- <u>ANNEX 4L</u> -F2C NOISE REDUCTION PLAN

The following is the process which will be used to establish an agreed method of noise reduction and noise control in F2C Team Racing models, with the objective of achieving compliance with the Sporting Code Section 4C, Part 1, paragraph 1.2.b).

An experimentation period will begin in May 2014 and end in June 2017. Progress reviews will take place in April 2016 and January 2017.

Team Race teams and Team Race engine manufacturers are expected to participate in the experimentation to achieve the required noise reduction and the practical means of testing compliance.

- Step 1 The introduction of a 3.0mm venturi effective 1st January 2015. This is expected to give a noise reduction of up to 3.5 dB(A).
 - To further encourage the need for positive progress to the final compliance level, an interim target of a further 2dB reduction is expected to be achieved by 1st January 2017.
- Step 2 Under the guidance of the F2 Sub Committee, the Subcommittee shall be responsible for presenting to the 2016 Plenary Meeting the results of its review as to whether the 96dB at 3 meters figure as stipulated in the Sporting Code Section 4C, Part 1, paragraph 1.2.b) is the most appropriate noise limit for F2C.
 - Factors to be considered are the site locations, the restricted area, height and the duration of the flights. Plus any other factors which mitigate the spread of noise.
 - If a different noise limit is approved by the 2016 Plenary meeting, then the F2 Sub Committee may amend the noise limits for the interim (effective 1st January 2017) and they shall amend the final noise level to be achieved from 1st January 2019.
- Step 3 During the 2015 and 2016 contest seasons, the F2 Sub Committee shall carry out noise tests at worldwide events either in races or, preferably, in demonstration flights, to record the noise reductions achieved and the means employed to do so. It is not mandatory to use a 3mm venturi in demonstration flights (ie outside of competition flights).
 - It is an essential part of this step that the various results of the different experiments are widely communicated to enable the work to progress rapidly to a successful conclusion.
 - Noise measurements should be taken at the centre of the circle (at the pilot's shoulder) and at 50 metres from the centre of the circle. These measurements will then be used to calculate the noise level at 3 metres.
- Step 4 Having reviewed the results of the noise tests, and taken into consideration the result of the F2C appropriate noise level review at the 2016 Plenary, the F2 Sub Committee shall consider whether it believes that further progress to the agreed F2C limit can be achieved by the experimentation route(s) so far adopted.
 - If the belief is that this is achievable, the F2 Sub Committee shall present the appropriate rules for the 2018 Plenary Meeting for implementation from 1st January 2019.
 - If the belief is that the limit is not achievable by methods other than by using a silencer, the F2 Sub Committee shall present rules for a silencing system for the 2018 Plenary Meeting for implementation from 1st January 2019.

The F2 Subcommittee Chairman shall ensure that the rules for any such imposed silencer solution are drafted only after open consultation with competitors and engine manufacturers on the preferred detail of that silencer rule.

Under the guidance of the F2 Subcommittee Chairman, the Subcommittee shall be responsible for ensuring that this plan for the noise reduction of F2C is widely communicated before the end of 2014.

Note: The timeline for the F2C noise reduction plan appears overleaf.

TIME LINE 2014 - 2019

2015

3.0mm venturi

2014 & 2015

Initial experimentation by F2C teams to reduce noise; noise tests at world wide events.

September 2015

Review noise limit with a view to setting appropriate level for F2C;

2016 Plenary Meeting

Present review results; possible consideration by Plenary of proposal regarding the appropriate level for F2C

2016 - June 2017

Continuing experimentation followed by a review of the results of the testing programs

2017 Plenary Meeting

Possible consideration by Plenary of proposal regarding the appropriate level for F2C (if not submitted at 2016 Plenary)

Plenary 2018

Plenary consideration for noise reduction rule, or imposition of a silencer rule.

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