
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.

Recently, I created an online video with Jeremiah Gage (author of “Bullseye Billiards”) covering how to shoot slow motion video of pool shots with a smart phone. The video also uses this technique to look at how to get stop, draw, and follow with jump shots at various distances and cue elevations. If you haven’t seen the video yet, you might want to check it out before reading further. It is video **NV F.3** at billiards.colostate.edu.

Diagram 1 shows an example shot from the video. This is a “baby jump” shot, where we only need to clear a gap between two balls (the 2 and 5). In other words, we need to jump over only the edges of the obstacle balls. With a baby jump, you can use your normal playing cue, and you can create stop, draw, and follow just like you normally do. You just need to use modest cue elevation and enough speed to get the jump height required. The shot in the diagram is from a game of 8-ball shooting stripes. We need a stop shot to get position on the 8-ball for the win. To get stun at the object ball (OB), you need to hit the cue ball (CB) slightly below center. If you don’t, the CB will pick up some topspin from the 1st bounce and any subsequent bounces on the way to the OB. In the slow-motion clips in **NV F.3**, you can clearly see how easy it is to get enough jump height with modest cue elevation and firm speed. You can also see how backspin on the CB wears off when the CB lands and bounces before hitting the OB.

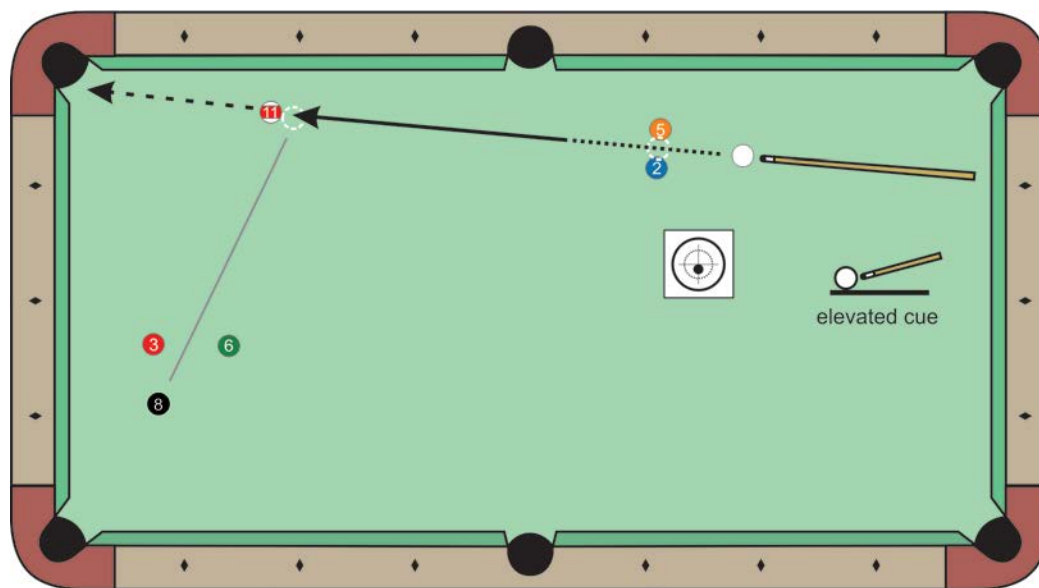


Diagram 1 Baby jump stop shot

In **NV F.3**, we demonstrate how to get stop, draw, and follow for several different shots requiring a full range of cue elevations. It is easy to get follow with a jump shot since the CB naturally picks up topspin every time it bounces while moving forward, including the first bounce off the tip. With the shot in **Diagram 1**, with a slightly above-center hit instead, the CB can follow forward a significant amount. Even a hit slightly below-center hit can easily create follow. As shown in the slow-motion clip in the video, a hit slightly below-center creates near stun after the first bounce off the tip, and the 2nd and 3rd bounces add topspin that results in follow.

Diagram 2 shows a shot from **NV F.3** where draw is required, with a jump over an entire ball. These types of shots are difficult with a normal playing cue. We used a phenolic-tip jump cue in the video. With

harder bounces due to the higher jump, the CB will tend to pick up extra topspin with each table impact, so we need to hit below center to get stun at the OB. To get draw, you need a good hit well below center, and you can't let the CB bounce too many times before reaching the OB; otherwise, the backspin will be lost and could eventually convert to topspin. For follow, a hit close to or slightly below center is appropriate. Remember, the CB picks up topspin on the first and any subsequent bounces. **NV F.3** demonstrates all of these shots, including the draw shot illustrated in **Diagram 2**.

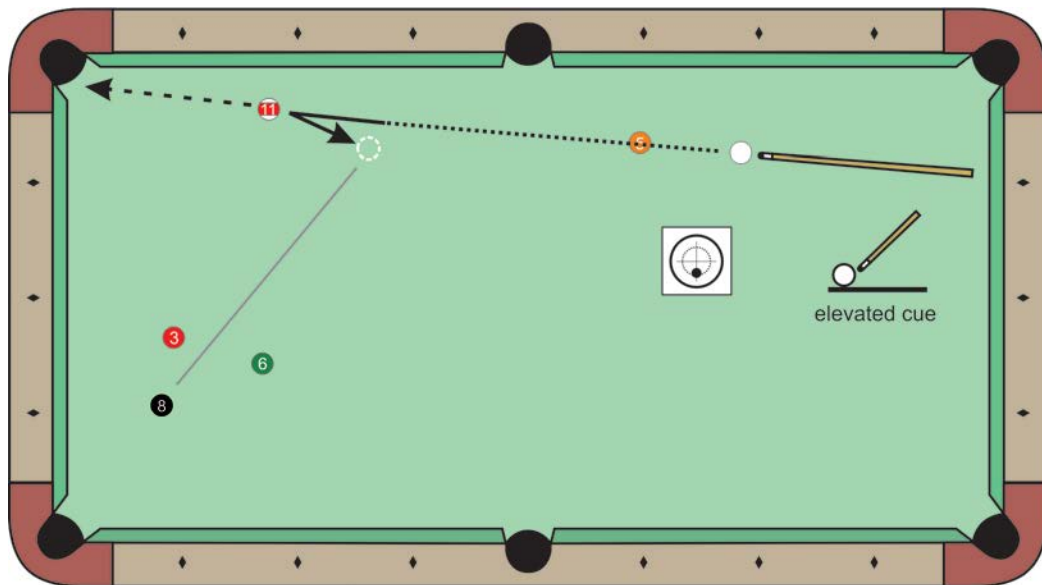


Diagram 2 Full-ball jump draw shot

Diagram 3 illustrates a jump shot requiring higher cue elevation, where you need to jump higher and sooner to get over an obstacle ball and land well before getting to the OB. At high cue elevations, it can be easier to use an overhand dart grip and stroke. See the "[jump shot technique](#)" resource page in the FAQ section at billiards.colostate.edu for more information and demonstrations concerning this technique. At higher cue elevations, the tip contact point must be farther below center than you might expect to get stun at the OB. Almost all of the backspin is lost during the first bounce into the table off the tip. With a draw shot, you need a below-center hit and you can't let the CB bounce more than once on the way to the OB, allowing the backspin to stay on the CB. To get the most draw, it is best to hit the OB on the fly with no bounces. For the shot in **Diagram 3**, slight follow is required to get a shot at the 8 next. To get follow on a short, high jump like this, you need high cue elevation to clear the ball and enable the CB to develop topspin on the 1st and subsequent bounces. If you attempt to hit the CB above center at such a high cue elevation, you will jam the CB into the table and it won't jump. A below-center hit is shown in the diagram; but remember, the CB will pick up topspin during the first and subsequent bounces and follow forward. Again, if you haven't seen this and the other shots in **NV F.3** yet, check them out next time you're online.

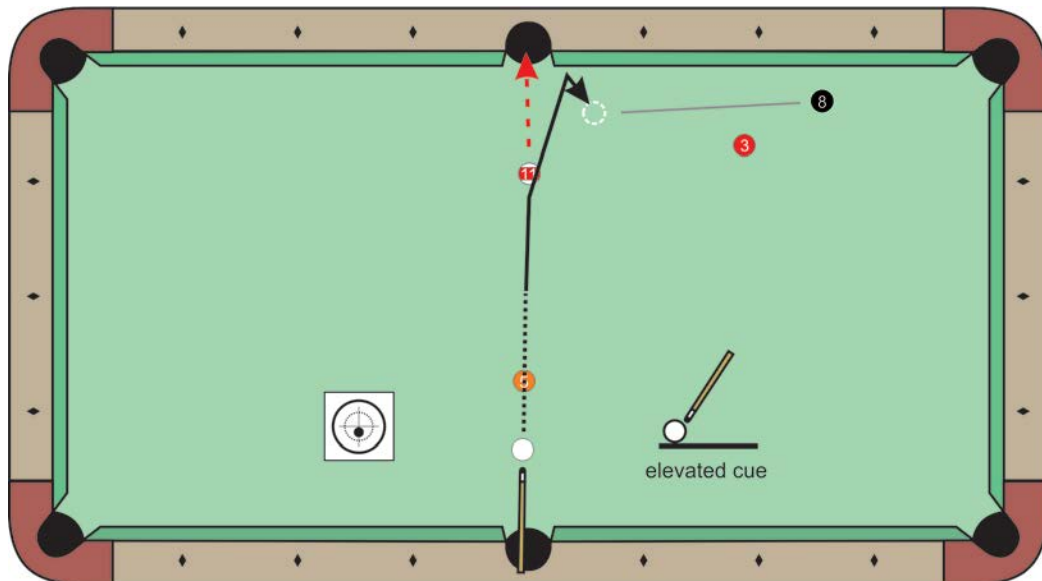


Diagram 3 Short, high jump with follow

Jeremiah and I hope you enjoy our video. For much more information and demonstrations related to jump shot technique and examples, see the “[jump shot](#)” resource page in the FAQ section at billiards.colostate.edu.

Good luck with your game,
Dr. Dave



NV F.3 – Pool stun/draw/follow jump shots at various cue elevations, with smartphone slo-mo

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](http://billiards.colostate.edu) at billiards.colostate.edu.

Dr. Dave is author of “[The Illustrated Principles of Pool and Billiards](#)” book and DVD, and co-author of the “[Video Encyclopedia of Pool Shots \(VEPS\)](#),” “[Video Encyclopedia of Pool Practice \(VEPP\)](#),” “[How to Aim Pool Shots \(HAPS\)](#),” and “[Billiard University \(BU\)](#)” instructional DVD series.