

“Frozen Proposition Shot” Dr. Dave Alciatore, PhD

ILLUSTRATED PRINCIPLES

Supporting narrated video (NV) demonstrations, high-speed video (HSV) clips, technical proofs (TP), and all past articles are available online at billiards.colostate.edu. Reference numbers used in the articles help you locate the resources on the website.

In a recent YouTube video ([NV L.61](#)), I demonstrate the interesting frozen-ball proposition shot shown in **Image 1**, where the goal is to pocket the 8 in the far corner. I learned it from Ed Liddawi at the recent PBIA/ACS Certified Instructors Summit in Quincy, IL. He learned the shot from "Mean" Gene Rickle, who called it the "impossible shot." It is actually impossible to miss if you know how to hit it!

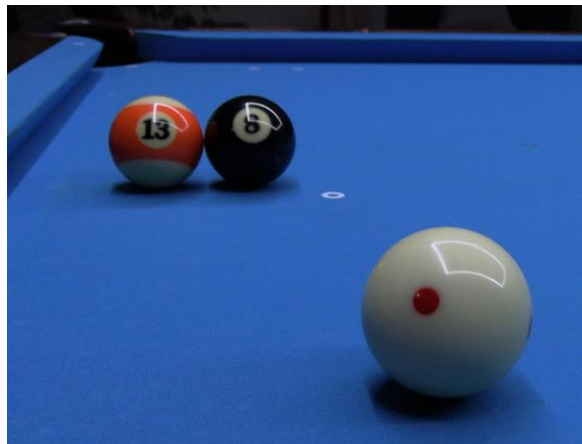


Image 1 Frozen proposition shot

The basic proposition is: I bet you can't pocket the 8 ball in the corner for the win, with cue ball (CB) in hand. The balls are frozen a ball off the center of the foot rail, and the kiss or tangent line of the 8 off the 13 heads well above the corner pocket. You can first give your "mark" or "fish" a bunch of tries at attempting to pocket the ball. As demonstrated in the video, they might try to throw the 8 in with sidespin, either from the side, or from above. That doesn't work. They might also try a full hit or an angled hit. Those might not work either. They might try faster speed from a different angle or an angled cut shot. Those might not work either. They might try faster speed from a different angle or an angled cut shot. Those might not work either. If they can't pocket the ball, which will often be the case, you then bet you can make the 8 on the first try.

If you know Bob Jewett's 10-times-fuller system, that I covered in another recent video ([NV L.60](#)), the shot is a "piece of cake." As shown in **Image 2**, you just need to aim to hit the 8 full along a line that heads 1/10 of the way from the ball line to the pocket. See the video for more info and lots of examples. With an accurate hit, the 8 pushes forward of the kiss line enough to reach the pocket. A little backspin on the CB can help it go forward even more.

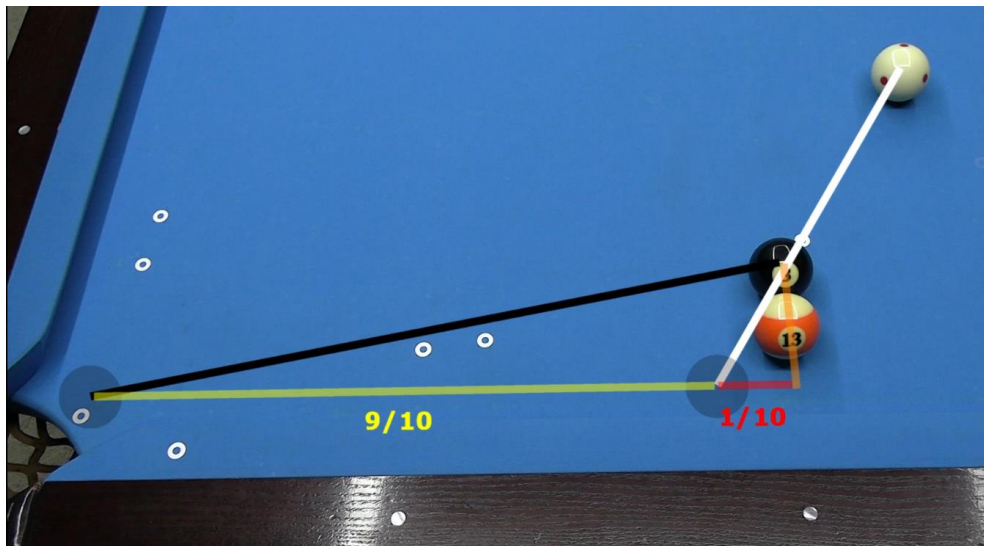


Image 2 10-times-fuller system

You can also bet you can make the same shot from the seemingly more-difficult CB position shown in **Image 3**. Many people will think this is impossible. You can have your “fish” or “mark” try it first. The same ghost-ball aim point as in **Image 2** (or slightly thinner) works here too. You can then bet you can even make the 8 in the same corner from the seemingly impossible position shown in **Image 4**. That shot also works with the same aim point. In fact, as shown in the video, the same 10-times-fuller ghost ball aim point works over a very wide range of angles.

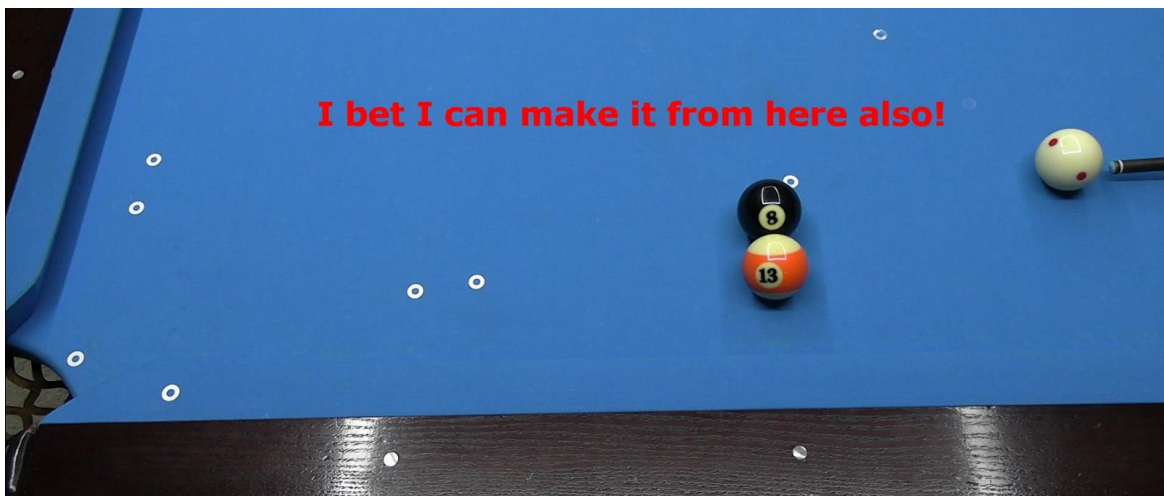


Image 3 Challenging CB position

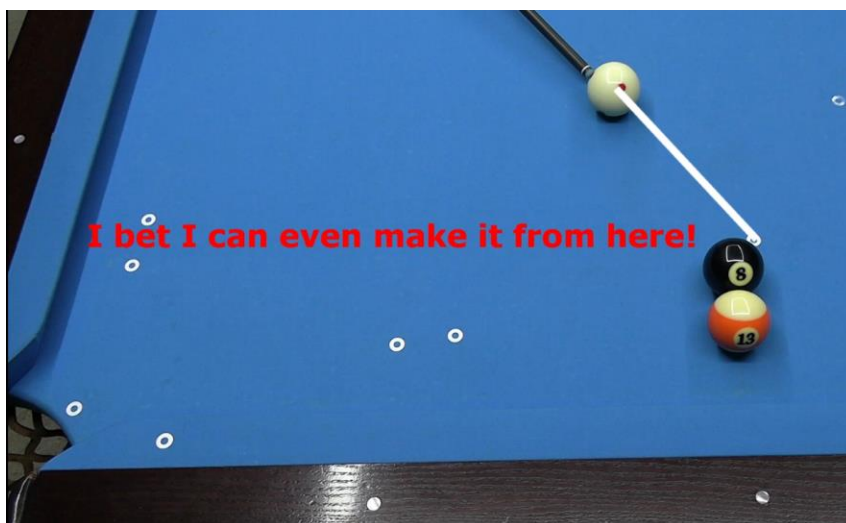


Image 4 Seemingly impossible CB position

The video also demonstrates top and bottom spin effects. Topspin on the CB transfers slight backspin to the 8, which sends it less forward. And bottom spin on the CB transfers slight topspin to the 8, helping it go more forward. With a thinner cut on the 8 from a bigger angle, top and bottom spin have less effect, but there is still a difference.

The video also looks at margins for error with both full and thin hits on the 8. The margin for error is much larger with the thin hit shown in **Image 3**. In other words, it is much easier to make the shot from this position as compared with the full-hit CB position shown in **Image 2**. This is probably due to the CB continuing to push forward as it slides across the 8 during contact. Watch [NV L.61](#) to see a clear illustration of this using a head-mounted GoPro camera, which shows the shooter's perspective. So if you are propositioning someone, the thin-hit CB position (**Image 3**) is the best place from which to shoot. Be sure to also use backspin to help.

Another possible proposition bet for the same ball layout is: With ball in hand, I bet I can pocket the 8 with 5 other totally different types of shots. How many can you come up with? In the video, I came up with a dozen totally different shots. That is probably more than you thought might be possible. I was certainly surprised. Check out the video if you want to see the dozen options. Here's a list of the shots:

- 1 – fuller square hit with SIT assist.
- 2 – double-kiss herd shot.
- 3 – kick with a timed kiss.
- 4 – push-through kiss bank.
- 5 – long kiss-back shot.
- 6 – cross-side bank.
- 7 – two-rail Z-bank to the side.
- 8 – kiss two-times-across bank.
- 9 – kiss two-times across timed-kiss bank.
- 10 – hop kick carom.
- 11 – hop skip timed carom.
- 12 – hop skim bank with the timed carom.

Be sure to watch and try the shots in online video [NV L.61](#). It demonstrates everything described above, plus a lot more. I hope some of the proposition bets presented help you win a little cash someday.

Good luck with your game,
Dr. Dave



normal video

[NV L.60](#) – Useful Direction Control with Small-Gap and Frozen-Ball Kiss Shots
[NV L.61](#) – Frozen Double Kiss PROPOSITION BAR BET Shots with GoPro POV

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 do not fully understand, please refer to the [online glossary](#) at billiards.colostate.edu.

Dr. Dave is a PBIA Master Instructor, Dean of the Billiard University, and author of the book: [The Illustrated Principles of Pool and Billiards](#) and numerous instructional DVD series, all available at: DrDaveBilliards.com.