



*Fédération
Aéronautique
Internationale*

Agenda

of the **Plenary Meeting** of the
FAI Aeromodelling Commission

To be held in **Lausanne, Switzerland**
on **28 & 29 March 2008**

*Avenue Mon-Repos 24
CH-1005 Lausanne
(Switzerland)
Tél.: +41(0) 21/345.10.70
Fax: +41(0) 21/345.10.77
E-mail: sec@fai.org
Web: www.fai.org*

AGENDA

CIAM PLENARY MEETING 2008

to be held at the Movenpick Hotel - Lausanne (Switzerland)
on Friday 28 March & Saturday 29 March 2008, at 08:30

1. PLENARY MEETING SCHEDULE AND TECHNICAL MEETINGS

According to the rules, and after confirmation at the 2007 CIAM December Bureau Meeting by the relevant Subcommittee Chairmen, the following scheduled Technical Meetings will be held: F2, F3D (interim), F3B&J, F4, F5, F6 Working Group, Space Model, Education.

The Technical Meetings will take place on Friday morning and some of them will be held in the Aulac Hotel.

2. DECLARATION OF CONFLICTS OF INTEREST

Declarations, according to the FAI Code of Ethics (ANNEX 1) will be received.

3. MINUTES OF THE MARCH 2007 BUREAU & PLENARY MEETINGS AND OF THE DECEMBER 2007 BUREAU MEETING

3.1. 2007 March Bureau

3.1.1. Corrections

3.1.2. Approval

3.1.3. Matters Arising

3.2. 2007 Plenary

3.2.1. Corrections

3.2.2. Approval

3.2.3. Matters Arising.

3.3. 2007 December Bureau

3.3.1. Corrections

3.3.2. Approval

3.3.3. Matters Arising

4. MINUTES OF THE MARCH 2008 BUREAU MEETING

Distribution and comments of the March 2008 Bureau Meeting.

5. NOMINATION OF BUREAU OFFICERS AND SUBCOMMITTEE CHAIRMEN

5.1. CIAM Officers

President

1st Vice President

2nd Vice President

3rd Vice President

Secretary

Technical Secretary

5.2. Subcommittee Chairmen

- F1 Free Flight
- F2 Control Line
- F3A RC Aerobatics
- F3BJ RC Soaring
- F3C RC Helicopter
- F3D RC Pylon
- F4BC CL/RC Scale
- F5 RC Electric
- F7 RC Lighter-than-Air
- Space Models
- Education

6. REPORTS

- 6.1. **2007 FAI General Conference, by the FAI Secretary General, Max Bishop**
- 6.2. **2007 CASI Meeting, by CIAM President, Sandy Pimenoff**
- 6.3. **2007 World Championships, Jury Chairmen (ANNEX 2)**
 - 6.3.1. F1A, F1B, F1C in Ukraine: Pimenoff Sandy (24th Jun to 1st Jul)
 - 6.3.2. F1E Seniors & Juniors in Romania: Emil Giezendanner (26th Aug to 1st Sep)
 - 6.3.3. F3A in Argentina: Bob Skinner (8th to 18th Nov)
 - 6.3.4. F3B in Switzerland: Tomas Bartovsky (8th to 14th Jul)
 - 6.3.5. F3C in Poland: Horace Hagen (27th Jul to 5th Aug)
 - 6.3.6. F3D in USA: Bob Brown (23rd to 28th Jun)
- 6.4. **2007 Sporting Code Section 4: CIAM Technical Secretary, Mrs Jo Halman (ANNEX 3)**
- 6.5. **2007 Subcommittee Chairmen (ANNEX 3)**
 - 6.5.1. Free Flight: Ian Kaynes;
 - 6.5.2. Control Line: Laird Jackson;
 - 6.5.3. R/C Aerobatics: Bob Skinner;
 - 6.5.4. R/C Gliders: Tomas Bartovsky;
 - 6.5.5. R/C Helicopters: Horace Hagen;
 - 6.5.6. R/C Pylon: Bob Brown;
 - 6.5.7. Scale: Narve Jensen;
 - 6.5.8. R/C Electric: Emil Giezendanner;
 - 6.5.9. Space Models: Srdjan Pelagic;
 - 6.5.10. Education: Gerhard Woebbeking.
- 6.6. **2007 World Cups, by World Cup Coordinators (ANNEX 4)**
 - 6.6.1. Free Flight: Ian Kaynes;
 - 6.6.2. Control Line: Jean Paul Perret;
 - 6.6.3. Thermal Soaring and Duration Gliders: Tomas Bartovský;
 - 6.6.4. R/C Electric: Emil Giezendanner.
 - 6.6.5. Space Models: Srdjan Pelagic.
- 6.7. **2007 Trophy Report, by CIAM Secretary, Massimo Semoli (ANNEX 5)**
- 6.8. **Aeromodelling Fund - Budget 2008, by the Treasurer, Andras Ree**

6.9. **CIAM Flyer, by the Editor, Emil Giezendanner**

6.10. **World Air Games, by Guy Revel**

7. 2007 PRESENTATION OF WORLD CUP AWARDS CEREMONY

**INVITATION TO THE
PRESENTATION CEREMONY FOR**

The 2007 World Cup awards for classes F1A, F1A junior, F1B, F1C, F1E, F1E junior,
F2A, F2B, F2C, F2D, F3B, F3J, S4B, S6B, S7, S8E/P and S9B,

will be held on Friday, 28 March, 2008, at 16.30

in the Movenpick Hotel.

8. PLENARY MEETING VOTING PROCEDURE

Confirmation of the voting procedure for the Plenary Meeting.

9. NOMINATIONS FOR FAI-CIAM MEDALS AND DIPLOMAS (ANNEX 6)

Alphonse Penaud Diploma

Andre' H Stockwell (South Africa)

Radojica Katanic (Serbia)

Marian Popescu (Romania)

Vladimir Kusy (Czech Republic)

Andrei Tupolev Diploma

Sergey Makarov (Russia)

Antonov Diploma

Paul Beard (United Kingdom)

Frank Ehling Diploma

George Arghir (Romania)

Ottar Stensboel (Norway)

Jordan Kovacevic (Serbia)

Joze Cuden (Slovenia)

Andrei Tupolev Medal

Mangalea Corneliu (Romania)

Leonid Fuzeev (Russia)

Per Findahl (Sweden)

FAI Gold Aeromodelling Medal

Jiri Havel (Czech Republic)

Miroslav Sulc (Slovak Republic)

G. Harry Stine (USA)

Martin Dilly (United Kingdom)

Narve Jensen (Norway)

Bob Skinner (South Africa)

10. *This item number is unused but has been retained to permit the Sporting Code proposals to be numbered as Item 11.*

11. SPORTING CODE PROPOSALS.

The Agenda contains all the proposals received by the FAI Office according to rules A.6 and A.7.

Additions in proposals are shown as **bold, underlined**, deletions as ~~strikethrough~~ and instructions as *italic*.

11.1 Bureau Proposals

Section 4A

a) A.3.1.

Amend paragraph as follows:

The Bureau is composed of a President, three Vice Presidents, a Secretary, a Technical Secretary, **a Treasurer, and** an Assistant Secretary ~~and~~ **plus** the Chairmen of those Sub-Committees that have official World Championship classes ~~plus~~ **as well as** the Education Sub-Committee Chairman. It is completed by the immediate past President of the CIAM, who, ~~however, does~~ **along with the Treasurer and the Assistant Secretary**, does not have voting rights. The President may also invite representatives of the NACs preparing World Championships or other persons required for the business of the Bureau.

Reason: It has been decided that the Bureau needs an independent Treasurer and neither this post nor the Assistant Secretary post carries voting powers.

Section 4B

a) B.2.5. World Cup and B.5.4. Results

Amend paragraphs B.2.5 & B.5.4 as follows:

B.2.5. World Cup

This is a classification of the results of special open international contests during a year. A World Cup may be organised by the relevant CIAM Sub-committee for any of the classes recognised as World Championships.

If a CIAM Sub-committee chooses to run a World Cup, it must:

- a) Define rules and points allocation; these must be published in the Sporting Code.

- b) Nominate in advance the open international contests which are to be included from the FAI **Sporting** Calendar.
- c) Check the draft FAI Sporting Calendar for errors or omissions and report to the December Bureau meeting.**
- d) Send a reminder communication to World Cup contest organisers at the beginning of each year. This communication is to:**
 - request confirmation of the contest details in the FAI Sporting Calendar;**
 - remind of the requirement to observe the Sporting Code (B.5.1);**
 - remind of the requirement to check FAI licences of entrants;**
 - remind of the requirements for submission of results in (B.5.4.);**
 - give a valid email address to which the results should be sent.**
- e) Collect results from each competition and allocate points to competitors. **(Refer also to paragraphs B.2.6 & B.5.4.)**
- f) Produce and distribute current positions in the World Cup during the year.
- g) Advise Bureau of any problems with any World Cup contests.**
- f) In each category, award a medal and diploma from the FAI to the winner and a diploma from the FAI to the second and third places. **The Subcommittee may appoint a World Cup Co-ordinator to administer the World Cup. If it does so then items c) – g) above are the direct responsibility of the World Cup Co-ordinator. The Subcommittee Chairman shall advise Bureau of the name of the World Cup Co-ordinator.**

B.5.4. Results

Results must be despatched to the FAI and NACs taking part in the event within a month. For events included in a World Cup, the results must be despatched to the relevant World Cup Co-ordinator within a month.

The results must include ~~the~~ **each entrant's FAI licence number**, full name and nationality **(or "FAI" in the case of entrants who have entered with a licence issued direct by the FAI)**. ~~of those listed and~~ For Scale events the name of the prototype air-or spacecraft subject flown by the competitor must also **be** included.

Results submitted to the FAI or World Cup Co-ordinator must be in electronic form to allow for publication on the official FAI website.

Failure to provide results as specified above may incur sanctions and in the case of World Cup contests, will place in jeopardy the next year's contest(s). (Refer to paragraph A.9.2)

Reason: Because of problems with the management of World Cups, the rules governing these contests had to be updated with particular reference to the contest reports that the organisers are obliged to provide to the

World Cup coordinators and for an improved and more rigorous check of FAI licences that the organisers have to undertake.

b) B.7.4.

Amend B.7.4 as follows:

Additional Fees

Separate additional fees will be offered at choice for: lodging (hotel and camping); food (banquet not included) and banquet (and possible other additional events).

Maximum fee = basic fee + lodging (hotel) + food + banquet.

With the exceptions listed below, the maximum possible fee is 600 Euro for seven nights, except for events which require a large number of judges or more than seven nights.

F3B 660

F3C 700

F3D 720

F4 700

F5 660

For World Championship events that require more than five international judges, a separate additional fee may be charged to each contestant to cover the actual cost of travel, lodging and meals for those judges in excess of five. The additional fee is limited to a maximum of 165 Euro per contestant. ...

Reason: Because of cost increases of expenses and lodging, the organisers of some categories are struggling in organising Championships.

11.2 FAI Sporting Code General Section

a) **5.2.2.3 Unsporting behaviour** **F3 Aerobatic Subcommittee**

Brought forward from the 2007 Plenary Agenda Deferred Section

Add second paragraph below existing paragraph.

Any conscious effort by a competitor, or a team member or supporter directly involved with a national team, to influence, intimidate, or threaten contest officials or other competitors or teams, with the intent of gaining an advantage over other competitors or teams, irrespective if this occurs directly before, during, or directly after the sporting event, shall be considered unsporting behaviour, and may result in disqualification of the individual or the team from the championship.

Reason: Recent experiences during world and continental championships, have had isolated incidences where competitors, team managers, and supporters/helpers have exhibited intimidating and threatening behaviour, with the intent of gaining an unfair competitive advantage. The addition of this paragraph will help to prevent this behaviour and renew an awareness of the consequences.

11.3 Volume ABR, Section 4A <i>(CIAM Internal Regulations – page 12)</i>

A.2 Procedure for CIAM Plenary Meetings

a) **A.2.1.** **Scale Subcommittee**

Add the following sentence

These meetings shall consider items in the agenda for the purpose of discussion and briefing of all those present and shall **through the Subcommittee Chairman** make their recommendations thereon **together with the recommendations resulting from voting in the Subcommittee proper** to the Plenary Meeting.

Reason: To be able to present the view of the relevant Subcommittee on technical matters in their sport to the Plenary Meeting.

A.4 Subcommittees

b) **A.4.5.** **Scale Subcommittee**

Add the bold text in a new paragraph

The Subcommittee Chairman will circulate the Plenary Meeting's official agenda to the Subcommittee members and ask for a vote, this vote to be presented to the Plenary meeting together with the result from the Technical meeting at the Plenary.

Reason: To be able to present the view of the relevant Subcommittee on technical matters in their sport to the Plenary Meeting.

c) **A.13. Aeromodelling Fund** **Education Subcommittee**

Add a new paragraph:

f) paying the costs of a scholarship of 2000 Euros to be awarded to one Junior every year by the Plenary Meeting.

Reason: The scholarship shall support a young pilot who is successfully competing in our sport, which already high expenses. The image of CIAM will improve as a youth orientated organisation and the awarding ceremony might become an attracting header for our website.

11.4

Volume ABR, Section 4B

(General Rules for International Contests – page 31)

a) B.2.4 World Championships

Serbia/Spain

Delete the last sentence in paragraph:

~~Number of classes in one World Championships is limited to five (5) for Seniors and five (5) for Juniors.~~

Reason: This rule decreased number of classes in Spacemodelling Continental and World Championships from eight to five, which is a decrease of approximately 40% of classes. This made an enormous confusion between the organizers and sportsmen after 35 years of very successfully conducted Championships (11 European, 1 Asian and 16 World Championships). It is not clear who and when shall select the competition classes – CIAM Bureau, SM Subcommittee or the organizer. In the first year that did the organizers and in 1 World and 2 Continental Championships appeared three different sets of competition classes. Final decisions were postponed and participating NACs have not enough time neither for preparing sportsmen and models nor for planning expenses and obtain necessary finances. Also there is a tendency to fly expensive sophisticated classes with much smaller participation in comparison with duration classes, which make organizer's budget planning uncertain. This also decreases interest of young people in spacemodelling, which is not good for the entire spacemodelling activity in CIAM if we know that spacemodelling was (and still is) the most beloved modelling activity by youngsters.

Spacemodelling is beloved for his versatility of classes and forcing spacemodellers to get specialized in only one or two in contradictory to the 45 years long of spacemodelling very successful practice.

This problem was very carefully considered by organizers, team managers and Space Models Subcommittee members in meetings organized in 11th European SM Championships in Kosice on 12 September 2007 and in 1st Asian SM Championships held in Baikonur on 1st September 2007 (where the CIAM President was present). Common conclusion was to request officially CIAM this rule to be deleted and previous situation reinstate if we do not want to loose spacemodelling as a FAI/CIAM activity and leave spacemodellers to similar non-FAI organisations, which appear in more and more countries.

Supporting Data: Careful analysis of interest for spacemodelling in NACs with very intensive spacemodelling activity (Russia, Ukraine, Slovakia and even some West European countries like Spain and UK) shows that the number of young spacemodellers shall decrease for at least 30% in next two years (WCh and CCh cycles) which indicates an alarm situation which require very quick and intensive action.

b) B.3.4. Age Classification for the Contest France

Change the paragraphs as follows and add a new paragraph b):

~~b)~~ by **c)**

~~e)~~ by **d)**

b)At F1D World and Continental Championships, when juniors and seniors fly together in the same site and at the same time, the junior competitors who are members of a national senior team will appear in the individual senior classification, but must also be included in the Junior individual classification.

Reason: At F1D Championships, a Junior competitor cannot be simultaneously a member of a junior team and of a senior team. But when he is a member of a senior team, and fly at the same site and by the same time as other juniors, there is no reason to discard this junior from the individual junior classification.

Supporting Information: Extract from the 2008 edition of the Sporting Code: A competitor is considered to be a junior up to and including the calendar year in which he attains the age of 18. All other competitors are classed as seniors.

a) World or Continental Championships may be organised specifically for juniors. At these Junior Championships, all competitors and all helpers, team members, mechanics and assistants must all be juniors. Except at RC Soaring (F3B and F3J) Championships, the team managers and/or their duly registered assistants and organising officials are the only seniors allowed in the starting area.

b) If there are three or more junior entries in an Open International, there must be a separate junior classification included in the results.

c) Any Junior World or Continental Champion who will be too old to defend his title at the next World or Continental Championships for juniors is entitled to fly in one World or Continental Championship for seniors, in the appropriate class, within the three calendar years following his becoming Junior World or Continental Champion.

c) B.6.4 Germany

Amend as follows:

The cost of hotel accommodation must be kept reasonable. Keep in mind that hotel accommodation is often the only possibility for overseas participants. Accommodation of acceptable middle class standard will be sufficient. There is no need for any luxury. The same applies to the food.

To keep travel expenses of the teams reasonable, organisers must not use the event to force teams to pay higher than street prices for accommodation. It is up to the teams whether they want to book board & lodging on their own.

Reason: The organiser of the F3C World Championship 2007 forced teams to pay higher than normal prices by monopolising the hotel booking.

- d) **B.13 Interruption of the contest** **Germany**
Add item c) of paragraph to B.13.1.

The contest should be interrupted or the start delayed by the Jury in the following circumstances and in other exceptional circumstances decided by the Jury:

- a) The wind is continuously stronger than 12 m/s (9 m/s for Free Flight, Scale and Space Models) measured at two metres above the ground at the starting line (flight line) for at least one minute (20 seconds for Free Flight), unless specified otherwise in category rules.
- b) The visibility prohibits proper observation of the models (especially in case of F/F or R/C contest) or due to atmospheric conditions it would be dangerous to continue the competition.
- c) It is necessary to reposition the starting line. This may only take place between rounds, **tasks** or groups in F3B and F3J.
- d) The prevailing conditions are such that they may lead to unacceptable sporting results.
- e) For F3A, F5A, F3C, F4C, F3D and F5D contests when the sun is in the manoeuvring area.
- f) Any incident affecting safety or requiring access for emergency services. In the event of an interruption during a round, the Jury must decide the action to be taken to complete, repeat or cancel the round. The remainder of the round may be completed as soon as conditions allow, with adequate notice given to all competitors and Team Managers.

Reason: In F3B we have an additional possibility for a reposition of the starting line.

- e) **B.15.1** **Czech Republic**
Add in the sixth line of paragraph:
Class F1E, **F3K** five (5) only
Reason:
Correction of omittance

11.5 Volume ABR, Section 4C, Part One (General Regulations for Model Aircraft – page 54)
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- a) **1.3.3 Category of Radio Controlled Flight,** **Czech Republic**
and
Annex 1.1 - 3. RC category
Replace the name of the F3B class by the following new one at all instances of its appearances.
~~Radio-controlled thermal soaring gliders~~ **Model glider triathlon**
Reason: The present name of the class does not clearly describe the content. Even for insiders it's often not clear whether this name points to

F3B or F3J. The new name not only enables easy distinguishing between these glider classes but could be also more attractive for the public.

b) Annex 1.1. World championship events for model aircraft

Czech Republic

Add a new subparagraph after 3. g):

h) F3K Radio controlled hand launch gliders

Reason: The class meets the requirements to become world championship FAI rule, after the last amendment of the SC.ABR., paragraph A.15.2 In cases where the conditions in A.14.1 have been waived, the rules may be considered eligible for use in World and/or Continental Championships from, and including, the year in which they became effective.

The F3K class gained great interest among modelers in the last years. German Open Nationals F3K were e.g. very successful over the years, in 2006 with a record of competitors coming from 13 nations.

c) ANNEX 1.1

Germany

Amend first statement and paragraphs 3 and 7 as follow:

WORLD CHAMPIONSHIP EVENTS FOR MODEL AIRCRAFT

The following events are recognised as world championships for model aircraft (2009):

3. RC category:

- a) F3A Radio controlled aerobatic model aircraft
- b) F3B Radio controlled thermal soaring gliders
- c) F3C Radio controlled helicopters
- d) F3D Radio controlled pylon racing model aircraft
- e) F3J Radio controlled thermal duration gliders
- f) F5B Radio controlled electric powered gliders
- g) F5D Radio controlled electric powered pylon racers
- h) F3K Radio controlled hand launch glider**

7. RC Junior category:

- a) F3J Radio controlled thermal duration gliders
- b) F3K Radio controlled hand launch glider**

Reason: F3K is flown all over the world for more than 18 years as a RC competition class. In the first stage the rules were just national, different in every country (Europe and USA). Later on several European countries agreed in rules to be used in the CONTEST Eurotour events (all CONTEST Eurotour events are registered as FAI competitions since 2003).

The history of the German open (international German championships F3K since 2000) shows a significant increase of pilots interested in F3K since 2000, beginning with 48 competitors from 4 nations to 93 competitors coming from 17 nations (2007).

CONTEST Eurotour F3K started in 1997 with 34 pilots coming from 3 European nations. The current status shows 219 pilots from 19 nations worldwide starting at 17 international contests in Europe. The number of competitors especially in the USA is also very high, with a high number of competitions all over the states. The number of competitors and nations will even increase when F3K had been rewarded with WC status.

11.6 Section 4C Volume F1 - Free Flight

Free Flight Outdoor

a) Annex 2, Appendix A - 3.A2A.5. Timekeeping France

Change the paragraph as follows:

~~Competitors at a pole fly one at a time in an order preferably established by mutual agreement of the competitors for each flight; in the event of disagreement at a pole, the official timekeeper at that pole may impose a flying order, subject to appeal to the FAI Jury.~~

Competitors at a pole fly one at a time in an order established by draw, before beginning of the first round by the official timekeeper. For the other rounds, order will be fixed by rotation according to the table below. Competitor(s) who choose(s) not to fly in this order will be placed at the end of the list.

Reason: In international contest young competitors and beginners competitors who fly at the end of a round have less chance of success than at the beginning of the round where expert fliers fly at the same time on several adjacent poles. So, to increase equal rights between contestants, it's necessary to determine flying order by draw.

Supporting Information 1:

Example with 5 competitors designed by letters A, B, C, D, E

	Flyer 1	Flyer 2	Flyer 3	Flyer 4	Flyer 5
Flight 1	A	B	C	D	E
Flight 2	C	A	E	B	D
Flight 3	E	C	D	A	B
Flight 4	D	E	B	C	A
Flight 5	B	D	A	E	C
Flight 6	A	B	C	D	E
Flight 7	C	A	E	B	D

Supporting information 2: This is often a most difficult part of an Open International. The timekeepers should be experienced free flight aeromodellers with good eyesight and be familiar with the rules of the event. They should be issued with copies of the relevant rules and a briefing sheet on the style of Appendix B.

Supplying an adequate number of timekeepers for an Open International is often more difficult than for a Championships - there may be a much greater number of competitors and the organisers may have smaller resources of manpower available. Starting pole positions should be allocated by draw for the first round, but with the possibility of constraining the draw to select people able to speak the same language at each pole as far as possible. Competitors at a pole fly one at a time in an order preferably established by mutual agreement of the competitors for each flight; in the event of disagreement at a pole, the official timekeeper at that pole may impose a flying order, subject to appeal to the FAI Jury.

It is preferable that the organisers supply at least one official timekeeper at each starting position in order to retain custody of the score cards, to observe that correct procedures are followed and to act as a contact point at that position. At least one official timekeeper at each position should be able to converse in one of the official languages of the event. Two timekeepers are required for each official flight; in the event of the organisers not supplying both timekeepers per position, then the required timekeepers should be other competitor(s) flying from that position or a helper of the other competitors. The official timekeeper at the position should ensure that all competitors undertake their fair share of help in the timekeeping and that there is always someone ready to help him time the next flight. Any dispute in undertaking timekeeping help should be referred to the FAI Jury and the organisers should be able to call upon a small number of additional timekeepers to allow timekeeping to continue at the pole during a dispute.

11.7 Section 4C Volume F2 - Control Line

F2A Speed

a) **4.1.2 Characteristics of a Speed Model Aircraft** **F2 Subcommittee**

Change as follows:

Maximum swept volume of motor or motors	2,5 cm ³
Minimum total projected area (S)	2 dm ² /cm ³ swept volume of the motor(s)
Maximum loading	100 g/dm ²
Maximum wingspan	100 cm

Reason: Clarification.

b) **4.1.3 Fuel** **F2 Subcommittee**

Change as follows:

Fuel to a standard formula for glow plug and spark ignition motors will be supplied by the organisers. Its composition shall be 80% methanol, 20% **first pressing** castor oil.

Reason: Clarification; there has been some confusion as to the specification of the castor oil to be used.

c) **4.1.4 Diameter of Control Lines** **F2 Subcommittee**

First, amend the title of the following paragraph and allocate a sub paragraph number.

Second, move the subsequent paragraph from 4.1.7 to 4.1.4.

Third, separate it, number as b) and c) and insert a new final sentence at c).

4.1.4 ~~Diameter of~~ Control Lines

a) Only two-line control is allowed, minimum control line diameter is 0,40 mm with a tolerance of minus 0,011 mm. **Control wires shall be unplated carbon steel Piano / Music Wire.**

b) No intentional twisting and/or linking of the two lines together shall be permitted from the point of exit of the model aircraft to the control handle. The lines shall be separated by at least 5 mm at the point of exit from the model aircraft and at least 25 mm at the handle.

c) The lines must be round in cross-section and may not have any liquid or coating material applied. **Solvent may be applied for cleaning purposes.**

Reasons: For a): some competitors have been using Stainless Steel wire which has a lower tensile strength than Piano Wire, resulting in lines breaking.

For b) & c): to locate the paragraph to a more appropriate place and separate for clarification.

d) **4.1.12 Helpers**

F2 Subcommittee

Insert a new first paragraph, delete text as shown and apply sub paragraph numbers as shown and also to the existing paragraph.

a) A pilot may not receive telecommunicated information during an attempt / flight.

Reasons: At the 2007 European Championships one pilot was receiving real time flight information generated by a TransiTrace system. This gives an unfair advantage over competitors who do not have access to such a system.

b) Two helpers and the team manager are admitted to the contest area. ~~A pilot may start and adjust his own motor and at most one other motor as a helper.~~ Only team members (including the Team Manager) are allowed to start and adjust the motor(s).

Reasons: This rule is impossible to monitor and so it has no value.

e) **4.1.17 Classification**

F2 Subcommittee

Amend and renumber the paragraph as follows:

The individual times recorded by each timing official and/or by an optical electronic system shall be recorded in writing and retained by the senior judge or other official.

Times recorded should be handled as follows:

a) In the case of manual timekeepers, the mean time of the three stopwatches shall be taken to calculate the result, unless:

- i)** One of the stopwatch times differs from the closer of the other two by more than 12/100 seconds, or the official reports that he made a mistake. In this case the mean time shall be calculated from the other two stopwatch times.
- ii)** Two stopwatch times differ by more than 12/100 seconds from the middle one, or two officials report a mistake. In this case this fact should immediately be reported to the competitor or his team manager. The competitor then has the choice of using only the remaining stopwatch time to calculate his result, or to be allowed a **replacement** attempt. His decision must be given to the F2A Circle Marshall without delay, and is irrevocable.
- iii)** No rounding off of decimals ~~should~~ **shall** be made when calculating the mean time. The time thus obtained for calculating the speed ~~should~~ **shall** be recorded and retained.
- iv)** **The speed in km/h shall be calculated by dividing 3600 by the time according to a), and then taken to the nearest lower 1/10 km/h.**

b) In the case of an optical electronic system, the senior speed judge shall check the result by looking at the logged individual lap times of the official flight, as well as the laps before and after the official flight. If there is any anomaly, the backup system shall be consulted. If the backup system is manual and both timekeepers report a mistake (they may have timed one lap short), or if the backup system is electronic and it shows an anomaly, or if both electronic systems fail, then the competitor shall be given a replacement attempt.

If the backup time, either manual or secondary electronic, is within 12/100 of the primary system time, the primary system time is used.

If the backup time, either manual or secondary electronic, differs by more, but is in itself consistent, its time should be used. If an uncertainty in excess of 12/100 seconds remains, then the competitor has the choice of choosing the slowest recorded speed or being allowed a replacement attempt. His decision must be given to the Circle Marshal without delay, and is irrevocable.

Replacement attempts shall be scheduled to take place within one hour of the original attempt.

(i) The recorded speed in km/h is to be taken from the Eoff column.

~~e) The result of the speed in km/h shall be calculated by dividing 3600 by the time according to b), and then taken to the nearest lower 1/10 km/h.~~

c) The best speed attained during the three flights is used for classification. In case of a tie, to separate the fliers, the second best speed, and if still a tie, the third best speed is used.

d) The **first** three ~~first~~ positions are subject to rechecking of the declared model aircraft characteristics.

Reason: for logic and clarity, it was necessary to reorder and renumber the paragraphs. The addition of 4.1.17 b)i) will help to eliminate recording errors when calculating the classification.

F2B Aerobatics

f) 4.2.14 Execution and Sequence of Manoeuvres F2 Subcommittee

Amend Modify K factors to 1 (one)

1. Starting	1	1
2. Take-off	2	1
3. Reverse wing-over	8	1
4. Three consecutive inside loops	6	1
5. Two consecutive laps of inverted level flight	2	1
6. Three consecutive outside loops	6	1
7. Two consecutive inside square loops	12	1
8. Two consecutive outside square loops	12	1
9. Two consecutive inside triangular loops	44	1

continued overleaf

10. Two consecutive horizontal eights	7	1
11. Two consecutive square horizontal eights	18	1
12. Two consecutive vertical eights	10	1
13 Hourglass	10	1
14. Two consecutive overhead figure eights	10	1
15. Four-leaf clover	8	1
16. Landing	5	1

Reason: 1. In an event where all competitors are obliged to fly the same manoeuvres in the same sequence and in all rounds, there is no need to assign different complexity weighting to each manoeuvre. 2 The range of marks bandwidth, expanded from 1 - 20 to 1 - 100 in 2006, now grants judges sufficient range to qualify all levels of competitors performing all manoeuvres, both "simple" and "complex". 3 Considering 1) and 2) above, the use of K factors has become obsolete because a modification, depending of the degree of difficulty, of the scores awarded by the judges is no longer necessary.

Supporting Information: The F2B Subcommittee is aware that there is disagreement within the c/l stunt community when it comes to the value of K factors in F2B. Concluding the many years of intensive work on the 2006 F2B rule revision, the Subcommittee has therefore found it appropriate that for a trial period of not less than two years the influence of K factors shall be eliminated (by setting all factors to value 1 as proposed above).

During this trial period, contest results shall be analysed in order to determine from actual results whether the removal of K factors should be permanent, whether modified factors should be used, or whether the current 2006 K factors should be reinserted.

F2C Team Race

g) 4.3.1 – 4.3.13 and Annexes 4C & 4E F2 Subcommittee

The entire text of the rules, the F2C Jury Guide and the Control Line Organiser's Guide has undergone a total revision.

See Agenda ANNEX 7a F2C Rules, Judges Guide, Organisers Guide.

F2D Combat

h) 4.4.3. Combat Site F2 Subcommittee

Add a new paragraph c):

All persons like officials, contestants not flying, team managers, helpers etc.. within the boundary of the flying site must wear protective headgear when active flying is going on.

Reason: Safety.

- i) **4.4.4. Competitor** **F2 Subcommittee**
Add at the end:

To avoid the catching of the opponent's lines the protruding parts of the helmet must be covered. No communication using electronic devices is allowed between the pilot and mechanics/persons outside the flying circle.

Reason: To be in line with current practise.

- j) **4.4.4 Competitor** **Russia**
Brought forward from the 2007 Plenary Agenda Deferred Section

Amend as follows:

The pilot ~~crew~~ **consisting of one pilot and one mechanic**, who shall be the entrant and known as the competitor, may employ a maximum of ~~two mechanics~~ **one helper** in any one heat. (In exceptional circumstances of wet or extremely windy weather, an additional helper may be used as a streamer holder and must perform no other function for the duration of that combat period).

For World and Continental Championships, the helpers, a maximum of ~~six~~ **three** other than team members or the team manager (or assistant team manager), must be registered for no more than one national team, from the beginning of the competition throughout to the end. During active combat periods, the pilot and his mechanic(s) **and his helper** must wear protective headgear fitted with an effective retaining strap.

Reason: Success in a bout to a great extent depends on the actions of the mechanic concerned. The majority of pilots participate in competitions jointly with their regular mechanics. These mechanics are worthy of being awarded just as their pilots. Safety: The fourth member of the crew is to be removed from the starting site for the period of an active combat.

- k) **4.4.5. Characteristics of a Combat Model Aircraft** **F2 Subcommittee**
Add at the end:

The models must be equipped with an engine shut-off device that should be activated if a fly-away occurs. The device must remain functional for the entire flight period and must be repaired or replaced before take off if it becomes non-functional during the match.

Reason: Safety. Safety. The engine shut-off device rule was approved at the 2007 Plenary Meeting to be effective from 1st of January 2009.

l) 4.4.6. Controls - Technical Verification **F2 Subcommittee**

Add at the end of paragraph b):

The strap should be as shown in the sketch i.e. it should be attached to the wrist with a loop and sliding knot so that if the handle is released it tighten itself securely around the wrist. The point of attachment at the handle is up to the discretion of the pilot.

Reason: Clarification.

Add at the end of paragraph c):

However the processing officials or judges can ask the competitor to change the lines if there is any doubt about the line quality, such as kinks, curls, stress or rubbing marks.

Reason: Safety.

Add a new paragraph f):

Demonstration of the engine shut-off device may be required by the judges before each heat. The engine shut-off device must stop the engine within 3 seconds of activation. Additional demonstrations may be requested by the judges after the heat.

Reason: Safety.

m) 4.4.9 Method of Starting

Brought forward from the 2007 Plenary Agenda Deferred Section

Add new paragraph i)

i) If a model aircraft flies away with or without lines, the heat shall continue, as if the model aircraft has landed (see 4.4.11.f and 4.4.15.n).

Reason: To cancel an attempt in the event of a model aircraft fly-away.

n) 4.4.10 Termination of the Contest

Russia

Brought forward from the 2007 Plenary Agenda Deferred Section

Amend paragraph c) as follows:

c) The Circle Marshal shall signal both pilots to fly level and anti-clockwise and to cease combat when both streamer strings have been cut. If one pilot has only the string remaining he may request the circle marshal instruct both pilots to fly level and anti-clockwise and to cease combat. This decision may not be reversed, ~~once made~~ **while his model is flying. If the pilot's model lands and then flies up, he can ask the Circle Marshal once more to draw the models apart, or to permit the pilots to resume the combat after the signal to combat is given: 4.4.9.h .**

Reason: Safety. This will allow the pilot to be more sure in deciding to reject the combat and will prevent his opponent from provoking him for cutting the lines of the models.

o) 4.4.11. Method of Scoring **F2 Subcommittee**

Delete in paragraph a):

100 points shall be awarded for each distinct cut off the opponent's ~~crepe paper~~ streamer. There is a cut each time the model aircraft, propeller or lines fly through the opponent's streamer resulting in ~~paper~~ particle(s) becoming detached from the streamer.

Add in paragraph b):

A cut must contain at least one part of the paper **or replacement** streamer. A cut that contains string alone will not count.

Reason: Clarification.

Add a new paragraph

i) In case of a line tangle where the circle marshal estimates the tangle can't be cleared he can require both pilots to land immediately. Ground time for both pilots will start from the circle marshals signal. After the models have landed the heat will continue as normal.

Reason: Safety to avoid a fly-away.

p) 4.4.12. Attempts **F2 Subcommittee**

Add in paragraph b):

In the event of a model aircraft fly-away **where the engine shut-off device has worked properly**, as a result of the lines having been severed by his opponent's model

Reason: Safety.

q) 4.4.14. Offences **F2 Subcommittee**

Add and delete in paragraph a):

if a pilot ~~unintentionally leaves~~ **steps outside the centre circle with one foot** while his model aircraft is airborne;

Reason: To be in line with current practise.

Add a new paragraph

g) In case of rough flying style, bad behaviour in line tangles or similar the circle marshal and/or judges can give the pilot a warning attracting a penalty of -100 points, unless it is considered severe where a disqualification should be given (subject to 4.4.15).

Reason: Today the gap between just talking to a pilot of his behaviour and giving him a disqualification is too big. When a pilot risks a penalty for bad behaviour he probably behaves better.

Safety to avoid a fly-away.

r) **4.4.15. Cancellation of the Flight** **F2 Subcommittee**

Add in paragraph c):

he attempts to fly a model aircraft which at the time of launch does not have a strong effective control mechanism, or does not have a secure engine attachment **or does not have a functional engine shut-off device** or does not have a running engine ;

Reason: Safety.

Add in paragraph e):

he leaves the lines or any of his model aircraft, which at that moment are not airborne, in the centre circle **while his opponent is flying or is ready to fly his model;**

Reason: Clarification.

Add in paragraph g):

he is not present at his allotted flight time, unless he has the express permission of the circle marshal **and the team manager of his opponent;**

Reason: To be in line with current practise.

Add in paragraph i):

he or any of his mechanics does not wear a protective helmet **according to 4.4.4;**

Reason: Clarification.

Add in paragraph k):

he flies other than level in an anticlockwise direction when only his model aircraft is airborne and there is no line entanglement. **Loopings and or sudden or rough manoeuvres are not allowed;**

Reason: To be in line with current practise.

Add

m) for any other flagrant breach of the rules, **such as attacking his opponents model instead of the streamer;**

Reason: Clarification for one specific situation.

Add in paragraph n):

he releases the handle **and the safety strap separates from handle or wrist,** or removes the safety strap, for any reason, while the model aircraft is flying;

Reason: Safety.

Add in paragraph o):

his model aircraft(s) does (do) not conform to para. 4.4.5.; **or the handle does not conform to paragraph 4.4.6.b;**

Reason: Clarification.

Russia

Brought forward from the 2007 Plenary Agenda Deferred Section

Change as follows:

r) if the model aircraft lands with no streamer string ~~and the streamer retaining device is missing or bent,~~ but not as a result of a mid-air collision;

Reason: A streamer attachment device should keep a streamer safely in all conditions of a bout, except mid-air collisions of models. If a model lands without a string and this happens not as a result of a mid-air collision, the competitor –violator shall be withdrawn from the bout not depending on whether the streamer attachment device is damaged or not.

Note that the following continue the paragraphs submitted by the F2 Subcommittee

Add in paragraph s):

1) if the mechanic or pilot leaves the model more than 0,5 metre outside the flying circle;

2) if the mechanics jump over the opponents model aircraft(s) and lines kept within the pitting area;

Reason: Safety, and to be in line with current practise.

Add in paragraph u):

the pilot's aircraft takes off without a complete and operating silencer **or a working engine shut-off device;**

Reason: Safety.

Add and delete in paragraph v):

if a mechanic carries a model aircraft and lines over an opponent's **model** ~~or pit crew~~ ~~he will be disqualified;~~

Reason: Clarification.

Add a new paragraph y):

In the event of a flyaway where the engine shut-off device does not stop the engine within 5 seconds.

Reason: Safety.

s) 4.4.16 Classification

Russia

Brought forward from the 2007 Plenary Agenda Deferred Section

Amend as follows:

Previous opponents and competitors of the same nationality shall be drawn apart if possible with competitors of the same nationality to fly against each other only if there are no remaining opponents. Defending champions, not members of their national team, ~~are considered as individuals not possessing any specific nationality~~ **shall be drawn apart with their team members in just the same way, as if they were members of their national team.**

Reason: This will exclude the team's pressing on the reigning champion to sacrifice his individual classification to the benefit of a team classification.

Annex 4D – Control Line World Cup Rules

t) 4D.3 Contests

Russia

Brought forward from the 2007 Plenary Agenda Deferred Section

Add at the end of the sentence:

a) a maximum of two contests in each class may be selected for any one country **with its territory including less than 3 hour zones.**

Reason(s): To encourage large countries, such as USA, China, Russia, etc. to organize a greater number of World Cup events for competitors to be able to participate in World Cup events with no need to cover great

distances in order to promote sports aeromodelling developing in a widely spread scale.

Supporting Data: Such addition has already been approved by the Spacemodelling Sub-Committee for the Spacemodelling World Cup Rules, effective from January 1, 2009.

u) Annex 4E Organisers Guide **F2 Subcommittee**

Amend Third Part, items 3, 4, 6, 7, 8, 9; Fourth Part, 3, 4, 5.

See Agenda ANNEX 7b F2 Organisers Guide (Annex E).

v) Annex 4J Electric Speed Model Aircraft **F2 Subcommittee**

Add a new provisional class F2G for electric powered Control Line Speed model aircraft.

See Agenda ANNEX 7c F2G CL Electric Speed Rules

c) **5.M.1.2 General Characteristics** **France**

Change:

Maximum total weight.....250g

Reason: None given.

d) **5.M.1.9 Classification** **France**

Change

Each competitor will have four (4) preliminary flights (schedule F3P), the sum of the best three counting to determine a first individual classification and the team placing if necessary. All preliminary scores will be normalised to 1000 points as described below. The top 20% (twenty percent) of the classified pilots with a minimum of five (5) will have three (3) additional flights. These final flights will be unknown schedules. The total of the best three preliminary flights normalised again to 1000 points will count as one score. This score and the three finals scores will give four (4) normalised scores. The sum of the three best will give the final classification. In the case of a tie, the sum of all the scores will determinate the winner.

Scores of all preliminary rounds and finals will be computed using the Tarasov-Bauer-Long (TBL) statistical averaging scoring system. Only computer tabulation systems containing the TBL alqorythm and judge analysis programs and approved by the CIAM Bureau can be used at world and continental championships. All scores for each preliminary round and finals will be normalised as follows. When all competitors have flown in frot of a particular group of judges (i.e. a round) the highest score will be awarded 1000 points. The remaining scores for that group of judges are then normalised to a percentage of the 1000 points in the ratio of actual score over winner's score.

$$\text{Points}_x = \frac{S_x}{S_w} \times 1000$$

Points_X = points awarded to competitor X

S_X = score of competitor X

S_W = score of winner of round.

Note 1: Final and semi-final flights to determine the individual winner are only required for World and Continental Championships. For smaller contests the total of the three best preliminary flights may be used to determine the individual winner and team placing.

Note 2: The TBL system can only be applied for events with at least 10 competitors and 5 judges. For those smaller events that are not scored with the TBL system, the high and low scores for each manoeuvre will be discarded if four or more judges are used.

Reason: None given.

e) **5.M.1.10 Judging** **France**

Change

For each competition in F3P, there must be a minimum of three (3), and a maximum of five (5) judges, plus one timer. For larger events, there might be several groups of judges.

Each judge has to assess each manoeuvre and any other relevant action of the competitor individually

and independently from the other judges. The criteria for judging are contained in the Schedules of Manoeuvres and the Judge's Guide (Appendix 5B, SC 4a).

To avoid errant judging, it is recommended that training flights be performed, before the beginning of

official flying. These training flights are judged and tabulated according to the regulations, but the results are not made public.

For World or Continental Championships the organiser must appoint one panel of five judges. The judges must be of different nationalities and must be selected from a current list of international Judges. Those selected must reflect the approximate geographical distribution and the final list must be approved by the CIAM Bureau.

The invited judges must have had F3P judging experience within the previous twelve months and must submit a resume of his/her judging experience to the organiser when accepting the invitation to judge at a World or Continental Championship. The organiser must in turn submit the resumes to the CIAM Bureau along with the judges list for approval.

Before every World or Continental Championship, there shall be a briefing for the judges, following by training flights by non-competitors. Also, warm up flights for the judges should be flown by non-competitors before the first official preliminary flight each day. After the preliminary flights, the highest placing non-finalist should be awarded the honour of performing the warm-up flights for finals unknown schedule. Warm-up flights should be judged but under no circumstances should be tabulated. Any deviations from the above procedures must be stated in advance by the organisers and must have prior approval by the CIAM or the CIAM Bureau.

Reason: None

f) **5.M.1.12 Execution of Manoeuvres** **France**

Change

In the preliminary flights (schedule F3P) and the unknown flights, the manoeuvres must be executed during an uninterrupted flight in the order that they are listed on the score sheet. The direction of take-off is the competitor's choice. The direction of each manoeuvre is determined as a result of the take-off direction.

Reason: None

- g) 5.M.1.13 Schedules of Manoeuvres F3 Aerobatics Subcommittee**
The current schedule of manoeuvres has to be replaced by two new schedules for years 2009 and 2010 in accordance with paragraph 5.M.1.13
 See Agenda ANNEX 7e F3P RC Aerobatics Indoor Manoeuvres Schedule Preliminary

Reason: The current manoeuvre schedule has been used for the last two years, and for the coming year (2008). It is considered too easy and not challenging enough for participants, and with a view of being declared an official world and continental championship class in the very near future, the difficulty level needs to be increased. It is proposed that implementation occurs on 1 January 2009.

- h) 5.M.1.13 Schedules of Manoeuvres F3 Aerobatics Subcommittee**
Change as follows:

The schedule F3P-**AP** is a **preliminary schedule** for expert pilots in Indoor Aerobatic Power Model Aircraft competitions.

The schedule F3P-AF is a finals schedule for expert pilots in Indoor Aerobatic Power Model Aircraft competitions.

The schedule F3P-AM is for competitors to demonstrate their artistic performances in Indoor Aerobatic Power Model Aircraft in conjunction with music. It is recommended that competitors in F3P-AM have to go through a prequalification in F3P-**AP** and **F3P-AF** first.

See Agenda ANNEX 7f F3P RC Aerobatics Indoor Manoeuvres Schedule Finals

Reason: See above.

- i) 5.M.1.13 Schedule of Manoeuvres France**
Change

The schedule F3P-~~A~~ is for expert pilots in Indoor Aerobatic Power Model Aircraft.

The schedule F3P-AM is for competitors to demonstrate their artistic performances in Indoor Aerobatic

Power Model Aircraft in conjunction with music. It is recommended that competitors in F3P-AM have to go through a pre-qualification in F3P-~~A~~ first.

SCHEDULE F3P

<u>N° Manœuvres</u>	<u>K-Factor</u>
<u>01 Take-off Sequence</u>	<u>1</u>
<u>02 Horizontal Eight with 1/2 rolls</u>	<u>5</u>
<u>03 Half circle with a roll to the outside of the circle</u>	<u>4</u>
<u>04 Triangular loop</u>	<u>3</u>
<u>05 Pull-push-push Humpty-bump exit inverted</u>	<u>3</u>
<u>06 Slow roll, from inverted</u>	<u>4</u>
<u>07 Top hat with 1/4 rolls, from inverted exit upright</u>	<u>3</u>
<u>08 Loop with integrated half roll on top</u>	<u>4</u>

continued overleaf

<u>09 Level half rectangle in knife-edge from inverted, exit upright</u>	<u>4</u>
<u>10 Rolling circle with one and a half roll to the inside of the circle, exit inverted</u>	<u>5</u>
<u>11 180° Turn from inverted</u>	<u>2</u>
<u>12 Torque roll, 2 points roll</u>	<u>5</u>
<u>13 Stall turn from inverted</u>	<u>3</u>
<u>14 Four points of an eight point-</u>	<u>4</u>
<u>15 Landing sequence</u>	<u>1</u>

The Aresti manoeuvre diagrams appear at Annex 5M Appendix 1.
An explanation of the Aresti diagrams appears in F3A Annex 5A.
The Judge's Guide appears in F3A Annex 5B.

Reason: None

j) 5.M.1.14 Description of Manoeuvres for F3P Indoor Aerobatic Power Model Aircraft France

Change

See Agenda ANNEX 7g F3P RC Aerobatics Indoor Schedule of Manoeuvres

Reason: New schedule.

11.9 Section 4C Volume F3 - RC Soaring

F3B Thermal Soaring

a) **5.3.1.10. Safety Rules**

Germany

Amend paragraph b) as follows:

b) Except in the circumstances described in paragraph 5.3.1.5 b) items 1, 2, 3, and 5 or in the case of a line break at the moment of release of the model aircraft, after release of the model aircraft from the hand of the competitor or helper, any contact of the model aircraft with any object (earth, car, stick, plant, tow- line, etc) **within the safety area will be penalised by 200 points;** ~~or~~ **the contact with a** person within the safety area will be penalised by ~~300~~ 1000 points. The number of contacts during one flight does not matter (maximum one penalty for one flight). The penalty will be a deduction of ~~300~~ **200 or 1000** points from the competitor's final score and shall be listed on the score sheet of the round in which the contact occurred.

Reason(s): The compromise with 300 points penalty for both infractions doesn't meet the requirements. We should distinguish between hitting an object and hitting a person within the safety-area. Hitting an object should be penalised with 200 points, hitting a person should be penalised with 1000 points.

F3J Thermal Duration Gliders

n) **5.6.1.3 Characteristics of Radio Controlled Gliders**

Czech Republic

Amend paragraph b) as follows:

b)The radio shall be able to operate simultaneously with other equipment at **10 kHz spacing below 50 MHz and at 20 kHz spacing above 50 MHz.** When the radio does not meet this requirement, the working bandwidth (max. 50 kHz) shall be specified by the competitor.

Reason(s): Present-day RC systems are mostly able to work with 10 kHz spacing. Using this ability would help to make the composition of groups more fair.

c) **5.6.1.3 Characteristics of Radio Controlled Gliders**

Germany

Amend paragraph b) as follows:

b) The radio shall be able to operate simultaneously with other equipment at ~~20~~ **10** kHz spacing. ~~When the radio does not meet this requirement, the working bandwidth (max. 50 kHz) shall be specified by the competitor.~~

Reason(s): Radio gear equipment nowadays is technically mature and easily able to run simultaneously at 10 kHz spacing. Close spacing makes the flight matrix easier to design without interferences and crystal changes.

d) **5.6.1.3 Characteristics of Radio Controlled Gliders** **Germany**

Amend paragraph f) as follows:

For the sake of randomness of the starting order among the successive rounds, each competitor must enter two different transmitter frequencies with ~~20~~ **10** kHz minimum spacing.

Reason(s): Radio gear equipment nowadays is technically mature and easily able to run simultaneously at 10 kHz spacing. Close spacing makes the flight matrix easier to design without interferences and crystal changes.

e) **5.6.1.3 Characteristics of Radio Controlled Gliders** **Germany**

Amend paragraph f) as follows:

For the sake of randomness for the starting order among the successive rounds, each competitor must enter ~~two~~ **three** different frequencies with ~~20~~**10** kHz minimum spacing. ~~The competitor can be called to use either of these frequencies during the contest, so long as the call is made at least 1/2 hour prior to the beginning of a round in written form to the pilot (or team manager when applicable).~~ **The organizer is entitled to use any of these three frequencies for setting the flight matrices. Once the competitor is given one of these three frequencies he must not change to another frequency for all flights during the whole preliminary rounds other than reflights. In case of a reflight the competitor can be called to use either of these three frequencies for only this reflight, as long as the call is made at least 1/2 hour prior to the beginning of the reflight in written form to the pilot (or team manager when applicable)**

Reason(s): **Safety.** To avoid crashes of models and to set the safety level as high as possible not changing frequencies is the more reasonable way than penalizing a pilot for having forgotten to change his frequency.

Several Incidents occurred in the recent years due to wrong frequencies, especially during Continental and World Championships. They proofed the necessity not to force pilots to change their crystals during any preliminary rounds of the contests. Flight paths of models out of control caused by a wrong frequency are not predictable. The possibility of a model crashing among the competitors or among the spectators is much too likely.

f) **Change 5.6.1.3 Characteristics of RC Gliders** **Germany**

Brought forward from the 2007 Plenary Agenda Deferred Section

Amend paragraph 5.6.1.3.f as follows:

f) For the sake of randomness for the starting order among the successive rounds, each competitor must enter **(three)** different frequencies with 20kHz minimum spacing. **The organizer is entitled to use any of these three frequencies for setting the flight matrices. Once the competitor is given one of these three frequencies he must not change to another frequency during the whole preliminary rounds in any case other than**

reflights. In case of a reflight – ~~T~~the competitor can be called to use either of these **three** frequencies **for only this reflight**, so long as the call is made at least ½ hour prior to the beginning of **the reflight** in written form to the pilot (or team manager when applicable)

Reason(s): Safety. To avoid crashes of models and to set the safety level as high as possible not changing frequencies is the more reasonable way than penalizing a pilot for having forgotten to change his frequency.

Several Incidents due to that issue occurred in the recent years especially during Continental- and World Championships, which showed the necessity of not having the pilots to change frequency during the preliminary rounds of the contest. Flight paths of models out of control because operated with the wrong frequency for it has not been changed are not predictable and the possibility of a crashing model into the competitors or visitor spectator area is way too dangerous.

g) 5.6.2.4. Safety rules **Czech Republic**

Amend paragraph b) as follows:

b) The model aircraft must not be flown at low lever (below 3 meters **from the top of tents, buildings, trees or other objects on the earth**) over the safety area.

Reason(s): Clarification. Till now it's not clear whether three meters are measured from the ground or from objects.

h) 5.6.4. Re-flights **Germany**

Add new paragraph f) as follows:

The competitor is entitled to a new working time if:

f) A towline (others than his own) was not removed after launch and is blocking (covering) his own towline.

Reason(s): A pilot can not be charged by not being able to get a proper launch because another competitors towline helpers did not follow the demand to remove their toelines from the launching area after the model aircraft has been released.

i) 5.6.8. Launching, 5.6.8.3. b) **Germany**

Amend paragraph b) as follows:

b) Immediately after the release of the model aircraft from the launching cable, without delay the towline helpers must either recover the towline on a hand reel (hand winch) or, when a pulley is used they must continue to pull the towline until it is completely removed from the towing area in order to avoid crosscutting with other lines which are still in a state of towing or will be used for towing. **This is not applicable if a line break occurs. In this case only the residual line attached to the ground or used by the**

towing helpers has to be removed from the launching area. A designated judge (launch line-manager) has to overview and control and - if necessary - to call on towline helpers to remove their lines out of the launching area after the model aircraft is released. If his demand is denied the pilot towed by towline helpers refusing to remove their line is to be penalized with 100 points.

Reason(s): Enabling every pilot to launch safely and to avoid crosscutting of lines as well as possible “blocking” of pilots about to launch (or while about to repeat a launch) because a towline of another competitor was not removed and is covering the towline of the pilot which is about to launch.

j) 5.6.8.7. Towlines RC Soaring Subcommittee

Amend paragraph b) as follows:

b) The length of the towline shall not exceed ~~450~~ **100** metres when tested under a tension of 20 N.

Reason(s):

1. With shorter starting height the flight times would be shorter in average and less pilots will have equal results (limited by the working time). The skill of finding thermal lift will be more expressed. Instead of landing competition the event would more turn to thermal hunting competition or aerodynamic quality competition.
2. The requirements for big airfield would be diminished. It will be possible to organize a high quality contest even on smaller airfields.

k) 5.6.9.2. Czech Republic

Amend paragraph as follows:

Officials (timekeepers) must remain upwind of the launch line **15 m radius circle** during **the working time before the** landing process. The pilot and one helper are allowed inside the 15 m radius circle.

Reason(s): Clarification. The present wording originates from the time when the landing spots were only 15 meters from the launch line. In addition: today the launch line isn't materialized any more.

I) 5.6.10.5

Germany

Brought forward from the 2007 Plenary Agenda Deferred Section

Amend as follows:

5.6.10.5 A landing bonus will be awarded in accordance to the distance from the landing spot marked by the organisers according to the following tabulation:

Distance from Spot (meters)	Points
up to m	
4	100
2	95
<u>0,2</u>	<u>100</u>
<u>0,4</u>	<u>99</u>
<u>0,6</u>	<u>98</u>
<u>0,8</u>	<u>97</u>
<u>1,0</u>	<u>96</u>
<u>1,2</u>	<u>95</u>
<u>1,4</u>	<u>94</u>
<u>1,6</u>	<u>93</u>
<u>1,8</u>	<u>92</u>
<u>2</u>	<u>91</u>
3	90
4	85
5	80
6	75
7	70
8	65
9	60
10	55
11	50
12	45
13	40
14	35
15	30
over 15	0

Reason(s): Dividing the inner two meters of the 15m concentric landing zone leads to more appropriate separation of the results. Timing tenth of a second but rewarding the landing meter wise - and thereby in steps of five points – occurs not to be equalized level of fight and landing credit. The more precision needed for a 20cm-wise landing task leads towards less speed needed for a proper approach.

m) **5.6.10.5**

Belgium

Brought forward from the 2007 Plenary Agenda Deferred Section

Add following sentence to 5.6.10.5:

No landing points are awarded if the model remains stuck in the ground and the tail of the model is not touching the ground after coming to rest. No landing points are awarded if the model ends up inverted after landing.

Reason(s): Return to the essence of landing a model. Landing a glider nearly vertically into the ground should not be awarded with bonus points for craftsmanship.

n) **5.6.10.5**

Greece

Amend paragraph as follows:

For the Fly-Off flights the landing bonus will be awarded in accordance to the distance from the landing spot marked by the organisers according to the following tabulation:

Distance from Spot (meters)	Points
up to m	
0,	200
0,4	95
0,6	90
0,8	85
1,0	80
1,4	75
1,8	70
2,2	65
2,6	60
3	55
3,4	50
3,8	45
4,2	40
4,6	35
5	30
over 5	0

Reason(s): Having analyzed the flight scores from almost all the previous WCh it proved that almost 90% of all competitors are landed within the 5 meters distance from the spot. On the other hand the difference in seconds at least on the fly-off sometimes is not big enough to separate the competitors. So something else should improve the current system.

- o) **5.6.12.3. Matrixes,** **RC Soaring Subcommittee**
5.6.12.4 Frequency Groups,
5.6.12.5 The Matrixes
Delete all three paragraphs and replace them with one new paragraph:
5.6.12.3 Groups
a) **The composition of groups should minimise the situations where any competitor flies against another many times, except in the fly-off. It is recognised that, in practice, with certain numbers of competitors, or where more than three rounds are flown, a situation where a competitor flies against another more than once may be unavoidable. This must be kept to a minimum.**
b) **In order to minimise the time needed to run the contest, it is very important to arrange the starting order to get minimum number of groups per round, with the maximum possible competitors in each group. It is recommended to put groups with vacant starting positions to the end of each round, to keep free space for contingent re-flyers.**
c) **The starting order has to ensure that as far as possible, there are no competitors of the same team in the same group.**

Reason(s):

- 1) At present the matrix system is very seldom used in the pure form. Frequency distribution (availability of crystals) in most cases doesn't allow its full usage.
- 2) With many rounds flown, neither the matrix system minimises the number of competitors who fly one against another many times.
- 3) The present rules have no statement dealing with competitors of the same team. In practice organisers voluntarily keep the rule that competitors of the same team don't fly in one group, because this helps to minimise the number of necessary helpers (there is always shortage of helpers). Therefore it's desirable to have this practice anchored in the code.
- 4) The proposed change would shorten the length of the F3J rules by almost 40%.

F3I Aero-Tow Gliders (Provisional)

p)

Replace the full set of rules.

See Agenda ANNEX F7h F3I Soaring Aero-Tow Rules.

Reason: Full rewriting of the rules to correct many cut-and-paste errors in the 2007 version. Arranges paragraphs in a more logical manner.

11.10 Section 4C Volume F3 - Helicopter

F3C Helicopter

a) 5.4.11. CLASSIFICATION

F3 Helicopter Subcommittee

Replace entire paragraph

~~After the completion of four official (preliminary) rounds, the best three normalised scores will be used to determine the team standings. The top 15 then compete in three fly-off rounds to determine the final individual classification. The normalised results of the preliminary rounds for the top 15 pilots will count as one score by dropping the lowest scoring round, adding the remaining rounds together, and dividing the resulting total by the number of counting preliminary rounds. This score, plus the three fly-off scores, provide four normalised scores with the best three to count for the final individual classification. The fly-offs to determine the individual classification are only required for Continental and World Championships. If the competition is interrupted during the preliminary rounds, the final team classification will be determined by counting all completed preliminary rounds and dropping the lowest. If the competition is interrupted during the fly-off rounds, the final individual classification will be determined by counting all completed fly-off rounds plus the results from the preliminary rounds and dropping the lowest. All scores for each round will be normalised by awarding 500 points to the average of the best 20% scoring flights. The remaining scores are then normalised to a percentage of the 500 points as follows:~~

$$\frac{\text{Score}_{(X)} \times \text{Total}_{(A)}}{\text{Points}_{(X)}} = \frac{\text{Score}_{(A)}}{\text{Total}_{(A)}} \times 500$$

~~Where: Points_(X) = Points awarded to competitor X~~

~~Score_(X) = Score of competitor X~~

~~Score_(A) = Total sum of the best 20% (Total_(A)) flights~~

~~Total_(A) = 20% of the total number of pilots at the start of the competition (rounded up in case of an odd number) or a maximum of 12.~~

~~When two flight lines are used the scores will be normalised for each flight line and each day separately. In that case, Total_(A) is replaced by one half of Total_(A) (rounded up in case of an odd number) only for the preliminary rounds.~~

~~If only one round is possible then the classification will be based on that one round. Ties for any of the first three places will be broken by counting the highest throwaway score. If the tie still stands a "sudden death" fly-off must take place within one hour.~~

After the completion of four official (preliminary) rounds, the best three scores will be used to determine the team standings. The top 15 of all competitors then compete in three fly-off rounds to determine the final individual classification. The results of the best three

preliminary rounds (normalised to 1000 points) will count as one score. This score, plus the three fly-off scores provide four scores with the best three to count for the final individual classification. The fly-offs to determine the individual classification are only required for Continental and World Championships. If the competition is interrupted during the preliminary rounds, the final team classification will be determined by counting all completed preliminary rounds and dropping the lowest. If the competition is interrupted during the fly-off rounds, the final individual classification will be determined by counting all completed fly-off rounds plus the results from the preliminary rounds. All scores for each round will be normalised by awarding 1000 points to the highest scoring flight. The remaining scores are then normalised to a percentage of the 1000 points in the ratio of actual score over the score of the winner of the round. If only one round is possible then the classification will be based on that one round.

For example:

$Points_{(x)} = Score_{(x)}$ divided by $Score_{(w)}$ multiplied by 1000

Where $Points_{(x)}$ = Points awarded to competitor X

..... $Score_{(x)}$ = Score of competitor X

..... $Score_{(w)}$ = Score of winner of the round

Ties for any of the first three places will be broken by counting the highest throwaway score. If the tie still stands a "sudden death" fly-off must take place within one hour.

Reason: The new normalization system based on the average score (500 System) has exhibited some anomalies at competitions with few competitors and only one flight line and the recent World Championship. The system was criticized by many competitors and team managers at the 2007 WC and viewed as a lottery system. The former normalization system based on the best score (1000 System) used up until 2005 was accepted/understood by all pilots and should be re-instated.

F3N Helicopter Freestyle

b) 5F.2 GENERAL CHARACTERISTICS

Germany

Change paragraph 5F.2

The swept area of the lifting rotor is not limited. The engine displacement is not limited.

Limitations are:

- a) WEIGHT: The weight of the model aircraft (with fuel or with batteries) must not exceed 6 kg.

continued overleaf

b) GYROS: The use of automatic stabilisation devices that utilise external references is forbidden.

The use of electronic rate sensors is not limited to any axis and several ones can be used at the same time.

The use of pre-programmed flight manoeuvres is forbidden. ~~The use of an electronic rate sensor is limited to rotation about the yaw axis.~~ The use of a governor is permitted.

c) ROTOR BLADES: All-metal main or tail rotor blades are prohibited.

Reason: During the last three years electronic stabilisation devices as described had been used at national championships in Germany, in accordance with modified national rules. Neither complication occurred nor uncertainty regarding the fairness of the competitions. To ensure the future of F3N the proposed amendment should be included.

11.11 Section 4C Volume F4 - Scale

Scale General Rules and Standards for Static Judging

a) 6.1.4 Scale Subcommittee

Add to the second paragraph

For Continental Championships with less than 40 competitors in the class, the organisers are allowed to use 2 set of 2 static judges instead of one set of three judges to speed up static judging.

Reason: To speed up the static judging when the entry is below 40 competitors in the class.

Change the fourth paragraph as follows

Within each class (F4B & F4C) all the judges (static and flying) must be of a different nationality and **preferably** selected from a list submitted by ~~the~~ **the NACs for guidance** and approved by the CIAM Bureau).

Reason: To be in line with the current definition of the judges list.

b) 6.1.4 Scale Subcommittee

Brought forward from the 2007 Plenary Agenda Deferred Section

Add to the end of the paragraph:

The organiser of a Scale C/L World or Continental Championship (F4B) shall appoint five judges, of whom three will be nominated to do the static judging, but all five will judge the flying once static judging is complete. **If the number of entries by the official closing date is less than 20, the organisers only need to appoint three judges to do both static and flying.**

Reason: To reduce organiser's cost when the number of entry is very low.

c) 6.1.4 Scale Subcommittee

Brought forward from the 2007 Plenary Agenda Deferred Section

Add to the end of the paragraph:

The organiser of Scale R/C World or Continental Championship (F4C) shall appoint three (or six for two panels) judges to do static judging, plus a separate panel of five to judge the flying. **If the number of entries by the official closing date is less than 20, the organisers only need to appoint three judges to do the flight judging.**

Reason: To reduce organiser's cost when the number of entry is very low.

d) 6.1.4 USA

Change 6.1.4 from – The organizer of a Scale C/L World or Continental Championships (F4B) shall appoint five judges, from whom three will be

nominated to do the static judging, but all five will judge flying once static judging is complete.

Change – The organizer of a Scale C/L World or Continental Championship (F4B) shall **appoint three judges, all of whom will do both static and flight judging.**

The organizer of Scale R/C World or Continental Championships (F4C) shall appoint three (or six for two panels) judges to do static judging, plus a separate panel of five to judge the flying.

The organizer of Scale R/C World or Continental Championship (F4C) shall appoint four judges to do static judging in two panels, plus a separate panel of four flight judges and the chief flight judge to judge on two flight lines. Teams of two flight judges will judge, while the Chief Judge over-see's the competition scoring.

Reason: None

e) 6.1.10 Judging for Fidelity to Scale and Craftsmanship Scale Subcommittee

Replace the K-factor table with the new one

	K-factor
1. Scale Accuracy	
a. Side view	13
b. End view	13
c. Plan view	13
2. Colour	
a. Accuracy	3
b. Complexity	2
3. Markings	
a. Accuracy	8
b. Complexity	3
4. Surface texture and scale realism	42
<u>a. Surface texture</u>	<u>7</u>
<u>b. Scale Realism</u>	<u>7</u>
5. Craftsmanship	
a. Quality	<u>12</u>
b. Complexity	<u>5</u>
6. Scale Detail	
a. Accuracy	<u>9</u>
b. Complexity	<u>5</u>
Total K Factor	K = 100

Reason: A better balance between the different parts of the judging.

f) 6.1.2 USA

Proposed alteration or addition :

For transmitter and frequency control see Volume ABR Section 4b, Para B.10. 4th paragraph down.

The second flight round will start one-third the way down the flying order. ***The third flight round will start two-thirds the way down the flying order. The fourth and final round will be flown in ascending order with regard to the preliminary placings after three flight rounds and static.***

Reason: None

F4B Control Line Scale

g) 6.2.2. Control Mechanism **Scale Subcommittee**

Change Add text to paragraph c) and replace paragraph d) as follows

c) These may include (but are not limited to) control of engine(s), landing gear, landing flaps. Secondary Control Functions may be controlled by the pilot via wires/cables, or may function completely automatically **or via 2.4 GHz “park radio” with maximum 20mW output power.** The frequency of any electro-magnetic

d) No control of Primary Control Functions other than through wires/cables shall be permitted. For Secondary Control Functions the use of 2.4 GHz “park radio” with maximum power output of 20 mW is allowed.

Reason: To take advantage of the modern radio with spread spectrum and low output power that will not disturb the RC part of the championship.

h) 6.2.9 **USA**

Proposed alteration or addition :

At World and Continental Championships, or whenever using three flight judges all three scores will count toward the final score.

Reason: None

F4C Radio Control Scale

i) 6.3.1. General Characteristics **Scale Subcommittee**

Delete the following sentence

~~b) The maximum thrust for a turbine engine shall be 10 kg (100 Newton)~~

Reason: Turbines are now included in the general model aircraft definition in the ABR section and the present note at the end of 6.3.1. also covers the turbine definition.

Note also that the 2007 Plenary Minutes Deferred Section proposal m) for 6.3.1. for turbines at 15 Kg is now redundant.

j) **6.3.3** **USA**

Proposed alteration or addition :

a) Each competitor will be **called to fly four times**, and must execute an official flight within the required time limit (see 6.3.4) on each occasion to be eligible for flight points for that flight.

Reason: None

k) **6.3.6. Flight** **Scale Subcommittee**

Change the K-factor table as follows

<u>Flight Scoring:</u>	<u>K-factor</u>
6.3.6.1. Take-off	<u>11</u>
6.3.6.2. Option 1.	<u>7</u>
6.3.6.3. Option 2.	<u>7</u>
6.3.6.4. Option 3.	<u>7</u>
6.3.6.5. Option 4.	<u>7</u>
6.3.6.6. Option 5.	<u>7</u>
6.3.6.7. Option 6.	<u>7</u>
6.3.6.8. Option 7.	<u>7</u>
6.3.6.9. Option 8.	<u>7</u>
6.3.6.10. Approach and Landing	<u>11</u>
6.3.6.11. Realism in flight	
a. Engine sound (realistic tone and tuning)	<u>4</u>
b. Speed of the model aircraft	<u>7</u>
c. Smoothness of flight	<u>7</u>
d. Choice of options	<u>4</u>

Reason: A better balance between manoeuvres and prototype scale behaviour scoring.

l) **6.3.6. Flight** **Scale Subcommittee**

Add a new note below the Flight Scoring Table and above the two existing paragraphs

The flight schedule must include the two manoeuvres “Figure Eight” and the “Descending 360° Circle” to be accepted as complete.

Reason: To allow the competitor to plan his flight schedule to best present his model.

m) **6.3.7. Optional Demonstrations** **Scale Subcommittee**

Add the following text as a new first paragraph

The manoeuvres “Figure Eight” and “Descending 360°” are mandatory manoeuvres to be included in each flight, to be positioned at the competitor’s discretion.

Reason: Consequential change from 6.3.6 Flight, above.

n) **6.3.9** **USA**

Proposed alteration or addition :

At World or Continental Championships, or whenever using four flight judges in teams of two, both of the flight judges scores count towards the final score.

The flight score shall be the sum of the points awarded **by both judges** in 6.3.6.

Reason: None

o) **6.3.10** **USA**

Proposed alteration or addition :

Add points earned in 6.1.10 to the average score of the two best flights under 6.3.9. If the competitor has achieved only one flight, the points awarded for that flight will be divided by two.

If for any cause beyond the control of the organizers (e.g. B.11.1) less than **four** official rounds are flown, the scoring shall be completed as follows:

- a) If two rounds are flown, the average of the two flights as in 6.3.9 is used.
- b) If only one round is flown, the single flight score of that one round is recorded.
- c) The scores in an official round can be recorded only if all competitors had equal opportunity for a flight in that round.

Reason: None

Scale Annexes

Annex 6A Judges Guide for Static Judging

p) **6A.1.10.4** **Scale Subcommittee**

Change the title and paragraph as follows:

6A.1.10.4 Surface Texture and **Scale** Realism

Realism is a question of how well the model captures the character and ~~surface texture~~ of the full size aircraft. The judges should

Reason: To bring the text in line with the new scoring table.

Annex 6C Judges Guide for Radio Control Flight

q) **6C.1** **USA**

Proposed alteration or addition :

After each flight, **the flight judges will record any non-standard event that causes downgrading or loss of flight points. The Chief Flight Judge will review all score sheets for fairness as well as any zero scores before the score sheets are taken to scoring.** As examples: Missed figures, figures flown out of order, out of flight time, flying behind the "Judges Line", missing dummy pilot or crash landing

Reason: None

r) **6C.3.7 Optional Demonstrations** **Scale Subcommittee**

Relocate the entire paragraph and diagrams to the end of the annex.

Reason: The paragraph numbers in Annex 6C relate to the appropriate rule in the rules section of the F4 volume. The relocation of 6C.3.7 will put the paragraphs in the Annex into the correct sequence according to the rules sequence.

s) **6C.3.7.V – Lazy Eight** **United Kingdom**

Replace existing description and diagrams of the Lazy 8 manoeuvre with that detailed below:

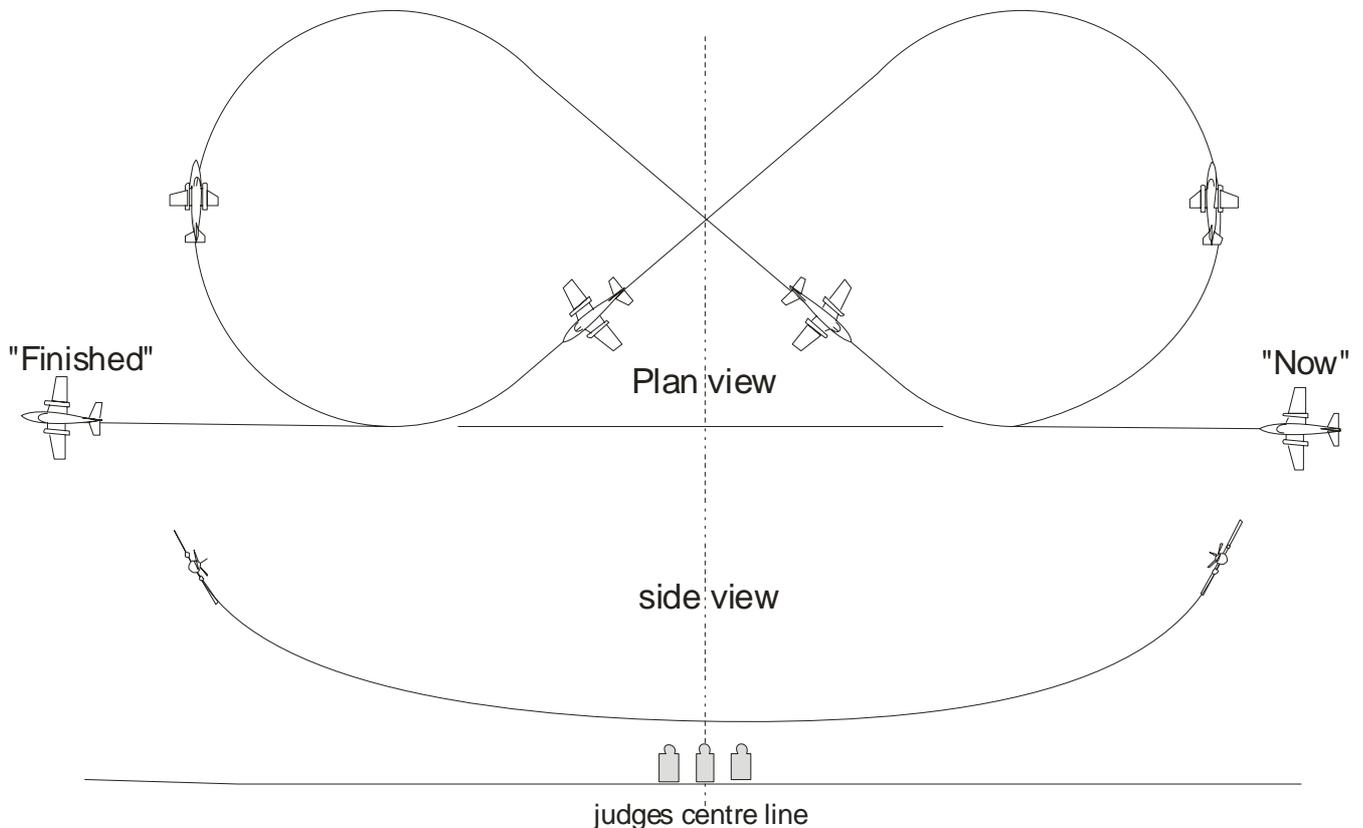
V Lazy Eight

The model approaches in straight and level flight on a line parallel with the Judges' line. After passing the judges' position **When the model is in line with the judges (the centre) a smooth curving climb is commenced which progresses to a smooth climbing turn of constant radius is commenced away from the judges.** At the apex of the turn the bank should be at least 60 deg **and the model shall be on a heading of 90 degrees to the judges' line.** The nose of the model then lowers and the bank comes off at the same rate as it went on. The turn is then continued beyond 180 deg to cross in front of the judges with **intercept the centre** with the wings level **and at the same height as the entry height into the manoeuvre.** before joining and turning on to the reciprocal of the original approach track. This completes half of the figure, which is then repeated in the opposite sense to give the full manoeuvre.

At the centre another smooth climbing turn is immediately commenced away from the judges, the shape of which should be the same as the first turn. The second turn is then continued beyond 180 deg to cross the centre with wings level and at the same height as the entry height into the manoeuvre. The Lazy Eight is completed by maintaining this height and heading with wings level before turning to intercept intercepting the original approach track **to exit the manoeuvre parallel with to the judges' line in straight and level flight.** A low powered aircraft would be expected to execute a shallow dive at full throttle in order to pick up speed before commencing the manoeuvre. The figure should be symmetrical each side of the judges' position.

~~This manoeuvre is essentially two wingovers in opposite directions and should be capable of being flown by most aircraft.~~

the diagram appears overleaf



Reason: The existing diagram and description is ambiguous and unclear.

New Provisional Class

t) 6.8. Class FG Large Scale Model Aircraft (Provisional)

**Scale
Committee**

Insert the rules as follows:

6.8.1. General Rules.

Maximum weight including fuel 25Kg. (Maximum Take-off weight)

All other rules as in F4C.

Reason: To reintroduce the Large Scale RC Class as a Provisional Class
Renewed interest in expanding the Scale classes to heavier models and giving the organisers more competitors to spread the costs. To get more people involved in Scale competition.

u) New Class for R/C Scale F4 USA

F4X Scale

1. The weight limits, as well as engine requirements and aircraft requirements etc. are the same as F4C scale.
2. Scale Drawings-should be limited to one 3-view or set of scale drawings of normal size.
3. Photographic evidence – one photo of the aircraft modelled, it does not have to show the complete aircraft. Other photos are strongly suggested for maximum points.
4. Proof of Colour – colour photographs, black & white photographs as well as colour chips can be used.
5. Competitor's declaration – the competitor is required to only finish the model in a scale colour scheme, no other declaration is needed.

Judging for Fidelity to Scale and Craftsmanship.

1. Scale Accuracy

Side View	10
End View	10
Plan View	10

2. Colour

Accuracy	10
----------	----

3. Marking

Accuracy	10
----------	----

4. Craftsmanship

Quality	10
---------	----

5. Scale Detail-limited to surface details and engine details, the cockpit is not judged.

Total K factor is only 70 it could as well be eliminated for this class.

Flight routine for this class would be the same as for F4C scale with the following changes:

Flight

Take-off	K	7
Straight Flight	K	4
Figure Eight	K	4
Descending 360	K	4
Option	K	10
Approach and Landing	K	7
Realism in Flight	K	4

Speed of the model, Smoothness of flight

Total K of 70

Reason: This new class is intended to increase the amount of competitors who would be interested in F4 Scale. We as a sub-committee must make positive attempts to increase participation in the area of scale or within a few short years others and myself are concerned that it will disappear and international participation in scale contests will also disappear. It is not a Fun Scale type of event but it is an event where the static rules are extremely relaxed. Some may consider it Fun Scale or ARF scale but it is intended to increase participation in scale competition as well as bring new modelers to F4C scale.

The hope for results of this being passed is that organizers will be increasingly interested in hosting a Scale World Championships. This new event should once again bring an event, which will make money for organizers worldwide. This one item to many of us on the sub-committee is the most urgent business at hand.

11.12 Section 4C Volume F5 - Electric

General Rules

- a) **5.5.1 General rules - 5.5.2 Contest rules** **Electric Subcommittee**

Add new paragraph 5.5.1.4 and re-number subsequent paragraphs.

Add new paragraph 5.5.2.2.j.

Add new paragraph 5.5.2.5 and re-number subsequent paragraphs.

5.5.1.4 Energy Limiter

In classes where an energy limit is defined an energy limiter device must be used. The energy limiter cuts off the motor when the given energy limit is reached. The energy limiter is located in the electric circuit between the battery and the motor controller and overrides directly or indirectly the motor-on R/C command of the pilot. The interruption must persist permanently or for a defined period of time.

5.5.2.2.j If an infringement of energy limitation rules occurs.

5.5.2.5 Processing of Energy Limiters

In classes where an energy limit is defined a pilot is allowed to homologate a maximum of 3 energy limiters at the processing. In case of a failure of an energy limiter during the competition it is allowed to process another one. If an energy limiter fails the homologation the competitor may ask for a second homologation, this result is obliging. Interchanging energy limiters between competitors is not allowed. The organiser of an event has to provide power supply for energy limiter processing.

Reason: General Rules for the use and processing of energy limiters necessary

F5B Electric Powered Motor Gliders

- b) **5.5.4.1 Definition** **F5 Electric Subcommittee**

Amend the model specifications as follows:

b) Model Aircraft specifications:

Minimum weight without battery	1000 g
Type of battery	Lithium Polymer
<u>Minimum surface area</u>	<u>26.66 dm²</u>
Maximum number of only serial cells (<u>cells in parallel are not permitted.</u>)	6
<u>Maximum weight of battery pack</u>	<u>600 g</u>
Limitation of energy by an electronic limiter that stops the motor	max. 1750 watt-min
<u>(the limiter is checked by the organiser during the contest)</u>	

d) Maximum number of battery packs to enter the contest: 1 pack per 2 rounds; 1 pack for reflights

(Repair of battery packs is permitted providing the cells used in the repair come from battery packs that were checked at the start of the contest for that pilot).

Reason: Clarification

c) **5.5.4.1 Definition**

Germany

Brought forward from the 2007 Plenary Agenda Deferred Section

Amend paragraph d as follows:

d) Starting order for world and continental championships: the starting order ... team members.

Starting order for other competitions: Pending on the number of pilots and planned rounds the organizer may try to divide the random starting order of the first round by the number of planned rounds to fly and shift the starting order accordingly. E.g. 24 pilots, 4 rounds. Starting order 1st round: 1....24; starting order 2nd round: 7....24, 1...6; starting order 3rd round: 13....24, 1....12 and so on.

Reason(s): The regulation for world or continental championships is too complicated for regular “weekend” competitions. However it should be tried to mix the starting order somewhat to reduce the weather impact pending on the local situation.

F5D Electric Powered Pylon Racing

d) **5.5.6.2 Technical Specifications**

F5 Electric Subcommittee

Amend as follows:

c.) Energy Limit

An energy limiter must be used which cuts off the motor when the given energy limit is reached. The energy limiter is located in the electric circuit between the battery and the motor controller and overrides the motor-on command of the pilot. The interruption must persist for minimum period of 10 seconds. When the pilot has finished his race or has left the pylon course flight path the motor may be switched on again.

Reason: Clarification

e) **5.5.6.2 Technical Specifications** **F5 Electric Subcommittee**

In order to replace all battery types by LiPo, amend paragraph 5.5.6.2 as follows:

a) Model Aircraft

Minimum weight 1,000 g

Maximum surface loading 65 g/dm²

b) Battery

Battery is limited by either weight or number of cells.

Type of battery: ~~NiCd or NiMH~~. Lithium Polymer batteries (LiPo)

Maximum weight: ~~425g~~ **300 g** including soldering, insulations, cables and connectors.

~~Maximum number of only cylindrical cells: 7~~

Minimum number of cells: 2

Maximum number of cells: 5

~~Maximum diameter: 24 mm~~

~~Maximum length (including pole): 45 mm~~

c) Each competitor may use a maximum of three model aircraft during the contest.

A maximum of 1 battery pack is allowed to accomplish 4 competition flights

Reason: Lithium Polymer cells (LiPo) are rapidly becoming the preferred option for electric flight in all classes. Their charge characteristics will make the F5D contest easier to run, both for the competitors and the organisers.

Limiting the quantity of batteries a pilot can use (ex: 4 battery packs for a 16 competition flights championship) is needed for safety reasons, to prevent too much abuse of the batteries.

Supporting data: We tested this solution last year, it proves that LiPo batteries are a lot more stable and safe than NiMh, it also proves that they cost less as it was possible to use the same pack 6 times the same day without any damage. A weight of 300 grams for the battery pack allows using "stock" battery packs as available in the usual model shops.

We also want to keep the minimal weight at 1,000g for safety reasons, as it allows using bigger and more reliable servos, receiver batteries and receivers, building stronger models and also building them in a cheaper way. With the reduction in weight of the battery proposed here, the model can be built more robust and thus it becomes safer to use.

f) 5.5.6.2 Technical Specifications F5 Electric Subcommittee

Delete all the specifications with NiMH cells.

~~b) Battery~~

~~Battery Type: NiMH or Li-Polymer.~~

~~The battery technology used must be either 1 (NiMH) or 2 (Li-Polymer), as shown below,~~

~~It must be declared by the competitor at the beginning of the contest.~~

~~Changing the battery technology after this declaration will mean disqualification from the entire contest.~~

1) NiMH

~~The battery is limited by either weight or the number of cells and dimensions:~~

~~Maximum weight: _____ 425 g~~

~~The weight of battery includes soldering, insulations, cables and connectors.~~

~~or~~

~~Maximum number of only cylindrical cells: _____ 7~~

~~Maximum diameter: 24 mm~~

~~Maximum length (including pole): 45 mm~~

Reason: Safety., the danger of explosion of NiMH must be eliminated.

g) 5.5.6.2 Technical Specifications F5 Electric Subcommittee

Amend as follows:

a) Model Aircraft

Minimum weight: 1,000 g

Maximum surface loading: 65 g/dm²

b) Battery

Type of battery: Lithium Polymer

~~The battery is limited by weight, the number of cells in serial connection only and the total number of batteries.~~

Maximum weight of battery pack: 275 g

(the weight of battery includes soldering, insulation, cables and connectors)

Number of cells in serial connection: up to 5(S)

(cells in parallel are not permitted)

**Limitation of energy by an electronic limiter that stops the motor:
max. 800 watt-min**

(the limiter is checked by the organiser during the contest)

Maximum number of battery packs: 5

(repair of battery packs is permitted providing the cells used in the repair came from battery packs that were checked at the start of the contest for that pilot).

continued overleaf

~~A competitor is permitted a maximum of 4 battery packs for a single contest.~~

~~The maximum average power within a 60 second period shall be 800 W.~~

~~The electric power has to be logged during flight. The logging device has to be placed in the electric circuit between the battery and motor controller.~~

~~The pilot has to provide technical equipment to analyse the log with a resolution of minimum 10 Watt and minimum 2 logs per second (log frequency ≥ 2 Hz).~~

~~d) If a Li-Polymer battery is used then the electric power log has to be checked by an official. The average power analysis may be taken arbitrarily at any flight time in the log. Any 60 sec period in the log has to be within the limit. Exceeding the electric power limit by 5,0% is scored as one infringement (cut); exceeding by more than 5,0% means disqualification from that heat.~~

~~The battery is limited by weight, the number of cells in serial connection only and the total number of batteries.~~

Reason: Clarification and harmonizing with F5B

h) 5.5.6.2 Technical Specifications F5 Electric Subcommittee

Amend paragraph b) as follows.

b) Battery

Type of battery: Li-Polymer

Minimum weight: **200 g**

Maximum weight: ~~275~~ 400 g

The weight of battery includes soldering, insulation, cables and connectors.

Reason: Minimum weight to save Li-Polymer because of reasons for safety, higher weight limit saves life cycles and costs. Due to use of the energy limiter this change does not have any effect to the speed of the models

F5F 10 Cell Motor Gliders

i) 5.5.8.1 Model Aircraft Specifications F5 Electric Subcommittee

Amend the model specification as specified below:

Minimum weight (ready to fly) 1500 g

Minimum surface area 36 dm²

Maximum surface loading 75 g/dm²

Type of battery ~~_____~~ NiCd or NiMh

Maximum number of cells ~~_____~~ 10

Size of only cylindrical cells ~~_____~~ 1/1 SubC

Definition of SubC size:

~~Maximum diameter: 24mm~~

~~Maximum length (including pole): 45mm~~

continued overleaf

<u>Type of battery</u>	Lithium Polymer
<u>Maximum number of only serial cells</u>	<u>4</u>
<i>(cells in parallel are not permitted.)</i>	
<u>Minimum weight of battery pack</u>	300 g
<u>Limitation of energy by an electronic limiter that stops the motor max. 1100 watt-min</u>	
<u>(the limiter is checked by the organiser during the contest)</u>	
<u>Maximum number of battery packs to enter the contest: 1 pack per 2 rounds; 1 pack for reflights.</u>	
<u>(repair of battery packs is permitted providing the cells used in the repair come from battery packs that were checked at the start of the contest for that pilot).</u>	

Reason: State of the art battery technology should be used for all F5 classes.

Specification of battery allows to further use same equipment and model size as 2007 rules without disadvantage.

Energy limiting equals the power for all pilots. (Like winches in F3B).

Maximum 4 cells and 1100 W set the energy in relation to the 2007 rules between F5B and F5F.

Minimum weight of 300 g for battery pack prevents to abuse the battery.

j) 5.5.8.1 Model Aircraft Specifications Austria

Change

Minimum weight: 1500g (ready to fly)

Minimum surface area: 36 dm²

Maximum surface loading: 75g/dm²

Type of battery: ~~NiCd~~, NiMH **or Lithium Polymere**

Maximum number of cells: **10 NiMH or 3 serial no parallel (3s1p) Lithium Polymere**

Size of only cylindrical cells NiMH: 1/1 Sub C

Definition of Sub C size: Max. diameter: 24mm

Max. length (incl. pole): 45mm

Minimum weight of Lithium Polymere battery: 320g

Maximum weight of Lithium Polymere battery: 420g

including soldering, insulations, cables and connectors

Reason:

k) **5.5.8.2 Distance Task** **Austria**

Amend as follows:

Same rules as F5B except:

After 200 seconds a minimum motor run time of 40 seconds must be used.

A maximum of 4 legs per climb is allowed.

If the motor run time of 40 seconds is not used completely, for each full second remains under 40 seconds, 5 points will be deducted from the score of this task.

Reason: In the meantime, Lithium-Polymer cells are a preferred option in electric flight classes and therefore it's necessary to allow it optional in F5F too.

The proposed configuration provides appr. the same Voltage as 10 NiMH-cells.

The proposed amendments of Distance task are causing a limitation and "freeze" of Power and should make the getting in for Juniors easier.

In this manner it's possible to rich a power limitation without electronic devices.

l) **5.5.8.1** **Belgium**

Replace all battery types by the LiPo variety

Minimum weight (ready to fly) 1500g

Minimum surface area 36 dm²

Maximum surface loading 75 g/dm²

Type of battery ~~NiCd or NiMH~~ **LiPo**

Maximum number of cells ~~4~~ **3**

~~Size of only cylindrical cells: 1/1 SubC~~

~~Definition of SubC size:~~

~~Maximum diameter: 24 mm~~

~~Maximum length (including pole): 45 mm~~

Power limitation by an electronic logger maximum 1300 Watt-min

Reason: Lithium Polymer cells (LiPo) are rapidly becoming the preferred option for electric flight in all classes. Their charge characteristics will make the F5F contest easier to run, both for the competitors and the organisers. The introduction of a Watt limiter is essential for safety reasons in order to prevent too much abuse to the batteries. To keep the usable power (and the level of the competition) at a reasonable level, as well as to protect the batteries from damage and ensure a long life, a Watt limiter set to a level of 1300 Watt-minute is recommended.

m) **5.5.8.1 Model Aircraft Specifications**

Germany

Cancel and add

Minimum weight (ready to fly) 1500g

Minimum surface area 36 dm²

Maximum surface loading 75 g/dm²

Type of battery ~~NiCd or NiMH~~ **Lithium Polymer**

Maximum number of cells ~~10~~ **3 - 4 only serial cells (Cells in parallel are not permitted)**

Minimum weight of battery pack 320 g

Limitation of energy by an electronic limiter that stops the motor at 1100 Wmin (66 kJ) maximum

~~Size of only cylindrical cells. 1/1 SubC~~

~~Definition of SubC size:~~

~~Maximum diameter: 24 mm~~

~~Maximum length (including pole): 45 mm~~

Reason: State of the art battery technology should be used for all F5 classes. A specification of the battery allows further use of the same equipment and model size as 2007 rules demand without disadvantage.

Energy limiting equals the power for all pilots (comparable to the norm winches in F3B).

Maximum 4 cells and 1100 W set the energy in relation to the 2007 rules between F5B and F5F.

11.13 Section 4C Volume F6 – Airsports Promotion

F6A Airplane Artistic Aerobatics & F6C Helicopter Artistic Aerobatics

a) **6.1 – 6.1.13.5 F6A Artistic Aerobatics** **F6 Working Group & Bureau**

To delete the existing F6A Airplane Artistic Aerobatics & F6C Helicopter Aerobatic classes and replace them with a new class F6A Artistic Aerobatics covering aircraft, helicopters and jets.

See Agenda ANNEX 7i F6A (1) Artistic Aerobatic Rules.

Reason: The two existing classes differ only by the type of model and are often run as a single class competition with common rules and classification. It does not make sense to duplicate all the rules in a second class and so the two classes have been combined and jets added.

F6B AeroMusicals

b) **6.2.7.4** **F6 Working Group & Bureau**

Add a new paragraph at the end of 6.2.7.4

At the Organiser's discretion, access to any following round except the last one may be split into direct qualification for most of the competitors and indirect qualification for up to three (3) additional competitors to fill up the originally planned number for that round. In this case, all pilots not directly qualified may take part in an additional round to select the last qualified competitors.

Reason: Enables all competitors to fly at least twice. Takes care of any fortuitous circumstance (not covered elsewhere in the rules) that prevents a competitor to display his full potential.

c) **6.2.7 Number of rounds** **F6 Working Group & Bureau**

Add a new article 6.2.7.7.

6.2.7.7. The Organiser shall set up and display for each round a timetable stating the time each competitor will be allowed to start his flight.

Reason: Clarifies the normal practice of establishing a timetable where each competitor is required to start at a defined time and not only in sequence after the preceding competitor. The procedure allows spectators and Media to know precisely in advance at what time any given competitor will fly. Proves easier for organisers and competitors.

d) **6.2.8 AeroMusicals rules** **F6 Working Group & Bureau**

Delete the word “ (her) “ in the first sentence of paragraph 6.2.8.1. :

These are flights where each competitor must compose his ~~(her)~~ own sequence

Reason: Forgotten in the previous edition. General CIAM procedures already mention that “his” covers both cases. Makes text easier to read.

e) **6.2.8.3.** **F6 Working Group& Bureau**

Add at the end of second sentence:

The competitor must provide the Organiser with a record of the chosen music on CD, tape or any other suitable support **specified by the Organiser in the original invitation document.**

Reason: Makes clear that the music support brought by a competitor must be suitable to the equipment available to the organiser.

f) **6.2.9. Timing procedures** **F6 Working Group& Bureau**

Replace original paragraph with:

6.2.9.1. ~~Before each flight, a competitor is entitled to 180 seconds preparation time after he has been given his transmitter(s).~~ **It is the competitor's responsibility to check the timetable and make sure he is ready to start at the prescribed time. He may be handed out his transmitter at any time as allowed by the Transmitter Impound Stewart but no later than the prescribed starting time of the previous competitor.**

Reason: Consequence of proposed new article 6.2.7.7

g) **6.2.9.2.** **F6 Working Group& Bureau**

Replace “30 seconds” with “15 seconds” :

.. the Steward will start the music **15** ~~30~~ seconds after the permission to start has been given.

Reason: 30 seconds proves too long. Makes for unnecessary waste of time.

h) **6.2.10.1.** **F6 Working Group& Bureau**

Replace “30 seconds” with “15 seconds” :

6.2.10.1. If the competitor fails to take off within **15** ~~30~~ seconds after the music starts, the flight is scored 0 (zero).

Reason: Consequence of proposed change in 6.2.9.2.

i) **6.2.11.1.2**

Delete and replace as follows:

~~Each flight may be awarded marks, in half point increments, from 10 to 0 by each of the judges and for each judging criterion as defined in the Judging Guide.~~

Each flight may be awarded marks, in half point increments by each of the judges and for each judging criterion as defined in the Judging Guide.

Each judge may award a maximum of 30 points to each competitor. A judging guide shall define the judging criteria and their relative weights.

Reason: Correction of error conflicting with the judging guide.

j) Annexes F6 Working Group & Bureau

Add the following Annexes. The appropriate annex numbers will be allocated in due course.

See Agenda ANNEX 7j – 7r F6 (2) – (10)

Annex - Judges' Guides

Annex - Organiser's Guides

Annex - Score Sheets

Annex - Music Information Forms

Annex - Music Public Performance Guide

Reason: Replaces any older ancillary document with new, up to date one

F6D Hand Thrown Gliders

j) 6.4.1 General Germany

Replace whole paragraph.

~~A contest where RC gliders must be hand thrown to altitude. The organiser must provide a sufficient number of timekeepers in order to allow enough simultaneous flights at all time. In principle, each competitor is allowed one helper who should not become physically involved in the flight.~~

~~Handicapped persons may ask their helpers for assistance at launching and retrieving (catching) their glider. The organiser should provide a transmitter impound where all transmitters are kept in custody while not in use during a flight or the corresponding preparation time.~~

6.4.1.1 Timekeepers

The organiser should provide a sufficient number of well-trained, official timekeepers in order to allow enough simultaneous flights at all time. The official timekeeper is not allowed to assist the competitor or his helper in any way. The competitor and his helper are entitled to read their results during the working time.

6.4.1.2. Helper

Each competitor is allowed one helper who is not allowed to become physically involved in the flight, except for retrieving the airplane, if it has landed outside the start and landing field. The helper is the only person allowed to help the competitor on the start and landing field. Team managers are not allowed to stand inside the start and landing field.

After the end of the working time the competitor and the timekeeper must sign the results of the round. If the result is not signed by the competitor, the score for the round will be 0 points.

6.4.1.3. Start Helper

Disabled persons may ask for assistance at launching and retrieving (catching) their model glider. This start helper has to be different in every round, meaning that every start helper can only be used once. The competitor has to touch the start helper before each launch of the model glider. During a competition with only one class, competitors of less than 1.5 m height may be assisted for launching and/or catching.

6.4.1.4. Transmitter Pound

The organiser should provide a transmitter pound where all transmitters and/or antennas are kept in custody while not in use during a flight or the corresponding preparation time.

Reason: Clarification of the wording in comparison to the current F3K rules

- k) **6.4.2. Definition of hand thrown gliders** **WAG Selection Working Group**

Modify the last paragraph of this article as follows

Each competitor must provide five **a sufficient number, at least two,** frequencies on which his model aircraft may be operated **to allow the organiser to set up flight groups** and the organiser...

Reason: Five frequencies are usually not necessary with a low number of competitors and many pilots do not have 5 different frequencies and do not want to buy more crystals. When each competitor would announce two frequencies, the competition could be realised.

- l) **6.4.2. Definition of hand thrown gliders** **Germany**

Replace the whole paragraph and sub-paragraphs as shown

6.4.2 Definition of model glider (hand thrown glider)

6.4.2.1. Specifications

Model gliders are gliders with the following limitations:

Wingspan maximum 1500 mm

Weight maximum 600 g

Radius of the nose must be a minimum of 5 mm in all orientations. (See F3B nose definition for measurement technique.)

The model glider must be launched by hand and is controlled by radio equipment acting on an unlimited number of surfaces.

The use of gyros and variometers onboard the model glider is not allowed.

The model glider may be equipped with holes, pegs or reinforcements, which allow a better grip of the model glider by hand.

The pegs must be stiff and an integral part of the model glider within the half-span of the wing, and be neither extendable nor retractable. Devices, which do not remain a part of the model glider during and after the launch, are not allowed.

6.4.2.2. Unintentional jettisoning

If the model glider suffers any unintentional jettisoning during the flight, then the flight shall be scored zero according to 5.3.1.7. If, during the landing, any unintentional jettisoning occurs (ref. 5.K.6.) after the first touch of the model glider with ground, any object or person, then the flight is valid.

6.4.2.3. Change of model glider

Each competitor is allowed to use five model gliders in the contest. It is permissible to change parts between these five model gliders. The competitor may change his model gliders at any time as long as they conform to the specifications and are operated on the assigned frequency. The organiser has to mark the five model gliders and all interchangeable parts of each of the five model gliders. All spare model gliders must stay outside the start and landing field and one of the spare model gliders may only be brought into the start and landing field for an immediate change. If changing the model gliders during the working time, then both model gliders must be in the start and landing field.

6.4.2.4. Retrieving of model glider

If the competitor lands the model glider outside the start and landing field, then it has to be retrieved back to the start and landing field either by the competitor or his helper. Other people, including the team manager, are not allowed to retrieve the model glider.

While retrieving the model, it is not permissible to fly it back to the start and landing field. Launching outside the start and landing field in this situation is penalised by 100 points that will be deducted from the final score.

6.4.2.5. Radio frequencies

Each competitor must provide at least FIVE frequencies on which his model glider may be operated, and the organiser may assign any of these frequencies for the duration of the complete contest. The organiser may re-assign frequencies to competitors only if a separate fly-off is flown and only for the duration of the complete fly-off.

6.4.2.6. Ballast

Para B3.1 of section 4 b (builder of the model airplane) is not applicable to class F3K. Any ballast must be inside the model glider and must be fixed safely

Reason: Clarification of the wording in comparison to the current F3K rules

- m) **6.4.3. Definition of the flying field** **Germany**
Replace the whole paragraph and sub-paragraphs as shown

6.4.3. Definition of the flying field

6.4.3.1. Flying field

The flying field should be reasonably level and large enough to allow several model gliders to fly simultaneously. The main source of lift should not be slope lift.

6.4.3.2. Start and landing field

The organiser must define the start and landing field before the start of the contest. Within the start and landing field each competitor must have adequate space to conduct his launches and landings, at least 30 m distance to any person in the start direction. The organiser should consider about 900 m² per competitor, (square of 30 m x 30 m).

All launches and landings must happen within this area. The border line defining the start and landing field is part of the start and landing field. Any launch or landing outside this area is scored zero for the flight.

Competitors may leave the start and landing field while flying their model glider, but starting, landing, and catching the model glider must only occur within the start and landing field.

6.4.3.3 Safety

6.4.3.3.1 Contact with person

In order to guarantee the highest level of safety, any contact between a flying model glider and any other person (except the competitor or start helper) either in or outside the start and landing field has to be avoided. If such contact happens during either the working or preparation time, the competitor will receive a penalty of 100 points on the total score. In addition, if the contact happens during the working time at the launch of the model glider, this will result in a zero score for the whole round.

6.4.3.3.2. Mid air collision

In cases of mid-air collisions of two or more model gliders the competitors will not be granted re-flights nor will penalties be levied.

6.4.3.3.3. Safety area

The organiser may define safety areas. The organiser must ensure that the safety areas are permanently controlled by well-trained personnel. A competitor will receive a penalty of 100 points, if:

- (a) His model glider lands inside the safety area or touches any ground based object like e.g. car or building,**
- (b) The model glider flies below 3 metres over the safety area (measured from the ground).**

6.4.3.3.4. Forbidden airspace

The organiser may define forbidden airspace, flying inside of which is strictly forbidden at any altitude. If a competitor flies his model glider inside such a forbidden airspace, a first warning is announced to the

competitor. The competitor has to fly his model glider out of the forbidden airspace immediately and by the shortest route. If during the same flight the model glider enters the restricted airspace again, the competitor will receive 100 penalty points.

6.4.3.4. Weather conditions

The maximum wind speed for F3K contests is 9 m/s. The contest has to be interrupted or the start delayed by the contest director or the jury if the wind is continuously stronger than 9 m/s measured for at least one minute at two metres above the ground at the start and landing field.

In case of rain, the contest director should consider interrupting the contest.

Reason: Clarification of the wording in comparison to the current F3K rules

n) **6.4.4. Definition of landing** **Germany**

Replace the whole paragraph and sub-paragraphs as shown

6.4.4.1. Landing

The model glider is considered to have landed (and thereby terminated its flight) if:

(a) The model glider comes to a rest anywhere

(b) The competitor touches the model glider for the first time by hand or any part of his body (or if the competitor is disabled, the same applies for his start helper).

6.4.4.2. Valid landing

A landing is valid, if:

a) at least one part of the model glider at rest, touches the start and landing field or overlaps the start and landing field when viewed from directly above (this provision includes any ground based object within the start and landing field, as well as the actual tape marking of the boundary of the landing field)

b) in the instance of a competitor catching their model, this defines a valid landing providing at the point of catching, the competitor is fully inside the start and landing field. If a competitor attempts to catch their model and as a result, the model then comes to rest fully outside of the start and landing field, this is not regarded as a valid landing.

Reason: Clarification of the wording in comparison to the current F3K rules

- o) **6.4.5. Flight time** **Germany**
Replace the whole paragraph and sub-paragraphs as shown

6.4.5. Flight time

The flight time is measured from the moment the model glider leaves the hands of the competitor (or his start helper) until a landing of the model glider as defined in 5.K.6. or the working time expires.

The flight time is official if:

The launch happened from inside the start and landing field and the landing is valid according to 5.K.6., and

The launch happened within the working time of the task.

This means that if the airplane is launched before the beginning of the working time then that flight receives a zero score.

In those tasks, where maximum or target flight times are specified, the flight time is scored up to this maximum or target flight time only.

Reason: Clarification of the wording in comparison to the current F3K rules

- p) **6.4.6. Organisation of rounds** **WAG Selection Working Group**
Replace the whole text of paragraph 6.4.6 by this one:

The contest is organised in qualifying, semi-final and fly-off rounds. At qualifying rounds the task 1 and 2 is flown. The start and end of the working time are announced with a sound-signalling device. The competitors are arranged in groups. For qualifying and semi-final rounds a group should be a minimum of 5 pilots. The results are normalised within each group, 1000 points being the basis for the winner of the group.

It is the Organiser's choice to set up one or several qualifying rounds, provided this is announced in the preliminary contest information. At the conclusion of each round, only the best ranking competitors are entitled to take part in the following round. The number or percentage of competitors flying in any following round is defined by the Organiser according to the expected competition duration.

At the Organiser's discretion, access to any following qualifying round may be split into direct qualification for most of the competitors and indirect qualification for up to three (3) additional competitors to fill up the originally planned number for that round. In this case, all pilots not directly qualified may take part in the additional round to select the last qualified competitors.

To the semi-final rounds the best pilot from each qualifying group proceeds. Other pilots, up to a maximum the number of 24, proceed to semi-final according to their normalised results. In case of tie at last proceeding places a draw decides.

At semi-final rounds the pilots fly task 2 in three groups (or two groups if the number of qualified pilots is less than 15).

To the final (fly-off) group the best pilot from each semi-final group proceeds. Other five pilots proceed to final according to their normalised results. In case of tie at last proceeding places, the pilot with better result from qualifying rounds proceeds.

At fly-off eight pilots fly in one group. All pilots with non zero score proceed to the following round. Usually the number of pilots is reduced by one at each consecutive round, so that at the last round only two pilots compete for the total winner. If in any round all pilots fly more then three minutes, then the pilot who landed last doesn't proceed to the next round. If in any round all pilots get zero score the round is repeated.

For each round, the competitors receive 2 minutes preparation time, as announced by the organiser. During the preparation time, the competitor is allowed to turn on and check his radio, but is not allowed any launch of his glider, either outside or inside the launching and landing area.

Reason: This merely replaces the mention of up to 24 that does not allow less than 24 pilots with a maximum of 24 that allows the Contest Director to define the number of pilots flying at semis according to the initial number of competitors. In addition the mention of the possibility to reduce the groups to 2 underlines what to do with a low number of competitors.

6.4.6. Organisation of rounds

Germany

Replace the whole paragraph and sub-paragraphs as shown.

6.4.6. Definition of a qualification round

6.4.6.1. Groups

The contest is organised in rounds. In each round the competitors are arranged in as few groups as possible. A group must consist of at least 5 competitors. The composition of groups has to be different in each round.

The results are normalised within each group, 1000 points being the basis for the best score of the winner of the group. The result of a task is measured in seconds. The normalised scores within a group are calculated by using the following formula:

normalised points = competitor's score / best competitor's score x 1000

6.4.6.2. Working time

The working time allocated to a competitor is defined in the task list. The start and end of the working time must be announced with a distinct acoustic signal. The first moment, at which the acoustic signal can be heard, defines the start and end of the working time.

6.4.6.3. Landing window

No points are deducted for flying over the maximum flight time or past the end of the working time. Immediately after the end of the working time, or after each attempt for the task "all-up-last-down", the 30 seconds landing window will begin. Any model gliders still airborne must now land. If a model glider lands later, then that flight will be scored with 0 points.

The organiser should announce the last ten seconds of the landing window by counting down.

6.4.6.4. Preparation time

For each round, the competitors receive at least 5 minutes preparation time. This preparation time should ideally start 3 minutes before the end of the working time of the previous group (or at the beginning of the last attempt in the task "all-up-last-down" of the previous group), in order to save time.

At the beginning of a preparation time, the organisers must call the names and/or starting numbers of the competitors flying in the next group.

6.4.6.5. Flight testing time

After all the model gliders of the previous group have landed, the competitors flying in the next group receive at least 2 minutes of flight testing time, which is part of the preparation time. During this flight testing time the competitors are allowed to perform as many test flights inside the start and landing field as necessary for checking their radio and the neutral setting of their model gliders.

Each competitor has to ensure that he is finished in time with his test flights and is ready to start when the working time of the group begins. The last 5 seconds before the start of the working time have to be announced by the organiser.

Competitors who are not part of this group are not permitted to perform test flights either inside or outside the start and landing field and any competitor so doing will incur a penalty of 100 points .

A competitor will receive a penalty of 100 points if he starts or flies his model glider outside of the working and preparation time,

Competitors may test fly before the transmitter impound and after the last working time of the day.

6.4.6.6. Qualification rounds

At qualifying rounds the task 1 and 2 is flown. The start and end of the working time are announced with a sound-signalling device. The results are normalised within each group, 1000 points being the basis for the winner of the group.

6.4.6.7. Semi final rounds

To the semi-final rounds the best pilot from each qualifying group proceeds. Other pilots, at least 60 % of the competitors of the qualification rounds up to the maximum number of 24, proceed to semi-final according to their normalised results. In case of tie at last proceeding places a draw decides.

At semi-final the pilots fly task 2 in three groups.

To the final group the best pilot from each semi-final group proceeds. Other five pilots proceed to final according to their normalised results. In case of tie at last proceeding places, the pilot with better result from qualifying round proceeds.

At fly-off eight pilots fly in one group. All pilots with non zero score proceed to the following round. Usually the number of pilots is reduced by one at each consecutive round, so that at the last round

only two pilots compete for the total winner. If in any round all pilots get zero or maximum score the round is repeated.

For each round, the competitors receive at least 2 minutes preparation time, as announced by the organiser.

Reason: Clarification of the wording in comparison to the current F3K rules

r) **6.4.8 Tasks** **Germany**

Replace the whole paragraph and sub-paragraphs as shown.

6.4.8.1. Task 1 (Last flight):

Each competitor has an unlimited number of flights, but only the last flight is taken into account to determine the final result. The maximum length of the flight is limited to 300 seconds. Any subsequent launch of the model glider in the start and landing field annuls the previous time.

Working time: min 7 minutes, max 10 minutes

6.4.8.2. Task 2 (All up, last down, seconds):

All competitors of a group must launch their model gliders simultaneously, within 3 seconds of the organiser's acoustic signal. The maximum measured flight time is 180 seconds. The official timekeeper takes the individual flight time of the competitor according to 5.K.6 and 5.K.7 from the release of the model glider and not from the acoustic signal. Launching a model glider more than 3 seconds after the acoustic signal will result in a zero score for the flight.

The number of launches (3 to 5) must be announced by the organiser before the contest begins.

The preparation time between attempts is limited to 60 seconds after the 30 seconds landing window. During this time the competitor may retrieve or change his model glider or do repairs.

The flight times of all attempts of each competitor will be added together and will be normalised to calculate the final score for this task.

No working time is necessary.

<u>Example:</u>	<u>Competitor A: 45+50+35 s = 130 s = 812.50 points</u>
	<u>Competitor B: 50+50+60 s = 160 s = 1000.00points</u>
	<u>Competitor C: 30+80+40 s = 150 s = 937.50 points</u>

11.14 Section 4C Volume F7 – Lighter-than-Air

F7A Hot Air Balloons

a) 7.1.1. – 7.1.15.9

Re-structure, re-number paragraphs, insert new paragraphs, delete some paragraphs, amend some existing paragraphs.

See Agenda ANNEX 7s F7 Rules

11.15 Section 4C Volume S – Space Modelling

Part Two Specification

a) **2.1 WEIGHT** **Space Modelling Subcommittee**

Change data

Gross or maximum weight, including space models engine or engines shall in no event exceed 0,5 kg (500 grams) ~~except S7 shall not exceeded 1,00 kg (1000 grams)~~ **2 kg (2.000 grams). It will be specified separately for each class in these rules.**

Reason: Increased reliability of space models engines and safe models construction allows increase of weight to make models technically more sophisticated, attractive to public and media and also to increase interest of hobby flyers to join the FAI activities.

b) **2.2. PROPELLANT AND TOTAL IMPULS** **Space Modelling Subcommittee**

Change data and add wording

No more than 425 g **200 g** of propellant materials shall be contained in its space model engine(s) **or their total impuls shall exceed 160 Newton-seconds (Ns) /alternative: 240 Ns/.**

Reason: To match energy requirements with increased gross or maximum weight at launch.

c) **2.4.2** **Space Modelling Subcommittee**

Delete second part of the first sentence.

A space model must not eject its engine(s) in flight unless it/they are enclosed in an airframe that will descend in accordance with the provisions of paragraph 2.4.1 ~~and in case of boost-gliders, engine casings not enclosed in an airframe or boost-glider engine pods, must descend with a deployed streamer with dimensions not less than 25 mm by 300 mm or a parachute with an area no less than 4 dm².~~ The engine(s) of the model can not be fastened by glue and can not be an integral part of models construction.

Reason: To avoid environment pollution at the flying fields and avoid breach of the environment protection regulations in many countries. Also this shall simplify and make shorter boost-glider model processing.

d) **2.4 CONSTRUCTION REQUIREMENTS** **Space Modelling Subcommittee**

Add new paragraph 2.4.8

Space models shall have an attractive appearance and shall be painted in bright colours, except scale models which shall resemble colour of the prototype.

Reason: To increase visibility of the models either while flying (to improve time-keeping or tracking) or on the ground to improve retrieval of the models and to make them also more attractive to public and media.

Part Three - Engine Standards

e) **3.12 STATIC TEST EQUIPMENT – 3.12.1**

**Space Modelling
Subcommittee**

Add the new sentence.

Engine thrust will be measured with the engine in horizontal position. Thrust shall be measured and recorded to an accuracy of +/- 1% of the full scale of the particular measuring range. **Absolute measurements error shall not exceed +/- 0,05 N while testing engines of total impuls up to 5 Ns during burning and delay time.**

Reason: Coloured track smokes at low total impuls engines of 1,25 Ns; 2,5 Ns and 5,00 Ns may develop an additional, very low thrust, which is below present tolerances of the measuring equipment, but which may add some non-measured energy up to 30% of total impuls of the engine, after the registered burning time is over and while model is coasting to the top of trajectory.

Part Four General Rules for International Contests

f) **4.3.2. Flight permission and Launch** **Space Modelling Subcommittee**

Complete the title of the paragraph and add new subparagraph

Launch of a space model is time from its first motion on the launcher, after space models engine(s) ignition, until it leaves the launcher and becomes airborne.

Reason: It is necessary to define launch because of scale models judging and decision making relating unsuccessful attempts.

g) **4.6. DISQUALIFICATION**

Space Modelling Subcommittee

Add new paragraphs following paragraph 4.6.4 numerated as 4.6.5, 4.6.6, 4.6.7, 4.6.8, 4.6.9 and 4.6.10. Delete paragraph 6.5 DISQUALIFICATIONS and renumerate paragraph 6.5 to 6.4. Delete paragraph 10.4 and renumerate paragraph 10.5 to 10.4. Delete the whole section 11.3 DISQUALIFICATIONS and renumerate the subsequent paragraphs

A model's official flight will be disqualified if the payload separates during flight or landing and thereby becomes separated from the model.

4.6.6 Any entry which, under any circumstances or in any manner, separates into two or more unattached pieces, or discards its engine casing(s) shall be disqualified.

4.6.7 Any entry that is supported by aerodynamic lifting forces in such a manner that it ascends in a climb not substantially vertical, within a 60 degree cone centred vertically on the launcher while under rocket power shall be disqualified from this competition.

4.6.8 Any radio controlled rocket glider that descends with parachute and/or streamer recovery device(s) attached shall be disqualified.

During the powered phase of flight, spinning or looping of the entry is permitted only around the roll axis or a parallel axis. Entries which spin or loop around the pitch or yaw axis shall be disqualified.

The judges must disqualify from scale altitude competition any entry, which in their opinion, does not show sufficient scale quantities or evidence of normal level of workmanship required for a scale model under the provisions of the scale competition (Part 9) in order to eliminate from scale altitude competition any entry which has scale qualities subordinated in favour of altitude performance qualities.

Reason: Reason is to group in 4.6. DISQUALIFICATION for all events at one place to make easier judges, team managers and competitors to get acquainted quickly or quickly to find reasons for disqualifications, which is of great importance for quick actions at the flying field during competitions.

h) 4.6 Disqualification United Kingdom

Add new paragraph 4.6.5

A flight will be disqualified if any part of the model, as launched, becomes detached. The only exception to this will be for S4, boost glider, where the model must eject its engine(s) in accordance with the provisions of paragraph 2.4.1.

Reason: With environmental awareness becoming more and more prevalent, it is no longer acceptable for ejected polystyrene pistons and/or wadding to be left littering flying sites and It is not practical to search for these items. A very simple adaptation similar to the way that nose cones are retained will ensure that the piston and/or wadding remains attached to the shock chord of a model after ejection. Spacemodelling is the only discipline of any of the "F" & "S" modelling classes that allows part of the model to be casually discarded during flight, without penalty. Leaving litter like this is detrimental to the promotion of spacemodelling.

In the last two World Championships, the amount of model rocket debris left on the flying sites was plain for all to see and this does nothing to help promote spacemodelling.

i) 4.9.2. Electronic or Radar Tracking Space Modelling Subcommittee

Replace the whole paragraph to read

4.9.2.1 Electronic altitude measurements

4.9.2.1.1 Electronic altimeter carrying requirements and application

Electronic altimeter carried in a space model shall be completely enclosed and contained within the model, so to be removable. It shall not be capable of separating from the model in flight. Technical specifications of this equipment shall and required container shall be announced in the local rules for each altitude contest.

All electronic altimeters shall be impounded before beginning of the event, kept safe by an official and checked and calibrated by the judges or a qualified calibrating team equipped with relevant electronic equipment.

Competitors shall take checked and calibrated electronic altimeters from the impound and mount them on the model in controlled by judges.

The competitor shall return electronic altimeter to the judges in shortest possible time for readout data and recheck or recalibration if the judges found that appropriate.

4.9.2.1.2. Radar altitude measurements

Subjected to the radar equipment to be used for radar altitude measurements, the organizer of the event shall announce special request for the type of reflective surface or responders to be used in particular event.

Reason: It was necessary to start defining rules for using hi-tech in altitude measurement and to establish conditions for abandoning visual tracking. These are too expensive, occupy too much people, take too much time and are very subjected to weather conditions and vertical visibility and are very unreliable.

Part Eight – Boost/Glider Duration (Class S4)

- j) 8.1 DEFINITION/DESCRIPTION Space Modelling Subcommittee**
Delete the last sentence

This competition comprises a series of events open to any free flight space model that ascends into the air without use of lifting surfaces which sustain the entry against gravity during that portion of flight when it is being subjected to or accelerated by thrust from its space model engine; and that returns its glider portion to the ground in stable gliding flight supported by aerodynamic lifting surfaces which sustain the portion against gravity. The intent of this competition is to provide a sporting competition for space models with gliding recovery. Space models that ascend into the air in a spiralling climb under rocket power in such a manner that they are supported during their rise by wings shall not be eligible for entry in this competition. ~~In this competition the entry must eject its engine(s) in accordance with the provisions of paragraph 2.4.2.~~

Reason: To avoid environment pollution at the flying fields and avoid breach of the environment protection regulations in many countries. Also this shall

simplify and make shorter boost-glider model processing and to make the rule compliant to the new wording of the rule 2.4.2.

k) 8.1 Definition/Description **United Kingdom**

Delete some text and add two words.

This competition comprises a series of events open to any free flight space model that ascends into the air without use of lifting surfaces which sustain the entry against gravity during that portion of flight when it is being subjected to or accelerated by thrust from its space model engine; and that returns ~~its glider portion~~ to the ground in stable gliding flight supported by aerodynamic lifting surfaces which sustain the ~~portion~~ **space model** against gravity. The intent of this competition is to provide a sporting competition for space models with gliding recovery. Space models that ascend into the air in a spiralling climb under rocket power in such a manner that they are supported during their rise by wings shall not be eligible for entry in this competition. In this competition the entry must eject its engine(s) **only**, in accordance with the provisions of paragraph 2.4.1.

Reason: S4 is losing its identity as a 'Boost Glider' event. Many models are now regular, rocket bodies that eject a super light glider rather than a glider that is boosted. Some are electing to eject virtually everything along with the motor in order to rid the 'glider' of nearly all of its mass. The minimum launch weight of 30% of the maximum weight has become meaningless in terms of recovery performance. If the rule were changed to reflect the original intention of the class, and only allow the ejection of the motor, rather than ejection of the glider, the minimum launch weight becomes relevant again and genuine, boost gliders will ensue.

At a recent World Championship, polystyrene triangles (the gliders) were ejected from rocket bodies. Is this really what S4 should become? Releasing a 2 gram glider and ejecting the other 15 grams + is not really within the spirit of the rules yet not illegal with the current wording. A small change in the wording will make a big difference to the models.

It would be easy to monitor as the judge, watching through binoculars, would only validate the flight once aware that only the motor had been ejected. Currently, the judge watches to ensure the motor has a streamer attached so it should be easy to ascertain if anything else is ejected also.

Part Eleven – Rocker Glider Duration (Class S8E/P)

l) 11.1. GENERAL **Space Modelling Subcommittee**

Add the last sentence from former paragraph 11.3.5. as new paragraph.

Any model that qualifies for flex-wing rules 13.1.1 or 13.2 is not eligible for this event.

Reason: Editing the rule to be in compliance with changes in new wording of paragraph 4.6 Disqualifications and with the subsequence deletion of former paragraph 11.3. Above sentence belongs to specifications of the

models essentially and not to reasons for disqualification. Therefore is put in paragraph General.

m) 11.7.1 Purpose

United Kingdom

Amend the paragraph as shown.

The purpose of the competition is to achieve as exactly as possible the given time of 360 seconds and to precisely land the model in a specified ~~rectangular area 50 metres long.~~ **circle of 10 metres radius.**

Reason: To replace the landing rectangle with a landing area comprised of individual landing circles, each of ten-metre radius described by a non-extensible measuring tape marked every one metre and pinned down at one end, this end being the centre of the circle. Points will be awarded according to how close to the centre of the circle the nose of the model comes to rest. 100 points within the one metre mark reducing by ten points for landing in every further metre away from the centre of the circle.

With increased performance of models and improved skills of the pilots, the chances of all flyers in a group achieving the six-minute max, is also increased. If all flyers achieve the six minutes, the task becomes a landing competition only and, under the current rules, the majority of top flyers are regularly achieving the 100 landing points. It is becoming increasingly difficult to separate the top flyers and making the landing more challenging gives an opportunity to better differentiate the best flyers.

Supporting data:

At the 2004 World Championship in Poland there were very many flights near the perfect 1000 points. No statistics were made available. However, statistics were available after the 2006 World Championships in Baikonur and the following data extracted: out of the 101 flights recorded, 20 flights were disqualified and there were 3 flights where pilots opted not to fly. Of the 78 scoring flights, over 70% were flown within 10 seconds of the required 360 seconds and nearly 50% of the flights ended with the maximum landing points.

Using the landing circles method, the logistics of laying out the landing area are also improved immensely. The complicated, very accurately measured, marked and square landing area is no longer necessary. All that is required are a number of pre-marked, 10 metre, inextensible tapes. Each tape is simply anchored at one end (the centre of the circle). Additionally, the tape pre-marking should be in points with the first mark, one metre from the centre, reading 100; the second mark, at two metres, should read 90, the third 80 and so on.

- n) **11.7.3 Landing Area** **United Kingdom**
Amend the paragraph as shown.

Before the start of each round, the organiser must provide:

- (a) **an appropriate number of non-extensible measuring tapes, marked every one metre. The number will be determined by the maximum number of flyers in a slot.**
- (b) ~~the a~~ **landing area 50 metres long aligned with the wind direction consisting of the appropriate number of 10 metre landing circles, laid out square to the wind direction and with the marked landing tapes pinned down at the centre of each circle** before the start of each round. The contest director is responsible for determining the direction of the landing area **and layout of the circles.** Any changes of indicated landing area are forbidden during the round. The landing area must be located at a place on the field where there is no danger of collision with any person during the landing of the models.

Reason: To replace the landing rectangle with a landing area of individual landing circles each of ten-metre radius, described by a non-extensible measuring tape, marked every one metre and pinned down at the centre of the circle.

- o) **11.7.4.6. Additional points will be awarded for landing** **United Kingdom**

Amend the paragraph as shown.

When the nose of the model comes to rest in the central landing area one metre in breadth **within one metre of the centre of the designated landing circle,** 100 points will be given. Coming to rest in one of the two outer landing areas two metres in breadth gives 50 points and 25 points will be awarded for landing in the rest of marked landing area. **10 points are deducted, from the maximum 100, for every further metre from the centre. If the nose of the model lands between marks it is the lower of the two marks that counts.**

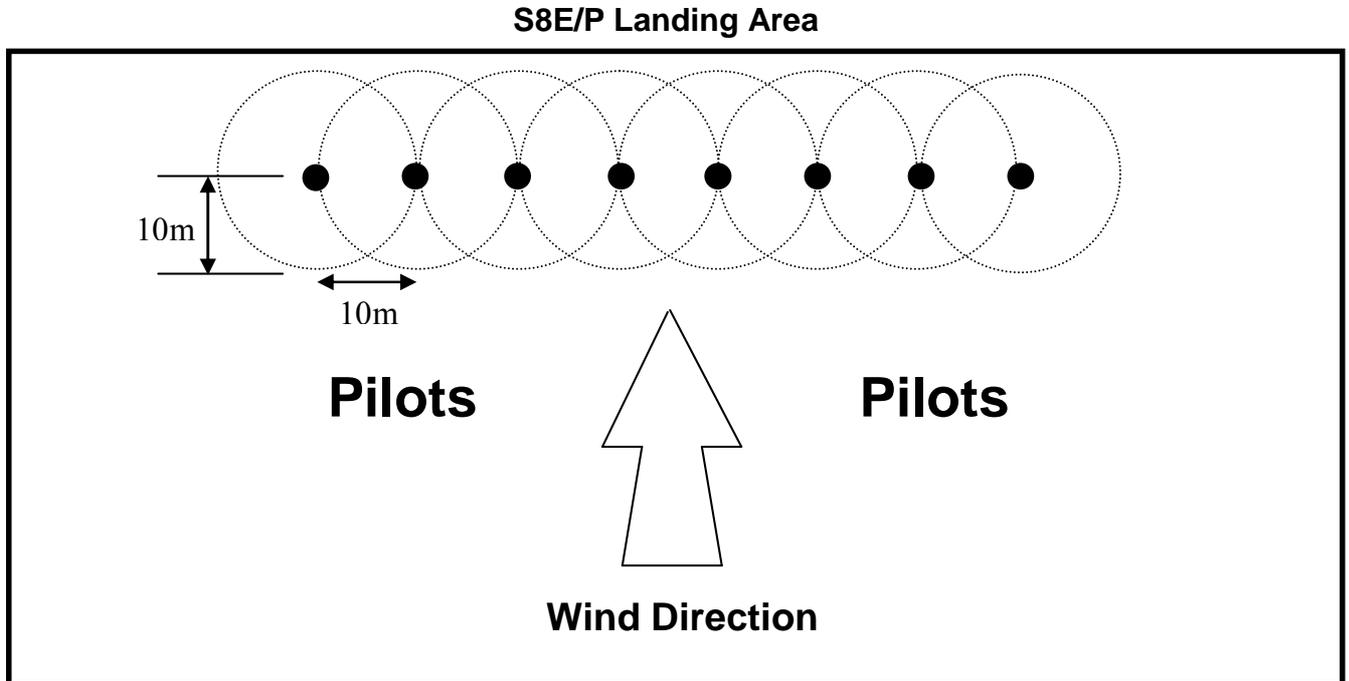
No additional points will be awarded if the landing occurs 390 seconds after the start or if the model lands outside of the designated landing area **circle. If, on landing, the model strikes the pilot or his helper, or the pilot stops the model, no additional points will be awarded for landing.** For each flight, the total score is compiled by adding points for flight time and additional points for landing.

Reason: To describe the scoring system relating to landing circles.

p) 11.7.5.4 Organisation of Starts

United Kingdom

Replace the landing area diagram as shown and move the title to the top of the diagram.



In normal situations the circles will overlap each other but the centres should never be closer than 5 metres apart. In normal practice, circle centres should be 10 metres apart as in the diagram above.

Reason: A new diagram is necessary to illustrate the layout of the new landing circles.

Part Twelve – Gyrocopter Duration (Class S9)

q) **12.3. SPECIFICATIONS – 12.3.1** **Space Modelling Subcommittee**

Change to read.

12.3.1. Each entry must be decelerated during descent by its auto-rotating recovery device. The resulting autorotation must be around the roll axis of **the role axis of the autorotating recovery device** and must be the result of proper deployment and operation of the recovery system.

Reason: Class S9 – Gyrocopters required more precise definition of action of the recovery device while model descending.

Part Fourteen – Space Model Records

r) 14.1 GENERAL **Space Modelling Subcommittee**

Change the first sentence to read

All FAI space model performance records must be established in **or at FAI first or second class sporting events listed in the FAI Sporting Calendar and organized** by the FAI representative National Airports Control or its affiliate in accordance with this Sporting Code **if the weather conditions and schedule of the event permit.**

Reason: Clarification. “In” was understood by the CIAM Bureau several years ago as possibility to establish or surpass world records only in classes registered in the Contest Calendar for a particular event and “at” to do that at an event listed in the Contest Calendar but for any of the space model classes according to the rules – not only those listed for competition particular event. Very strict and formal application of this interpretation of the rules completely stopped world record attempts in international competitions, but allow surpassing records in national events without international judges and witnesses at all. The upper wording shall rectify this omission and encourage top space modellers to continue developing models in classes rarely flown in competitions and encourage other sportsmen to build models in these classes widening interest in new spacemodelling areas.

Annex 2 – Judges and Organisers Guide

s) 3. GENERAL JUDGING CRITERIA **Space Modelling Subcommittee**

Type the instruction in the space below: Replace the second paragraph with the following text.

WHO CAN DISQUALIFY A FLIGHT (DQ). The RSO and his deputies are the only persons who can disqualify flight in the FAI First Class events (World Air Games, World and Continental Championships and International sporting events approved by CIAM). Time-keepers may be called upon to make decisions on flight adherence to rules and safety in the FAI Second Class events (other international sporting events organized by or under authorization of NACs. In case of Scale competition (Class S7) Scale Judges, who judge flights for flying characteristics shall continue to judge regardless if the RSO declare DQ, so if there is a protest upheld by the FAI Jury, given points for flight characteristics shall count.

Reason: Clarification. The first part of the proposal relates clarification of duties and responsibilities in the flying field depending of the class of FAI sports events, which was not clear in former rules. The second part of the proposals relates DQ of scale models, the most expensive and sophisticated class. There were protests several times in last couple of years in spacemodelling 1st class events on too stern decisions of RSOs, who disqualified flights several times as unsafe although certain irregularity

occurred at safe altitude and did not any harm to people or property. These irregularities could be properly sanctioned by deduction of flight characteristics points according to the rules for flight characteristic judging. However, scale judges in all these cases stopped judging just after the RSO declared DQ, which harmed not only the competitor then his team, too. The upper clarification has intention to prevent such unpleasant situations. As the base for Jury decision shall be used testimony of all five scale judges independently.

New Provisional Classes

- t) **Streamer target time duration competition – Class (S6A/P)**
Space Modelling Subcommittee

7.5. Streamer target time duration competition-Class (S6A/P)

7.5.1. Purpose of competition

The purpose of this competition is to achieve, as exact as possible the given time of 240 sec. and precision of launch in 5 minutes time. Model shall be timed from the instant of first motion on the launcher until the instant it touches the ground.

Construction requirement and specification

Models for this class are identical with those in Class S6A – Streamer duration competition.

Entry

Two models are shall be inspected and marked by the judges for this competition.

7.5.3. Timing and classification

FAI Sporting Code Volume ABR Section 4B paragraph B.11 applies to this competition.

One point will be awarded for each full second of flight time up to a maximum of 240 points (i.e. 240 seconds a maximum).

The winner of a particular flight in the relating group receives a score of 1000 points. Other competitor receive points as follows:

$$P_C = 1000 * \frac{R_C}{R_W}$$

Where P_C - points of the competitors
 R_W - result of the winner in the relating group
 R_C - result of the competitor

The five competitors with the highest scores after three starts qualify for final round.

There will be one final flight for a group consisting of all participants of final round.

7.5.3.5. The winner of competition will be determined by the result of final flight of competitors of final round.

7.5.3.6 When there is a tie, the best score of previous rounds shall be used to determine the individual winner. If a further tie occurs, the first best score of one round shall decide the winner. If a further tie occurs, the second best score of one round shall decide the winner.

7.5.4 Organization of starts

7.5.4.1 The competitors shall be combined in groups by draw, to permit as 5-7 flight simultaneously. The draw is organized in such a way that, as far as possible, there are no competitors of the same team in the same group. The flying order of different groups is established by the draw, too. A different composition of groups shall be used for each round.

7.5.4.2 Each group is entitled five minutes of preparation time before the starter announces beginning of the working time. In preparation time each competitor shall prepare his models for flight.

7.5.4.3 Each group of the competitors has five minutes of working time to perform one official flight. Each competitor has only two attempts of launch. In case of the catastrophic failure of the model, caused by the catastrophic failure of engine, competitor may launch his second model in working time.

7.5.5 The starting order of the competitors in each group will be determined by order in which competitors announce their wish to fly to the range safety officer. In the case of a misfire, the competitor is allowed to repeat the start only after the attempts of all competitors, who are registered for start at the time of his attempt.

Reason: Classic time duration competitions are very monotonous and take much time. Flying is in one hour rounds and frequently 45 minutes nothing happen in the field and after that in next 15 minutes everybody wishes to fly. Intention is to eliminate this idle time and to make very dynamic competitions with motivations for sportsmen to win.

- u) **Scale altitude competition with electronic altimeter – Class S5F/P**
Space Modelling Subcommittee

Insert the new provisional class at the appropriate page

10.5 Scale altitude competition with electronic altimeter–Class S5F/P

10.5.1 Definition and purpose of competition

This event involves altitude competition with scale models in which flight characteristics is altitude of flight measured by electronic altimeter.

Objective of the competition is to achieve the highest sum of points for static scale judging and altitude of flight in best of three flights.

10.5.2 Construction requirements

In this class shall be flown one to three stage models of minimum overall length of 1500 mm. Diameter of the first stage shall be at least 70 mm, of the second stage 50 mm and of the third stage 30 mm.

Diameter of the upper stage defined by diameter of the electronic altimeter casing is decisive for diameters of lower stages to preserve proportions of the prototype.

Gross maximum weight of the model shall not exceed 0,5 kg (500 g).

Total impuls of all engines shall not exceed 80 Ns.

10.5.3 Proof of scale and static scale judging points

Rules 9.1 to 9.11 shall be applied.

10.5.4 Electronic altitude measurements

Rule 4.9.2.1.1 apply.

10.5.5 Scoring

Total number of scale quality points awarded to an entry will be added to the highest official altitude achieved by the entry in one out of three flights. If altitude data from electronic altimeter is lost no altitude is added. Point for altitude shall be allocated by rate 1 meter is equal to 1 point.

Reason: intention of this competition to introduce new technology in altitude measurement, to increase dynamic of competition and to motivate sportsmen to build and fly bigger and much more attractive models for public and media then they did for years.

12. WORLD AND CONTINENTAL CHAMPIONSHIPS 2009 – 2011

WORLD CHAMPIONSHIPS

YEAR	WORLD CHAMPIONSHIPS	BIDS FROM	AWARDED TO
2009	F1A, F1B, F1C		CROATIA
	F1E (Seniors and Juniors)		GERMANY
	F3A		PORTUGAL
	F3B	Czech Republic (Firm) Ukraine (tentative)	
	F3C		USA
	F3D		GERMANY

continued overleaf.../2010

Agenda of the 2008 CIAM Plenary Meeting

YEAR	WORLD CHAMPIONSHIPS	BIDS FROM	AWARDED TO
2010	F1A, F1B, F1P Juniors	Romania (firm) Slovakia (withdrawn)	
	F1D (Seniors and Juniors)	Romania (firm) Serbia (firm)	
	F2A, F2B, F2C, F2D (Seniors and Juniors)	Hungary (firm) Serbia (firm) Spain (firm)	
	F3J (Seniors and Juniors)	Czech Republic (firm) France (firm) Hungary (firm) Croatia (firm) Slovakia (firm)	
	F4B, F4C	Czech Republic (firm) Poland (firm)	
	F5B, F5D	USA (tentative)	
	SPACE MODELS (Seniors and Juniors)	Poland (firm) Serbia (firm)	

YEAR	WORLD CHAMPIONSHIPS	BIDS FROM	AWARDED TO
2011	F1A, F1B, F1C	Bulgaria (firm) Poland (firm) Serbia (firm)	
	F1E (Seniors and Juniors)	Slovakia (firm)	
	F3A	Offers invited	
	F3B	Offers invited	
	F3C	Italy (firm)	
	F3D	Offers invited	

Continental Championships appear overleaf

CONTINENTAL CHAMPIONSHIPS

YEAR	CONTINENTAL CHAMPIONSHIPS	BIDS FROM	AWARDED TO
2009	F1A, F1B, F1P Juniors		ROMANIA
	F1D (Seniors and Juniors)		SERBIA
	F2A, F2B, F2C, F2D (Seniors and Juniors)		SERBIA
	F3J (Seniors and Juniors)		POLAND
	F4B, F4C		NORWAY
	F5B, F5D	Offers invited	
	SPACE MODELS (Seniors and Juniors)		SERBIA

YEAR	CONTINENTAL CHAMPIONSHIPS	BIDS FROM	AWARDED TO
2010	F1A, F1B, F1C	Serbia (firm) Turkey (firm)	
	F1E (Seniors and Juniors)	Romania (firm) Serbia (firm)	
	F3A	Austria (firm)	
	F3B	Offers invited	
	F3C	Romania (firm)	
	F3D	Offers invited	
	F3A Asian-Oceanic	Offers invited	

continued overleaf.../2011

YEAR	CONTINENTAL CHAMPIONSHIPS	BIDS FROM	AWARDED TO
2011	F1A, F1B, F1P Juniors	Poland (firm)	
	F1D (Seniors and Juniors)	Offers invited	
	F2A, F2B, F2C, F2D (Seniors and Juniors)	Offers invited	
	F3J (Seniors and Juniors)	Romania (firm) Slovakia (firm)	
	F4B, F4C	Offers invited	
	F5B, F5D	Offers invited	
	SPACE MODELS (Seniors and Juniors)	Romania (firm)	

13. ANY OTHER BUSINESS

14. ELECTION OF BUREAU OFFICERS AND SUBCOMMITTEE CHAIRMEN

14.1. CIAM Officers

President
 1st Vice President
 2nd Vice President
 3rd Vice President
 Secretary
 Technical Secretary

14.2. Subcommittee Chairmen

F1 Free Flight
 F2 Control Line
 F3A RC Aerobatics
 F3BJ RC Soaring
 F3C RC Helicopter
 F3D RC Pylon
 F4BC CL/RC Scale
 F5 RC Electric
 F7 RC Lighter-than-Air
 Space Models
 Education

15. NEXT CIAM MEETINGS

The list of Agenda Annexes appears overleaf

ANNEXES TO THE AGENDA OF THE 2008 CIAM PLENARY MEETING

ANNEX FILE NAME	ANNEX CONTENT
ANNEX 1	FAI Code of Ethics
ANNEX 2 (a-l)	2007 Championship Reports
ANNEX 3 (a-m)	2007 Subcommittees' , Technical Secretary Reports & Treasurer Report
ANNEX 4 (a-f)	2007 World Cup Reports
ANNEX 5 (a-d)	2007 Trophy Report
ANNEX 6 (a-f)	FAI-CIAM Medals & Diplomas: Nominee Forms
ANNEX 7a F2C Rules, Judges Guide, Organisers Guide	F2C CL Team Racing Rules, Judges Guide, Organisers Guide
ANNEX 7b F2 Organisers Guide (Annex 4E)	F2 CL Organisers Guide (Annex 4E)
ANNEX 7c F2G CL Electric Speed Rules	F2G CL Electric Speed Rules New Class
ANNEX 7d F3M RC Aerobatics Large Schedule of Manoeuvres	F3M RC Aerobatics Large Models Manoeuvres Schedule & Descriptions
ANNEX 7e F3P Aerobatics Indoor Manoeuvres Schedule Preliminary	F3P RC Aerobatics Indoor Preliminary Manoeuvres Schedule & Description
ANNEX 7f F3P Aerobatics Indoor Manoeuvres Schedule Finals	F3P Aerobatics Indoor Finals Manoeuvres Schedule & Description (from Subcommittee)
ANNEX 7g F3P RC Aerobatics Indoor Manoeuvres Schedule	F3P RC Aerobatics Indoor Manoeuvres Schedule (from France)
ANNEX 7h F3I Soaring Aero-Tow Rules	F3I Soaring Aero-Tow Rules
ANNEX 7i F6A (1) Artistic Aerobatics Rules	F6A Artistic Aerobatics Rules
ANNEX 7j F6A (2) Artistic Aerobatics Score Sheet	F6A Artistic Aerobatics Score Sheet
ANNEX 7k F6A (3) Artistic Aerobatics Music Information	F6A Artistic Aerobatics Music Information
ANNEX 7l F6A (4) Artistic Aerobatics Judges Guide REV	F6A Artistic Aerobatics Judges Guide REV
ANNEX 7m F6A (5) Artistic Aerobatics Organiser's Guide REV	F6A Artistic Aerobatics Organiser's Guide REV
ANNEX 7n F6B (6) AeroMusicals Score Sheet	F6B AeroMusicals Score Sheet
ANNEX 7o F6B (7) AeroMusicals Music Information	F6B AeroMusicals Music Information
ANNEX 7p F6B (8) AeroMusicals Judges Guide	F6B AeroMusicals Judges Guide
ANNEX 7q F6B (9) AeroMusicals Organiser's Guide	F6B AeroMusicals Organiser's Guide
ANNEX 7r (10) Music Public Performance Guide REV	F6 Music Public Performance Guide REV
ANNEX 7s F7 Rules REV	F7 Rules REV

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