



A Case for Eliminating the Manipulation of Zero as a Score

Keeping our data sets large

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IAC 16830

DOUG LOVELL PRESENTS A STRONG case against the use of the scheme that tosses out the highest and lowest judge's score for each figure.

The argument I have regularly

used against this scheme is that our data set is already small. Making a data set smaller by intentionally throwing away scores pushes the remainder of the data set further

away from the ideal statistical distribution of a bell-shaped curve. The more a data set approaches a bell-shaped distribution, the more accurate the statistical assumptions

that we make about it are, and the more accurate the operations are that we perform on it. To put it in the IAC's point of view, the smaller the data set, the further away we get from being able to assume that the majority of the judges get it right the majority of the time.

Thus, we not only want to keep our data sets as large as possible, we want to eliminate the sources of data set skewing.

As data sets grow larger and larger, not only do any errors and biases more reliably and evenly balance each other out, but the less there is any residual effect of on the overall outcome. As data sets gets smaller and smaller, the more any errors and biases associated with each score affect the overall outcome. An unbalanced error or bias skews a data set. Thus, we not only want to keep our data sets as large as possible, we want to eliminate the sources of data set skewing.

In mathematical terms, there is no difference between zero and 10 as scores, in the sense they are both endpoints, or boundary values, or maxima and minima. The fact that zeros have so many caveats associated with them is actually quite statistically damaging for a number of reasons.

In the viewpoint offered by Lovell's article, when we adjust zeros upward, we are essentially tossing out only the low scores. We are intentionally skewing our data. The extent to which the data is skewed depends only upon what the score is from the lowest-scoring non-zero-scoring judge. That judge has now

determined what the scores are from multiple judges.

Another way to look at the statistical damage associated with the artificial movement upward of zeros, is to imagine if we performed the same operation downward with 10s. Let's say we had a rule that

stated minority 10s must be lowered to at most the next highest judge's score. This would be that equivalent skewing of the data at the high end of the allowable scoring span.

The most statistically correct methodology is to treat zero (and 10) like any other score. In other words, eliminate hard zeros, let zeros exist only as the accumulation of errors, and do not artificially adjust any score upward (or downward). Fly the wrong way or the wrong figure, and you get an accumulated zero error very quickly. Start rolling before a stall break in what is supposed to be a snap roll, and you get an accumulated zero error very quickly for not actually snapping.

The overall result of this idea would be the elimination of any special treatment of any individual scores, and the elimination of so called "hard" zeros. All scores would stand as is, and all scores would represent the accumulation of judging downgrades. The only additional downgrade to a pilot's point total would come from penalty points, which would be deducted due to outs, interruptions, low calls, etc.

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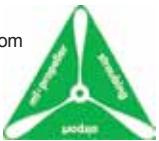
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