

FEDERATION AERONAUTIQUE INTERNATIONALE
AEROMODELLING COMMISSION (CIAM) - PROPOSAL FORM

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Date: 2/24/2023

Proposal submitted by:

For proposals from Subcommittees: Voting Numbers Required:

Overall Votes Cast: For: Against:

Sporting Code Volume: *SC4_Vol_F1_FreeFlight_22_v2.0*

Heading of section: *3.4 Class F1D INDOOR MODEL AIRCRAFT*

Class: *F1D*

Number & heading of the paragraph: *3.4.2 Characteristics of Indoor Model Aircraft F1D*

Page number if appropriate:

This proposal is a:

Rule Change	<input type="checkbox"/>
Clarification	<input checked="" type="checkbox"/>

Safety	<input type="checkbox"/>
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Noise	<input type="checkbox"/>
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Other	<input checked="" type="checkbox"/>
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mark the boxes with **X**
as appropriate

Type the instruction in the space below:

Insert below text **AFTER** “The competitor must be the builder of the models entered

Type the text changes in the space below (*show deletions as ~~strike through~~ and additions as **bold underlined***):

3.4.2. Characteristics of Indoor Model Aircraft F1D

Maximum wingspan of the monoplane model 550 mm,

Maximum chord of the lifting surfaces 200 mm

Maximum tail span 450 mm,

Minimum weight without rubber motor 1.4 g,

Maximum weight of the lubricated rubber motor 0.4 g.

The competitor must be the builder of the models entered.

3.4.2.1 F1D Builder of the Model Definition [BOM]

The definition in its simplest form is “a model built solely by its pilot”.

Definition in Detail

To determine eligibility of a model as that built by its pilot.

Below is list of what is permitted and is not permitted

3.4.2.1.1 An F1D is Permitted as long as it is:

- a) **Built entirely by the pilot flying the model in the competition (refer exceptions as defined in Section 3.4.2.2).**

- b) Built from components as defined in Section 3.4.2.2.2.
- c) Built from a kit of components (Commercial or non-commercial) as long as the kit comprises individual components that are not pre-manufactured (refer exceptions as defined in Section 3.4.2.2.2)
- d) The kit is solely individual components that are not pre-assembled (refer exceptions as defined in Section 3.4.2.2.2).

3.4.2.1.2 An F1D is Not Permitted if:

Any element of the model is not built entirely by the pilot – refer exceptions as defined in Section 3.4.2.2

3.4.2.2 Allowed & Not Allowed

This list is not exhaustive, however it clarifies the majority of common building materials in the making of an F1D.

3.4.2.2.1 Definition of allowed components/ basic/ raw materials

- a) Balsa wood
- b) Wire
- c) Film for covering models
- d) Boron, Kevlar, Silicon Carbide, glass fibre etc.
- e) Carbon fibre sheet, strip, tubes, rod
- f) Paper, tissue etc.
- g) Man-made sheet materials such as Rohacel, Depron etc.
- h) Adhesives generally
- i) Prop bearings
- j) Variable pitched and fixed pitch propeller hubs
- k) `O' rings and Teflon washers
- l) Metals, sheet, tube, bar etc.
- m) Screws/ fixings generally
- n) Pre-cut balsa ribs, spars, tips, outlines – commonly part of a kit
- o) Pre-cut blanks for stick, tailbooms, posts etc. – commonly part of a kit
- p) Jigs to assist in manufacture

3.4.2.2.2 Definition of not allowed components from sources other than the pilot building their own.

- a) A tailplane, wing or fin manufactured ready to cover or with covering
- b) A stick or tail boom pre-formed and/or seamed
- c) A propeller blade/s ready to cover or with covering
- d) Carbon formed ribs, spars
- e) Wing posts, tail posts and prop spars reinforced/ composite using carbon fibre, boron or silicon carbide
- f) Reinforced/ composite spars, ribs, stick, tailboom or tip outlines using carbon fibre, boron or silicon carbide.
- g) Reinforced/ composite propeller outlines using carbon fibre, boron or silicon carbide

3.4.2.3 Model Processing and Compliance.

3.4.2.3.1 A Class F(1D) –Model Aircraft Specification Certificate

- a) All pilots shall complete a Model Specification Certificate for each of their models in strict accordance with the FAI requirements of the certificate (Cert to be amended to suit F1D). See certificate example... *(form to be developed upon adoption)*
- b) The Competitors NAC or Team Manager will check the model aircraft and ensure it is completed correctly.
- c) Once checked that the model aircraft corresponds to the specification it shall be clearly marked with the Pilots unique FAI identification number.
- d) The certificate must be presented, with the model aircraft, to the officials in charge of processing at the World or Continental Championship. Where appropriate scrutiny of the model will be carried out.

- e) The organising NAC will complete the appropriate section of the certificate confirming the model complies with the specification.
- f) The Contest Director is responsible for ensuring that all model aircraft conform to the model specification for the class.

3.4.2.3.2 Compliance

- a) Spot checks will be carried out during a Competition, The Contest Director has the responsibility of managing this procedure.
- b) If a formal Complaint or protest is lodged questioning a models compliance the Contest Director will seek assistance to scrutinise and check the Models compliance.
- c) If a model is found to differ from its Model Specification Certificate the Contest Director may impose appropriate penalties detailed in section C.19 of SC4 CIAM General Rules
- d) If non-compliance is determined by the CD & Jury and it is further established that the non-compliance is deliberate deception it has the power to disqualify the pilot and the team in accordance with the FAI General Rules in section C.19 of SC4 CIAM General Rules.

Type the reasons in the space below:

The FAI recent interpretation before the 2018 F1D World Champs allowed the use of prebuilt VP hubs stating "The usage of such VP needs expertise, measurements and test flights to harmonize its setting with the size and setting of the prop and the rest of the model, rubber, available height and actual conditions in the site. Therefore, the jury agrees to continue the practice applied at several previous championships, i. e. not banning the usage of purchased VP hubs."

While the allowing of prebuilt VP hubs has been a common practice within the sport for several decades, the 2018 Jury opinion language has led people to use the same wording/justification to allow completely prebuilt composite props with VP hubs to be sold as well as the sale of preformed composite wings and stab components as well as premade composite/laminated wing spars.

This proposal seeks to clarify and codify the boundaries of the Builder of the Model rule rather than relying on jury interpretations. This amended proposal is the result of many conversations amongst the Indoor Free Flight community following initial proposal and most recent World Championships in Romania.

The elimination of the Builder of the Model rule in Outdoor Free Flight classes has not shown any empirical increase in participation in the events and has, in fact, reduced the individual modeler innovating beyond that which is commercially available.

Indoor Free Flight has always put a premium on innovation in model design. F1D, being the World Championship class within Indoor Free Flight should highlight not only the competitor's ability to trim their model but also building and innovation skills.

Type any supporting data for the proposed technical amendments in the space below: