David Alciatore, PhD ("Dr. Dave")   **ILLUSTRATED PRINCIPLES**
"VEPS GEMS - Part I: Introduction"

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**.

I am very excited because this is my six-year-anniversary issue as a BD instructional columnist. The reason why six years is an important benchmark for me is I'm a university professor in my "day job;" and in academia, six years is the amount of time you have to prove yourself for tenure. If you do a good job during those first six years, you get tenure and basically have a job for life (because you have earned it). If you don't meet expected standards, you are "downsized" (i.e., "canned"). Now I feel like I have Billiards Digest "tenure." I can't believe it has been six years already, and I look forward to many more. When I wrote my first article, I had a list of about 50 topics I wanted to cover. At first, I was concerned I might eventually run out of ideas; but now, I'm sure I'll never get to all of them. After covering 72 topics, my "list" has grown to about 80 topics yet to be covered!!! That's more than 6 more years' worth, even if I don't think of anything else to add.

I'm also excited this month because Tom Ross (a past BD columnist) and I just finished an ambitious project called "*The Video Encyclopedia of Pool Shots* (VEPS)." We started planning VEPS over a year ago, and we spent most of the past summer filming and editing video. Over the next several months I would like to highlight some interesting shots and "gems" from the series.

Have you ever thought about how many different types of shots are both possible and realistic at a pool table? Well, the goal for me and Tom was to address this question ... and not leave any rock unturned. We wanted to include only shots that are practical and useful in typical game situations at a pool table, but we couldn't resist including a few proposition and trick shots. Our goal wasn't to invent many shots, but to catalog everything we could find and think of, and present all of it within an organized, progressive, bottom-up tutorial framework. We drew inspiration from Ray Martin's "99 Critical Shots in Pool," which does a good job of summarizing many of the most common types of shots, and Byrne's "Complete Book of Pool Shots," which is an impressive collection of 350 different shots, with many inspired by three-cushion billiards. However, our intention was to provide an exhaustive compilation in video format, where each shot could be demonstrated on a real table. It's one thing to see a shot diagrammed in a book, but it's another thing entirely to actually see it executed. We also liked that video would allow us to add the extra dimensions of overlaid graphics, narration, and slow-motion replay.

The complete catalog of shots that Tom and I came up with, organized into five major areas and fifty distinct categories, is listed below. The total number of shot types within the fifty categories amounts to over 750!!! The complete list can be viewed online at: **dr-dave-billiards.com/veps**. Isn't it amazing how many options exist at a pool table? That's one of the reasons why this game is so much fun. Here's the list of the fifty main categories:

I. Basic Shot Making and Position
1. **cut shots**
2. **stun shots**
3. **follow shots**

4. draw shots
5. CB direction control
6. CB speed control
7. avoiding a scratch
8. combination shots
9. carom (OB kiss) shots
10. billiard (CB kiss) shots

II. English and Position Control
11. English (sidespin) basics
12. English effects and aim correction
13. rail cut shots
14. CB path control
15. basic position play shots
16. advanced position play shots
17. center-of-table position shots
18. straight-in position play shots
19. OB-hanger CB path control
20. multiple-rail position play shots

III. Safety Play and Strategy
21. defensive safety shots
22. offensive safety shots
23. safety replies
24. ball-in-hand options
25. general strategy
26. 8-ball strategy
27. 9-ball strategy
28. rail-first shots
29. clearance and cluster break-out shots

IV. Banks, Kicks, and Advanced Shots
30. bank and kick shot generalities
31. one-rail kick shots
32. multiple-rail kick shots
33. bank shots
34. frozen-ball shots
35. frozen-rail shots
36. ticky shots
37. double kiss shots
38. kiss-back shots
39. throw shots
40. spin-transfer shots

V. Skill and Specialty Shots
41. power shots
42. jump shots
43. massé shots
44. break shots
45. cushion and point compression shots

46. pocket point and wall shots
47. game run-outs
48. fouls
49. proposition and "cute" shots
50. famous trick shots ("Top Ten")

If you look at the complete list of shots online, you will notice that many of them are designated as "GEMS." The "gem" label helps us emphasize a shot or concept that we feel is particularly important to know as a pool player, whether understood explicitly or in a more intuitive way. Over the next several months, I will present and discuss some of the more interesting "gems" from each of the five major areas. If you would like to see a preview, samples are provided online. **NV B.64** provides an overview of the entire series, in "trailer" format. **NV B.65** discusses and demonstrates proper technique for executing long power-draw shots. **NV B.66** demonstrates the 30° rule and the peace-sign technique, along with examples of how to use them to predict cue ball direction. **NV B.67** presents the trisect system for draw shots, and shows how you can use a modified peace-sign to help visualize the final cue ball motion. **NV B.68** demonstrates how to plan and execute cluster break-out shots using cue ball reference directions. Finally, **NV B.69** illustrates how to aim various types of carom shots using the 90° and 30° rules. If you want more information on any of these topics, they are covered in several of my recent articles, which can be viewed at my website (*billiards.colostate.edu*).

NV B.64 – Video Encyclopedia of Pool Shots (VEPS) video series trailer
NV B.65 – Power draw technique advice from VEPS I

NV B.66 – The 30° rule, from VEPS I
normal video
NV B.67 – The trisect system for draw shots, from VEPS I
NV B.68 – Tweener cluster breaks, from VEPS I
NV B.69 – Carom shots, from VEPS I

Well, I hope you enjoy and benefit from my series of articles highlighting shots and "gems" from the "*Video Encyclopedia of Pool Shots*" series. I look forward to sharing as much as I can from the series because it has been a true labor of love for me and Tom over the last year. Next month, we'll look at selected "gems" from the first main category of shots.

Good luck with your game,
Dr. Dave

PS:

- If you want to refer to any of my previous articles and resources, you can access them online at *billiards.colostate.edu*.

- I know other authors and I tend to use lots of terminology (e.g., squirt, throw, stun, impact line, 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."