

## INCREASING FAI PARTICIPATION

Lots of you will have seen the discussions on e-mail, chat rooms and social media about the proposals that the BMFA (the UK's NAC) has put up for presentation at the 2015 CIAM Plenary.

Many will say they're ridiculous but they've missed the point we need to be talking not about what we do next season but the season 5 years on from now. In other words we need a long-term plan.

When you see these proposals (there's a summary further on) you'll realise that they contain the ideas for a proper future - not yet another 'reactive' quick fix.

The aim is to get more people involved in flying models in the FAI Free Flight Classes that aren't too complex or too expensive or beyond their building skills. What will still be needed from those people, whatever they fly, there will still be a lot of commitment.

We've been thinking of a way to do all this without creating a new set of classes, but at the same time gradually reducing the impact of current technology.

Some people have wondered whether a lot of today's flyers would give up if there was a "ban" on current advanced technology models and of course the last thing we want is for any of today's flyers to give up; we think there's a way of having our cake and eating it.

We need to reduce the technology - content and impact - gradually. Not in a knee jerk one-season effort but over a five-year thought through plan that gives FAI model flying an assured future. What we need is more people flying and that flying needs to be more accessible.

We need to remember all the factors that impact on our activity and take account of the real World.

The aim of the BMFA proposal is to begin this process. We believe that CIAM as a whole (a lot of this applies to all the disciplines - not just Free Flight) needs to consider the long term future for the FAI classes and this may well mean altering CIAM's legislative process to allow this to happen.

## PROPOSAL TO CIAM TO CONTAIN F1 PERFORMANCE

### **The premise for the rule changes**

The UK holds it to be self-evident that the performance of F1 class Free Flight models has reached a level at which now exceeds sensible limits.

We believe CIAM should commit to a planned step change in performance reduction over a period of five years. The CIAM bureau should mandate the free flight sub-committee to take the appropriate action to create and implement the necessary changes.

Current F1 class models have become extremely effective in achieving the maximum times and Championships are now decided on the fly off. The numbers reaching the fly off are far too high a proportion of the entry. In the last two events some 50% of the entry made the cut. In addition to the management of the numbers we have the situation of models out flying the sites available to us, especially at fly off time when flights of 10 minutes may be required to achieve a result. We need a long-term plan to reduce performance, and hence flight times, without emasculating the event.

In addition we should seek to reduce complexity and thus the cost. The models should be brought closer to the reach of the competent and ambitious sportsman and reduce the need for commercial involvement.

The levels of performance reduction needed are in the order of 50%, to enable a meaningful competition with a round maximum of 2.30 and maximum model performance of no more than 4 minutes.

The change process will require firm management but must avoid the danger of killing enthusiasm for the discipline. We suggest that a programme of change should be staged over 5 years with final complete replacement of models at the end of that time.

The structure of CIAM has meant that in the past changes have been made to model specifications and organisation on a reactive rather than a proactive basis. The effect of this has been to drive the models into ever-greater complexity. Rather than being driven by events we believe that CIAM should change this approach and adopt a proactive plan in order to tackle the current issues. The suggestions are as follows:

### **The staging of change**

Stage 1 - Reductions in performance without model changes – with effect from 2016.

These changes are to show that CIAM is serious in its ambition to take proactive control.

Stage 2 - Elimination of devices/technologies that may require re-trimming of models but will not make complete airframes redundant – effective from 2018

Stage 3 - Changes that that will require completely new airframes and will deliver still-air times of no more than 4.0 minutes and enable round maximums to be reduced to 2.30. - Effective from 2020

In order to comply with CIAM procedures only stage 1 changes are tabled as specific proposals at this time. This paper is appended in order to show their position within the phasing of the overall plan.

## Detailed rule changes

### Stage 1 rule changes

This stage is for simple ideas that will limit the existing performance without a wholesale change to the specification. The existing models can still be flown but there are some limitations placed upon their performance.

- F1A. The diameter of the towline to be increased (specified as 1.75mm diameter) the drag will reduce the launch speed. The towline is not to be released on launch. The launcher final contact point to be within one metre of the end of the line. This will cut the launch impetus and thus the altitude gain.
- F1B. DPR prohibited – A two handed launching is required. This will cut the launch impetus and thus climb height.
- F1C. Cut the engine run to 4 seconds.

### Stage 2 rule changes

This stage starts the changes to the model specification. The following “devices” to be prohibited and restrictions introduced. This would be in 3 years (January 2018) these changes can be made without making total model fleets immediately redundant.

- F1A.
  - Flaps to wings banned
  - Restrict tow movement to three functions being straight, circle and launch.
  - Release functions restrict to only launch and glide settings.
- F1B.
  - VP props banned
  - Flaps to wings banned
  - DPR prop start banned
  - Only a single timer function other than DT
  - Limit prop diameter to 500mm.
  - Discus launch banned
- F1C.
  - Geared engines banned
  - Flapped wings banned
  - Folding wings banned
  - VP props banned

### Stage 3 rule changes

In 5 years (January 2020) further stages that will mean totally new aircraft. The limitations in stages 1 and 2 would be retained but in addition

### Span limitation for all classes

- F1A 1.90 metres
- F1B 1.30 metres
- F1C 2.10 metres

### Management of the event

- Reduce rounds to 5. The consistency of models means that in good conditions models will still max, the number of flights has a minimal impact. This change allows more time to organise the eventual fly off.
- Within rounds allow a 10-minute working time to launch after the commitment to fly.

- At final stage a reduction of the max to 150 seconds. There will be a sufficient reduction in performance from all the changes to make this a suitable challenge and reduce the size of the flying site size required.

#### The effect

We believe that the above will start the debate and bring the performance of the F1 classes under control. The changes will still provide exciting models.