Distance Control, The Game We Love, and the USGA

Many eyes are on the ball and equipment in hopes of preserving the game of golf.

BY FRED RIDLEY



have a unique perspective of the GCSAA, having chaired the USGA Championship Committee for four years. One thing that sticks in my mind about being in charge inside the ropes at our championships, particularly the U.S. Open, is the way in which superintendents from the best clubs and courses around the country volunteer their time to assist the USGA in presenting championship courses to the best players in the world. It was not unusual to see a superintendent from a past or future U.S. Open site mowing greens or raking bunkers.

In my remarks at the February 2005 USGA Annual Meeting, I outlined the USGA's priorities for the year ahead.

• We will recommit ourselves to hosting the best and most significant championships in golf.

• We will undertake an initiative to grow the USGA membership to at least one million by the end of 2007.

• We will establish, build, and grow partnerships with other stakeholders in the game of golf.

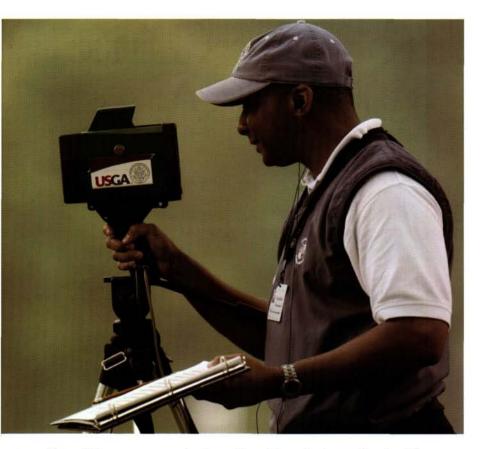
• We will continue our efforts to build our body of knowledge about golf equipment and, in

particular, the golf ball, with the single purpose of being thoughtful, well-informed rulemakers.

The people involved and the range of issues are very complex regarding equipment matters. There are no simple answers. The debate about distance, and in particular the distance the best players in the world are now hitting the golf ball, is not new. It has been constant for more than 100 years. The USGA believes it is important that the major constituencies in the game be well informed.

The USGA's Equipment Standards Committee regulates clubs, balls, and other equipment to assure compliance with the Rules of Golf. We regulate not just for the most accomplished golfers, but for all golfers of all abilities. The underlying philosophy is to assure that skill not technology — remains the dominant factor in playing golf.

This philosophy is set forth, in detail, in the Joint Statement of Principles adopted by the USGA and the Royal & Ancient Golf Club of St. Andrews (R&A) in 2002. Prior to the Statement of Principles, there was a sharp division The USGA remains committed to efforts to build the body of knowledge about golf equipment and the golf ball.



Carter Rich, manager of USGA equipment rulings, does field testing at the U.S. Open to measure players' carry and drive distances. in the golf world on the issue of spring-like effect. That and other equipment-related issues were impacted because the USGA had used outdated equipment and, frankly, we were not anticipating change very effectively. We have come a long way since those days.

The USGA is fortunate to have a group of very talented employees who devote themselves to the USGA's role of establishing equipment standards for all golfers. Dick Rugge, USGA senior technical director, oversees a staff of 18 at the USGA headquarters in Far Hills, N.J. Housed within the USGA Technical Center is an impressive array of test and research equipment, including an indoor test range, Iron Byron, and other space-age technology.

Many of the accomplishments of the Equipment Standards Committee and the USGA technical staff do not generate headlines, but nevertheless they reflect significant steps in understanding and regulating the equipment all golfers use.

During 2004, the USGA implemented a new method of measuring spring-like effect in drivers and other clubs, utilizing a pendulum tester developed by the technical staffs of the USGA and R&A. That pendulum tester is simpler to use, features more reproducible test results, and is capable of being used in the field. Manufacturers and the golf tours have accepted it. According to some club manufacturers, the pendulum tester also has proven itself to be an important tool in club-head development.

Simplified putter "plain in shape" interpretations were implemented by the USGA that are easier for everyone to understand and apply. They make it easier to evaluate conformance. This is just one step in our efforts to simplify our rules wherever possible.

Improved backspin measurement methodology, together with our ball research project, provides new insights into how technology is changing the way the game of golf is played.

These procedures have significant effects on the way manufacturers produce and market their clubs. In response to those needs, we have reduced the average time to decide whether a submitted club conforms with the Rules of Golf from 60 days to 20 days. Manufacturers have been cooperative with the USGA in carrying out our equipment-related responsibilities. While we do not always agree with each other, there are frank and candid exchanges of information and ideas that are good for everyone involved.

With regard to the golf ball, during 2004, the indoor test range was fully implemented, allowing testing year round, with better-controlled conditions and more reproducible results. We also have made significant progress on our ball research project, about which I will say more in a minute.

Other research efforts have been aimed at better understanding how technology affects the way the game is played, especially at the highest levels. For example, swing speed and launch conditions of all tour pros at the 2004 U.S. Open were measured. Matt Pringle, USGA senior research engineer, has been developing a turfimpact tester for use on fairways and greens, to better understand the effects of course setup on player performance. We hope to refine the tester this year and to use it to generate more data at our championship sites.

Of course, the issue that continues to generate more discussion than any other topic regarding technology and the game of golf is the distance elite players hit the golf ball. In that regard, let me summarize what we know and how this knowledge has brought the USGA and the game to where we are.

The average driving distance on the PGA Tour increased 10% or 26 yards from 1993 to 2003

(260 yards to 286 yards). This increase was due to several factors: higher spring effect in drivers; larger clubheads with larger sweet spots; more forgiving clubs that allow the accomplished players to swing harder; higher swing speeds due primarily to increased athleticism but also to longer, lighter clubs; development of balls with lower spin rates and improved aerodynamic properties; and use of advanced launch monitors to match clubs, shafts, and balls to an individual player's swing.

In recognition of these increases and these factors, in May 2002 the USGA and the R&A adopted a Statement of Principles. By adopting the Statement, the USGA and the R&A agreed that:

• Any further significant increases in distance at the highest level are undesirable.

• Factors contributing to distance would be considered on a regular basis, and

• If such increases occur — whether from technology, athleticism, improved coaching, course conditioning, or a combination of these factors the organizations would immediately seek ways to protect the game.

It is significant that, after careful study, the PGA Tour adopted a similiar statement in 2003.

A number of things have already been done by the USGA and the R&A to rein in any further increases in distance. What we have been able to accomplish is due in large part to the cooperation between the R&A and the USGA and to the considerable time and money invested by both organizations. We hope to continue to work closely to accomplish our mutual goal of effective and responsible regulation.

We have witnessed an unprecedented series of advances in golf technology from the manufacturers in a relatively short time. In response, the USGA and the R&A over the last six or seven years have taken more steps to control the effects of technology on the game than were necessary in the preceding 100 years. For example, we adopted a limit on:

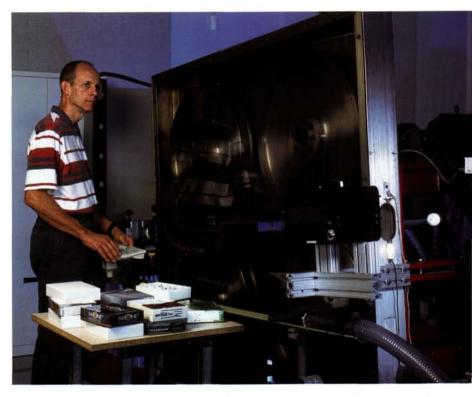
• Spring-like effect, and then developed a new pendulum test device and procedure.

• Clubhead size, including dimensional limitations.

• Shaft length (48 inches).

We implemented a new Overall Distance Standard that included updating our test protocol to utilize current club technology and to reflect the clubhead speed of today's accomplished players. As part of the new testing procedures, we implemented an indoor test range, with more consistent and reproducible results.

We also realized that if we are going to continue to be truly effective regulators, we need to learn a lot more about golf ball performance. In 2002, the USGA committed the funds necessary to conduct advanced research on all aspects of the golf ball. The goal is to learn as much as possible about the ball and its performance characteristics: size, weight, materials, construction, dimple design, impact dynamics, aerodynamics, and moment of inertia.



We are not in the business of research for the sake of research, however. The ultimate goal is to determine how performance might best be regulated if it is determined to be necessary under the Statement of Principles. In that regard, we believe that we have developed industry-leading modeling techniques and are on the cutting edge in our understanding of ball performance characteristics.

We plan to largely complete the project in 2005. We would then be in a position to formulate any possible rule change based on science, not opinion, and we would have a thorough understanding of how the change would affect players of all abilities. Anything less would be irresponsible rule making.

The PGA Tour has been supportive of these efforts and has repeatedly acknowledged that the The USGA's indoor test range is used to determine whether or not a golf ball conforms to the USGA Overall Distance Standard. USGA and the R&A are the appropriate rulemaking bodies for regulating golf equipment. They have publicly supported the research efforts, particularly the ball project, and have recognized that it is only through that research that we can define what options are available to regulate distance and make educated assessments of the effects of those options. They also have given us full access to the data generated by their new ShotLink System for every shot at every tour event. As a result, we have a far clearer picture of how the game is being played by the best players. Actual data have replaced speculation and opinion because of ShotLink.

Several notable people, well respected in the game, have expressed opinions about increasing distance. The debate about distance is not new. Many golf writings dating back at least to Bernard Darwin in the early part of the last century have been a part of that debate.

The USGA welcomes and listens to all input, and our position remains consistent. We will continue the ball research program to be prepared in the event changes become necessary in the future. We will act based on facts rather than opinions. We will follow the Statement of Principles adopted in 2002. While at the present time there is no consideration by the USGA of a rollback of the golf ball, a rollback could happen in the future if there are more changes to the game and we gain a better understanding from reliable scientific data as to the options for how that best could be accomplished.

The Equipment Standards Committee has set an aggressive agenda for 2005. We believe it accurately reflects the state of the industry and the game. I hope to be able to report next year at this time that 2005 was another year of accomplishments: That we have continued to simplify our rules, anticipated new techological advances and acted appropriately, that we have an even better understanding of how technology has changed the way golf is played and why, and that we are ready to implement a rule change on golf ball distance if it is ever decided that such a change is necessary. If made, such a decision will be based on our Statement of Principles, good science, and input from others who have a stake in the game.

FRED RIDLEY was named president of the USGA in 2004.

