

## F3 Aerbatics Proposals 2021 - some thoughts about proposal g)

### **Some thoughts about “New Normalization”**

The current way of normalization was introduced in 2018, to prevent sub-top pilots from a lower (normalized) score because a "top" pilot has an exceptionally good flight. This could be unfair to these pilots, although they fly at their "normal" level.

This effect demoralizes the pilots involved.

Unfortunately when the pilot looks at his scores more closely, it will be discovered that although initially he may have a higher score the differential will be greater putting him farther behind the leaders.

Good competitors get near 1000 points, while the best ones achieve points above 1000, others below 1000. As another consequence, competitions get more thrilling, because the 1000 point reference won't be determined already when the best competitor has finished his flight in a round.

Top pilots get more points, sub top pilots get more, too.

It does not work well with a small number of pilots.

The points of pilots depend on the judges panel. If one panel uses the whole spectrum from 0 to 10, the other may be only from 0 to 8 it may happen that the third in one round has more points than the winner of the other panel.

Statement of Pierre Pignot Dezember 2016 after having recalculated the 2016 F3A ECh:

"You will notice that the 30 pilots selected for the semi-final flights are the same.

You will notice that the 9 pilots selected for the final flights are the same. The only difference is the pilot ranked on the tenth place (Niklass takes the place of Rombaut). At the end the top nine is the same with the same ranking for the top seven.

We can thus say that both methods of calculation are equivalent, then why to change? But if we look more in detail, we notice that judge's panel plays an important role. The two judge's panels have not the same standard deviation, what creates big gap of points between the winners of the different rounds. The winner of the first round has 1108 points and the winner of the second round has 1160 points. Here it does not create problem because it is Nurila Lassi who gains all the preliminary rounds, but it shows that this new method of calculation is unfair.

The current method is not perfect but it is not good to take a case isolated (sometimes the best score of a pilot is discarded) to suggest changing everything..."

This kind of normalization can create one round which may be more valuable because weather conditions or even by bias.

It may happen for example, that one pilot wins three rounds of four and another pilot wins only one round but might be the winner-rounds don't have the same valid. This is really unfair.

The ranking calculation is now so complex that no one can easily understand it. If a pilot has for example 600 points he knows that he has 60 %. With current normalisation he needs a calculator. In addition according to the opinion of calculation experts, this normalization could be used by a team to favour one of their pilots and thus modify the team classification.

**For comparing rounds the number of pilots needs to be the same.** For Preliminary scores which are used for semifinal a recalculation with the number of

semifinalists is necessary. **Otherwise rounds are not comparable.** An additional proposal to clarify the case was necessary in 2019.

The biggest problem is that you can't see the error with a short look at the calculation. It is necessary to recalculate which isn't possible for organizers and FAI Jury members after a long Semi-Final day.

**Errors caused by not comparable numbers of pilots occurred during World Cup competitions at all Cat 1 events since 2018. At the 2018 European F3A Championship and 2019 F3P World Championship the error was detected in time. At the 2019 World Championship the mistake was detected too late and affected the final participants.**