

# 2025 National Capital Area Council College of Adventure University of Scouting

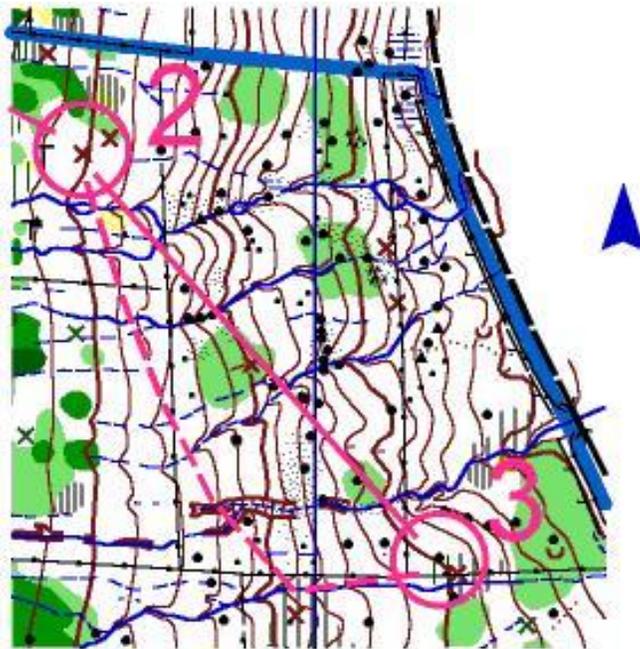


**EAC203A**

**Orienteering**

# Orienteering Glossary

**Aiming Off** - to deliberately aim to one side of a control or feature so that you know which way to turn upon hitting the feature before seeing the control.



aiming off - participant aims to the right of the control to the stream and then heads left to following the stream to the control.

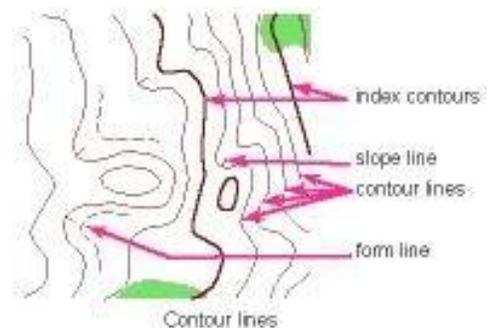
**Attack Point** - an obvious feature near the control point from which the control can be located by navigating carefully with map and compass.

**Bearing** - the direction of travel as indicated by the compass.

**Catching Feature (also called a Collecting Feature or Backstop)** - an obvious feature on the map and ground located beyond a control or other sought after feature which indicates that the target feature has been over-shot.

**Check Point** - an obvious feature on the map or ground which can be used to check that you are keeping to your chosen route.

**Contour** - a line on a topographic map that connects points of equal elevation.



# Orienteering Glossary

**Control/ Control Marker/ Marker-** a trapezoid-shaped marker (usually orange or red and white) used to mark features on an orienteering course, usually with a control punch attached to mark a control card as proof of arrival.



**Control Circle** - a circle drawn around a feature on the map to indicate the location of a control marker. The feature should be in the exact center of the circle.

**Control Code** - letters (or numbers) on a control marker which enable participants to verify that it is the correct one.

**Control Description** - a list given to each participant which briefly describes each control feature in order. It also gives the control code.



## Get A Clue: Get to know your control descriptions!

**Example of a Clue Sheet**

	A	B	C	D	E	F	G	H
	Class			Length			Climb	
	GREEN			5.160			120	
	▶			↗	↘	×		
1	31	→	∨	~	3x1	○		
2	32		↗	↘	∨			
3	33		⊖	~	5x1	⊕		
	○	<	170			>	○	
	A	B	C	D	E	F	G	H

**Explained:**  
 This is the "GREEN" Course with a length of 5.16 Km and 120 meters of climb.  
 Start at the trail-road intersection.  
 Eastern of several shallow pits (3x1 m). The Flag is on the northern side of pit.  
 Trail Junction  
 Shallow depression (5x1m)  
 The flag is on the southeastern side of the depression.  
 170m from last flag to Finish

**A = Control Number** ←  
Controls must be visited in sequence

**B = Control Code** ←  
The control flag will be marked with this code. Use it to confirm the ID of the control.

**C = Which one of Similar Features** ←

- ↑ Northern \*
- ↘ Southeastern \*
- ↑ Upper
- ↓ Lower
- || Middle

*\* denotes symbol should be oriented to denote direction*

**D = Control Feature** ←

<b>Landforms</b> Terrace Spur Re-entrant (draw) Earth bank Quarry Earth wall Erosion gully Small erosion gully Hill Knoll Saddle Depression Small depression Pit Broken ground	<b>Rocks and Boulders</b> Cliff, rock face Rock pillar Cave Boulder Boulder field Boulder cluster Stoney ground Bare rock Narrow passage  <b>Special Features</b> Special Item Special Item	<b>Water and Marsh</b> Lake Pond Waterhole River, watercourse Minor water channel Narrow marsh Marsh Firm ground in marsh Well Spring Water tank / trough	<b>Vegetation</b> Field Semi-open land Forest corner Clearing Thicket Linear thicket Vegetation boundary Tree cluster Single tree Root stock, tree stump	<b>Man-Made</b> Road Trail Ride Bridge Powerline Pylon-pole Tunnel Stone wall Fence Crossing point Building  Paved area Ruin Pipeline Tower Boundary stone, cairn Fodder rack Stariway Shooting platform Monument, statue Charcoal burning ground
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**H = Other Information**

- ⊕ First aid
- ☕ Refreshment
- ⚡ Radio control
- ⤴ Manned control check

**G = Location of Control Flag**

- ↗ Northeast side \*
- ↘ Southeast edge \*
- West part \*
- ↖ East corner (inside) \*
- ↙ South corner (outside) \*
- ↙ Southwest tip \*
- ↖ Northwest end of \*
- Northeast foot \*
- || Upper part
- || Lower part
- || Foot (no direction)
- < On a bend
- ⊖ Beneath
- ⊕ On top of
- || Between

*\* denotes symbol should be oriented to denote direction*

**F = Combinations, Size**

- × Crossing
- ∨ Junction
- 1 Height (meters)
- 2x2 Size (meters)

**E = Appearance**

( Low ) Shallow ∪ Deep ▒ Overgrown □ Open ∙ Rocky	≡ Marshy ∙ Sandy ⊕ Needle Leaved ⊕ Deciduous ∙ Ruined
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For more information on orienteering in the U.S., <http://orienteeringusa.org>  
 Orienteering USA is recognized as the governing body for orienteering in the US by the International Orienteering Federation and the US Olympic Committee.



# Orienteering Glossary

**Control Feature** - a natural or man-made feature on or next to which the control is hung.

**Control Marker** - see control.

**Control Number** - a number drawn beside each control circle on a map. On a cross-country course, they indicate the order in which the controls must be visited. The top of the number should point to North.

**Control Punch** – a small plastic clipper with different designs of pins. Used to verify each control feature has been visited. These have largely been replaced by electronic punches at orienteering club-sponsored events.



Electronic Control Punch



Manual Control Punch

**Course** - a sequence of control points marked on the map which are to be visited by the orienteer.

**Cross Country Course** - the classic course used for all major competitions. Control features must be visited in the prescribed order.

**Dog-Leg** - positioning of a control which favors approaching and leaving a control by the same route, thereby leading other competitors to the control. Course design which results in a dog-leg should be avoided.

**Fine Orienteering** - precision navigation in detailed terrain usually demanding careful use of map, compass and pace counting, and usually involving short course legs.

**Finish Symbol** - If it shares the same location as the start: 

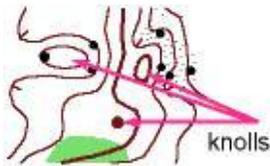
If its location is separate from the start: 

**Folding the Map** - orienteers fold their maps to aid concentration on the leg being run, and to facilitate thumbing their position.

# Orienteering Glossary

**Handrail** - A linear feature which closely parallels your route and acts as a handrail to the next control.

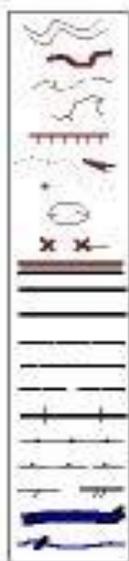
**Knoll** - a small hill.



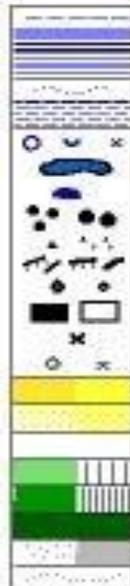
**Leg** - a section of a course between two control points.

**Legend or Key** - a list of the symbols represented on the map.

## LEGEND



Contour lines  
 Index contour  
 Formline  
 Slope direction  
 Earthbank  
 Small ditch, Gully  
 Knolls, Broken ground  
 Depressions  
 Rootstock  
 Paved road  
 Road  
 Vehicle track  
 Footpath  
 Small footpath  
 Indistinct footpath  
 Powerline with poles  
 Stonewall  
 Ruined stonewall  
 Fence, High fence  
 River  
 Stream with bridge



Minor water channel  
 Uncrossable marsh  
 Marsh  
 Small marsh  
 Seasonal marsh  
 Well/pipe, Spring, Drain  
 Lake  
 Pond  
 Boulders: small, large  
 Boulder cluster, Boulder field  
 Cliffs: passable, impassable  
 Rockpile (Cairn), Light pole  
 Buildings, ruins  
 Special man-made object  
 Trees: evergreen, deciduous  
 Open land, Rough open land  
 Open with scattered trees  
 Forest: Easy movement (White)  
 Forest: Slow running  
 Forest: Difficult to run  
 Vegetation: Difficult to walk  
 Stony ground, Bare rock  
 Distinct vegetation boundary

*The above are International Orienteering federation (IOF) symbols.*

# Orienteering Glossary

**Linear Feature** - a feature that extends in one direction for some distance e.g., paths, fences, stonewalls, and streams. Used as handrails.



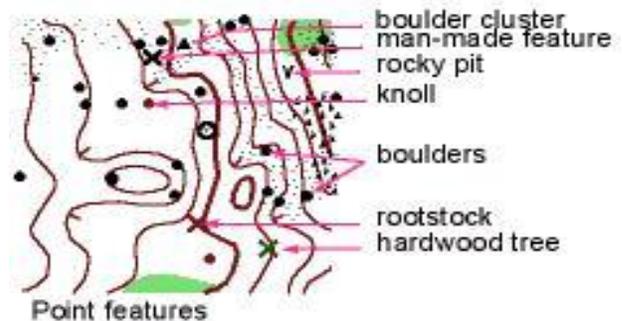
**Local Meet** – an orienteering event organized by a local orienteering club (such as the Quantico Orienteering Club) which is less formal than an National Ranking Event.

**Orienteering the Map** - matching the orientation of the map to the features on the ground. This is one of the fundamental skills in orienteering, and leads to successful navigation. The map can be oriented either by comparing the map directly with the terrain or by using a compass to orient to north.

**Master Map** - a map that may be displayed near the start from which competitors copy their courses onto their blank map. These are rarely used today, as courses are usually pre-printed on the maps.

**Pace Counting/ Pacing** - a system of counting double-paces (every time the left or right foot hits the ground) to measure distance covered. An orienteer would measure the distance between two points using the scale on the compass and then count his/her paces until the distance was covered. Pacing allows an orienteer to know when he or she has perhaps gone too far and missed the feature they were looking for.

**Point Feature** - a feature in the terrain that only occupies a small area. Frequently mapped examples are boulders, pits and mounds, stumps, and root mounds. They are not suitable as control sites for novice courses unless they are on a handrail.



**Precision Bearing** - some compasses can be used to take a precise bearing (direction clockwise from north) which can then be followed in the terrain

**Punching** - the act of marking the control card with the punch, either manually or electronically.

**Reentrant** - a small valley running down a hillside. A stream cut into a hillside would create a reentrant-type feature. On a map, the contour lines which describe a reentrant point uphill.

# Orienteering Glossary

**Safety Bearing** - a compass bearing which, if followed, will bring a lost orienteer to a road or other major, recognizable feature. It maybe added to the control description list as a safety measure.

**Safety Whistle** - a whistle which can be used if a participant is injured or lost. The International Distress Signal is six (6) short blasts repeated at one (1) minute intervals.

**Score Event** - participants visit as many controls as possible within a fixed time, e.g., 30 minutes. More distant or difficult controls are often allotted a higher point value. Points are deducted for each amount of time the orienteer arrives after the allotted time is up, say 5 points for every minute. The person with the most points wins.

**Spur** - a small ridge.

**Start Symbol** -a triangle used to locate the start on the map. It should be centered exactly over the starting point, and one apex should point toward the first control.



**String Course** - a course marked with a continuous string line. These courses are often used with very young children to give them familiarity with the forest.

**Thumbing** - a technique for holding the map, using your thumb to indicate your present location. To do this properly, it is often necessary to fold the map.



# Orienteering Glossary

## Orienteering Skills and Strategies

### ***Orient Your Map***

It is important to orient your map. This means that north on the map is kept physically turned toward north in the real world. Orienteering maps have lines that show magnetic north (not exactly the same as true north). Using your compass, rotate the map so north on the map is turned toward north on your compass. Yes, this means that you will often be looking at your map sideways or upside-down, but that's OK. By keeping your map oriented, you will reduce the tendency to become disoriented yourself.

### ***Stay In Contact***

Always keep in contact with the map. This means that you should know at all times exactly where you are on the map, and what direction you are heading. In order to accomplish this, keep your map oriented. Constantly glance from the map to the terrain and back again. Note features on the map, and make sure you can identify them in the landscape around you, and vice-versa. If something doesn't look right - maybe there is a feature on the map that you don't see around you - stop immediately and reorient yourself. Don't just keep going - you'll have a worse time figuring out where you are.

### ***Reorient Yourself***

If you do become disoriented, use your compass to orient yourself and your map. Try to identify features in the terrain around you that you can positively identify on the map. Look for things like trails, power lines, buildings, streams, and such that are reasonably easy to identify. If this doesn't work, another strategy is to go back the direction you came from until you start seeing familiar features. Reorient yourself, plan a new route, and go.



### ***Handrails***

Use linear features as "handrails". A handrail is any linear feature - like a trail, power line, stream, fence, or vegetation boundary - that you can "hang on to" or follow. As you plan your route, look for things you can follow. On your first course or two, these will probably be trails or roads that are very easy to follow. As you begin doing intermediate level courses, start looking for streams, ridges, or vegetation boundaries. Following a handrail may make your route slightly longer, but the advantage is that you are much less likely to become disoriented or lost.

# Orienteering Glossary

## ***Break It Up***

Often, on advanced courses, there are no true linear features to follow. In these instances, look for a series of features that more or less make a line in the direction you wish to travel. Break the route into several smaller ones.



For instance, you might:

- Start at a dry stream.
- Pass a clearing.
- Follow the trail until it bends left.
- Pass a clearing.
- Pass a cluster of boulders.
- Pass another clearing.
- Follow a ridge past another boulder.
- Go downhill to the stream, and
- Follow it until you find the control marker.



## Printer-friendly PDF

Date	Event	Details
<b>Feb. 8</b> Sat.	<a href="#">Fountainhead Regional Park, Main parking area, Fairfax Station, VA</a>	Bumble
<b>Feb. 16</b> Sun.	<a href="#">Little Bennett Regional Park, Pleasants Construction Parking</a>	Classic
<b>Feb. 22</b> Sat.	<a href="#">Balls Bluff Regional Park, LDS Church parking, Leesburg, VA</a>	Classic
<b>Mar. 2</b> Sun.	<a href="#">King's Landing, Main parking area, Huntingtown, MD</a>	Classic
<b>Mar. 9</b> Sun.	<a href="#">George Mason University</a>	Sprint
<b>Mar. 16</b> Sun.	<a href="#">Prince William Forest Park, Camp 5 - Happyland, Triangle, VA</a>	Classic
<b>Mar. 23</b> Sun.	<a href="#">Patapsco Valley State Park, CCBC Catonsville, Catonsville, MD</a>	Classic
<b>Mar. 30</b> Sun.	<a href="#">Gambrell SP, Shelter 3, Frederick, MD</a>	Rogaine
<b>Apr. 6</b> Sun.	<a href="#">Hemlock Overlook Regional Park, Hemlock Pavilion, Clifton, VA</a>	Classic
<b>Apr. 13</b> Sun.	<a href="#">Blockhouse Point</a>	Classic
<b>May. 4</b> Sun.	<a href="#">Lake Needwood, Circle Parking Area, Derwood, MD</a>	Classic
<b>May. 10</b> Sat.	<a href="#">Event in the Vicinity of Quantico VA</a>	Classic
<b>May. 17</b> Sat.	<a href="#">Swanson Road Natural Area, North end, Upper Marlboro, MD</a>	Classic
<b>Jun. 1</b> Sun.	<a href="#">The Chase</a>	The Chase & Potluck/Party

**Source URL:** <https://www.qocweb.org/events/schedule>