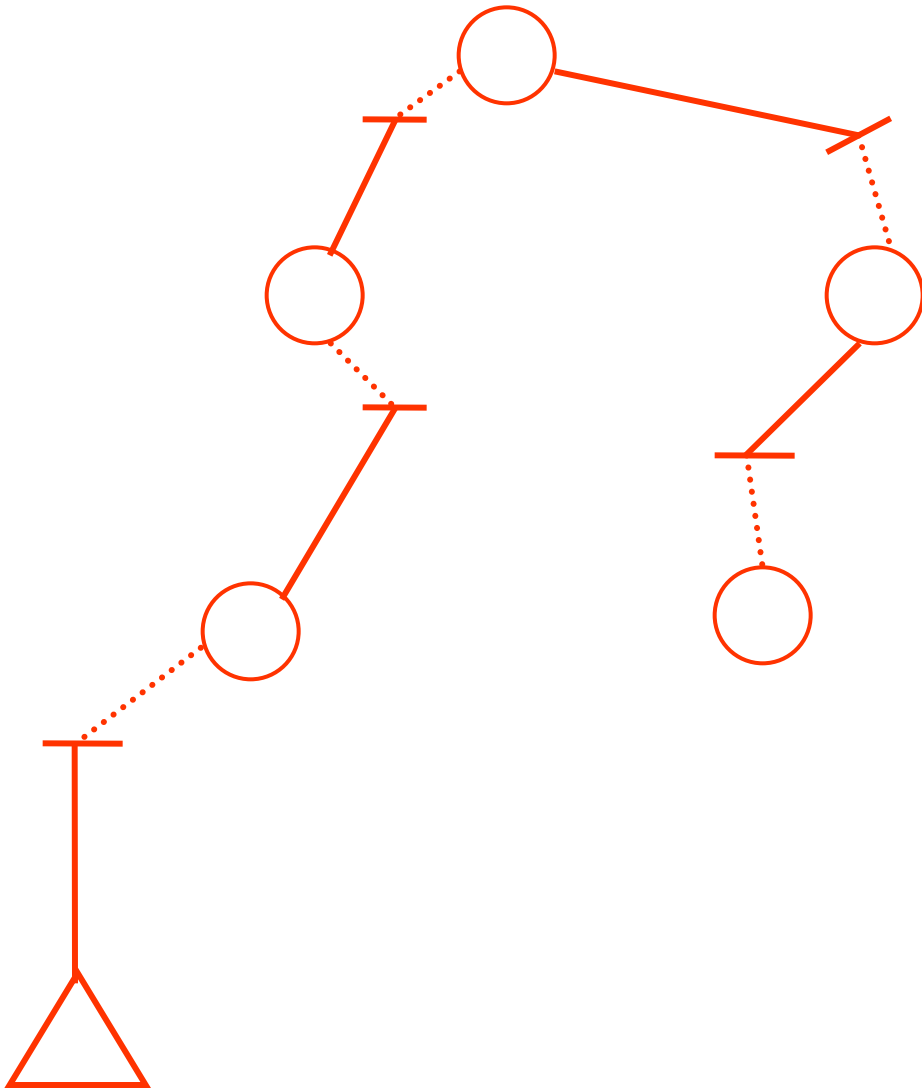


## ***Technique – Attack points***

✓ Attack point – is a clear and safe point as close to the control as possible. From this point the runner should be able to attack the control.

✓ Pick an easy point to find, you shouldn't have to search for the attack point then its no use having it.





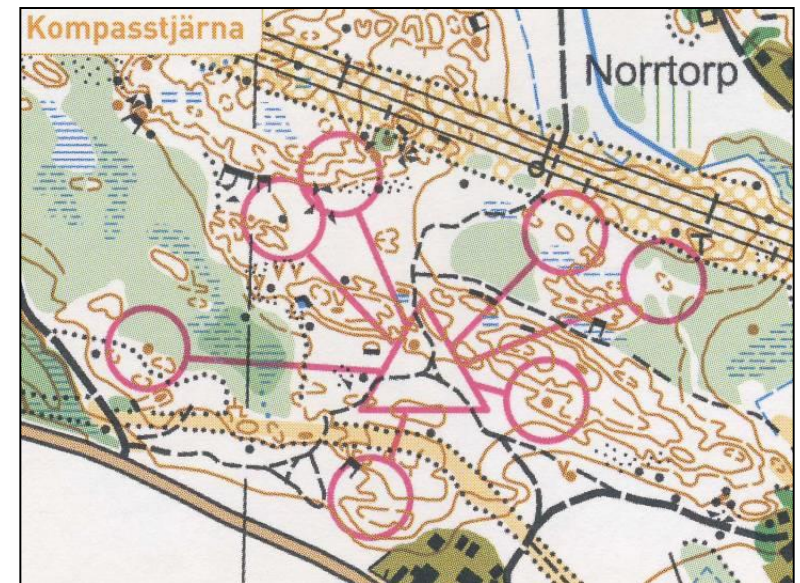
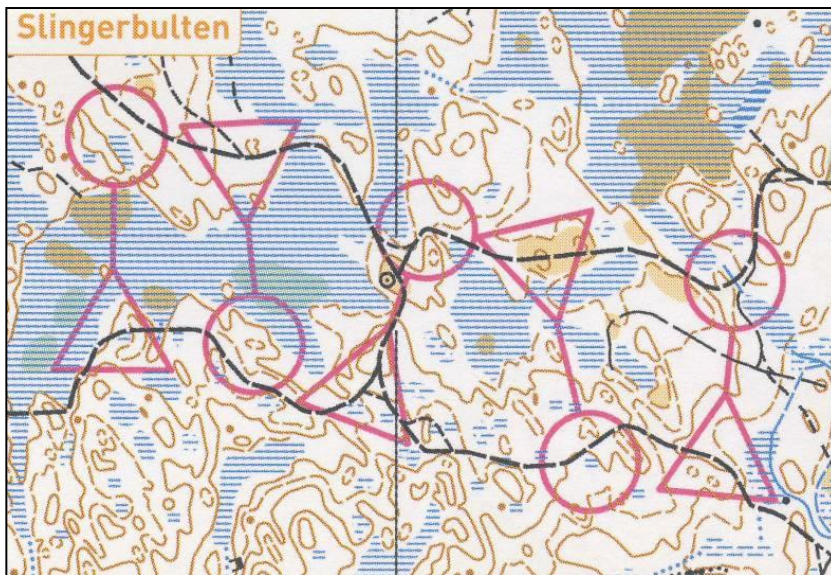
## *Technique – Attack point*

- ✓ Rough orienteering towards the attack point.
- ✓ Fine orienteering to the control.

## *Technique – Compass work*

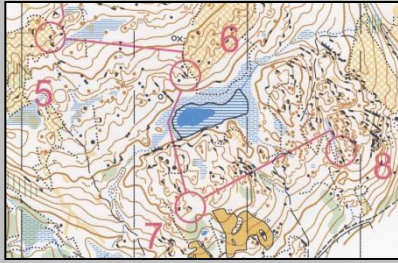
Short legs between obvious line features with many opportunities to take compass bearings. Tape at the starting points.

- 1) Fine compass bearings to the control.
- 2) Rough compass bearing on the way back.

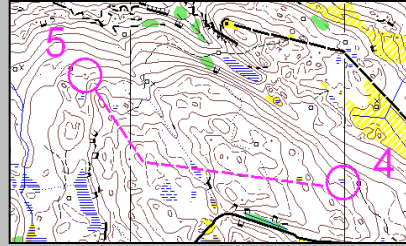




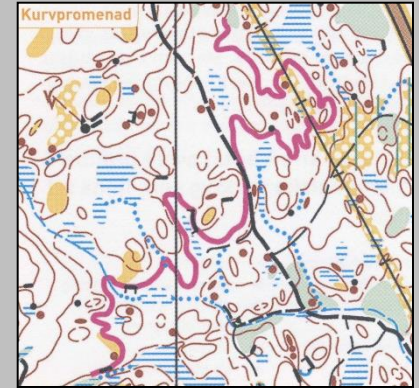
## Best way to take the control



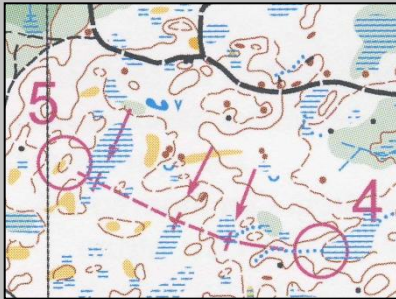
## Take the control from above



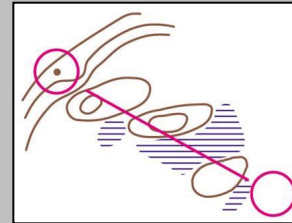
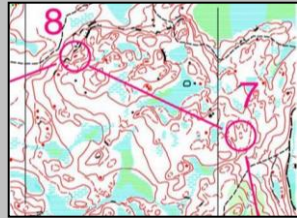
## The contours



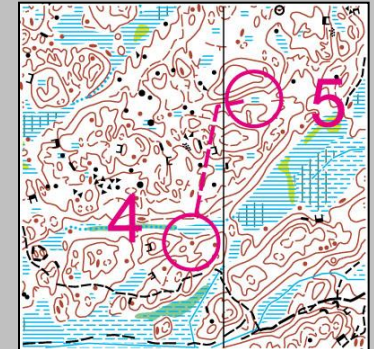
## What to read on?



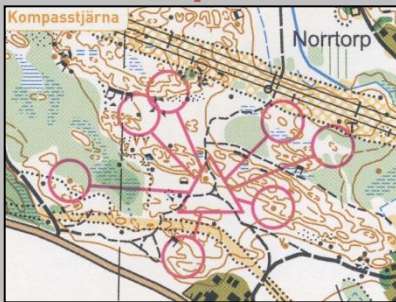
## Simplify



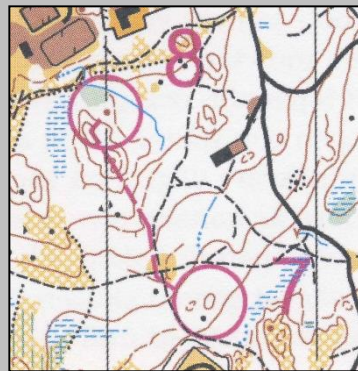
## "Miss by purpose"



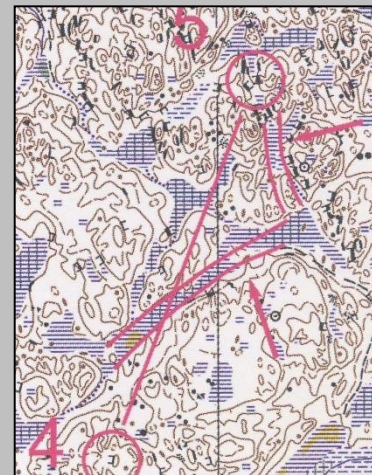
## Compass



## Attack point



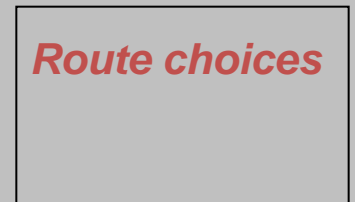
## "Highways"



## Strategy with less details



## Route choices

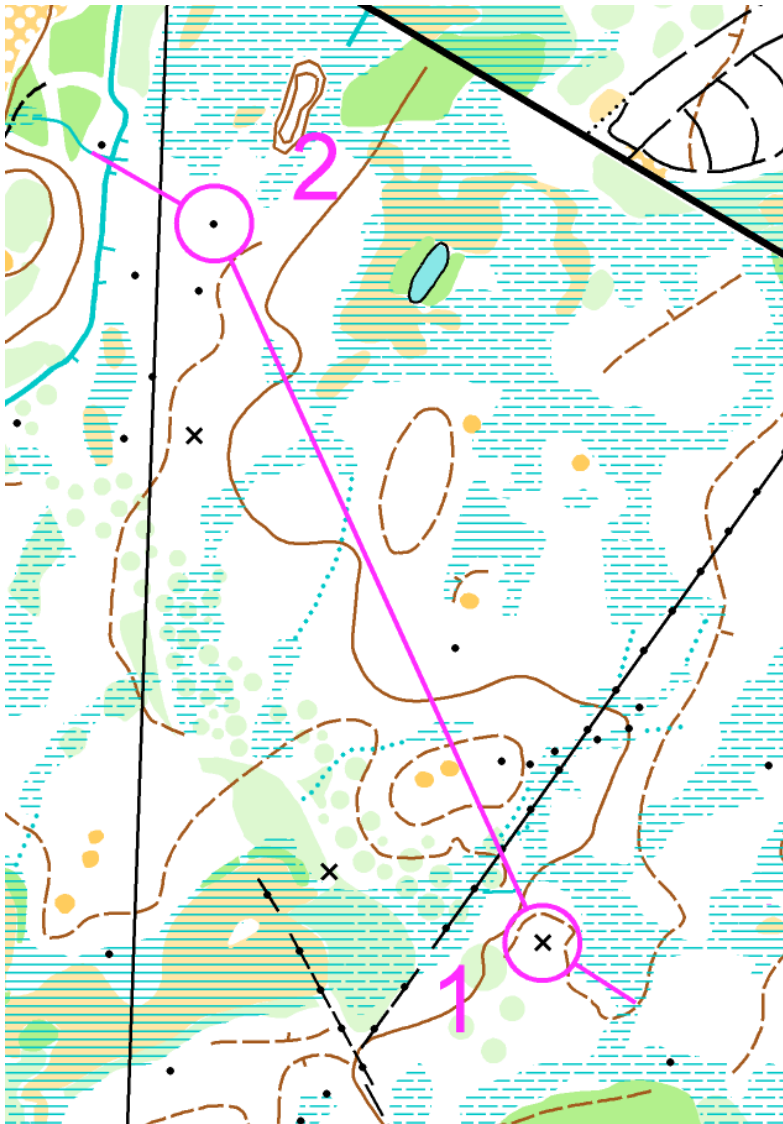


## *The colors of the advanced steps*

### **Purple standard – Advanced level step 2**

**HD 16**

- The same techniques but longer from obvious map reading points.
- More and longer legs



## *Purple course – two new orienteering levels*

K14

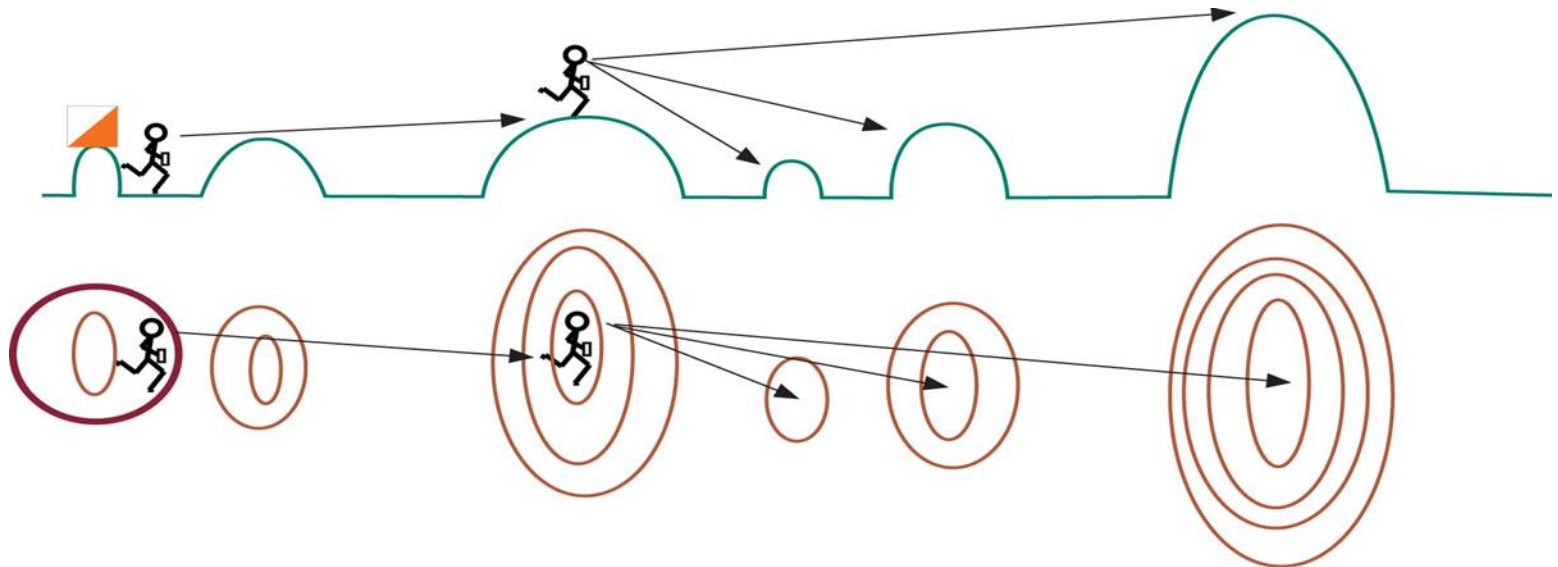
Taking controls without obvious catching features.  
With very few details.

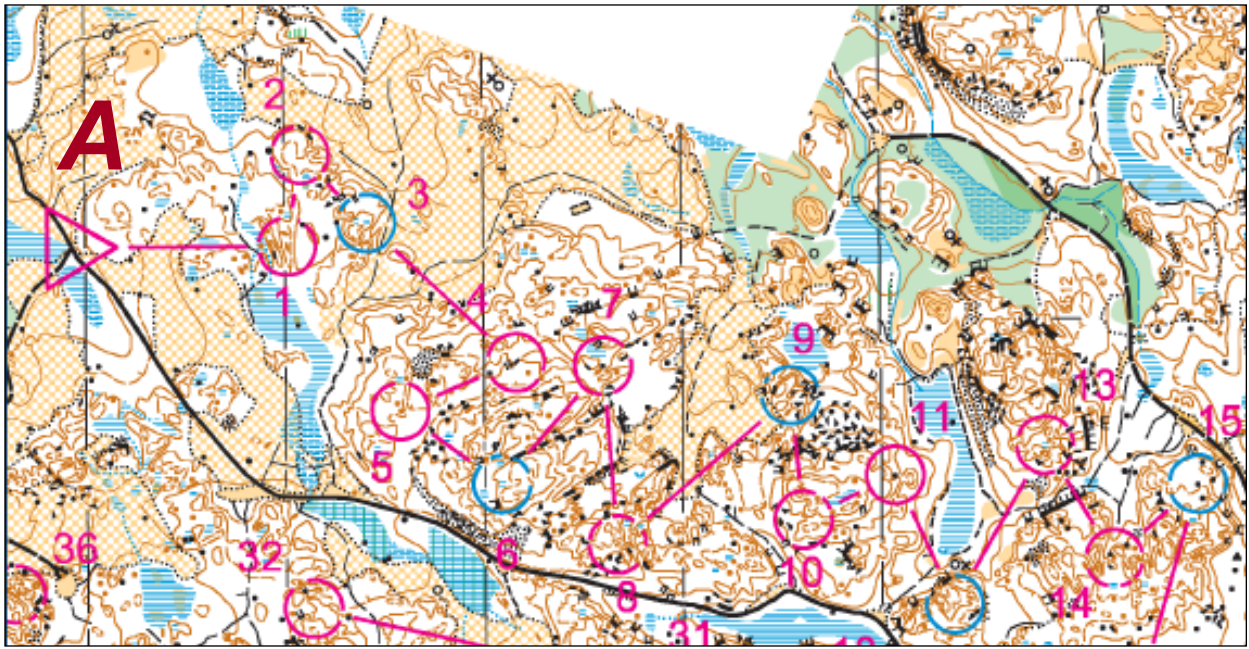
## *The colors of the advanced steps*

### **6. Blue/black standard – The highest level classes HD 18-90**

**E-classes + all other**

- Tactical thinking
- Very hard route choices
- Controls and legs “in the slope of the hills”

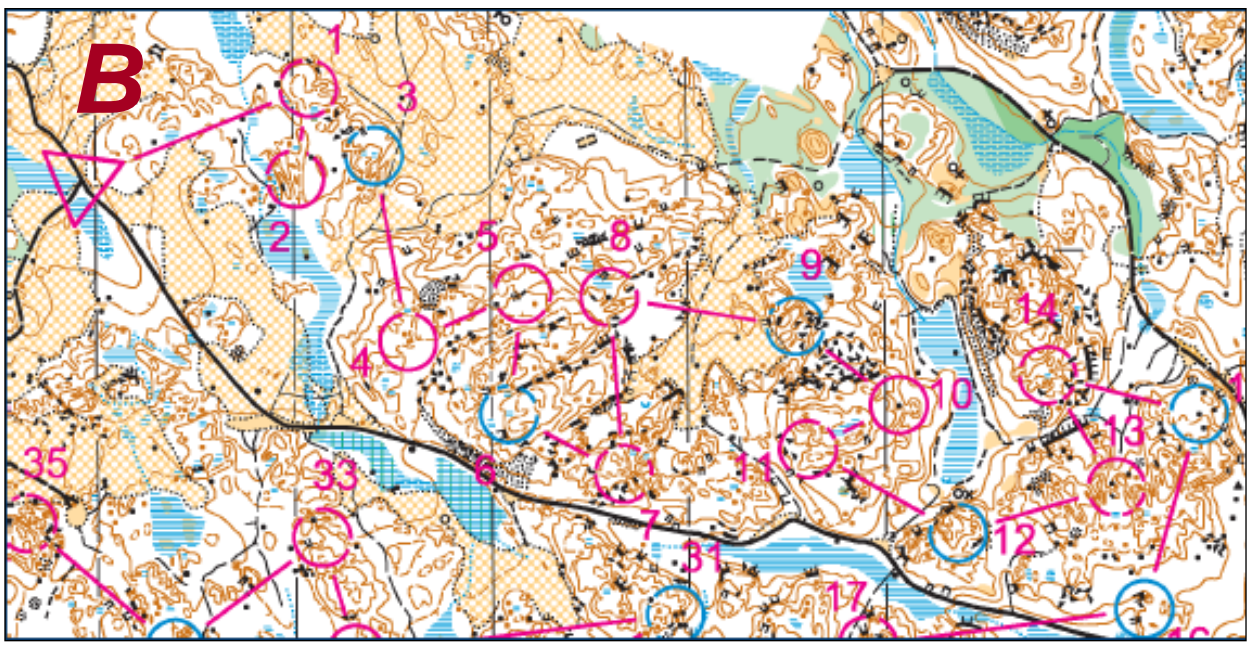




**Accurate map reading, transfer map-terrain**

**Put out – collect  
Pair exercise**

**1 control flag/person**

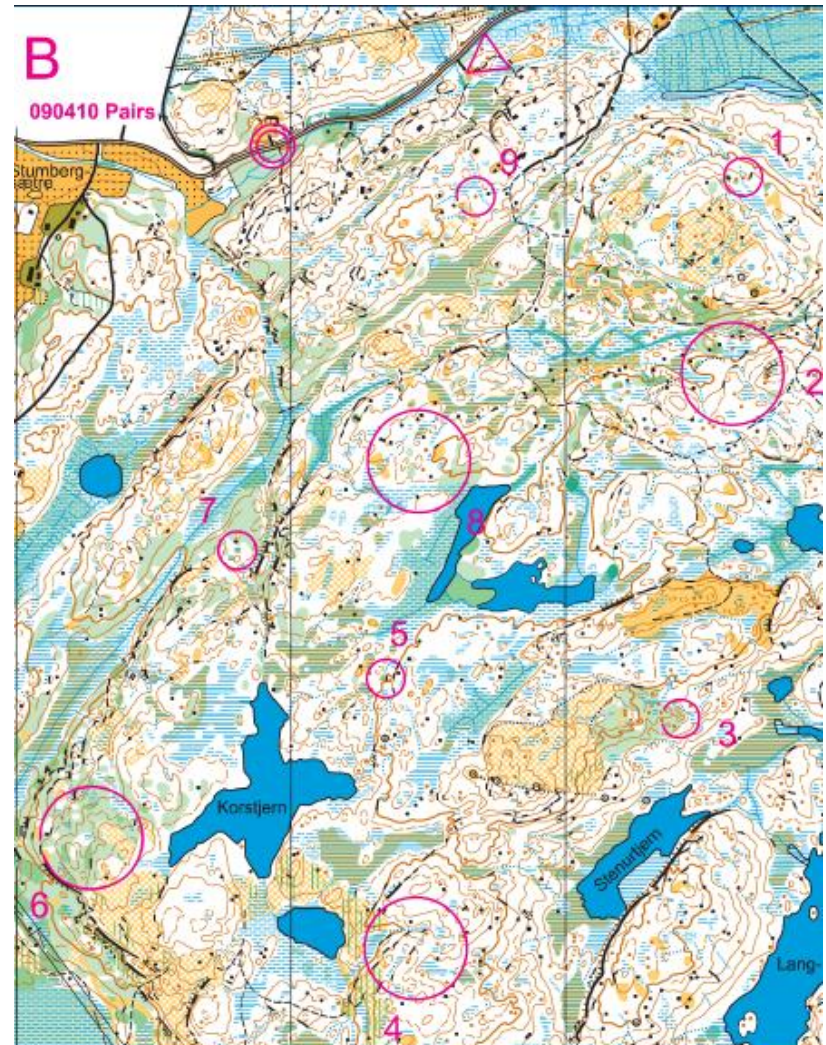
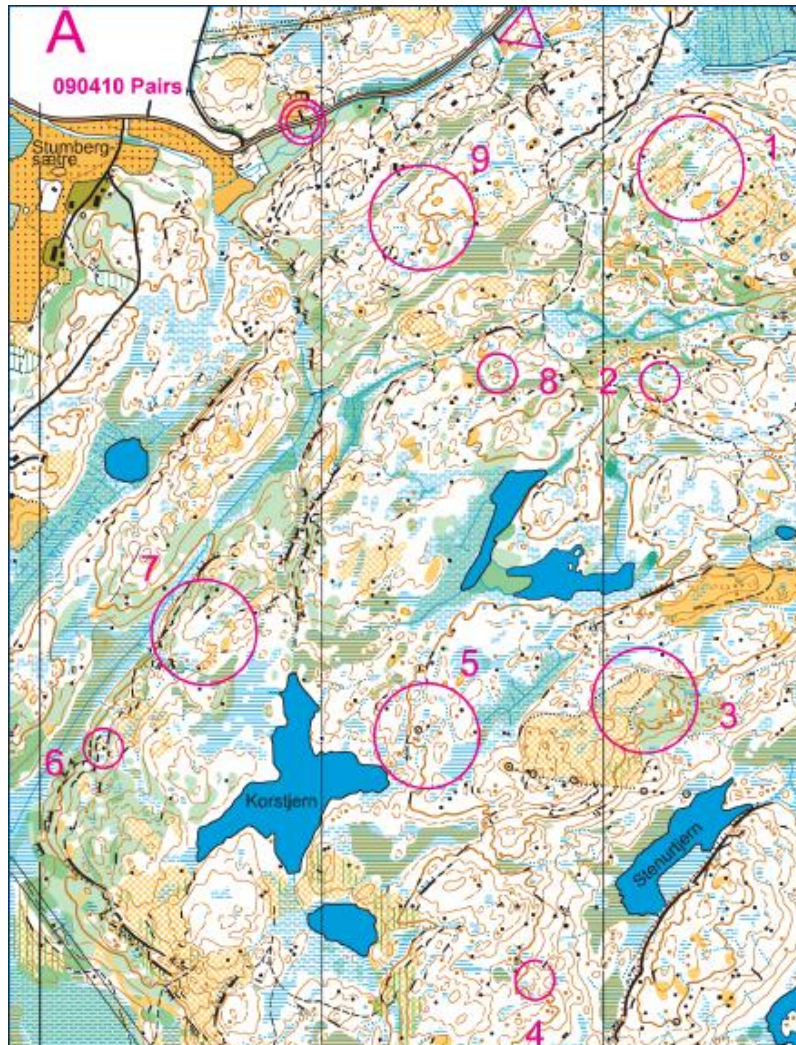


**Map A and map B**

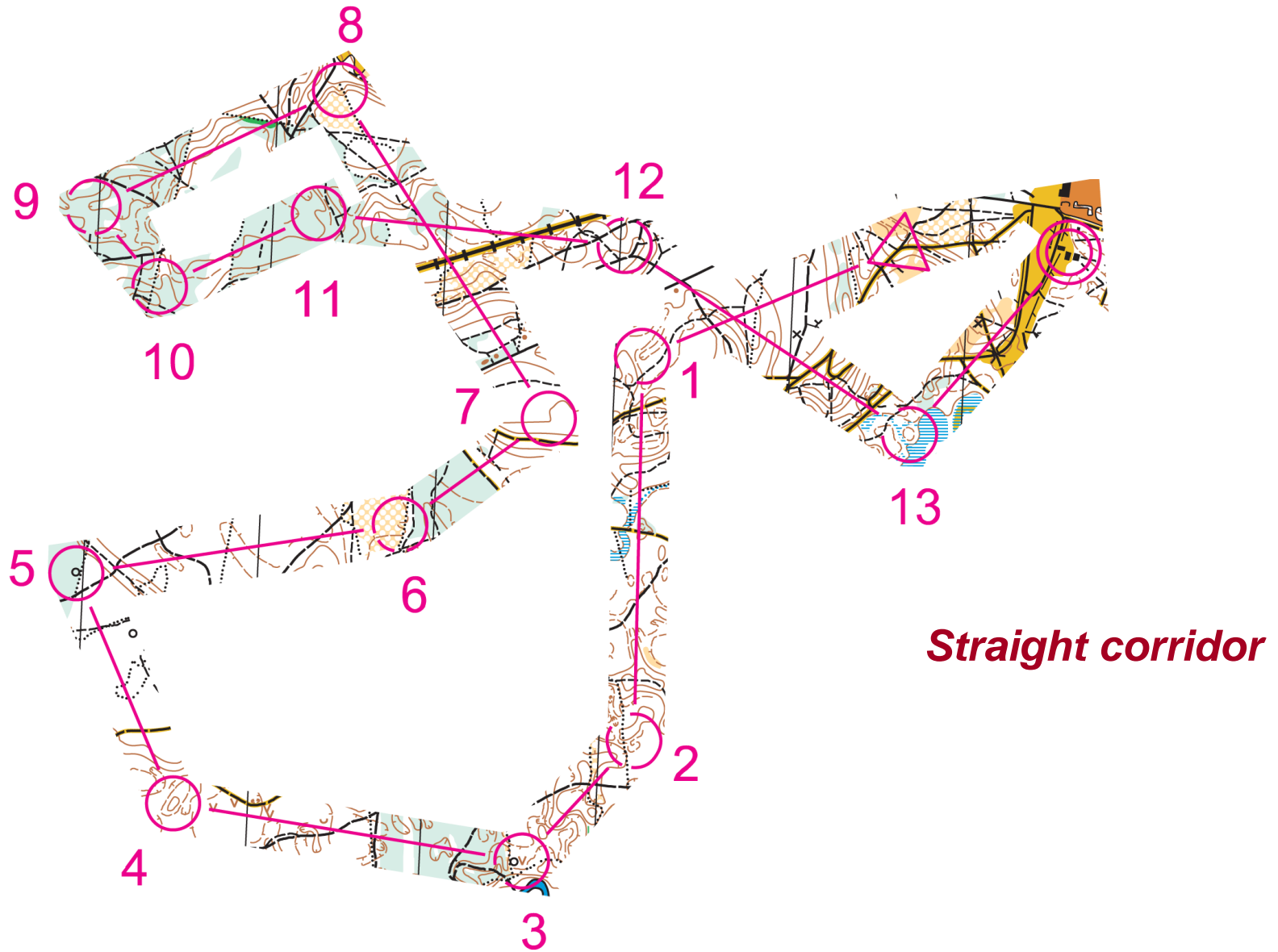
**Wait for each other at  
the control marked  
with blue circle.**

# Accurate map reading, transfer map-terrain – Pair exercise

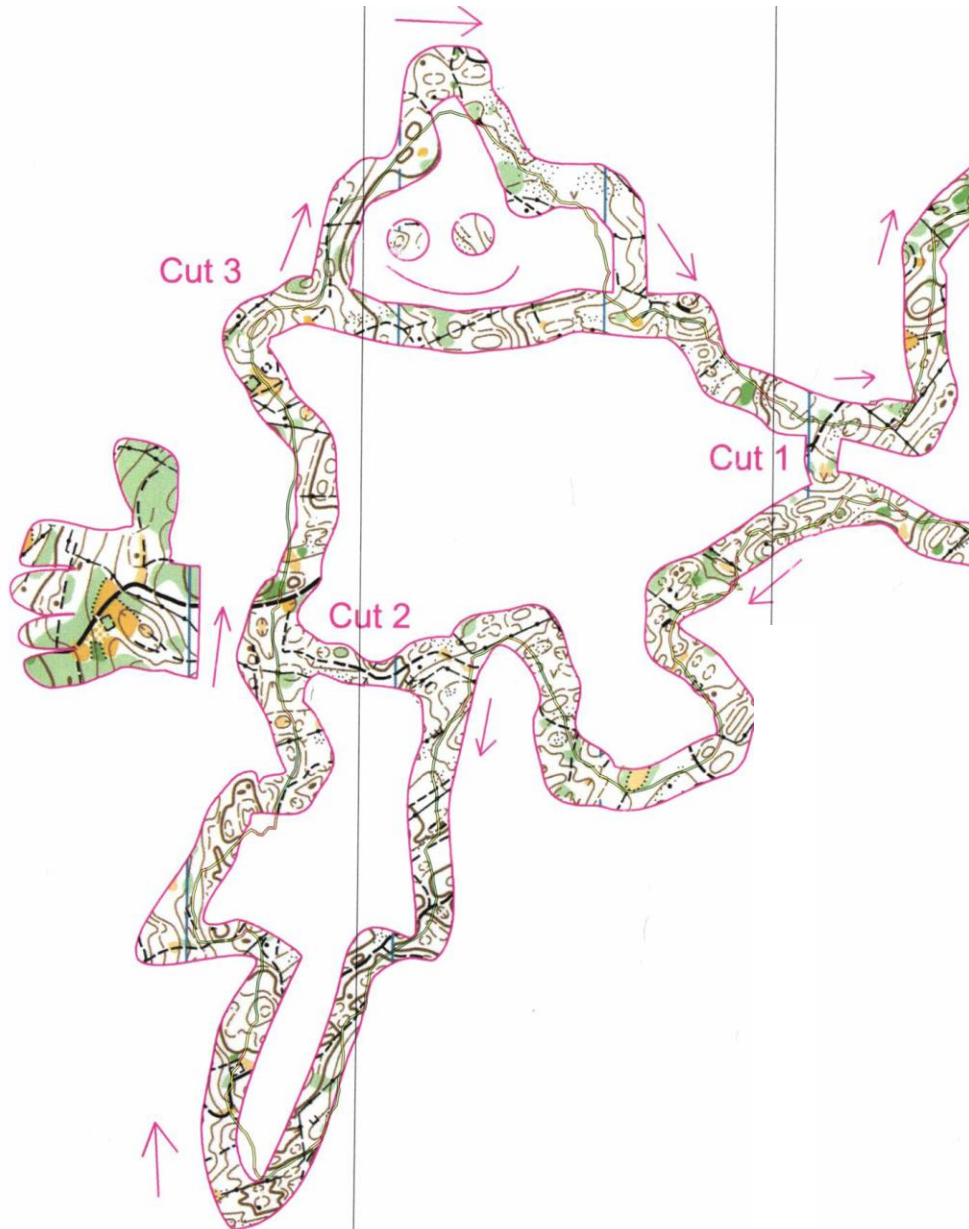
Runner A starts, leading runner B to the big circle (1). Runner B then lead runner A to the small circle (1) where the control flag is. Change leader. Runner B lead runner A to the big circle (2) and so on...



# Compass bearing, determination of distance



# ***Compass bearing, determination of distance***

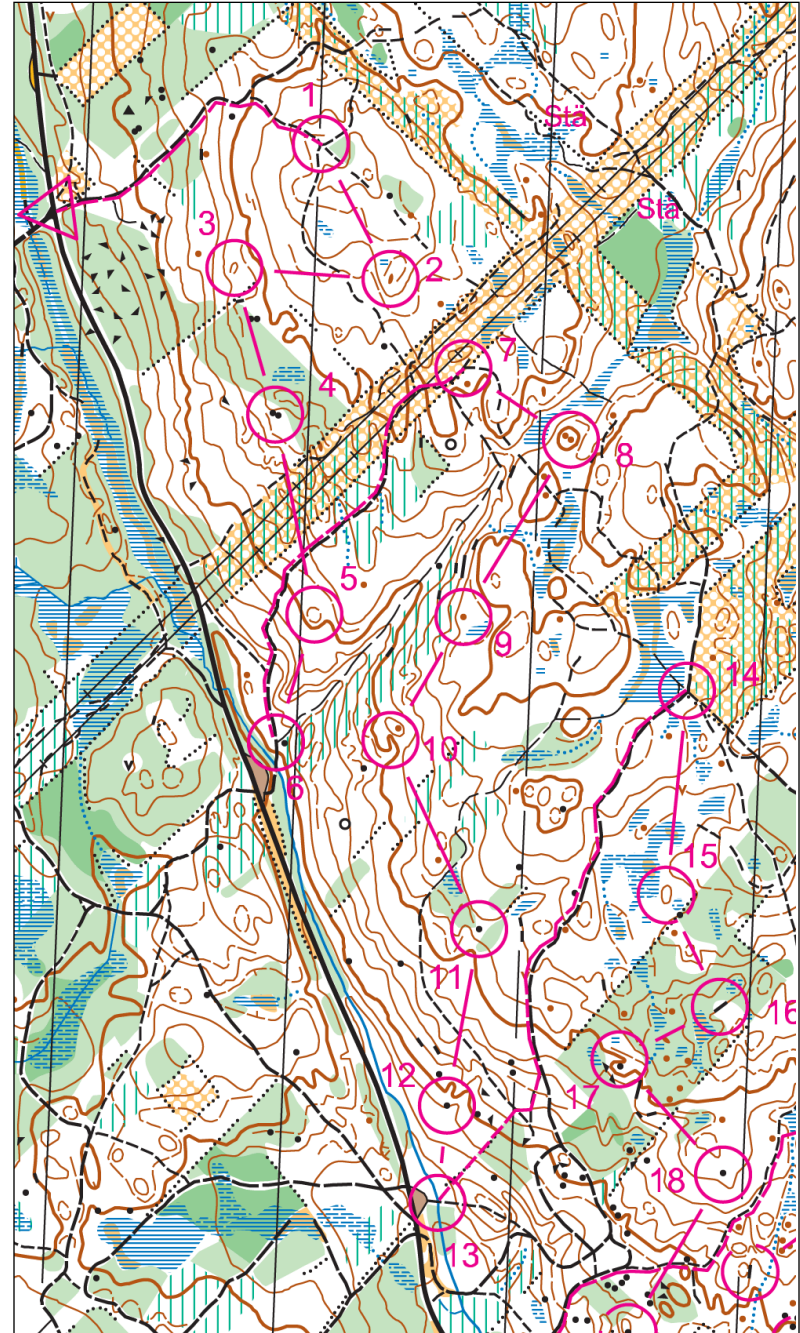


***Corridor snake***

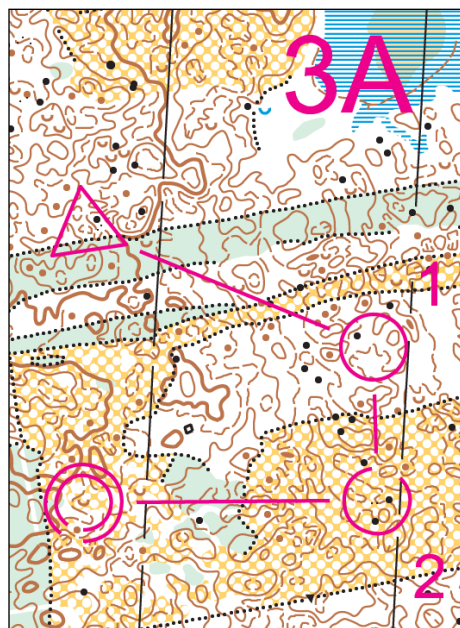
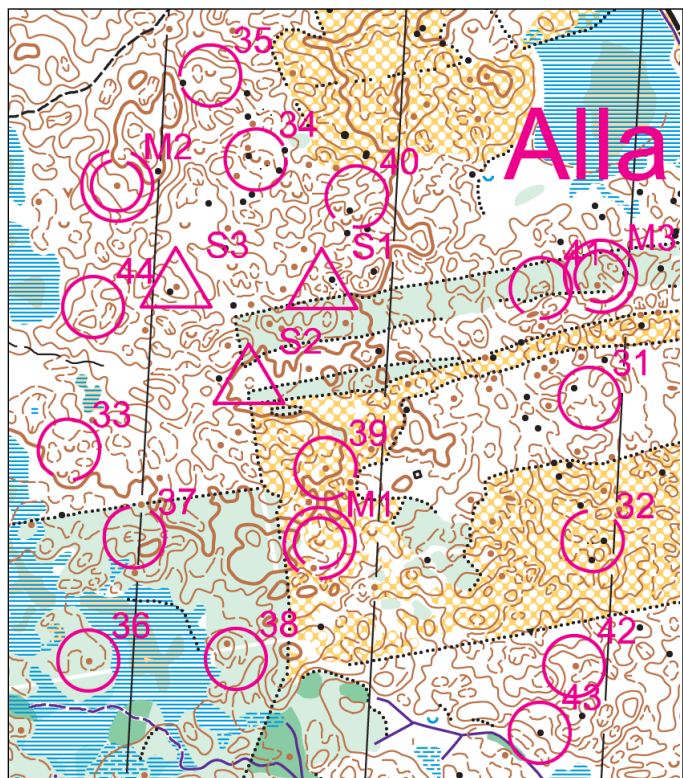


# *Speed and technique adaptation*

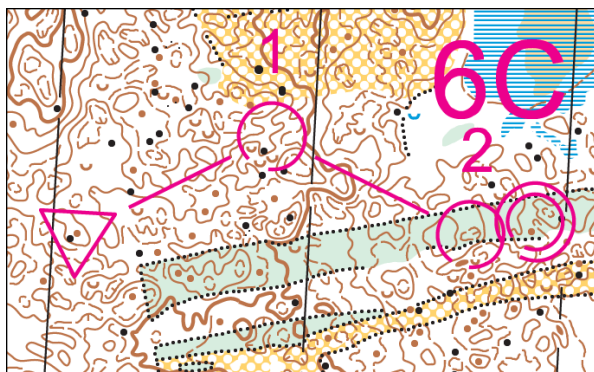
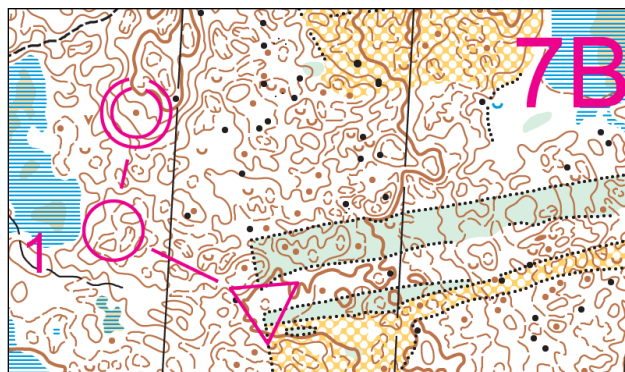
## *Downhill-O*



# Speed and technique adaptation



**Start loops**  
**After each finish.**  
**Jog back to**  
**starting point. (In**  
**the middle of the**  
**three start triangles).**



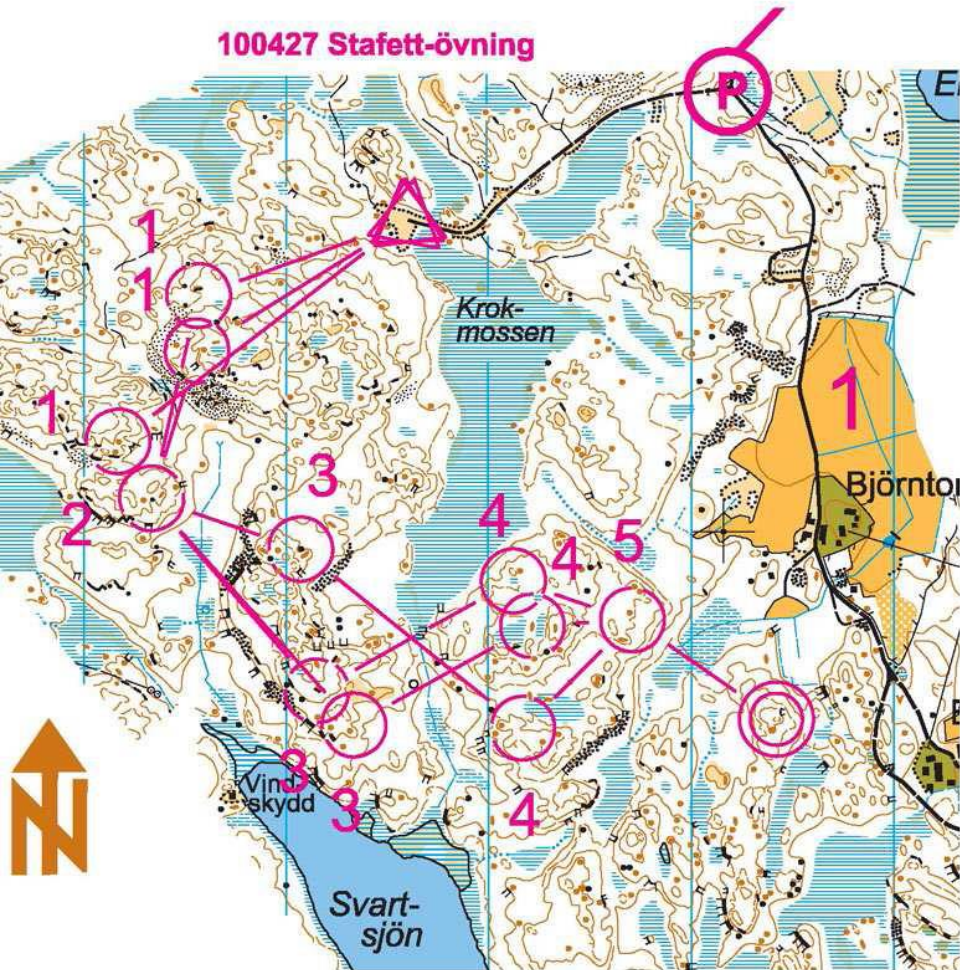
# Man to man

Relay exercise

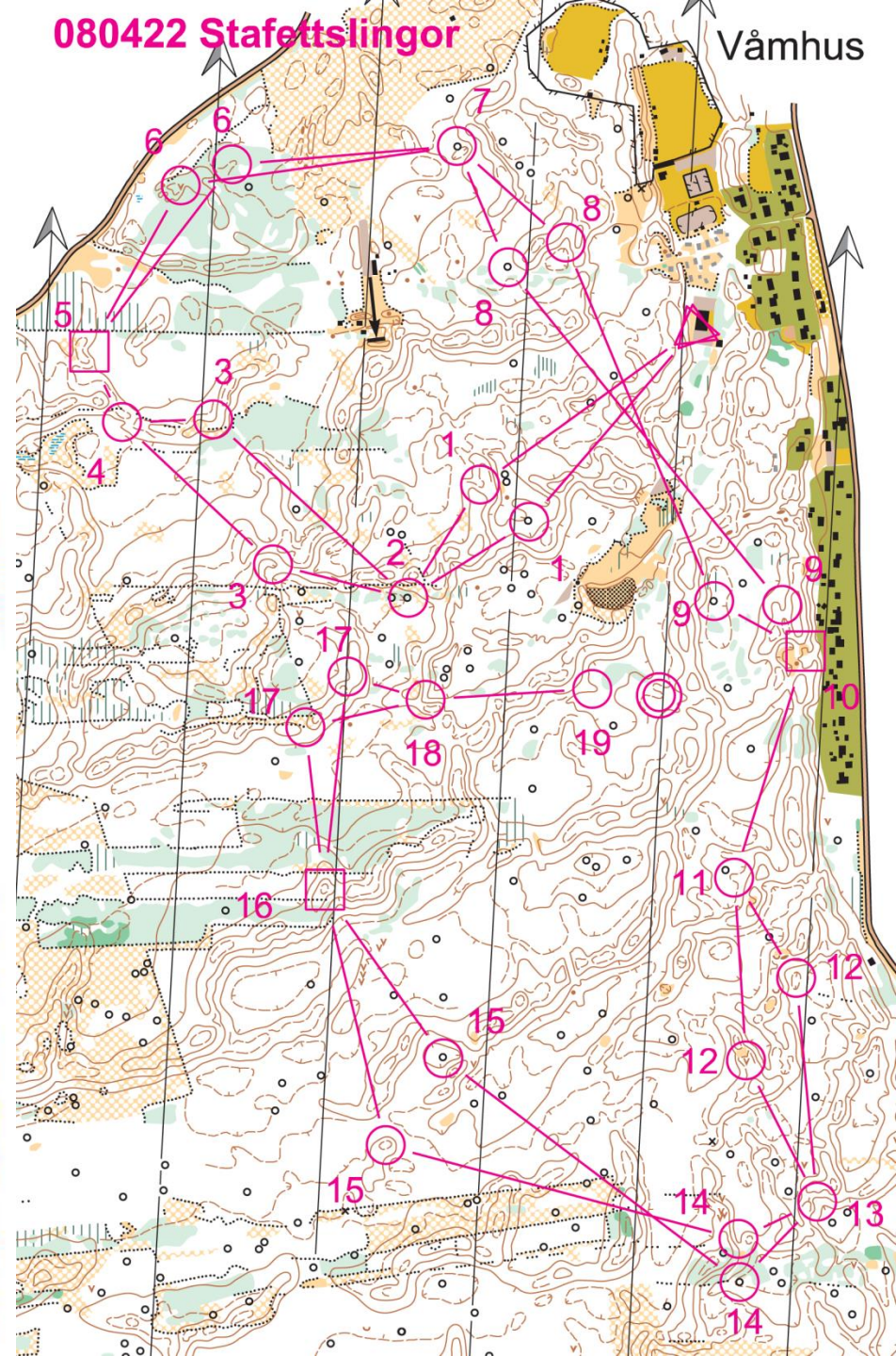
Short "forked" courses

Mass start/Hunting start

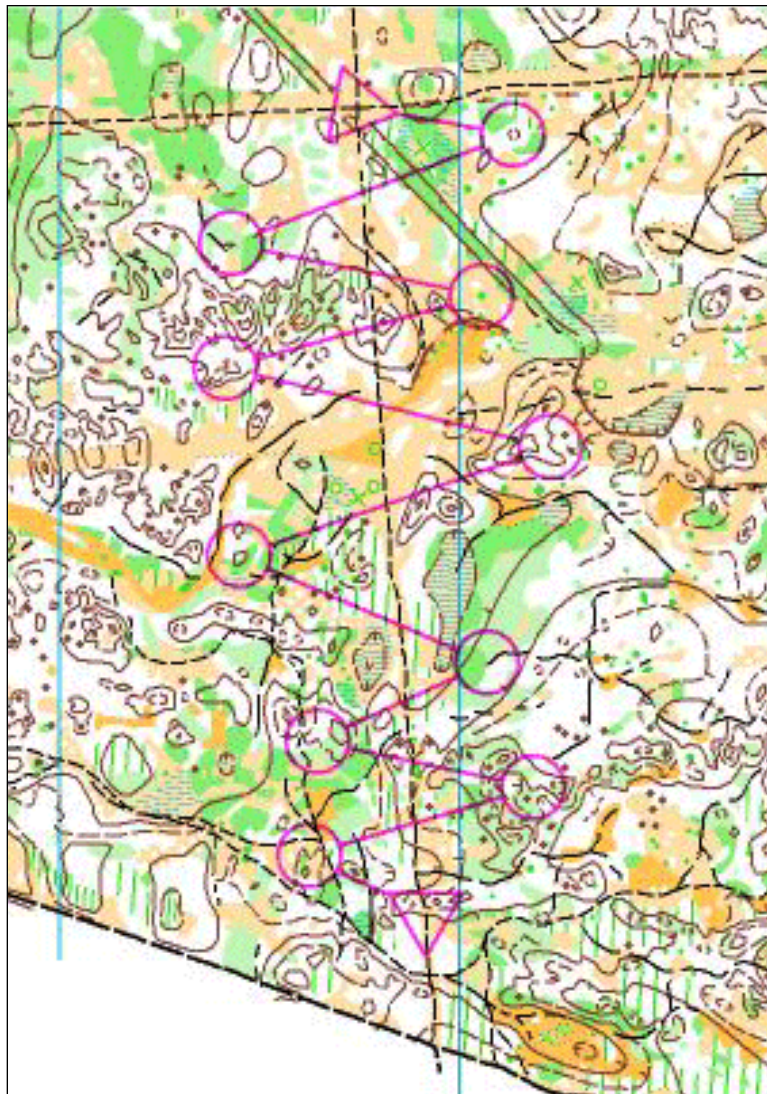
100427 Stafett-övning



080422 Stafettslingor



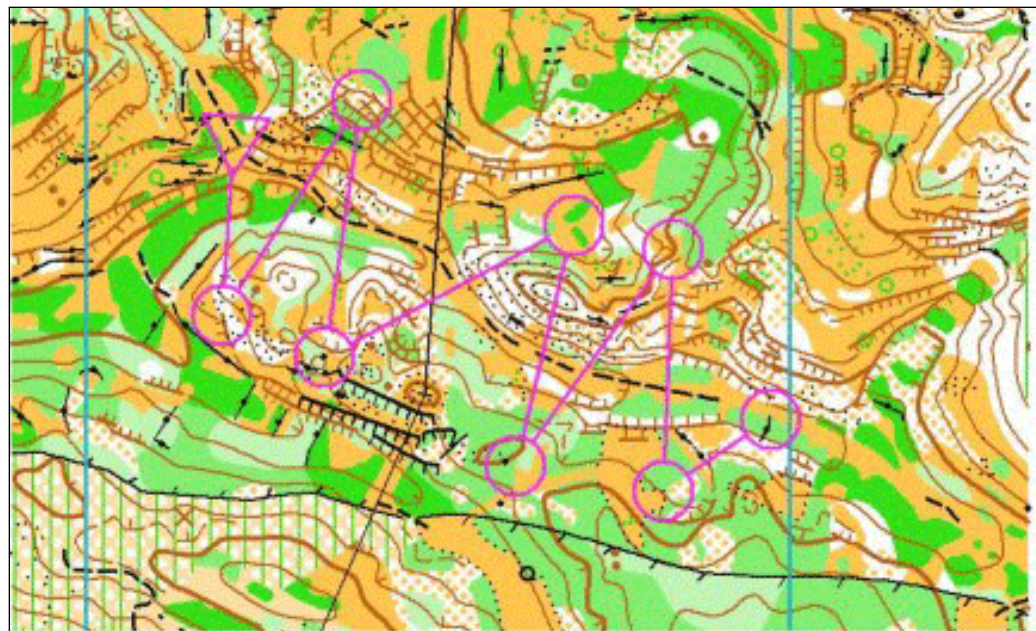
## *Man to man*



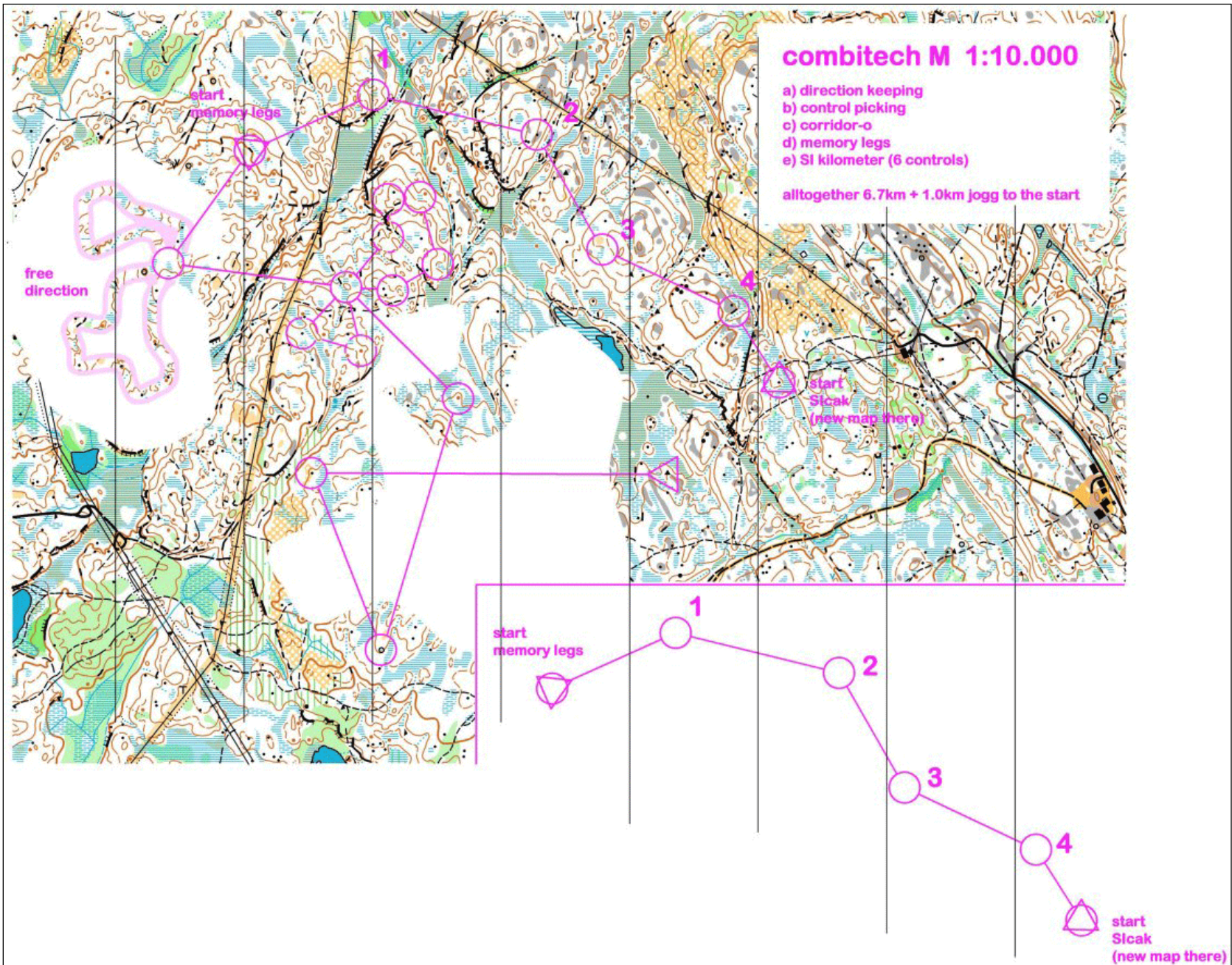
## *Eternity relay*

*One map for each team*

*Change over on the path*



# Multi exercise



# ***Useful web sites***

**<http://o-training.net>**

**<http://worldofo.com>**

**<http://omaps.worldofo.com>**



Questions ?

***Best national team in the world, now and in the future...***

**Movie about 2014....**







**2011 → 2014, 28 WOC-medals**



*A plan for each individual...*



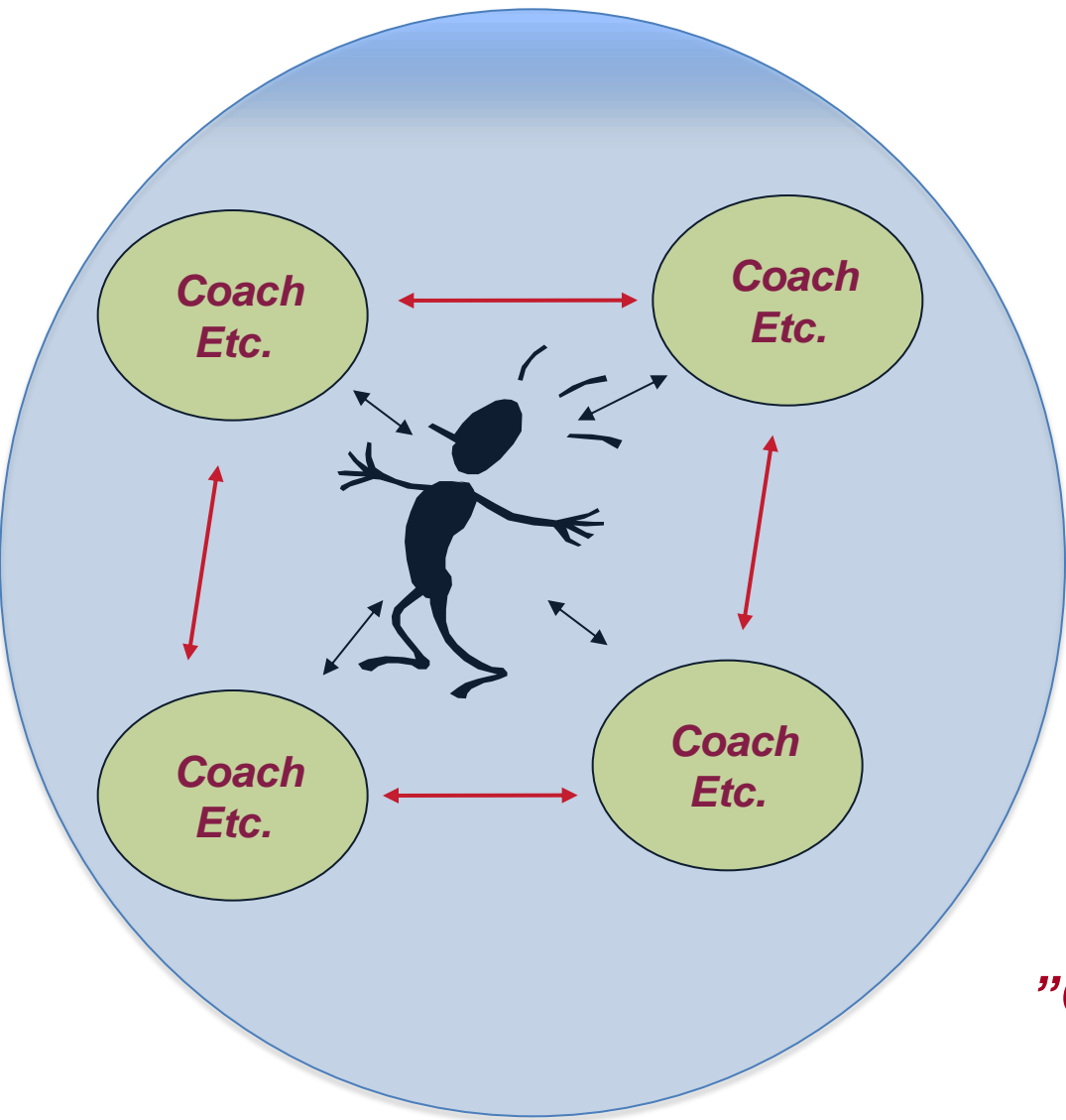
”Best national team”

Knowledge and Research



**Eliteclubs** (about 50)  
**Gymnasiums** (14)  
**Universities** (8)

- Coaches education
- Literature etc.



***”Create your own environment  
for your development”***

# In the team we believe in:

*We always do our best*

*If someone in the team gets better the team gets better*

*We have an open attitude and work together*

*We can learn a lot from each other*

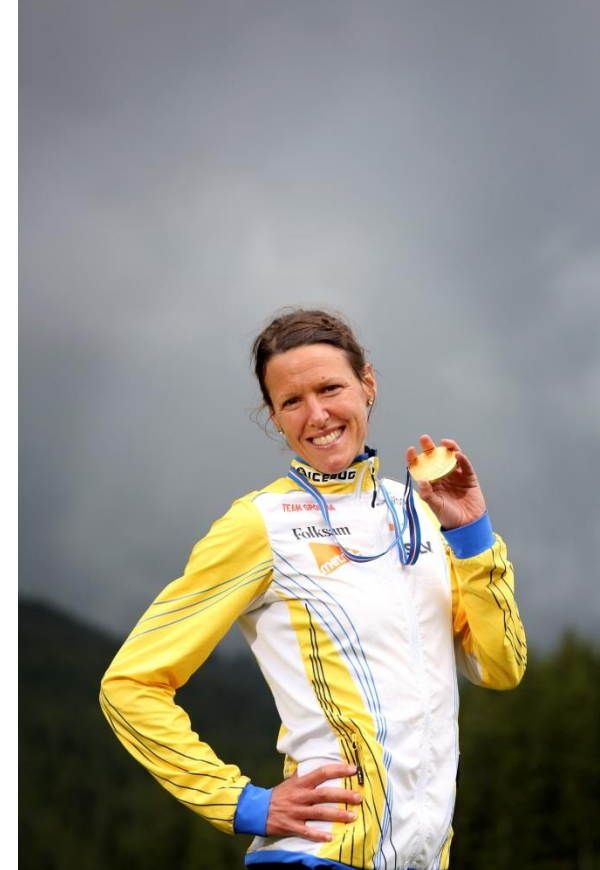
*We are willing to try new things*

*Fair play*

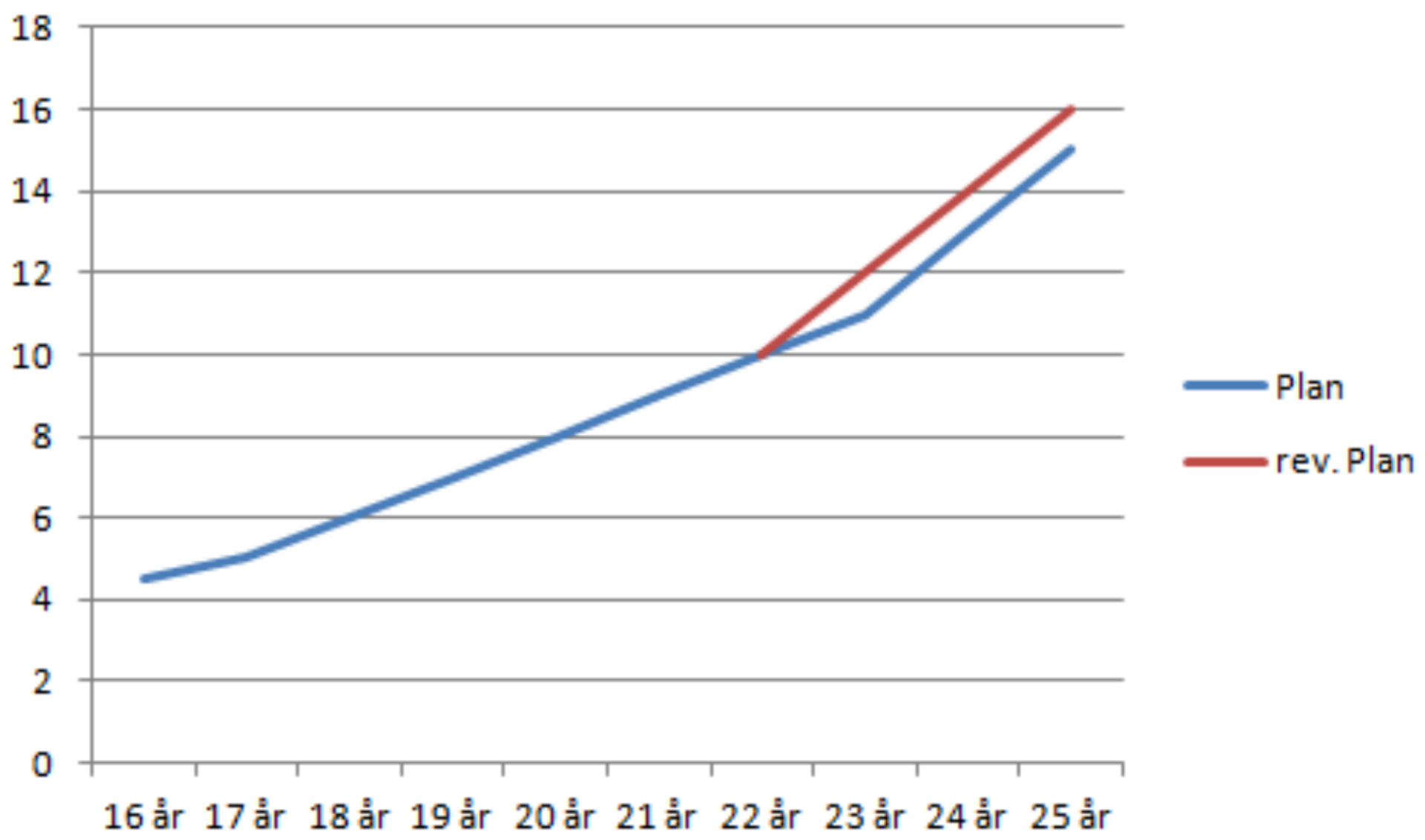


# From good orienteer to world class orienteer... ?

- "A lot of roads leads to Rome"
- Be healthy and stay away from injury
- Long term plan, hard and structured training
- Flexibility
- Work both on weaknesses and strengths
- Analyse what you can do better
- Take help in the parts you need
- Focus on a small number of things at the time



# Advanced Plan Training





Questions ?

[hakan.carlsson@orientering.se](mailto:hakan.carlsson@orientering.se)