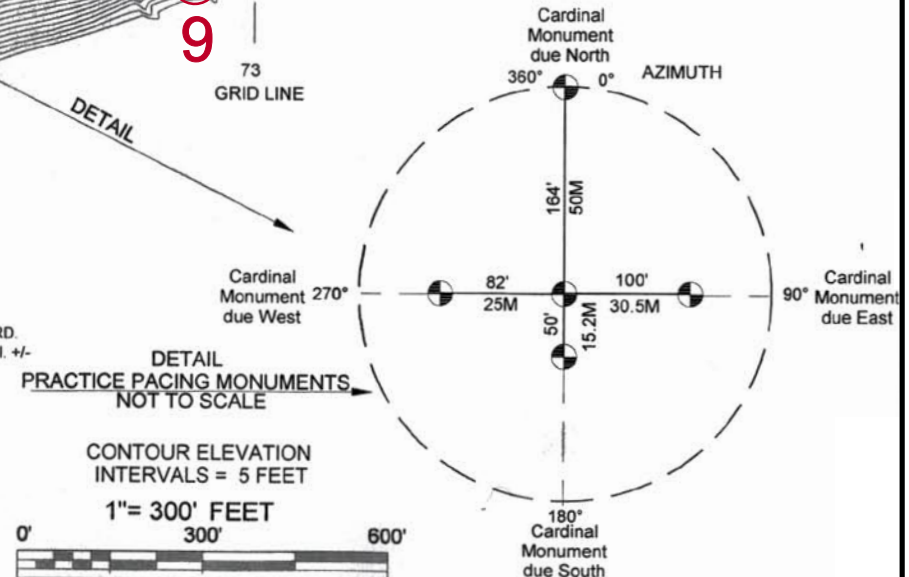
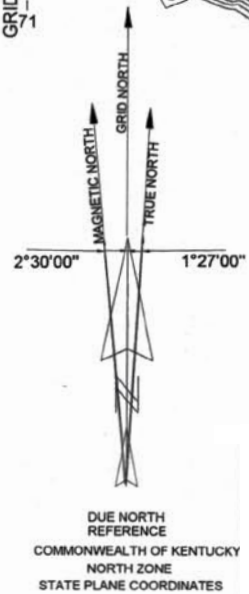


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**PETE WATKINS CAMP MICHAELS  
 ORIENTEERING COURSE  
 BOY SCOUTS OF AMERICA  
 DAN BEARD COUNCIL  
 MAPPING & ORIENTEERING SPONSOR  
 KENTUCKY ASSOCIATION PROFESSIONAL SURVEYORS  
 NO. KY. CHAPTER**



TO HATHAWAY RD.  
 KY. S.R. 536 1 MI. +/-

SCOUT CAMP ROAD

# Camp Michaels Orienteering Course

## Scout Instructions

Orienteering is a sport using a map and compass to find orange and white markers along a course. The map is your main tool. It has a vast amount of information that can help you find the best route between markers. The compass is used to orient the map, and sometimes guide you along a bearing. Smart orienteers often do not follow direct bearings between markers. They will use the map to find the easiest and fastest path – often mostly along a road or trail. Each marker will be found at the center of a numbered red circle on the map.

- 1) First, find the cardinal direction points set in concrete in the ground near the main parking lot and flagpole. Using the map and your compass, find the two points that are 100 feet apart (from the center point to the east point – they have red lines on them).
- 2) To help you measure distance along the course, pace between these markers at least 3 times at a natural stride, stepping off with your left foot and counting each time your right foot touches the ground (a “pace” is 2 steps). Calculate the length of your average pace with the help of the table below:

Paces in 100 ft:	15	16	17	18	19	20	21	22	23	24	25
Feet / pace:	6.66	6.25	5.88	5.55	5.26	5.0	4.76	4.55	4.35	4.17	4.0

- 3) Using any of the methods shown in your *Boy Scout Handbook* and with the help of a buddy, measure the height of the flagpole next to the main parking lot. Mark the flagpole height here: \_\_\_\_\_ feet.
- 4) Go to marker 1 (at the parking lot edge near the flagpole). Markers are triangular, orange and white, and mounted on green poles. Inside each marker is a letter. Using your map and compass, find all of the markers. Remember that metal (like the marker) will affect your compass – step away to take a bearing. If you mostly use your map, you will find that the easiest route to travel between markers is not always along the direct compass bearing. The goal is to visit each marker, not to follow any specific path. At each marker, look inside and write down the letter here:

Marker 1 - \_\_\_\_\_

Marker 8 - \_\_\_\_\_

Marker 2 - \_\_\_\_\_

Marker 9 - \_\_\_\_\_

Marker 3 - \_\_\_\_\_

Marker 10 - \_\_\_\_\_

Marker 4 - \_\_\_\_\_

Marker 11 - \_\_\_\_\_

Marker 5 - \_\_\_\_\_

Marker 12 - \_\_\_\_\_ (see # 5 below)

Marker 6 - \_\_\_\_\_

Marker 13 - \_\_\_\_\_

Marker 7 - \_\_\_\_\_

- 5) What is the distance between marker 12 and marker 13? \_\_\_\_\_ feet. (There are two ways to figure this out - one uses the map only. Try to use both methods to check yourself.)
- 6) Bring this sheet to your leader to show that you have completed the course. Your leader will have the answers and a secret code to translate a message out of the marker letters.

# Camp Michaels Orienteering Course

## Leader Instructions

Completing this activity meets the orienteering requirement for First Class. The course is one mile long, and requires measuring both the height of a flagpole and the distance between two markers. A *prepared* Scout can do the activity in about one hour.

This course should NOT be a Scout's first map and compass activity. You must first teach how to use a compass to take and follow a bearing, how to orient a map, read a topographical map, and how to measure distances. All of this is found in the *Boy Scout Handbook*, but will need some hands-on teaching for a Scout to master. This course should be a fun and challenging way for a Scout to test his new skills.

Camp Michaels is private property of the Dan Beard Council. You **MUST** complete an "Application for Camp Usage" (see "Forms" section of the Council website) at least 72 hours in advance, and sign in with the Campmaster or Ranger to bring your Scouts to the course. You are welcome to use the course if your unit is camping at Camp Michaels. There is no charge to use the course.

Each Scout needs BOTH the course map and Scout instructions (which serves as an answer sheet). There are two maps of the course – choose either the full color orienteering map or the black & white topographical map. Print the map and instructions on opposite sides of a sheet of paper, and put inside a gallon zip-top bag for durability. Scouts will also need a pencil, a map compass, and their Boy Scout Handbook.

Start at the main parking lot. First have each boy read the "Scout instructions" fully. Confirm that each has all of the required materials. Buddy up the Scouts for safety, but insist that they each complete their own answer sheet. (Sending a more senior Scout as a buddy can work if the older boy will let the younger Scout work the course by himself.) Reinforce that part of their challenge is to use the map to find the easiest way between markers – often NOT along the direct bearing to the next marker. Ask the boys to find the cardinal points on their map, then on the ground, to demonstrate the detail and accuracy of the map. They set off independently to complete the activity at this point.

ANSWERS: Flagpole height: 33.5 feet

Marker letters 1-13: T E R N G W B O F P B H G

Distance between marker 12 and 13: 279 feet

Secret code – Have the scout write out the letters A thru M, then write letters N thru Z directly below the first line of letters. "A" translates to "N", N to A, B to O, O to B, etc. The marker letters spell out "GREAT JOB SCOUT" when translated.

## THANK YOU

This course was conceived in 2003 by Pete Watkins. The initial layout and mapping was done by members of the Northern Kentucky Chapter of the Kentucky Association of Professional Surveyors, lead by Charles R. (Bob) Wilson, PLS, of BlueGrass Land Survey & Consulting LLC. KAPS and Troop 1 of Florence, KY, installed the control monuments in the ground. Markers on poles were installed by Pete Watkins with the assistance of Joseph Watkins, Craig Watkins, Steve Fitzsimons, Scott Swanson and Tim Iott. The course was formally dedicated July 19, 2003, and named the "Pete Watkins Camp Michaels Orienteering Course." The markers were fabricated and donated by Flaig Welding of Hebron, KY, and powdercoated by Custom Paint and Powder of Burlington, KY. In January 2006, Ron Reynolds renumbered the course. Bob Wilson produced the B&W topographical map of the course. The color orienteering base map was provided by Mike Minium and Orienteering Cincinnati. The final maps were produced by Ron Reynolds with help from Brittany Reynolds. The Ku-Ni-Eh Lodge of the Order of the Arrow provided monetary assistance for initial map reproduction. Please contact Ron Reynolds at (513) 553-3114 for any problems with the course.