

# General Scale Rules

For the classes: F4D, F4E, F4F, and Pistachio

## International Indoor Fly In 2008

Remark: Our thanks go out to the BMFA for allowing us to use their rule system. The rules as presented are extracted from the BMFA rule book.

Everything that was not applicable to the four indoor scale classes has been deleted for clarity. Where the original rules referred to BMFA this has been substituted. Please note that the original numbering and lettering has been maintained in order to keep it clear what rules we have omitted!

### 6.1 GENERAL

#### 6.1.1 Definition of Scale Models

A scale model shall be a replica (copy) of a heavier-than-air, fixed wing, powered, man carrying aircraft. N.B. To indicate the subject full size aircraft being scale-modelled, the word prototype is often used. The entrant must have constructed his own model. Proprietary items available via normal trade channels, whether included in a kit or not, can however be used in the construction of scale models, although this will result in a reduction of static marks awarded by the judges under the craftsmanship heading.

#### 6.1.3 Competition Programme.

The competition shall be divided into two parts, static and flying. The score shall be the total of both parts. In some cases the flight score part shall also be subject to a complexity bonus as defined later.

#### 6.1.4 Judges

(a) The organiser shall appoint at least two judges, who shall determine the degree of fidelity to scale and craftsmanship, and at least two flight judges.

(b) As soon as practicable after each judging of the model or each flight (as applicable) the marks for each judge for each individual section of manoeuvre must be made available for inspection. Competitors are not permitted to question their marks with judges or officials (other than to accept guidance on the rectification of any faults) except in cases of an official protest. The penalty for infringement of this rule is instant disqualification.

(c) During fidelity to scale and craftsmanship judging, any prior or special knowledge of the prototype possessed by a judge shall be discounted and the model shall be assessed solely on the documentation submitted by the competitor.

#### 6.1.5 Coefficient

Where a coefficient (K) is noted, marking shall be between 0 and 10 using increments of half a mark. The mark shall then be multiplied by the coefficient (K).

#### 6.1.6 Remarks

(a) All models shall become airborne in the manner of their prototype.

(b) Models of seaplanes, of all classes, are permitted to use wheels or wheeled dollies for take-off in

the absence of suitable water surface conditions. Deviation from scale, through inclusion of permanently attached wheels, skids or similar non-prototype devices in the model structures shall, in this case, not be taken into consideration in scoring of 'fidelity to scale' points.

(c) No parts of a model, except propeller and spinner may be removed, nor may anything other than a dummy pilot and antenna be added externally to the model between scale judging and flying. Bombs, drop tanks, etc. must be presented in static, but may be replaced before flying by simpler and repairable examples of the same colour, size shape and weight. Any infringement will result in disqualification. Additional air entries are permitted, provided they are covered by movable hatches for static judging; these hatches may be opened manually prior to flight, or if in flight by means of radio control. Necessary repairs due to flight damage are permitted, but the maximum weight still applies. The appearance of the model in flight may not be unduly affected.

(d) A flying propeller of any form or diameter may be substituted for a scale propeller. The size, shape and colour of the spinner may not be changed.

Note: This relates only to powered propellers that were intended to propel the subject aircraft. If a model of a multi-engined aircraft uses non-powered (windmilling) propellers, these may not be changed between static and flying. Features such as, for example, the small generator propeller on the nose of an aircraft such as a Me163, may likewise not be changed for flying propellers.

(e) Metal -bladed flying propellers are forbidden.

(f) The release or dropping of a dolly immediately after take-off shall not be considered as jettisoning.

(g) Explosives may not be dropped.

(h) If the pilot of a prototype is visible from the front or from the side during flight, a dummy pilot of scale size and shape shall be equally visible during flight in the model.

If such a pilot is not fitted any reduction is left to the discretion of the judges. For F4F Peanut and Pistachio a pilot is not mandatory. They do however attain extra static marks.

### **6.1.8 Number of Helpers**

Each competitor is permitted one helper during a flight. In the case of multi-engined models, one additional helper is permitted to assist. An additional helper may assist with pre-flight preparation should the competitor require this. All but one helper must retire clear of the flying area before the flight is called.

### **6.1.9 Proof of Scale**

#### **6.1.9.1**

Proof of scale is the responsibility of the competitor.

#### **6.1.9.2**

Name of entry - the exact name and model designation of the subject aircraft shall be indicated on the entry form and in 'proof of scale' documentation

#### **6.1.9.3**

The scale to which the model is built is optional, but must be stated in 'proof of scale' documentation.

#### 6.1.9.4

To be eligible for fidelity to scale (static) points, the following is the minimum documentation must be submitted to the judges. (See 6.1.12.1 for recommended presentation of documentation)

(a) Photographic evidence:

At least three photographs or printed reproductions of the prototype, including at least one of the actual subject aircraft being modelled. Each of these photographs or printed reproductions must show the complete aircraft, preferably from different aspects. The photographic evidence is the prime means of judging scale accuracy against the prototype.

(b) Scale Drawings:

Accurate scale drawing(s) of the full-size aircraft that show at least the 3 main aspects of Side View, Upper Plan View and Front End View. These drawings must be to a common scale giving a minimum wing span of 250 mm (150 mm minimum for Indoor and Free Flight classes), and a maximum wing span of 500 mm. If the fuselage is longer than the wingspan, these measurements will be made on the fuselage. Unpublished drawings by the competitor or other draftsman are not acceptable unless certified accurate in advance of the contest by an authoritative source such as the Scale Technical Committees of countries governing bodies, the builder of the original aircraft, or other competent authority.

(c) Proof of Colour:

Correct colour may be established from colour photographs, from published descriptions, from samples of original paint, or from published colour drawings. For the F4 classes written descriptions must be accompanied by colour chips certified by a competent authority.

(e) In case the model utilises components that have not been made by the competitor please note this in the documentation.

#### 6.1.10 Judging for Fidelity to Scale and Craftsmanship

1. Scale Accuracy	Side view	K = 15
2. Scale Accuracy	End view	K = 15
3. Scale Accuracy	Plan view	K = 15
4. Markings	Accuracy	K = 8
	Complexity	K = 3
5. Colour	Accuracy	K = 3
	Complexity	K = 2
6. Surface Texture and Realism		K = 12
7. Craftsmanship	Quality	K = 11
	Complexity	K = 4
8. Scale Detail	Accuracy	K = 8
	Complexity	K = 4
	Total K	K = 100

Judging distances are specified in the respective scale classes

### **6.1.11 Scoring**

Each section in 6.1.10 shall be awarded a mark out of 10 by each judge. These marks shall then be multiplied by the appropriate K factor and aggregated. The static score can only be used in the final classification when the model completes an official flight.

### **6.1.12 Judges Guide for Static Judging**

See Appendix 6a - Judges Guide for Static Judging.

### **6.1.13 Protests and Appeals**

(a) Any competitor wishing to register a protest must do so at the event to the Contest Director.

(b) If not satisfied with the CD's decision the competitor must, at the event, hand him the protest in writing, together with a fee of double the standard entry fee. The CD will then immediately empanel a jury of three persons to deal with the protest.

(c) The jury's decision is final.

(f) If the written protest or the appeal is upheld, the protest fee will be returned.