

Orlando Conference Leads to USBC Ball Rule Change Delay

Ball companies succeed in getting USBC to reconsider changes

by Jim Goodwin

One of the big happenings at the recent Bowl Expo was one we didn't see. One June 23, the United States Bowling Congress held a meeting between their Equipment Specifications Committee and representatives of the bowling ball companies to discuss USBC's proposed rule changes which would affect how balls are made and drilled.

The meeting was announced in a USBC press release and billed as "an open discussion forum", but as Jim Dressel put it in his *Bowlers Journal Cybereport*, "when is an 'open forum' not open?" The media was barred from the meeting, but was asked to attend a press conference with USBC officials following. *Stars & Strikes* declined to attend the press conference.

Our reason for not attending the press conference was simple – if we were not allowed to listen to the discussion, how would we know what questions to ask? We spoke with several ball company reps after the meeting and all said it wasn't their side who didn't want the press invited. We also heard USBC officials gave themselves an A- for their side of the discussion. The ball company people we spoke with in the days following the meeting were more inclined to make the grade a D-, but all's well that end's well, and it appears USBC got the message from the ball companies and responded by delaying the rule changes pending further research.

The concern most expressed to us by the ball reps was that USBC appeared to be taking what should be a scientific process and making a hasty and politically correct decision. Brunswick engineer Tod Grams told me during the Mini Eliminator event in Las Vegas "I think it's vital that USBC gets the right information from the right sources, rather than making decisions on what's unproven or unknown. They should work with the ball companies to get the facts and answers to the questions they have."

The dilemma for the ball companies is the possibility of revealing too much that could benefit their competition. Ball making is a very competitive business where new discoveries can make a huge difference to the bottom line. And the other bottom line is that bowling center proprietors will change the lane conditions to accommodate their customers, so it's a delicate balance.

At the Mini Eliminator Jim Goodwin had a chance to discuss the controversial issues surrounding ball rule changes in detail with Brunswick's Tech Staff. Here's what he learned:

On July 23, United States Bowling Congress decided to 're-evaluate' two of the proposed rule changes that were causing concern among the industry's ball makers, and move forward with two others. They decided to move ahead on a new hardness specification,

the past decade.

In the past 10-15 years, the cost of a high performance bowling ball has doubled or tripled, but the variety of balls offered has increased tenfold or more. The market has become saturated – virtually all the major compa-

(core/weight block and cover stock/outer shell) are matched to the overall weight to insure maximum performance.

Most avid bowling enthusiasts associate high performance balls with top tier bowlers like the pro stars, but today, even youth bowlers, who can't physically handle the heavier balls, have the advantage of high performance dynamics. Today, with proper coaching and guidance, they can develop their game and consistently move up the weight scale without the shock of excessive ball reaction caused by the dynamics.

The increased cost of bowling equipment is understandable when you compare the old polyester or rubber shell/pancake weight block to the materials and designs of today. It's like comparing a bi-plane to a stealth fighter jet. Other sports like golf and tennis have also experienced a technical revolution. Today, a high performance driver costs more than entire sets of golf clubs only 15-20 years ago. The fact that bowling is evolving technically on a par with other sports is a tribute to the manufacturers and the industry.

For those who have been involved in the game for decades, the costs of today may seem very high, but not so much to the sport's newcomers. The

increased cost can be attributed to several factors – raw materials, research and development, engineering, sophisticated production techniques and processes, higher labor costs, and marketing.

Today, for example, Brunswick's operating budget includes 7-8% for research and development, a cost that virtually didn't exist 20 years ago. "That's much higher than other industries where it's usually 3-4%," said Edwards. Marketing is also very important because it doesn't make much sense to build a better product if you don't tell the world about it and why it is better.

Without any doubt, bowling balls are better today than only a decade ago. Bowlers today have hundreds to choose from. While this may not seem important to the average recreational bowler, it is very important to the sport and contributes to the respect the game gets from the general public. Most people understand that golf now has equipment that can make average players dramatically better, and that process is starting in bowling. Once the general public perceives bowling as a complicated, sophisticated technical sport, interest in learning to bowl and learning to bowl better will increase. Technical advances may not be com-



Brunswick's Bill Wasserberger, left, discussing ball reaction with Bill Hoffman during the Mini Eliminator, while Tom Tomaras looks on

which limits particle content in cover stocks pending a new testing procedure, and on adding the USBC approval logo on all balls made after March 1, 2006. However, the original 2" logo has been reduced to the USBC acronym and a star outline as part of the serial number.

Delayed, as a result of the feedback from the ball companies, was the balance hole spec and the new CG requirement. "We (now) believe that they would have a very limited effect and not fully addresses the scope of technological changes the USBC wants to pursue," said USBC Technical Director Neil Stremmel. Sounds like almost the exact words from Bill Wasserberger and others who attended the June 28 summit meeting in Orlando.

The Evolution of Change

Through the evolution of advancing three-dimensional computer design techniques, the engineers in the Research and Development department at Brunswick and other bowling ball companies have turned the science of bowling ball design into an art form in

nies now offer 'the ultimate weapon', and very few bowlers have the ability to choose new equipment without expert advice and extensive research. That's a good thing. Change equals progress.

"The ability to design the cores and dynamics of the balls three dimensionally on the computer is something we couldn't even do ten years ago," said Brunswick engineer Ray Edwards. "We had a primitive version in 1993, but it really has evolved over the past decade."

Perhaps the greatest benefit of the computer design process is that it allows ball designers and engineers to control the dynamics of the ball throughout the weight ranges. In the past, the hitting power of the lighter bowling balls was much weaker than that of the fifteen and sixteen pound balls. Today, the dynamics



Brunswick's R & D Guys: l to r - Tod Grams, Ray Edwards and Billy Orlikowski

technical evolution was a very slow process for almost a century, and now it's moving at the speed of light. In-

pletely understood, but they earn respect for the sport simply by their existence.

Machines and Humans Mesh

At tournaments like the Mini Eliminator where Brunswick technical teams get to observe some of the best amateur bowlers in the world, they can see the results in the field for the countless hours spent in the lab and testing facilities at their Muskegon, Michigan headquarters.

The process starts on the computer with ball designers like Ray Edwards, Bill Wasserberger and Tod Grams. When the designers arrive at a design they like, the production process begins, and Billy Orlikowski steps in to help with production scheduling and testing.

Dozens of test balls of every type are produced, and Billy and Tod work with an amazing machine they call 'Throwbot' to measure and evaluate all new models.

Throwbot is very simply a ball throwing machine, but a very sophisticated, computerized ball-throwing machine. We wonder why they didn't name it 'Rollbot', but we're also sure it's capable of either function. The Brunswick engineers can program the million-dollar 'Throwbot' to roll shot after identical shot for as long as needed to measure a ball's reaction. It never gets tired.

Billy O and Tod are the human ball testers at Brunswick, and since both are expert bowlers, they provide the 'human feel' that cannot be produced by a machine. "We can separate the good ones from the bad ones much faster than throwbot," said Orlikowski.

Grams is the new engineer at Brunswick and after four months, he says, "This is the greatest job in the world." An avid bowler, Grams left his job designing automobile interiors and electronics for his present position. "We put the human principal in play and we can find the flexibility of the balls," said Grams. "Throwbot is great for simply observing a reaction or measuring durability, but it can't make objective decisions about balls like we can."

Once the Brunswick R & D team is confident they have a pretty good product, even more testing is done outside the lab by more bowlers like their pro staff and others. At the Mini Eliminator, they also have the advantage of getting input from experts like Product Specialists Ron Bragg and Tom Tomaras and pro champions Johnny Petraglia and Robert Lawrence, all of whom worked at the Mini Eliminator tournament.

Advice and Assistance to USBC

The Brunswick Technical Team and R & D staff take their jobs very seriously, and have a clear understanding of their ability to help shape the future of the sport. Engineers and ball designers at Brunswick and all of the top ball companies are dedicated to improving the products that make bowling better, and they stand ready to work with the new United States Bowling Congress and other industry groups to do what is best for bowling.

When USBC announced that they were considering making major changes to bowling ball specifications, Chief Engineers Bill Wasserberger and Edwards and their team took immediate steps to educate the USBC Equipment Specifications Committee and demonstrate the affect of their decision. Wasserberger even produced a CD to show the differences in balls with and without the suggested changes, and conducted seminars during the Mini Eliminator to explain the results to anyone who wanted to attend.

The two major areas of concern to the ball companies were the proposed elimination of extra weight holes and a requirement to have the CG (center of gravity) mark within one inch of the center of the grip.

According to Wasserberger, these changes would have "virtually no effect" on the ball's reaction, but would limit the options for ball drillers and cause bowlers to abandon favorite balls that did not meet the new requirements. One BPAA official we spoke with at Bowl Expo said he thought the changes would be unenforceable, much like the hardness rule that was passed many years ago.

His point was that proprietors and leagues and tournaments officials were unlikely to assume the role of checking balls before every tournament or league season, nor do they want to be put in a position of becoming 'ball policemen'.

We haven't spoken with any knowledgeable person in this industry that doesn't agree that the credibility of the sport needs to be improved. Most also believe that the ball companies, and the lane machine and oil producers and the pin makers have pretty much been on their own in recent years. To their credit, they have maintained some level of sporting integrity, but over the next few decades, USBC should try to catch up and use their knowledge and expertise for the betterment of the sport.
