David Alciatore, PhD ("Dr. Dave")   **ILLUSTRATED PRINCIPLES**
"VEPS GEMS - Part XIV: 'Spot-on-the-Wall' System"

Note: Supporting narrated video (NV) demonstrations, high-speed video (HSV) clips, and 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 article 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 my fourteenth article based on the "*The Video Encyclopedia of Pool Shots* (VEPS)," an instructional DVD series I recently created with past BD columnist and good friend Tom Ross. VEPS contains 750 shot types and principles within 50 main categories and 5 major areas. An outline of the entire VEPS series and video excerpts from each DVD can be viewed online at: **dr-dave-billiards.com/veps**.

In the last six articles, we've looked at various systems for aiming one-rail, two-rail, and three-rail kick shots. These systems included the rolling cue-ball (CB), through-diamond mirror system, the Plus System, and the Corner-5 System. This month, we'll look at a visual, non-formula-based alternative to these systems called the "spot-on-the-wall" system, and show how, why, and when it works. The system allows you to determine the line of aim to kick one, two, or three rails to a corner pocket (or other target). No arithmetic or diamond numbers are needed, although the system does require familiarity with a given table and its surrounding. The "spot-on-the-wall" system is demonstrated with numerous examples in **NV B.35** and in Shot # 524 of "VEPS IV - Banks, Kicks, and Advanced Shots."

normal video

NV B.35 – Corner-5, Plus-2, and one-rail kicks, and "spot-on-the-wall" aiming, with Tom Ross

Diagram 1 shows an example of how to use the system to aim three-rail kick shots to a corner pocket. The first step is to find a track to the corner pocket for any "benchmark" shot (see Diagram 1a). That is, select and mark some arbitrary CB position and then vary your aim into the first rail until you find one that sends the CB to the corner pocket. As with most multiple-rail kick systems, use running English with a rolling CB. After determining the benchmark aim line, note where it points on a nearby wall and place an identifying mark on the wall if necessary (e.g., with a Post-It Note or piece of tape). If there is no wall close to the table, just find the nearest landmark such as another table, a statue, a column, something hanging from the ceiling, or anything else that doesn't move. As we will see, depending on the number of rail cushions contacted, it helps to have the spot a certain distance from the table; however, the system will still work fairly well even if the distance is not perfect. Now, as indicated by Diagrams 1b and 1c, the remarkable and beneficial aspect of the system is that shooting at the identified wall spot from almost any CB position, into the same rail, will send the CB to the corner pocket. In the remainder of this article, we will use the systems we have examined in recent months to determine the best spot distances to use for each type of kick.

a) spot on wall for benchmark shot


b) shot 2 also aimed at spot on wall

c) shot 3 also aimed at spot on wall

Diagram 1 "Spot-on-the-wall" example at the table

   Diagram 2 shows various three-rail tracks to the corner pocket based on the Corner-5 System. If you would like to review this system, please watch **NV B.85** or refer back to my November '10 article. Shown in the diagram are three different spots where aiming lines for the different tracks intersect. As you've probably figured out by now, for the "spot-on-the-wall" system to work perfectly, all of these lines would need to intersect at a single point. Also, ideally, a room landmark (e.g., a wall) would be available at this exact location for identifying or marking a spot. Unfortunately, the lines don't all intersect at the same point, and there might not always be a landmark at the desired distance. However, if you pick a wall spot (or other room landmark) that is 0.75 to 1.5 table widths beyond the first rail, all of the required aiming lines will point fairly close to the spot. As a consequence, when kicking at the spot off the long rail from any direction, the CB will rebound off three rails and come fairly close to the corner pocket.

normal video

NV B.85 – Corner-Five System for aiming three-rail kick shots, from VEPS IV
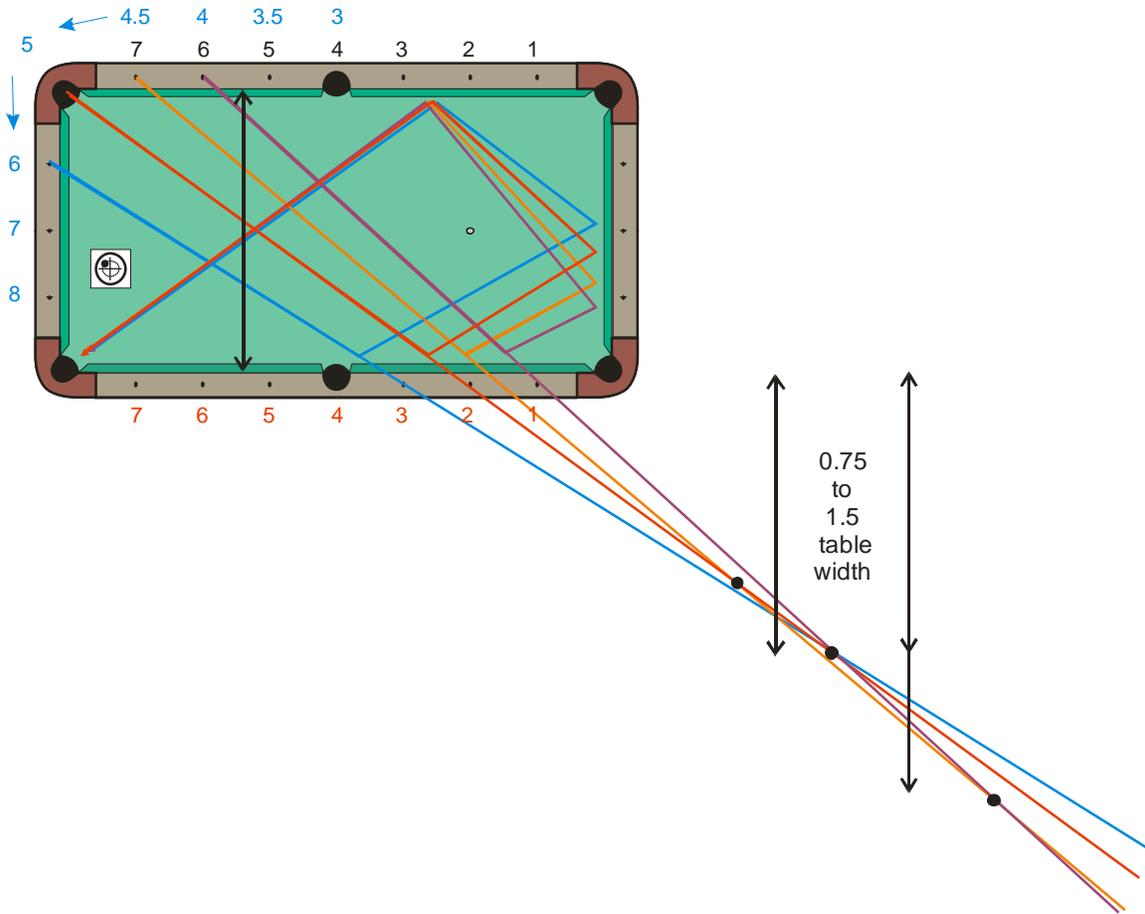
Diagram 2 Tracks and "spot-on-the-wall" distance for the three-rail Corner-5 System

The "spot-on-the-wall" system can also be applied to two-rail and one-rail kicks. **Diagram 3** shows various two-rail tracks to the corner pocket based on the Plus System. If you wish to review the basics of this system, please watch **NV B.84** or refer back to my August '10 article. As with the previous example, the diagram shows three different spots where the aiming lines for the different tracks intersect. Again, while the aiming lines don't all meet at a single point, they do converge fairly closely near the points shown. Therefore, for two-rail kicks, the best distance to place the wall spot appears to be about 1 to 1.5 table lengths beyond the first rail. With the spot in this range, kicks aimed at the spot off the short rail will head very close to the corner pocket.

NV B.84 – Plus System for aiming two-rail kick shots, from VEPS IV

1 to 1.5 table lengths

1
2
3
4
5
6
7
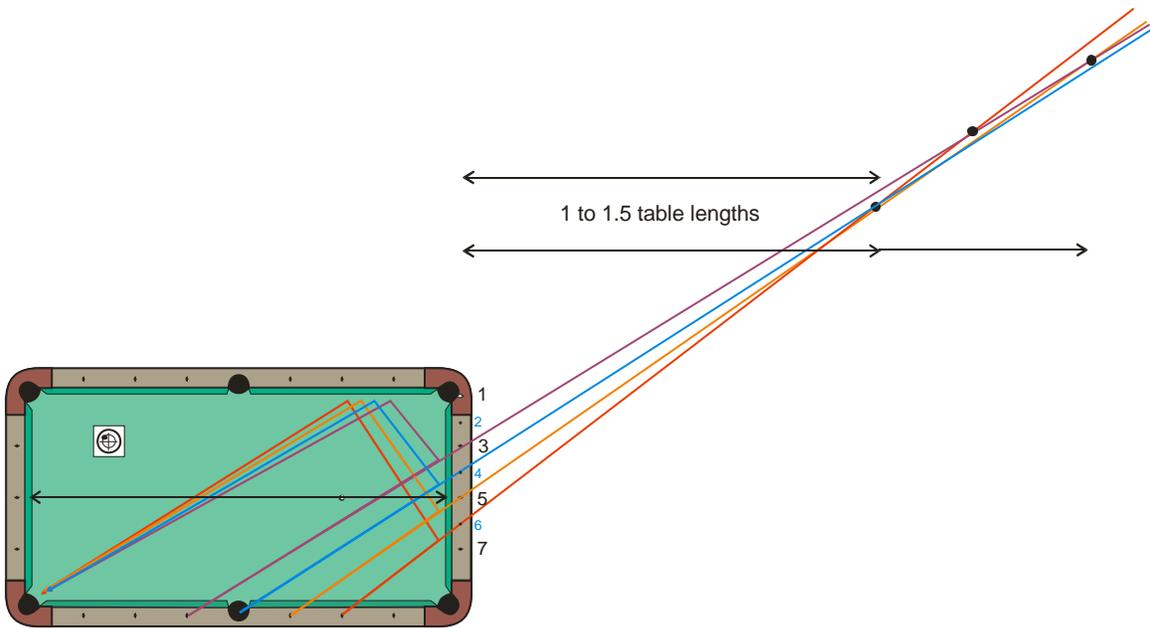
**Diagram 3 Tracks and "spot-on-the-wall" distance for
the two-rail Plus System**

Diagram 4 illustrates various corner pocket tracks for the one-rail, rolling-CB, through-diamond mirror system described in my June '10 article and demonstrated in **NV B.82**. With this system, the track aim lines shown do in fact come very close to converging at a single point. Therefore, with one-rail kicks, you should expect the "spot-on-the-wall" system to be fairly accurate and consistent, provided the spot is about 1 table width beyond the rail.

normal video

NV B.82 – Rolling-cue-ball through-diamond kick-shot aiming system, from VEPS IV

about
1 table
width

4-to-2

2-to-1

5-to-2.5

3-to-1.5
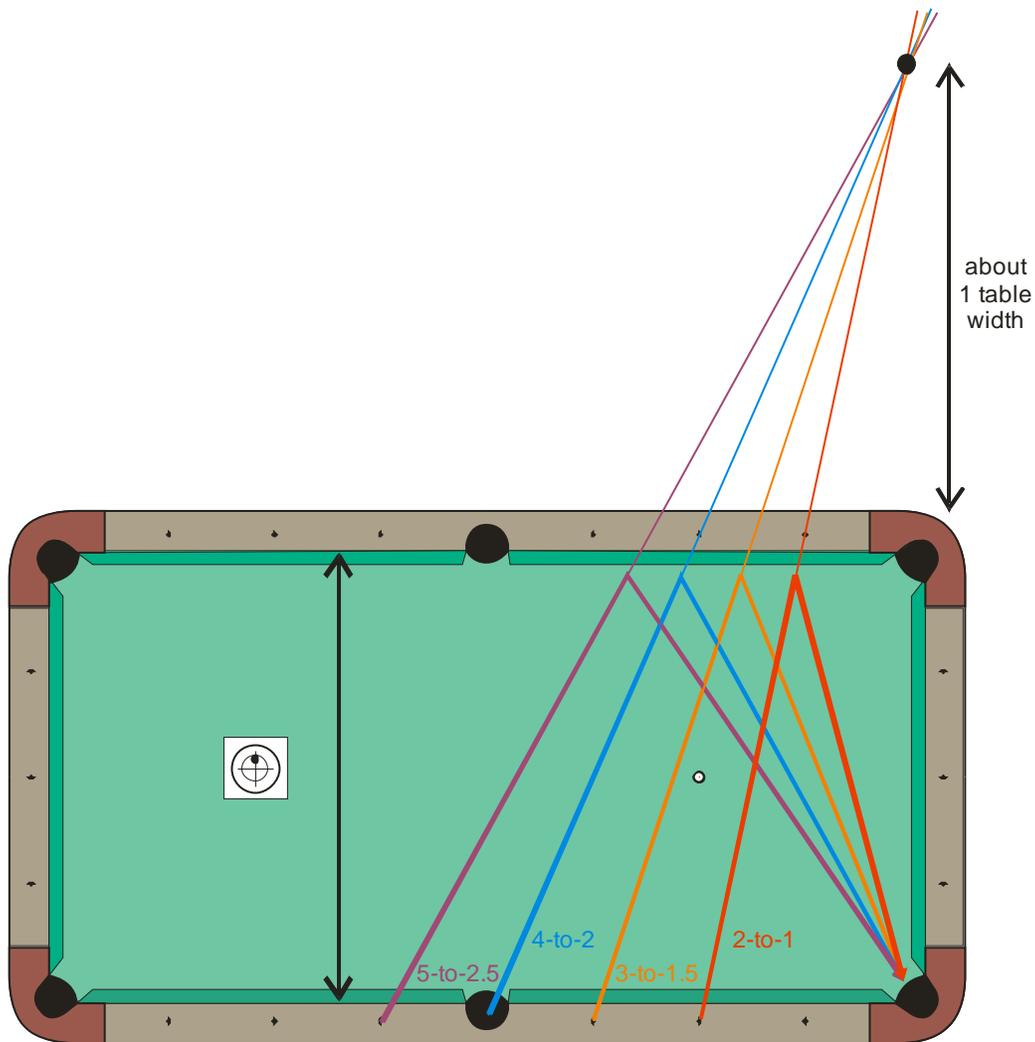
Diagram 4 **Tracks and "spot-on-the-wall" distance for
the one-rail, rolling-CB, through-diamond mirror system**

Whenever I've seen the "spot-on-the-wall" system described in books or videos (even in **NV B.35**, which I filmed with Tom Ross), I've been disappointed by the lack of logical information concerning how far the spot on the wall should be from the table. Some people recommend "the farther the better," or "imagine flipping the table to create mirror images, with one flip for each cushion contact." None of this ever really made sense to me, and that's why I used the well-known kicking systems to try to come up with more meaningful and effective advice. Hopefully, the diagrams in this article will help you do a better job at picking a location on a wall or other room landmark. If you play on the same table often, and if you've done your homework, you won't need a bunch of arithmetic or guesswork to decide where to aim. Just aim at the spot!

I hope you are enjoying and benefiting from my series of articles featuring shots and gems from the "*Video Encyclopedia of Pool Shots (VEPS)*." Example shots from the fourth VEPS DVD can be viewed on the VEPS website or at ***billiards.colostate.edu*** under **NV B.81** through **NV B.86**. Next month, we'll start taking a look at some advanced shot techniques presented on Disc V – Skill and Specialty Shots.

NV B.81 – Bank and kick shot terminology and basics, from VEPS IV
NV B.83 – Shallow-angle contact-point-mirror-image kick-shot aiming system, from VEPS IV
NV B.86 – Cut-induced throw (CIT) and spin-induced throw (SIT), from VEPS IV

normal video

Good luck with your game,
Dr. Dave

PS:

- I know other authors and I tend to use lots of terminology (e.g., squirt, throw, stun, ball-hit fraction, etc.), 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.

- I want to thank Jim Valasina. He graciously proof-reads my articles every month to help find errors and make suggestions. My article quality is better as a result of his efforts. Thanks again Jim!

Dr. Dave is author of the book, DVD, and CD-ROM: "The Illustrated Principles of Pool and Billiards," the DVD Series: "The Video Encyclopedia of Pool Shots," and the DVD: "High-speed Video Magic."