

Suggestions resulting from the experience of the 2008 FAI World Championships for Control Line Model Aircraft

The experience of the 2008 FAI World Championships for Control Line Model Aircraft (F2 classes) organized in France (Piennes) confirms the interest to clarify (or complete) some rules regarding aspects of organization and duration of the competition (especially in F2B and F2D classes).

Remark : F2 World Championships are usually organized on 7 days including one day for arrival and another day for processing of the models and official training, which means 5 days for the competition ; European Championships are generally organized with one day less. That is very clearly the maximum that could be acceptable regarding time to spend and corresponding expenses for participants.

Moreover, the noise level is a major problem in F2D and F2C classes for respect of neighbourhood but also for health of the participants or visitors. Unless appropriate solutions for that major problem are **rapidly** defined, it will not be probably acceptable in a close future to organize major competition in more and more places such as Piennes. **The real treatment of that very important problem needs a clear and strong will-power of the CIAM Bureau for the concerned classes** (mainly F2D and F2C in Control Line and F3D in Radio Control). That will probably need a long time to find appropriate solutions and so it is now imperative (for the future of the concerned classes) to consider the question as soon as possible. It is also absolutely necessary to involve organizers of major competitions (World or Continental Championships and World Cup International contests) plus producers of engines ... and not only competitors ; at the moment, the F2 Subcommittee is on a large majority only composed with high level competitors who have finally no real interest to see major changes in their class and so who, deliberately or non consciously, think short-dated rather than for the future.

It will be appropriate that the CIAM Bureau, after analysing the following suggestions, firmly request at the next CIAM Bureau the F2 Subcommittee (via its Chairman) to do detailed proposals for the 2010 CIAM Plenary Meeting in order to be effective at 1st January 2011.

1- F2B

A) Draw for qualifying flights

Paragraph 4.2.8. "*Number of rounds*" mentions that "*the flying order for each round shall be established by separate random draws*". It will be useful for the organizers to define in the rules how the draws have to be done especially for the elimination rounds in World and Continental Championships.

The F2B rules mention a maximum of 50 flights per day which corresponds to a maximum of 25 flights for half a day (morning or afternoon).

Statistics from the previous Championships for F2B class (double-circle format) :

- 2008 World Championship : 89 competitors (including 12 juniors) from 34 nations.
- 2006 World Championship : 84 competitors (including 12 juniors) from 30 nations.
- 2007 European Championship : 44 competitors (including 8 juniors) from 17 nations.

So it could be recommended to split the nations into groups by draw with a maximum of 20 to 25 competitors per group.

Remark : it seems more appropriate to organize the groups per nation. Doing like this the competitors of a nation will fly on the same circle for a defined half day which is more practical both for team-manager and competitors in order to help the other F2B competitors of a national team.

That means :

- 3 groups if 60 to 75 competitors with 3 days for the elimination rounds.
- 4 groups with 80 to 100 competitors with 4 days for the elimination rounds.

When the groups per nation are defined, a separate random draw for each elimination round is done for each group in such a way that competitors of a national team shall be separated in the flying order by at least one competitor from another nation (as requested in paragraph 4.2.8.)

B) Fly-off

F2B rules mention an additional fly-off (3 rounds flown on the same contest flight circle) for the 15 competitors holding the best scores from the elimination rounds plus an additional fly-off for the 3 best juniors. That means 54 flights to run in a World Championships on the last day which is very difficult both for the judges and for the organiser (preparation of the prize giving with individual and team results plus printing of the FAI diplomas).

So, it is appropriate to shorten the number of F2B flights for the last day of competition. In those conditions, it could be suggested to limit the additional fly-off with 2 rounds with a final placing of the finalists processed as follows : highest fly-off round score added with the competitor's score (divided by two) after the elimination rounds.

Remark : it is necessary to divide by two the competitor's score (divided by two) after the elimination rounds because that score is the sum of two flight scores at double (or single) circle format.

C) Composition of the panels of judges

It could be mentioned in the rules that, for World or Continental Championship, it is the responsibility of the FAI Jury to designate the Head Judge for each panel of judges and to define the composition of the two panels in case of a double-circle format composition (paragraph 4.2.11.)

D) Starting manoeuvre

In order to avoid different interpretation of the rules, it is suggested to precise (paragraph 4.2.15.2.) that the engine could be started by the competitor or the helper.

Remark : with an electric propulsion, it is difficult to define who is starting the propulsion ; so it will not be equitable to oblige the competitor to start his piston engine(s) as it was requested in the previous rules.

2- F2D

Solutions have to be rapidly defined in order to reduce the impact of noise : reduction of duration of the noise period and of the noise level.

There is also a potential problem of duration of competition regarding the actual number of participants in that class both in some World cup International contests and in a World Championships. Some of the orientations that could be defined regarding duration of the noise period will also simultaneously shorten the duration of the competition.

Statistics from the last two World Championships in F2D class :

- 2008 World Championship : 92 competitors (including 13 juniors) from 30 nations.
- 2006 World Championship : 58 competitors (including 8 juniors) from 21 nations.

A) Period for start and adjustment of motors

Paragraph 4.4.9. defined a 60 seconds period for start, run and adjustments of motors. Such a long time was appropriate when diesel ignition engines were used but is not necessary with glow-plug ignition engines. So, that period could be reduced to 5 or 10 seconds without any consequence for competitors.

B) Duration of a combat heat

Paragraph 4.4.9. defined four minutes for the combat period. Regarding actual speeds of models, a big majority of the combats are finished before the end of the four minutes period. So, the combat period could be reduced to three without any impact on the results of the competition.

C) Shut-off device

The engine shut-off device rule has been approved for safety at the 2007 Plenary Meeting to be effective from 1st January 2009. This shut-off device should be activated when a fly-away occurs.

It could be also imposed to use that device when the combat is finished (as done in F2A class) in order to limit the noise period ; it will also contribute to shorten duration of the competition.

Remark : if the idea to use the shut-off device in order to stop engines at the end is rejected, it could be necessary to impose a maximum permitted noise level, for example 94 dB(A) over grass. Such a requirement impose to define a detailed procedure for measurement which will not be practical to apply in F2D ; so such an orientation is probably not realistic.

3- F2C

Solutions have to be rapidly defined in order to reduce the level of the noise during racing. It is not sure that reduction of the speed (see paragraph A)) will have a positive impact (reduction) of the level of the noise. So, solutions have to be rapidly defined in order to reduce the noise level in F2C.

A) Speed of the models

Most of the incidents during racing come from the high speed of the models combined with little experience and/or "aggressive" behavior of some pilots. In those conditions, safety imposes a strict judgment and rapid decisions from the F2C Panel of judges in order to avoid dangerous situations and unfair actions.

It is necessary to see what will be the real impact of the increase of diameter of lines which will be effective 1st January 2009. If this modification is not sufficient, it will be necessary to request complementary modification in order to reduce significantly the speed of the models (for example limitation of the diameter of the venture).

B) Races run with only two teams

Actually, some eliminating races could be run at the end of the draw with only two teams. At the last World Championships, many of the teams concerned by such races have done a very good time giving them the opportunity to enter more easily in the semifinals which is not equitable with respect to the other teams which have flown races with three teams.

So it could be appropriate to modify the rules in order to ask for volunteers (as done when it is not possible to organise a reflight for a team which have been granted an attempt) to fill when necessary the eliminating races at the end of the draw and so avoid races with only two teams.

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