

Scoring and Results Calculations using the CIVA FairPlay System at the US / IAC Nationals



As is now usual at this prestigious event, the contest results are being calculated using the FairPlay system (FPS) that has been employed at all CIVA international aerobatic championships around the world for many years.

The primary aims of FPS are firstly to balance the output of all judges in the panel so they each have equal importance, then to look for and resolve any unusually high or low individual figure grades and also overall scores per judge for each pilot. The software uses well-proven statistical algorithms in this processing to ensure that as far as possible the final results are free from ill-fitting raw grades and biased scores that could otherwise lead to a degree of unfair advantage or disadvantage remaining.

A fundamental requirement of FPS as used by the ACRO software is that the key steps in the process are openly displayed in all official results that are output. The primary stages in the operation of FPS are:

- At the conclusion of each flight when the judges Form-A's are collated, an assessment is made by the Chief Judge as to whether any figure should be classified as a "Confirmed Hard Zero" (CHZ). This will normally be driven by a majority of HZ's from the judges, but the CJ is entitled to override this conclusion if he/she determines either by conferencing or use of the video playback that the HZ should be enforced (i.e. "confirmed") even though it may not be the majority grade, or that a majority HZ should be discounted (i.e. not "confirmed") in which case any HZ's awarded will be replaced by statistical average grades during the FPS process.
- Once the raw grades and CHZ's have been entered into the computer, pilots receive a printed check sheet to compare with the judges hand-written paperwork to ensure that the entries made by the scorer are correct. To assist each pilot to in assessing their performance this sheet also gives an average raw grade and the equivalent score for each figure, and a raw equivalent score total for this pre-FPS untreated data.
- When the sequence results are calculated for printing the FairPlay system is always used. This avoids the inclusion of any judges opinions that FPS determines are overly high, low or plain wrong (i.e. unconfirmed HZ's, or non-zero grades when an HZ has been confirmed) within the balanced raw grades, and also in the individual scores that are calculated separately from each judges' processed data for each pilot. The FPS score given on the results sheet for each pilot is thus unlikely to be the same as that initially estimated on the raw grades check-sheets, this difference being a natural consequence of the FairPlay processing.
- The results displayed on the IAC web will be numerically identical to the printed versions, with the added benefit that pilots pop-up score sheets are also available to display the judges figure-by-figure assessments of each flight. While the sequence is in progress and until the protest period is concluded these pop-up score sheets will show only the pilots raw grades and pre-FPS equivalent scores, but as soon as the results have been finalised and approved the scorer will re-run the ACRO software with the sequence 'locked' to create fully detailed replacement pop-up FPS score sheets. These will be uploaded in place of the initial simpler versions, so that everyone can review the changes that FairPlay has made to the judges grades and any individual scores that have been rejected due to identified bias.

Note that a thorough explanation of the FairPlay processing system can be obtained by clicking the "FairPlay System" link at the lower-left corner of any web-based pop-up ACRO score sheet.

Many years' worth of CIVA International Championship results are also available online at www.civa-results.com

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