

# THE BOARDROOM



## GREEN COMMITTEE

# For Safety's Sake

Article and Photos By Ronald W. Fream

Followers of the game of golf have noticed over the past five or so years how the ball has been flying farther. Not only does Tiger Woods drive it farther, but even old-timer Arnold and his senior tour buddies, Annika, Kerri and their ladies' tour colleagues and the "average Joe" golfer, too. Greater tee shot length is the marketing goal of every manufacturer of clubs, shafts and balls. Approximately 26 million golfers in America seek extra length. If the ball will go farther, or at least seem like it will go farther, consumers will buy it. If they buy it, the profits will flow.

The "drive it farther" and "buy a game" obsessions are creating collateral actions that have increasing importance, yet seem to be overlooked. Course owners, operators, head pros and club managers, municipal golf managers, golf superintendents, residential homeowners and renters and golf resort guests are not yet attuned to this collateral action. It is a fact that as the golf ball is being driven farther, it is also being driven farther off line, off the fairway and at times off the golf course. It is an immutable law that hitting a golf ball farther does not always mean hitting it straighter. The center of a fairway is only the intended or "ideal" place to hit the ball. Even Tiger finds deeper or denser rough

these days than he did at 20 years of age. Joe average will invariably try to duplicate the swing of Tiger Woods, John Daly or Davis Love III using the latest hot-off-the-rack, super-hyper driver with a dazzling tri-metal shaft and spectacular sensitive new grip to pound a wound or unwound

to seek ever-longer drives.

Recent equipment advances produce longer tee shots and longer second shots when long second shots are required. Tiger Woods "only" averages 286 yards per drive according to recent PGA tour statistics. Tiger says that he usually tries to use 90 to 95 percent of his maximum drive ability. During the Masters at Augusta, Tiger averaged 305 yards, but sent his tee shot on 18 on Sunday nearly 330 yards. John Daly leads the pros with a 302-yard average week to week. Daly is the long-driving example of the disparity between length and accuracy. Akiko Fukushima leads the Ladies Tour with an almost 268 yard driving average. Annika Sorenstam and Pak Se Ri have averaged about 255 yards, Kerri Webb almost 268 yards. Juli Inkster, long time top LPGA player, averages around 250 yards. This is well beyond her length of 20 years ago.

The technological revolution in golf equipment was matched by a substantial increase in the number of players during the 1990's. As more new players took up the game, more play occurred on many courses. The once infrequent mis-hit shot was now becoming more frequent, more common. Increasing maintenance costs, and a desire for higher profits saw starting times compressed. This



solid center or liquid core \$4.50 ball. But, Joe never really knows for sure where the ball will land. He has optimistically tapped into his kid's college fund to buy the latest new equipment in search of a drive 5 to 10 percent longer than last year's best effort. What emerges is that most golfers are following the profit-driven charge by industry

put more players on the course simultaneously. More targets of opportunity were a result.

The spatial relationships that have been considered acceptable margins for safety in the past, within a golf course and adjacent to the course, have been disrupted and altered. Safety factors affecting existing courses often present different problems and solutions than those that must be considered now at the start of a planning and design process for a new course or project. The likelihood of injury to golfers on the course and the potential for injury and damage to people and structures around the course has unquestionably increased. In fact, trying to obtain greater tee shot length or longer second shot length increases the potential for overreaching that only compounds the opportunity to mis-hit the shot, sending it farther off line. Mis-hit shots that go farther can reach tees that were before, out of the way shots can veer farther into adjacent fairways or greens, perhaps by flying over trees once able to collect the wayward shot. Occasionally, the well-connected and longer drive will reach the foursome ahead particularly on shorter par-4 holes.

It is necessary now for the owners and operators of courses to review the horizontal relationships within the course. The golf pro and the golf superintendent will need to be more alert to mis-hit balls. Actions may be necessary to lengthen some holes, reorient or reposition a teeing area, add more tee surface or add or remove some bunkers. Bunkers that once guided shots are often easily hit over now. Adjusting the tee top mowing pattern or re-cutting the outline edge of the tee to refocus on the centerline of the hole can help. Carefully setting tee markers to align better on the center of the hole helps. Enlarging existing fairway bunkers, adding longer and obvious sand bunkers or removing mis-directing bunkers can help reduce safety liability. Fixes are not automatic. Each hole needs an individual evaluation.

Cart paths may have to be repositioned to move the rider away from new possible landing areas or to avoid driving toward a tee shot. The distance between a greensite and adjacent tees could now bring waiting players into range of oncoming players. Moving a tee or some tees to increase the



distance to an adjacent greensite may be necessary. Adding a new green side bunker may help defer some mis-directed golf shots. Trimming some trees to improve visibility or having tree surgery done to improve the shape and health of a strategic tree may be necessary. Planting new trees to introduce a physical buffer and deflector can be useful in some situations. Trees can be planted to help direct tee or second shots, but planting three-foot tall trees won't help much. Safety screens are unsightly, but can reduce the hazard at a too close tee. Some existing screens near tees may require re-positioning or benefit from extensions vertically or horizontally.

Safety concerns within the course are only part of the problem. Longer shots broaden the landing pattern, send balls into adjacent fairways or farther out of bounds, over the property line and into adjacent roadways, houses, and the resort swimming pool or condominium courtyard. Setback distances, from green to next tee, between adjacent hole centerlines, from the greensite to property line or from the golf hole centerline to adjacent residences or hotel rooms that were used as guidelines in the 1970's or '80s, are invalid today. Courses older than 30 years were often laid out with little or no consideration of safety setbacks or safety easements save for immediate hole-to-hole relationships. Infill of housing around a course years after the original design and construction can result in structures coming within range of mis-hit balls not conceived of when the golf

architect designed the layout those many years ago. There were fewer personal injury lawyers in those days, too.

Safety fences erected to deter shots from carrying into roadways may be too short or mis-positioned relative to the new technological advances in equipment. Damage to passing cars is more likely. The once safe backyard terrace, children's swing set, deck or swimming pool may now be in range. Buildings recognized to be in range of mis-directed shots that put up screening may now find that screening too low. Homes fronting around courses often have seen the occasional ball in the yard. Others, originally mis-positioned in the planning or architectural process, have seen numerous near misses and solid hits. Homes now farther from the tee, or even beyond the course-fronting row of homes can come into range for a really big drive gone awry. This means home, or resort facilities, once in safe locations now are in range of the mis-hit ball. Walking or jogging paths overlooking a course now may be providing moving targets. The potential for injury and damage has increased. Do not forget that at maximum velocity, a golf ball can be a lethal weapon. This potential for liability or personal injury lawsuits has greatly increased.

Existing property owners must re-evaluate their homes' position along the fairway. Resort hotels must consider where the golf view and golf fronting condos and town homes are, as well as the golf view hotel rooms. Decisions made only five



years ago regarding safety setbacks from lines of play are likely to be inadequate now. Land planning or civil engineering decisions of 10 or 20 years ago, or farther back in real estate development history, likely have homes or other structures well within a mis-hit shots range, or overly long hit shots range. Today, clubhouse facilities including terraces, swimming pools, tennis courts or view windows could become targets. Balls smashing windows, bouncing on the terrace, breaking clay tile roofs or falling in the garden or swimming pool are going to be more common occurrences. Sitting on the hotel balcony watching golfers play through is becoming more dangerous in many locations. Your backyard BBQ or children's play area may now be in range of the results of a distinct effort to play like Tiger Woods off the tee.

Practice driving ranges must also re-evaluate the height and position of perimeter fences and safety screens. With 250-yard drives becoming common and 300-yard professional drives the norm, overall range lengths shrink and safety hazards emerge. Perimeter fence heights once deemed safe no longer are. Roadways adjacent to the course or practice range were safer 10 years ago than today. Entry drives to the clubhouse or pro-shop may be more in range now. Smashing the windshield of an oncoming school bus via a sliced 265-yard drive is not a pretty image.

Over the years various publications have carried setback safety assessment guidelines proposed by various golf archi-

itects. Golf architect Robert Muir Graves gave considerable thought to adjacent area safety dimensions over 30 years ago. More recently, Graves and other golf architects and the Urban Land Institute have included some guidelines within publications focusing on golf and real estate development. Every golfer hits the shot differently. Every day on the golf course is a new day. There is no way to forecast every possible shot, good or bad. There is no way to defend completely against any mis-hit eventuality. There are no fixed, absolute and 100 percent fail-proof standards.

The problem with guidelines is that they are arbitrary. Every individual golf hole can have differing requirements as influenced by par and length of the hole, length of one's individual tee shots, club used,

ball use, topography and terrain, amount and type of adjacent vegetation, wind influence, and type of adjacent development or adjacent golf hole. What is clearly obvious is that any standard golf hole easement dimension reference of 5 or 10 years old is obsolete. For older courses, the potential risks due to now inadequate safety easements increase. In general, there is more risk to the slice or right side of a hole than to the left or hook side. This is due to there being more right-handed golfers whose mis-hit shots tend to go to the right. In the 1960's and '70's, well-hit tee shots for the average male pro were in the vicinity of 250 yards. Good single figure recreational players considered 210 or 225 yards a booming tee ball. The average male player would happily take a 200-yard drive. Women of that period were looking at 150 or 160 yards as a well-hit shot. Women golfers considered 180 or 200 yards to be very good. Golf architects often placed fairway bunkers in the 220-240 yards range off the back tees. These bunkers were to challenge the very good player and would be beyond the range of average and high handicap players. Some years ago, a reasonable distance between two adjacent hole centerlines was 225 to 250 feet. Given the opportunity, aware golf designers allowed more than 250 feet between centerlines. Not every course had these minimum dimensions.

Mis-hit hooks or slices took off and traveled to their limits in these length ranges. The placing of setback safety easements or property boundaries was at its widest in the 180 to 225 yard range off the



back tee where most balls landed. A width of 160 or 180 feet from the designed centerline of a hole to the right (slice side) boundary and around 150 to 160 feet to the left (hook side) property boundary was looked at as a comfortable and mostly safe setback. The setbacks radiate outward left and right from the back tee at around a 15 to 20 degree diagonal angle and parallel the alignment of the hole.

The once popular single file or loop of banana's type of golf routing layout tended to narrow easements and bring more property boundaries into play. Alternative golf hole layout arrangements, more common now, help lower perimeter risk. Dual or multiple fairways reduce available real estate frontage but help reduce safety risk too.

In some cases, more cautious golf architects made an effort to have the property developer or land planner establish an additional setback safety buffer of 15, 20 or 30 feet or perhaps more from property line inward to where any building edge would be placed. Some golf architects initiated landscape tree planting concepts that helped reduce wayward ball flight. Some golf architects able to contribute to land use planning helped site lot configurations and building pads with safety in mind. As golf property became more valuable, trying to establish wider or deeper setback limits often became economically unpopular with the developer. In tight conditions, adapting the orientation of some buildings to present a blank wall or protected patio, for example, to a potential bad shot, was seen.

It is not the professional golfer's length that produces safety problems. It is the average golfer's ego that is driving these folks to try and copy the pros ability and length. It is the average wannabe who is influenced by an announcers impressed commentary when Tiger hits it 300 yards dead straight. The media supports and encourages pro player length, as does the PGA Tour for it's effect in lowering scores. The wannabe's follow and, therein, lies the problem.

What is happening to golf and real estate is that the single figure players, average and high handicap players are also knocking the ball farther and farther from

the centerline target. Today, golf hole safety setback easements to property lines of 195 to 220 feet to the slice side and 170 to 190 feet to the hook side appear a little safer. In some situations, another 35 feet on the right as a building setback could be called for. Not only is the golf hole easement becoming wider, but with longer shots anticipated, the extension of the setbacks along the holes increases from the 180 to 250 yard range to the 150 to 275 yard range. Short mis-hit slices and hooks are possible, too. Each golf course is an individual entity with an individual specif-



ic design solution. However, in considering increased golf hole easement condition when adjacent real estate development is involved, it is easy to add 5 or 10 more acres of land to the average requirement for 18 holes, perhaps more. This additional area for safety raises development costs, reduces building site yield, or both. The cost to the real estate developer in land, increased construction costs, golf course landscaping and to the operator in long-term maintenance, has increased. More land, fewer houses, higher cost, higher sales prices, more market resistance or slower sales. For resorts, it's the same situation. More land and more open space must be provided during the planning and design process to offer a good faith effort to prevent or minimize potential safety liability. Increased golf land translates into substantial maintenance cost increases. Higher maintenance costs pull directly from operating profit. Higher cost raises

green fees which can discourage play.

Real estate developers must be sure the design criteria used for the golf course gives due diligence and good faith consideration to the safety factors. The experienced golf architect has a clearer understanding of the safety factors than do most land planners, civil engineers or landscape architects. Over-eager developers seeking every square foot of golf view property must yield to these new factors of aerial flight and associated potential liability conditions. Setbacks and easement distances remain arbitrary. There is no 100 percent freedom from a mis-hit golf ball. Educated judgment is available.

Much of the new technology has only recently become widely available. Offer the product, and America will buy it. Longer shots are not guaranteed, but technological improvements have demonstrated that almost every golfer's length is increasing. It is not the length where the safety factor is the primary focus. It is the mis-hit, mis-directed wayward shot that is going farther and is going to be the problem. For owners, developers and operators, being proactive, attentive and conscientious in taking protective action when the potential danger is obvious or likely, is the best way to offset a litigious society. Avoiding injury has its rewards.

Today's playing lengths may be obsolete in a few years, or sooner. The rate of technology advancement and the new product introductory cycle of 3 to 9 months could add substantial distance soon. Counter measures on the course cannot keep up. Unless the USGA takes a stand to permanently limit ball flight distance, safety concerns will only become a more prominent factor for golf course owners and operators to consider.

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