

Special Balls? - Makers Say No

By JOHN D. AMES

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In the latter 1930s, with the golf ball apparently growing "longer" every year, the USGA started on a program to limit the ball's distance qualities. For some time there had been a Rule specifying maximum weight and minimum diameter for the ball, but this had now become inadequate to meet the new situation fully.

It now seemed necessary to regulate directly the *performance* of the ball. Some courses were being outmoded as regards length, and it was costly to the clubs and their members to bring them up to date. Further, it seemed desirable, as a USGA announcement said, to have "greater emphasis on individual playing skill by promoting uniformity in the manufactured elements of the game." Finally, it was hoped that limitation of distance qualities would cause competing manufacturers to concentrate mainly not on distance but on making balls of better all-around quality and uniformity of performance (and perhaps reduce their cost!).

So, to obviate further distortion of the game, the USGA retained Armour Research Foundation of Chicago to devise apparatus which would scientifically measure the velocity of the ball immediately after impact. There is, of course, a direct relation between the velocity of a ball and its "carry."

After the device tested some 6,000 balls during 1941, at temperatures varying from 45 to 100 degrees Fahrenheit, the USGA added the following provision to the Rules:

"The velocity of the ball shall be not greater than 250 feet per second when measured on the USGA's apparatus; the temperature of the ball when so tested shall be 75 degrees Fahrenheit; a maximum tolerance of 2% will be allowed on any ball in such velocity test."

This had the effect of "freezing" the ball at its 1941 "length." The manu-

facturers agreed to cooperate in maintaining the new standard.

The golf balls tested prior to the war fell, generally, within the specifications. During the war, testing first was curtailed and finally suspended, and the test equipment was dismantled and stored. When peace came, the apparatus was put into operation, tests were resumed, and are continuing.

According to the post-war records of the USGA device, there has been a tendency for the ball to go faster, and the tendency is continuing.

The USGA Executive Committee felt that this should be brought to the attention of the ball manufacturers, so that they could take the proper steps to hold the ball within the prescribed limits.

Further, there has been much gossip to the effect that certain companies make special golf balls for playing professionals on their staffs, and it was decided that this matter also should be thoroughly aired.

Therefore, late last year the USGA wrote to all golf ball manufacturers setting forth the situation and asking what steps, if any, they were taking to hold *all* their golf balls within the specifications.

All manufacturers responded. Without exception, they stated that they had made no change in the construction of the ball and that they did not manufacture any special balls for individuals.

In recent weeks a new phase of the problem has arisen in reports that some balls are being made slightly smaller than the specified size, and we know of one source which has advertised a small-sized ball, even though it does not conform with USGA Rules. Variations in size admit of on-the-spot checking. The Association naturally assumes that the manufacturers keep the factor of size in mind as well as weight and speed.

The report that manufacturers pro-

duce special, long-distance balls for their own playing professionals was labelled as pure gossip and without foundation by every manufacturer.

"The writer has been in the golf-ball business since 1902," wrote Jack Jolly, President of Jack Jolly & Son, Inc. "We made the Kempshall Flyer, liquid-center ball at that time, which was the first liquid-center ball made here. For the past 30 or 40 years I have heard all kinds of stories of special golf balls being made for pros and certain amateurs. As far as I know, it's just a lot of nonsense. I don't know of any golf ball company that would want to do anything like that."

Both MacGregor Golf, Inc., and the Wilson Sporting Goods Co. pointed out, however, that golf balls vary somewhat in resiliency even when manufactured within specifications and that their staff professionals hand-select their balls from regular stock.

"Our staff professionals have played nothing but our standard construction, and we have no intention of producing special balls for them," wrote Henry P. Cowen, President of MacGregor Golf, Inc. "Because of their special power, however, it is customary to hand-select this stock in the higher compression, from 90 to 100, but we do not believe that this is outside the scope of USGA regulations when construction from center to cover is identical in all respects to regular stock.

"Of course, we would not deny 90 to 100 compression golf balls to anyone who might ask for them, and such stock will be included in deliveries to the trade, along with stock grading down to 75 compression. In other words, regular stock has a standard of 75 to 100 compression. The stock we have anticipated supplying our advisory staff would have a closer tolerance of 90 to 100 compression, but again I repeat that there is no variance in construction."

A high-compression ball obviously is not suitable for any but the powerful hitter, and even the leading professionals may not all want identical balls. Fred J. Bowman, Vice-President of Wil-

son Sporting Goods Co., pointed this out when he wrote:

"Some players have their own ideas as to what they want in the hardness of golf balls, as well as the feel and click, and usually do their own selecting of balls out of each dozen available. A ball that may suit one player may prove to be unsatisfactory or undesirable for another.

"In our opinion, a variation in the hardness of a top-grade ball will not give one player an advantage over another. Statistics will show most of the tournaments are won on the green, where distance is not a factor as compared with feel and click.

"We do not have special specifications on golf balls for certain players."

Vincent Richards, Assistant to the President of the Dunlop Tire and Rubber Corp., labelled the report of specially manufactured balls most concisely when he wrote: "As far as this company is concerned, we make only one stock ball for the pro shops. . . . We, too, have heard gossip and rumors. . . . The consensus was that it was merely gossip and rumors."

Placing the period at the end of the discussion, William T. Brown, Vice-President of A. G. Spalding & Bros., Inc., wrote: "I would like to emphasize most emphatically that for the past 20 years,



United States Rubber Co.
This 140-year-old Scottish ball of sheepskin and goose feathers posed no problem

at least, A. G. Spalding & Bros., Inc., has not made a single special ball for anyone. . . . We are in full agreement with you that it isn't fair nor to the best interest of the game and doesn't go with the spirit of the game to supply anything but standard balls at tournaments."

Only one manufacturer suggested any explanation for what the USGA test apparatus indicates is a general increase in the ball's velocity. Mr. Brown, of Spalding, pointed out:

"During the war period the Army took over Armour Institute, the (USGA) driving machine was dismantled, and electrical connections were not only removed but lost. After the war, the missing parts were replaced by newly developed electronic devices that were undoubtedly more accurate than those first used, on which errors had to be computed. The newly devised hook-up, as it now exists, reads several feet per second faster than the old set-up, so that the Spalding Dot, for instance, on which no change in construction has been made and which was within the legal limits in 1941, is now slightly in excess of them. . . ."

"It is my personal opinion that 5 or 6 feet per second faster represents about the amount of the change in the read-

ing on the Armour machine between the post-war electronic timing device and the pre-war slower reading, and would confirm our statement that the ball has not been changed in any respect except in name since 1934."

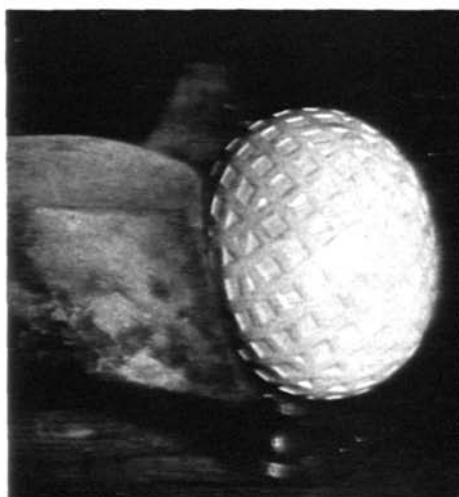
"So far as we know, Acushnet golf balls comply with the USGA specifications," wrote F. W. Bommer, President of the Acushnet Process Sales Co., in a remark that was typical, "even though we do not quite agree that measuring the velocity of a golf ball very close to a clubhead correctly determines the ultimate distance the ball will fly on a golf course. You can count on our continued cooperation."

J. W. Sproul of the United States Rubber Co., wrote:

"Our manufacturing specifications are set up to comply with the requirements of the USGA as closely as possible, and we are confident that all golf balls marketed by us are entirely within the prescribed limitations as set down by the USGA."

J. C. Brydon, Vice-President of the Worthington Ball Co., wrote:

"It has always been our intention and we will continue to keep our golf balls within the limits as specified in the Rules of Golf."



Arthur D. Little, Inc.

Resilience of the modern ball is revealed in these "stop-motion" photographs which show how clubhead flattens ball at impact. Exposures were 1/100,000 of a second.