

# System for Aiming With Sidespin (SAWS) BHE/FHE Calibration

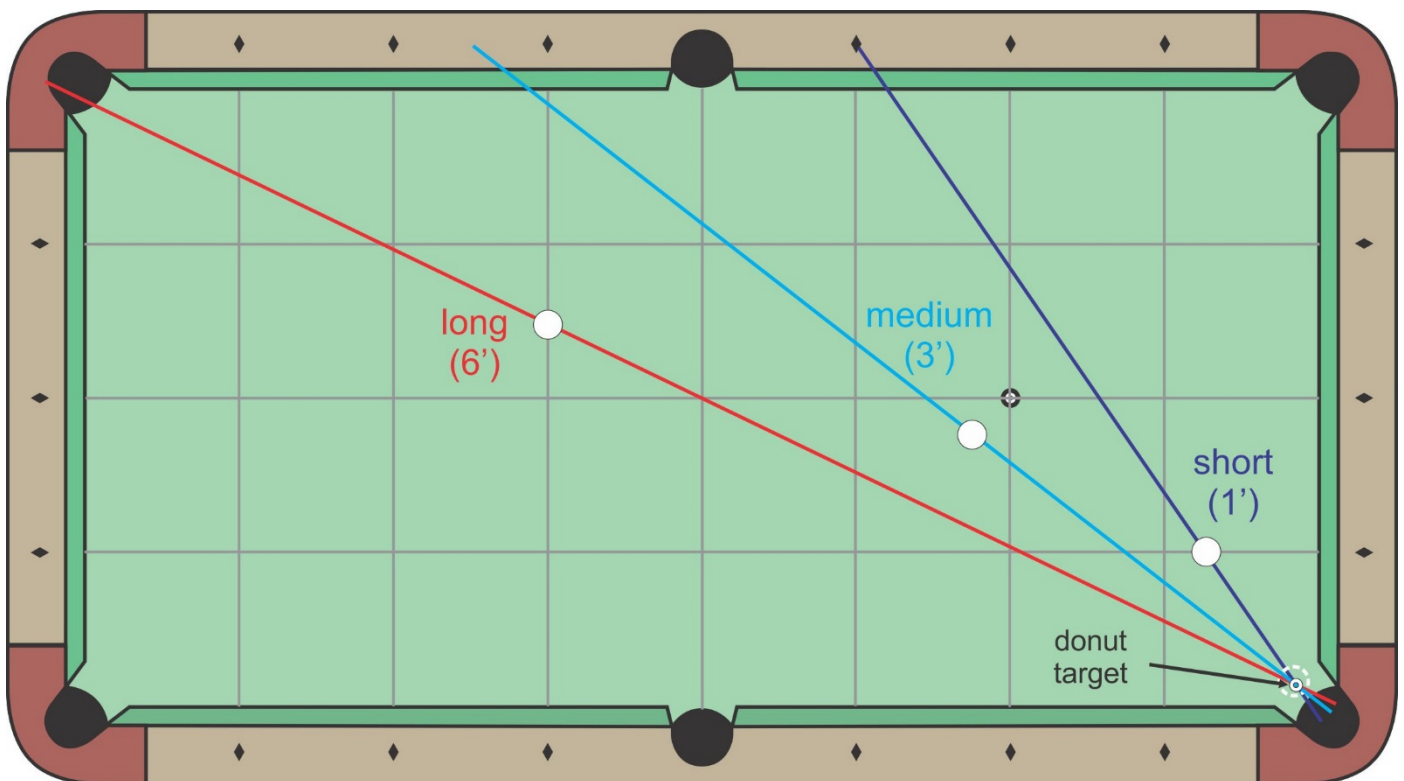
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## SAWS Instructions:

Complete the gridded table on the next page, determining the percentages of BHE and FHE required for each **distance** (short, mid, long) and each **speed** (slow, medium, fast). Use **Dr. Dave's** example percentages as **starting points**.

- Practice the shot speed for a given column first, using the speed definitions on the next page, and then **complete the entire column** before moving to the next.
- Keep the tip on the horizontal centerline of the CB, use your **preferred bridge length consistently**, keep the cue as level as possible (touch the rail), and use close to **maximum sidespin** for every shot.
- If using **right sidespin**, if the **CB goes to the left**, increase the **BHE %** (and decrease the **FHE %**); and if the **CB goes to the right**, decrease the **BHE %** (and increase the **FHE %**).
- Continue adjusting until the CB passes **over the pocket donut** with good accuracy.
- If you are **left-handed**, you can **switch** to the other side of the table to make the shots more reachable.
- An **open bridge** is recommended to help make the BHE pivots more accurate and consistent.



# SAWS BHE/FHE Percentages

Preferred bridge length: \_\_\_\_\_

Use the top (8.5") and side (11") of the page, along with the ruler to the right, to measure this.

## Speed definitions (hitting from the head string):

- "slow" – ¼ stroke off 1 rail back to the head string
- "medium" – ½ stroke off 2 rails to the center string
- "fast" – ¾ stroke off 3 rails to the foot string

## Tip on Horizontal Centerline with Level Cue

		speed		
		slow	medium	fast*
distance	short (1')	BHE: ___% FHE: ___%	BHE: ___% FHE: ___%	BHE: ___% FHE: ___%
	mid (3')	BHE: ___% FHE: ___%	BHE: ___% FHE: ___%	BHE: ___% FHE: ___%
	long (6')	BHE: ___% FHE: ___%	BHE: ___% FHE: ___%	BHE: ___% FHE: ___%

\*: If your preferred bridge length is longer than your cue's natural pivot length, you will need to use a smaller pivot length for fast-speed-shot BHE, but you can extend your bridge length after the pivot if necessary. Alternatively, you can use a negative (reverse) FHE and then pivot at your normal bridge length to the final offset with all BHE (100% from the negative FHE position).

## Corrections:

- **Below-center hit** (swerve delayed): +10% BHE (**B = backspin = more BHE**)
- **Above-center hit** (sooner swerve): +10% FHE (**F = follow = more FHE**)
- **New/slick cloth** (swerve delayed): +10% BHE
- **Old/sticky cloth** (sooner swerve): +10% FHE
- **Cue elevation** (more and sooner swerve; avoid whenever possible):  
less BHE, more FHE (and even reverse BHE/FHE for larger elevations)

Example (Revo LD Shaft with 12" bridge length and 20" natural pivot length on used Simonis 860):

		speed		
		slow	medium	fast
distance	short (1')	BHE: 60% FHE: 40%	BHE: 80% FHE: 20%	BHE: 90% FHE: 10%
	mid (3')	BHE: 40% FHE: 60%	BHE: 70% FHE: 30%	BHE: 85% FHE: 15%
	long (6')	BHE: 30% FHE: 70%	BHE: 60% FHE: 40%	BHE: 80% FHE: 20%

Increase BHE% (or shorten bridge length) for a shaft with a shorter natural pivot length (i.e., more squirt).

