

BREAK OUT THE VIDEO

Know a few lines of reference when dealing with clusters.



[Note: Supporting narrated video (NV) demonstrations, high-speed video (HSV) clips, and technical proofs (TP) can be accessed and viewed online at billiards.colostate.edu. The reference numbers used in the article help you locate the resources on the Web site. You might want to view the resources on a CD-ROM or DVD. Details can be found at dr-dave-billiards.com.]

THIS IS the second article based on the “The Video Encyclopedia of Pool Shots (VEPS),” an instructional video series I recently created with past *BD* columnist and good friend Tom Ross. Last month, I introduced the series and presented a catalog of shot categories. This month, I will highlight several “gems” from the first major area: “Basic Shot Making and Position,” which is the topic of the first DVD in the set. Gems are shots or concepts Tom and I think are important to know as a pool player, whether understood explicitly or in a more intuitive way. (The complete list of shot types in each major area, an outline of the entire VEPS series, and video excerpts from each DVD can be viewed online at: dr-dave-billiards.com/veps.)

The first gems I will present involve how to aim cluster break-out shots. **Diagram 1** shows a situation where we want to pocket the 11 ball and also break out the 12- and 13-ball cluster to create an opportunity to run out and win the game. As shown in the diagram,

the cluster is between the natural-angle direction predicted by the 30° rule for a rolling cue ball (CB) (see NV B.66) and the tangent-line direction predicted by the 90° rule for a stun shot. Because the cluster lies between the two CB reference directions, we need to make sure the CB has only partial roll (about half of full roll) when it strikes the 11 ball. Again, no roll (stun) would send the CB

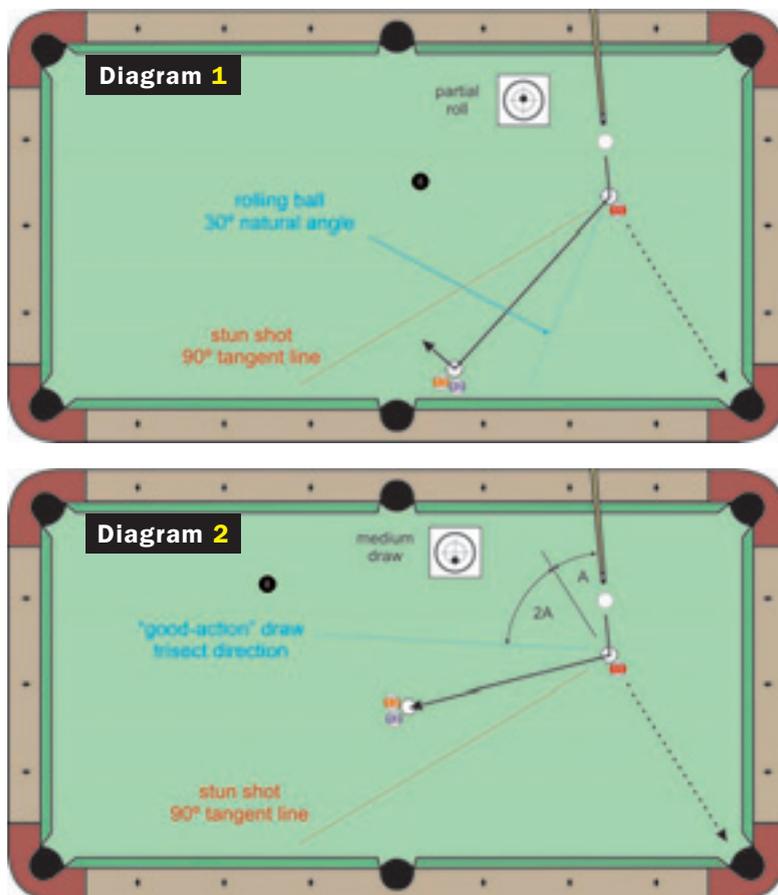
or 13 ball, or both, as demonstrated in NV B.68.

In **Diagram 2**, the cluster is between the tangent-line direction and the “good action” draw-shot direction predicted by the trisect system (see NV B.67 and NV B.68). My March '06 column covered the trisect system in detail, but to summarize, the final CB direction with a “good action” draw shot is three times the cut

angle away from the original direction (see “A” and “2A” in the diagram). Because the 12- and 13-ball cluster again lies between the two CB reference directions, we need to make sure the CB has about half the “good action” amount when it strikes the 11 ball. Again, a stun shot would send the CB along the tangent line, missing the cluster to the left. And a draw shot with good action would cause the CB to miss to the right. With medium speed, and about 75% tip offset, we should see the CB head into the heart of the cluster. And as with the previous example, we should expect a follow-up shot to enable us to continue the run (see NV B.68).

The next two shots are caroms, where the object ball (OB)

is kissed off another ball. **Diagram 3** shows what is often referred to as a “wired” carom. Here the 3 ball is frozen to the 13 ball, and the tangent line off the 13 ball points straight into the heart of the pocket. In this case, the 3 ball can be pocketed using a wide range of speeds and with a wide range of CB contact



in the tangent-line direction, and full roll would send the CB in the natural-angle direction. With medium speed, a hit just above center will create half roll and send the CB into the heart of the cluster. With a solid carom into the cluster, as shown, we should expect a follow-up shot at the either the 12 ball

points on the 3. As shown in NV B.69, even with a small gap between the 3 ball and 13 ball, the 3 will still head straight into the pocket after the carom because the 3 cannot develop enough forward roll (topspin) over the short distance between the balls. With a larger distance, to use the same 3-ball ghost-ball target on the 13 ball, you would need to use more speed to minimize the amount of roll the 3 ball develops on the way to the 13. With slower speed, the CB picks up forward roll (topspin) on the way to the 13 ball, and the 3 ball curves forward of the tangent line missing the pocket.

Diagram 4 shows a natural-angle carom example. Here, the 12 ball blocks the direct path for a cut shot of the 3 ball into the pocket. However, the 3 ball can be kissed off the 13 and pocketed. Unlike the previous example, where acquired topspin was to be avoided, here we want the 3 ball to have full roll. Luckily, in this example, the required direction off the 13 is very close to the 30° natural angle for a rolling CB (see NV B.66). So with a slow enough hit on the 3 ball, it will easily develop



Diagram 3



Diagram 4

roll before the 13 ball and carom toward the pocket. And as predicted by the 30° rule, this will occur with a wide range of contact points on the 13 ball (i.e., there is a fairly wide margin for error). Whenever a carom shot happens to be lined up in the natural-angle direction like this, it is nearly as automatic as a wired carom ... provided you don't shoot too hard and prevent the OB from developing full roll.

Well, I hope you enjoy my series of

articles highlighting shots and “gems” from the “Video Encyclopedia of Pool Shots” series. Next month, we’ll look at selected shots from the second category of shots: English and Position Control.

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