## TP B. 28

Sliding-Bank-Shot Table Comparisons From Careful Measurements
supporting:
"The Illustrated Principles of Pool and Billiards"
http://billiards.colostate.edu
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## for background and demonstrations see:

"NV L. 30 - SLIDING BANK SHOT DIAMOND SYSTEMS ... How to Aim Banks at Fast-Speed or Close-to-the-Cushion:"
https://billiards.colostate.edu/normal-video/nv-l-30/
and "NV L. 32 - TWICE-PLUS-TENTH ... The Most Useful Bank Shot Diamond System You'll Ever Learn:"
https://billiards.colostate.edu/normal-video/nv-l-32/

Carefully Measured Through-Diamond Points on Opposite Rail (meas) for Each Diamond Aim Point on the Banking Rail (aim):
9' Olhaussen (Dr. Dave's video table) Bank Reference Lines: $\quad$ aim :=( $\left.\begin{array}{llllll}.5 & 1 & 1.5 & 2 & 2.5 & 3\end{array}\right)^{\mathrm{T}} \quad \operatorname{meas}:=\left(\begin{array}{llll}1.38 & 2.72 & 3.89 & 5.07\end{array} \quad 6.38 \quad 7.74\right)^{\mathrm{T}}$
9' "Red Label" Diamond: $\quad$ meas $_{R D}:=\left(\begin{array}{llllll}1.40 & 2.93 & 4.52 & 5.60 & 6.92 & 8.30\end{array}\right)^{\mathrm{T}}$

7' Valley Bar Box: $\quad$ meas $_{V}:=\left(\begin{array}{llllll}1.51 & 2.74 & 4.12 & 5.19 & 6.52 & 7.54\end{array}\right)^{T}$
9' Brunswick Gold Crown: $\quad{\quad m^{2 a s}}_{\mathrm{GC}}:=\left(\begin{array}{llllll}1.27 & 2.88 & 4.38 & 5.38 & 6.56 & 7.96\end{array}\right)^{\mathrm{T}}$
NOTE - all the tables, expect the 9' Olhaussen, were under slightly humid conditions, with old, worn-in cloth.

7' Diamond Bar Box: $\quad$ meas $_{\mathrm{DB}}:=\left(\begin{array}{llllll}1.6 & 3.31 & 4.94 & 6.22 & 7.55 & 8.59\end{array}\right)^{\mathrm{T}}$

Dr Dave's Twice-Plus-Tenths Diamond System (from TP B.27):

$$
\begin{aligned}
& \mathrm{D}:=12.5 \quad \mathrm{~d}:=\frac{4.25}{\mathrm{D}} \quad \mathrm{w}:=\frac{48.25}{\mathrm{D}} \quad \mathrm{f}:=\frac{1}{5} \\
& \mathrm{x}_{\text {opt }}(\mathrm{a}):=\mathrm{a}-\frac{(1+\mathrm{f}) \cdot \mathrm{a}}{\mathrm{w}} \cdot \mathrm{~d} \\
& \mathrm{a}_{\text {opt }}(\mathrm{x}):=\frac{\mathrm{x}}{1-\frac{\mathrm{d} \cdot(1+\mathrm{f})}{\mathrm{w}}} \quad \quad \operatorname{opt}(\mathrm{a}):=(2+\mathrm{f}) \cdot a+\frac{(1+\mathrm{f}) \cdot \mathrm{a}}{\mathrm{w}} \cdot \mathrm{~d}
\end{aligned}
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Diamond Aim Point on Banking Rail

## Conclusions:

1) The twice-plus-tenth system matches measured data very well on typical tables under typical conditions.
2) The 9' Olhaussen and 7' Valley tables banked very close to "on system."
3) A Brunswick Gold Crown usually plays "on system," but under humind and used-cloth conditions, it plays a little short, especialy at medium bank angles.
4) Diamond tables (9' Red Label and 7' bar box) banked very short, especially at larger bank angles. For more info, see: https://billiards.colostate.edu/faq/bank-kick/Diamond/
5) The 7' Diamond bar-box banked almost a diamond shorter than typical "on system" tables!
