United States Golf Association
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Notice to Manufacturers
USGA Equipment Research - Areas of Interest

In accordance with the Joint Statement of Principles issued in 2002 by the USGA and the R&A, the purpose of the equipment Rules is to protect golf's best traditions, to prevent an over-reliance on technological advances rather than skill, and to ensure that skill is the dominant element of success throughout the game. To carry out this mission, the USGA Test Center conducts ongoing research into golf equipment technology. One area of research that has already been discussed and reported is golf ball technology. The USGA and the R&A have been doing extensive research into golf ball construction, design, materials and performance for more than 2 ½ years. We would also like to make you aware of some of the other research topics currently being investigated. These include:

1. **Spin Generation**
   One of the key performance parameters controlling ball flight and ball response on the ground is spin. As part of its mission to fully understand the technology of the governed equipment, the USGA has been investigating how spin is generated when a golf ball is struck by a golf club. This is being done for a variety of shots, clubs, club face conditions, balls, and playing conditions. This research includes computer simulation modeling, lab testing, robot testing, and player testing. It is possible that this research could lead to future proposals for new measurements, new tests and limits for club or ball parameters which affect spin.

2. **Clubhead Moment of Inertia**
   Moment of inertia of driver heads has approximately tripled over the past 15 years. The USGA is concerned that any further increases in clubhead moment of inertia may reduce the challenge of the game. It is possible that current head size restriction could serve as an effective cap on further increases. However, future materials with greater strength and lower weight than materials currently used in clubheads could potentially enable significant further increases in moment of inertia. There may be other means of further increasing moment of inertia as well. As a result, the USGA is conducting this research to determine whether a limit on moment of inertia should be established.

3. **Adjustability of woods and irons**
   The Rulebook currently states that wood and irons must not be designed to be adjustable except for weight. The USGA is considering expanding the types of adjustable features permitted for woods and irons. A proposal to allow more types of adjustable features on woods and irons could be made in the future. However, any such proposal would prohibit the making of adjustments during a stipulated round.

Conclusion
It is important to note that the subjects discussed in this notice are strictly research areas of interest at the present time. No proposals are being made at this time. Any proposals for rule changes that might result from this research will be communicated through the USGA's Notice and Comment process.

If you have any questions or comments, please contact Dick Rugge, P.O. Box 708, Far Hills, NJ 07931, Fax 908-234-0138, e-mail: drugge@usga.org