



*Fédération
Aéronautique
Internationale*

Agenda

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

To be held in **Lausanne, Switzerland**
on **11 & 12 April 2014**

Issue 1

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AGENDA

CIAM PLENARY MEETING 2014

to be held in the Mövenpick Hotel - Lausanne (Switzerland)
on Friday 11 April and Saturday 12 April 2014, at 09:15

1. PLENARY MEETING SCHEDULE AND TECHNICAL MEETINGS

According to the rules, and after confirmation at the 2013 CIAM December Bureau Meeting by the relevant Subcommittee Chairmen, the following scheduled Technical Meetings will be held: F1, F2, F3FJ, F4, F5, F6 Working Group, Space Models and Education. No interim Technical Meetings will be held.

2. The Technical Meetings will take place in the meeting rooms and in the Auditorium of the Mövenpick Hotel, and other venues that may be available to the CIAM.

3. DECLARATION OF CONFLICTS OF INTEREST (ANNEX 1a)

Declarations, according to the FAI Code of Ethics will be received.

4. PRESENTATION IN MEMORIAM

5. MINUTES OF THE APRIL 2013 BUREAU & PLENARY MEETINGS, AND OF THE DECEMBER 2013 BUREAU MEETING

5.1. 2013 April Bureau

5.1.1. Corrections

5.1.2. Approval

5.1.3. Matters Arising

5.2. 2013 Plenary

5.2.1. Corrections

5.2.2. Approval

5.2.3. Matters Arising.

5.3. 2013 December Bureau

5.3.1. Corrections

5.3.2. Approval

5.3.3. Matters Arising

6. APRIL 2014 BUREAU MEETING DECISIONS

Distribution and comments of the April 2014 Bureau Meeting decisions.

7. NOMINATION OF BUREAU OFFICERS AND SUBCOMMITTEE CHAIRMEN (ANNEX 1b)

7.1. CIAM Officers

President

1st Vice President

2nd Vice President

3rd Vice President

Secretary

Technical Secretary

cont/...

Note. This year the nomination form will be distributed together with the agenda. The Delegate or the Alternate Delegate will have to complete the form (Annex 1b) in advance and submit it, preferably during the registration period, but certainly before leaving the auditorium for the various Technical Meetings.

7.2. Subcommittee Chairmen to be elected

F2 Control Line
F4 RC Scale
F5 RC Electric
F7 RC Aerostats
S Space Models
Education

7.3. Subcommittee Chairmen to be confirmed

F1 Free Flight
F3 RC Aerobatics
F3 RC Soaring
F3 RC Helicopter
F3 RC Pylon Racing

8. REPORTS

8.1. 2013 FAI General Conference, by the FAI

8.2. CIAM Bureau report on its activity since the last Plenary, by CIAM President, Antonis Papadopoulos

- ASC Presidents meetings May and October 2013
- CASI meeting October 2013
- Bureau activities

8.3. 2013 FAI World Championships, Jury Chairmen (ANNEX 2)

8.3.1. F1A, F1B, F1C Free Flight Senior. France (3 to 10 August). Ian Kaynes

8.3.2. F1E Free Flight Seniors and Juniors. Slovakia (25 to 30 August). Gerhard Woebbeking

8.3.3. F3A R/C Aerobatics Seniors and Juniors. South Africa (15 to 25 August). Michael Ramel

8.3.4. F3B Soaring Seniors and Juniors. Germany (4 to 11 August). Tomas Bartovsky

8.3.5. F3CN Helicopters Seniors and Juniors. Poland (19 to 28 July). Dag Eckhoff

8.3.6. F3D Pylon Racing Seniors and Juniors. Netherlands (22 to 29 July). Gerhard Woebbeking

8.3.7. F3K Soaring Seniors and Juniors. Denmark (21 to 28 July). Tomas Bartovsky

8.3.8. F3P R/C Aerobatics Indoor Seniors and Juniors. Germany (2 to 9 February). Michael Ramel

8.4. 2013 Sporting Code Section 4: CIAM Technical Secretary, Mrs Jo Halman (ANNEX 3)

cont/...

8.5. 2013 Subcommittee Chairmen (ANNEX 3)

- 8.5.1. Free Flight: Ian Kaynes
- 8.5.2. Control Line: Bengt-Olof Samuelsson
- 8.5.3. R/C Aerobatics: Michael Ramel
- 8.5.4. R/C Gliders: Tomas Bartovsky
- 8.5.5. R/C Helicopters: Dag Eckhoff
- 8.5.6. R/C Pylon: Rob Metkemeijer
- 8.5.7. Scale: Narve Jensen
- 8.5.8. R/C Electric: Emil Giezendanner
- 8.5.9. Aerostats: Marcel Prevotat
- 8.5.10. Space Models: Srdjan Pelagic
- 8.5.11. Education: Gerhard Woebbeking

8.6. 2013 World Cups, by World Cup Coordinators (ANNEX 4)

- 8.6.1. Free Flight: Ian Kaynes
- 8.6.2. Control Line: Peter Halman
- 8.6.3. F3A R/C Aerobatics: Rob Romijn
- 8.6.4. Thermal Soaring and Duration Gliders: Ralf Decker
- 8.6.5. Space Models: Srdjan Pelagic
- 8.6.6. Radio controlled slope soaring model aircraft: Franz Demmler
- 8.6.7. Radio controlled thermal duration gliders: Erkki Arima
- 8.6.8. Motor Gliders: Emil Giezendanner
- 8.6.9. Euro Cup Radio controlled pylon racing model aircraft: Rob Metkemeijer

8.7. 2013 Trophy Report, by CIAM Secretary, Massimo Semoli (ANNEX 5)

8.8. Aeromodelling Fund- Budget 2014, by the Treasurer, Andras Ree (ANNEX 3)

8.9. CIAM Flyer, by the Editor, Emil Giezendanner (ANNEX 3)

8.10. Airsports Promotion, by Media Consultant, Guy Revel (ANNEX 3)

9. PRESENTATION OF 2013 FAI WORLD CHAMPIONSHIPS MEDALS COUNT PER NATION

10. PRESENTATION OF 2013 WORLD CUP AWARDS CEREMONY

**INVITATION TO THE
PRESENTATION CEREMONY FOR**

The 2013 World Cup awards for classes F1A, F1A junior, F1B, F1B junior, F1C, F1E, F1E junior, F1P junior, F1Q, F2A, F2B, F2C, F2D, F3A, F3B, F3F, F3K, F3J, F5B, S4A, S6A, S7, S8E/P and S9A

will be held on Friday, 11 April 2014, at 16.30 in the Mövenpick Hotel.

11. PLENARY MEETING VOTING PROCEDURE

Confirmation of the voting procedure for the Plenary Meeting.

12. SCHOLARSHIP SELECTION APPROVAL (ANNEX 8)

- Bernhard FLIXEDER (Austria)
- Bojan DIMESKY (Former Yugoslav Republic Of Macedonia)
- Oskar FINDAHL (Sweden)
- Fredrik GRINI (Norway)
- Vesna KATANIC (Serbia)
- Mariyana Valentinova SAVOVA (Bulgaria)

13. NOMINATIONS FOR FAI-CIAM AWARDS (ANNEX 6)

Alphonse Penaud Diploma

- Christopher CALLOW (Australia)
- Zoran KATANIC (Serbia)
- Ivan TREGER (Slovakia)
- Dimche VELKOSKI (Former Yugoslav Republic Of Macedonia)

Andrei Tupolev Diploma

- No Candidates

Antonov Diploma

- Milan JELINEK (Slovakia)

Frank Ehling Diploma

- Nikola BOROVIAC (Serbia)
- Bogdan WIERZBA (Poland)

Andrei Tupolev Medal

- Emil BROBERG (Sweden)

FAI Aeromodelling Gold Medal

- Pierre PIGNOT (France)
- Emanuel SANTOS FERNANDES (Portugal)
- Bengt-Olof Samuelsson (Sweden)
- Miroslav SULC (Slovakia)
- Bogdan WIERZBA (Poland)

14. OPEN FORUM

After the success of last year's OPEN FORUM session, CIAM Bureau has decided to continue this initiative. For this year, we have invited delegates from RC systems manufacturers and we will discuss the technology available today, and plans for the future in order to be able to plan and develop the Sporting Code of tomorrow, using the opportunities we have with the technology. You will receive additional information regarding the Open Forum Session as soon as it is available.

15. SPORTING CODE PROPOSALS

The Sporting Code proposals begin overleaf.

15. 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*.

Bureau proposals now appear in the appropriate rule section of item 15.

Each section begins on a new page.

15.1 Volume ABR, Section 4A (CIAM Internal Regulations)

a) **A.4 Subcommittees** **Sweden**

To add another Subcommittee to the existing ten CIAM Subcommittees.

A subcommittee in control of UAS (UAV) operations including competitions shall be formed in CIAM for implementation 1st January 2016. A Working Group must be established as soon as possible with the purpose of providing a platform for UAS (UAV) groups and to be able to start to make competitions under the umbrella of FAI and the CIAM Aeromodelling community.

The first goal is to establish that a platform for this type of competition is available and open for all type of UAS owners.

The second goal is to present rules to the 2015 CIAM Plenary Meeting

Reason: In the CASI Meeting in Kuala Lumpur 2013 it was discussed where the ownership of UAV/UAS should be and the common feeling was that this shall be a subcommittee in CIAM. If FAI does not take this under its wings there will be a problem in the future to get this into the domain of FAI.

Supporting Data: There is already on the market flying models, both aircraft and rotorcraft, that have the possibility to be either remotely controlled (eg First Personal View) or autonomously guided (eg GPS).

b) **A.7 Timetable for Proposals to the CIAM Plenary Meeting** **Bureau**

A.7.1 a)

Amend the paragraph as follows:

All proposals from ~~the~~ Sub-committees and ~~the~~ NACs for the Plenary Meeting must be ~~received electronically,~~ **submitted through the FAI automatic submission process**, in the format described in A.6.1 g) ~~by the FAI Office~~ between 1st August and 15th November of the year immediately preceding the Plenary Meeting at which the proposals may be considered within the appropriate two-year rule cycle.

Note: the web address for the automatic submission process will generally be included in the reminder letter that the FAI office sends out or it may be obtained directly from the FAI office.

Reason: To bring in line with current practice.

c) **A.10 Championship Organiser Bond** **Bureau**

Add a new rule at A.10 and re-number the existing A.10 and subsequent paragraphs. A consequential change will be required at the newly numbered A.11 Sanction Fees

A Championship organiser must deposit a Bond of 2,000 Euro when the contest sanction fee is paid to FAI. This Bond represents an expression of good faith that the organiser will not default and that the organisation of the championship, and the championship itself, will adhere to, and comply with, the rules governing championships set out in the Sporting Code. If any of the rules are breached by the organiser then the Bond, in whole or in part, shall be retained by the FAI otherwise the Bond will be returned to the organiser when all their obligations to FAI have been fully and properly discharged.

d) **A.11 Sanction Fees** **Bureau**

Consequential change to the existing A.10 re-numbered to A.11 as follows:

a) A sanction fee is required for listing any type of international contest in the FAI Contest Calendar.

b) The sanctions fees are as follows:

Limited international contests:

World Championship = 500 Euro **+ 2,000 Euro Organiser Bond**

Continental Championship = 300 Euro **+ 2,000 Euro Organiser Bond**

Other Limited International Contest = 70 Euro

Other contests:

Open International Contest
(including World Cup and
International Series contests) = 70 Euro.

Open National Contest = 40 Euro.

c) The sanction fees shall be reviewed each year by the Bureau and any proposed fee changes must be approved by the Plenary Meeting.

Reason: To try to ensure that championships are held to the standard required. There have been many championships over recent years where the site has not been suitable and the organisation has been poor. With this financial requirement, the organisers have a greater reason to do things properly and it should benefit the competitors by having a good standard of competition.

Volume ABR Section, Section 4B begins overleaf.

15.2 Volume ABR, Section 4B <i>(General Rules for International Contests)</i>
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- a) **B.3.5.** **Belgium**

Amend the 2nd paragraph as follows:

The reigning champion has the right (...) to participate in the next World or Continental Championships in that category regardless of whether he qualifies for the national team or not.

If the reigning champion does not qualify for the national team, he can decide if he will act as a separate one man team or as a fourth member or a fifth member of the national team (if the national team consists already of 3 seniors and 1 junior).

If he/she is not member of the team, his score will not be taken into account in the team results **and for the classes with group scoring, he/she is handled as a separate one person team**.

Reason: The status of the reigning champion must be clarified to avoid discussion at world or continental championship

If this proposal is accepted, the point B16.2 must be adapted.

- b) **B.3.6. Team Manager** **F5 Sub-committee**

Amend the 2nd paragraph as follows:

For Free Flight, Control Line, RC Soaring, Scale, **Electric Flight** and Space Model competitions, the team manager may have an assistant, registered with the organiser, who will have the same duties as the team manager

Reason: Electric Flight World Championships with two flying sites needs a second responsible person

- c) **B.6 Organisation Specific to World & Continental Championships Events** **Bureau**

B.6.1

See Agenda Annex 7I for Appendix A.1a, referred to in the proposal.

Amend the whole of B.6.1 as follows:

B.6.1 a) It is the CIAM's responsibility to decide and award World and Continental Championships and to decide which NAC shall be delegated with the responsibility for the organisation of the Championship.

b) ~~The firm acceptance of a bid~~ **The awarding of a Championship** will normally be made by vote of the CIAM Plenary meeting two years in advance of the year of the proposed Championship.

c) In order to be eligible for selection, all bids must ~~include the details required in Annex A.1a:~~ **comply with the following procedure:**

(i) All bids must be submitted on the bid application form shown at Appendix A.1a, with Section 1 information completed.

(ii) Before any bid may be presented at the Plenary Meeting, it must be appraised by the relevant Subcommittee Chairman or by a person duly appointed by him. After that appraisal, Section 2 of the bid application must be completed. The "Comments" box must contain a full explanation if the

Recommendation Status is “NO”. Both sections of the bid application shall be presented to the Plenary Meeting for consideration by the Delegates.

- d) Under normal circumstances, bids may be submitted:
- i) to the FAI office at any time in the year prior to the Plenary Meeting two years in advance of the Championship year;
 - ii) at the Plenary Meeting two years in advance of the Championship year.
- d) Bids for consideration at a Plenary Meeting may be submitted to the FAI office at any time in the year prior to the Plenary Meeting that is two years in advance of the Championship year and not later than 45 days before the Plenary Meeting.**
- e) In exceptional circumstances, the decision for awarding World and Continental Championships may be taken more than two years in advance of the year of the proposed Championship, providing a request is made by November 15 and published in the Agenda of the following Plenary Meeting.
- f) In the event that no acceptable bid is available two years in advance, the decision may be postponed to the Plenary meeting in the year before the Championship. If no bid is accepted at that meeting, the Plenary Meeting may exceptionally delegate the decision to the CIAM Bureau meeting at the end of that year. **The latest that a decision may be made is one year in advance of the proposed date of the Championship.** This is the latest time at which the decision can be made to proceed with a Championship for the following year.
- g) ~~The actual dates must be presented no later than the Plenary Meeting in the year preceding the Championship.~~ **After the championship is awarded, any change to the information provided by the organiser in Section 1 of the bid document, must be presented no later than the Plenary Meeting in the year preceding the Championship. At this time the Organiser Agreement between FAI and the Organiser will be signed.**

Reason: To standardise the bids that CIAM receives; to make the bid submission process more effective and efficient with a better utilisation of the time at the Plenary Meeting; to try to improve the standard of championships. Additionally, as has been seen in recent years, awarding a championship at the December Bureau meeting for the following year is too late for countries to organise teams and the championship has to be subsequently cancelled. This is a great deal of work without any positive outcome. Making the final decision a year in advance of the date of the championship will give organisers more time to organise the championship and NACs more time to commit to sending teams.

d) B.6.1 F1 Sub-committee

Add a 2nd paragraph at the end of sub-paragraph g):

All CIAM Plenary meeting votes on Championships bids are open to those countries which participated in the previous Championship of that type (World or specific Continent) and class.

Reason: The acceptance of Championships have sometimes decided by countries with no experience or interest in a class. The 2013 vote for F1E had many more votes cast than the number of countries flying F1E. Experience is necessary to judge the acceptability of a championship bid. A vote on the basis of being on good terms with country X or thinking that it is time to reward country Y is not a recipe for a good decision. The proposed limitation would help to keep votes to those

countries active in a class and, in the case of Continental Championships, with regional knowledge.

e) B.7.1 Information Bureau

Amend the paragraphs as follows:

- a) A first memorandum of information (Bulletin 1) and entry forms must be despatched to the NACs, also to Jury members and judges, after the Bureau meeting at which Bulletin 0 was presented and approved ~~and at least three months before the contest.~~ **and, in any case, no later than the end of January.**
- b) The approval mechanism for Bulletin 1 is as follows:
- i) Any changes or amendments instructed by the Bureau should be incorporated by the Organiser into a revised bulletin. Either the original Bulletin 0 or the revised Bulletin 0 should be named “Bulletin 1” and emailed to the CIAM Secretary **promptly after the Bureau meeting and no later than mid-January.**
 - ii) The CIAM Secretary will check that the document contains the correct data. When he is satisfied that it is correct, he will then issue Bulletin 1 to the NAC email list and the CIAM Delegates email list with the organiser **and CIAM Bureau** in copy. He will forward a copy to the FAI Secretariat for information.

Reason: To ensure that Bulletin 0s are issued in a timely fashion and to aid the CIAM Secretary in achieving this.

f) B.7.2 Entry Fees Bureau

Add a new paragraph b) as follows and re-number subsequent paragraphs. There will be a consequential change to Annex A.1b.

B.7.2 b) The entry fee must be quoted in Euro but the equivalent fee may be paid in the local currency of the country hosting the event or in any other currency that the organiser specifies in Bulletin 1.

Reason: To reduce the costs of currency exchange for both the organiser and the NAC making payment for a team.

g) B.7.4 Additional Fees Bureau

Amend the 8th paragraph and delete the final paragraph regarding Bulletin 1 as shown.

Bulletin 0 must contain a clear explanation of the hotel, food & banquet costs per person per day in Euros **for CIAM Bureau approval. After approval, Bulletin 0 will be issued as Bulletin 1 as specified in B.7.1.**

~~Bulletin 0, after approval and including any corrections required by the Bureau meeting, shall be issued as Bulletin 1 by the organiser to the appropriate NACS as specified in B.7.1 or earlier if possible.~~

Reason: The revised clause B.7.1 at Agenda proposal e) renders the final paragraph superfluous and emphasis is made to the first paragraph.

h) B.7.4. Additional Fees

Norway

Amend the paragraphs as follows:

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 **for Free Flight (F1) and Control Line (F2)** is 600 Euro for seven nights. ~~except for events which require more than five judges or more than seven nights.~~~~

~~**F3A: 750; F3B: 660; F3C: 700; F3N: 700; F3D: 720; F4: 700; F5: 660**~~

For the radio controlled classes the maximum entry fee for seven nights is 500 excluding the banquet, food & lodging.

For Championship requiring more than seven nights the formula is $500 \div 7 \times$ number of nights (to cover the expenses for hosting the jury and judges for more days).

For World Championship and Continental Championships 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: We have left the F1 and F2 at the present rules since it is in the RC classes we do have most of this problem, but have nothing against making this proposal valid for all classes.

Too often the organisers have had to take a loss due to the cost of accommodation and food in their budget and rather than take the loss have then cancelled their bid and we did not get any Championship in the class.

If we concentrate our scrutiny on the Championship operation and leave the accommodation and food to the competitors, this might make it much easier to get a balanced budget.

The organisers might still help the competitors to get the accommodation and meals, but this is then no longer part of the equation for the budget.

i) B.9.1

F1 Sub-committee

Add a 2nd sentence to sub-paragraph c) as follows:

c) Spectators are not allowed within 25m from the starting line. **In addition to contest officials, the only people allowed at the starting position are the competitor, his helper, and the team manager or the assistant team manager.**

Reason: The class rules in Volume F1 state that the competitor may have one helper. The team manager or assistant team manager needs to be there for organisational work but this is not stated except in the Junior definition.3.4.a. There is not limitation for senior events. It is desirable to have a limit on the people at the starting positions, partly for safety and also to reduce the possibility of the timekeepers being distracted.

j) **B.13.6** **F1 Sub-committee**

Amend the paragraph as follows:

The time recorded is the mean of the times registered by the timekeepers, ~~but reduced~~ **rounded** to the nearest whole number of seconds ~~below to~~ the resulting mean time **(0.5 second rounded up to the second above)** unless the difference between the times registered shows evidence of an error in the timing, in which case the organiser will determine, with the FAI Jury, which time will be registered as the official time or what action should be taken.

Reason: To provide a score closer to the time recorded. There is a particular problem with fight times just below a maximum, for example, with a 180 maximum, times of 179 and 180 currently give a score 179 – missing the maximum even though the timekeeper with 180 might have seen the model for longer than 180. The proposed change gives the benefit to the competitor in these unusual close situations.

k) **B.15.1 Interruption of the Contest** **France**

Amend paragraph a) i) as follows:

9 m/s for Free Flight, Control Line, Scale and Space Models, **F3J**

Reason: During the last two international championships (WC in South Africa 2012, EC in Turkey 2013), some flights had to be made under winds between 9 m/s and 12 m/s. They clearly demonstrated that these wind conditions in thermal duration contests lead to erratic sporting results.

l) **B.16.2.National Team Classification** **Bureau**

Consequential changes will be required in the various volumes as appropriate.

Amend paragraph a) as follows:

~~a) The team classification is established by adding the scores of the three team members of the team together unless there is a fourth member of the team (who must always be a junior) in which case it will be the three best scoring members. For F2C the classification is established in the same way but substitute “team” for “member”. In the case of a team tie, the team with the lower sum of place numbers, given in order from the top, wins. If still equal, the best individual placing decides.~~

a) The national team classification for all CIAM classes for World or Continental Championships is established after the completion of the championship using one of the following two methods only:

(i) By adding together the numerical final placings of the three national team members unless there is a fourth member of the team (who must always be a junior) in which case it will be the three best placed members.

Teams are ranked from the lowest numerical places to the highest, with complete three-competitor teams, ahead of two competitor teams, which in turn are ranked ahead of one-competitor teams. In the case of a national team tie, the best individual placing decides.

or

(ii) By adding the scores of the three members of the team together unless there is a fourth member of the team (who must always be a

junior) in which case it will be the three best scoring members.

In the case of a national team tie, the team with the lower sum of place numbers, given in order from the top, wins. If still equal, the best individual placing decides.

For F2C, in either method of national team classification, a “member” is a two-competitor team.

Reason: To standardise the team classification procedure to two methods only across all the categories.

m) B.16.2. Team Classification Belgium

Amend paragraph a) as follows:

The team classification is established by adding the scores of the three team members **together.** ~~of the team unless there is a fourth member of the team (who must always be a junior) in which case it will be the three best scoring members~~ **If the team consists of more than 3 pilots, the three pilots who are to be taken into account for the score of the team must be designated before the beginning of the contest.** For F2C.....

Reason: If the reigning champion has decided to be part of the national team (see proposal of change of B.3.5.), the team can consist of 5 members (3 seniors, 1 junior, 1 reigning champion).

Whether the team consist of 4 or 5 members, it is not fair to take the three best scores for the team classification. The three members of the national team must be announced before the beginning of the competition.

n) B.17.6 Identification Marks Austria

Amend paragraph a) i) as follows:

B.17.6.a) Model aircraft, except for indoor free flight and scale, shall carry:

i) The national identification mark (as listed in Annex B.2) followed by the FAI licence number **or National Identification Number of the competitor.** The letters and numbers ...

Reason: Some countries have very long FAI licence numbers, which are large for including on models in 25 mm lettering. In other countries the FAI licence number is changed every year, which would require new numbers on each single model every year. Anyway the FAI licence numbers appears on the FAI sticker !

o) Annex B.4 FAI Perpetual Aeromodelling Trophies Bureau

Adopt or re-allocate trophies and add to the Trophy List as follows:

Group 1

1. F1E WCh Junior Team Trophy donated by France and Serbia.
2. F3A WCh Junior Individual “Floating Trophy” donated by South Africa
3. F2B ECh Team trophy “Luciano Compostella” donated by Italy to be awarded at the F2B European Championships

cont/...

Group 2

Donation of four trophies for 2014 Championships:

1. F3A ECh Junior Individual Trophy “Princess Marie of Liechtenstein” donated by Her Serene Highness Princess Marie of Liechtenstein.
2. F3N ECh Senior Individual Trophy “Harz-Pokal F3N” donated by Germany.
3. F3F WCh Senior Individual Trophy “Kap Arkona” donated by Germany.
4. F3C ECh Junior Individual Trophy “Harz-Pokal F3C” donated by Germany.

Group 3

Re-Allocation of Existing Trophies:

1. F1E ECh Junior Individual Trophy “Rhön-Pokal of 2008” (existing trophy was originally allocated to F1E ECh Individual (senior) which class already had a trophy but which had not been registered).
2. F4H WCh Individual Trophy “KLM” (existing trophy for F4B which is now a non-Championship class).
3. F4H WCh Team Trophy “FAI Challenge” (existing trophy for F4B which is now a non-Championship class).

Reason: B.21.8 requires that CIAM vote for the adoption of any trophy.

The **Group 1** trophies were donated after the 2013 Plenary Meeting. Bureau felt that it was important that these trophies be presented at the 2013 Championships and approved the awarding of the three trophies in 2013 ahead of the 2014 Plenary at which it is proposed that they be adopted.

The **Group 2** trophies are new trophies for 2014.

The **Group 3** trophies are re-allocation of existing trophies.

Volume ABR, Section 4C, Part One begins overleaf.

15.3 Volume ABR, Section 4C, Part One <i>(General Regulations for Model Aircraft)</i>
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No proposals for this section

Volume ABR, Section 4C, Part Two begins overleaf

15.4 Volume ABR, Section 4C, Part Two (Records)

a) 2.10.5.1

F7 Sub-committee

Amend the paragraph as follows:

*For Airships, the base for outside records is a rectangle of 100 x 50 m. For indoor records, the base is a rectangle of 50 x 25 m. The corners are defined by vertical pylons. ~~The start/finish line is the outside part of one of the smallest base lines.~~ **The flight area must be flat or with a maximum fall not to exceed 1 metre in 200m. The course consists of a rectangle, defined by four prominently coloured pylons set on each corner. Each pylon shall be consecutively numbered one through four. The base line is the side Pylon One to Pylon Two (longest side of the rectangle). At the middle of the side One-Two, set Pylon Five (or a wire sighting device). At an angle of 90 degrees to the Base Line set Pylon Six 20 m (outdoor) or 5 m (Indoor) distant from the Base Line. The line between Pylon Five and Pylon Six is the start/Finish line.** The base is to be run five times.*

For Outdoor records, the rectangle is 100 x 40 m. For Indoor records, the rectangle is 25 x 10 m.

Reason: Having the start/finish line as part of one of the smallest base line allow the pilot to have a 3 corners flight instead of the normal 4 corners run..

The definition of the base must have a similar approach than other rules for records in a closed circuit (refer to chapter 2.6.1 as an example)

Indoor distances are fitting the size of a normal indoor sport gymnasium. Outdoor distances four time the indoor distances.

Volume F1 – Free Flight begins overleaf

15.5 Section 4C Volume F1 - Free Flight

Free Flight Indoor

F1D

- a) **3.4.2. Characteristics of Indoor Model Aircraft F1** **Hungary**

Amend the paragraph as follows:

Minimum weight without rubber motor ~~1,2~~ **1,4** g,

Maximum weight of the lubricated rubber motor ~~0,6~~ **0,4** g.

Reason: The proposal intends to significantly reduce the flight times, because of the decreasing availability of proper flying sites. Nowadays only two (!) large sites are available for world (Belgrade and Slanic) and one (Belgrade) for European championships! Both sites are facing to privatization which might results the loosing of both because of the renting costs. The class has to be flown in smaller sites with shorter flights and shorter contests to survive.

The proposal keeps the surface loading in order to keep the beauty of the F1D models' flying style. Besides the shorter times the 0,2 g addition to the model weight eliminates the effect of the only available heavier covering material, as the lightest plastic film is no longer manufactured since years, helps to make reliable variable pitch or diameter mechanisms and apply new, but heavier materials. Existing models will stay usable with 0,2 g spacers.

Hopefully these changes might encourage new flyers as it would be a bit easier to build down to weight. The top flyers might keep their chances to win but the gap could well be closed.

Free Flight Outdoor

F1C

- b) **3.3.2. Characteristics of Model Aircraft with Piston Motor(s) F1C** **F1 Sub-committee**

Add text to the end of the paragraph as follows:

The competitor will be disqualified from the competition if the motor is still running when the flight is terminated by touching the surface of the earth or encountering an obstacle. This applies at any time before or after the permitted duration of the motor run.

F1E

- c) **3.5.8 Classification** **F1 Sub-committee**

Amend paragraph a) as follows:

a) In each round, the time in seconds recorded by each competitor shall be expressed as a percentage of either (i) the declared maximum time, or (ii) if no maximum time is recorded by any competitor, the highest flight time achieved in that round. This percentage is entered as the competitor's score for the round. The percentage scores should be displayed on the scoreboard rounded ~~down~~ to **the nearest value to 2 decimal places (0.005 rounded up)**. All scores from the five

rounds will decide the final classification. In open internationals (not championships) a general classification is produced for all junior and senior competitors. The junior classification is made using the scores obtained by the juniors in the general classification.

Reason: If the rounded-down percentages are added to find the final classification score then an anomalous result may arise by giving a different classification solely from the accumulation of rounding errors. The problem does not arise if the flight percentages and totals are calculated precisely on a computer and converted to 2 decimal places only for display on the scoreboard. The proposed scheme of rounding to the nearest value would greatly reduce (but not completely eliminate) this peculiarity.

Supporting data: This occurred at two competitions in 2013. For example, at the Popa Cringu competition all 5 flights were flown to a 240 second max, so that logically the total times can be compared to get the same results as those obtained from the percentages for the flights. Duta Ionut dropped one flight with 174 seconds which gave an exact percentage of 72.50 for that flight and a total score of 472.50%. Zorin Valeanu dropped 2 flights with times of 202 and 212 seconds. They both had exactly the same time total of 1134 seconds. Zorin's dropped flights convert to percentages of 84.16666...% and 88.33333..% making an accurate percentage total of 472.50%. But when Zorin's scores are rounded to 2 decimal places they become 84.16% and 88.33% and the total is 472.49% - meaning that the winner and second places were decided just on a numerical oddity of an apparent 0.01% difference. With the proposed change for rounding scores to the nearest value the scores would be 84.17% and 88.33% and the total 472.50%.

F1Q

d) 3.Q.2 Characteristics

F1 Sub-committee

Amend the 6th paragraph and the sub-paragraphs.

For the text see Agenda Annex 7a.

Reason: The 2013 F1Q rules were already complicated and a greater complexity has been added by the 2013 proposals. It is proposed to rationalise the rules and reduce them to simplified requirements on the system requirements for the two approaches.

e) 3.Q.2 Characteristics

Finland

Amend the rule as follows:

Maximum surface area (St) 34 dm²

~~Nickel Cadmium (NiCad), Nickel Metal Hydrate (NiMH) and Lithium (Li) batteries can be used.~~

~~Lithium type battery packs must be in "as manufactured" condition with the covering around the cell surface. If more than one cell is used a balancer connector must be fitted.~~

~~External Battery packs are required to have a safety tether to the fuselage.~~

Safety locks must be used to prevent unintentional restarting of motor(s) after motor(s) have been stopped.

cont/...

Rule B.3.1. of Section 4b does not apply to class (No builder of the model requirement.)

The motor run time will be determined by a maximum energy amount. In addition, motor runs over 20 seconds are regarded as overruns. The energy budget of each model is ~~53~~ **500** joules per gram of the total weight. For energy calculations, weight exceeding ~~550~~ **500** grams is to be ignored. Energy limitation will be by an energy limiter or by a motor run limit related to measured ~~power~~ **energy**.

~~a) For models with energy limiters. The allowed energy amount starts to be calculated with the launch of the model. If the energy limiter does not have the capability of detecting the launching moment it may start its calculation from the beginning of the motor run. The measuring device has to calculate the energy consumed in real time. After coming to the end of the limited energy supply, the motor(s) must stop irreversibly. The timer stays independent, but the device may inform the timer about the end of the energy supply.~~

~~b) For models without energy limiters the motor's energy in watt-sec over the motor run is calculated as the measured wattage multiplied by the motor run. A freshly charged battery (4.15 to 4.2 volts per Li cell, 1.2 volts per NiCad or NiMH cells) should be used. When the motor has reached full power, wattage is measured using a commercial wattmeter via 3.5 mm male and female bullet connectors furnished by the contestant.~~

a) Models with energy limiters. The energy limiter measures the energy used. Motor(s) will be stopped when energy allotment is met.

b) Models without energy limiters. Motor run will be controlled by the timer.

The energy allotment measurements will be done for all models statically with an energy meter (that is measuring Joules). The measurement starts from the moment corresponding to the launch of the model and ends when the motor(s) have stopped. The measurement should be made with fully-charged batteries (4.15 to 4.2 volts per cell for lithium batteries, 1.2 volts per cell for NiMH). The battery temperature must be the same (+/- 5 °C accuracy) as competition flight.

The meter will be connected to measure the energy going to the speed controller, using 3.5mm bullet connectors; male for plus and female for minus.

F1Q models may use radio control only for irreversible actions to terminate the flight (dethermalisation). This may include stopping the motor if it is still running. Any malfunction or unintended operation of these functions is entirely at the risk of the competitor.

The number of models eligible for entry by each competitor is four.

Note: The proposal as amended at the Technical Meeting and approved by Plenary was flawed and unworkable, therefore the CIAM Technical Secretary and the F1 Subcommittee Chairman agreed the modified text that appears at paragraph b) in this edition of the Sporting Code.

Reason: The rules for class F1Q were updates starting from the year 2012; these new rules are based on the energy allotment of the model. The new rules have turned out to be good. There are several energy limiters available and they have been utilized in competitions in the years 2012 and 2013. However, there is still one caveat in the rules: the maximum surface area of the model has not been limited. Consequently, the model size will keep growing until the models become overly

large and fragile.

The energy allotment of the models should be reduced. The current figure allows the models to climb too high.

Measurements of used energy can be carried out for models without energy limiters in the same way as the energy allotment of models equipped with a limiter is measured.

As the selling of Nickel Cadmium batteries is no longer allowed, there is no need to name them in the rules.

Removing the maximum battery weight from the rules outdated the need to use self-assembled batteries to meet the maximum allowed weight.

Surface area:

F1A size model have turned out to be practical size in use. This size has survived through decades of modelling evolution. If the surface area of F1Q models is not limited then the model size will grow to be very large, resulting in fragile models.

An unlimited area would also lead the fliers trying to minimize the battery weight in order to utilise this saved weight to increase the wing area. This would push batteries to their limits – again.

Maximum energy:

Lighter models are safer and would fit better to smaller flying fields. Reducing the energy allotment will reduce the climb heights to Reasonable levels. This will make the class more approachable for beginners.

To develop class it is now important to get rules clear. It will increase interest for this fine kind and bring more participants for competitions.

f) 3.Q.2 Characteristics

Italy

Delete paragraph a) as follows:

~~The energy limiter must interrupt the impulse signal from the timer to the ESC and cuts off the motor(s) in the moment the given energy limit is reached, without the need of interaction of other devices. The ESC must always operate via its series-connection to the energy limiter. The timer stays independent, but the energy limiter may inform the timer about the end of the energy supply~~

Reason: The F1Q change proposal specifying the architecture of the system to control the energy used, approved in the last Plenary Meeting, is wrong on several counts:

- The class rules define the general characteristics of the model but in no case should be prescriptive of the technical solutions adopted in compliance of the stated general rules unless for particular Reasons such as the means to verify compliance or others such as safety, environment, not relevant in this case.
- The F1Q basic rules are, at present, an energy limit commensurate with the model weight and a maximum engine run time. How to comply with these limits is up to the competitor to engineer and the contest organizer to verify with approved and effective procedures and instruments.
- Pretending to dictate the engineering solution and the architecture of the system to control the energy used and the engine run time is arbitrary. The recently approved change calls for the energy limiter to cut off the energy

supplied without interaction with other devices. Would a newly developed system fully integrating the timer, the limiter and the ESC functions (thus saving weight, cables and connections) be considered illegal in force of the approved change? It would entail in a limit to ingenuity and development.

- The approved change is also impracticable for the purpose of checking and verification. Would anyone be capable to effectively ascertain on the field whether the installed limiter is separate from the timer function?
- The newly introduced change prevents competition between different solutions already on the market since some time and penalises a number of fliers who have invested in a solution which would not be any more legal in January 2014. Consideration should be given to a potential conflict of interest.

For these Reasons the above proposed deletion should be effective on 1st January 2014 or alternatively a one year moratorium of F1Q rules should be introduced to reconsider several aspects of the formula.

g) 3.Q.2. Characteristics

USA

Add a new paragraph, exact location to be defined, as follows:

Models with motors above 300 Watts are required to have a RDT capability that will shut down the motor within a 0.5 second and dethermalise the model within 3 seconds. The flier or his assistant should demonstrate to the timer(s) that the RDT's transmitter is on before launching the model.

Reason: Heavy F1Q models with powerful motors are potentially lethal. And ESCs may not shut the motor instantly if it hits an object.

The Airtek instant RDT has a response time of up to 0.3 second. The delay in dethermalising the model is to reduce the speed's impact on the wings.

Pre-flight checks are useful as there have been cases were the RDT transmitter was not turned on.

Models with lower power are slower and should be exempt.

h) 3.Q.2. Characteristics

USA

Amend the 6th paragraph as follows:

3.Q.2

~~The motor run time will be determined by a maximum energy amount. In addition, motor runs over 20 seconds are regarded as overruns.~~ The energy budget of each model is 5 joules per gram of the total weight. For energy calculations, weight exceeding 550 grams is to be ignored. Energy limitation will be by an energy limiter or by a motor run limit related to measured power. **Static motor runs cannot exceed 60 seconds.**

Reason: All F1Q models – with and without ELs - are tested statically: models without-EL by the mid-run Wattage estimate and models with ELs by SETs (Static Energy Testers), so that a static motor run ceiling is enforceable.

The rational for a one minute static motor run ceiling is to prevent the development of F1Q models that fly three minutes under power, emulating indoor events. (It is only a matter of time before such models would be developed.) Although a model with a one minute static motor run will actually have a slightly longer motor run in flight, it still has to glide almost two minutes for a max.

i) 3.Q.2., 3.Q.5 and 3.Q.9 USA

Note: to abolish timing the motor run and consequential changes.

Amend the 6th paragraph as follows:

3.Q.2

~~The motor run time will be determined by a maximum energy amount. In addition, motor runs over 20 seconds are regarded as overruns. The energy budget of each model is 5 joules per gram of the total weight. For energy calculations, weight exceeding 550 grams is to be ignored. Energy limitation will be by an energy limiter or by a motor run limit related to measured power. **Motor runs will not be timed.**~~

Note that consequential changes will be necessary at 3.Q.5 and 3.Q.9 as follows:

3.Q.5. Definition of an Unsuccessful Attempt

~~(a) the time of the motor run from the release of the model exceeds the time specified in 3.Q.2 or 3.Q.9~~

3.Q.9 Timing

~~(c) The motor run must be timed by two timekeepers with quartz controlled electronic stopwatches with digital readout, recording to at least 1/100 of a second. The motor run is determined as the average of the two registered times, and this average is reduced to the nearest 1/10th of a second below.~~

Reason: It is evident that timing F1Q motor runs is rather inaccurate since F1Q models can climb over 100 meters, lack bunts in the case of non-EL models, and sport quite motors.

As F1Q is defined in terms of energy, models only have to satisfy their energy budgets. A model's energy budget constrains its motor run length and motor's power. Compliance is verified statically by SETs (Static Energy Testers) for EL models and by the mid-run Wattage measurement for non-EL models (which need to post their motor runs for calculating their energy). Once a model is compliant, there is no point of timing their motor runs.

Therefore only duration will be timed in F1Q. In the cases were a model climbs much higher than its peers or if a timekeeper suspects a model has exceeded its energy budget, the model could have its energy verified statically after the flight (as in the case of F1B motor weights).

F1S New Class

j) Class F1S F1 Sub-committee

See Agenda Annex7b for the rules.

Reason: The "E36" class has proven popular and practical in the USA where it originated and in other countries where the class has been introduced. It will make a suitable electric model to fly alongside the established 2-minute classes like F1G and F1H.

Volume F2 Control Line begins overleaf.

15.6 Section 4C Volume F2 - Control Line

F2A

a) **4.1.12 c, e and f Number of Helpers** **Netherlands**

Amend paragraph c as follows (delete paragraphs e) and f)) and re-number subsequent paragraphs.

~~c) In the case of a complete national Speed team (3 or 4 members), the two helpers must be two of the other team members or one team member and the team manager.~~

c) All registered members for the competition belonging to a national team and in possession of a valid sporting license may act as helper in speed flights. They may only act as helper for the national team they are registered for.

~~e) In the case where there are two entrants in an incomplete team, the second team member must act as one of the helpers for the other entrant from his own country. In this case, the entrants from the incomplete team may employ only one registered entrant from another incomplete team or one registered supporter from any country or the entrant's team manager as their second helper.~~

~~f) In the case where there is a single entrant from a country the competitor may use two registered helpers. In this case the entrant from the incomplete team may employ up to two registered entrants from other incomplete teams or up to two registered supporters from any countries. Or the entrant's team manager and one other helper as specified above.~~

Reason: The current ruling that in principle only speed competitors may act as helper is often causing problems with the execution of F2A flights. Since many speed pilots and team managers are also involved in other classes of F2 contest, running simultaneously, the availability of all three competitors and a team manager at the same time is often a big problem. This leads to delays in the competition, not just in speed, but many times also in F2C, B and D. Everybody has to wait till enough people entitled as helper under the current ruling are available, while at the same time enough other members of the national team (combat pilots/helpers F2B or F2C people) are present at the speed circle.

The delaying effects on the event are especially felt if the circles where the event takes place are in large distances from each other. Timing of flights in the different circles is than a great problem.

Accepting the proposal would help the smooth organisation of a major event in a considerable way.

Supporting data: In Poland our team had a competitor in F2A who also flew F2B. The stunt site was 13 kilometres away from the rest of the sites. Communication between sites was difficult and delays, due to protest in F2C and F2D were many, so synchronisation between the events was almost impossible. Everybody was waiting for everybody.

The same goes for Bulgaria where the F2A circle also was far from the rest of the sites.

b) 4.1.12 c, d, e and f Number of Helpers Sweden

Amend paragraph c as follows and delete paragraphs e) and f) and re-number subsequent paragraphs.

~~e) In the case of a complete national Speed team (3 or 4 members), the two helpers must be two of the other team members or one team member and the team manager.~~

c) The helpers may be other competitors, team manager and registered supporters from the competitor's country and/or another country. All such helpers must possess a valid Sporting Licence.

~~e) In the case where there are two entrants in an incomplete team, the second team member must act as one of the helpers for the other entrant from his own country. In this case, the entrants from the incomplete team may employ only one registered entrant from another incomplete team or one registered supporter from any country or the entrant's team manager as their second helper.~~

~~f) In the case where there is a single entrant from a country the competitor may use two registered helpers. In this case the entrant from the incomplete team may employ up to two registered entrants from other incomplete teams or up to two registered supporters from any countries. Or the entrant's team manager and one other helper as specified above.~~

Reason: The current ruling that in principle only speed competitors from the same country may act as helper is often causing problems with the execution of F2A flights. Since many speed pilots and team managers are also involved in other classes of F2 contest, running simultaneously, the availability of all three competitors and a team manager at the same time is often a big problem.

This leads to delays in the competition, not just in speed, but many times also in F2C, B and D.

Everybody has to wait till enough people entitled as helper under the current ruling are available, while at the same time enough other members of the national team (pilots/helpers in F2B and or F2C competitors) are present at the speed circle.

The delaying effects on the event are especially felt if the circles where the event takes place are in large distances from each other.

The proposed change will also make the rules similar to F2B and F2D, where there is no requirement for the other competitors in the national team to be the only helpers allowed.

Accepting the proposal would help the smooth organisation of a major event in a considerable way.

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

Supporting data: At the EC 2013 in Hungary Sweden had 3 speed competitors. All of them were also competing in F2C. The speed competitors were not allowed by the organiser and the FAI Jury to have an extra supporter as a helper to smooth the running of the competition. This supporter had a valid Sporting Licence. As a result there were delays in the speed competition.

F2B

c) 4.2.5 Contest Weather

Italy

Amend the paragraph as follows:

No contest flight shall be started when the wind speed is equal to or greater than 6 metres per second for a continuous period of 30 seconds, as measured from the height of a person standing on the ground holding the measuring instrument overhead at arms-length. In the event of such conditions occurring the F2B Contest Director and Head Judge shall agree a suitable delay to the contest timetable and shall inform all contestants and contest officials as soon as is practicable

Reason: F2 flying fields are generally surrounded by trees, bushes, fences which generate with high wind speed severe turbulence thus putting in serious danger all those involved in the contest...

Supporting data: On the occasion of W.C. 2012 in Bulgaria, F2B circles where located in a park with very tall trees. In the first two qualification days flights were performed with around 7 m/s constant wind. At least 2 models crashed due to severe turbulence effect and stopping of the flights was imposed by the Head of Judges Serge Delabarde for safety concern.

d) 4.2.7 Contest Flights

F2 Sub-committee

Amend paragraph a) as follows:

a) When a registered competitor makes a flight which is intended to record a score in the contest, it shall be referred to as a contest flight. A contest flight shall become an official flight at the moment the model aircraft ~~is released to start~~ begins the ground roll of the take-off manoeuvre. All official flights shall result in a score being recorded against the respective competitor's name, except in the case of a re-flight being awarded and accepted, as provided at paragraph h) below.

Reason: This is a consequential change if proposal "4.2.15.3 Take-off Manoeuvre" at Agenda item g) is approved.

e) 4.2.14 Execution and Sequence of Manoeuvres

France

Amend the paragraph as follows:

The sequence of manoeuvres with their corresponding K factor is :

1. Starting ~~4~~

Reason: This is a consequential change (No k-Factor anymore) if proposal "4.2.15.2 Starting Manoeuvre" at Agenda item e) is approved.

f) 4.2.15.2. Starting Manoeuvre

France

Technical Secretary's Note: there will be a consequential change to 4.2.14 (proposal f) in this agenda).

Amend the paragraph as follows:

~~All judges shall award a mark 10 (ten) if the model aircraft begins its ground roll for the take-off manoeuvre within 1 minute of giving the ready to start hand signal.~~

Both manual starting and the use ~~motor starting of~~ devices such as electric starters shall be permitted.

~~and the 10 points shall be awarded if the above~~

~~1 minute condition is fulfilled, whatever the method of motor starting used.~~

~~But a mark 0 (zero) shall be given if:~~

~~–no hand signal is given ;~~

~~–or the competitor starts his motor/s before his hand signal has been acknowledged.~~

~~–or the take-off ground roll begins more than 1 minute after his hand signal was acknowledged.~~

Reason: With a substantial percentage of competitors meanwhile using push-button starting electric motors in F2B, flyers using IC motors may be disadvantaged.

Supporting data: In order to allow sufficient time for the adjustment of tabulation forms and related software, this change of rules shall be set in force not earlier than **January 1st 2016.**

g) 4.2.15.3 Take-off Manoeuvre

F2 Sub-committee

Technical Secretary's Note: there will be a consequential change to 4.2.7 (proposal d) in this agenda).

Amend the paragraph as follows:

At take-off, electric powered model aircraft must be restrained by an assistant or a suitable device from the moment the battery is connected until the pilot holds the handle in his hand and gives a signal to release.

a) Start of manoeuvre:

The moment when the model aircraft is released to start its **begins its** ground roll. The model aircraft must take off from the ground.

Reason: Electric power trains are typically operating by means of automatic, delayed start-up sequences and/or may be started by the pilot or an assigned helper. In order to minimise the risk of runaways being caused by accidental start-up of the electric motor (s), a helper must hold the model until being signalled by the pilot to release.

F2C

h) 4.3.2 Team Racing Site

USA

Technical Secretary's Note: there will be a consequential change to proposals i, j) and k) in this agenda).

Amend the paragraph as shown and re-number the following paragraphs.

~~b) Circle at 19.1 m radius shall be marked with a broken line. It indicates the point beyond which the pitman is not permitted to reach to retrieve a model aircraft. This is called the safety circle.~~

Reason: The purpose of the original rule is to prevent a mechanic from entering the flight circle where he is in the greatest danger. The original rule addressed the too-common occurrence of a mechanic laying down in the circle with his feet just outside the flight circle in order to retrieve a model. The current rule requires the organizers to paint yet one more line and then creates a hard-and-fast rule with severe penalty. The proposed change greatly simplifies the rules and provides an easily identified requirement for the mechanic.

i) 4.3.4 Characteristics of a Team Racing Model Aircraft Bureau

Add new paragraphs as shown and re-number the existing paragraphs as necessary.

b) The maximum exhaust outlet area is 60 mm² at the cylinder liner projected exhaust outlet or crankcase exhaust outlet.

c) Two separate methods of reducing noise are allowed:

i) with a silencer

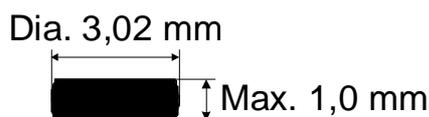
ii) with a restricted venturi size.

d) With a silencer

- i) The aircraft shall be fitted with a silencing system, either separate or integral, which reduces the noise by at least 14 dB(A) when tested on a standardised audio noise generator. This silencing system must be able to be connected to the noise generator.
- ii) The silencer or exhaust outlet shall have a maximum outlet area of 60mm² and shall be outside the aircraft.
- iii) The entire silencer system must be gas tight between the crankcase outlet and the silencer outlet.
- iv) The silencer system shall be checked in accordance with the procedure in Annex 4M.
- v) A test of the gas tight fitting of the engine and the exhaust system shall be conducted as a random check in the line check area during warm-up as follows: when the gas outlet of the silencer on a running engine is shut off with a finger or plug, the engine should stop immediately.

e) With a restricted venturi size

i) The motor shall be naturally aspirated via a single, round venturi with a maximum diameter of 3 mm. The venturi diameter shall be checked with a simple no-go plug gauge per the following sketch:



ii) Any interconnecting chamber between the air intake and the induction port of the motor shall have a maximum volume of 1,25 cm³.

iii) No sub-piston induction or any other supplementary air intake is allowed.

Reason: This proposal is made to allow the use of current F2C equipment in 2015 and onwards with only a change in venturi diameter.

Supporting Data: Flight tests have been carried out with a 2013 model and the noise reduction with a 3 mm venture size was measured to be -2.7 dB(A) when measured from the centre of the circle. This noise reduction is not as much as with a silenced model. The airspeed reduction was +1.2 seconds/10 laps.

It is assumed that, with development, the speed reduction will be in the order of 1.0 seconds/10 laps. This means in fact that people who choose a 3 mm venture instead of a silencer will be consequently slower by some 10 seconds for a 100 lap race (compared with an unrestricted venture size).

- j) **4.3.4 Characteristics of a Team Racing Model Aircraft** Bureau
Amend paragraph e) as follows:
- e) Minimum dimensions of the fuselage at the top of the cockpit: height: 100 mm; width: 50 mm; cross-sectional area: 39 cm² - (wing fillets shall not be included in the fuselage cross-sectional area). **If the silencer is partly recessed into the fuselage, the cross section shall be measured with an imaginary outline of the cross section as if there was no cut out for the silencer.**
- Reason: To clarify how the cross section shall be measured with a partly recessed silencer.
- k) **4.3.7 Race from Start to Finish** USA
Technical Secretary's Note: this is a consequential change if proposal h) is approved.
Add a new paragraph h) and re-number the subsequent paragraphs.
- h) At no time may the pitman place any load-bearing component of his body or ancillary equipment (excluding the model itself) in contact with the ground inside the flight circle.**
- Reason: See proposal h).
- l) **4.3.9. Warnings-Disqualifications** USA
Technical Secretary's Note: this is a consequential change if proposal h) is approved.
Amend the paragraph as follows:
- A TEAM SHALL BE DISQUALIFIED FROM A RACE:
- c) ~~If the mechanic steps into the flight circle (with either foot) or reaches further than the safety circle (line) painted 0.5m into the flight circle.~~ **Places any load-bearing component of his body in contact with the ground inside the flight circle.**
- Reason: See proposal h).
- m) **4.C.6.8 F2C Judging Guide** USA
Technical Secretary's Note: this is a consequential change if proposal h) is approved.
Amend the paragraph as follows:
- 4.C.6.8. Rule 4.3.9.k) states that “A team shall be disqualified from a race if the mechanic ... ~~or steps into the flight circle with either foot or reaches further than 0.5 metres into the flight circle~~ **Places any load-bearing component of his body in contact with the ground inside the flight circle.**”. This rule was introduced to ensure that mechanics remain in a safe location when retrieving their model aircraft. Retrieving a model aircraft in this context should generally be taken as recovering the model aircraft from an area outside a pitting segment. The penalty of disqualification should not be applied to mechanics who may have one foot slightly inside the flight circle ~~or reach in to catch the model aircraft slightly over the 0.5metre stated limit.~~ The Reasoning behind this interpretation is that during a normal pitting activity mechanics are balanced on both feet and facing in the direction of other approaching model aircraft. They will, therefore, be easily able to move clear of any other.....
- Reason: See proposal h).

n) **4.3.4. Characteristics of a Team Racing Model Aircraft** **Netherlands**

CIAM Plenary is requested to authorise the F2 Sub-committee to investigate and, if necessary, prepare appropriate rule proposals for the 2016 Plenary meeting regarding a standard fuel for F2C competitions. The F2 Sub-committee investigation will need to be extensive, with the use of chemical experts and others. If the conclusion is that a standard fuel is feasible, the F2 Sub-committee will construct a consistent, fair and safe set of rules for F2C fuel.

Reason: The current rule does not limit in any way the components of F2C fuel. Some components are only available in some countries and some are dangerous to health. Some components are difficult or impossible to legally ship from one continent to another.

o) **4.3.6 Organisation of Races, paragraph b)** **USA**

Amend paragraph b) as follows:

b) The draw is organised in such a way that, when possible, **1)** only one team of any nation may participate in a qualifying race or semi-final race, **and 2) for qualifying races, each team shall have a first, second and third choice of sectors. If conflict arises from attempting to apply these two requirements, separating competitors by country will have precedence.**

Reason: The choice of sector has a very significant impact on the outcome of a race due to prevailing weather conditions. In an interest of fairness to all competitors, during the qualifying races, the draw should be made to give each competitor a first, second and third choice.

While the draw should be random in nature, simple procedures are available that can achieve this fairness in setting the qualifying races.

p) **4.3.7.c Race from Start to Finish** **Netherlands**

Amend paragraph c) as follows:

c) A period of 30 seconds is allowed for final preparations (filling up the tanks) and the Circle Marshal announces the last five **ten** seconds by counting down.

Reason: This is already common practice at many contests. A period of 5 seconds countdown is often considered too little in case the stopwatch setting between the circle marshal and the competitor is slightly off.

Ten seconds countdown is easier for all people involved. (competitors, timekeepers, judges)

q) **4.C.6 General Points** **USA**

Amend paragraphs 4.C.6.1, 4.C.6.3 and 4.C.6.4 as follows:

4.6.C.1 The draws for flying order should be made by the F2C Contest Director in the presence of the panel of judges as early as possible so that competitors are given the maximum time to prepare.

A “draw” is a random selection. The random selection may be as simple as drawing slips of paper out of a hat, or done by computer. A draw must honour the requirements as defined in paragraph 4.3.6.b
For the qualifying rounds, all three rounds are drawn at the same time. If the last race in any qualifying round draw is not full, the team(s) in

that (not-full) race will still be assigned a sector choice, As reflights occur, the empty slots in the last race will be filled by the teams given reflights, but the sector choice assigned to the original team(s) in that race shall not be changed.

Since the original order of flights and sector choice was random, reflights should be merely scheduled in order at the end, first filling in a not-full race and then adding additional flights as necessary.

For the semi-finals both rounds are drawn at the same time using the matrix at 4.C.5.2.

- 4.C.6.3. All qualifying races with only two teams (for example if a team withdraws) will be put at the end of the round in order to allow a 3rd team which is granted a re-flight to enter the race. ~~If necessary, a new draw for pitting segments will be made under the responsibility of the panel of judges.~~ **Teams granted reflights shall be assigned to races at the end of a round in the original order of the draw. The F2C Panel of Judges is granted the authority to adjust placement of re-flights to attempt to honour paragraph 4.3.6.b.**

- 4.C.6.4. ~~In the case of re-flights there will be a new draw for pitting segments (unless it is a complete re-flight of the same 3 teams).~~ **Teams from a complete reflight of the same three teams will not be reassigned to later races but will be flown with sector choices as assigned in the original draw.**

Reason: This change to the F2C Judges' Guide will achieve a number things:

- 1) It defines what a “draw” is (since that word is not defined any other place).
- 2) It will simplify the manner in which races at the end of a Qualifying round are structured.
- 3) It assures randomness in the draw of races at the end of a round without time-consuming re-draws by the F2C Panel of Judges.
- 4) It allows a team or teams drawn in a not-full race at the end of a Qualifying round to prepare knowing which race they will be in and which sector choice they will have.

Given that the original draw is a random event, and given that re-flights are also randomly encountered, simple assignment of teams granted a re-flight to the empty “slots” in the race at the end of the round in their original draw order is still a random event. There is no need for any additional random draw to be made.

Since this proposal is for the F2C Judges' Guide, it is appropriate to submit it for consideration at the 2013 Plenary. Associated with this proposal is one that affects the rules themselves (4.3.6.b), and will likely be delayed until 2014.

F2 Annexes

Annex 4D – Class F2D Judges Guide

r) 4.4.5 Characteristics

F2 Subcommittee

Add a new sub-paragraph as follows:

h) No sharp edges, abrasive or sticky areas are allowed on the model that might assist the cutting of the streamers.

Reason: Clarification

Annex 4E – Control Line World Cup Rules

s) 4.E.1 Classes

F2 Subcommittee

Amend the paragraph as follows:

The following separate classes are recognised for World Cup competition in Control Line: F2A (Speed), F2B (Aerobatics), F2C (Team Racing), ~~and F2D (Combat)~~ **and F2F (Team Racing).**

Reason: There has been a surge of interest in this Team Racing class and it deserves to be added to the specific classes for the F2 World Cup.

Annex 4F - Control Line Organisers' Guide

t) 3. Time Schedule

F2 Subcommittee

Amend the F2D column as shown:

3rd day	1st Round	1st Qualifying flights	1st Round	Qualifying <u>eliminating</u> round
4th day	2nd Round	1st / 2nd Qualifying flights	2nd Round	Qualifying <u>eliminating</u> round

Reason: Correction of the description.

Annex 4H - Class F2F- Diesel Profile Team Racing Model Aircraft

u) 4.H.1. Definition of a Diesel Profile Racing Event

F2 Subcommittee

Amend the paragraph as follows:

b) ~~No member of a team may be a member of another team. Only one member of each team may be an expert. A senior modeller is considered to be an expert if he/she has been placed once in the:~~
~~- thirty first places of a Control Line World Championships class F2C (team-racing);~~
~~- or twenty first places of a F2C Control Line World Cup;~~
~~- or five first places of F2F Control Line World Cup.~~
~~A junior is not considered to be an expert even if he is placed within the three criteria above.~~

Reason: To make F2F more accessible.

Annex 4K - Class F2G

v) 4.K.2 Characteristics of an Electric Speed Model Aircraft

F2 Subcommittee

Amend the sub-paragraphs as follows:

~~f) The model aircraft must be fitted with a wheeled undercarriage for landing. Minimum wheel diameter 25 mm.~~

~~f) The maximum flight time must not exceed 3 minutes from take-off.~~

g) A radio control system may be used to shut down the electric motor in accordance with ABR 1.3.2 c). A person other than the pilot may operate this system.

Reason: Feedback from the competitors.

w) 4.K.4 Length of the Course

F2 Subcommittee

Amend the 2nd paragraph as follows:

a) The measured distance covered by the model aircraft must be at least one kilometre.

b) The radius of the flight circle must be ~~17,69 m. (9 laps = 1 km).~~ **15.92 m (10laps = 1 km)**

Reason: Feedback from the competitors.

Volume F3 Aerobatics begins overleaf.

15.7 Section 4C Volume F3 - RC Aerobatics

F3A

- a) **5.1. Organisation of Radio Controlled Aerobatic Contests** **United Kingdom**
Amend the 13th paragraph as follows.

When the contest director/sound steward is satisfied that he has obtained a reading from the SLM, he will indicate this to the competitor, ~~and the timing device will be re-activated to start the 8-minute flying time.~~ **and the helper will then proceed to the designated take-off area where he will place the model aircraft on the ground at which point the timing device will be reactivated to start the 8 minute flying time.**

Reason: Safety.

- a) The present system encourages helpers to hurry or even run with the model from the sound check area to place it in the take off area so that the pilot can begin his flight for which the 8-minute flying time has already started.
- b) With the current rule the ready boxes are often placed too close to the judges and this proposed amendment will stop that.
- c) Additionally, the statement “to start the 8-minute flying time” is ambiguous, as some of the eight minutes flying time is actually taken up by the helper carrying the model from the sound check area to the take off area.

Note: In the USA (WCh) metal barriers had to be placed between the judges and sound check area but helpers whilst carrying the model still had to negotiate round the judges, who were sitting between the sound check area and take off position. The sound check was not wind orientated. At Chateauroux (ECh) the sound check was not wind orientated. In South Africa the method of timing suggested in this proposal was eventually adopted because of the runway layout and it was clearly a much safer situation with the helper walking normally to the take-off area.

F3M

- b) **5.10.14. – Known schedule of manoeuvres** **Czech Republic & France**
Delete the existing schedule (2012-2013) and insert a new F3M Schedule for 2015.

Known schedule of manoeuvres	K-Factor
1 Triangle loop with positive snap roll on upline and 4/8-point roll on 45° line.	3
2 Stall turn with one roll and 2/2-point roll opposite on upline, 1½ negative snap roll on downline and 2/2-point roll on 45° leg.	4
3 Half loop with ¼, ½, ¾ alternate rolls on enter and ¾, ½, ¼ alternate roll on exit.	4
4 Two turn negative spin, one opposite roll.	3
5 1 ¼ positive snap roll, same direction roll, opposite ¼ roll.	4
6 Pull-push-push Humpty Bump 4-point roll on upline, opposite ¼ roll and ¼ roll on downline.	3
7 Reverse Cuban eight, one negative snap roll, 2/4-point roll opposite on leg 1, 1½ roll on leg 2, 2/4-point roll and a opposite positive snap roll on leg 3.	6
8 Teardrop with 2 positive snap rolls on 45° downline, 2 linked rolls on upline.	4
9 Diamond loop, a positive opposite snap roll and roll on leg 2, opposite roll and snap roll on leg 4.	5

10 Half square loop, a roll and 1 ¼ opposite negative snap roll.	3
11 ¾ of rolling circle with 3 alternated rolls, first inside.	5
12 45° uphill leg 1½ roll, 5/8 of a loop with one integrated full roll and a roll on exit.	4
<i>The description of the manoeuvres, including judging notes, and the Aresti diagrams are given at Annex 5L.</i>	

New schedule 2015:

Known schedule of manoeuvres	K-Factor
-------------------------------------	-----------------

<u>1. Double turn with two ¾-loops and knife edge connecting line between them</u>	<u>5</u>
<u>2. Glass hours on side with snap roll on the vertical line</u>	<u>3</u>
<u>3. Double inverted top hat with loop in knife edge and snap roll on the top of it</u>	<u>4</u>
<u>4. Half loop with integrated full roll</u>	<u>2</u>
<u>5. Cobra with snap rolls up and down</u>	<u>3</u>
<u>6. Humpty Bump (pull-push-push) with 2-point roll up and 4-point roll down</u>	<u>2</u>
<u>7. Combination of roll, knife edge flight and snap roll</u>	<u>4</u>
<u>8. Shark tooth with full roll up and 1½-roll down</u>	<u>2</u>
<u>9. Golf ball in knife edge flight</u>	<u>4</u>
<u>10. Turn with 4-point roll up and two alternating snap rolls down</u>	<u>3</u>
<u>11. Horizontal circle 8 with 8 integrated alternating ½-rolls</u>	<u>5</u>
<u>12. Half loop with integrated full roll and 2½ turns of inverted spin</u>	<u>4</u>

Reason: Unfortunately, no proposal was sent for the Plenary Meeting on 19 & 20 April 2013 for a new schedule 2014-2015. As an emergency, and in this extraordinary situation, a new schedule is needed for 2015 (validity 1 year).

c)	Annex 5L – Description of Manoeuvres	Czech Republic & France
	Known Schedule	

Replace the existing manoeuvre descriptions and Aresti diagram.

See Agenda Annex 7c for the manoeuvre descriptions and Aresti diagram.

Volume F3 Soaring begins overleaf.

15.8 Section 4C Volume F3 - RC Soaring

F3F

- a) **5.8.2 Characteristics of Radio Controlled Slope Gliders** **Czech Republic**
Add the following paragraph as the final paragraph.

Paragraph B.3.1 a) of Section 4B (Builder of the Model aircraft) is not applicable to class F3F.

Reason: It is necessary to adjust the wording of Sporting Code to the reality. At present, with composite models, most of the building is done by the manufacturer, so the paragraph B.3.1 makes no sense. All other RC soaring classes contain such exemption, only in F3F rules the authors forgot to include it.

- b) **5.8.2 Characteristics of Radio Controlled Slope Gliders** **Czech Republic**
Amend the 6th paragraph as follows:

~~... Variation of geometry or area is allowed only if it is actuated at distance by radio-control.~~ **The use of any onboard-sensed data to automatically move the control surfaces or to modify the aircraft geometry is prohibited.**

Any technological device...

Reason: The present wording of the paragraph 5.8.2 is not sufficiently clear concerning electronic stabilisation systems. The proposed sentence would help to remove any doubt.

- c) **5.8.2. Characteristics of Radio Controlled Slope Gliders** **USA**
Add a new 4th paragraph as follows:

Maximum surface area 150 dm²
 Maximum flying mass 5 kg
 Loading less than 75 g/dm²

The use of any onboard-sensed data to automatically move the control surfaces or to modify the aircraft geometry is prohibited.

Minimum radius of fuselage nose 7.5 mm in all orientations (see template below).

Reason: Although the general rules state the model must be directly controlled by the competitor, this addition makes the rules absolutely clear gyros and other types of on board automation are not permitted in F3F.

- d) **5.8.6. Cancellation of a Flight:** **Norway**
Technical Secretary's Note: this is a consequential change if proposal e) is approved.
Add a new sub-paragraph: at i) to the end paragraph 5.8.6 as follows:

A flight is official when an attempt is carried out, whatever result is obtained.

A flight is official but gets a zero score if:

- a) the competitor ... h) ... exiting the course.

i) the pilot fails to present the model to the line judge when entering the speed course

Reason: See proposal e).

- e) **5.8.8. The Flying Task:** **Norway**
Technical Secretary's Note: there will be a consequential change to Agenda proposal d) "5.8.6. Cancellation of a Flight."
Add a new final paragraph as follows:
The flying task is to fly 10 legs on a closed speed course of 100 meters in the shortest possible time from the moment the model first crosses Base A in the direction of Base B. If some irremovable obstacles do not allow 100 meters the course may be shorter but not less than 80 meters. This exception does not apply for world or continental championships.
The competitor is responsible to present the model to the line judges.
Reason: This change will highly improve safety. Organizer will be able to set up the sighting device in a safe distance to the edge eliminating judges close to the edge. It is simple; the pilot must make sure that the line judge can see his model while flying near the bases.
A correct time is not possible to record if the pilot fails to present the model while entering the speed course.
- f) **5.8.9 The Speed Course** **Norway**
Amend the 1st paragraph as follows:
The speed course is laid out along the edge of the slope and is marked at both ends with two clearly visible flags. The organizer must ensure that the two turning planes are mutually parallel and perpendicular to the slope. **To ensure accuracy the sighting device should be made like "A-frames"**. Depending on the circumstances, the two planes are marked respectively Base A and Base B.
Base A is the official starting plane. At Base A and Base B, an Official announces the passing of the model (ie any part of the model aircraft) with a sound signal when the model is flying out of the speed course. Furthermore, in the case of Base A, a signal announces the first time the model is crossing Base A in the direction of Base B.
Reason: This change is to clarify and to make sure that competitors can expect accuracy wherever they choose to compete. Still today many Organizers use pole or poles. F3B type sighting device is
- g) **5.8.10 Safety** **Norway**
Add a sentence to the beginning of the paragraph.
Whenever possible, the sighting device used for judging the turns must be placed in a safe distance from the slope edge.
The organizer must clearly mark a safety line representing a vertical plane which separates the speed course from the area where judges, other officials, competitors and spectators stay.
Crossing the safety line by any part of the model aircraft during the measured flight will be penalized by 100 points subtracted from the sum after conversion, the penalty not being discarded with the result of the round. The organizer must appoint one judge to observe, using an optical sighting device, any crossing of the safety line.
Reason: This change is to clarify and to make sure that competitors can expect accuracy wherever they choose to compete. Still today many Organizers use pole or poles. F3B type sighting device is

h) 5.8.12 Scoring **Slovakia**

Technical Secretary's Note: this is a consequential change if proposal i) is approved.

Amend the paragraph as follows:

5.8.12 Scoring: The result of the flight is stated as the time in seconds and hundredths of seconds obtained by each competitor. For the purpose of calculating the result of the round, the competitor's result is converted this way:

$$\frac{1000 \times P_w}{P}$$

where P_w is the best result in the round **or group (see paragraph 5.8.16)** and P is the competitor's result.

Reason: See proposal i).

i) 5.8.16. Interruptions **Slovakia**

Technical Secretary's Note: there will be a consequential change to 5.8.12 Scoring (proposal h) in this agenda).

Amend the paragraph as follows:

A round in progress must temporarily be interrupted if:

- a) the wind speed constantly is below 3 m/sec or more than 25 m/sec.
- b) the direction of the wind constantly deviates more than 45° from a line perpendicular to the main direction of the speed course.

If these conditions arise during the flight the competitor is entitled to a re-flight. ~~A round in progress is to be cancelled if~~

- ~~a) the interruption lasts more than thirty minutes;~~
- ~~b) fewer than 50% of the competitors have been able to perform the task caused by marginal conditions. Without the condition "constantly" (i.e. 20-seconds) have been met and thus caused re-flights.~~

Constantly means that the conditions are at least 20 seconds above or below the limit.

If the interruption lasts more than thirty minutes then the starting list of the round is to be divided into groups and the scores (see paragraph 5.8.12) are re-computed within the groups. The results of an incomplete group are to be cancelled and this group have to fly from the beginning.

The groups must be of equal size (+ - 1 competitor); the minimum competitors in one group is 10; the division of the starting list must be announced before the start of the round.

The round may continue if the conditions are again constantly within the limits.

Reason: The proposed change may allow using the periods with good wind more effectively. Such procedure was already used at the F3F WCh 2012 and F3F ECh 2013 as local rules.

j) **5.8.16 Interruptions**

Norway

Amend rule as follows:

5.8.16. Interruptions: A round in progress must temporarily be interrupted if:-

- a) ~~the wind speed constantly is below 3 m/sec or more than 25 m/sec.~~
average wind speed is below 3m/sec or more than 25m/sec during the timed flight
- b) ~~the direction of the wind constantly deviates more than 45° from a line perpendicular to the main direction of the speed course.~~
the average direction of the wind is more than 45degrees from a line perpendicular to the main direction of the speed course during the timed flight

If these conditions arise during the flight the competitor is entitled to a re-flight.

A round in progress is to be cancelled if:

- a) the interruption lasts more than thirty minutes;
- b) fewer than 50% of the competitors have been able to perform the task caused by marginal conditions ~~Without the condition "constantly" (i.e. 20-seconds) have been met~~ and thus caused re-flights

Reason: By using a weather station the CD and organizers will be given a tool to make much more accurate decisions. The weather station will constantly measure the average wind and direction so it will be easy to see if it is possible to fly.

It is very well known that low wind conditions often are mixed with thermal activity. The pilot should be given the possibility to use the thermal and not be told to wait until the wind speed and or direction is back to legal values.

After using the weather station over several years we have found out that pilots are very happy with the system. There are no more discussions and it seems to be as close to fair as you can get. Clearly no system or instrument can make conditions 100% fair when you talk about an outdoor sport.

A bonus effect of using the weather station is that the data can be collected and logged. The weather data can also be published together with the time of the flight.

There is already several timing gear with weather stations around in different countries that can do such measurements.

It is also possible to ask someone in the community to make this for sale or to make a manual on how to do it.

F3J

k) **5.6.1.1. Definition of Radio Controlled Glider**

Czech Republic

Amend the paragraph as follows:

... ~~Any variation of geometry or area must be actuated at distance by radio.~~ **The use of any onboard-sensed data to automatically move the control surfaces or to modify the aircraft geometry is prohibited.**

Reason: The present wording of the paragraph 5.6.1.1 is not sufficiently clear concerning electronic stabilisation systems. The proposed sentence would help to remove any doubt.

l) 5.6.1.1 Definition of a Radio Controlled Glider **USA**

Amend the paragraph as follows:

A model aircraft which is not provided with a propulsion device and in which lift is generated by aerodynamic forces acting on surfaces remaining fixed. Model aircraft with variable geometry or area must comply with the specification when the surfaces are in maximum and minimum extended mode. The model aircraft must be controlled by the competitor on the ground using radio control. Any variation of geometry or area must be actuated at distance by radio. **The use of any onboard-sensed data to automatically move the control surfaces or to modify the aircraft geometry is prohibited.**

Reason: Although the general rules state the model must be directly controlled by the competitor, this addition makes the rules absolutely clear gyros and other types of on board automation are not permitted in F3J.

m) 5.6.1.3 Characteristics of Radio Control Gliders (C) **USA**

Amend the paragraph as follows:

c) Any technological device used to aid in supplying data of the air's condition or direct feedback of the model's flight status is prohibited during the flight. These devices include any transmission or receiving devices not used to directly control the model aircraft (telephones, walkie-talkies, telemetry of airspeed and altitude etc), temperature detecting devices (thermal imaging cameras, thermometers etc), optical aids (such as binoculars, telescopes etc), and distance/altitude measuring devices (GPS, laser range finders etc). Telemetry of signal strength at the aircraft receiver, and state of the receiver battery **and GPS location data that is not displayed in any form to the pilot or helpers during a flight, and not used for aircraft control** is permitted. Use of corrective eyeglasses and sunglasses are permitted. If an infringement of this rule occurs, the pilot will be disqualified from the contest.

Reason: At several of the WC events and often in club events models are lost and not recovered. Having the GPS coordinates available to locate a downed model could save thousands of dollars in lost aircraft. There is almost no value in the use of GPS coordinates during a flight. Even the altitude data in GPS data is unreliable enough to be useful. Since this rules change specifically requires that the data not be displayed or used in any form during a flight it precludes usage of the data. Enforcement is quite simple – if a pilot was to be receiving and using data it would have to be displayed or transmitted to a pilot or helper and that would be quite obvious that they were using that information. Similarly to enforcing that a vario is not in use it would be obvious from the pilot's actions.

n) 5.6.2. Flying site **Germany**

Amend paragraphs a) and b) as follows:

5.6.2.2.

a) The flying site shall include a marked launch corridor of 6 metres width with a central launch line. The launching corridor shall be arranged crosswind and shall **must** include launch marks on the central launch line at least 15 metres apart, one for each competitor of a group.

b) The flying site shall **must** include landing spots, one for each competitor in a group. Each landing spot will correspond to one of the launching marks and will be

arranged at least 30 metres downwind of the launching corridor.

Reason: Clarification to avoid discussions during the competition.

o) 5.6.4. Re-flights

Germany

Amend paragraph 4, 1st sub-paragraph as follows:

1`. in an incomplete group, or in a complete group on additional launching/landing spots, **if there is no member of his team in this group.**

Reason: In paragraph 2. is written: “.....if the frequency (not more relevant nowadays) or the team membership of the drawn competitor does not fit or the competitor will not fly, the draw is repeated.”

Here it is clearly stated, that there should be no competitor with the same team membership in this group.

This makes sense especially for small teams.

If this is not possible paragraph 3. can be used.

p) 5.6.7 Control of Transmitters

United Kingdom

Amend the paragraph by deleting entirely sub-paragraphs a) and c); inserting new sub-paragraphs a), b), c) & d); moving existing sub-paragraphs b) and c) to become bullet points in the new sub-paragraph b).

~~5.6.7.1. a) — The Contest Director will not start the contest until all competitors have handed over all transmitters to the organisers.~~

a) Competitors using 2.4ghz spread spectrum transmitters may retain their transmitters during the competition. Transmitters using other frequencies may be impounded at the discretion of the Contest Director. (See also ABR B.11.2; B.11.3 & B.11.4.)

b) If a transmitter pound has to be used for am/fm transmitters then:

- Failure to hand in a transmitter before the official starting time of the contest may result in the competitor forfeiting his first round flight.
- The competitor must hand over his transmitter to the designated official (usually the timekeeper) immediately after finishing his flight.

~~c) Any test transmission during the contest without permission of the Contest Director is forbidden and will result in disqualification.~~

c) The only permitted flying during the competition hours are the official competition flights. Other than for ground testing of equipment using 2.4 GHz spread spectrum, any other transmission or any flight shall only take place with the permission of the Contest Director.

d) A penalty of 300 points shall be applied to any competitor making an unauthorised transmission or flight without the permission of the Contest Director. If this transmission or flight results in injury to personnel or damage to property, then the competitor will be. disqualified from the whole competition.

Reason: This is an urgent clarification. The current rule does not take into account the latest changes in transmitter technology and has been widely ignored for several years. When transmitters are retained, 'test' flying has sometimes taken place during the competition which the CD has then had to stop.

The amendment gives parity between 2.4 GHz and am/fm transmitters.

Retention of transmitters can also raise the possibility of the competitor making a

mistake and flying in the wrong slot then, and then, when the mistake is discovered, flying again in the correct slot. The new rule would apply a penalty to a mistake of this sort, but stops short of the harsh penalty of disqualification which applies under the present rule.

The proposed penalty of 300 points or disqualification is consistent with the penalty applicable to landing in the F3J safety corridor.

q) 5.6.8.1. Launching **Germany**

Amend the paragraph as follows:

5.6.8.1. ~~At all times, the models must be launched upwind.~~ **The contest director defines the start direction. The start should be executed as far as possible against the wind inside of** the marked launch corridor (5.6.2.2). An attempt is annulled and recorded as zero if the model aircraft is launched outside the launching corridor.

Reason: Clarification to avoid discussions during the competition.

r) 5.6.11 Final Classification **Bulgaria**

Amend paragraph 5.6.11.1 as follows:

a) If ~~seven (7)~~ **five (5)** or fewer qualifying rounds are flown, the aggregate score achieved by the competitor will be the sum of these scores for all rounds flown. If more than ~~seven~~ **five** rounds are flown, then the lowest score will be discarded before determining the aggregate score.

Reason: ALL of F3J WC and international competitions with more than 40 competitors proceed 6 to 7 rounds. 8 rounds rule punish top pilots with bad luck in only one round (mostly pop up because of crossing or cutting lines...) and lot of best pilots cannot earn flyoff because of this rule. This rule discourages all pilots with bad flight to continue competition. There is lot of pilots with 0 because of fare landing end flying in competition because of 8 rounds rule.

I lot of pilots hate 8 rounds rule and this will move more of them to F5J. We will lose lot of competitors in near future because of this rule. We already lost juniors in F3J.

Supporting data: F3J is going down, F3J juniors are not more than 3-5 in WC events. 8 round rule is one of main Reason to move out from F3J. At least 95% of F3J pilots prefer 6 round rule.

F3Q

s) 5.Q.2.2.1 Definition of a speed task **France**

d) Replace the drawing.

See Agenda Annex K for the new drawing.

Reason: Safety limit (as represented by a red flag on a stake) is placed 10 metres in front of the base B. The timekeepers are then secure.

Volume F3 Helicopter begins overleaf.

15.9 Section 4C Volume F3 - Helicopter

F3N

a) **5G.8.1 Difficulty**

F3 Heli Sub-committee

Add the following text:

This criterion evaluates the level of difficulty of the freestyle flight. It is important, that the entire flight is to be judged, not only some highlights. So the score reflects the average level of difficulty.

The K-factors of the set manoeuvres may give some reference values for the difficulty, but during the calibration flights and by watching practice flights the judge should get a clear impression of the range of difficulties of possible manoeuvres.

Risky manoeuvres should never be mistaken as difficult manoeuvres. Risky manoeuvres must not lead to higher scores in difficulty, but result in a downgrade in safety.

Reason: Safety and clarification of judgement.

Volume F3 Pylon Racing begins overleaf

15.10 Section 4C Volume F3 – Pylon Racing

No proposals for this section

Volume F4 Scale begins overleaf.

15.11 Section 4C Volume F4 - Scale

F4

- a) **6.1.1. Definition of Scale Model Aircraft:** **Spain**

Amend the first sentence as follows:

A scale model aircraft shall be a reproduction of a heavier than air, ~~fixed-wing~~, man-carrying aircraft, **the class F/A/B/C/D/E/F/G/H/K/ are fixed-wing class the F4L are motorised rotary wing class.**

Technical Secretary's Note: the classes should read "...../J" (and not "K") and if the new class is approved then it will be allocated the designation "F4K".

See Agenda proposal k) for the rules & Judges Guide.

Reason: To allow a new class for motorised rotary wing Scale Helicopters

- b) **6.1.1 Definition of scale Model Aircraft** **United Kingdom**

Amend the first sentence as follows:

A scale model aircraft shall be a reproduction of a heavier than air, ~~fixed wing~~, man-carrying aircraft **reduced scale reproduction of a full size aircraft. The full size aircraft modelled must have flown and models of pilotless aircraft or drones are not permitted.**

Reason:

1. The current definition of a scale model is unnecessarily restrictive and unrealistic.
2. There is no Reason why autogyros or tilt wing/engine aircraft (e.g. Boeing V22 Osprey) should be excluded from scale competition. A model of an autogyro would be able to fly a schedule of manoeuvres without any additional changes to the rules.
3. Flying a scale model of a full size aeroplane that has **not** flown is unrealistic and also in conflict with rule 6.3.7 (second sub-para) which if requested by the judge, requires the competitor to provide evidence that the flight options selected are "within the normal capabilities of the aircraft subject type modelled". If the full size prototype was never flown, the competitor would not be able to provide such evidence.

- c) **6.1.5 Coefficient** **United Kingdom**

Amend the text as follows:

6.1.5 Coefficient **Scoring**

Where a K-factor is noted, ~~scores~~ **marks** shall be awarded from 0 to 10 inclusive using increments of half a mark **for Flight Judging and a tenth of a mark for Static Judging.** The score shall then be ~~multiplied~~ **calculated by multiplying the marks awarded** by the K-factor (K).

Reason:

1. To simplify the English and to reflect reality
2. The judges award *marks* not scores
3. The marks are multiplied by the K-factor to calculate the scores
4. When static judging, it is unfair to deduct half a mark for a very minor detail error.

d) 6.1.9 Documentation (Proof of Scale)
6.1.9.2

United Kingdom

There will be consequential changes to Agenda proposal n) “Annex C, the Judges Guide”; Agenda proposal o) “Annex 6E.1, the Competitor’s Declaration”; Agenda proposal p) “Annex 6E.2, the Score Sheet”.

Amend the paragraph as follows:

The exact name and model designation of the prototype shall be indicated on the entry form, on the score sheet and also in the “Proof of Scale” presentation. ~~The documentation submitted by the competitor must state if the original prototype is non-aerobatic. The judges will discuss this information before the first flight commences in F4C. The Chief Judge shall make the final decision before any flight is made and this might affect the marks awarded under 6.3.6.11d.(Choice of Options)~~

Reason:

1. This rule has served us well for many years but it is a rather simplistic view which does not reflect full size practice. Under this rule, unless a model is declared non-aerobatic, it is often incorrectly assumed to be fully aerobatic and capable of flying all the manoeuvres ‘in the book’, which is only true for models of aircraft built for aerobatics. The design criteria of a full size aeroplane may indicate its performance potential, but its actual performance is dependent upon how it has been tested, the extent of the testing and the subsequent clearance for flight or release to service. The release to service will invariably have restrictions imposed upon it depending upon carriage of fuel, payload, weapons or stores or possibly because of a change of role. Flight testing may also reveal the need for particular manoeuvres to be prohibited. An aeroplane not designed for aerobatic manoeuvres may, during its service life, have routinely carried out manoeuvres considered to be aerobatic. A vintage aeroplane may also have its performance restricted because of the need to conserve engine wear or to preserve its airframe fatigue life.

2. The competitor should have the maximum freedom of choice of manoeuvres, whilst at the same time ensuring that the manoeuvres he flies are appropriate. Rule 6C.3.7 (which is in the Judges Guide – page47)

3. It is the competitor’s responsibility to ensure that the manoeuvres he flies are within the capabilities of the full size aeroplane and the judges can ask for evidence of this (rule 6.3.7 second sub-para – page18).

Supporting data: There was a majority in support of the concept of this proposal when it was debated at the Scale Seminar held in Spain at the 2012 World Championships.

e) 6.1.9.4 a) Photographic Evidence

United Kingdom

Amend the paragraph as follows:

a) Photographic evidence:

At least three photographs or printed reproductions of the prototype, including at least one of the actual subject aircraft being modelled are required. Each of these photographs or printed reproductions must show the complete aircraft, preferably from different aspects **and not be smaller than A5**. These main photos must be submitted in triplicate, the second and third copies may be photocopies.

Photographs of the model are not permitted unless the model is posed

alongside the full size prototype and the photo used as proof of colour. The use of photographs based on digital files which show evidence of being enhanced or manipulated shall result in disqualification. The photographic evidence is the prime means of judging scale accuracy against the prototype.

Reason: With the ready availability of photographic image enhancing/editing software (e.g. Photoshop), photographs of the full size aircraft can be edited to hide errors and also photographs of the model can be edited to make the model appear to be the full size aircraft.

Request that this be applied as a local rule for the 2014 World Championships.

f) **6.1.9.4e)** **United Kingdom**

Amend the paragraph as follows:

Refer also to the Agenda proposal g) for a new rule “Builder of the Model”.

e) Competitor’s declaration:

The competitor must include in his documentation a **signed** declaration that he is the builder of the model aircraft entered, listing all components of the model aircraft he did not make himself. If using modified ready-made parts, it is the competitor’s responsibility to prove the modification and that this is done by him. The competitor must also complete and sign the required declaration form (See Annex 6E) confirming these and other aspects. If found in violation the competitor may be disqualified from the contest. **his model conforms to the requirements and rules appropriate to the class of model. The Competitors Declaration also contains a questionnaire which is used by the Judges to determine the origin of the model design and its construction and the extent of use of commercially available components.**

The declaration form is at ANNEX 6E.1

Reason: Although ABR B.3.1a & ABR B.20.2 are quite clear, the Builder of the Model Rule for F4C is much too important to be hidden away as a part of a sentence in an F4C sub-paragraph under the heading of the Competitors Declaration.

There is increasing evidence that the Builder of the Model rule is subject to abuse and possible misunderstanding or misinterpretation due to translation from English.

g) **6.1.13 Builder of the Model** **United Kingdom**

There will be a consequential change to Agenda proposal o) Annex 6E.1 “Competitor’s Declaration Form”.

Add new paragraph 6.1.13 to clarify the existing rule as follows:

Scale models must be constructed and finished solely by the competitor, The only exceptions to this rule are for models entered in Class F4H and for team entries entered in Class F4J.

Note The use of the word “constructed” in this context means that the competitor is the person who has done all the work on the model.

The Competitor must also prepare the model for flight, although helpers are permitted see paragraph 6.1.8

Commercially available components, machined parts, die or laser cut parts and prefabricated or moulded airframe components which are manufactured by a third party, whether specifically for the model or supplied as part of a kit,

may be used in the construction of scale models.

Details of these items (excluding fixings, i.e. screws, nuts a bolts etc) must however, be entered on the Competitors Declaration Form and if they affect the visible scale accuracy or craftsmanship of the model they will result in a reduction of the marks awarded during static judging. This includes any part of the model which has been manufactured using any computer aided process, eg CAD/CAM, CNC, 3-D printing, unless the competitor can provide evidence that he wrote the software.

If any commercially available parts have been modified by the competitor to improve scale accuracy then the evidence of this work must be supplied (attached to the declaration) in order for the Judges to assess the craftsmanship.

If found in violation of this rule the competitor may be disqualified from the contest.

Reason:

1. The Builder of the Model Rule is not clearly defined in the existing F4 rules although the ABR Builder of the Model rules B.3.1.a and B.20.2 are quite clear and apply to F4.
2. The Builder of the Model Rule is much too important to be hidden away as a part of a sentence in an F4 sub-paragraph under the heading of the Competitor's Declaration. (The first sentence of Para. 6.1.9.4e) refers).
3. There is increasing evidence that the Builder of the Model rule is subject to abuse and possible misunderstanding or misinterpretation due to translation from English.
4. Modern design and construction methods and technology such as CAD/CAM, CNC machining, 3-D printing etc. which are commonly used in the aerospace industry are increasingly becoming available to the aeromodeller and the model engineer. When this technology is used to produce scale models or components parts for scale models, the static judges are faced with having to decide the extent to which the competitor has been involved in the process. The competitor can only claim to have designed and manufactured such a component if he produced the software.

Request that this be applied as a local rule for the 2014 World Championships

F4C

h) 6.3.6 Flight

United Kingdom

There will be a consequential change to Agenda proposal I) "6C.3.6.11 Judges Guide".

Amend the sub-paragraph 6.3.6.11 as shown.

6.3.6.11. Realism in flight

- | | |
|---|-------|
| a) Engine sound (realistic tone & tuning) Model Sound | K = 4 |
| b) Speed of the model aircraft | K = 9 |
| c) Smoothness of flight | K = 9 |

Reason: In reality the sound that the model makes is "model sound", The engine sound can only be clearly distinguished on the ground at a low throttle setting. When in flight, the engine sound cannot be separated from the overall sound of the model,

which includes propeller sound and airframe sound.

The judges guide states that “Tone relates to the character of the sound by comparison with the full size at all throttle settings” but the character of the sound made by a full size aircraft is not simply related to the throttle setting. It also varies considerably depending on factors such as speed, direction of travel in relation to the observer, whether climbing or diving, etc. The sound that the model makes is also dependent upon these same factors and as a result some manoeuvres will sound more realistic than others. It may be stating the obvious but a greater knowledge of the full size aircraft is often essential for this to be appreciated.

The judges guide states that “Tuning” is the smoothness of operation of the engine at all throttle settings.” This has nothing to do with realism because many aeroplanes misfire or even backfire at low throttle settings and during manoeuvres. In addition, “tuning” is not relevant to electric powered models.

The judges guide states that “The marks for engine sound should therefore be split equally between these two aspects” (tone and tuning), but this rule makes no provision for ‘on-board electronic sound systems’.

i) 6.3.7 Optional Demonstrations

United Kingdom

There will be a consequential change at Agenda proposals o) “Annex 6.E.1 Competitor’s Declaration” & p) “Annex 6E.2, the Score Sheet”.

Amend the 3rd paragraph as follows:

~~Selection must be indicated on the score sheet and given to judges before commencing the flight. The options may be flown in any order. Options A- (Chandelle), N (Overshoot), R (Flight in triangular circuit), S (Flight in rectangular circuit), T (Flight in a straight line at constant height), W (Wing over) and Z (Procedure Turn) may only be chosen by subjects certified and approved as “non-aerobatic” on the Competitor’s Declaration Form (Annex 6E.1). These are aircraft designed with limited manoeuvrability where the original prototypes of which were restricted by the manufacturer or licensing government agency.~~

~~Examples are:~~

~~Pioneer and early aircraft (pre 1915)~~

~~Purpose designed reconnaissance and bomber aircraft (note: this does not include fighter aircraft later adapted for reconnaissance duties or fighter/bombers where the designer intended an aerobatic capability)~~

~~Touring aircraft~~

~~Passenger and cargo aircraft~~

~~Military transports~~

~~If these non-aerobatic manoeuvres are flown by models NOT certified as non-aerobatic, then they shall be marked zero.~~

Reason:

1. The competitor should have the maximum freedom of choice of manoeuvres, whilst at the same time ensuring that the manoeuvres he flies are appropriate. Rule 6C.3.7 (which is in the Judges Guide – page47)

2. It is the competitor’s responsibility to ensure that the manoeuvres he flies are within the capabilities of the full size aeroplane and the judges can ask for evidence of this (rule 6.3.7 second sub-para – page18).

Supporting data: There was a majority in support of the concept of this proposal

when it was debated at the Scale Seminar held in Spain at the 2012 World Championships.

**j) 6.3.7 Optional Demonstrations United Kingdom
Item T**

There will be consequential changes to Agenda proposal n) “Annex 6C, the Judges Guide” and Agenda proposal p) “Annex 6E.2, the Score Sheet”.

In the list, amend Item T as shown.

T Flight in a straight line at constant height **Straight flight at low speed**
(maximum height 6 metres) K = 7

Reason:

1. Following removal of the ban on the use of Gyros or artificial stabilisation devices, a flight in a straight line at constant height with a model fitted with such devices will require little or no pilot input.
2. As a consequence of removing the need to declare a model “non-aerobatic”, the straight flight will offer no challenge to models with a high power loading or to turbine powered models. Replacing the straight flight with a slow flight at minimum speed presents a manoeuvre which is more difficult for faster models when in a landing configuration..

Supporting data: A full description of the proposed manoeuvre is shown at Agenda proposal l) “6C.3.7T Flight in a Straight Line”

F4 New Class

k) F4K Radio Controlled Flying Scale Model Helicopters Spain

Add a new class and a new Judges’ Guide.

See Agenda Annex 7d for the rules and site layout and Agenda Annex 7e for the Judges’ Guide.

ANNEX 6C – F4C JUDGES GUIDE – FLYING SCHEDULE

l) 6C.3.6.11 Realism in Flight United Kingdom

Amend the 1st to 6th paragraphs as follows:

Realism in Flight covers the entire flight performance including the way in which the model aircraft flies between manoeuvres.

Judges will allot points for Realism within the following aspects, always keeping in mind the likely characteristics of the full size subject:

~~Engine sound (realistic tone & tuning)~~ **Model Sound** K = 4

~~“Tone” relates to the character of the sound by comparison with the full size at all throttle settings.~~

~~“Tuning” is the smoothness of operation of the engine at all throttle settings.~~

~~The marks for engine sound should therefore be split equally between these two aspects.~~

This is an assessment of how accurately the model replicates the characteristic sound of the full size aircraft. Judges should be familiar with typical sounds produced by different categories of aircraft and also be aware of the variations in sound produced at different speeds and varying throttle settings and/or propeller speeds. Judges should therefore consider how

closely the sound produced by the model demonstrates what would be the typical sound produced by a full size aircraft in the same category and powered by a similar means of propulsion to that which the model is attempting to replicate.

There should also be some variation in the sound produced depending on throttle settings and whilst it is difficult, for example, to make a model powered by a single cylinder 2-stroke sound like a full size aircraft with a multi cylinder 4-stroke at full throttle, there may be times during the flight, particularly when the throttle is closed, when the sound is more realistic.

Special consideration should be given where the model demonstrates any particular characteristic sounds of the full size aircraft. Competitors are encouraged to advise judges if such characteristic sounds can be reproduced and where they will occur in the flight eg excessive propeller noise at high power setting or noise produced by the airframe during high ‘g’ manoeuvres.

Reason: Consequential change if Agenda proposal h) "6.3.6 Flight" is approved.

m) 6C.3.6.11 Realism in Flight **United Kingdom**

There will be a consequential change to Agenda proposal n) "Annex 6C, the Judges Guide – Flying".

Amend the 11th paragraph as follows:

Realism in flight aspects shall be discussed by all flight judges after completion of the flight. ~~in consultation with any claim for non-aerobatic eligibility made on the Competitor's Declaration form (Annex 6C.1).~~ The judges should attempt to arrive at an agreed score for this item.

Reason: The competitor should have the maximum freedom of choice of manoeuvres, whilst at the same time ensuring that the manoeuvres he flies are appropriate. Rule 6C.3.7 (which is in the Judges Guide – page47)

n) 6C.3.7T "Straight Flight at Low Speed". **United Kingdom**

Add the description and manoeuvre diagram.

See Agenda Annex 7f for the manoeuvre description and diagram.

Reason: Consequential change if Agenda proposals d) 6.1.9 Documentation (Proof of Scale"; j) "6.3.7 Optional Demonstrations"; m) "6C.3.6.11 Realism in Flight" are approved.

ANNEX 6E – FORMS FOR USE IN SCALE MODEL AIRCRAFT CONTESTS

o) Annex 6E.1 Competitor's Declaration Form **United Kingdom**

Delete the requirement to declare that the model aircraft is non-aerobatic and add a question to the static judging questionnaire section.

Agenda Annex 7g for the amended Annex 6.E.1 Competitor's Declaration.

Reason: Consequential change if Agenda proposals d) "6.1.9 Documentation (Proof of Scale"; g) "6.1.13 Builder of the Model" & and proposal i) "6.3.7 Optional Demonstrations" are approved.

p) Annex 6E.2 Example of a Score Sheet **United Kingdom**

Delete the requirement to declare that the model aircraft is non-aerobatic; replace “Flight in a Straight Line at a Constant Height”; replace “Engine sound”.

See Agenda Annex 7h for the amended Example Score Sheet.

Reason: Consequential change if Agenda proposals d), “6.1.9 Documentation (Proof of Scale”); i) 6.3.7 Optional Demonstrations; j) “6.3.7 Optional Demonstrations Item T” are approved.

Volume F5 Electric begins overleaf.

15.12 Section 4C Volume F5 - Electric

F5

a) 5.5.1.3 General Characteristics of RC Electric Powered Model A/c F5 F5 Sub-committee

Amend the paragraph as follows:

~~d) Any transmission of information from the model aircraft to the pilot is prohibited with the exception of signal strength and voltage of the receiver battery.~~

d) Any kind of electronic systems is allowed. Exceptions are written in the special rules of these classes.

Reason: Transmission in F5B, F5F and F5D is part of current rule. Checking of prohibited devices would be a waste of energy for organisers

F5D

b) 5.5.6.5. Helper Czech Republic

Amend the paragraphs and add three new paragraphs as follows:

5.5.6.5 Helper

~~a) All competitors must be accompanied by only one helper (caller) for Reasons of safety. The helper can be the team manager, another competitor from the same team, or a third party. The pilot or helper of one team may act as helper in one or more other teams.~~

~~b) He may release the model aircraft at the start and give the pilot verbal information regarding the flying course of his model aircraft and official signals.~~

~~c) In all cases the caller must be the holder of an FAI licence not necessarily issued by the NAC of the pilot and must have paid the entry fee.~~

5.5.6.5 Competitors

a) A race team shall consist of a pilot and a caller. All pilots must be accompanied by a caller for Reasons of safety. The caller may be the team manager, another competitor from the same national team or a third party. In all cases the caller must be the holder of an FAI licence, not necessarily issued by the NAC of the pilot, and must have paid an entry fee.

b) Each pilot and mechanic/caller shall be registered as a team from the beginning of the competition through to its end.

c) Notwithstanding b) above, the pilot or caller of one race team may act as the caller in one or another of the maximum three race teams permitted in a national team. However, once registered, pilot/caller roles may not be interchanged in a race team nor may a caller registered with one national team act as a caller for any other national team.

d) In each race, the caller must release the model aircraft at the start and give the pilot verbal information regarding the flying course of his model aircraft and any official signals.

e) Electronic communication with the pilot shall be prohibited.

cont/...

f) There will be no pilots' helpers at any of the pylons.

Reason: It is necessary to harmonise the F5D rules with the F3D ones, because championships of both classes are mostly organised as one event.

c) **5.5.6.10. Team Classification**

5.5.6.11. Awards

Czech Republic

Add two new paragraphs as follows:

5.5.6.10 Team Classification

To establish the scores for the international team classification, add the final individual scores of the members of the team. Teams are ranked according to the lowest numerical score to highest, with complete three-competitor teams ahead of two-competitor teams which in turn are ranked ahead one competitor teams. In a case of a team tie, the team with the lower sum of place numbers, given in order from the top, wins. If still equal, the best individual placing decides.

5.5.6.11 Awards

Awards will be given in compliance with ABR B.16. Callers will be awarded with diplomas only.

Reason: It is necessary to harmonise the F5D rules with the F3D ones, because championships of both classes are mostly organised as one event.

F5F

d) **5.5.8.1 Model Aircraft Specifications**

F5 Sub-committee

Delete the existing final two paragraphs and add a new final paragraph as follows:

~~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.~~

If a logger is used, the data shall be retrieved during or immediately after the flight.

With the logger, 1 (one) point is deducted for every 3 (three) watt-min used over the limit.

Reason: Harmonizing with F5B

cont/...

F5J

- e) **5.5.11.1.3.a Characteristics of Electric Powered Radio Controlled Gliders with electric motor and altimeter / motor run timer** **Germany**

Amend the paragraph as follows:

Maximum wingspan	4 m
Maximum Surface Area	150 dm ²
Maximum Flying Mass	5 kg
Maximum wingspan	4 m
Loading	12 to 75 g/dm ²
Type of battery	Any type of rechargeable batteries
Type of motor	Any type can be used

Reason: For finding the best suitable size and layout of the model airplane for a new class only the general boundaries of 5kg max. weight, 150 dm² area and wing-loading of 12 to 75 g/dm² should be used.

- f) **5.5.11.4 Safety Rules** **Germany**

Replace the three existing paragraphs and add two new paragraphs as follows:

- ~~a) No part of the model aircraft must land or come to rest within the safety area, as defined by the Contest Director.~~
- ~~b) The model aircraft must not be flown at low level (below 3 metres) over the safety area.~~
- ~~c) Every single action against the safety rules will be penalized by deduction of 100 points from the competitor's final score. Penalties shall be listed on the score sheet of the round in which the infringement(s) occurred. This penalty is also applied, in cases where the infringement(s) of the rule happened to a discarded attempt or round. A penalty earned in the preliminary rounds is not carried forward into the fly-off rounds.~~

a) Contact with an object within the defined safety area (including the launch / landing area and access corridor) will be penalised by deduction of 300 points from the competitor's final score.

b) Contact with a person within the defined safety area (including the launch / landing area and access corridor) will be penalised by deduction of 1000 points from the competitor's final score.

c) For each attempt only one penalty can be given, If a person and at the same attempt an object is touched the 1000 points penalty is applied.

d) Penalties shall be listed on the score sheet of the round in which the infringement(s) occurred.

e) If necessary the organiser may define a part of the airspace as safety space. In such a case he must appoint at least one official who observes the border (vertical plane) by a sighting device. This official must warn the pilot if his glider crosses the border. If the glider does not leave the safety space immediately a penalty of 300 points is given.

Reason: Learning from F3J. Paragraph after revision like F3J.

g) 5.5.11.10. Launching

Germany

Amend the paragraphs as follows:

a) At all times, the models must be launched ~~into wind and~~ within four (4) metres of the competitor's launch mark. An attempt is annulled and recorded as zero, if the model aircraft is not launched within the above specified distance. The launches must be straight forward, with the motor running. Any other type of launch is not allowed.

b) ~~In zero or variable light wind conditions,~~ The launch and final approach to touchdown direction will be set by the contest director. Any other direction is not allowed.

c) An attempt is annulled and recorded as zero, if the model aircraft is launched before the start of a group's working time. **A restart at the launch/landing spot within the Group' s Working Time according to the other launching rules is allowed.**

d) ~~Prior to launch all altimeters /motor run timers, must be initialized on the designated landing spots, at ground level.~~ **All altimeters /motor run timers must be initialized when the motor is switched on.**

e) ~~Zooming is not allowed. It is defined as the storage of extra energy in the form of kinetic energy (speed), which is then converted into potential energy (height) after the height reading is made. Any model observed by the designated timekeeper or Contest Director, to be attempting any zooming techniques, after the period of 10-seconds has elapsed, will be penalized by deduction of 100 points from the round score.~~

Reason:

a) b) It is the responsibility of the Contest Director to set the general direction of launch accordingly to the weather conditions.

c) Without any possibility of a restart the sanction of a zero score is too hard.

d) The stored height of the last flight should be stored as long as possible before the next flight for double checking.

e) Can be deleted. Difficult to prove. Practically there is no zooming possible after a 10sec time period when the motor has been stopped.

h) 5.5.11.14.1. Organisational Requirements

Germany

Add a new paragraph at the end of the existing sub-paragraph c).

c) To be a fair contest, the minimum number of fliers in any one group is six (6). As the contest proceeds, some competitors may be obliged to drop out for various Reasons. When a group occurs with five (5) or fewer competitors in it, the organizer should move up a competitor from a later group, ensuring if possible, that he has not flown against any of the others in previous rounds and of course that his frequency is compatible.

For contests with 30 pilots or less at the beginning of the contest the organizer should move up a competitor from a later group when a group occurs with four (4) or fewer competitors instead of minimum six (6) at the beginning of the contest or cancel the group and fill up the other groups accordingly.

Reason: Still a fair competition and reduced effort for the organizer.

i) Annex 5.E **F5 Subcommittee**
5E.2 Procedure for nomination of World Cup Contests

Amend paragraphs 5E.2.1 as follows:

5E.2.1 The Electric Flight World Cup will be organised in classes F5B (Gliders), ~~and~~ F5D (Pylon Racing model aircraft) **and F5J (Thermal Duration Gliders)** during the years in which there are no World Championships.

Reason: F5J class was in short time a very popular competition class.

j) Annex 5.E **F5 Subcommittee**
5E.3 Classification

Amend paragraph 5E.3.2 as follows:

5E.3.2

Not more than ~~two (2)~~ **one (1)** contest could be counted in the same country.

Reason: Better focusing of one good organised contest per NAC.

Volume F6 Airsports Promotion begins overleaf.

15.13 Section 4C Volume F6 – Airsports Promotion

F6

- a) **Introductory Paragraph** Bureau on behalf of the F6 Working Group

Add the following paragraphs as an opening header of Volume F6:

F6 events are designed to be our sport's promotion means. As such, while being real, challenging competitions for the participants, they also must be enjoyable and entertaining for spectators and media. This cannot be achieved if spectators are not allowed to follow and understand what is happening.

So as to achieve this, it is highly recommended that F6 event organisers include in their field staff an experienced commentator, whose duty should be to continuously comment the event in the most entertaining way while explaining what happens at any given time and providing factual information about the competitors and the standings.

Reason: To emphasise that a running commentary is essential to interest and entertain uninformed spectators and make an F6 competition a proper promotion tool for aeromodelling sport.

F6A

- b) **6.1.8. Marking** Bureau on behalf of the F6 Working Group

Add a new paragraph as follows:

6.1.8.3. Display of scores

The total score shall be divided by 18 (if 3 judges), 30 (if 5 judges) - or a proportional number according to the number of judges - to give the official displayed score. The displayed score shall include 2 (two) or 3 (three) decimals.

Reason: To make results more easily understandable for spectators. Most sports scored on judges impressions, whatever the criteria, display scores on a 0 to 10 scale as the relative value between competitors is more readily understood.

Supporting data: Experience shows that most sports judged on subjective criteria issue displayed scores based on an ideal "10" value. This contributes to a better understanding of the competitors relative performance value by spectators.

- c) **6.1.8.4. Electronic scoring system** Bureau on behalf of the F6 Working Group

Add a new paragraph as follows:

6.1.8.4A graphic electronic scoring system may be used, provided the software has been approved by the F6 Working Group. In such a case, individual judges' scores resulting from the graphic display set by each judge may use decimals.

Reason: This competition class judging is based on personal impressions and not on discrete scoring steps based on tight and strictly defined criteria. Therefore it appears best not to ask judges awarding a specific numeric score, but to provide a measure of their relative impression relative to perceived perfection. This is what a graphic scale of value can provide, a corresponding numeric score being only

provided by the dedicated software.

Supporting data: Modern electronics allow a quicker display of scores, and speed up the competition proceedings, essential to sustain spectators interest. A graphic scoring software system better take into account the fact that flights scores are based on personal impression and not precisely defined, discreet downgrade values.

F6B

d) 6.2.11.1.4. Display of scores Bureau on behalf of the F6 Working Group

Add a new paragraph 6.2.11.1.4. and re-number the subsequent paragraph.

The total score shall be divided by 18 (if 3 judges), 30 (if 5 judges) - or a proportional number according to the number of judges - to give the official displayed score. the displayed score shall include 2 (two) or 3 (three) decimals.

Reason: To make results more easily understandable for spectators. Most sports scored on judges impressions, whatever the criteria, display scores on a 0 to 10 scale as the relative value between competitors is more readily understood.

Supporting data: Experience shows that most sports judged on subjective criteria issue displayed scores based on an ideal "10" value. This contributes to a better understanding of the competitors relative performance value by spectators.

e) 6.2.11.1.5. Electronic scoring system Bureau on behalf of the F6 Working Group

Add a new paragraph 6.2.11.1.5. and renumber and re-number the subsequent paragraph.

A graphic electronic scoring system may be used, provided the software has been approved by the F6 Working Group. In such a case, individual judges' scores resulting from the graphic display set by each judge may use decimals.

Reason: This competition class judging is based on personal impressions and not on discrete scoring steps based on tight and strictly defined criteria. Therefore it appears best not to ask judges awarding a specific numeric score, but to provide a measure of their relative impression relative to perceived perfection. This is what a graphic scale of value can provide, a corresponding numeric score being only provided by the dedicated software.

Supporting data: Modern electronics allow a quicker display of scores, and speed up the competition proceedings, essential to sustain spectators interest. A graphic scoring software system better take into account the fact that flights scores are based on personal impression and not precisely defined, discreet downgrade values.

Volume F7 Aerostats begins overleaf.

15.14 Section 4C Volume F7 - Aerostats

F7A

a) **7.1.5 Judges and Officials**

F7 Subcommittee

Replace the whole of 7.1.5 with the following:

There will be consequential changes as shown.

~~7.1.5.1 Composition and Responsibility~~

~~The Panel of Judges must have a Chairman, a Flight Director and one or more judges. The Panel of Judges must be defined prior to the start of the competition and the members shall be chosen for their competence in Hot-air Ballooning.~~

~~For International competitions, refer to rule ABR, Contest Officials (chapter B4).~~

~~It is the responsibility of the Panel of Judges to make any decision dictated by competition circumstances that may arise. It can penalise/disqualify a competitor for misconduct or infringement of the rules.~~

~~Any decision from the Panel of Judges is obtained by majority vote and in the case of a tie the Chairman makes the final decision.~~

~~7.1.5.2 Flight Director~~

~~The Flight Director must be a recognised pilot of radio controlled hot-air balloons.~~

~~He defines the tasks and the flight conditions (take-off area, targets, timing, maximum measured distance, restart permission etc), controls the evolution of the tasks and validates the tasks.~~

~~The Flight Director may:~~

~~-cancel a task if the weather conditions do not allow a normal and equal flight between competitors,~~

~~invalidate a task if all competitors receive a zero “flight score”.~~

~~7.1.5.3 Contest Officials~~

~~The Panel of Judges may get help from Contest Officials provided that these Contest Officials are qualified or trained for the activity they have to perform. The Contest Officials are in charge of distance and time measurements, observation and reporting to the Panel of Judges of any deviation occurring during the competition.~~

7.1.5 Contest Officials and Jury

7.1.5.1 Contest Officials

The college of Contest Officials must have a Flight Director and at least two timekeepers appointed by the Organiser. This college is in charge of the management of the tasks: definition, flight conditions, time and distance measurements, reporting of deviations and calculation of scores.

a) Flight Director :

The Flight Director must be a recognised pilot of radio controlled aerostat (hot air balloon for F7A contests, airship for F7B contests). He defines the tasks and the flight conditions (take-off area, targets, timing, maximum measured distance/time, restart permission etc). He controls the evolution of the tasks and validates the tasks. He is in charge of the calculation of the scores and of the results (refer to chapter 7.1.10-Results). He transmits the filled flight sheets, scores and results to the Jury.

cont/...

He may :

- cancel a task if the weather conditions do not allow a normal and equal flight between competitors,

- invalidate a task if all the competitors receive a zero flight score,

b) Timekeepers :

The Timekeepers are in charge of distance and time measurements, observation and reporting to the Flight Director of any deviation occurring during the task. Measurements, observations and deviations are reported on flight sheets.

7.1.5.2 Jury

The Jury must have a Chairman and two assistants.

The Jury is defined by the Organiser prior to the start of the competition.

The Jury validates the results, examines the protests and takes a decision on them.

It is the responsibility of the Jury to make any decision dictated by competition circumstances that may arise. It can penalise/disqualify a competitor for misconduct or infringement of the rules.

Any decision from the Jury is obtained by majority vote.

The following are consequential changes if proposal a) above is approved:

7.1.3.4 Competition and tasks :

Amend the 3rd paragraph as follows:

Several examples of tasks are provided in the last chapter but any task can be created provided it is fully explained to the competitors, the ~~Panel of Judges~~ **Jury** and the Contest Officials

7.1.4 Organisation

Amend the 4th paragraph as follows:

..... He must secure a sufficient number of qualified officials (**Jury** and Contest Officials),.....

7.1.7- Safety Rules

Amend the 2nd paragraph as follows:

The Organiser and the **Jury and the Contest Officials...**

The Jury will summarily...

7.1.8.3- Tasks

Amend the 1st paragraph as follows:

..... the flight Director must clearly inform the **Jury and the Contest Officials,**

7.2.5 Judges and Officials

Amend the title and replace the whole paragraph as follows:

7.2.5 Contest Officials and Jury

Refer to chapter 7.1.5

Reason: The current rules gives the Flight Director two possibilities to intervene in

the management of protests : As Flight Director, he provides explanations to a competitor. As member of the Jury, he votes on the value of a protest. This situation is not fitting a normal examination of a protest where the Jury must be separate from the Contest Officials. During a competition, we must have to have two independent levels : one for the conduct, evaluation and validation of the tasks, one for the examination of the protests.

Supporting data: On several competitions, the Flight Director took decisions against a competitor. As the competitor knows that the Flight Director is a member of the Jury, he may estimate his protest has no chance to be accepted and therefore does not submit. This leading to frustration, negative reactions and to source of conflicts.

Volume S Space Modelling begins overleaf.

15.15 Section 4C Volume Space Modelling

Part Two - Space Models Specification

- a) **2.3 Stages of Operation** **Serbia**

Add a new paragraph as follows:

2.3.3 Number of stages of scale models in Classes S5 and S7 shall correspond to number of stages of the original prototype defined by technical data submitted for judging. Example: Saturn 1B is a two stage prototype and if it carries a powered Moon Lander, which is a payload of the prototype, this is not a “three stage” scale model than its special effect.

Reason: This is necessary clarification to avoid confusion when identifying configuration of a scale model at static judging.

- b) **2.4 Construction Requirements** **Serbia**

Amend paragraph the table and sub-paragraph as follows:

2.4.4 Minimum dimensions of subclasses of classes S1, S2, S3, S5, S6, S9 and S10 must not be less than:

Event Class	Minimum diameter (mm) (for at least of 50% of the overall length and 20% for S5)	Minimum overall Length (mm)
A	40	500
B	40 <u>50</u>	500 <u>650</u>
C	50 <u>60</u>	650 <u>800</u>
D	60 <u>70</u>	800 <u>950</u>
E	70 <u>80</u>	950 <u>1100</u>
F	80 <u>90</u>	1100 <u>1250</u>

~~Models of Classes S1, S2, S3, S6, S9 and S10 must have minimum diameter of 30 mm of enclosed airframe for at least 50% and for Class S5 for at least 20% of the overall body length. In case of Classes S1 and S5 the smallest body diameter must be not less than 18 **25** mm for at least 75% of the overall length of each **the highest (second or third)** stage, including their back sections. No boat tails or reducers are allowed unless they meet this requirement.~~

Reason: It was necessary to increase dimensions in the table for two reasons: a) to make physical distinction between classes A and B and b) to make models bigger and more attractive and also to improve their flyability. Text in the paragraph below was changed to clarify it because it was a “stumbling block” for years. It was changed many times but the ambiguity was staying. Now it is removed. Also diameter of 18 mm left from “old times” when motors of such diameter were used. Today it is meaningless and diameter of upper stage should be matched to nowadays needs.

c) **2.4 Construction Requirements**

USA

Technical Secretary's Note: the table did not contain any amendments.

Amend the text [and table] as follows:

2.4.4 Minimum dimensions of subclasses of classes S1, S2, S3, S5, S6, S9 and S10 must not be less than:

Event Class	Minimum diameter (mm) (for at least 50% of the overall length and 20% for S5)	Minimum Overall Length (mm)
A	40	500
B	40	500
C	50	650
D	60	800
E	70	950
F	80	1100

~~Models of Classes S1, S2, S3, S6, S9 and S10 must have minimum diameter of 30 mm of enclosed airframe for at least 50% and for Class S5 for at least 20% of the overall body length. In **the** case of Class S1 the smallest body diameter must be not less than 48 **25** mm for at least 75% of the overall length of each stage, including their back sections. No boat tails or reducers are allowed unless they meet this requirement. **An S1 sustainer stage may not have a boat tail. In the case of Class S5, the smallest body diameter must be not less than 18 mm for at least 50% of the overall length of each stage.**~~

Reason: In the paragraph following the table, the first sentence is eliminated because it has been superseded by the header of Column 2.

Reason for S1 amendment:

- Using current model sizes, an 18mm diameter S1 sustainer stage flies to altitudes where the model is extremely difficult to see. This makes it very challenging for the Range Safety Officer (RSO) to assess if the recovery system of the model has deployed safely. The high altitude also makes it difficult for the competitor to see and successfully recover the model. Increasing the minimum required diameter of the sustainer stage will reduce the apogee height, thereby improving visibility for the RSO and the competitor.
- The current rules are ambiguous as to whether or not a boat tail is allowed for an S1 sustainer. The proposed change clarifies that a boat tail is not permitted for an S1 sustainer.

Supporting data: See Agenda Annex 7i for the Supporting Date for the S1 Amendment.

Reason for S5 amendment: The current rules do not specify a minimum diameter that would apply to an S5 sustainer stage. Current S5 models have included sustainer stages as small as 10mm diameter. These small stages fly to high altitudes where the model is extremely difficult to see. This makes it very challenging for the Range Safety Officer (RSO) to assess if the recovery system of the model has deployed safely. The high altitude also makes it difficult for the competitor to see and successfully recover the model. Increasing the minimum required diameter of the sustainer stage will reduce the apogee height, thereby improving visibility for the RSO and the competitor.

cont/...

Supporting data:

- For S5C at the 2012 World Spacemodelling Championships, Bumper-WAC models took the top seven places. The maximum altitude was 730 meters. At this altitude, the models cannot be seen. Recovery of the models is difficult.
- For S5C at the 2013 European Spacemodelling Championships, Bumper-WAC models took the top four places. The maximum altitude was 801 meters. At this altitude, the models cannot be seen, and recovery of the models is very difficult. Some models landed in a nearby corn field, and several models (and their electronic altimeters) were not recovered, perhaps in part due to the small size of the sustainers.
- Under current rules, the S5 event has only one competitive prototype. Increasing the minimum required diameter of the sustainer stage will reduce the apogee height, thereby improving visibility for the RSO and the competitor. It will also help increase diversity in the prototypes entered for the event.

d) 2.4 Construction Requirements Serbia

Amend the paragraph as follows:

2.4.6 A space model shall not contain any type of explosive or pyrotechnic payload. **A prefabricated ejection charge for ejection of a recovery device, in conjunction with a space model engine(s), shall not be considered explosive or pyrotechnic payload.**

Reason: This is necessary clarification especially in case when multiple, clustered engines are used in multistage models in order to avoid disqualification of the model from competition.

e) 2.4 Construction Requirements Serbia

Amend the paragraph as shown. (This sentence was omitted from the Edition 2013 and was existing in previous editions. Technical Secretary's Note: the sentence was not included in the 2013 edition because the proposal submitted by Serbia for the 2012 Plenary Meeting and approved at that meeting showed this entire sentence as marked for deletion.

2.4.7 Models in Classes S4, S8 and S10 must fly and land without separation of any part in flight. **In classes S4, S8 and S10, the minimum weight of the model that returns to ground in stable gliding flight supported by aerodynamic lifting surfaces, shall not be less than 30% of the maximum specified weight for the particular subclass.**

Reason: Request for gliding models to have minimum weight of 30% of maximum weight was in the rules to prevent use of small Styrofoam tailless wings with very poor flying characteristics but with long flight times. Such “gliding portions” were not flying but rather were “floating”.

f) 2.4 Construction Requirements Serbia

Add a new paragraph as follows:

2.4.8 Space models shall be painted (nose cone, body tubes, fins or wings) in bright colours and shall use a “freestyle decoration” because of increased visibility and attractiveness.

Reason: In many SM classes like S3, S6, S9 etc models are small, not painted and not attractive plastic tubes with very poor visibility. In all other aeromodelling classes

models have very good appearance and attract public and media. This is necessary to achieve with space models in these very popular and very well participated classes.

Part Three - Space Model Engine Specification

g) **3.10 Certification for FAI Contests**

Serbia

Add a new paragraph as follows:

3.10.3. The organizers of World and Continental Championships are not obliged to perform a static test during the event if they provide all engines of the same type by the same producer for all participants in a particular class or classes. In such a case the organizer shall get the certification document in accordance with 3.10.1 by the producer and/or to do the static test for random samples of engines to be used prior the Championships to make sure that the delivered engines are in compliance with the space model engine standards. This shall be specified in Bulletin 1 for these Championships.

Reason: In the best participated classes S3A, S4A, S6A, S9A participate up to 25 countries, but there are used only 4 to 5 types of space models engines. They must be tested if provided by participants to avoid engines modification. In case if the organiser provides engines for all participants and they take them from one box just before their flights any cheating is not possible. So time consuming and expensive engine testing shall be avoided and many engines saved for flying. However the organizer must make sure the engines are safe and they comply with the space models engine standards, but this shall happen before the Championships and shall relate only producer and the event organiser. Space modellers also have problems with shipping engines by planes and in this case this inconvenience should be avoided.

h) **3.14 Type Identification**

Serbia

Apply numbering to the existing paragraph and add a new paragraph as follows:

3.14.2 Standard markings on exterior of the casing of a space model engine shall consist of four marks: a) producer's name or logo, b) engine class (and total impulse) marked by a capital letter in accordance with paragraph 3.1.4 of these rules, c) average thrust in Newtons (N) marked by a numeral and d) delay time in seconds (s) marked by a numeral. When the colour coding of the nozzle end is used a producer is obliged to provide an affidavit that explains this coding with every delivered quantity of the engines that shall be submitted to the organizer at an event.

Reason: Such markings are in use for decades, but are nowhere in the rules. It is necessary to make these markings standardized and mandatory by putting them in the rules.

cont/...

Part Four – General Rules for International Contests

i) **4.1 World Championships Event for SPACE MODELS** **Serbia**

Decrease the engine power of one of the classes as shown:

- i) W/CH for Senior classes:
 - a) altitude models – S1B
 - b) parachute duration models – S3A
 - c) boost glider duration models – S4A
 - d) scale altitude models – S5C
 - e) streamer duration models – S6A
 - f) scale – S7
 - g) rocket glider duration and precision landing models – ~~S8E/P~~ **S8D/P**
 - h) gyrocopter duration models – S9A

Reason: This is a consequential change if proposal v) “11.7 Class S8E/P” is approved. It relates to the request of S8E/P flyers from several countries to fly with cheaper engines to lower altitudes which gives different benefits explained in that proposal.

j) **4.1 World Championship Events for Space Models** **USA**

Replace an existing class with a different class as shown below:

The following events are recognized (~~2004~~) as World Championships for Space Models:

- i. W/CH for Senior classes:
 - a) altitude models – S1B
 - b) precision fragile payload models – S2/P**
 - ~~c) parachute duration models – S3A~~
 - ~~d) boost glider duration models – S4A~~
 - ~~e) scale altitude models – S5C~~
 - ~~e) streamer duration models – S6A~~
 - f) scale – S7
 - g) rocket glider duration and precision landing models – S8E/P
 - h) gyrocopter duration models – S9A

Reason:

- S2/P provides a challenging event for precision altitude and duration while protecting a fragile payload. Models tend to be larger and use larger motor than for many other WSMC events. Design, construction, and flying these models will provide a new and modern challenge to competitors. The large models will also be attractive to spectators and media coverage.
- S6A is sometimes perceived as one of the simpler Spacemodelling events. Replacing S6A with S2/P will provide an increased level of challenge for Senior competitors. S6A will be retained for Junior competitors.

Supporting data: See Agenda Annex 7j for the Supporting Data.

k) 4.2 Number of Models Serbia

Amend the final paragraph as follows:

For classes **S1, S2**, S3, S4, S6, S8, S9 and S10 one (1) additional model may be processed and flown by the competitor on there being a tie for first place at the end of the third round.

Reason: It is necessary to allow a new model for classes S1 and S2 for additional flight to resolve tie if other criteria are not fulfilled. It happens not rarely that two competitors with best but equal results have only one official flight each and other model is either lost or crashed. This makes very big problems to the organisers and the Jury in FAI Championships. One model for fly-off like in other classes would resolve this situation.

l) 4.5 Official flights Serbia

Add a new paragraph as follows:

4.5.4. Definition of a Re-flight

A competitor shall be allowed a re-flight when he is prevented from making an official flight through no fault of his own. In such cases he or his team manager should notify RSO immediately. Permission for a re-flight shall be given by the RSO, or in case of a protest, by the FAI Jury. A re-flight shall be made under flight conditions similar to those under which the other official flights for that class were made, but before the official results are announced.

Reason: There was a number of situations in the FAI SM Championships or World Cup contest when a competitor was not able to make an official flight because of errors of field personnel or for other reasons out of his personal responsibility. It is necessary to sanction such situations by the rules.

m) 4.7. Radio Controlled Space Models Serbia

Add a new paragraph as follows:

4.7.5 In World and Continental Championships because of increased safety, reduced harmful radio-interferences and simplified organisation of the RC events, spread spectrum 2.4 GHz radio devices shall be used.

Reason: 2.4 GHz Spread Spectrum radio equipment is very popular and widely used all over the world. There is a lot of participants in World and Continental Championships and am/fm radio spectrum control is very demanding and expensive and organisation especially of group flying complicated. Therefore it is necessary to recommend application of these modern costly compatible and reliable devices.

n) 4.8. Timing and Classification Serbia

Amend the paragraph as follows:

4.8.3. The total time of the three flights of each competitor is taken for the final classification **unless otherwise defined by the rules of a particular class.**

Reason: There is a “target time” in Classes S2/P or S8E/P which is combined with a “precision altitude” or “precision landing” in a formula for calculating classification points, so a present definition in 4.8.3 must be changed and completed.

o) 4.9.2.1 Electronic Altitude Measurements Serbia

Amend the 9th point of sub-paragraph b) as follows:

- b) - For FAI Category 2 events, simpler devices may be used that give the data readout of peak altitude by **numbers on its hand held reader** or by audio or visual means directly from the altimeter, with no external device required.

Reason: This is sanction by rules all available equipment. Simple and cheap electronic altimeters have hand held readers that come in a kit with the altimeter. They are more sophisticated then those with audio or visual readout.

S1 – Altitude Class

p) 5.1 2 Definition & 5.3 Sub-Classes Serbia

Amend the following paragraphs and add a new paragraph at 5.4 as shown.

5.1. Definition

In any altitude competition event, the model achieving the highest maximum altitude as ~~tracked and reduced~~ **measured and/or calculated** shall be declared the winner.

5.3. Sub-Classes

Altitude competition shall be divided into classes based upon the maximum allowable gross launching weight of the model and the maximum permissible total impulse of the engine or engines powering the model. Any number of engines may be used in any arrangement provided that the sum of the total impulses of the individual engines does not exceed the allowable total impulse maximum for the competition class.

The following event classes are in effect for altitude competition:

CLASS	TOTAL IMPULSE (Newton-seconds)	MAXIMUM WEIGHT (g)	
S1A	0,00 -	2,50	30 <u>60</u>
S1B	2,51 -	5,00	60 <u>90</u>
S1C	5,01 -	10,00	120
S1D	10,01 -	20,00	240
S1E <u>LMAR1</u>	20,01 -	40,00	300 single stage
S1F <u>LMAR2</u>	40,01 -	80,00	500 two stage

Note: LMAR stands for Large Model – Altitude Rocket and shall be used for promotional purposes of Spacemodelling in addition to competitions. They shall encourage new designs in order to achieving ultimate flight specifications.

5.4. Classification

Every competitor shall be given three opportunities to make official flights. The best out of three flights shall be taken for classification. In case of tie the second or even the third flight shall be decisive. It the tie stays competitors shall be allowed to make an additional flight with a new model.

Reason:

- a) Terms tracked and reduced are from early days of Spacemodelling and are not understandable to nowadays sportsmen. Competition must be matched to new

available technologies that use different terms.

b) Maximum weights are not realistic for subclasses A and B. They belong to times when models were very small. These values must be approached to today's practice.

c) There was nothing in the rules about classification that made big problems in competitions. There were several situations in the FAI SM Championships that tie was not resolved because the rules do not consider such situations. This caused a big problem to the organisers and the FAI Jury. Therefore it is necessary to think about all possible situations and have appropriate solutions for them.

S4 - New Class

q) S4D/P Programmed Flights Competition

Serbia

Add a new class as follows:

8.5 CLASS S4D/p PROGRAMMED FLIGHTS COMPETITION

8.5.1 DEFINITION

Programmed flights competition introduces in free flight boost-glider competition new technologies like on board cameras and programming devices. The goal of competition is to perform automatically some flight tasks and at the same time to monitor flight of all models in the air on monitoring screens and so make this event attractive to public and media.

8.5.2 PRINCIPLE OF COMPETITION

Competition of program flights shall be organized in subclasses D and consists of three flights. The flight No 1 is a duration competition flight. Flights 2 and 3 are flights on an assigned route over three belts 1000 m wide, Belt No 1 is distant 700 meters and is 100 meters long, Belt No 2 is distant 600 m and is 100 m wide and Belt No 3 is distant 400 m and long m wide. Belts are located in relation to the wind direction.

These belts are drawn on a Google map on the screen of computer and is oriented depending on the wind direction. Modellers shall get tasks for flying over or in vicinity of some markers and to land in a particular area.

8.5.3 PROGRAMMING AND TRACKING DEVICES

There is a number of small, light commercially available programming devices, GPS loggers and trackers at very competitive prices including also small, light photo or TV cameras that allow real time recording of flight. They shall be used as onboard equipment.

8.5.4 SCORING

Points for flight No 1 are points for a duration flight up to 360 seconds.

Points for 2nd and 3rd flight shall be awarded as follows: Models which land in Belt No 1 shall be awarded with additional 60 points, those which land in Belt No 2 shall get bonus of 30 points and those in belt No 3 – 10 point. No additional points for those that land out of belts.

Models shall get also 0 to 10 additional points for appearance.

Individual result for second and the third flight is $B = \text{flight time points} + \text{bonus for landing in a belt} + \text{points for appearance}$.

Overall points of an individual competitor are $B_t = B_1 + B$ (better score of 2nd and 3rd flight).

cont/...

Team points are obtained as a sum of results of team members.

8.5.5 MONITORING OF FLIGHTS

Position of all competition models shall be observed on the video beam screen during flights and shall be registered on a PC. All this shall be available to public and media.

Reason: It is necessary to introduce new technologies in space modelling especially in free flight boost gliders. This class can become very interested for public and media and in further phases of development of this class competitions at night or low visibility shall be possible.

S7 Scale Class

r) 9.11.2 and Annex 1 (Scale Space Models Judge's Guide) USA

Technical Secretary's Note: the submitted proposal referring to Annex 1 did not contain the text to be deleted, this was corrected by the Technical Secretary.

Amend the paragraph and Annex 1 as follows:

9.11.2. Adherence to scale: 200 points maximum. To be considered as a scale model, the dimensions of the body diameter, **and** overall length, ~~nose cone length and one selected dimension mm~~ should shall not depart from scale by more than 10% or else the model is disqualified. This rule shall not be applied to dimensions less than 10 mm. The judging category should be judged in two areas: 1) ~~nose cone and bodies of each of up to three stages~~ model dimensions - **150**points maximum; 2) colour and markings - **50**points maximum. ~~This rule shall not be applied to dimensions less than 10 mm.~~

See Annex 1 overleaf.

Annex 1

FAI CATEGORY	SUB-CATEGORY	JUDGING CONSIDERATIONS	POINTS
Scale Adherence	<u>Colours</u>	Comparing the entry to colour photographs, paint samples, or other colour substantiation, to what degree does the entry's colour(s) resemble that prototype's colour?	(0-25) _____
	<u>Markings (lettering & insignia)</u>	Comparing the entry to photographs, marking diagrams, or other marking substantiation, to what degree do the entry's markings resemble the prototype's markings?	(0-25) _____
	<u>Overall Model Dimensions Configuration</u>	Overall model length	(0-25) _____
		Nose cone length	(0-25) _____
		Greatest body diameter	(0-25) _____
		One selected dimension greater than 10mm	(0-20) _____
		<u>Length of first stage</u>	<u>(0-25) _____</u>
		<u>Fin span (individual fin, or tip-to-tip) *</u>	<u>(0-25) _____</u>
		<u>Selected dimension greater than 10 mm (second stage length, diameter, etc.)</u>	<u>(0-25) _____</u>
		Second Stage	Second stage length (0-20) _____ Second stage diameter (0-20) _____
		Third stage	Third stage length (0-20) _____ Third stage diameter (0-20) _____
	<p><u>Award points shall be based on a % deviation from the prototype's scaled dimensions. Each 1% error reduces the value by 2 points. Deviation > 10% shall be awarded a value of 0.</u></p> <p><u>* If prototype is finless, select one other dimension greater than 10 mm and check here ()</u></p>		
Category Total (200 Max)			
Note: A difference of 1% reduces 2 points for every measured item			

Reason:

- The changes to Rule 9.11.2 are to be consistent with changes made to Annex 1.
- The primary change to Annex 1 is to change the dimensions that are measured. 2013 rule changes require that measurements include the length and diameter of stages 1, 2, and 3. However, many scale model prototypes do not have a 3rd stage. Several historic and modern prototypes have a 3rd stage that is within a payload fairing and therefore inaccessible for measurement. Under the 2013 rules, a model receives a zero score for absent stages or inaccessible measurements. This is not a good judging scheme. Models without a 2nd or 3rd stage might be less difficult, but that does not make the model less accurate. Any effect on difficulty should be included in the Degree of Difficulty score, not Adherence to Scale.
- The new dimensional accuracy measurements retain several measurements used in the 2013 (and prior) rules. Additional measurements are specified that can be used with single stage or multi-stage models.

- The quantity of measurements is reduced from 8 (in the 2013 rules) to 6. This provides sufficient measurements to determine the accuracy of the model while expediting the measurement process.
- Points per measurement and the points for colour and markings are slightly adjusted to maintain a total of 200 points for the “Adherence to Scale” category.

Supporting data: The Nike-Hercules models were entered at the 2013 European Spacemodelling Championships. Under the 2013 rules, these models would lose 40 points of accuracy since the Nike Hercules prototype does not have a 3rd stage. As noted above, not having a 3rd stage might affect the Degree of Difficulty, but it does not make the model less accurate.

S8 Rocket Glider Duration Class

s) 11.2 Purpose USA

Amend the text as follows:

11.2 PURPOSE

The purpose of this competition is to achieve the longest flight duration time in combination with a landing of any part of the model within a given landing area of 20 by 20 metres ~~which adds one minute to the flight time. The model shall be timed from the instant of first motion on the launcher until the instant it touches the ground.~~

Reason: This will be a consequential change if proposal t) “11.4 Timing and Classification”, below, is approved.

t) 11.4 Timing and Classification USA

Number the 1st paragraph, move the 2nd paragraph to the end of the new text and number it 11.4.5 and add new paragraphs 11.4.2 – 11.4.4 as follows:

11.4.1 Timing and Classification Rules 4.8 will be used for this competition.

11.4.2 The model shall be timed from the instant of first motion on the launcher until the instant it touches the ground.

11.4.3 One point will be awarded for each full second of flight time up to the class maximum listed in rule 11.6.

11.4.4 60 additional points will be awarded if any part of the model lands within the 20 by 20 metres landing zone. During landing, if the model hits the pilot or their 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 from flight time and additional points for landing.

11.4.5 For the fly-off in classes S8E and S8F the jury shall determine the maximum time of flight (but not exceeding 30 minutes) for a round according to the meteorological conditions and the character of the flying site. The maximum must be announced before the start of the round.

Reason: We support the 2012 rule change for having junior pilots demonstrate piloting skill and rewarding their ability to land in a designated area. However, the original wording specified that the bonus would be awarded as additional flight time. This creates a conflict between the bonus flight time and the maximum flight time

specified in Rule 11.6.

We believe that the logical intent of the landing bonus was to add the bonus points to the flight time. This was done at the 2013 European Spacemodelling Championships for the Junior S8D event (discussed further below).

This proposal clarifies the rules for S8 to bring the wording of the rules in line with the intent of the bonus and the current interpretation.

Supporting data: Results for Junior S8D at the 2013 European Spacemodelling Championships are listed below. Several of the flights exceed the flight maximum time of 360 seconds. It's clear that the landing bonus rule was being interpreted as 360 seconds max (per Rule 11.6) plus 60 points for a good landing.

Nr	Start Nr	Surname , Name	FAI licence	Country code	1st flight	2nd flight	3rd flight	1st fly-off	Total	Place
	129	SHIROBOKOV,ALEKSANDR	03098	RUS	420	290	310		1020	1
	101	BRATOEV, SLAV	00647	BUL	420	249	313		982	2
	135	STROKOV, KIRILL	01215	RUS	228	191	420		839	3
	152	MUKHA, ROMAN	UKR-S-893	UKR	229	347	217		793	4
	114	DYBA, MATEUSZ	POL6694	POL	215	282	243		740	5
	118	PIASECKI, MACIEJ	POL6994	POL	304	230	202		736	6
	148	TARAN, ROMAN	UKR-S-631	UKR	204	247	260		711	7
	155	AVRAMOV, STOIL	986170	USA	179	105	420		704	
	153	SHAKO, OLEKSII	UKR-S-729	UKR	161	201	335		697	8
	130	KASHKIN, ANDREY	02630	RUS	266	189	234		689	9
	157	STENBERG, ALYSSA		USA	286	DQ	395		681	
	111	TOTEV, MLADEN	02540	BUL	171	285	167		623	10
	112	KARAIVANOV, SVETOZAR	02512	BUL	189	96	241		526	11
	117	NIEBIELSKI, MATEUSZ	POL6693	POL	263	87	144		494	12
	138	KATANIC, VESNA	S-472	SRB	83	146	117		346	13
	158	STENBERG, ZACKARY		USA	DQ	202	DQ		202	
	140	CIPCIC, MIODRAG	S-400	SRB					0	14

u) 11.6. Sub-Classes

Serbia

Amend the table as follows:

CLASS	TOTAL IMPULSE (Newton-seconds)	MIN*	MAX WEIGHT (g)	MINIMUM WING SPAN (mm)	MAXIMUM FLIGHT TIME (sec)
S8A	0,00 - 2,50	20	60	<u>500</u>	180
S8B	2,51 - 5,00	30	90	650 <u>700</u>	240
S8C	5,01 - 10,00	40	120	800 <u>900</u>	300
S8D & <u>S8D/P</u>	10,01 - 20,00	100	300	950 <u>1100</u>	360
S8E & S8E/P	20,01 - 40,00	100	300	1100 <u>1300</u>	360
S8F	40,01 - 80,00	170	500	1250 <u>1500</u>	360

Reason: RC S8E/P flyers were asking several years decrease of total impulse of the engine to D engine but to preserve dimensions (wing span) of the models. A benefit shall be cheaper engines, more possibility for better training, smaller flight altitudes that requires better pilots' skills. Also wing spans in other classes are increased with general recommendation for bigger models.* (P) Introduced are minimum weights as well as for all other subclasses.

v) **11.7 Class S8E/P** **Serbia**

Amend the engine size in the title and 2nd paragraph as follows:

11.7. CLASS S8E/P **S8D/P**

11.7.2. SPECIFICATIONS

The competition has only one subclass determined for models which comply with subclass ~~S8E~~**S8D**. Total impulse of engine(s) 20,01 to 40,00 10,01-20,00 and a wing span of 1100 mm is allowed.

Reason: There is a proposal from S8E/P flyers for several years to decrease total impulse of the engine from 20,01-40,00 Ns (E class) to 10,01-20,00 Ns (D class) but to preserve dimensions (wing span of 1100 mm) of models. So, models shall fly not so high but pilots should be very good trained to achieve high performances. D engines are also remarkably cheaper than E engines so with the same amount of money much better flying abilities shall be achieved.

S8 New Class

w) **S8/F/P RC Triathlon Tournament** **Serbia**

11.9.1 Definition

RC Triathlon tournament is a complex class that combines different flying skills: precision time – precision landing, aerobatics and duration flights. Classification is determined by a normalisation formula.

11.9.2 Principle of Competition

There will be three flights:

- a) First out of three flights is – precise landing on defined spot in a target time as in existing class S8D/P.
- b) The second flight contains a set of glider's aerobatic figures to be performed in 360 seconds. It can be flown with E engine because of height needed to complete the whole set of aerobatic figures.
- c) The third flight is a S8D duration flight with target time of 360 seconds. Time over the target time shall be awarded with bonus points depending on placings of competitors.
- d) Points from 0 to 10 for appearance would be awarded at model processing by a SM Scale Judge.

11.9.2 Scoring

- a) First out of three flights shall be scored as for S8D/P (See rule 11.7.4.8).
- b) Aerobatic set of figures shall be evaluated as:
 - stall turn (0 - 100 pts),
 - chandelle (0 - 90 pts),
 - rolling turn (0 - 70 pts),
 - inside loop with spin (0 - 60 pts),
 - inverted flight with spin (0-50),
 - outside loop (0 - 40 pts),

cont/...

spin (0 - 30 pts),

three consecutive sharp turns (0 - 20 pts)

Total for set of aerobatic figures: 0 - 460.

Note: The set of aerobatic figures is selected from the Handbook of Glider Aerobatics by Peter Mallinson and Michael Woollard,, Air Life Publishing Ltd, UK, 1999.

c) In the third flight the best flyer shall get bonus of 100 pts and the last of 0 pts. These points shall be uniformly distributed to those who flew over 360 seconds. The score in the third flight shall be the flight time + bonus points.

d) Score of individuals shall be sum of points of all three flights normalized by formula:

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

$$P_c = \frac{1000 \times R_c}{R_w}$$

where P_c = points of the competitor

R_w = result of the winner in the relating group

R_c = result of the competitor

e) Score of a team shall be sum of points of its team members

11.9.3 Organisation of competition

Organisation of duration flights and duration and landing precision is the same as for S8D and S8D/P. Aerobatic flights shall be flown in different zones – several flights at a time and will be judged by ground officials who will have sketches of sets of figure and are trained for such evaluation. Flight zones shall be specially distributed so to ensure required safety of models, persons and property on the ground.

Reason: This class should show ultimate skills of RC spacemodellers and to attract attention of public and media.

S12P Time Duration Triathlon Tournament

x) 12.6.5. Sub-Classes

Serbia

Amend and expand the table as follows:

Sub-classes for this competition are defined by rule 12.5.

CLASS	TOTAL IMPULSE	MAXIMUM WEIGHT	MAXIMUM FLIGHT TIME (sec)
	(Newton-seconds)	(g)	
S12A/P	0,00 - 2,50	60	180
S12B/P	2,51 - 5,00	90	240
S12C/P	5,01 - 10,00	150	300
S12D/P	10,01 - 20,00	200	360

ANNEX 2

y) 3. General Judging Criteria

Serbia

Amend paragraph d) as follows:

d. Unsafe Recovery. Crashes and other unsafe recoveries cannot be qualified. What constitutes an unsafe recovery? The rules state it is one that creates a hazard to property or people. For consistency let us ask ourselves if we would like to be under the rocket we are judging when it lands. If the answer is “no” then a disqualification is called for especially during payload flights where no minimum size parachute is required. **In case of scale models unsafe recovery is when a recovery device (parachute or streamer) of a substantial part, which are nose cone, any of the stages or boosters does not deploy and can make hazard for men or property on the ground. If a streamer or a parachute of a smaller and insignificant part does not properly work this is not a Reason for disqualification than for reduction of points for recovery devices in flight characteristics.**

Reason: Scale models are very sophisticated and very expensive models with a lot of parts that separate in flight. Some of them are significant for flight but some of them contribute only to a general impression and are treated as “special effects”. Some RSOs declare DQ whenever a small, insignificant streamer does not fully unfurl, which is a great harm for sportsman and finally also for the contest. So a precise criterion must be defined by the rules.

z) 3. General Judging Criteria (2)

Serbia

Delete paragraph e).

~~**e. Engine Ejection.** No engines can be ejected – even if they have attached streamers or parachutes, except for boost gliders. All engines have to descend within an airframe that provides for safe recovery. Exception: Boost glider models may eject pods or engines if they have a streamer or parachute. (See below for minimum sizes)~~

Reason: In earlier editions of the SM rules there was a possibility in conjunction with paragraph 2.4.2 to eject engines of a boost-glider in so called engine pod. It is not possible any more, so this explanation in Annex 2.3.e is obsolete and should be deleted.

Item 16 Election of Bureau Officers and Subcommittee Chairmen begins overleaf.

16. ELECTION OF BUREAU OFFICERS AND SUBCOMMITTEE CHAIRMEN

16.1. CIAM Officers

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

16.2. Subcommittee Chairmen

F2 Control Line
 F4 RC Scale
 F5 RC Electric
 F7 RC Aerostats
 S Space Models
 Education

17. FAI WORLD AND CONTINENTAL CHAMPIONSHIPS 2014 – 2017

VERY IMPORTANT: Each NAC/country/Delegate presenting a bid prior to voting for the award of the Championships may make a presentation of the championship organisation, lasting a **MAXIMUM of 2 minutes** only. Presentations for bids with only one candidate will be performed only if any of the Delegates requests so. Bidders are requested to distribute important information prior to the meeting, to each of the NACs/delegates by electronic means. This is to enable Delegates to study the contents of the bid, so that they may make informed decisions at the meeting.

FAI WORLD CHAMPIONSHIPS

2014 FAI World Championships	Awarded to	Location and Actual Dates
F1A, F1B, F1P Juniors	ROMANIA	Salonta 28 July – 3 August
F1D (Seniors and/or Juniors)	ROMANIA	Slanic – Prahova 31 March – 5 April
F2A, F2B, F2C, F2D (Seniors and Juniors)	POLAND	Wloclawek 9 – 16 August
F3F (Seniors and Juniors)	SLOVAKIA	Donovaly, B. Bystrica 7 – 14 September
F3J (Seniors and/or Juniors)	SLOVAKIA	Martin 13 – 20 July
F4C (Seniors and Juniors)	FRANCE	Marmande 19 – 26 July
F5B, F5D (Seniors and Juniors)	AUSTRIA	Turnau – Styria 23 – 29 August
SPACE MODELS (Seniors and Juniors)	BULGARIA	Kaspichan 22 – 30 August

2015 FAI World Championships	Bids from	To be Awarded in 2014
F1A, F1B, F1C Seniors	awarded in 2013 MONGOLIA	-----
F1E (Seniors and/or Juniors)	awarded in 2013 SERBIA	-----
F3A (Seniors and Juniors)	awarded in 2013 SWITZERLAND	-----
F3B (Seniors and Juniors)	awarded in 2013 NETHERLANDS	-----
F3C (Seniors and Juniors)	Austria (firm)	
F3N (Seniors and Juniors)	Austria (firm)	
F3M (Senior and Juniors)	Offers invited	
F3D (Seniors and Juniors)	Czech Republic (firm)	
F3K (Seniors and/or Juniors)	awarded in 2013 CROATIA	-----
F3P (Seniors and Juniors)	awarded in 2013 POLAND	-----

2016 FAI World Championships	Bids from	To be Awarded in 2014
F1A, F1B, F1P Juniors	Romania (tentative) FYR of Macedonia (firm)	
F1D (Seniors and/or Juniors)	Serbia (firm)	
F2A, F2B, F2C, F2D (Seniors and Juniors)	awarded in 2013 AUSTRALIA	-----
F3F (Seniors and Juniors)	Offers invited	
F3J (Seniors and/or Juniors)	Croatia (tentative) Slovakia (firm) Ukraine (firm)	
F4C (Seniors and Juniors)	Romania (firm)	
F5B, F5D (Seniors and Juniors)	Offers invited	
SPACE MODELS (Seniors and Juniors)	Serbia (firm) Ukraine (firm)	

cont/... 2017 World Championships & 2014 Continental Championships

2017 FAI World Championships	Bids from	To be Awarded in 2015
F1A, F1B, F1C Seniors	Offers invited	
F1E (Seniors and/or Juniors)	Offers invited	
F3A (Seniors and Juniors)	Austria (firm)	
F3B (Seniors and Juniors)	Offers invited	
F3C (Seniors and Juniors)	Offers invited	
F3M (Seniors and Juniors)	Offers invited	
F3N (Seniors and Juniors)	Offers invited	
F3D (Seniors and Juniors)	Offers invited	
F3K (Seniors and/or Juniors)	Offers invited	
F3P (Seniors and Juniors)	Offers invited	

FAI CONTINENTAL CHAMPIONSHIPS

2014 FAI Continental Championships	Awarded to	Location and Actual Dates
F1A, F1B, F1C Seniors	ROMANIA	Salonta 11 – 17 August
F1A, F1B, F1C Seniors	MONGOLIA (awarded by Bureau)	Ulaanbaatar 19 – 29 July
F1E (Seniors and/or Juniors)	SLOVAKIA	Martin 24 - 30 August
F3A (Seniors and Juniors)	LIECHTENSTEIN	Bendern 10 – 19 July
F3A Asian – Oceanic (Seniors and Juniors)	THAILAND	Pattaya 10 – 17 May
F3B (Seniors and Juniors)	No Offers	
F3C (Seniors and Juniors)	No Offers	
F3N (Seniors and Juniors)	No Offers	
F3C Asian – Oceanic (Seniors and Juniors)	No Offers	
F3D (Seniors and Juniors)	No Offers	
F3K (Seniors and/or Juniors)	No Offers	
F3P (Seniors and Juniors)	No Offers	

2015 FAI Continental Championships	Bids from	To be Awarded in 2014
F1A, F1B, F1P Juniors	awarded in 2013 ROMANIA	-----
F1D (Seniors and/or Juniors)	awarded in 2013 SERBIA	-----
F2A, F2B, F2C, F2D (Seniors and Juniors)	awarded in 2013 BULGARIA	-----
F3F (Seniors and/or Juniors)	Offers invited	
F3J (Seniors and/or Juniors)	Hungary (firm)	
F4C (Seniors and Juniors)	Offers invited	
F5B, F5D (Seniors and Juniors)	Offers invited	
SPACE MODELS (Seniors and Juniors)	awarded in 2013 UKRAINE	-----

2016 FAI Continental Championships	Bids from	To be Awarded in 2014
F1A, F1B, F1C Seniors	Serbia (firm) Romania (firm) FYR of Macedonia (firm)	
F1E (Seniors and/or Juniors)	Serbia (firm) Romania (firm)	
F3A (Seniors and Juniors)	Germany (firm)	
F3A Asian – Oceanic (Seniors and Juniors)	Offers invited	
F3B (Seniors and Juniors)	Offers invited	
F3C (Seniors and Juniors)	Offers invited	
F3M (Seniors and/or Juniors)	Offers invited	
F3N (Seniors and Juniors)	Offers invited	
F3C Asian – Oceanic (Seniors and Juniors)	Offers invited	
F3D (Seniors and Juniors)	Offers invited	
F3K (Seniors and/or Juniors)	Offers invited	
F3P (Seniors and Juniors)	Offers invited	

cont/... 2017 Continental Championships

2017 FAI Continental Championships	Bids from	To be Awarded in 2015
F1A, F1B, F1P Juniors	Offers invited	
F1D (Seniors and/or Juniors)	Offers invited	
F2A, F2B, F2C, F2D (Seniors and Juniors)	Offers invited	
F3F (Seniors and/or Juniors)	Offers invited	
F3J (Seniors and/or Juniors)	Offers invited	
F4C (Seniors and Juniors)	Offers invited	
F5B, F5D (Seniors and Juniors)	Offers invited	
SPACE MODELS (Seniors and Juniors)	Offers invited	

18. ANY OTHER BUSINESS

19. NEXT CIAM MEETINGS

The table of Agenda Annexes appears overleaf.

ANNEXES TO THE AGENDA OF THE 2014 CIAM PLENARY MEETING

ANNEX FILE NAME	ANNEX CONTENT
ANNEX 1 (a-b)	FAI Code of Ethics, Nomination Form for Office Holders
ANNEX 2 (a-n)	2013 FAI Championship Reports
ANNEX 3 (a-p)	2013 Subcommittee Reports, Technical Secretary, Treasurer & F6 WG Reports, CIAM Flyer
ANNEX 4 (a-i)	2013 World Cup Reports
ANNEX 5 (a-d)	2013 Trophy Reports
ANNEX 6 (a-e)	FAI-CIAM Awards: Nominee Forms
ANNEX 7a	F1Q 3.Q.2 F1 S-C
ANNEX 7b	F1S New Class F1 S-C
ANNEX 7c	F3M Annex 5L Known Schedule 2015 CZE & FRA
ANNEX 7d	F4K New Class Rules ESP
ANNEX 7e	F4K New Class Judges Guides ESP
ANNEX 7f	F4 Annex 6C.3.7T GBR
ANNEX 7g	F4 Annex 6E.1 GBR
ANNEX 7h	F4 Annex 6E.2 GBR
ANNEX 7i	S1 2.4.4 Supporting Data USA
ANNEX 7j	4.1 World Championships USA
ANNEX 7k	F3Q 5Q.2.2.1 Course Layout
ANNEX 7l	ABR B6 Organisation of Championships Appendix A.1a
ANNEX 8 (a-f)	Scholarship Candidates

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