Baseline Method of Course Building

By Dave Hanson

There are many methods of course building that involve helpers. Some are "creative" with a placement of obstacles following the course flow; others have separate groups of people building different sections or quadrants of the course. But these styles of course building allow the course builders' preferences and interpretation of what the judge had in mind to be incorporated into the final product. These methods also tend to create problems such as producing one area of the course that does not fit in the available ring space, or producing four quadrants that individually are exact but do not mesh into one course so that major tweaking is required.

Other methods use a more systematic approach, involving placement of obstacles as noted on the course layout. The latter usually have numbers or posts at specific intervals along the perimeter of the course area. The course builders orient themselves within this grid to place the obstacles. The baseline method is a course-building method with the distances on the baseline being a reference point of the grid within the ring area and the offset being the obstacle locator.

The grid and baseline methods are used primarily to place the obstacles within the course area in correct spatial relationships as on the judge's layout. No consideration is made to adjust for course flow until all the obstacles are in place. The judge should then tweak the obstacles to obtain the course challenges envisioned when designing the course. The baseline method was developed to help a *small* group of helpers place the agility obstacles efficiently. The major advantage to this method is that the judge gets what is drawn on paper; which, paradoxically, is also this method's greatest disadvantage ("what you see is what you get" for course builders). It's important that the judge has an accurate picture of the course area that is available before designing courses.

The new version of Clean Run Course Designer 3 (CRCD 3) features an option to label obstacle coordinates to help course builders using the baseline method.

A second feature incorporated into the program allows the course designer to compare differences between two courses. In comparing courses, the obstacles that remain in place from the original course are shown in a lighter color. The obstacles that are removed or realigned from the original course position are crosshatched to denote their movement. The obstacles that are new or realigned on the second course are shown in normal color intensity.

You can increase the visibility of the changes by using different colors for the obstacles in the two courses. For example, using red for the first course and black for the second makes the differences in the courses stand out. When building nested courses this comparison feature helps to show which obstacles do *not* need to be moved. A bonus feature shows that when the obstacle coordinates are toggled in the comparison course, the only obstacles that have visible coordinates are those that are new to the second course.

Creating a Course Diagram Using the Baseline Method with CRCD 3

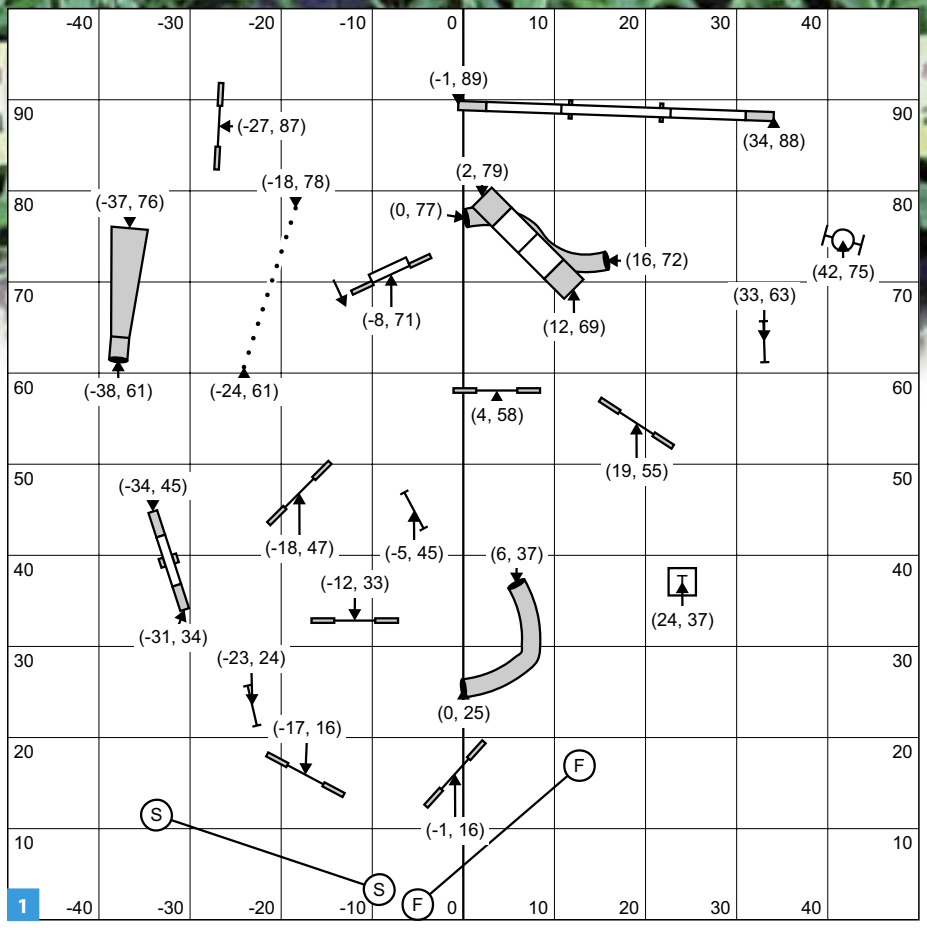
CRCD 3 allows the designer to choose where the baseline is drawn. The baseline can be centered in the course or placed along any perimeter of the course. It is indicated by a darker line than the rest of the background grid. Generally, it is good practice to put the baseline through the center of the course, either vertically or horizontally, to minimize the offset distance. Also, starting the baseline at the ring perimeter gives the course builder a definitive point from which to recreate the baseline for future courses.

Obstacle coordinates are grouped in pairs; the first number is the horizontal distance, and the second is the vertical distance. This number notation follows the Cartesian coordinate system where the first number is the horizontal distance (*X* distance) and the second number is the vertical distance (*Y* distance). To the right of the baseline is positive and to the left is negative. However, if you don't wish to use these program defaults, there is a toggle that allows you to choose which coordinate (x or y) is specified first, thereby allowing you to always place the baseline distance as the first number in the coordinate pair, followed by the obstacle offset distance. (Select View / Obstacle Coordinates. In the Obstacle Coordinates dialog box, select "Coordinate along baseline displayed first" and click OK.)

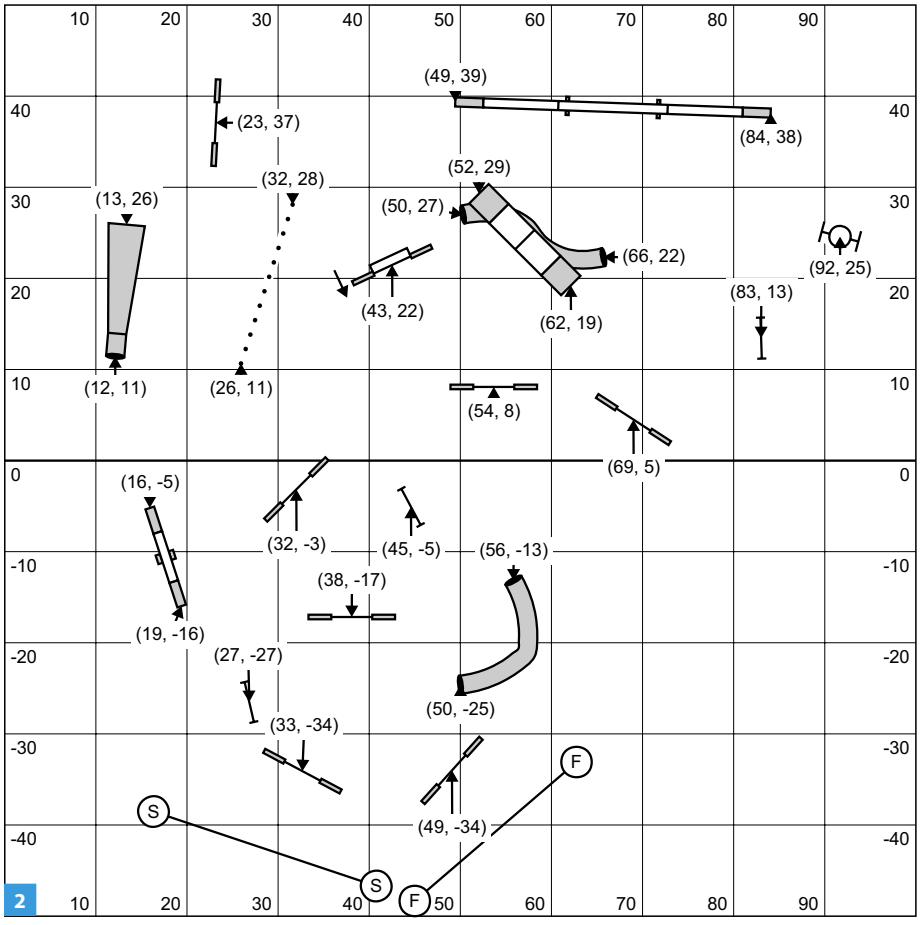
To display a baseline on a course you have created in CRCD, use the View / Background Lines menu item to show the Background Lines dialog box. Ensure that "Boundary and numbered grid lines" is selected. To show a vertical baseline, select "Measure horizontally from center" and "Measure vertically from bottom." To show a horizontal baseline, select "Measure horizontally from left" and "Measure vertically from center."

Show the obstacle coordinates by using the View / Obstacle Coordinates menu item.

Note: Displaying the obstacle coordinates will slow down operations such as moving and rotating shapes, so the software recommends taking this step only after you have essentially completed designing the course.



Baseline centered vertically with offset distances measured from the baseline (positive to the right and negative to the left) and baseline distances ascending from the bottom ring boundary. In this orientation, the offset (horizontal) distance is the first number and the baseline (vertical) distance is the second number.



Baseline centered horizontally with offset distances measured from the baseline (positive above and negative below) and baseline distances ascending from the left ring boundary. In this orientation, the baseline distance is the first (horizontal) number and the offset (vertical) distance the second number.

Creating a Course Diagram Using the Baseline Method Without Software

Most courses are now drawn using computer software and show a grid layout. If, however, you don't have access to these tools and your layout lacks the distances for baseline course building, follow the procedure below.

Before going onto the course:

- Draw the baseline on the course layout (I usually draw it in the center of the course)
- Mark the zero point of the baseline (I use the edge of the ring/course layout so the distances match the ring grid distances)
- Draw a line perpendicular to the base line to the obstacle(s) to be located (this is the offset distance).

If your grid is in increments of 10', you can estimate the distances to the nearest foot between the grid lines.

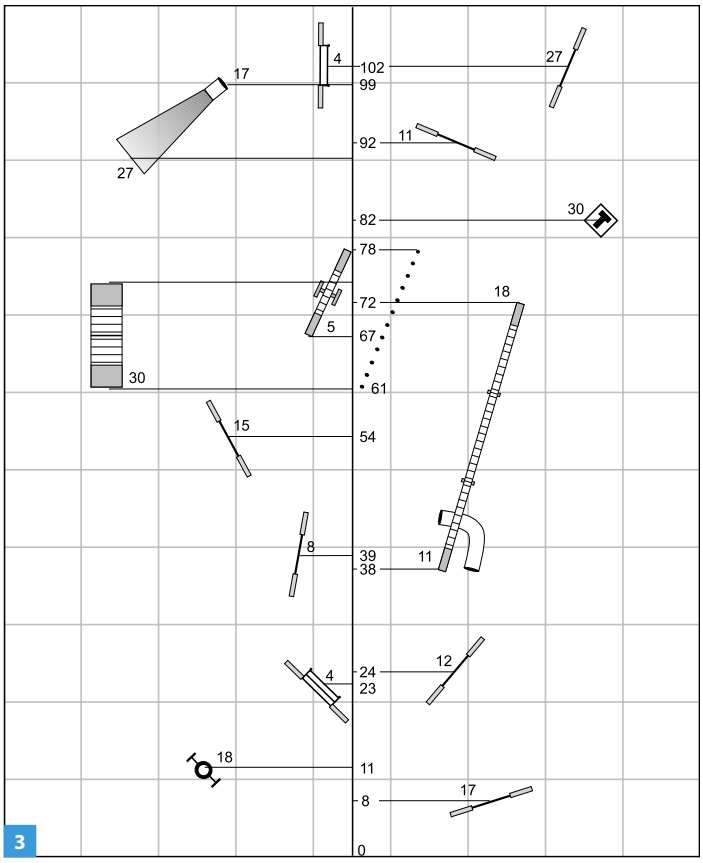
For consistency, I recommend that the obstacles be located as follows (CRCD 3 follows this convention):

- Jumps: to the center of the bar (allows different sized jumps other than drawn)
- Weave poles: first and last pole (gives correct orientation)
- Seesaw, A-frame, and dogwalk: center of the ramps at each end of the obstacle
- Tunnels: center of entry and exit ends
- Chute: center of entrance and center at end of fabric
- Table: center of table

For each obstacle to be placed measure the distance along the baseline from zero (ring boundary) and measure the (offset) distance from the baseline to the obstacle. Note these distances on the course layout.

Setting the Obstacles in the Ring

Lay a 100' tape measure along the baseline (usually the middle of the course) and reference each end with a golf tee. The chief course builder should have a measuring wheel with which to measure the offset distance to the obstacles.



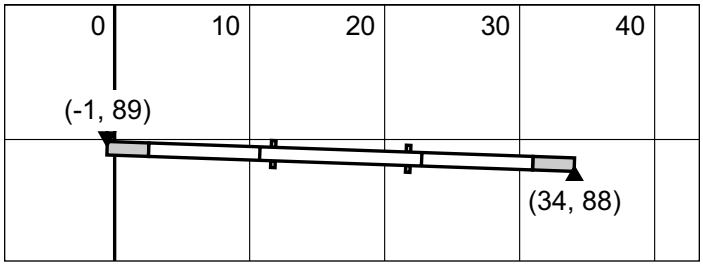
A baseline drawn on a course diagram with perpendicular lines drawn to position each obstacle.

For each obstacle:

- Find the baseline distance on the tape
- Measure out the offset distance perpendicular to the baseline
- Set a marker for that point
- Ring crew, not the chief course builder, moves the equipment into place

What you measured on the scaled course layout is now recreated in life scale in the ring. Set all the obstacles in this manner. For jumps, rotate the course layout to the orientation of the ring and set the bar on the ground at the same angle shown on the map.

Examples: Setting Obstacles in the Ring

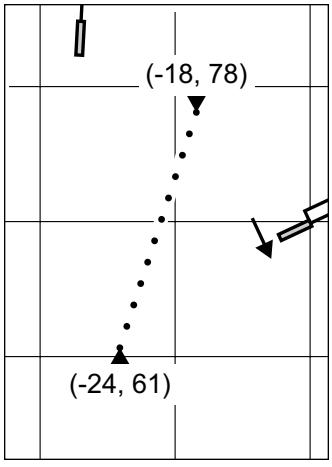


Dogwalk

- *Find the 89' mark on the tape, measure out 1' to the left of the baseline with the wheel, and set a marker.*
- *Find the 88' mark on the tape, measure out 34' to the right of the baseline with the wheel, and set a marker.*
- *Course builders set up the dogwalk between the two markers.*

Weave poles

- *Find the 61' mark on the tape, measure out 24' to the left of the baseline with the wheel, and set a marker.*
- *Find the 78' mark on the tape, measure out 18' to the right of the baseline with the wheel, and set a marker.*
- *Course builders set up the weave poles between the two markers.*



Tips to Speed up the Process:

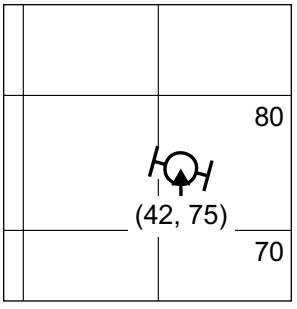
- Orient the baseline along the long axis of the ring so that the perpendicular offset distance is minimized.
- Set the long obstacles and contacts first since this helps to give the ring crew a better reference when setting angled jumps.
- When setting jumps, have one ring helper carry some bars. As the bar is set down on the ground in the correct orientation, other ring crew can bring in the wings and extra bars to build the jump.
- Use a clearly visible marker—a cone works well for contacts, weave poles, and so on.
- Set ring barrier poles at 10' or 20' intervals and put a distance marker there to give the course builder a good reference for direction out from the baseline.
- Be efficient in ring crew. Know who is moving the big pieces of equipment into place. Have extra help for jump setting while others build the big pieces.
- The chief course builder has the master course copies; also give the ring crew copies of the courses.
- If building nested courses, mark which obstacles remain in place from course to course (CRCD 3 has this feature).

Advantages of the Baseline Method

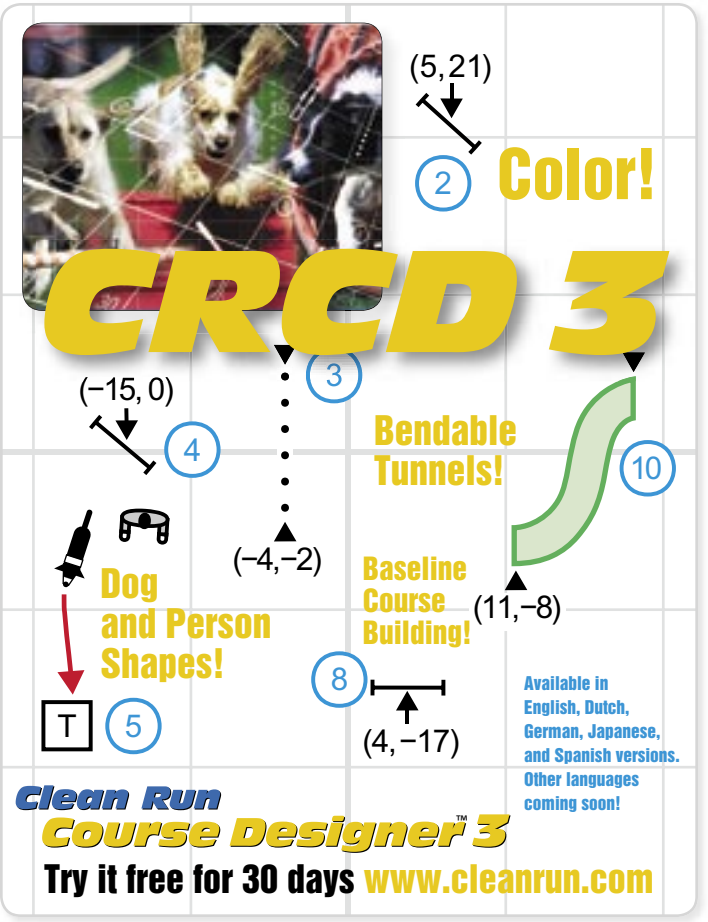
- What the judge has on the course diagram is what is in place on the ground. If it works, there should be little tweaking by the judge.
- If working with nested courses, the main pieces of equipment should be in place for the day and be a reference point for building subsequent courses.
- The distance out from the baseline is relatively short, so being a tad off perpendicular orientation should not be a factor.

Disadvantages of the Baseline Method

- What the judge has on the course diagram is what is in place on the ground. If it does not work, the judge must perform major tweaking.
- Requires a small, trained crew who understand the method.



Tire jump

- *Find the 75' mark on the tape, measure out 42' to the right of the baseline with the wheel, and set a marker.*
- *Course builders bring in the tire and set it at the correct orientation.*

Dave Hanson is one of the pioneers of agility. He is a respected judge and administrator whose ideas have influenced agility in many ways.