

EXECUTIVE SUMMARY: 2024 PBA STRING PIN REPORT

Topic: Evaluation of QAMF Edge String pin machines (USBC-Approved version) and their suitability for Professional Bowlers Association (PBA) competition.

I. Background

Early in 2024, several bowling centers equipped with the new USBC-Approved QAMF string pin machines expressed interest in joining the PBA Regional Tour.

The USBC (United States Bowling Congress) approved certain string pin machines starting August 1, 2023. Additionally, they determined that scores and averages on these systems do not require adjustments compared to traditional free-fall pinsetters.

However, not all string pin machines are certified/approved; only those with strings of at least 54 inches in length meet the USBC standards. A link to the USBC studies can be found here.

Objective: The PBA conducted a series of tests to determine if these certified string pin machines could maintain the integrity of professional-level play.

II. Differences Between Free-Fall and String Pin **Machines**

Free-Fall Machines: Pins are placed freely on the lane and knocked down without any attachments.

String Pin Machines: Pins are connected to strings that are used to reset the pins. USBC-Approved string pin machines use longer strings (54 inches) to simulate free-fall action while minimizing tangles (breakdowns).

continued on page 6

INTRODUCING THE PBA ELITE **LEAGUE: BATTLE OF THE BRANDS**

Manufacturing brands to compete all season long in refreshed PBA Elite League format

by Nolan Hughes

The PBA's premier team competition will have a brand new look in 2025.

The PBA Elite League: Battle of the Brands introduces teams representing eight major bowling ball manufacturers: Brunswick, DV8, Ebonite, 900 Global, Hammer, MOTIV, Roto Grip and Storm.

The adapted structure taps into the existing fandom behind bowling manufacturers and accentuates the ongoing rivalry between them.



With a point system comparable to Formula 1's Driver and Constructor standings plus an additional strategic element, the new format retains the season-long component established

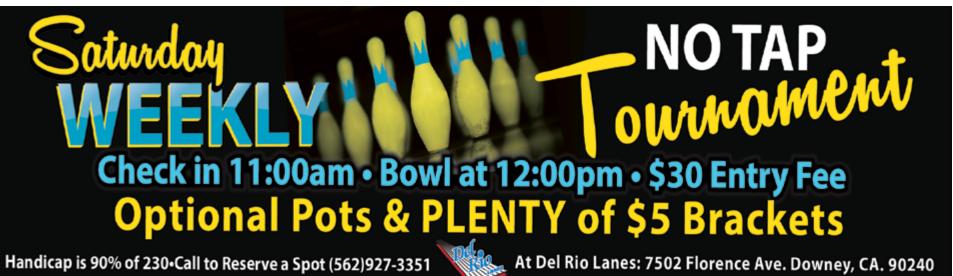
with the 2024 PBA Elite League.

E-mail us at:

Sales@Strike12Creations.com

The rivalries between continued on page 5





FREE personalized name on the back! Jerseys come in

for adding any bowling company logos.

youth, ladies and men's styles. Collar styles: Crew, Quarter zip,

Polo and V-neck. Additional charges for length modifications and

GREATER LA COUNTY USBC

WOMEN'S CHAMPIONSHIPS

TEAM EVENT with VIRTUAL SINGLES

GLAC USBC will be donating an additional \$500 Prize Money!

CORBIN BOWL

19616 Ventura Blvd Tarzana, CA 91356 (818) 996-2695

Sun, January 19, 2025 – 9am

KEYSTONE LANES

11459 Imperial Hwy. Norwalk, CA 90650 (562) 868-3261

Sat, January 25, 2024 – 1pm

Sign up for SWEEPERS ROUND ROBIN DOUBLES. Overall payout (ratio 1:8) per location.

- Open to Greater LA County (GLAC) USBC female members
- Trio Team format / 3 games per event
- USBC Certified
- Brackets and Side Pots Available
- Handicap: 90% of 220
- Entry Fees: \$105 Team / \$25 Virtual Singles
- Questions? Call (562) 426-2030 or email: info@glacusbc.com



VISIT GLACUSBC.COM TO ENTER ONLINE AND FOR MORE INFO!

GREATER LA COUNTY USBC OPEN CHAMPIONSHIPS

TEAM EVENT with VIRTUAL SINGLES

GLAC USBC will be donating an additional \$500 Prize Money!

CORBIN BOWL

19616 Ventura Blvd, Tarzana, CA 91356 (818) 996-2695

Sat, January 18, 2025 – 1pm

Open to the first 26 entries!

KEYSTONE LANES

11459 Imperial Hwy., Norwalk, CA 90650 (562) 868-3261

Sat, January 25, 2024 – 1pm Sun, January 26, 2024 – 9am

Sign up for SWEEPERS ROUND ROBIN DOUBLES. Overall payout (ratio 1:8) per location.

- Open to Greater LA County (GLAC) USBC adult members
- 4 Person Teams / 3 games per event
- USBC Certified
- Brackets and Side Pots Available
- Handicap: 90% of 220
- Entry Fees: \$140 Team / \$25 Virtual Singles
- Questions? Call (562) 426-2030 or email: info@glacusbc.com



VISIT GLACUSBC.COM TO ENTER ONLINE AND FOR MORE INFO!

owalik Family hiropractic

Dr. Daryl Kowalik, DC

Lake Forest, CA 92630

23731 El Toro Rd., Suite C

Located at corner of Rockfield

in the Home Depot Center.

Call us if you need help with:

-Migraines -Headaches -Neck Pain -Pinched Nerves

-Upper, Mid, and Low Back Pain-Disc Her-

niations and Bulges

-Sciatica

-Scoliosis

-Digestive Issues

-Heartburn -Auto Collision Injuries

> -Whiplash -Numbness

-Tingling -Asthma

-Allergies

-Pain with Pregnancy -Menstrual Pain

-Ear Infections

-Wellness



TOM COLLINS Tops Senior Laughlin League

by Frank Weiler

REDLANDS - Tom Collins is a great bowler. He is lane savvy with a knowledge of lane patterns and bowling equipment seldom seen by league bowlers. As a **Bowling Savant** he has been rolling honor scores and high averages for decades.

Now as a senior bowler he continues to perform on the lanes as if time is standing still. His ball speed hasn't slowed and the revolutions he imparts to a bowling ball hasn't been reduced with age. This makes Tom just as talented and just as accomplished a bowler as he was thirty years ago. Not many senior bowlers can make such a claim.

While many senior bowlers reminisce about the "Good old Days" Tom is living the "Good old Days" right now. He has adjusted his bowling game to excel on current lane conditions so that he is scoring as if it is 1990 all over again. That's why Tom is topping the Senior Laughlin League in average today just like he topped many of his leagues in 1990.

After rolling a huge 680 scratch series and 248 scratch game in the Senior Laughlin League last week, Tom leaped to the top of the League "LEADER BOARD".

The TOP TEN bowlers of the Senior Laughlin League follow:

Tom Collins	201
Claude Heffington	195.95
Lind Baldwin	195.90
Tim Eshelman	193
Rick Hudson	192
Ray Gaunt Jr.	191.8
Bob Corrigan	191.3\
Mike Pulchalski	189
Mike Mills	187
Vince Vasquez	183.9

The League wishes to give a "SHOUTOUT" to Claude Heffington for rolling last weeks league high scratch game of 259 and Tom Collins for rolling last weeks league high scratch series of 680.

The exploits of these great bowlers prove again that "CALIFORNIA BOWLERS ARE THE BEST BOWL-**ERS IN THE WORLD"**

NEW PATIENTS

CONSULTATION. **EXAM, X-RAYS AND REPORT** \$37!

to schedule your

Call 949-380-8883 appointment!

We Provide Effective and Specific Analysis and Care, Relieving Pain By **Restoring Your Health Naturally!**

> Watch our video w/patient testimonials at

DrKowalik.com

How Long Has It Been?

by Dave Williams

It was a surprise to me when I read the headline that Randy Pedersen was just elected to the Bowling Hall of Fame. That's the USBC Hall of Fame, not the PBA Hall of Fame. Randy has been a member of the PBA Hall of Fame since 2010. But it still came as a bit of a shock that he was not already a member of the USBC Hall of Fame as well.

How long has it been? That was my immediate first thought after learning that Randy had finally been elected in the Superior Performance category. I could not find Pedersen's name among the USBC Open Championships records, so my assumption is that it must have been the 20-year qualification that was holding up his nomination.

Considering all that Mr. Pedersen has done in the world of bowling makes you wonder how he was even able to compete in 20 of the USBC tournaments. And how is it that he wasn't nominated for Meritorious Service prior to this latest announcement?

Randy was born in the small town of Shallotte, N.C., just a couple of miles from the Atlantic Ocean, near Myrtle Beach, on May 28th, 1962. That was another surprise to me, as I always thought he was born in Santa Maria, Calif., where he spent his early years developing his craft at Rancho Bowl, a center that still exists today.

The first time I remember hearing his name, he must have been a hot, up-andcoming young bowler in the junior leagues when I was participating in the annual PBA Regional event held there. Although I never bowled that well at Rancho Bowl, the "free" steak barbecue for all the PBA bowlers and participants after the Pro-Am was worth the drive!

As a bowler on the PBA Tour, Randy distinguished himself with 13 titles, being elected to their Hall of Fame way back in 2010. Pedersen captured one of the triple crown events, the PBA National Championship, in 1987, his only major title. During a ten year span (1986-1995) he captured 11 national titles. His final two victories were at the Indianapolis Open in 1999, and the Pepsi Open in 2002. Pedersen also has one victory on the PBA50 tour, the Dayton Classic, in 2013, giving him 14 overall titles.

Randy's Meritorious Service and Body of Work

While not competing on the lanes, Pedersen started his broadcasting career as a lane-level reporter on ABC's Pro Bowlers Tour. His reporting was so refreshing because he was still "one of the guys" that brought about some fascinating interviews. Nelson Burton Jr., the color commentator for ABC at the time, must have seen something special in Pedersen and encouraged his contributions.

It wasn't long after that Burton ended his career with ABC-TV, when the PBA Tour left for a more lucrative agreement with ESPN. He stayed for a couple of years on ESPN, but then decided to call it quits. Randy Pedersen stepped into the job vacated by Burton in 2001, and he's been there ever since (first with ESPN, and now with Fox).

It's hard to believe that next year Randy will have surpassed the number of years, 24, that Burton served as color analyst with ABC and ESPN, although Burton did return on many occasions for cameo spots after his retirement.

Just like Billy Welu and Nelson Burton Jr. before him, Pedersen has developed a slew of catch phrases. A couple of my favorites are: "It's wetter than an otter's pocket out there," and "Give me some coffee to go with that sweet roll."

The Stone 8

Randy Pedersen will always be remembered for the solid 8 pin he left in the tenth frame against veteran Ernie Schlegel at the 1995 Bayer-Brunswick Touring Players Championship. Pedersen needed the first strike to win, but the "stone 8" on his first roll in the tenth gave Schlegel a 237-236 victory, and the \$40,000 first prize.



Randy Pedersen

Ernie Schlegel was beside himself after the solid 8 pin, as he raised his arms in victory. "I don't believe it! I don't believe it! I don't believe it! Unbelievable. Yeh, Yeh, Yeh! One for the old people! I am the greatest! Muhammad Ali." For those of you that may have missed it, here's the video from that amazing show, provided by Mr. YoH:

https://www.youtube.com/watch?v=Go9ECPMNgnc

The Pedersen Legacy

Petersen has been admired for his all-encompassing knowledge of the game. He distinguished himself with a Hall of Fame career on the lanes, and then continued with his broadcasting occupation that kept bowling contemporary, with a bit of history thrown in for good measure.

Randy once said in an interview with Lyle Zikes, reportedly appearing in the June 2002 issue of Bowling Digest, regarding his broadcasting career: "One thing I learned is if you can bring enthusiasm to the table, sometimes it doesn't really matter what is coming out of your mouth. The viewing audience senses the enthusiasm."

- Excerpts of this article adapted from "Five Inductees To Be Enshrined in USBC Hall of Fame Class of 2025," by Dave Schroeder at bowl.com
- Statistics provided from Randy Pedersen player profile at pba.com



ESTERN PACIFIC

1216 W. Grove Avenue, Orange, CA 92865

Distributors For:

- Qubica / A.M.F.
- Brunswick
- Century Lane Machines
- NEO Technologies
- Pinsetter Parts Plus
- Quality Bowling W.P. Rental Shoes
- HOME OF Martin Academy Pinsetter/Pinspotter Training Facility

We Specialize in:

- Resurfacing
- **Lanes in Private Homes**
- Pinsetter Parts & Supplies
- New Lane Installations

Online Ordering System at www.wpbowling.com **All Brands of Lane Conditioners** 800 - 595 - 2695 • Fax: 714 - 974 - 2681





2025 CALIFORNIA OPEN & WOMEN'S STATE CHAMPIONSHIPS

Open to all 2024-25 USBC certified adult members of the California USBC Association



TEAM, DOUBLES, SINGLES & ALL-EVENTS: 4th STREET BOWL



1441 N. 4th Street, San Jose, CA 95112 • (408) 453-5555

HANDICAP:

90% of 220

Optional Scratch Division available in each event! Enter on-site prior to competition

Separate OPEN & WOMEN'S Divisions

ENTRY FEES:

\$40 Per Event Per Person

Sign up early... Some squads are full!

SQUAD TIMES:

Saturday:

12:00pm & 4:00pm

Sunday:

9:00am & 1:00pm

ENTRY FORMS & RULES AT CALUSBC.COM





\$7,000

Added Prize
Money from



- ★ Prize Money awarded in Team and Singles event
- ★ USBC Certified
- ★ BOWL EVERYTHING IN ONE DAY!

The Handicap Team Champions will earn a FREE team entry into the 2026 State Championships!

Each event is three games total bowled on the same pair of lanes.

DOUBLES will be virtual using team/singles scores per squad (Round Robin Sweeps) and will be accumulated into one overall doubles results.

Questions? Contact (562) 449-4527 or E-mail: info@calusbc.com

SQUAD DATES:

Check CALUSBC.com for availability

April 26-27

May 3-4

May 10-11

May 17-18

May 24-25

Memorial Weekend

Jersey Offer
for Tournament
Boulers!
Allow 5-6 weeks

\$10 OFF* COUPON: STATE2026

Order online at Strike12Creations.com



The Open & Women's Singles Champion will earn a FREE jersey!

Battle of the brands continued from page 1

manufacturing brands stem from the immense loyalty felt across all levels of the organization, from players and employees, to fans and executives.

In fact, Tyler Jensen, president of Storm Products, Inc., will be managing one of Storm's three teams himself. Jensen emphasized the pride Storm founder Bill Chrisman, who passed in September 2023, took in watching his staff players succeed.

"I've spent years watching Mr. Chrisman's face light up as Storm staff members triumphed on television using our high-performance bowling equipment," Jensen said. "His love for professional bowling ran deep. In the early days, Mr. Chrisman and his small team fought to have PBA players try his equipment. Today, we're fortunate to have a strong team of players who choose to use our products to compete and are proud to wear the logo." Jensen's pride is echoed and perhaps elevated by MOTIV, the lone independent manufacturer in the PBA Elite League.

Scott Hewitt, the Vice President of Sales & Marketing at MOTIV, said the PBA Elite League's authentic competition allows each brand to showcase its "real team of pros." "This is the kind of genuine rivalry that speaks to fans and players alike — it's about loyalty, passion, and true brand representation," Hewitt said. "For bowlers who already have a favorite brand, it's going to be electric seeing their brand battle it out. And for those who haven't committed to a brand yet, this format is clear, relatable, and easy to get behind — like cheering on Team USA."

For aspiring PBA Tour players, signing a staff contract with a bowling ball manufacturer represents a rite of passage. Now, a staff contract grants more than an endless supply of bowling balls: it can be a spot on one of the most exclusive bowling teams in the world. The company with the most staff players on tour is Brunswick, who will have four teams representing their brands in the PBA Elite League.

Bugsy Kelly, Brunswick's director of marketing, will be managing the Ebonite team. He said Brunswick is excited to embrace the new team format. "We are excited to be part of this evolution in the sport." Kelly said. "This new format presents an incredible opportunity for our established and rising stars to showcase their talent individually and, at the same time, highlight the importance of being part of a team. We respect our competitors, but look forward to hoisting the trophy at the end of the season."

While friendships and doubles teams frequently cross brand lines on the PBA Tour, the animosity between brands bubbles under the surface at all times perhaps best exemplified by among the most guotable moments in recent PBA memory:

"Take that you bottle b****!"

Who could forget the now-infamous phrase Sean Rash bellowed at Jason Belmonte more than a decade ago. What is often lost to history is that Rash, a former Brunswick and current 900 Global staffer, dropped the memorable quote during a Brunswick vs. Storm match as part of a competition between manufacturing brands. nThe intensity of that rivalry — not only between Rash and Belmonte, but the brands as a whole — represents the ethos of the revamped PBA Elite League.

ROSTERS

All PBA Tour players who meet the criteria for 2025 PBA Tour priority entry players who finished top 43 in 2024 PBA Tour competition points, finished in the top 12 in PBA Tour Trials, or won a PBA Tour title between 2015-2024 — are eligible for the 2025 PBA Elite League. A complete list of eligible players can be found at the bottom of this page.

Each brand will be able to roster 6-15 brand-sponsored eligible players. All rosters must be finalized by Jan. 1, 2025 and will be revealed Jan. 3 on BowlTV.

A midseason transaction window will be open Feb. 17-23, 2025. During that time, brands may drop a player(s) from their roster, add a player(s) who is not rostered, or trade a player(s) to another brand. Both brands in any trade must agree.

SCORING

The same competition points used to determine PBA Playoffs standings will count concurrently toward the PBA Elite League. Before each singles title event on the 2025 PBA Tour, brand managers will each select five players from their rosters — only the points earned by those five players will count for their teams.

Standings will be updated following each singles title event. Teams will earn points in each singles title event through April's PBA Tournament of Champions. Points are weighted based on the duration and prestige of the title event.

Standard-point events: PBA Animal Pattern 1-4 Championships (part of the PBA World Series of Bowling XVI)

Double-point events: PBA Delaware Classic, PBA Illinois Classic, PBA Pete Weber Missouri Classic, PBA Nevada Classic, PBA Tournament of Champions

Triple-point events: U.S. Open presented by Go Bowling, PBA World Championship, USBC Masters, PBA Players Championship

FINALS

The PBA Elite League: Battle of the Brands Championship will be held April 26-27 at Thunderbowl Lanes in Allen Park, Mich. Teams will select five players to compete in the two-part stepladder.

Teams will be seeded following the regular season finale in the PBA Tournament of Champions. The No. 4-8 seeds will compete April 26 (3 p.m. ET on FS1)



with the winning team advancing to meet the top three seeds in the final round on April 27 (Noon ET on FOX).

All matches will utilize the baker format as seen in previous iterations of the PBA Elite League. The stepladder will feature single-game matches culminating with a Race-to-Two championship match.

The champions will earn \$100,000 to be allocated to its players by the manufacturer.

EQUIPMENT

During the regular season, players will be able to use any product-registered bowling ball available to them. For example, Roto Grip players can throw Storm and 900 Global equipment; Hammer players can throw Brunswick, Ebonite, Track, DV8, Radical and Columbia 300 equipment.

In the PBA Elite League: Battle of the Brands Championship, however, players will be limited to their single brand's equipment. To continue the previous example, Roto Grip players will only be able to throw Roto Grip equipment in the finals not Storm or 900 Global.

Furthermore, since not all brands produce a urethane bowling ball, no player may use urethane equipment during finals matches. The tournament director may grant an exception for equipment used exclusively for spares.

TEAM MANAGERS

BRUNSWICK — Corey Dykstra, CEO of Brunswick Bowling Products **DV8** — Billy Orlikowski, Brunswick Director of Consumer Product Management **EBONITE** — Bugsy Kelly, Brunswick Director of Marketing 900 GLOBAL — Gary Hulsenberg, Storm Vice President of Marketing **HAMMER** — Brian Graham, Brunswick VP of Consumer Products **MOTIV** — Brett Spangler, MOTIV Tour Rep ROTO GRIP — Chris Schlemer, Roto Grip Brand Manager **STORM** — Tyler Jensen, President of Storm Products, Inc.

ELIGIBLE PLAYERS

DeeRonn Booker Andrew Anderson Deo Benard AJ Chapman AJ Johnson Dick Allen Andrew Hall DJ Archer Anthony Simonsen Dom Barrett **Bailey Mavrick EJ Tackett** Bill O'Neill Eric Jone BJ Moore François Lavoie Boog Krol Gary Faulkner Jr. Brandon Runk Graham Fach\ Hayden Stippich Cam Crowe Carsten Hansen Jake Peters Jakob Butturff Chase Nadeau **Chris Barnes** Jason Belmonte Chris Via Jason Sterner Cristian Azcona Jesper Svensson Chris Sloan **Justin Knowles** Keven Williams Darren Tang

Kevin McCune Kim Bolleby Kris Prather Kyle Sherman **Kyle Troup** Marshall Kent Matt Russo Matt Sanders Matt Ogle Mitch Hupé Nate Purches Nate Stubler\ Nathan Bohr Osku Palermaa Packy Hanrahan Parker Bohn III Patrick Dombrowski Richie Teece

Ronnie Russell Ryan Barnes Ryan Ciminelli Sam Cooley Santtu Tahvanainen Sean Lavery-Spahr Sean Rash Shawn Maldonado Stu Williams Thomas Larsen Tim Foy Jr. Tom Daugherty Tom Smallwood Tomas Käyhkö **Tommy Jones** Wes Malott Zach Wilkins

String Pins continued from page 1

Key Considerations:

Strings on string pin machines can affect pinfall dynamics, potentially affecting scoring.

Approved string pin machines aim to closely replicate free-fall conditions but may behave differently under certain conditions.

III. Testing Process and Key Findings

Testing Locations:

Conducted at three bowling centers: Lehigh Lanes (FL), EZ Bowl (IN), and Foxx View Lanes (WI).

Tests also included different lane patterns and a range of PBA-level bowlers.

Data Analysis:

Lanetalk technology was utilized to gather data from 2024 PBA National Tour events on free-fall machines.

Scoring was not directly compared between the 2 types since it can be easily influenced with lane patterns and other scoring factors.

Key metrics analyzed included:

First-ball shot outcomes Leave rates (e.g., corner pins, splits) Spare conversion percentages Videos and surveys were also reviewed.

Findings:

1. Strike and Spare Rates:

The strike percentage on QAMF string pin machines was 48.52%, compared to 57.62% on the national tour (free-fall machines).

Higher rev-rate players noted fewer "messenger" pins on string machines, requiring bowlers to hit higher in the pocket for consistent pin carry.

2. Impact of High-Speed Bowling:

A specific test with a bowler throwing at speeds of 27-30 mph confirmed that increased speed did not result in higher scores. The average score using highspeed techniques was lower (205) than the bowler's previous regional average (215).

3. Scoring Fairness:

No significant advantage was found for specific styles (e.g., high rev, two-handed techniques). Players needed to adjust to the difference in pin action but generally found the machines to be fair.

4. Pin Respotting and Out-of-Range Issues:

String machines automatically reset pins to their original positions, unlike free-fall machines that may have more nuanced handling of out-of-range pins. The PBA will follow USBC rules for handling these situations.

5. Surveys and Player Feedback:

Surveys conducted with participants showed that 91% of bowlers would be willing to compete in PBA events on USBC-Approved string pin machines. Very few re-racks (5 in over 1,350 games) were reported, suggesting improved speed of play.

IV. Technical Challenges and Solutions

Mode Switching: During early tests, issues arose when string pin machines were accidentally set to "recreational mode" instead of "USBC-Approved mode." The recreational mode has shorter strings (46 inches), which led to more unique pinfall scenarios. The manufacturer has since implemented a display feature showing the current mode on center desks. They also plan to add this feature to lane monitors.

Maintenance Observations:

Approved mode requires someone on-site to handle tangles, especially with high-speed play, though a full-time mechanic is not necessary.

The machines eliminate deadwood and out-of-range delays, contributing to faster gameplay.

V. Conclusion and Recommendations

The PBA's tests and data analysis have determined that USBC-Approved QAMF Edge String pin machines are acceptable for professional-level competition. The machines maintain the integrity of the sport while offering benefits like reduced maintenance and increased efficiency.

Next Steps:

Integration: QAMF Edge String pin machines in USBC-Approved mode can be utilized in PBA Tour events. For 2025, we have several PBA Regional tournaments planned. There are no title events currently scheduled for the PBA National

Build Your Own Rocket!

Private Engineering Classes

Dive into the world of aerospace and physics Hands-on learning guided by expert engineers

Get certified in rocketry by the National Association of Rocketry

TKeep your fully developed rocket!

Limited Spots Available!

Contact Us to Launch Your Engineering Journey Today! (949)409-9501 - stemulateoc@gmail.com

DE LUCIA'S

ITALIAN RESTAURANT & BAR

23600 Rockfield Blvd. Lake Forest, CA 92630

Across from Forest Lanes

Join us for meals to remember!

Monday - Thursday: 4pm - 8pm

Friday & Saturday: 11am - 8pm

Sunday: 11am - 9pm

Happy Hour

Sun - Thurs All Day

Fri, Sat 11am to 6 pm

Further Testing: The PBA may conduct additional evaluations of other certified string pin machines in the future to ensure consistency.

Final Statement: QAMF Edge String pin machines meet the PBA's standards for fairness and competition. They do not pose a significant advantage or disadvantage to any style of play and are deemed a viable option for professional events.

Appendices

Appendix A: Links to live-stream videos and key moments from test events.

Appendix B: Summary of survey results from participants.

Appendix C: Detailed statistical data comparing string pin machines to free-fall systems.

Appendix A: Video links

Reminder that you can get fortunate on any pinsetter

https://youtu.be/SiDd-IL6nJg?si=VujtaP2M6KZtpPNr

Links to String pin Regional events:

Foxx View Lanes - Waukesha, WI

https://www.youtube.com/watch?v=SpeUM55OzsQ&list=PLwuUW8zaol88HyC4 4Yxltyl34KBNT17w-&index=1

https://www.youtube.com/watch?v=0uuCJE8JDgs

https://www.youtube.com/watch?v=NjlA23xCVAE

https://www.youtube.com/watch?v=ujTYZmRFtdA

https://www.youtube.com/watch?v=4lyaffDgL8s

EZ Bowl - Bluffton, IN

https://www.youtube.com/watch?v=HmG9YKAWIM0&t=28s

https://www.youtube.com/watch?v=T9GmpsjwM4M

https://www.youtube.com/watch?v=xUF2Jn9qFvQ

Lehigh Lanes - Lehigh Acres, FL

https://www.youtube.com/watch?v=Q4UAe3EwFe4

https://www.youtube.com/watch?v=j8A0UiK8jpg https://www.youtube.com/watch?v=MDHtxSTGUF0

Appendix B: Key Findings from the 2024 String pin Surveys

The surveys conducted among participants in the 2024 string pin test events revealed the following insights:

1. Willingness to Compete:

91% of respondents said they would participate in an event that awards a PBA title using string pin machines.

2. Re-racks and Dead-Wood Issues:

7% reported needing a re-rack (once). 5 in over 1,350 games. 0% encountered dead-wood issues.

3. Impact of Strings on Pinfall:

Strings could both aid in pinfall (e.g., a string knocking down a pin from above) and hinder it (e.g., strings preventing a messenger pin from hitting another pin).

4. Perception of Difficulty:

68% felt that achieving strikes was more challenging on string pin machines compared to traditional free-fall machines.

5. Quotes from PBA Members:

"The string pins certainly gave me more instant and accurate feedback on how my balls energy was being used. Wrong energy usage was much more obvious to me."

"Corner pins don't always carry as well. Especially if you don't go high flush."

"Biggest thing is that corners are more prevalent and carry is just slightly harder in general"

"The strings do cause some interference in both striking and spare conversions. This is true for all players but in my opinion this is still is a fair playing field as every player has the same chance of filling frames."

"Look at the finals of each event. The best still rise to the top."

- 1. Walter Ray Williams Jr. def. Ryan Shafer in FL
- 2. Kyle Troup def EJ Tackett in IN
- 3. EJ Tacket def Marshall Kent in WI

Appendix C : Data Comparison - PBA National Tour vs. String pin Tests (2024)

Free-fall vs. String pin Machines

Below is a comparison of key metrics between free-fall pinsetters (PBA National Tour) and string pin machines (test events):

1. Strike Percentage:

Free-fall: **57.62%** String pin: **48.52%**

2. Most Common Non-Strike Leave:

Free-fall: **10-pin (21.92%)** String pin: **10-pin (20.08%)**

3. Overall Spare Conversion Rate:

Freefall: **75.69**% String pin: **69.91**%

4. Notable Leave & Spare Rates:

7-10 split:

Leave rate: 1.70% (Free-fall) vs. 1.16% (String pin) Conversion rate: 0.94% (Free-fall) vs. 0.00% (String pin)

2-10 split:

Leave rate: 1.77% (Free-fall) vs. 1.43% (String pin) Conversion rate: 21.18% (Free-fall) vs. 16.00% (String pin)

1-2-4-10 washout:

Leave rate: 0.47% (Free-fall) vs. 0.94% (String pin) Conversion rate: 30.23% (Free-fall) vs. 27.27% (String pin)

5. Unique Observations:

2-8-10 split:

Leave rate: 1.62% (Free-fall) vs. 1.24% (String pin) Conversion rate: 0.74% (Free-fall) vs. 2.30% (String pin)

This higher conversion rate on string pin machines may indicate a slight advantage, though it could be a statistical anomaly. The conversion rate on other splits do not show this variance.

6. Anomalies in National Tour Data:

A disproportionately high number of 1-pin leaves were recorded in the national tour data due to manual corrections of scores (e.g., adjusting a mistakenly marked strike to a nine-count). Thus, the high frequency of recorded 1-pin leaves may not be accurate.

7. Considerations on Data Comparison:

The PBA National Tour includes the most elite bowlers, leading to higher strike and spare percentages. Therefore, while comparisons with regional and PBA50 data are insightful, we should consider the skill gap between these groups. A statistical comparison between PBA National Tour and PBA Stringpin events can be found below.

Certified Stringpin Statistical Comparisons 2024.pdf







1st Choice Heating & Air Conditioning, Inc.

Quality is not expensive, it's priceless!

(949) 305-5754

BOWLING NEWS DIRECTORY

Los Angeles County

CAL BOWL - 68

2500 E. Carson Street, Lakewood, CA 90712 (562) 421-8448 • Fax: (562) 420-4775 www.calbowl.com • Manager: Leonard Ruiz Jr. Email: Leonard@calbowl.com

DEL RIO LANES - 32

7502 Florence, Downey, CA 90240 (562) 927-3351 • Fax: (562) 928-5453 www.delriolanes.com • Mgr: Sabrina Gonzalez Email: Sabrina@delriolanes.com

GARDENA BOWLING CENTER - 16

15707 S. Vermont Ave., Gardena, CA 90247 (310) 324-1244 gardenabowl.com

KEYSTONE LANES - 48

11459 E. Imperial Hwy., Norwalk, CA 90650 (562) 868-3261 • Fax: (562) 929-0701 www.keystonelanes.com • Mgr: Dave Piazza Email: Dave@keystonelanes.com

OAK TREE LANES - 36

990 N. Diamond Bar Blvd., Diamond Bar, CA 91765 (909) 860-3558 oaktreelanes.net

SANTA CLARITA LANES - 32

21615 W. Soledad Canyon Rd., Saugus, CA 91350 (661) 254-0540 • Fax (661) 254-7562 <u>www.santaclaritalanes.com</u> Email: scl4usc@aol.com

ESTABLISHED 1940 CALIFORNIA

Bowling News

MAILING ADDRESS 7502 Florence Ave. Downey, CA 90240

EDITORIAL OFFICE 11459 Imperial Hwy. Norwalk, CA 90650

TEMP. OFFICE NUMBER: 626-252-2985
24-HOUR FAX NUMBER:

E-mail: news@californiabowlingnews.com
Website: www.californiabowlingnews.com

CHARLES KINSTLER......Publisher
DEAN LOPEZ......Editor / Typesetter

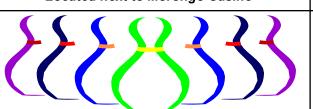
Riverside & San Bernardino

BOWLIUM LANES - 32

4666 E. Holt Blvd., Montclair, CA 91763 (909) 626-3528 • Fax: (909) 626-2144 <u>www.bowlium.com</u> Facebook.com/Bowlium

CANYON LANES - 24

49750 Seminole Dr., Cabazon, CA 92230 (951) 572-6120 Fax: (951) 922-2385 Located next to Morongo Casino



Orange County

FOREST LANES - 40

22771 Centre Drive, Lake Forest, CA 92630 (949) 770-0055 • Fax: (949) 770-7839 www.forestlanes.com • Manager: Jon Diso Email: Jon@forestlanes.com

LA HABRA "300" BOWL - 32

370 E. Whittier Blvd., La Habra, CA 90631 (562) 691-6721 Fax: (562) 691-0272 www.lh300bowl.com

SADDLEBACK LANES - 32

25402 Marguerite Parkway, Mission Viejo, CA 92692 (949) 586-5300 • Fax: (949) 586-0740 <u>www.saddlebacklanes.com</u> Mgr: John Chapman • Email: john@saddlebacklanes.com

WESTMINSTER LANES - 40

6471 Westminster Blvd., Westminster, CA 92683 (714) 893-5005 • Fax: (714) 891-4225

<u>www.westminsterlanes.com</u> Mgr: Jennifer Chow • Email: jennifer@westminsterlanes.com



San Diego

MIRA MESA LANES - 44

8210 Mira Mesa Blvd., San Diego, CA 92126 (858) 578-0500 miramesalanes.com



CALIFORNIA USBC ASSOCIATION

Association Manager - Lynn Matsubara 3673 Industry Ave. #102, Lakewood, CA 90712 info@calusbc.com • calusbc.com www.californiayouthbowling.com (562)449-4527

NORTH COUNTY USBC

Association Manager - Ross LaBar 306 W. El Norte Pkwy #95, Escondido, CA 92026 ncusbcamanager@gmail.com www.ncusbca.com (714)322-2780

VENTURA COUNTY USBC

Association Manager - Debbie Brickell vcusbc@gmail.com
(805)339-9334

Las Vegas Laughlin

GOLD COAST - 70

Hotel, Casino, & Bowling Center 4000 W. Flamingo Road Las Vegas, NV 89103 (800) 331-5334

THE ORLEANS - 52

Hotel, Casino, & Bowling Center 4500 West Tropicana Las Vegas, NV 89103 (888) 365-7111

RIVERSIDE LANES - 34

1650 S. Casino Drive Laughlin, NV 89029 (888) 590-2695 • Fax: 702-298-2687 Email: Jcaudle@riversideresort.com

SAM'S TOWN - 56

Hotel, Gambling Hall, & Bowling Center 5111 Boulder Highway
Las Vegas, NV 89122
(800) 634-6371 • SamsTown.com

SOUTH POINT - 64

9777 Las Vegas Blvd. South Las Vegas, NV 89123 (866) 796-7111 Fax: 702-797-8081 64 Lanes, Snack Bar, Pro Shop

SUNCOAST - 64

Hotel, Casino, & Bowling Center 9090 Alta Drive, Las Vegas, NV 89145 (702) 636-7400

Ventura County

BUENA LANES - 42

1788 S. Mesa Verde, Ventura, CA 93003 (805) 677-7770 <u>buenalanes.com</u>

Email: buenalanes1@earthlink.net

CITRUS BELT

Association Manager - Elise Hamner 667 West 2nd Street, San Bernardino, CA 92410 <u>citrusbelt@verizon.net</u> (909) 381-4599

GREATER LA COUNTY USBC

Association Manager - Lynn Matsubara 3673 Industry Ave. #102, Lakewood, CA 90712 E-Mail: <u>info@glacusbc.com</u> <u>glacusbc.com</u>

(562) 426-2030 Fax: (562) 426-2032

ORANGE COUNTY

Association Manager - Stacie Osborn PO Box 4396, Garden Grove, CA 92842-4396 E-Mail: assnmgr@ocusbc.org (714) 554-0111

SAN GABRIEL VALLEY

Association Manager - Annette Anderson 1832 Greenacre Rd., Pomona, CA 91768 E-Mail: sgvusbc@gmail.com (909) 326-1201

SAN DIEGO U.S.B.C.

Association Manager - Donald Way 7840 El Cajon Blvd. Ste 203, La Mesa, CA 91941 E-Mail: <u>sandiegousbc@gmail.com</u> www.sandiegobowling.com

(619)697-3334

USBG ASSOGIATIONS

Brunswick Brund Two Pro Approach Oak Tree Wraps Up Round Two

by David Yamauchi

DOWNEY – The Brunswick Invitational took to the lanes with just two weeks left in the second round. Pro Approach Oak Tree was sitting on a big 4 point lead over second and a 6.5 point lead over third place, and looking to put a squeeze on the rest of the teams.

In the "A" match, **Pro Approach Oak Tree** (Leonard Ruiz Jr.) was eyeing some big wins knowing that 4 wins would basically lock up the round for them. **US Foods** (Gabriel Martinez) was sitting 4 back knowing they needed wins to stay alive in the round. Ramon Torres was back on his game as he posted a huge 711 series to give Pro Approach Oak Tree a big 4-1 win over US Foods and locking up the round win. Gabriel Martinez paced US Foods with a solid 646 set.

In the "B" match, **DV8** (Matthew Zweig) and **Threadworks** (Eric Snow) were watching the top match, knowing they needed wins combined with US Foods wins to stay alive in the round. Threadworks struck to a big sweep over DV8 led by a huge 703 set from the always tough Eric Snow. Tony Brunning posted 623 to lead DV8 in the tough effort.

Forest Lanes (Jon Diso) was mathematically still alive in the round and rooting for US Foods while taking on Family Ties (Bobby Campangale) who were eight back before tonight. Forest Lanes took games one and three, but a big 98-pin win in game two gave Family Ties the 3-2 result. Family Ties was led by Bobby Campagnale (627) and Daniel Hong (624) while Forest Lanes got some mega spin action from Jon Diso for a nice 633 set.

Don **Julio Tequila** (Gabe Garza) was taking on **Taco Bell** (Kaven Massey) with both

teams looking to bank wins in their overall season total. Don Julio Tequila took the bookend games, but Taco Bell's big game two was enough for totals and a 3-2 result. Jarred Eusebio was big for Taco Bell with a 644 series while Jason Carrillo led Don Julio with a 601 set.

Junior Amateur Tour (Kevin Valmonte) moved up to the 9th spot after a couple good weeks to take on first-round winners Love Laundry (Ramsey Basurto) with the two teams neck and neck in the season wins race. Love Laundry took games one and three, but Junior Amateur Tour's big second game gave them the 3-2 win. Michael Marmolejo led Junior Amateur Tour with a solid 665 series while Marquan Rivers (586) and Vernon Adams (584) paced Love Laundry.

Pro Approach Cal Bowl (Austin Wasielewski) was matched up with Bowlium (Billy Myers Jr.) with the two teams trying to get back on track after a tough week five. The night was all Bowlium as they swept for the 5-0 win. Billy Myers Jr. was hight for Bowlium with a solid 617 series while Austin Wasielewski posted 582 for Pro Approach Cal Bowl.

Del Rio Lanes (Michael Barnett), Weaverbird (Eric Williams Jr.), Touchstone Homes (Christian Eichelkraut) and Pro Approach Del Rio (Augie Labrado Jr.) rounded out Monday's action. Weaverbird banked a 4-1 win over Del Rio Lanes behind Eric Williams Jr.'s 651 series. Jonathan Huezo led Del Rio Lanes with a strong 645 set. Touchstone Homes took 4 from Pro Approach Del Rio led by Christian Eichelkraut's 618 series. Augie Labrado Jr. led Pro Approach Del Rio with a nice 608 set.

TOP 10 ROUND 2 WEEK 6

Pro Approach Oak Tree . 26	Taco Bell 16
Threadworks 20	Don Julio Tequila 16
US Foods19	DV8 15.5
Family Ties 17	Junior Amateur Tour. 15
Forest Lanes 17	Bowlium 14.5

TOP 10 THIS WEEK

711 Ramon Torres
703 Eric Snow
668 Paul Varela
665 Michael Marmolejo
651 Eric Williams Jr.

646 Gabriel Martinez 645 Jonathan Huezo 644 Jarred Eusebio 638 AJ Garcia 633 Jon Diso

SUPER SWEEPER POT

Sponsored by Dean Sanderson of Transamerica Financial Advisors Inc.

1st AJ Garcia 255 \$160 • 2nd Bobby Campagnale 247 \$70



11801 Pierce Street Suite 215 Riverside, CA 92505

Office: 951.530.9343 Mobile: 714.875.0450 Fax: 951.389.3755

Dean Sanderson Fax: 951.389.375
Investment Advisor Representative
License: 0F92487 dean.sanderson@tfaconnect.com

https://deansanderson.wfgopportunity.com/

Financial Advisors Pot went to AJ Garcia (255) for \$160 with 2nd to Bobby Campagnale (247) for \$70. Sidepots went to Ramon Torres (251) and Bobby Campagnale (247) for \$68 each with 2nd to Austin Wasielewski (243) and Ramon Torres (246) for \$34 each. SuperPot went to Jonathan Huezo (237) for \$204 with 2nd to Eric Williams Jr. (236) for \$102. Come out on Monday at 7:30 and watch Southern California's Richest League take the lanes at Del Rio as they sweep with high-low doubles on the 29' short/light pattern next week!

7502 Florence Ave., Downey CA 90240 • (562) 927-3351

Weekly Scratch 5-Gamer Every Tuesday

\$55 Entry Fee with Optional Pots and Brackets Check-in at 6pm • Bowl at 7pm • 1 in 5 Payout 12/3: Ong Open • 12/10: 2024 PBA RPI • 12/17: House

Saturday HDCP No-Tap Tournament

\$30 Entry Fee with Optional Pots and Brackets
Check-in at 11am • Bowl at Noon • 1 in 5 Payout
4 Games on Same Pair of Lanes on House Shot
22771 Centre Dr. Lake Forest, CA 92630 (949) 770-0055