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

Are you tired of missing shots you shouldn't miss? If so, then you are in the right place. In this column, I announce a new aiming system called Dave's Aiming Method or DAM! DAM is the greatest thing since sliced bread! And it is guaranteed to bring your game to the next level!

I am being a little silly about DAM to make fun of some of the outrageous "marketing claims" we have heard about many "aiming systems" proposed over the years. But DAM is a real thing. Although, it isn't really a system. It is just an explanation and detailed summary of how pros and top players aim. This column covers every important element of DAM, each of which is demonstrated and discussed in detail in online video NV
L.38.

Aim While Standing

The most important thing pros do when they aim is visualize the shot and aim while standing, before getting down into their stance. Pros do not use any procedural aiming "systems" for cut shots. They aim intuitively using all the visualization capabilities of their brain trained by countless hours of smart practice and successful experience. They just "see" the shot angle and required line of aim.

Aiming while standing is important because, as shown in **Image 1**, from a higher perspective it is much easier to see the angle and aim of a shot. It is much more difficult to see the required line of aim when down on the shot. Therefore, you should trust the aim you see while standing and not change your aim when in a low stance.



Image 1 View of a shot from a high perspective

If you have difficulty aiming, it can help to practice visualizing the imaginary ghost ball, where the cue ball (CB) needs to be at object ball (OB) impact. It can also help some people to visualize the required contact point between the balls. And it can also help some people to just visualize the amount of CB-OB overlap (or "shot picture") required to create the cut angle necessary. The <u>aiming template</u> in **Image 2**, which can be printed to scale from the link in the YouTube video description, can be cut out and used at the table to practice visualizing the cut angle, ghost-ball position, contact point, and amount of ball overlap for any shot.

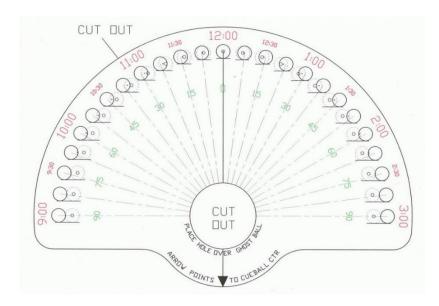


Image 2 Cut shot aiming template

To practice ghost-ball and contact point visualization, it can help to set up a shot with the ball number at the required contact point. As shown in **Image 3**, you can also place an extra CB at the required ghost-ball position. And, if using Red Measle CBs or any marked or striped balls, you can line up the dots, marks, or stripes with the line of the shot at both the ghost ball and CB. All these things can help you train yourself during practice to visualize the angle and aiming line required for the shot.

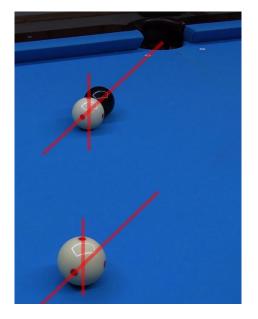


Image 3 Using red-measles balls to visualize aim

Regardless of what you focus on when you aim, it can help to visualize the line to the pocket by standing behind the OB-to-pocket line. This also helps you clearly see the angle of the shot. Then return to the CB to do the most important part of "aiming while standing," where you visualize and align to the required line of aim. This position is where pros do most of their actual aiming, visualizing the line to the pocket, cut angle, ghost ball, and required line of aim. When moving from the pocket line view to the CB view, it can help some people to focus on the required ghost ball position or contact point during the move.

Vision Center Alignment

An important part of "aiming while standing" is carefully aligning your <u>personal vision center</u> with the line of the shot. If you want to find and test your vision center position, see the videos and info on the resource page linked in the video description. Even though I am right-eye dominant, my personal vision center is right between my eyes, so I have my nose lined up with the line of the shot while standing and when down on the shot (see **Image 4**). If I did not, I would see the shot wrong.

Focused and Straight Drop

When most top players get down into their stance, their eyes are focused along the aiming line at the OB target. This helps them drop straight down, keeping their vision center aligned with the line of the shot the entire time (see **Image 4**). This should be the case regardless of how you get down into your stance. In the video, I demonstrate both walking into the stance, and starting with my back foot in place and stepping out into the stance. Regardless, when you get down into your stance with focus on the OB, you are rotating the visualized "shot picture" straight down into the stance. This helps you maintain the "aiming while standing" alignment the whole way down, so you don't need to aim when you are down on the shot, which can be problematic.

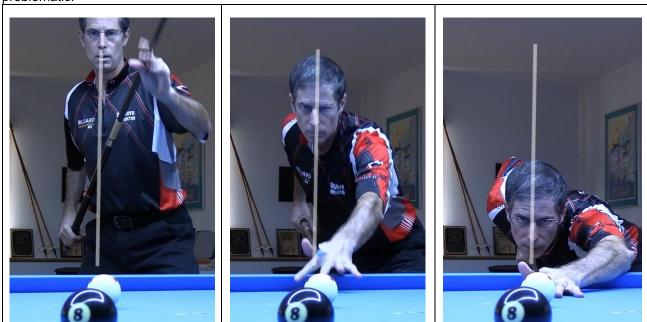


Image 4 Dropping vision center straight down into the stance

Tip and Cue Alignment Check

When a pro is down on the shot, they move their eyes back and forth between the CB and OB to make sure the cue is aligned with the "aim while standing" shot picture. It is best to hold the cue still while doing this so you can better focus on tip and cue alignment. You need to verify that the tip is exactly where you want on the CB and the cue is aligned perfectly with the line of aim. If things are off a little, you need to rotate the cue and shift the bridge hand together small amounts to bring the tip and cue into alignment. As demonstrated in

the video, you cannot just pivot the cue or just shift the bridge hand. Both must be done together to arrive at the correct line of aim with the desired tip contact position.

Focus Lock and Execution

"Focus" is a key word in several DAM elements. Consistent and intense focus is one thing that separates the great players from everybody else. An important step after warm-up strokes and before the final stroke is a pause at the CB. At this point, great players do a final check and then lock their eyes on the OB target before the final stroke. And they execute the stroke with still "laser focus" eyes, still head and body, and good fundamentals, creating a straight stroke with smooth acceleration into the CB for accurate and consistent speed control. If you need help with your stroke fundamentals, see the "best practices" link in the video description.

HAMB

The main reason why pros aim so well is they have put in the practice. There is no shortcut to aiming excellence. You literally need to Hit A Million Balls (HAMB) to reach pro level. The keys are practicing a lot, diagnosing your misses, and learning from your mistakes. Only smart practice makes perfect. If you want some advice on how to practice the most effectively, see the link in the video description.

If you ask pros how they aim, most are not able to express a clear, accurate, and satisfying answer. The main reason for this is they aim intuitively without thinking. They are certainly not using any sort of procedural "aiming system." What makes them so effective is lots of smart practice and using a consistent and purposeful pre-shot routine. It is important to learn how to aim intuitively without cluttering your brain with "aiming system" mumbo jumbo or any thoughts, or by trying to focus on a single thing like a contact point or an imaginary ghost ball. Aiming is a very visual thing that requires the full power of the brain to execute. If you train your brain to aim naturally through smart practice and a consistent and purposeful pre-shot routine, you will develop and improve faster.

Again, everything in this column is discussed and demonstrated in detail in online video <u>NV L.38</u>. For more information and help, see the <u>DAM resource page</u> link int eh video description!

Good luck with your game, Dr. Dave



NV L.38 - HOW TO AIM in Pool and Billiards ... The AIMING SYSTEM of the PROS

<u>PS</u>:

• 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: <u>The Illustrated Principles of Pool and Billiards</u> and numerous instructional DVD series, all available at: **DrDaveBilliards.com**.