*Supporting narrated video (NV) demonstrations, high-speed video (HSV) clips, technical proofs (TP), and all of my past articles can be accessed and viewed online at billiards.colostate.edu. The reference numbers used in the articles help you locate the resources on the website. If you have a slow or inconvenient Internet connection, you might want to view the resources from a CD-ROM or DVD. Details can be found online at: dr-dave-billiards.com.*

This is the fourteenth and final article in a series based on the "*The Video Encyclopedia of Pool Practice (VEPP),*" a five-disc instructional-DVD collection I recently created with fellow BD columnist Bob Jewett. VEPP is an organized and methodical training program and pool workout. It teaches you how to develop, assess, and track progress of skills for all facets of your game. An outline of the entire VEPP series along with video excerpts from each DVD can be viewed online at: *dr-dave-billiards.com/vepp*. Last month, we looked at useful and fun safety and carom challenges from the 5th DVD: "VEPP V - Challenges, Games, and Advice." This month we'll look at a useful approach for practice, also from the 5th DVD, where you create and work on customized drills based on you specific areas of weakness.

It is important to practice the shots and techniques that you are good at so you can maintain those skills. However, it is just as important to practice the skills you don't yet have. It is also important to practice the shots that give you trouble in typical game situations. Whenever you play or compete, you should always keep track of the shots that don't work out as you had planned. That way, you can work on these things specifically the next time you practice. A good way to structure your work on these problem areas is with a "progressive practice" drill, where the difficulty level starts out easy and gradually increases. For example, when Bob and I were filming VEPP, Bob had a little trouble at first predicting the exact cue ball (CB) path off the cushion on a few rail cut shots. **Diagram 1** shows a good custom drill that can be used to work on this skill. The goal is to pocket the 1-ball and send the CB cross table at the desired angle, in this case to hit the target ball on the opposite cushion. The first target position ("A") is straight across the table, so a stun shot would work, but this is less easy to control than a rolling CB. However, with a rolling CB, you need a touch of right sidespin to achieve the desired line. This and other shots in this drill are demonstrated in **NV C.19**; but don't just watch ... also practice them the next time you're at a table.
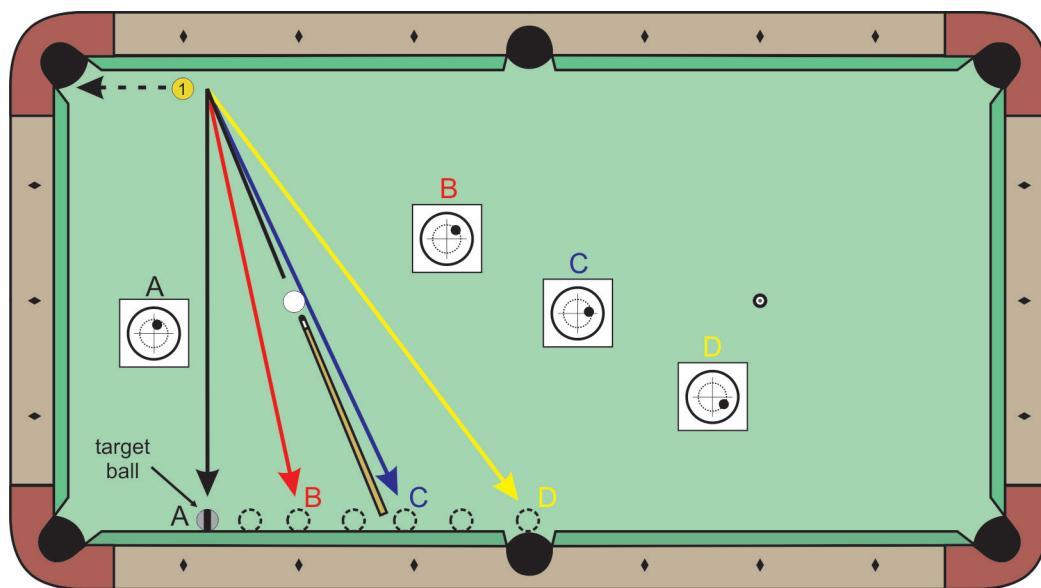
Diagram 1 Custom rail-cut-shot CB-direction drill

After practicing and succeeding with the first shot in Diagram 1 several times, progressively advance the target ball up table to develop a feel for how you need to adjust speed and spin to send the CB along each of the desired lines. For target position "B," you can still use a rolling CB, but you need to add more sidespin. The amount of sidespin required will vary some with table conditions. The CB direction will also vary a little depending on how much you might cheat the pocket, which changes the cut angle slightly. Sidespin makes the shot more difficult because you need to be able to adjust for the squirt and swerve that comes with using english. For information and demonstrations for how to compensate for squirt and swerve, see the "aim compensation" FAQ page on my website. For target position "C," Bob used nearly maximum english, still allowing the CB to roll. For target position "D," Bob used near maximum sidespin with slight draw to create drag which increases the effect of the sidespin. See how high you can send the CB up table using draw, sidespin, and/or pocket cheating. The side pocket was close to the limit on my table.

Diagram 2 shows another example custom progressive drill that focusses on a common "problem shot" for many people. The goal is to pocket the 2-ball and send the CB directly across the table a controlled amount. We have a printable target available on the VEPP website that you can cut out to serve as the CB goal position. Start with the target one diamond off the long rail, and progressively move it farther away with each success. The CB is always shot from the same spot, across from the side pocket a diamond off the rail. We have a demonstration of the drill in **NV C.20**. Because there is a slight cut angle on this shot, a stun shot would send the CB along the tangent line, which would send the CB a little up table. One approach to having the CB head straight across table instead is to make sure the CB has a slight amount of forward roll when it reaches the object ball. In the video, for the starting target position, Bob uses a center-ball hit at medium speed to accomplish the task. The CB picks up a little forward roll by itself on the way to the 2-ball.
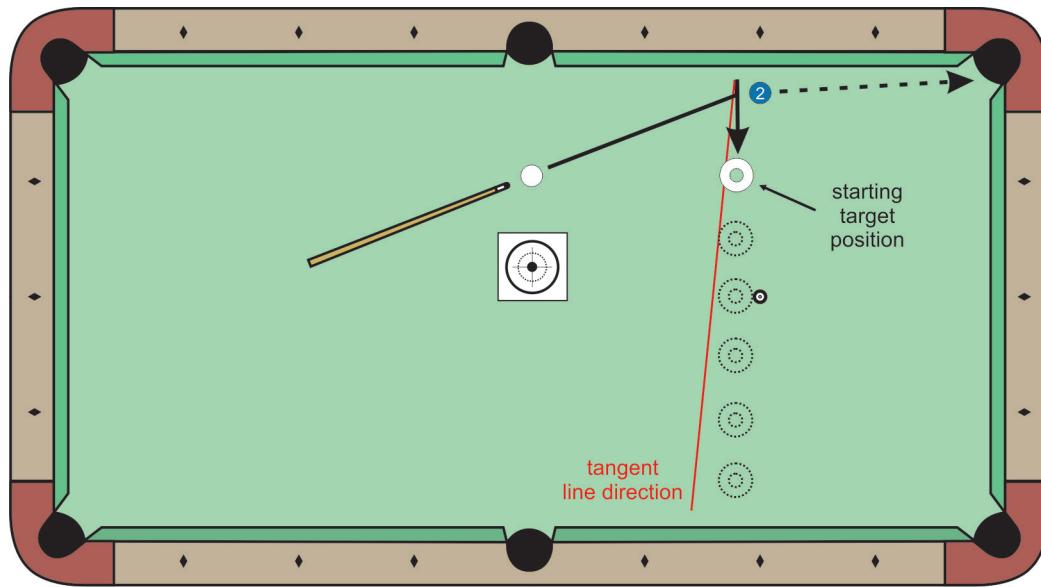
Diagram 2 Custom stun-across-the-table drill

As you add more speed to send the CB to the more-distant target positions, you will need to raise the tip a little to allow the CB to develop slight forward roll. As we demonstrate in **NV C.20**, as long as you end up within a hand span of the target, call it good. This drill is challenging because you need to be accurate with the exact cut angle of the shot (i.e., you can't cheat the pocket too much), the amount of CB forward roll at impact needs to be fairly precise, and the speed needs to be good to reach the target distance. Try out the drill and practice sending the CB to each of the target positions shown in the diagram. Even with the relatively small cut angle of the shot, it is still easy to get the CB across the entire table width. The key is to be accurate and consistent at the different distances so you will be able to control the CB when needed in a game situation.

Again, keep track of shots you miss during matches and run-out drills and develop and practice your own custom drills like the examples above. With practice, hopefully you won't miss those same shots again the next time them come up in a match. I hope you have enjoyed and benefitted from my series of articles featuring drills from the "*Video Encyclopedia of Pool Practice (VEPP)*."

Good luck with your game,
Dr. Dave

normal video

NV C.19 - Custom drills - rail cut shots with english, from VEPP V
NV C.20 - Custom drills - stun across the table with rail cut shots, from VEPP V

PS:

- I know other authors and I tend to use lots of terminology, and I know not all readers are totally familiar with these terms. If you ever come across a word or phrase you don't fully understand, please refer to the online glossary on my website.

Dr. Dave is author of the book, DVD, and CD-ROM: "The Illustrated Principles of Pool and Billiards," and co-author of the DVD Series: "Video Encyclopedia of Pool Shots (VEPS)" and "Video Encyclopedia of Pool Practice (VEPP)."