



VIA ELECTRONIC DELIVERY

MEMORANDUM

September 16, 2008

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TO: Baseball Bat Manufacturers.

FROM: Baseball Research Panel and Baseball Rules Committee.

SUBJECT: Bat performance measurements.

This correspondence serves as the formal announcement of the NCAA's decision to replace the Ball Exit Speed Ratio (BESR) with the Ball-Bat Coefficient of Restitution (BBCOR) as the means for measuring bat performance in testing. The NCAA Baseball Research Panel believes the BBCOR eliminates some discrepancies with different length bats and is a more direct measure of bat performance. Additionally, the Panel believes most bat designers understand and deal with the concept of the BBCOR more frequently than the BESR and that this should ease the process of trying to create bats that meet the NCAA performance standard. It should be noted that the actual testing procedure has not changed.

The NCAA Baseball Rules Committee has determined, based on a large sample of wood bats tested in the same manner, that an appropriate standard for BBCOR is 0.50. This reaches the NCAA's intention to maintain its non-wood standard using available scientific data and as nearly as possible achieving wood-like performance in non-wood bats. The 0.50 standard sets the performance line slightly higher than the best available wood bats in our database. This will ensure that all wood bats continue to be legal under the new standard. The NCAA will maintain the current length-to-weight "difference" (i.e. -3); moment-of-inertia (MOI) standard, and bat diameter limit. There will be no "sliding scale" associated with the new BBCOR standard; thus, all bats must meet the 0.50 limit regardless of length. It is anticipated that this new standard will require an adjustment in the design of all bats currently legal under the BESR. To allow manufacturers sufficient time to adjust, the NCAA will enforce this standard beginning January 1, 2011 and will only allow BBCOR-certified bats in the 2011 season and beyond. There will be no opportunity for "grandfathering" of old bats.

In order to review and explain these changes in more detail, the NCAA will hold a conference call that is open to all manufacturers on Wednesday, September 17 at 1 p.m. Eastern Time. Dr. Alan Nathan, a member of the Research Panel, and Tim Corbin, chair of the Baseball Rules Committee, will present the views of their

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respective committees. Time will be provided for a question and answer session. This call is only open to manufacturers and will take place before the NCAA staff alerts the NCAA baseball community of this change.

Anticipated questions:

Question: Will all currently-existing bats need to be tested again? Answer: Yes.

Question: How will bats be designated as legal starting in 2011? Answer: All bats will be required to be designated with a BBCOR Certification Mark.

Question: Why is the NCAA making this change?

- For a given bat length, batted-ball speed is a near-perfect correlation with BBCOR (i.e., a bat's BBCOR will predict the speed with which the ball will leave the bat).
- Wood and non-wood bats with the same BBCOR produce essentially the same batted-ball speeds, so it is easy to relate a non-wood bat's performance to that of a similarly-sized wood bat.
- Because the BBCOR of a bat does not depend on its length, there is no need for a sliding BBCOR scale.
- A BBCOR standard would not be a burden on manufacturers because COR (coefficient of restitution) is a fundamental concept in the physics of bat design, and BBCOR can be adjusted independent of other bat characteristics, such as length, weight, and MOI.
- NCAA Division I baseball statistics indicate increasing offensive performance, particularly in home runs and runs scored, and the Committee believes this is due, in large part, to the kind of bats in use today.