Technical Department Fax: (908) 234-0138



NOTICE TO GOLF BALL MANUFACTURERS RE OPTIMIZATION

Subject: Overall Distance Standard Optimization Test Procedures

In 1975, meetings with manufacturers were held to discuss the Overall Distance Standard (O.D.S.). At that time, the USGA test procedure to be used was circulated for comment. This procedure, which became effective on March 1, 1976 and was updated in 1980, specified test launch conditions based on a calibration ball. The procedure also stated:

"If it is found that a ball submitted for testing has its optimum distance when tested outside of the range of launch conditions specified above, it will be tested at the new conditions and calibration ball data for validating the test will be redefined for these conditions and so specified."

As a practical matter, until recently the growing number of submissions (currently 1,400 ball types) has rendered it totally impractical to find the optimum launch conditions, using the mechanical golfer, for every ball tested. However, in the Spring of 1996 we will be able to determine the optimum launch conditions for any ball type using our new **Indoor Test Range** (ITR), which provides accurate aerodynamic property measurements of golf balls. This capability, in conjunction with a refined trajectory and roll model, will allow us to seek and find, through an iterative process, those launch conditions which will result in maximum overall distance, holding only clubhead speed at impact as a constant.

Timetable for Implementation of the Optimized O.D.S.:

It is intended that all balls submitted for the 1997 conforming ball list and thereafter will be subjected to the optimization O.D.S. test procedures. Balls submitted in 1996 will not be accepted for a multi-year listing. The three year listed balls on the list as of September, 1995 will, however, be allowed to expire without being subjected to the optimized O.D.S. procedure. The five year listed balls will be subjected to the updated test in 1998.

If during the phase-in to the upgraded optimization test procedure, a manufacturer learns that a ball on the current list may exceed the limit in 1997 and attempts to capitalize on this information, through publicity, promotion, or any other





means, that ball will be subjected to the optimized O.D.S. test procedure as soon as practical. If the results confirm failure, the ball will be removed from the list immediately, and an appropriate notice to competitors will be issued.

Comment:

The upgraded test procedure should prove more equitable for most manufacturers. The reason is that to date <u>all</u> balls have been subjected to launch conditions which were optimized for the longest ball in 1975. Those conditions may still be optimum for some of today's balls, but not for others.

If we learn that any of the balls presently on the list would fail the optimized O.D.S. test procedure if submitted in 1997 without modification, we will work as closely as possible, on a confidential basis, with manufacturers potentially affected, to assist in their efforts to rectify the situation. The USGA will, as soon as is practical, provide manufacturers that are unaware of the optimum launch conditions for their balls with such information, without necessarily confirming the information through outdoor testing.

Beginning in 1997, and during the initial stages of official O.D.S. testing, outdoor tests will be conducted to confirm all simulations that show a potential O.D.S. failure. However, it is our intent ultimately to eliminate outdoor testing, except for unusual or extraordinary cases.

A meeting with ball manufacturers at the USGA headquarters will be scheduled for the Spring of 1996 to demonstrate how optimum launch conditions for a particular ball are found and to discuss any implementation concerns. If ball manufacturers are interested in discussing the optimization test procedures or anything else related to this subject before that time, a meeting can be scheduled during the PGA Show in Orlando.

If you have any questions or comments regarding the above, please contact the Technical Director at your convenience.

Frank W. Thomas

USGA, Technical Director

12/4/95



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