ANNEX 6A

TECHNICAL RULES FOR FLYING SCALE MODEL CONTESTS

CLASS F4

JUDGES GUIDE FOR STATIC JUDGING

6A.1 General

a) **Before static judging commences** the judges should review the whole entry at a distance not closer than 3 metres in order that a standard be established for grading the points to be awarded. The entries should be studied in relationship to each other from a superficial aspect before detailed examination commences. **The Chief Static Judge should take this opportunity to ensure that all judges are of a similar mind as to what is involved, particularly with respect to complexity aspects where these are applicable.**

b) **A trial assessment using one or more non-competition models should be done prior to the start of the competition to establish a uniform standard.**

c) **If two panels of static judges are to be used, a Deputy Chief Judge will be appointed from the second panel.**

d) The static evaluation is broken down into six items as listed in 6.1.10. Judges must discuss each item as a team and attempt to arrive at a unanimously agreed score for each item, although each will retain the right to differ. Any degree of difference should however be ~~marginal~~ **minimal.**

e) The chief judge should discuss the merits and criticisms of each item with the other judges, making suggestions for the scores to be awarded as a basis for further discussion. The use of half points (see 6.1.5.) is important when judging top-class models. There may be instances where, for example, a 9 would be too low and a 10 too high, and a suitable score might be, say, 9,5.

d) **Regardless of the actual marks awarded, it is imperative that an accurate and fair comparison is attained across the whole range of models entered. The relative mark of one model compared to another is the most important standard to be achieved. Judges are encouraged to make use of analysis sheets and electronic or other archive devices to achieve this comparison.**

g) **Upon the completion of the static judging of each model, the chief judge must check all score cards for completeness before submitting them for processing. The panel of judges has the right to alter scores retrospectively that they subsequently feel to be wrong (e.g. first model deviations, details not proven by documentation, over-looked commercial items). Sufficient time must be allocated by the organisers for this review to be done. Only when the Chief Judge agrees that this has been achieved should the scores be released for publication.**

h) **If model aircraft are flown before being static judged (see 6.1.3.), any damage sustained during flight shall be ignored by the static judges provided the model is intact and it is practical to do so.**

6A.1.9. Documentation for Proof of Scale

The minimum documentation **as stated in 6.1.9.4**. must be provided. Failure to comply shall result in **penalty** marks **as follows:**

a) Less than 3 full photos of prototype: **Accuracy (6.1.10.1)** **Realism (6.1.10.4)**	**ZERO points for Scale** **Likely downmarking of**
Craftsmanship (6.1.10.5)	**Likely downmarking of**
Detail	**Likely downmarking of Scale (6.1.10.6)**
b) Missing or unauthorised drawings: **Accuracy (6.1.10.1)**	**ZERO points for Scale**
c) No photo of subject aircraft: (6.1.10.2)	**ZERO points for markings**
Realism (6.1.10.4)	**Likely downmarking for**
d) Incomplete colour documentation: (6.1.10.3)	**ZERO points for Colour**

~~Additional documentation is desirable, but a competitor should not be unduly penalised for lack of photographic detail for an aircraft that no longer exists.~~
The documentation stated above is the absolute minimum required for participation. In reality more comprehensive evidence is needed to assess the model relative to the prototype. As the full size aircraft cannot be presented it follows that the photographic documentation provided should be as comprehensive as possible if a high score is to be achieved.

All documentation should relate to the subject aircraft whenever possible; variations from this must be clearly marked if not otherwise obvious. All relevant notes and corrections to the documentation must be in English.

The static judges have a difficult task to do in a short period of time. Documentation should therefore be presented in a format that can be quickly and accurately assessed. Superfluous or contradictory evidence should be avoided. The documentation should be presented on separate sheets to avoid the requirement for judges to continually turn pages for cross-references. A stiff A2 size sheet is considered to be the largest that may be comfortably handled by the judges. It will assist the judges if the documentation is presented in a format that reflects the sequence of the judging aspects, e.g.: Side view, End view, Plan view, Markings, Colour, etc.

6A.1.10. Static Judging

Items 6.1.10.1. must be judged at a minimum distance of 3 metres in F4B and 5 metres in F4C from the ~~nearest part~~ **centre line** of the model. A handler should be prepared to position the model as directed by the judges. No measurements are to be taken and the models ~~will~~ **must** not be handled by the judges.

The model must be judged against the documents presented and judges should award marks solely on this evidence. The quality of the documentation / evidence provided by the competitor will normally be reflected in the score that the judges award. Accurate and clear evidence deserves good marks if the model matches this. Judges must ensure that a competitor does not benefit by default by submitting poor or incomplete documentation.

Judges must assess both accuracy and complexity in those aspects where indicated.

6A.1.10.1. Scale Accuracy

The photographs are the prime means of determining the accuracy and realism relative to the full size aircraft and must **always** take precedence over drawings if there is any doubt concerning **an** item of scale accuracy. Caution **should however** be exercised when determining rigging angles using photographs that are taken at an oblique angle, as these might give the wrong impression. **In this particular case** the drawing **may be a more appropriate** reference **for checking dihedral and incidence angles.**

The model should first be positioned in a pose similar to that in the best photograph and checked for any obvious discrepancies. This procedure is then repeated with other suitable photographs.

Then using photographs and drawings, check:

a) Side view, **this may be either left or right depending upon the most suitable photograph. A check should be made of the** fuselage outline, cabin or canopy shape, cockpit aperture shape, engine cowling and spinner shape, outline of fin and rudder, wing and tailplane sections. Also the shape, angle and position of landing gear legs and tail wheel or skid, the size of wheels and tyres. **On multi-wing aircraft a check should be made of wing stagger, wing gap and the shape and arrangement of struts and incidence wires.**

b) **Front**-end view, for dihedral, wing thickness and taper, wing struts, bracing and gap on **multi-wing aircraft.** Also the thickness of fin, rudder and tailplane, cross-sections of fuselage and engine cowling, cowling shape and cutouts, propeller size and shape, shape of cockpit canopy or windshields; size, shape, position and angle of landing gear, wheel track, tyre thickness.

c) **Upper**-Plan view for wing outline and fairings, aileron size, flaps; tailplane size and outline; elevator size, shape and cut outs, trim tabs, fuselage shape and taper, cockpit or canopy shape, engine cowling shape.

6A.1.10.2. Markings

If just a single panel of 3 judges is involved, much of the Markings aspect can be assessed whilst checking scale accuracy. The relative positioning and shape of the markings on the model are often a good indication of scale accuracy as they highlight errors in shape and outline. The opportunity to check markings on the underside of the model can also be taken whilst checking the plan view.

Markings Accuracy:

Check the position and size of all markings and lettering**. Particular emphasis should be made to the relative positioning of markings to other markings and key features on the airframe.** Check that the style and thickness of all letters and figures are correct. Check that any trim strips are of the correct dimensions and are correctly positioned. Check camouflage patterns.

Markings Complexity:

Prior to commencing the competition the judges should agree the principle for awarding complexity points in relation to markings. A high mark for complexity is not solely dependent upon the number of markings, but the difficulty in achieving the required effect. Complex lettering, particularly when spread over a large area or relating to key positions on the airframe, should attract a higher complexity mark than sparsely positioned markings of more simple design. Curved lines are usually more complex than straight lines. Camouflage patterns should be considered carefully, with the more complex styles involving irregular patterns and indistinct edges being rewarded accordingly. For high marks to be given in this section it is important that documentation is presented covering all the markings to be assessed.

6A.1.10.3. Colour

Colour Accuracy:

Correct colour may be established from colour photographs, from accepted published descriptions if accompanied by colour chips certified by competent authority, from samples of original paint, or from accepted published colour drawings. Also check colours of national markings, lettering and insignia. Camouflage colour schemes should show the correct degree of merging of the shades.

Colour Complexity:

Consideration should be given to the greater effort involved in reproducing multi-coloured finishes compared to models which feature only one or two basic colours. **The system for awarding colour complexity points should be agreed before starting competitive judging. Up to two complexity points may be given for each main colour that covers a significant part of the airframe. A maximum of a single point may be given for each minor colour, such as those for the insignia, struts, guns, bombs etc. Basic colours of black and white should attract a fraction of a complexity point. It is again essential that if high markings are to be awarded, a comprehensive standard of colour documentation must be presented.**

6A.1.10.4 Surface Texture and Realism

Realism is a question of how well the model captures the character and surface texture of the full size aircraft. The judges should ask themselves if they are looking at the subject aircraft in miniature, or just a model aeroplane?

The texture and appearance of the surface of the model should be a good reproduction of that of the prototype. Fabric covered types should be covered in the correct material, and the outline of stringers and wing ribs should be visible. Ply covered or wooden monocoque types should be correctly simulated and any sag between the ribs and formers should be apparent if this is present on the prototype. Metal stressed skin types should show simulation of panels and rivets. In all instances, the appropriate gloss, or matt finish should be correctly reproduced.

If the subject aircraft is an unblemished museum example then the model should be in similar pristine condition. If the subject aircraft is an operational aircraft then a degree of weathering and signs of regular use should be evident if appropriate to the full size machine.

The documentation should show these aspects and the judges should mark accordingly.

6A.1.10.5. Craftsmanship

This section deals with the skill, ingenuity, general finesse and complexity involved in the construction of the model.

Craftsmanship Quality:
The model should be checked for quality of workmanship, with particular reference to clean, sharp edges, especially trailing edges of wings and tail surfaces; correct gaps at hinge line of control surfaces; close fit where **non-scale joints are used for dismantling the model or access hatches used for model operation.**

Non-scale Items such as switches, needle valves, silencers, control horns, etc. should not be visible.

Craftsmanship Complexity:
Judges should consider the overall complexity of the design awarding higher marks for more intricate shapes and structure. Special items of ingenuity may also be rewarded under this section.

In assessing both the above aspects judges should consult the competitor's declaration and check for any components that have not been made by the competitor (see **6.1.9.4e**) and adjust the marks awarded accordingly.

The points that are awarded must again reflect the standard of documentation presented.

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6A.1.10.6. Scale Detail

Check that items such as those listed are present on the model where applicable, and that they are accurately reproduced and correctly positioned.

Hatches	Brake pipes
Handles	Landing gear springing
Footsteps	Tyre treads
Doors	Wing slots
Armament	Navigation and landing lights
Bombracks	Pitot head
Control cables	Walkways
Control horns	Tanks
Fairings	Radiators
Bracing	Filler caps
Turnbuckles	Louvres
Struts	Cooling gills
Lacing or stitching	Mass balances
Aerials	Instrument panel
Venturis	Cockpit or cabin interior detail

The points awarded should reflect both the accuracy and the quantity of scale detail present.

Scale Detail Accuracy:
The documentation presented should clearly show the features that are being assessed. Higher marks should be awarded to those competitors who accurately reproduce these items.

Scale Detail Complexity:
A well-documented highly detailed model should score proportionately more than a model with little detail, even if the full-size prototype is itself sparsely detailed. Judges should ensure when marking this aspect that

they are relating to the complexity of detail actually on the model, not awarding marks for just what the prototype should have.