



*Fédération  
Aéronautique  
Internationale*

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# Agenda

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

To be held at **Maison du Sport International** in **Lausanne,**  
**Switzerland**  
on **12<sup>th</sup> and 13<sup>th</sup> April 2024**

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Version 1.0

# AGENDA

## CIAM PLENARY MEETING 2024

to be held at Maison du Sport International in Lausanne, Switzerland  
on Friday 12 April at 12.30 (CEST) and 13 April 2024, at 9.15 (CEST)

### 1. PLENARY MEETING SCHEDULE AND TECHNICAL MEETINGS

After confirmation by the relevant Subcommittee Chairmen, the following Technical Meetings will be held this year: F1, F2, F3 Soaring, F3DE, F4, F5, F9, and Education.

The Technical Meetings will take place via Zoom before the CIAM Plenary Meeting. One additional session will be held related to the CIAM General Rules. The updated Schedule of the Technical Meetings can be found on the FAI website <https://fai.org/page/ciam-plenary-2024>.

Please consult this page regularly since you will be able to find all the details and documents for all sessions.

The program of the Technical Meetings is the following:

	9:30	13:00	18:00	19.00
March 9, Saturday	F2 Control Line		F5 Electric	
March 10, Sunday			F4 Scale	
March 13, Wednesday				F1-Free Flight
March 14, Thursday				F3 Pylon Racing
March 16, Saturday	F3 Soaring	F9 Drone		
March 17, Sunday	Education	CIAM General Rules		

All times for the Technical Meetings are as of Lausanne (CET).

### 2. DECLARATION OF CONFLICTS OF INTEREST (ANNEX 1a)

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

### 3. PRESENTATION IN MEMORIAM

### 4. MINUTES OF THE PLENARY MEETING, AND OF THE DECEMBER 2023 BUREAU MEETING

#### 4.1. 2023 e-Plenary

4.1.1. Corrections

4.1.2. Approval

4.1.3. Matters Arising.

#### 4.2. 2023 December Bureau Meeting

4.2.1. Corrections

4.2.2. Approval

4.2.3. Matters Arising

**5. APRIL 2024 BUREAU MEETING DECISIONS`**

Distribution and comments of the April 2024 Bureau Meeting decisions.

**6. NOMINATION AND ELECTION OF SUBCOMMITTEE CHAIRMEN (ANNEX 1b)**

**6.1. CIAM Officers**

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

**Note.** Since this will be a physical meeting, according to FAI rules, voting rights are held solely by NACs which are represented at the Plenary Meeting by a Delegate or an Alternate Delegate who is present at the time of voting, or NACs which have given their proxy to a NAC whose Delegate or Alternate Delegate is physically present at the time of voting.

**6.2. Subcommittee Chairmen to be elected**

- F2 Control Line
- F4 Scale
- F5 RC Electric
- F7 RC Aerostats
- F9 Drone Sport
- Education

**Note.** Since this will be a physical meeting, according to FAI rules, voting rights are held solely by NACs which are represented at the Plenary Meeting by a Delegate or an Alternate Delegate who is present at the time of voting, or NACs which have given their proxy to a NAC whose Delegate or Alternate Delegate is physically present at the time of voting.

**6.3. Subcommittee Chairmen to be confirmed**

- F1 Free Flight
- F3 RC Aerobatics
- F3 RC Soaring
- F3 RC Helicopter
- F3 RC Pylon Racing
- S Space Models

**7. REPORTS**

**7.1. FAI Activities Report, by FAI Secretary General, Markus Haggene**

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

**7.3. 2023 FAI World and Continental Championships, by the Jury Chairmen (ANNEX 2)**

7.3.1. 2023 FAI F1 Seniors World Championship for Free Flight Model Aircraft. Ian Kaynes

- 7.3.2. 2023 FAI F1E World Championship for Free Flight Model Aircraft. Narve Jensen
- 7.3.3. 2023 FAI F3A World Championship for Aerobatic Model Aircraft. Peter Uhlig
- 7.3.4. 2023 FAI F3B World Championship for Model Gliders. Tomas Batovsky
- 7.3.5. 2023 FAI F3CN World Championship for Model Helicopter. Stefan Wolf
- 7.3.6. 2023 FAI F3DE World Championship for Pylon Racing. Markus Griggs
- 7.3.7. 2023 FAI F3K World Championship for Model Gliders. Tomas Bartovsky
- 7.3.8. 2023 FAI F3P World Championships for Indoor Aerobatic Model Aircraft. Peter Uhlig
- 7.3.9. 2023 FAI F5J World Championship for Electric Model Aircraft. Andras Ree
- 7.3.10. 2023 FAI World Drone Racing Championship. Bruno Delor
- 7.3.11. 2023 FAI World Championships for Space Models. Antonis Papadopoulos
- 7.3.12. 2023 FAI F1 Juniors European Championship for Free Flight Model Aircraft. Ian Kaynes
- 7.3.13. 2023 FAI F1D European Championship for Free Flight Indoor Model Aircraft. Andras Ree
- 7.3.14. 2023 FAI F2 European Championships for Control Line Model Aircraft. Massimo Semoli
- 7.4. **2023 Sporting Code Section 4: CIAM Technical Secretary, Mr Tyson Dodd (ANNEX 3)**
- 7.5. **2023 Subcommittee Chairmen (ANNEX 3)**
  - 7.5.1. Free Flight: Ian Kaynes
  - 7.5.2. Control Line: Vernon Hunt
  - 7.5.3. RC Aerobatics: Peter Uhlig
  - 7.5.4. RC Soaring: Tomas Bartovsky
  - 7.5.5. RC Helicopters: Stefan Wolf
  - 7.5.6. RC Pylon: Barrie Lever
  - 7.5.7. RC Scale: Pal Linden Anthonisen
  - 7.5.8. RC Electric: Sotir Lazarkov
  - 7.5.9. Aerostats: Johannes Eissing
  - 7.5.10. Drone Sport: Bruno Delor
  - 7.5.11. Space Models: Zoran Pelagic
  - 7.5.12. Education: Per Findahl
- 7.6. **2023 World Cups, by World Cup Coordinators (ANNEX 4)**
  - 7.6.1. Free Flight World Cup: Ian Kaynes
  - 7.6.2. Control Line World Cup: Pavol Barbaric
  - 7.6.3. RC Aerobatics World Cup: Rob Romijn
  - 7.6.4. RC Thermal Soaring and Duration Gliders World Cup: Martin Weberschock
  - 7.6.5. RC Helicopter World Cup: Ian Emery
  - 7.6.6. RC Slope Soaring World Cup: Lukas Gaubatz
  - 7.6.7. RC Thermal Duration Gliders World Cup: Sotir Lazarkov
  - 7.6.8. RC Hand Launch Gliders World Cup: Eric Dahl Christensen
  - 7.6.9. RC Pylon Racing World Cup: Robbert Van Den Bosch

7.6.10. RC Drone Racing World Cup: Bruno Delor

7.6.11. RC Electric Powered Motor Gliders World Cup: Sotir Lazarkov

7.6.12. Space Models World Cup: Dragan Jevtic

7.7. **2023 Trophy Report, by CIAM Secretary, Massimo Semoli (ANNEX 5)**

7.8. **Aeromodelling Fund- Budget 2024 by the Treasurer, Andras Ree (ANNEX 3)**

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

7.10. **EDIC WG report, by Chairman, Manfred Lex (ANNEX 3)**

8. **PRESENTATION OF 2023 FAI WORLD CHAMPIONSHIPS MEDALS COUNT PER NATION**

9. **PRESENTATION OF THE 2023 WORLD CUP AWARDS**

**PRESENTATION FOR**

The 2023 World Cup awards for classes F1A, F1A junior, F1B, F1B junior, F1C, F1E, F1E junior, F1Q, F1Q junior, F2A, F2B, F2C, F2D, F2A junior, F2B junior, F2C junior, F2D junior, F3A, F3B, F3C, F3D, F3F, F3K, F3T, F3J, F5J, F9U, S4A, S6A, S7, S8P and S9A

The medals and diplomas will be available after the end of the Plenary.

10. **SCHOLARSHIP SELECTION APPROVAL (ANNEX 8)**

- Capucin Ragot (FRA)
- Yuval Sarig (ISR)
- Klaudia Matéová (SVK)
- Ivan Chorny (UKR)
- Skylar Donnely (USA)

11. **NOMINATIONS FOR FAI-CIAM AWARDS (ANNEX 6)**

**Alphonse Penaud Diploma**

- Hans STOLL (SUI)
- Dezso ORSOVAI (HUN)
- Didier BARBERIS (FRA)
- Jan van VLIET (NED)
- Krzysztof PRZYBYTEK (POL)

**Andrei Tupolev Diploma**

- Leszek MALMYGA (POL)

**Antonov Diploma**

- Vladimir HORVAT (CRO)

**Frank Ehling Diploma**

- Csontos ARPAD (SVK)

### **FAI Aeromodelling Gold Medal**

- No candidates

**Note.** Since this will be a physical meeting, according to FAI rules, voting rights are held solely by NACs which are represented at the Plenary Meeting by a Delegate or an Alternate Delegate who is present at the time of voting, or NACs which have given their proxy to a NAC whose Delegate or Alternate Delegate is physically present at the time of voting.

### **ITEM NUMBERS 12, 13 ARE INTENTIONALLY NOT USED**

#### **14. SPORTING CODE PROPOSALS**

The Sporting Code proposals begin overleaf.

## **14. SPORTING CODE PROPOSALS**

The Agenda contains all the proposals received by the FAI Office according to the manner required in rule A.10.

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

Bureau proposals appear in the appropriate rule section of item 14.

Each section begins on a new page.

The text of the submitted proposals may have been changed to correct the English grammar or to improve clarity and understanding. Technical Secretary notes should be addressed, if required, at the Technical Meetings.

After the end of each Technical Meeting, the minutes will be published and there will be an online voting like the way we voted for the last 3 years. Proposals that will be unanimously approved will not be discussed during the Plenary Meeting to save time. The rest of the proposals will be discussed during the Plenary and the present delegates will vote.

## 14.1 Volume CIAM General Rules

### a) A.7 SUBCOMMITTEES

### Bureau Proposal

The CIAM may set up Subcommittees, which are consulted for advice on sporting and technical matters in the special category concerned.

Note: The current permanent Subcommittees are:

F1 Free Flight	F4 Scale
F2 Control Line	F5 Electric
F3 Aerobatics	F7 Aerostats
F3 Helicopters	F9 Drone <del>Sport</del> <b>Sports</b>
F3 Pylon Racing	S Space Modelling
F3 Soaring	Education

*Reason: Now the Drone Sports are more than one.*

### b) A9. CLASSIFICATION OF CLASSES

### Bureau Proposal

A Provisional class that does not meet the requirements to move to Official after 4 years from the year it was introduced, will now become Unofficial. Unofficial classes will either remain as such, or the Subcommittee Chairman can delete them from the Sporting Code. Under Force Majeure situations the Bureau may extend the 4 years to 6. An Unofficial class can be practiced only at National Level events.

*Reason: Without such a time limit, we have many classes without any chance to be officials.*

### c) C.7.2 FAI JURY AT WORLD AND CONTINENTAL CHAMPIONSHIPS & WAG

### Bureau Proposal

b) The Jury must include at least one member of the Bureau (which includes Subcommittee Chairmen) or one who, over the last 5 years, has served on the Bureau. Only a person with such qualifications may act as the Jury President. Under exceptional circumstances, a person who has served in the past at least two times as a Jury Member in the same class in an FAI event may also be selected by the Organizer and approved by the Bureau.

*Reason: The existing wording in this paragraph is not as clear as it should be that it refers to the Jury President.*

### d) C.11.1 Class F – Model Aircraft

### ITALY

#### Rule Change:

*Change Text C.11.1*

- Model aircraft, except for Indoor Free Flight and Scale, ~~shall carry~~ **could present**:
  - The national identification mark (**e.g. FRA- GER - ITA – etc**) followed by the FAI Unique ID number. The letters and numbers must be at least 25 mm high and appear at least once on each model (on the upper surface of a wing for Free Flight models).
- Note: The list of the national identification marks (3 letters per country) is downloadable from "Documents" section of the CIAM website <http://www.fai.org/ciam-documents>.
- Note: The mandatory carrying of the FAI ID number shall commence in 2022.



- A model identification code (letters and/or numbers). This code has to be different for each nominated model aircraft of the competitor. The model identification code is to appear on each main part of the model (wing(s), tail, front and rear fuselage if detachable) so that the individual parts of a competitor's different models may be separately identified. The letters and/or numbers must be at least 10 mm high and clearly visible. The identification code of the nominated models shall be recorded on the score card. For World or Continental Championships this must be recorded on the Model Aircraft Specification Certificate.
- ~~A model aircraft must not carry a national identification mark, an FAI Unique ID number or an FAI sticker which relates to any person other than the competitor. At the processing of the model aircraft, the organiser must mark each FAI sticker (if required).~~

*Reason: It has been experienced that both para-a) and b) are not completely applied by competitors and even not sanctioned at the Model Processing, From 2022 it is common to see painted on the wing FAI ID xxxxx instead of NATIONAL ID plus ID as required by the rules. In other cases, the FAI ID is not present or the FAI National Number is different from the Competitor. The spirit of the rule is to identify the model owner and avoid exchange of models during competitions. This rule in para a) and b) needs to be respected at model processing, but in extensive mode: the model need to have the marks of the competitor, and the model id, and this must be recorded in Model Aircraft Specification Certificate and on Sticker to put on the model. Eventual other numbers/id etc. has no relevance. Moreover, we need to take into consideration the fact that new competitors are more Pilot of Aeromodels than Model Builders, in other hand especially for Junior Pilot, they can use already used model airplane that were realized by old champions, without destroying the paint scheme and -not less important- the consequently deletion of the model and model builder/pilot history and memories. This is also to avoid useless protest during Class # 1 and # 2 competition.*

**e) C.15.1 CIAM championships naming policy**

**Bureau proposal**

[Introduce F9U Drone Racing on the table, with the name World Drone Racing Championship \(WDRC\).](#)

**f) C.15 Organisation of World and Continental Championships**

**F1 Subcommittee**

**Rule Change:**

Modify C. 15.2. 1

Change first item under even years heading:

F1ABPQ (Junior)

*Reason: It is desirable to allow juniors an electric powered class, particularly in view of the small number flying F1P, The choice of F1Q follows its acceptance for World Championship status in 2023. The adoption of the same class for juniors gives an easy progression to flying the same class at senior level when they are too old for the junior category. F1Q models are easier to trim than the smaller F1S models. The F1P event usually has a small number of competitors and so it is possible that F1Q could be flown on the same day and thus the championship would not be extended to a longer duration.*

*Note that while this addition is to the list of World Championship classes, it is understood that the same events apply for Continental Championships.*

**g) C.15 Organisation of World and Continental Championships Bureau Proposal**

**For the class F9U the odd or even year will be decided during the 2026 Plenary Meeting**

**h) C.15.5 Entry and additional fees**

**Bureau Proposal**

C.15.5.1 Entry fees

d) For World or Continental Championship, the ~~maximum~~ **basic amount for the** entry fee shall be **300** EUR for up to seven nights except for the following classes:

F3A/P: **450 EUR**      F3B: **400 EUR**      F3C-F3N: **400 EUR**      F3D-F3E: **420 EUR**

F4: **400 EUR**      F5B-F5J: **400 EUR**

**The exact amount of the entry fee will be derived from the basic amount by taking account of the Cost-of-Living Index in the hosting country. A formula will be used and every year by the end of October, a table including the entry fee per country will be published to inform the organizers of the next year's entry fee.**

In these entry fees, the amount of 10 CHF (or the equivalent) as described in C.4 (Sanction Fees) is not included and it will be added.

e) For World or Continental Championship if more than the minimum number of judges required by the relevant rules is allowed, then an additional fee may be charged to each contestant. The additional fee shall be calculated as follows up to a maximum of **165** Euro:

Additional fee = (Travel cost of extra officials + ((Cost of food & accommodation for seven nights) / (7 \* Number of nights)) / Number of competitors

f) If an obligatory fee is required for official helpers and supporters, it must not exceed 20 % of the obligatory fee for competitors up to a maximum of **80 €**.

*Reason: A new method to calculate the entry fees is proposed by the Bureau. With this new system the entry fees will not be the same for every country since the cost of leaving varies from country to country. This way more countries will be able to bid to host a World or Continental Championship without financial risks. The concept of the new system will be presented during the CIAM General Rules session and the Bureau taking into account the recommendations from the members will prepare the final version of the proposal. The basic amounts (marked with yellow) will also be discussed.*

**i) C.16.1 General requirements**

**Bureau Proposal**

The organiser must:

j) For World and Continental Championships and Open Internationals on the FAI Sporting Calendar, provide, at no cost to the competitor, third-party liability insurance to the standard required for competitors participating in the contest including flying at off-site practice facilities. **The Insurance Policy, its Terms & Conditions, and the Sum Insured shall be disclosed by the organizer to CIAM Bureau along with the Bulletin-0.**

*Reason: With this proposal, the insurance policy and the details will be known in advance.*

## 14.2 Section 4 Volume F1 - Free Flight

### a) Entire Volume

F1 Subcommittee

Clarification – Change the numbering system;

Replace the numbering of paragraphs with the number 3 by the class abbreviation, so that for example section 3.1.. for F1A Glider specification becomes F1A.., 3.3.. for F1C becomes F1C... and in provisional classes 3.G. for F1G becomes F1G... For Annexes to the volume change the leading 3 to F1.

Refer to attached Example

*Reason: The present numbering system dates from the time when the Sporting Code was printed as a single paper volume covering all aspects of CIAM. The initial sections contained the rules which are known in the CIAM General Rules volume and the following sections contained the technical regulations for each class, section 3 for free flight, section 4 for control line, etc. This was logical in this single physical volume but the last Sporting Code in this format was printed during the 1990s and then in 2001 the present system of independent volumes for each technical category was introduced. Each technical volume is an independent document and it makes no sense to maintain the numbering system, of all paragraphs beginning with 3 in volume F1.*

*It is proposed to replace the first and second numbers in each class by the unique class abbreviation. This has the benefit of immediate recognition of which class any paragraph applies to. For example quoting paragraph 3.5.4 needs translation to know that it applies to class F1E whereas the proposed numbering F1E.4 makes this obvious.*

*The proposed system for class specifications is consistent with the present format of using just F1 as the start of the numbering of the general rules which apply to all classes. Since all numbers are entered specifically in the volume it is a relatively simple edit to change the format in the way proposed.*

### b) F1.2 Timing

F1 Subcommittee

F1.2.1 Timekeepers

Clarification – Add text to F1.2.1(b)

b) Competitors may act as timekeepers for flights of other competitors. **The requirement for at least two timekeepers always applies.**

*Reason: A clarification that at least two timekeepers are necessary for timing each flight including in this circumstance when timekeepers are not provided by the organisers.*

### c) General Regulations for Free Flight contests

USA

F1A, F1B, F1C, F1E, F1G, F1H, F1J, F1P, F1Q, and F1S

**F1.2.7 Electronic evidence of flight time**

Rule Change: To bring the rapidly evolving use of time and altitude recording devices in line with current practices and to simplify contest management for organizers and officials.

#### **F1.2.7 Electronic evidence of flight time**

In Fly-offs, ~~electronic time and altitude recording devices may be used mounted in or on a model. Such devices must be~~ **EDIC-approved**, ~~commercially available with an altitude measuring frequency of at least 2 Hz and display equipment like a computer, tablet or smart phone equipped with graphing software must be available to produce a time-altitude graph of the recorded flight.~~ The responsibility of the use and correct functioning of such devices rests with the competitor.

The use of an altimeter is voluntary.

~~If the competitor is using an~~ **The** EDIC-approved altimeter ~~then this must be shown to the timekeeper before the flight for the timekeeper to record the serial number marked on the altimeter and to confirm that for the first additional flight it shows the empty memory indication~~

~~Competitors using altimeters which are not EDIC-approved must follow the following procedure. Prior to each fly off, participants with (reserve) models equipped with such recording devices being switched on, should position their model(s) at ground level no more than 5 metres from their assigned starting pole. Upon instruction of the contest director, the participant will have to lift the model(s) from the ground and hold the model(s) elevated a number of times, the number and duration of these movements is decided by the contest director thereby generating a unique altitude-time signature.~~

In case of a flight-time related dispute, the competitor automatically may proceed to the following fly off round. Any dispute must be marked on the competitor's scorecard for that fly off round. After the last fly off but no later than 30 minutes from the end of the last fly off, the jury will ask the competitor who filed the dispute to read out the altimeter data and present the altitude versus time graph. The jury will ~~check the signature in the graph and determine the flown time for the fly off round for which a dispute has been filed. If the moment of launch, landing and flight time can be clearly established and the correct signature is present,~~ the flight time will be recorded for the final result. If any one of these conditions is not met, the timekeeper's time of the disputed fly off round will be used as the score for that fly off round. If this time is less than the maximum flight time set for that particular fly off round, any subsequently flown fly off rounds will be cancelled for that competitor. In case of a protest related to the altimeter generated flight time, the altitude graphs must be made available to the jury. Failure to do so will result in the timekeeper's recorded flight time being the official score.

*Reason: This rule was put into the sporting code before EDIC approved altimeters were available. EDIC approved units are now ubiquitous. They are readily available from more than one manufacturer and are relatively inexpensive.*

*The old language detailing the altitude signature can now be removed. The procedure for flight-time related disputes is being better understood and is being put into practice at more and more competitions around the world. Using EDIC approved altimeters makes remedying a dispute a short and simple process where we can be more confident that the result is fair.*

#### **d) General Regulations for Free Flight contests**

**USA**

F1A, F1B, F1C, F1E, F1G, F1H, F1J, F1P, F1Q, and F1S

### F1.2.7 Electronic evidence of flight time

Rule Change: To bring the rapidly evolving use of time and altitude recording devices in line with current practices, to simplify contest management for organizers and officials, and to allow challenges to regular round scores using the same well proven practice of challenging fly off scores with electronic evidence.

#### F1.2.7 Electronic evidence of flight time

~~In Fly-offs,~~ Electronic time and altitude recording devices may be used mounted in or on a model. Such devices must be **EDIC-approved**. ~~commercially available with an altitude measuring frequency of at least 2 Hz and display equipment like a computer, tablet or smart phone equipped with graphing software must be available to produce a time-altitude graph of the recorded flight.~~ The responsibility of the use and correct functioning of such devices rests with the competitor.

The use of an altimeter is voluntary.

~~If the competitor is using an~~ **The** EDIC-approved altimeter ~~then this must be shown to the timekeeper before the flight for the timekeeper to record the serial number marked on the altimeter and to confirm that for the first additional flight it shows the empty memory indication~~

~~Competitors using altimeters which are not EDIC-approved must follow the following procedure. Prior to each fly off, participants with (reserve) models equipped with such recording devices being switched on, should position their model(s) at ground level no more than 5 metres from their assigned starting pole. Upon instruction of the contest director, the participant will have to lift the model(s) from the ground and hold the model(s) elevated a number of times, the number and duration of these movements is decided by the contest director thereby generating a unique altitude-time signature.~~

In case of a flight-time related dispute, the competitor automatically may proceed to the following fly off round. Any dispute must be marked on the competitor's scorecard for that fly off round. After the last fly off but no later than 30 minutes from the end of the last fly off, the jury will ask the competitor who filed the dispute to read out the altimeter data and present the altitude versus time graph. The jury will ~~check the signature in the graph and determine the flown time for the fly-off round for which a dispute has been filed. If the moment of launch, landing and flight time can be clearly established and the correct signature is present,~~ the flight time will be recorded for the final result. If any one of these conditions is not met, the timekeeper's time of the disputed fly-off-round will be used as the score for that fly-off round. If this time is less than the maximum flight time set for that particular fly-off round, any subsequently flown fly off rounds will be cancelled for that competitor. In case of a protest related to the altimeter generated flight time, the altitude graphs must be made available to the jury. Failure to do so will result in the timekeeper's recorded flight time being the official score.

*Reason: This rule was put into the sporting code before EDIC approved altimeters were available. It was only practical to perform the CD directed altitude signature procedure before flyoff flights. EDIC approved units are now ubiquitous. They are readily available from more than one manufacturer and are inexpensive.*

*The old language detailing the altitude signature can now be removed. The procedure for flight-time related disputes is being better understood and is being put into practice at more and more competitions around the world. Using EDIC approved altimeters makes remedying a dispute a short and simple process. As such there is no longer a reason to limit challenges to flyoff flights only.*

## e) General Regulations for Free Flight contests

USA

F1A, F1B, F1C, F1E, F1G, F1H, F1J, F1P, F1Q, and F1S

### F1.2.7 Electronic evidence of flight time

Rule Change: To bring the rapidly evolving use of time and altitude recording devices in line with current practices, to simplify contest management for organizers and officials, to allow challenges to regular round scores using the same well proven practice of challenging fly off scores with electronic evidence, and to more rigidly define when a challenge must be resolved.

#### F1.2.7 Electronic evidence of flight time

~~In Fly-offs,~~ Electronic time and altitude recording devices may be used mounted in or on a model. Such devices must be **EDIC-approved**. ~~commercially available with an altitude measuring frequency of at least 2 Hz and display equipment like a computer, tablet or smart phone equipped with graphing software must be available to produce a time-altitude graph of the recorded flight. The responsibility of the use and correct functioning of such devices rests with the competitor.~~

The use of an altimeter is voluntary.

~~If the competitor is using an~~ **The** EDIC-approved altimeter ~~then this must be shown to the timekeeper before the flight for the timekeeper to record the serial number marked on the altimeter and to confirm that for the first additional flight it shows the empty memory indication~~

~~Competitors using altimeters which are not EDIC-approved must follow the following procedure. Prior to each fly off, participants with (reserve) models equipped with such recording devices being switched on, should position their model(s) at ground level no more than 5 metres from their assigned starting pole. Upon instruction of the contest director, the participant will have to lift the model(s) from the ground and hold the model(s) elevated a number of times, the number and duration of these movements is decided by the contest director thereby generating a unique altitude-time signature.~~

In case of a flight-time related dispute **the flowing procedure should be followed:** ~~the competitor automatically may proceed to the following fly off round Any dispute must be marked on the competitor's scorecard for that fly off round. After the last fly off but no later than 30 minutes from the end of the last fly off, The jury will ask the competitor who filed the dispute to read out the altimeter data and present the altitude versus time graph. The jury will check the signature in the graph and determine the flown time for the fly off round for which a dispute has been filed. If the moment of launch, landing and flight time can be clearly established and the correct signature is present, the flight time will be recorded for the final result. If any one of these conditions is not met, the timekeeper's time of the disputed fly off round will be used as the score for that fly off round. If this time is less than the maximum flight time set for that particular fly off round, any subsequently flown fly off rounds will be cancelled for that competitor.~~ **All challenges must be successfully resolved prior to the next fly off in order for the competitor to advance.**

In case of a protest related to the altimeter generated flight time, the altitude graphs must be made available to the jury. Failure to do so will result in the timekeeper's recorded flight time being the official score.

*Reason: This rule was put into the sporting code before EDIC approved altimeters were available. It was only practical to perform the CD directed altitude signature procedure before flyoff flights. EDIC approved units are now ubiquitous. They are readily available from more than one manufacturer and are inexpensive.*

*The old language detailing the altitude signature can now be removed. The procedure for flight-time related disputes is being better understood and is being put into practice at more and more competitions around the world. Using EDIC approved altimeters makes remedying a dispute a short and simple process. As such there is no longer a reason to limit challenges to flyoff flights only. The increased speed at which these challenges can be resolved also means that it is no longer necessary to allow competitors to advance to the next fly off round and then confirm the max or retroactively eliminate the subsequent score.*

**f) General Regulations for Free Flight Contests**

**F1 Subcommittee**

**F1.2.7 Electronic evidence of flight time**

Rule Change: Modify F1.2.7

In Fly-offs, **altimeters approved by EDIC** ~~electronic time and altitude recording devices may be used mounted in or on a model and used~~ Such devices must be commercially available with an altitude measuring frequency of at least 2-Hz and display equipment like a computer, tablet or smart phone equipped with graphing software must be available to produce a time-altitude graph of the recorded flight. The responsibility of the use and correct functioning of such devices rests with the competitor.

The use of an altimeter is voluntary.

~~If the competitor is using an EDIC-approved~~ **The** altimeter then this must be shown to the timekeeper before the flight for the timekeeper to record the serial number marked on the altimeter and to confirm that for the first additional flight it shows the empty memory indication ~~Competitors using altimeters which are not EDIC-approved must follow the following procedure. Prior to each fly off, participants with (reserve) models equipped with such recording devices being switched on, should position their model(s) at ground level no more than 5 metres from their assigned starting pole. Upon instruction of the contest director, the participant will have to lift the model(s) from the ground and hold the model(s) elevated a number of times, the number and duration of these movements is decided by the contest director thereby generating a unique altitude-time signature.~~

~~In case of a flight time related dispute, the competitor automatically may proceed to the following fly off round. Any dispute must be marked on the competitor's scorecard for that fly off round. After the fly off but n~~**No** ~~later than 30 minutes from the end of the fly off round, the jury will ask the competitor who filed the dispute to read out the altimeter data and present the altitude versus time graph. The jury will check the signature in the graph and determine the flown time for the fly off round for which a dispute has been filed. If the moment of launch, landing and flight time can be clearly established and the correct signature is present, the flight time will be recorded for the final result. If any one of these conditions is not met, the timekeeper's time of the disputed fly off round will be used as the score for that fly off round. If this time is less than the maximum flight time set for that particular fly off round, any subsequently flown fly off rounds will be cancelled for that competitor. In case of a protest related to the altimeter generated flight time, the altitude graphs must be made available to the jury. Failure to do so will result in the time keeper's recorded flight time being the official score.~~

***Reason:** To require that only altimeters approved by EDIC may be used. This removes the complex procedure for non-approved altimeters to obtain a signature on the altitude trace before the flight. A further requirement is to examine the altitude trace after each flight, rather than allowing multiple flyoff flights to be recorded before examining the results, which results in a more complicated review process.*

**g) 3.4 Class F1D Indoor Model Aircraft**

**F1 Subcommittee**

**3.4.2 Characteristics of Indoor Model Aircraft F1D**

Rule Change: Modify the final paragraph of 3.4.2

For Open Internationals (not Championships) in Category 1 (less than 8m) and Category 2 (from 8 to 15 m) sites, the organiser may specify that the rubber motor (0,4g) must be replaced by a rubber motor of maximum weight 0,2g and a spacer (free length but minimum weight 0,2g). This must be announced in advance in the competition bulletin. The reduced motor and the spacer are to be checked ~~before or~~ after the flight as in F.1.3.2.

Reason: *To apply the same approach already proposed for F1.3.2.*

**h) F1.1 Organisation Requirements for Free Flight Contests**

**F1 Subcommittee**

**F1.4.2 Age Classification F1D for competition flights**

Clarification: Modify F1.4.2

At F1D World and Continental Championships, when juniors and seniors fly together in the same site and at the same time, the junior competitors who are members of a national Senior team will appear in the individual senior classification but must also be considered in the national Junior team and included in the Junior individual classification ~~as far as~~ if the Junior national team is not complete. **For such competitors, the junior helper and steering rules are applied.**

The names of the junior national team members must be declared before the beginning of the competition.

Reason: *To clarify the situation when a junior is flying in a senior team and may also be considered for the junior team*

**i) F1.1 Organisation Requirements for Free Flight Contests**

**F1 Subcommittee**

**F1.3.2 Processing Indoor Model Aircraft for competition flights**

Rule Change: Modify F1.3.2

Indoor free flight duration models must be processed before or after each flight to confirm that the model meets the dimensional and weight requirements of the class and to confirm the FAI unique number of the competitor is marked on the model. Rubber motors are to be weighed ~~before or~~ after the flight to confirm that these are within the specification.

Reason: *To adopt the most efficient organisation of processing with the models checked before or after a flight by choice and the rubber motors only after the flight.*

**j) F1.1.1 Organisation Requirements for Free Flight Contests**

**F1 Subcommittee**

**F1.1.2 Provision of Timekeepers**

Rule Change: Modify F1.1.2



### **F1.1.2 Provision of Timekeepers**

- a) In **Outdoor** Free Flight events, provide each starting position with two time keepers in Championships. At Open Internationals each starting position should be provided with at least one timekeeper, but if the organisers are unable to provide official timekeepers they must announce this in advance in a bulletin. For fly-offs an additional timekeeper must be provided (i.e. three for Championships, at least two for other contests). All time keepers must have binoculars. Each starting position must be equipped with at least one tripod for supporting binoculars.
- b) In F1E Championships each country and the reigning champion, if not a member of this national team, is allotted a pair of timekeepers for the first round by draw. In successive rounds all countries change timekeepers by moving one down the list of timekeepers. In other F1E competitions timekeepers are allocated to competitors in the order in which they arrive at the starting line.
- c) **In F1D Championships two timekeepers may be provided for each national team and each defending champion, with different timekeepers for each round. Alternatively a central pool of timekeepers may be provided and two timekeepers are allocated to competitors in the order in which they arrive to request timekeepers.**

*Reason: To economise on the number of timekeepers particularly at sites where there are limits on the number of models allowed in the air at any one time.*

## **k) Annex 3 A guide for the organisers of FAI indoor free flight competitions**

**F1 Subcommittee**

### **3.A3.5 Model Checking**

Rule Change: Modify item (3) of 3.A3.5

- 3) The third phase of checking requires that during the competition the organiser should measure the relevant characteristics of each model when it is used for an official flight. For F1D this means checking model weight, **wing chord, tail span** and wingspan before **or after** the flight and the weight of the rubber motor ~~before or~~ after the flight (F1.3.2).

*Reason: Consistent with the changes proposed for F1.3.2 and to clarify the quantities to be checked for F1D.*

## **l) Annex 4 Free Flight Ranking**

**F1 Subcommittee**

### **1.0 Classes**

Rule Change: Modify (1) as shown

F1A, F1B, F1C, F1E, **F1Q**

*Reason: To add F1Q to the ranking now that there area considerable number of competitions for this class and it has also reached Championships status.*

m) **Class F1Q Electric Power Model Aircraft**

F1 Subcommittee

F1Q

3.8.7 Duration of Flights

Rule Change: Modify paragraph

**3.8.7. Duration of Flights**

~~The maximum duration for each flight shall be three minutes.~~

**The maximum duration to be taken for the official flights in world and continental championships is four minutes for the first round and, if conditions allow, for one other round and three minutes for the other rounds. In other international events a maximum of three minutes will be used for all rounds unless different durations (not exceeding five minutes) have been announced in advance in the contest bulletin for specific rounds.**

In the event of model recovery problems or to suit meteorological conditions, the Jury may permit the maximum for a round to be changed **and to decrease the maximum energy allowance to 2 joules per gram and the maximum motor run to 20 seconds.** Such a modified maximum **or energy allowance** must be announced before the start of the round.

**Maximum durations greater than three minutes should only be used for rounds at times when wind and thermal activity are expected to be at a minimum.**

*Reason: With F1Q now a championship class this brings the rule into line with F1A F1B F1C with the additional freedom to change energy limit as well as maximum.*

n) **Class F1Q Electric Power Model Aircraft**

F1 Subcommittee

F1Q

3.8.2 Characteristics

Rule Change:

*Add text to paragraph 5 of 3.8.2*

**3.8.2. Characteristics**

Nickel Metal Hydride (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.

The motor run time will be determined by a maximum energy amount. In addition, motor runs over 30 seconds are regarded as overruns. The energy budget of each model is 3 joules per gram of the total weight. For energy calculations, weight exceeding 550 grams is to be ignored. **The contest organizer can reduce the allowed energy amount to 2 joules per gram and the motor run to 20 seconds in specific rounds or all rounds if this has been faannounced in advance in the contest bulletin.** (remainder of 3.8.2 unchanged)

*Reason: To give the contest organiser the option to restrict performance to reduce distance flown and limit the number in the flyoff.*

**o) Class F1Q Electric Power Model Aircraft**

**F1 Subcommittee**

F1Q

3.8.8 Classification

Rule Change: Modify as shown

**3.8.8. Classification**

- a) The total time for each competitor for each of the official flights defined in 3.8.3 is taken for the final classification.
- b) In order to decide the individual placings when there is a tie, additional flights shall be made after the last flight of the event has been completed. The maximum time of flight for the first of the deciding flights shall be ~~five~~ **six** minutes and the maximum time of flight shall be increased by two minutes for each subsequent flight. **The maximum energy allowance is 2 joules per gram and the maximum duration of motor run is 20 seconds.**
- c) The organiser will establish a 7 minute period during which all fly-off competitors must launch their model. Within these 7 minutes the competitors will have the right to a second attempt in the case an unsuccessful first attempt for an additional flight according to 3.8.5. Starting positions will be decided by draw for each fly-off.
- d) In the event of exceptional meteorological conditions or model recovery problems, the Jury may permit the maximum for a round to be changed from that given under 3.8.8.b b and decrease the maximum energy amount to ~~2 joules per gram~~ and the motor run time to ~~20 seconds~~ according to conditions.

*Reason: To bring the maximum time for the first flyoff from 5 minutes to 6 minutes. This 2 minutes above the longest maximum for the rounds which it has been proposed that the longest maximum in the rounds be increased to 4 minutes. It is also consistent with F1A F1B F1C.*

*To force the use of a 2 joules/20seconds limit for the flyoffs which is currently optional. The modification to (d) leaves the option of a limit below this level.*

**p) New ANNEX V**

**AERONAUTICAL UNION OF SERBIA**

F1N – Indoor hand launching gliders

Annex V - Rules for CIAM F1N International Series Competition

Rule Change:

*Add the new ANNEX V to SC 4 Volume F1*

**ANNEX V – RULES FOR CIAM F1N INTERNATIONAL SERIES COMPETITION**

**• Introduction**

The “CIAM F1N Indoor Series” International Series, later only “F1N Series”, is a set of Open International events on which at the end the winner will receive a trophy and the title Winner of the F1N Series - F1N Champion for the current year.

- **Competitors**

All competitors in the specified F1N open international contests are eligible for the F1N Series.

- **Contests**

Contests included in the F1N Series must appear on the FAI Sporting Calendar and conducted according to the FAI Sporting Code (FAI SC 4 Volume CGR and FAI SC4 Volume FF Section F1N). The contests to be counted for the F1N Series in one year are to be nominated at the CIAM Bureau Meeting at the end of the preceding year and are to be indicated on the FAI Contest Calendar.

The Bulletin No1 of each F1N Series contest must be published not later than 30 days before the start of the competition by sending it to the Chairman of the F1N Series Board and the F1N Series Coordinator. In this bulletin all necessary data must be published: date and venue of the event, time schedule, data on the competition hall and all other important conditions necessary for correct organization and judging in accordance with the CIAM standards for international competitions Category 2. Names of the FAI Jury members must be announced before beginning of the contest. President of the FAI Jury must be from another country.

- **Points allocation**

Points shall be allocated to the competitors after each competition according to their placings and results as given in the following formula below:

$$C_{points} = 100 * \left( \frac{X}{Y} \right) + B$$

Where:

$C_{points}$  = points awarded to the competitor

X = competitors score

Y = winners score

B = bonus points based on the competitor's placing

Placing	1	2	3	4	5	6	7	8	9	10
Bonus	25	19	14	10	7	5	4	3	2	1

- **Classification**

The F1N Series results are determined by considering the total number of points obtained by each competitor in the F1N Series events. Each competitor may count the result of all competitions, except that only one competition may be counted from each country in Europe (taking the better score for any European country in which he has scored in two or more competitions). To determine the total score, up to three events may be counted, selecting each competitor's best results during the year. In the case of a tie the winner will be determined according to the following scheme. The number of events counted will be increased from three, one at a time, until the winner is obtained. If this does not separate the tied competitors then the winner will be determined by considering the points obtained in the best three events multiplied by the number of competitors flying in each event. The winner is the one with the greatest total thus calculated.

- **Awards**

The winner earns the title of the Winner of the F1N Series – F1N Champion. Certificates, medals or trophies may be awarded as available.

- **Communications**

The F1N Series Coordinator (who is approved according SC4 Volume CGR par. C 2.2.3.h) should receive the results of each contest in the F1N Series and then calculate and publish the current F1N Series positions. These should be distributed to the F1N community and should also be available to any interested bodies or individuals. Latest results will also be sent to the organizer of each competition in the F1N Series for display at the competition. Final results of the F1N Series are sent to the FAI, National Airsports Controls and will be posted at the CIAM website.

Each F1N Series Contest Organizer is obliged to send results of his contest to the Coordinator of the F1N Series and to another person (if nominated) responsible to administer, the event within three days after the contest has ended. The current F1N Series positions will be calculated and distributed within the next seven days.

- **Promotion of indoor contests**

If the time frame and technical conditions allow, because of promotion of indoor contests, competitions of the F1N Series may be completed with a competition of some other indoor class.

*Reason: Class F1N FF Hand Launch Gliders is one of the CIAM Classes for many decades. Some 15 years ago it became the official class. At the beginning it was popular in different parts of the world but recently it is popular in Europe, particularly in its southern part. F1N is now being flown in BIH, CRO, GRE, POL, ROU, SLO, SRB and SVK and in some of these countries the national championships are organized. F1N is one of the best tools for promotion of aeromodelling. It is cheap to build models and to organize competitions and is convenient for the competitors of all generations from very young to remarkably old (from 7 to 77 of age). F1N competitions can be organized in every town or village where a school gym exists and can be flown in all four seasons.*

*F1N contests were registered through the years in NAC and/or FAI Contest Calendars but these events were flown separately one by one and no firm connections were existing between the competitors and the organizers, which is important for progress and development of each class. To overcome this problem the F1N fans and supporters from BIH, CRO established some 7 years ago an unofficial F1N league and started to publish intercountry ranking after every event. This raised interest, participation and popularity of the class very much. Participation in every event is ranging from 30 to 90 competitors in four age classifications overall, young juniors (8 to 12), juniors (13 to 18) and female.*

*To increase number of countries interested in this class this autumn is established a Viber group "Initiative for F1N", where the organizers of NAC and FAI F1N contests supported by NACs officials are gathered. The result of the work of this group is: a) a list of all F1N contests to be registered to NAC and/or FAI contest calendar 2024 is made so to avoid any date clashes; b) a proposal to establish an CIAM Open International F1N Series of competitions is given and c) a proposal for the Rules for CIAM F1N Open International Series is written and herewith the NAC of Serbia submits it to CIAM for approval. All group members are sure that the approval of these rules and the F1N competition series sanctioned by CIAM shall remarkably increase the interest in this class and reliability of contest organization and so allow much better and quicker attraction of the youngsters to aeromodelling and at the same time to prolong the activity of model veterans in aeromodelling.*

**q) Annex 1 Rules for Free Flight World Cup**

**F1 Subcommittee**

4 Point Allocation

Rule Change: Insert additional text in Paragraph 4 (b)

- b) Points are awarded only to competitors **who have completed at least three official flights and** are in the top half of the results list (if N is the number of competitors, then points are awarded only for places 1 to N/2, rounding up when necessary in calculating the N/2 place, denote this number by H).

*Reason: To ensure that those flying only one or two flights cannot be considered for points. This also means that competitors in events which are terminated prematurely after only one of two flights will not be eligible for World Cup points.*

## 14.3 Section 4 Volume F2 – Control Line

### a) Annex 4K

### F2 Subcommittee

#### F2G

Rule Change – The purpose of this proposal is to reduce speed on a safe level while maintaining structural regulations of the class. Modify 4.2.K to reduce in flight power available.

~~a) Maximum of load of power supply — 42V~~

**a) The power source shall consist of any kind of rechargeable batteries (or secondary cells), the maximum no load voltage must not exceed 26 Volts (max. tolerance +0.2 Volts). In case the voltage is measured, this shall be done at the moment the preparation time for the pilot starts. After the measurement has been taken, the pilot is allowed 10 minutes preparation time before he is called to the start. If the model aircraft carries more than the allowed number of cells as power source for the motor or the voltage exceeds this voltage, the competitor is disqualified from that flight.**

~~b) Maximum weight of battery (or batteries) — 200 g (incl. battery cables and connectors)~~

**b) Battery type: any type of battery with a maximum of 6 cells in series. Cells in parallel are not permitted. The maximum weight of the battery pack is 200 g. The weight of the battery pack includes soldering, insulation, cables and connectors. Mechanical or chemical modification of the individual cells, e.g. to reduce their weight, is not allowed except that insulation sleeves of individual cells may be changed.**

*Reason: Under the 2023 rules of the F2G class and in summer 2023, speeds in excess of 310 km/h were reached several times by Swiss F2G pilots. In one case, a recorded speed of 327 km/h may possibly have reached the limits of both the physical strain on the pilot and of the technical safety.*

*The Swiss Control Line Commission therefore feels compelled, with this proposal, to demand a limitation of the maximum battery voltage for F2G from the current 42 volts to 26 volts for safety reasons. This with a maximum number of cells of 6. The proposed value of 26 volts, with otherwise unchanged rules, allows speeds in the order of 290 Km/h. The change is to come into force on 1 January 2025.*

#### **Motivation**

As part of the F2G exercise, we think that the speeds reached must remain comparable to those of the F2A in order to remain affordable by the greatest number of pilots possible and also allow practice with sufficient physical safety as well as an adequate technical progress margin. The speeds reached in 2023 are greater than 325 km/h, which motivates the proposal.

For this, we recommend aiming for maximum performance of around 310 km/h.

Our approach is to propose a change in the regulations that is simple to apply but which nevertheless allows speeds close to 300 km/h to be achieved so as to leave room for improvement.

**Axiom:**

As a starting point, it should be noted that whatever the manufacture, aesthetics or efficiency of the flying machine (plane), the main vector that characterizes the speed of an F2G is the power that we are able to deliver to the motor shaft (NB also valid for the F2A). The cables representing more than 80% of the resistance, limitations on the geometric data of the aircraft would not be of interest.

**Proposal:**

The power versus speed curve shows us that for a target speed of 300 km/h and 0.45mm cables, the power at the motor shaft should be around 1900W. With the hardware available today, this gives us a power at the battery level of about 2600 W. This value is confirmed by the flights carried out in 2022 and 2023.

The electrical power  $P$  used in airplanes can be expressed according to the law  $P [W] = U [V] \times I [A]$

Knowing that today the maximum usable currents in our motors are of the order of 125 A, it becomes possible to evaluate the maximum voltage that we could recommend according to:

$$P = U \times I \Rightarrow U = P / I$$

$$U = 2600 [W] / 125 [A] = 20.8 [V]$$

This voltage of 20.8 V corresponds to an operating voltage under load, in propulsion. Knowing that the operating voltage of LiPo batteries is about 3.4 V at high load (high C), this allows us to calculate the number of elements (cells) to be used according to:

$$20.8 / 3.4 = 6.11 \Rightarrow 6 \text{ LiPo cells}$$

In nominal voltage, this gives us

$$6 \times 4.35 = 26.1 \text{ V rounded up to } 26 \text{ V}$$

NB: 4.35 V/Cell is the potential value with LiPo HT batteries

**Checking limits:**

For 310 km/h you need 2900 W

- which represents 3.8 V / element under 125 A  $\Rightarrow$  not achievable today with LiPo batteries.
- which represents 142 A under 3.4 V which is not achieved / supported by the motors or very complex today because it represents a 30% increase in power dissipated in the motors and induce a significant risk of burning the motors under  $RI^2t$

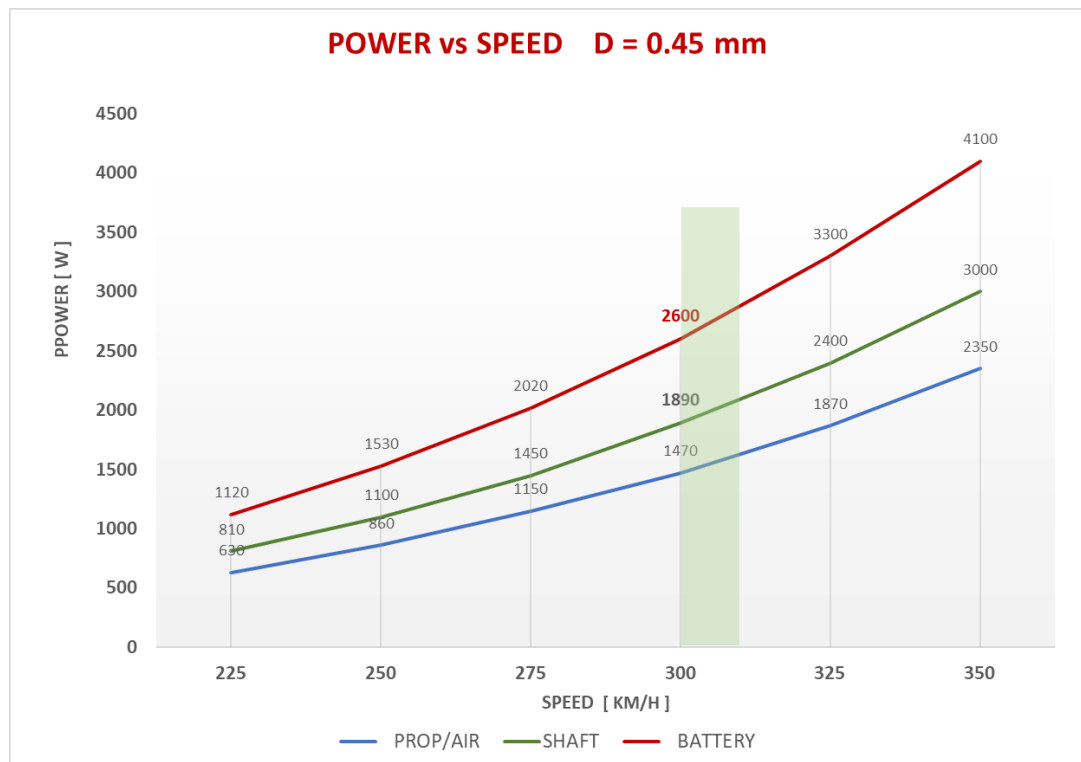
**Conclusions:**

The move to 26V max will lead to an effective reduction in speeds while leaving potential for improvement with a technical ceiling close to the values achieved today by the F2A. **Goal achieved.**

A return to a cable diameter of 0.40mm is not desired.

**Diagram of power vs speed**





## b) Annex 4K

Switzerland

### F2G

Rule Change:

After the introduction as a provisional FAI class, the F2G participants have managed to achieve very remarkable results in an astonishingly short time. The speed of 327 Km/h flown in Landres in July 2023 clearly demonstrates the extraordinary potential of electric propulsion for control line speed models and the successful demonstration at the World Cup competition in Poland on August 23rd 2023 also underlines the future sustainability of the F2G class.

At this point in time we now find that the current FAI rules for upgrading a very high-tech class to "official" are both unrealistic and in this case prohibiting the worldwide spread of a promising new electric flight class in aeromodelling.

This situation is possibly discriminatory against successful pilots. **The F2 Subcommittee hereby proposes to upgrade the F2G class from "provisional" to "official" by 1 January 2025.**

*Reason: None provided*

## c) Annex 4D F2D Judges Guide

F2 Subcommittee

### F2D

Clarification – To make it more clear what concerns penalties and Foot in – Foot out

a) **Judges Guide 4.4.13.A.a**



**Pilot foot on pilot circle line.**  
**No penalty**



**Pilot foot outside pilot circle line.**  
**Penalty**

**Judges Guide 4.4.13.C.p**



**Mechanic foot on flying circle line.**  
**No penalty**



**Mechanic foot inside flying**  
**Disqualification**

*Reason: Clarification*

d) **Annex 4D F2D Judges Guide**

**F2 Subcommittee**

**F2D**

**4.3 Combat Site**

Clarification – To make the circles more visible.

a) Circles **should be made in white color using** are best marked using white paint, or chalk **or** but plastic strip. ~~can be used except for the pilots' circle.~~ If plastic strip is used, the organizer must make sure it is laid out and fastened in such a way that it will not cause a trip hazard to pilots or mechanics.

**To improve the visibility of the marking, a second line of a different colour can be added to the circles. To help red/green colour-blind pilots, mechanics and officials, red lines should never be used on grass.**

*Reason: Clarification to make circles more visible*

**e) F2D – CL Combat**

**NAC AUSTRIA**

**F2D  
4.4.5 b**

Rule Change: Improvement for incomplete teams (1 or 2 pilots) to find a mechanic, if a team does not have a mechanic of its own.

Incomplete Teams (1 or 2 pilots) may use a mechanic listed for the Team, or the other pilot (if any) or any other member of the National Team. They may also choose to use a mechanic from the "Mechanics Pool".

**If no such person can be found, the pilot is entitled to use mechanics of other incomplete team(s), or any person holding a valid FAI License. However, F2D pilots competing at the respective event may not be chosen.**

**To encourage F2D mechanics to register into the "mechanics pool" some incentives may be provided to them by the organizers.**

*Reason: During the 2022 World Championships we have had such a situation of a single pilot's team without mechanics at all. The only solution that allowed these pilots to participate at the Championships was the use of pilot/mechanic(s) from another active teams and a pilot of different NAC participating in another class. At the initial Team Manager's meeting, this solution was offered by two different Team Managers and accepted unanimously as well as supported by the FAI officials.*

**f) 4.4 F2D Combat + Annex 4D F2D Judges Guide**

**F2 Subcommittee**

**F2D  
4.4.15 Individual and Team classification**

Rule Change/Clarification – To clarify how to make draws with odd number of pilots.

**F2D Rules 4.4.15.d**

d) Each round shall be randomly drawn (subject to 4.4.15.e **and 4.4.15.f**) from the competitors remaining in the competition.

**Judges Guide 4.4.15.d and f**

**A round that includes a non-flying competitor from a previous round shall be drawn in one phase with the non-flying competitor from the previous round flying as first pilot in heat 1 and also first pilot in the last heat (if the number of competitors permit it and he is still in the contest). If he cannot fly in the last heat due to the number of competitors he will fly first and last in the next round and so on until he has caught up.**

Reason: To clarify how to make draws with odd number of pilots

**g) Annex 4F Control Line Organiser Guide**

**F2 Subcommittee**

**6.2 Layout**

Rule Change:

**6.2.2**

**In order to assess the quality of the flying circles when evaluating an application for a first category event, the chairman of the F2 subcommittee shall inquire with F2 flyers from the organizer's nation and/or international competitors knowing the projected site in the country of the applicant. Upon a request and to assist in the design of the circles for practice and contest use, the Chairman of the CIAM F2 Subcommittee shall provide the organizer of an F2 first category event with a list of knowledgeable experts.**

**6.2.2.1**

**No later than 90 days prior to the start of an F2 first category event, the organizer must submit a written and documented report to the Chairman of the F2 Subcommittee on the design of the circles for all categories in accordance with the rules.**

**6.2.2.2**

**The Subcommittee F2 is, at its discretion, entitled to verify compliance with the rules on the layout of the circles by sending, prior to the event, its own advisor to the location of the event. The dispatch of the advisor must take place in consultation with the organizer. The costs for travel and accommodation of the advisor must be borne by the organizer and must be reimbursed to the advisor before the start of the event.**

**6.2.2.3**

**The F2 Subcommittee may, at its discretion, waive the requirement of a pre-contest sites condition report and/or to send an advisor to the venue of the event. The chairman of the subcommittee will inform the organizer accordingly.**

Reason: Since 2009 repeated failure of several F2 first category event organisers to provide competitors with rules-compliant flight circles for practice and contest flying

**h) Annex 4F Control Line Organiser Guide**

**F2 Subcommittee**

**F2B**

**6.5.2. Aerobatics**

Rule Change: Modify the first sentence in 6.5.2.3

The diagram at Appendix II shows the recommended dimensions for contest **and practice** flight circles and the recommended markers to be erected **at first category events** every 1/8th of a lap interval indicating the height of the horizontal base which lies 1.5 m above the centre of the circle. As a minimum standard, all contest flight circle/s shall have the centre (pilot's) circle and outer diameter circle clearly marked with lines of 10 cm width. The

erection of a safety fence (or other suitable barrier) around the outside of all contest flight circles as shown below is also highly recommended.

Reason: *The installation of 45° marker boards, which has so far only been recommended, has proven to be very effective and their installation is appreciated by pilots and judges. The F2 Subcommittee, therefore, supports the mandatory installation of 45° marker boards at first category events.*

**i) F2B - 4.B.12. Results Awareness**

**ITALY**

Rule Change: Delete

**4.B.12 Results Awareness:**

~~In order to prevent influence of any kind, no judge should look at tabulated results scores and/or at contestants' "placing" until after the completion of a contest. Neither should judges discuss individual official flights, nor the execution of maneuvers; nor the marks awarded, nor the tabulated results (placing) or scores, with anyone at all during the whole contest. This includes discussions with the other judges, with any contestant, with any Team Manager, and with all spectators. The Head Judge should ensure that all members of the judging panel are aware of this requirement and that they all observe these requirements throughout the contest.~~

*Reason:*

*This recommendation is useless, now it is common that the result and even the score sheet detailed are available by Organization or on personal Social Network pages (e.g. Internet, Facebook, Twitter, Instagram, Whatsapp, etc.) where everybody can have access to the result in real time.*

*At the last EuroChampionship in Poland some people observed that a Judge after every maneuver looked to his smartphone before to write vote... No evidence that he can verify the votes of other judges and adapt his vote... but also if he waits for a message for working or family needs, this behavior is unacceptable: judges must pay the utmost attention to carrying out their duties.*

*Considering that the prohibition of smartphones cannot be applied, we have to trust on the Judge professionalism and give a strong reminder of their fairness... and fair behaviour can be controlled through analysis of the score sheets.*

**j) F2B - Annex 4F Control Line Organiser Guide**

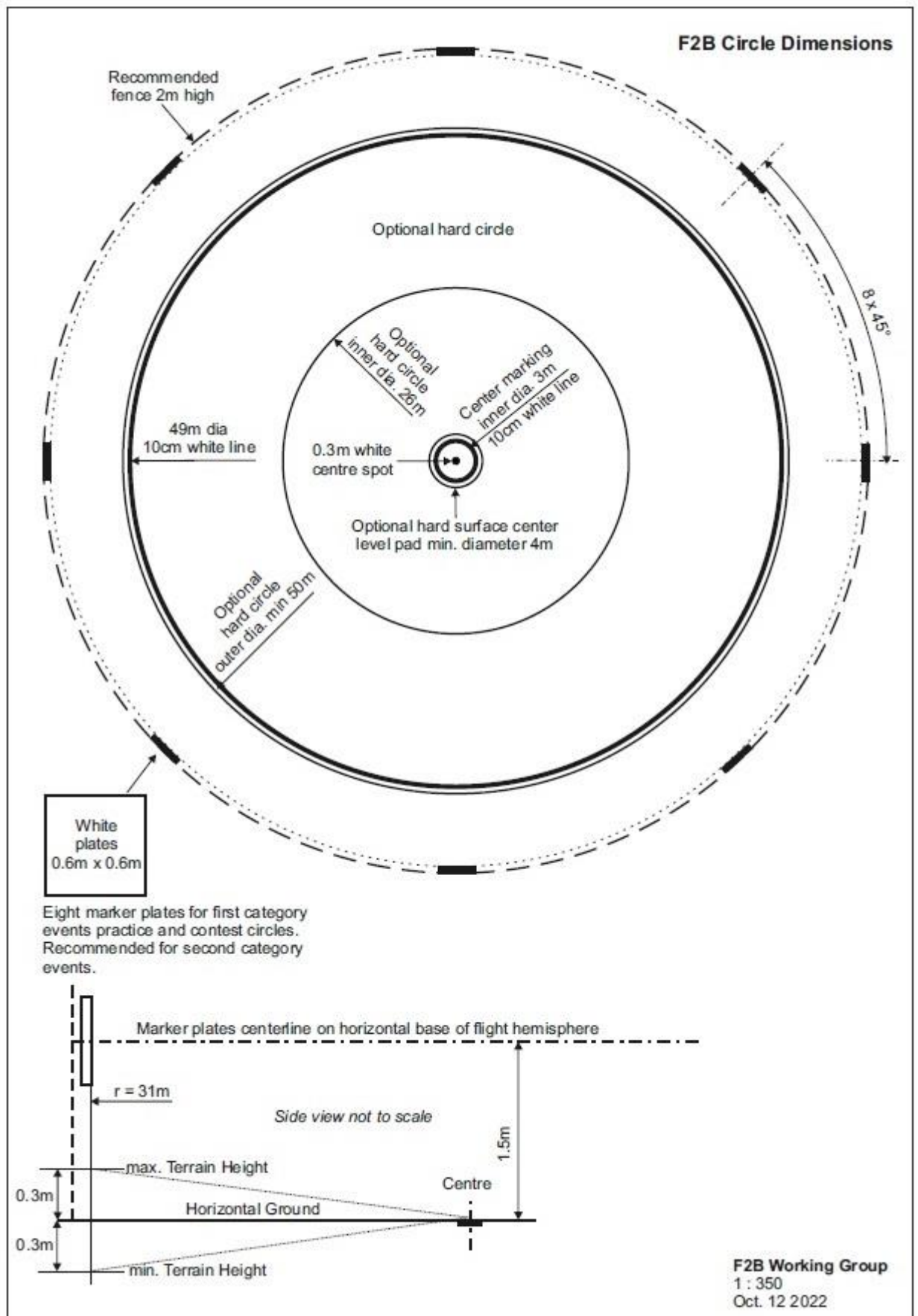
**F2 Subcommittee**

**APPENDIX II Aerobatics Circle Dimensions**

Rule Change/Clarification:

Annex F2B Circle Dimensions.pdf following:

Reason: *Markers plates no longer recommended but compulsory at first category events.*



## 14.4 Section 4 Volume F3 – Pylon

### a) F3E

### F3 Pylon Subcommittee

#### 5.3.2. Technical Specifications of Pylon Racing Aeroplanes

Rule Change: Add the following (bold underlined) text, delete the strike through sentence

5.3.2.3. Each competitor may process and use a maximum of three models in a contest. The competitor may combine the parts of the model aircraft during the contest, provided the resulting model aircraft conforms to the rules and that the parts have been checked before the start of the contest. There is no limit to the number of used motors, **propellers**, batteries **and RC equipment**.

*Reason: Propellor adjustment are an essential part of F3E racing, to adapt the plane to the environmental condition. Propellers can get damaged during landing and must be replaced for safety in that case.*

*Repair of failing RC equipment has so far been allowed during competitions, it is good to confirm this in the regulations*

### b) F3E

### F3 Pylon Subcommittee

#### 5.3.2.5. Weight of model

Rule Change: Add the following (bold underlined) text, delete the strike through sentence

5.3.2.5. Weight of model

Minimum weight ready to fly: 1,000 g

Maximum surface loading 65 g/dm<sup>2</sup>

In case of the use of stickers the maximum weight **and surface loading** of the models including stickers will be increased by 6 grams. **will be calculated after subtracting the weight of the stickers. In case the sticker are applied asymmetric, the competitor may use counterweights to correct the model center of gravity and these counterweights will also be subtracted from the total weight.**

*Reason: Organiser supplied ID stickers maybe required in some events, these have a discernible weight impact on the F3E model. This rule takes account of this and allows for transverse balance to be maintained.*

### c) F3E

### F3 Pylon Subcommittee

#### 5.3.2.7. Augmented stability systems and similar.

Rule Change:

The radio equipment shall be of the open loop type (i.e. no automated electronic feedback to the control surfaces either internally or from the model aircraft to the ground). Systems or components which can move control surfaces of the aircraft or which can move masses in the aircraft based on input other than pilot input from their transmitter are not allowed to be installed in the aircraft.

Permitted:

1. Control rate devices that are manually switched by the pilot.
2. Any type of transmitter button or lever, switch, or dial control that is initiated or activated and terminated by the competitor.
3. Manually operated switches or programmable options to couple and mix control functions.
4. Devices for position tracking solely for the purpose of an automated tracking and scoring system for the competition event.
- 5. Sound or vibration alarms or signals generated by an external device, operated by the caller. The volume of the device sound should not exceed normal caller voice.**
- 6. Sound or vibration alarms and signals generated by the transmitter, audible or feelable by the pilot, not controlling the model directly. The volume of the device sound should not exceed normal caller voice.**
- 7. Motor RPM control at the start of the motor, programmed in Tx or ESC.**

Reason:

*These rule amendments clarify current practise.*

**d) F3E**

**F3 Pylon Subcommittee**

**5.3.5.1. General**

Rule Change:

a) Limitation of energy will be by an electronic limiter that stops the **energy supply to** the motor: max 1000 Wattmin.

Reason:

*A wind milling motor is allowed under limiter activation according to EDIC regulations.*

**e) F3E**

**F3 Pylon Subcommittee**

**5.3.5. 3. Use of limiters in competition**

Rule Change:

The organiser can use two systems of use of limiters. Only one of these two systems can be used in one contest.

The organiser must decide which of these systems he will use and indicate this clearly in the invitation:

- 1: Every competitor uses his own limiter
- 2: The organiser provides for every competitor two (2) limiters, these will be drawn by competitors ~~either every day or before every round.~~

Reason:

*There is not enough time to change a limiter every round, they can be built into the model in a place not so easy to reach and reconnect.*



**f) F3E**

**F3 Pylon Subcommittee**

**5.3.11 Race from Start to Finish**

Rule Change:

**5.3.11 Race from Start to Finish**

j) An early start up to 2 seconds (the model passing the start line before the starting signal) or a start in a wrong direction will be penalized as an infringement. **At a start more than 2 seconds early, the team will be disqualified from that heat and rule g) is not valid.**

Reason:

*With current rules it is advantageous to start 9 seconds early and have the 10% infringement.*

**g) F3T**

**F3 Pylon Subcommittee**

**5.5.18 Race from Start to Finish**

Rule Change:

**5.5.18 Race from Start to Finish**

~~v) In case not all competitors use 2.4 GHz radio systems: For FM/AM radio systems each transmitting frequency appears in only one column. When making the draw, there must be appropriate FM/AM radio frequency separation. (20 kHz, see 1 A.5T.3)~~

Reason:

*This rule is redundant due to the exclusive use of spread spectrum RC systems*

**h) F3D**

**F3 Pylon Subcommittee**

**A.5R.15 Transmitter Impound Supervisor**

Rule Change:

~~A.5R.15 Transmitter Impound Supervisor (1)~~

~~a) This person should be provided with a large rack or folding table, protected from the sun and rain, on which to collect and safeguard the contestants' transmitters.~~

~~b) Transmitters should only be handed back to those pilots who are on their way to the Ready Area. When returned to the Impound after each heat, the transmitters should be checked to ensure that they are switched off.~~

~~c) The Transmitter Impound supervisor shall operate a spectrum analyser or other adequate radio monitoring equipment for the purpose of detecting radio interference.~~

~~d) He must be equipped with a walkie-talkie or headset to enable him to communicate with the Starter and the Pit Boss...~~

~~e) In the case of detection of potential interference he shall immediately notify (by walkie-talkie or head set) both the Pit Boss and the Starter.~~

f) ~~The Transmitter Impound Supervisor may also be one of the people who helped with registration, inspection, or setting up the matrix.~~

Reason:

*This rule is redundant due to the exclusive use of spread spectrum RC systems*

i) **F3T**

**F3 Pylon Subcommittee**

**5.5 Class F3T – RC Semi-scale pylon racing with controlled technology aeroplanes.**

Rule Change:

Intention: This class is defined for semi scale pylon racing at a controlled level of technology in aircraft aerodynamic design, aircraft construction, propeller and power plant, with maximum safety. **Using where applicable, approved commercially available equipment.**

Rules strategy: The technical rules have the intention that speeds will not increase substantially over the years in order to maintain safety and controllability of model pylon racing aircraft. This is achieved by a limitation to approved models of a semi scale type, approved and unmodified engines plus exhaust systems. ~~and approved, propeller dimensions and materials.~~

**Commercial availability: An approved power unit or component/part is considered commercially available if the conditions below are met (components go to make up an assembly such as a power unit, parts are single items, for example a propeller is a part).**

**a. An identical power unit or component/part can be obtained within 45 days by any consumer at a price that is independent of who the consumer is. The source or supplier of power units or component/parts must be in the public domain i.e. has some kind of visibility in printed media that is publicly sold, has a website presence or is on open social media sources, and can accept payments from International customers.**

**b. If a power unit or component/part was once legal it is always legal, with two exceptions.**

**1.) The first exception is if this power unit or component/part is specifically made illegal by another rule.**

**2.) Commercial availability compliance issues will be brought to the attention of the F3 Pylon Approvals Chairman, at which time the Chairman will setup an investigation as to the availability. This process will be completed within 30 days of being raised to the F3 Pylon Approvals Chairman.**

**If commercial availability is not proven then the F3 Pylon sub committee will refer the case to the CIAM Bureau for judgement on legality of the power unit or component/part.**

The class is controlled by a special CIAM F3T Approvals Committee (F3T ApsCom) with a minimum of 5 experts from different countries, nominated by their NACs, which will advise on:

- Approval of F3T models
- Approval of F3T engines
- ~~Approval of F3T propellers~~

~~The names of the members of the F3T ApsCom will be published on the F3 Pylon Racing page of the CIAM web site.~~

The F3T ApsCom works under the responsibility of the CIAM F3 Pylon Racing Subcommittee.

Approved models, and ~~engines and propellers~~ power units will be published on the F3 Pylon Racing page of the CIAM web site.

The F3T rules and Annexes are similar to the F3D rules and Annexes (FAI Sporting Code section 4 – Aeromodelling Volume F3 Radio Controlled Pylon Racing) except for the technical specification of the models

Reason:

*In the F3T Pylon class there is a requirement for commercial availability of power units and components/parts. Currently there is no definition of what is commercially available, this rule defines commercial availability and sets out a procedure for compliance with the rule.*

*In other rule changes the approval process for propellers is removed, therefore we remove mention of propeller approval.*

*The names of the F3T approval committee for models and engines has never been published to prevent commercial lobbying by designers and manufacturers to obtain favourable decisions, therefore the removal of the 'The names of the members' requirement aligns with current practise.*

**j) F3T**

**F3 Pylon Subcommittee**

**5.5.6 Engine**

*Rule Change:*

The engine must be of the single cylinder reciprocating piston type, with a maximum total swept volume of 6.60 cm<sup>3</sup>. Propellers must rotate at the speed of the crankshaft. The engine shall have only one front air intake and one side exhaust.

Only engines approved by the F3T ApsCom are allowed. See Annex 5X for engine approval procedures and criteria.

Engine air intake shall be circular with a maximum diameter of 9 mm.

No modifications to the following parts of the engine are allowed other than as specified in A.5X.3.

- crankshaft
- crankcase;

- cylinder,
- piston, conrod, piston pin
- cylinder head,
- technology of the bearings. (Only standard size, single row, full steel ball bearings allowed for the crankshaft and only plain bearings allowed in the con rod).
- crankcase back plate.

It is not allowed to have a system on board of the aircraft to supply power to the glow-plug of the engine. All electrical connections to the engine's glow plug from a power supply must be removed prior to takeoff

**Changing combinations of cylinder jacking shims and head shims is permitted.**

**External maintenance repairs to an engines crankcase and exhaust are permitted so long as these repairs do not enhance the engines performance.**

*Reason: It is accepted that changes to the cylinder and head shim setups are part of the event but this was not specifically mentioned in the rules.*

*Engines get damaged in crashes and through extended use, so external repairs are permitted so long as they offer no performance increase to the engine.*

## k) F3T

## F3 Pylon Subcommittee

### 5.5.9 Propellers and spinners

Rule Change:

~~5.5.9.1 Propellers must be two-bladed with fixed blades.~~

~~The blades must be of equal length, area, and shape.~~

~~Composite resin continuous fibre construction propellers and metal propellers are not allowed.~~

Material:

~~Either wood or a chopped carbon fibre filled injection-moulded compound. The material of injection moulded propellers needs approval of the F3T ApsCom, Wood propellers may be modified from a commercial product or may be home made. A wood propeller shall be made from a single piece of wood and may be finished with a clear coating for the purposes of waterproofing or balancing only.~~

Dimensions:

~~Wooden propellers: no limits.~~

~~Injection moulded propellers: only commercially available stock carbon filled injection moulded propellers are permitted. The propeller shall have a minimum diameter of 7.4" (188 mm).~~

~~Only propellers approved by the F3T ApsCom may be used. A propeller once approved shall be eligible for competition so long as it remains commercially available. When the~~

~~production of an approved propeller type is terminated, this will be marked on the web site by adding the date of production termination. Such propeller type can be used for two more years after this date. Only propellers that carry the manufacturer's type and dimension are permitted. The recommended rpm limit for this type as given by the manufacturer must not be exceeded during flights. See Annex 5X for propeller approval procedures and criteria. Note: The approval of a propeller refers only to the manufacturer and type.~~

**The only permitted propellers are the following commercially available products.**

**APC 7.4x7.5C part no. LP07475C**

**APC 7.4x7.6C part no. LP07476C**

**APC 7.4x7.7C part no. LP07477C**

Under no circumstances can ~~the F3T ApCom~~ **CIAM** be held responsible for the safety of an individual propeller. In all cases, it is the competitor's responsibility to ensure that any propeller he uses is safe. Damaged propellers must not be used.

Changes to the propeller blades are not permitted, except for:

- a. One blade may be sanded on the top (front) side only for balancing.
- b. One side of the hub may be sanded for balancing.
- c. The shaft hole may be enlarged, but only as much as necessary to fit the engine crankshaft. The enlarged hole shall be concentric with the original hole.
- d. Edges and tips may be sanded, but only as much as necessary to remove sharp moulding flash.

Reason: *The APC propellers mentioned in the rule change are the defacto standard for the F3T class, however the old rule did allow wooden propellers and for other propellers to be approved.*

*The wood propellers might have created a combination of engine and prop that was disruptive to the stability of the class.*

*There is no need to approve propellers now, should the APC company cease production of these propellers (very unlikely) then the rule can be revised in another rule cycle.*

*The APC company are aware of the rule change proposal and are supportive of it.*

## 14.5 Section 4C Volume F3 - RC Helicopter

**Note : For all F3 – RC Helicopter proposals an early implementation day is requested by the S/C Chairman**

### Section 4 Volume F3 – RC Radio Control Model Helicopter

#### a) Section 4 Volume F3 Radio Control Model Helicopter

#### F3 Heli Subcommittee

#### F3C

#### 5.4.11 Classification

Clarification: Revise this paragraph.

Part of Competition	# of Competitors	# of Rounds	Classification	Ranking
Preliminary	All registered and qualified pilots	4	Sum of normalized points of each of the four rounds. Dropping the lowest result, only if there are at least 3 completed rounds	Determines the ranking of pilots classified 29... n
Semi-Final	Top 28 pilots of preliminary part of competition	2	Sum of normalized points of each of the two rounds plus the normalized result of the preliminary part of the competition. Dropping the lowest of any of these 3 results, only if there were 2 semi-final rounds completed.	Determines the ranking of pilots classified 15..28
Final	Top 14 pilots of semi-final part of competition	2	Sum of normalized points of each of the two rounds plus the normalized result of the semi-final part of the competition. Dropping the lowest of any of these 3 results, only if there were 2 final rounds completed.	Determines the ranking of pilots classified 1..14

The finals to determine the individual classification are only required for World and Continental Championships.

If the competition is interrupted, the final individual classification will be determined by counting all completed rounds and by calculating according to the table above.

All scores for each round will be normalised by awarding 1000 points to the highest scoring flight. The remaining scores are then normalised to a percentage of the 1000 points in the ratio of actual score over the score of the winner of the round. If only one round is possible then the classification will be based on that one round.

For example:

$\text{Points}_{(X)} = \text{Score}_{(X)} \text{ divided by } \text{Score}_{(W)} \text{ multiplied by } 1000$

Where  $\text{Points}_{(X)} = \text{Points awarded to competitor X}$

Score<sub>(x)</sub> = Score of competitor X

Score<sub>(w)</sub> = Score of winner of the round

Points (x) should be calculated to at least two decimal places and recorded (truncated) to two places after decimal point.

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

The team classification for World and Continental Championships is established at the end of the competition (after the final flights) by adding together the numerical final placings of the three team members using the full list of competitors unless there is a fourth **or a fifth** member of the team (who must always be a junior **and/or a woman**) in which case it will be the three best placed members. Teams are ranked from the lowest numerical scores to the highest, with complete three-competitor teams ahead of two-competitor teams, which in turn are ranked ahead of one-competitor teams. In case of a tie, the best individual placing decides the team ranking. (Ref: *CIAM General Rules*, C.15.6.2 i))

*Reason: It is shown that there is a missing line for minimal area of recovery devices in the sporting code. At the last WSMCh (Austin, Texas) it was observed that evidently heavy parts descended on recovery devices which were too small to safely descend them, thus this is a*

## b) Section 4 Volume F3 Radio Control Model Helicopter

### F3 Heli Subcommittee

#### F3C

##### 5E.6.11 Autorotations

Clarification: Revise this paragraph.

The manoeuvre begins and ends as announced by the caller. The end must be after the landing. Because the autorotation can contain several flying manoeuvres, the announced beginning can be before the engine is powered off or set to idle. The manoeuvre description must clearly state, when the engine has to be powered off or set to idle position. In order to obtain the maximum score, the MA must have executed the flying manoeuvres exactly as described in the manoeuvre description, and after the smooth landing the MA tailboom must be parallel to the judges' line. **If the start of the manoeuvre which includes the 10m straight level entry is too late, there is a downgrade of 2 points.** If the flight path is stretched, shortened or deviated from, in order to reach the landing circle, the manoeuvre must be downgraded. The required flight path gives maximum score, but there will be downgrades of 1 or 2 points depending of the severity of the path deviation. For example: If the flight path clearly points to a landing close to one of the flags, but the path is stretched to reach the circle, the score can only be a maximum of 6 (corresponding to outside the circles), and there will be an additional downgrade of 2 points for the stretch. This means the score can only be a maximum of 4. If the model lands without stretching, the maximum score would have been a 6.

Scoring criteria for Autorotation landings:

Rotor shaft points inside the 1m circle = Maximum 10 points.

Rotor shaft points on the 1m circle = Maximum 9 points.

Rotor shaft points inside of 3m circle = Maximum 8 points.

Rotor shaft points on the 3m circle = Maximum 7 points.

Rotor shaft points outside of 3m circle = Maximum 6 points.

Note: If a flying manoeuvre is missed out or if the engine is not powered off (or not set to idle position), the score for the complete figure shall be zero.

*Reason: The clarification is necessary to make it clear how large the downgrade is, if the autorotation starts too late.*

**c) Section 4 Volume F3 Radio Control Model Helicopter**

**F3 Heli Subcommittee**

**F3C**

**ANNEX 5D 5D.3 SCHEDULE F – F7: Inverted Umbrella with half rolls**

Clarification: Complete manoeuvre F7.

**F7: Inverted Umbrella with half Rolls (UU)**

**K=1.0**

MA flies straight and level for a minimum of 10 m and pulls up into a vertical ascent on center line. After a nose up stop MA performs immediately in a backward vertically flight a half roll in any direction followed by a half backward loop. After MA stops it performs a centered 'U'. After a nose up stop MA performs a half backward loop followed by a backwards vertically ascent. After a nose down stop MA performs immediately in a forward vertically flight a half roll in any direction followed by a vertical descent. MA pulls with a quarter looping into horizontal straight and level flight for a minimum of 10 m at the same altitude as when entering the figure.

Note 1: The quarter loops at the entrance and the exit of the figure and the half loop of the centered 'U' must have the same radius.

Note 2: The two half backward loops must be of equal size and must have half radius than the half loop of the centered 'U'.

Note 3: The bottom of the 'U' must be at the same altitude as when entering the figure.

Note 4: The two rolls must be performed at the same altitude.

**Note 5: The 2 half rolls must be higher than the 2 outer stall positions.**

*Reason: Because of misunderstandings in the manoeuvre description a clarification is necessary.*

**d) Section 4 Volume F3 Radio Control Model Helicopter**

**F3 Heli Subcommittee**

**F3N**

**5.11.8 Classification**

Clarification: Revise this paragraph.

After the completion of every round, all scores will be normalised by awarding 1000 points to the highest scoring flight. The remaining scores are then normalised to a percentage in



the ratio of actual score over the highest score of the round. The scores should be calculated to at least two decimal places and recorded (truncated) to two places after decimal point.

There shall be two rounds of Set Manoeuvre flights and one round each for Freestyle and Music Freestyle. However, the lowest score of each competitor will be the throwaway score. The other scores are added together and then divided by the number of counting preliminary rounds.

The result is the preliminary score. If only one round is possible then the classification will be based on that round.

After completion of the preliminary flights, the top 10 competitors are entitled to three fly-off flights, one Set Manoeuvre flight, one Freestyle and one Music Freestyle flight. The normalised results of the preliminary rounds for the top 10 pilots plus the three fly-off scores provide four normalised scores with the best three to count for the final individual classification. **If only one fly-off could be flown the final individual classification will be calculated by using the normalised results of the preliminary rounds for the top 10 pilots plus the normalised scores of this fly-off. If not more than two fly-off flights are possible the final individual classification will be calculated by using the normalised results of the preliminary rounds for the top 10 pilots plus the two fly-off scores provide three normalised scores with the best two to count.**

At national and open international competitions the preliminary/fly-off system is not mandatory.

Ties will be broken by counting the throwaway score. If the tie still stands, a “sudden death” freestyle fly-off must take place until a decision is made.

The team classification for World and Continental Championships is established at the end of the competition (after the fly-off flights) by adding together the numerical final placings of the three team members using the full list of competitors unless there is a fourth **or a fifth** member of the team (who must always be a junior **and/or a woman**) in which case it will be the three best placed members. Teams are ranked from the lowest numerical scores to the highest, with complete three-competitor teams ahead of two-competitor teams, which in turn are ranked ahead of one-competitor teams. In case of a tie, the best individual placing decides the team ranking. (Ref: *CIAM General Rules*, C.15.6.2 i))

*Reason: The clarification is necessary because it has to be described what happen if not all fly-offs are possible to fly and due to the women's classification there is the possibility of nominating a fifth team member.*

## e) Section 4 Volume F3 Radio Control Model Helicopter

F3 Heli Subcommittee

### F3N

#### 5G.6.6 Autorotation

Clarification: Revise this paragraph.

#### AUTOROTATION

During this manoeuvre the model should follow an almost straight flight path from the start to the landing on the ~~helipad~~ **20m centerline**. This path may be interrupted by a flip or roll but should be resumed after this. If the landing point is not ~~in the circle~~ **on the 20m centerline**, a downgrade of 1 point per 1m distance **of the rotor shaft** should be made.

*Reason: The clarification was necessary because no landing point after the autorotation was defined which makes an evaluation of the manoeuvre impossible.*

**f) Section 4 Volume F3 Radio Control Model Helicopter**

**F3 Heli Subcommittee**

**F3N**

**5G.8.3 Creativity**

Clarification: Revise this paragraph.

**CREATIVITY**

New combinations or new manoeuvres at all will lead to high scores here. Also dynamic and diversified sequences are positive.

There also should be a variety of different tempi in the presentation. Sequences without manoeuvres or repetitions will lead to downgrades.

**An excessive use of same pirouetting rate will also lead to downgrades. Flights should include diversity in pirouetting rates for different parts of the flight.**

~~In Music flights the transformation of musical accents into the performance is of great importance here.~~

*Reason: There is a need for a more precise description of the evaluation criterion.*

**g) Section 4 Volume F3 Radio Control Model Helicopter**

**F3 Heli Subcommittee**

**F3N**

**5G.8.3 Creativity**

Clarification: Revise this paragraph.

**CREATIVITY**

New combinations or new manoeuvres at all will lead to high scores here. Also dynamic and diversified sequences are positive.

There also should be a variety of different tempi in the presentation. Sequences without manoeuvres or repetitions will lead to downgrades.

**An excessive use of same pirouetting rate will also lead to downgrades. Flights should include diversity in pirouetting rates for different parts of the flight.**

~~In Music flights the transformation of musical accents into the performance is of great importance here.~~

*Reason: There is a need for a more precise description of the evaluation criterion.*

**h) Section 4 Volume F3 Radio Control Model Helicopter**

**F3 Heli Subcommittee**

**F3N**

**5G.8.2 Harmony**

Clarification: Revise this paragraph.

**HARMONY**

The combination of the manoeuvres, smooth or flowing transitions between them are the main factors for this criterion. Also the manoeuvres size and dynamic in relation to the model aircrafts performance is of influence. The pace is not of influence here, harmony can be as well demonstrated in dynamic as in gentle sequences.

In Music flights also the harmony between the music and the presentation comes to influence here. **The transformation of musical accents into the performance is of great importance here.**

*Reason:* There is a need for a more precise description of the evaluation criterion.

**i) Section 4 Volume F3 Radio Control Model Helicopter**

**F3 Heli Subcommittee**

**F3N**

**5G.8.1 Difficulty**

Clarification: Revise this paragraph.

**DIFFICULTY**

This criterion evaluates the level of difficulty of the freestyle flight and music 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 for difficulty, but result in a downgrade for safety.~~

*Reason:* There is a need for a more precise description of the evaluation criterion.

**j) Section 4 Volume F3 Radio Control Model Helicopter**

**F3 Heli Subcommittee**

**F3N**

**5G.8.5 Safe Presentation**

Clarification: Revise this paragraph.

## **SAFE PRESENTATION**

In addition to the safety rules during the flight(s) (5.11.10), the impression of the presentation related to safety is the guide here. If a pilot does not exceed the limit of his skills or flies unsafe in any way (eg too close to himself) a high score can be given here. Flying low (within the rules) by itself is not a reason for downgrade. Risky manoeuvres should never be mistaken as difficult manoeuvres. **Risky manoeuvres must not lead to higher scores for difficulty, but result in a downgrade for safety.**

*Reason: There is a need for a more precise description of the evaluation criterion.*

### **k) Section 4 Volume F3 Radio Control Model Helicopter**

**F3 Heli Subcommittee**

#### **F3N**

##### **5.11.10 Flight Program**

Clarification: Revise this paragraph.

### **Safety During the Flights**

The prohibited flying area (see figure 5.11.A) is observed by the judges. If the safety line is crossed the flight shall be scored zero points.

The competitor ~~may choose his position during the flight with the following constraints:~~

~~(a) The MA must not be flown between the pilot and judges.~~

~~(b) The pilot must stand in front of the judges.~~

**must stand in the 3m circle (labelled H in Figure 5.11.A - F3N Contest Area Layout) located 15m in front of the centre judge. The MA must not be flown between the pilot and judges.**

The non-observance of these constraints will be penalised by a zero score in the safety criterion for the manoeuvre or the flight in Freestyle.

If, during a flight in any of the schedules, a part of the helicopter except the landing gear or tail fin touches the ground the flight is terminated and scored zero points. This also applies to the MA tilting over after a landing or autorotation. **If main blades touches the ground before the caller finishes the manoeuvre or the freestyle flight this also leads to zero points for the manoeuvre or the freestyle flight.**

### **Set Manoeuvre Flight**

Every pilot makes his choice of seven different manoeuvres from the list of manoeuvres (refer to paragraph 5.11.11). He may choose different manoeuvres for each round. The list with the manoeuvres chosen for a round must be delivered to the Contest Director or an official before the beginning of the round. The flight time of the Set Manoeuvre rounds is eight minutes.

### **Freestyle Flight**

Each competitor is given a flight timeframe of at least 3:20 minutes, and no more than 3:40 minutes. During this time there are no restrictions for the flight or the performed manoeuvres except those regarding safety. The play-back of music is not allowed. The flight time begins when the helper gives a distinctive hand signal and finishes only with another distinctive helper hand signal.

### **Music Freestyle Flight**

The same criteria as in Freestyle, but the play-back of music during the flight is prescribed. The flight time begins when the helper gives a distinctive hand signal and finishes only with another distinctive helper hand signal. If the music starts before the flight, the flight time starts not later then 15 seconds after the start of the music.

*Reason: There was a need to clarify where the pilots position is during the flight. And it has to be clarified what happens if the blades touch the ground before the flight has finished.*

## 14.6 Section 4C Volume F3 – Soaring

### Section 4 Volume F3 – RC Soaring

#### a) 5.6.2.2.b

Switzerland

##### F3J

Rule Change: **5.6.2.** *The Flying Site*

**5.6.2.2.b)** The flying site must include landing spots, one for each competitor in a group. Each landing spot will correspond to one of the launch marks and will be arranged at least 30 metres downwind of the launch corridor. **Landing sites may also be located between the take-off lines, minimum 30 metres from the corridor, the exact location will be determined by the competition director based on the terrain.**

*Reason:* Through these adjustments, more flying areas are possible, the starting height is slightly reduced, which comes closer to the F3J idea again.

*At Freiburg's Trophy, this mode has already been used for 3 years and has been very well received by the pilots.*

#### b) 5.6.8.2.b

Switzerland

Rule Change: **5.6.8.2.** *The launch of the model aircraft will be by hand held towline or winch.*

b) Upwind turnaround devices, which must be used, shall be no more than 450 **130** metres **or less than 100 metres** from the winch. ....

*Reason:* Through these adjustments, more flying areas are possible, the starting height is slightly reduced, which comes closer to the F3J idea again.

*At Freiburg's Trophy, this mode has already been used for 3 years and has been very well received by the pilots.*

#### c) 5.8.2 Characteristics of Radio Controlled Slope Gliders 5.8.13 Classification

RC Soaring Subcommittee

##### F3F

Clarification:

5.8.2 If an infringement of this rule occurs, the ~~pilot~~ **competitor** will be disqualified from the contest

5.8.13 The remaining results are added to obtain the final score which will determine the position of the ~~pilot~~ **competitor** in the final classification.

*Reason: Throughout the whole text of the F3F class for the competing person the term "competitor" 30 times is used. Only in paragraphs 5.8.2 and 5.8.13, it appears the term "pilot". The same term should be used for the same subject in the whole text for clarity.*

d) **5.8.5 Number of attempts**

**RC Soaring Subcommittee**

**F3F**

Clarification:

The repeated flight ("re-flight") shall happen as soon as possible considering the local conditions **after a fixed number of pilots (e.g. 5), pre-defined and announced by the organiser before the start of the contest. If the remaining number of pilots in a round is smaller than the pre-defined number, the re-flight shall happen at the end of the round.**

If a ~~pilot~~ **Team Manager** announces a protest against the result of his ~~the~~ flight and this protest for a "re-flight" cannot be decided by the jury before the end of the running round, the ~~pilot~~ **competitor** will obtain a "provisional re-flight" (with all consequences regarding penalties) in order to achieve a countable score...

*Reason: The new wording tries to avoid arbitrary re-flight delays.*

*The old text also mistakenly states that the pilot may announce protest. But this is possible only at second-class competitions. However, the FAI Sporting Code is primarily intended for first-class competitions, where only the Team Manager can submit a protest. Specifying Team Manager is sufficient because at second-class competitions the pilot keeps all the rights of the team manager.*

e) **5.8.7. Organisation of Starts and 5.8.17. Weather Conditions and interruptions**  
**RC Soaring Subcommittee**

**F3F**

Clarification:

**5.8.7. Organisation of Starts:** The flights are to be performed round by round. The starting order is settled by draw in accordance with the radio frequencies used. **Before the round starts, the competitors must be divided into potential groups of equal size ( $\pm 1$  competitor) with at least ten (10) competitors in one group. This division will be used if weather conditions require.**

The competitor...

**5.8.17 Weather Conditions and interruptions:**

~~...The whole group must be divided into groups of equal size (+ one (1) competitor) with a minimum number of competitors in one group of ten (10) before the round starts.~~

*Reason: The groups should always be prepared in advance, even at best weather conditions; therefore the sentence about division in groups better fits in paragraph 5.8.7*

f) **5.8.8. Task and 5.8.9. The Speed Course**

**RC Soaring Subcommittee**

**F3F**

Clarification: Delete the last sentence from paragraph 5.8.8 and add a new sentence at the end of paragraph 5.8.9. In paragraph 5.8.9 replace the word "Official" by "Judge"

**5.8.8. Task: ...**

~~...The competitor's model must be visible to the appropriate judge on the turns at Bases A and B.~~

**5.8.9. The Speed Course: ...**

...Base A is the official starting plane. At Base A and Base B, an Official **a judge** announces the passing of any part of the intact model in flight with a sound signal when the model is flying out of the speed course. Furthermore, a signal announces the first time the model is crossing Base A in the direction of Base B.

**The competitor's model must be visible to the appropriate judge on the Bases A and B turns. If the model is not visible at crossing the Base, the judge signals if he can see the model again outside the course.**

*Reason: The new text contains instructions for the judge if the model flies below the slope's edge for only a short time.*

*The replacement of the word "Official" unifies the terminology.*

g) **5.8.11 Judges**

**RC Soaring Subcommittee**

**F3F**

Clarification: Change the text of paragraph 5.8.11 as follows.

~~The flights are judged by two judges who do not have to be the same for all competitors.~~

The judges' **judge serving as the starter** task is **has** to control **ensure** that the flights are performed according to the rules **and** to be time-keepers **the timekeeper.** **and to ensure that the right distance is flown. If an automatic system performs the timing, he supervises it.**

*Reason:*

In the F3F part of the Sporting Code, you may find the terms "Judge", "Starter", and "Official".

In real F3F competitions one may find five main positions of officials:

1. Contest Director. 2. Starter, 3. and 4. Official signalling at base A and B 5. Official observing the safety plane.

In the present text, for these officials, the naming is inconsistent.

1. The Contest Director is not mentioned in the F3F text but is defined in the general parts of the FAI Sporting Code.

It can be deduced from the text in paragraph 5.8.11 that the judges mentioned are taking the duties of the Contest Director regardless that the CD must be only one person.

2. The Starter and his duty are mentioned in paragraph 5.8.7. Often he takes care of all the duties defined for judges in paragraph 5.8.11.



In any case, paragraph 5.8.11 needs to be clarified. The request for two different judges for two groups of competitors could lead to unfair results.

3. Officials signalling at bases A and B are named Judges in paragraphs 5.8.6 and 5.8.8, whereas in paragraph 5.8.9, they are called "Officials".
4. Ditto.
5. The official for observing the safety plane is called "judge" in paragraph 5.8.10. OK

#### h) 5.8.17 Weather conditions and Interruptions

#### RC Soaring Subcommittee

##### F3F

Clarification: Modify the last part of the paragraph 5.8.17 as follows

If these conditions arise during the flight the contest director must interrupt the contest and the competitor is entitled to a re- **starter will offer the competitor a re-flight due to weather conditions. The competitor must (immediately) either accept the re-flight and abort the flight, or reject the offer of the re-flight and continue with the flight..**

**The competition flights will than continue after the weather conditions are within limits for at least 20 seconds.**

~~The whole group must be divided into groups of equal size (+ one (1) competitor) with a minimum number of competitors in one group of ten (10) before the round starts.~~

If the weather is stable during the whole round only one group is **all competitors are** evaluated as one group; if the competition must be interrupted **for** more than thirty (30) minutes, then the interrupted group must start from the beginning and the ~~results are~~ evaluated for each **group scoring must be applied** (see paragraph 5.8.12).

##### Reason:

*The competitor should be allowed to decide whether ha accepts the conditions and finish his flight. Sametimes, even if the wind speed is a little below the limit, the thermal lift may help to allow finish the flight. Imagine the situation, when the competitor made good 9 laps and the judge would cancel his flight in the last lap. It may also happen that the competitor damages his model at landing, can't re-fly and instead of average time gets zero.*

#### i) F3G Provisional - 5.G.1

#### GERMANY

##### F3G

Clarification:

Remove the title "Provisional Rules" from the title and all sections related to F3G in SC4\_Vol\_F3\_Soaring\_23 version 1st January 2024.

##### ~~PROVISIONAL RULES~~

##### Reason:

*Starting 2021 until the end 2023 five international (FAI) and at least four international/non FAI competitions of the class F3G have been successfully completed.*

*The rules documented in SC4\_Vol\_F3\_Soaring\_23 have been proven to be valid, practical and executable supporting fair, interesting and exciting competitions.*

j) **5.G.2.4 Task B Distance**

**GERMANY**

**F3G**

Clarification:

Adding time measuring tolerance to the minimum time required between starting the motor and entering the course at Base A during task distance.

1. The model shall be launched in the direction(s) determined by the contest director. The time between when the motor is switched on and entering the course the first time at Base A in direction to Base B shall be equal or more than forty (40) seconds **with a tolerance of minus two (2) seconds**.

Reason:

*The change should reflect a potential deviation/tolerance between the time the motor is started by the pilot and the official helper at Base A identifying that the motor has been started and pressing the start button on the stopwatch, measuring the time until entering the course.*

*The modified rule/time period will still fully serve the purpose to prevent the acceleration of the model with the motor prior to entering the course at Base A.*

k) **5.G.2.5 Task C Speed**

**GERMANY**

**F3G**

Clarification:

Adding time measuring tolerance to the minimum time required between starting the motor and entering the course at Base A during task speed.

1. The model shall be launched in the direction(s) determined by the contest director. The time between when the motor is switched on and entering the course the first time at Base A in direction to Base B shall be equal or more than forty (40) seconds **with a tolerance of minus two (2) seconds**.

Reason:

*The change should reflect a potential deviation/tolerance between the time the motor is started by the pilot and the official helper at Base A identifying that the motor has been started and pressing the start button on the stopwatch, measuring the time until entering the course.*

*The modified rule/time period will still fully serve the purpose to prevent the acceleration of the model with the motor prior to entering the course at Base A.*

I) **5.G.2.5 Task C Speed**

**BELGIUM**

**F3G**

*Rule Change: Replace in item b) “four (4)” by “three (3)”*

b) the task must be completed within **four (4) three (3) minutes**

*Reason:* 3 minutes is plenty to complete such a flight. Most organisers of F3G competitions use three (3) minutes as a local rule

## 14.7 Section 4 Volume F4 Scale

### F4C

#### a) 6.3.1 Annex C – F4C Static Judging Summary

GERMANY

##### 6.3.1C.3.5 Assessing Colour Complexity

Rule Change: *Change the second paragraph*

It is suggested that up to two complexity marks may be given for each main colour that covers a significant part of the airframe. A maximum of a single mark may be given for each minor colour, such as those for the insignia, struts, guns, bombs etc. ~~and basic colours of black and white should attract a fraction of a complexity mark.~~

*Reason: The colours black and white are just as difficult to apply as all other colours. If you want to evaluate black and white differently, you have to describe the colours exactly with their colour code.*

#### b) 36.3.1 Annex C – F4C Static Judging Summary

GERMANY

##### 6.3.1C.3.8 Assessing Craftsmanship – Quality

Rule Change: *Change the third paragraph*

It is the skill of the competitor which is being assessed and not the skill of a third party. Judges must consult the competitor's declaration to check for any components that have not been made by the competitor and any such items must be excluded from this assessment. ~~Judges should also be aware that the use of traditional methods i.e. handmade moulds/plugs to produce components requires a greater level of craftsmanship than when using CNC technology or 3D printing.~~

*Reason: Creating a CAD model to then create a CNC programme or use it to drive a 3D printer requires a very high level of training and experience with these new techniques.*

#### c) 6.3 Class F4C – Radio Controlled Scale Aeroplanes

GERMANY

##### 6.3.2.1 General Characteristics

Rule Change: *Change the third paragraph*

~~Maximum weight of the complete model aircraft in flying condition including any dummy pilot but without fuel is 15 kg (~150 Newton)~~

**Maximum take off mass of 20 kg.**

*Reason: If only an empty ("dry") weight is kept, an unequal balance of the different types of propulsion is created. An aircraft with a piston engine usually needs e.g., 500 ml (~400 gr)*

of fuel only. An electrically powered aircraft needs about 2-4 kg of batteries. A jet needs about ~5 litres (~4 kg) of kerosene.

This results in very different take-off weights:

- Piston engine: 15 kg + 0.4 kg fuel => 15.4 kg
- Electric motor: 15 kg + 3 kg battery => 18 kg
- Jet: 15 kg + 4 kg kerosene => 19 kg

The use of a maximum weight including fuel or batteries etc., establishes equal conditions for all participants.

In the case that hybrid drives (fuel + battery) are used in the future, the maximum weight would also apply to them.

#### d) 6.3 Class F4C – Radio Controlled Scale Aeroplanes

GERMANY

##### 6.3.2.5 Official Flights

Rule Change: *Change the last paragraph*

In the event the wind is continuously stronger than ~~9m/s~~ **7m/s** measured at two (2) metres above the ground at the flight line for at least one minute, the Contest Director ~~can~~ **must** interrupt, or delay the start of, the contest.

*Reason: Less the wind speed creates equal conditions for the different types of aircraft. At wind speeds of 9 m/s, the gusts are also correspondingly strong (~ 15 m/s). For example, historic biplanes or a WWI aircraft are nearly impossible to be controlled at these wind speeds. When the wind speed is reduced, the gusts also reduced disproportionately. Slow airplanes get the possibility to fly a round in wind again. Less wind speed provides more safety and maintains model type diversity. The spectrum of aviation should be maintained and represented.*

#### e) 6.3.1 Annex A – Radio Controlled Flight Manoeuvres

GERMANY

##### 6.3.2A.2 Take-Off

Rule Change: *Change the first paragraph*

The model aircraft ~~should~~ **must** stand still on the ground with the engine/engines running without being held by the pilot or helper and then take-off into wind, or as required by the competitor to make best use of the take-off distance available.

*Reason: With the Word definitions at top of the volume a rule with the word should makes no sense The spectrum of aviation should be maintained and represented.*

## 14.8 Section4 Volume F5 – Electric

### F5 – RC Electric Powered Thermal Motor Gliders

**Bulgaria**

#### General

#### 5.5.2.1 Definition of an Official Flight

Clarification: Remove from F5 general section rule for F5B/F class only

~~a) During a two (2) minute starting period, the competitor is allowed an attempt which starts when the model aircraft is released by the competitor or his helper. After two minutes, no further launching or take off is allowed and the flight is scored with 0 points. The pilot may repeat a second two minute starting period only if:~~

**a)The official flight starts when the model aircraft is released by the competitor or his helper. The pilot may repeat flight only if:**

*Reason: This definition was written for F5B/F class and must be moved to F5B section of the rules*

### F5 – RC Electric Powered Thermal Motor Gliders

**Bulgaria**

#### Section 5.5.4.4 Launching

Clarification: Move to F5B definition of the starting procedure

#### 5.5.4.4 Launching

~~a) Before launching, the competitor has to show to his timekeeper how he controls his motor(s) on his transmitter (on, off, reversing);~~

a) During a two (2) minute starting period, the competitor is allowed an attempt which starts when the model aircraft is released by the competitor or his helper. After two minutes, no further launching or take-off is allowed and the flight is scored with 0 points.

*Reason: Remove an old instruction for motor on/off procedure not used from many years and add definition of F5B starting procedure form general section*

### F5 – RC Electric Powered Thermal Motor Gliders

**FRANCE**

#### F5J

#### 5.5.11.5.1 Contest Flights

Clarification: Specify the minimum number of rounds during a competition, in order to validate this competition

(a) ~~The competitor will be allowed a minimum of four (4) flights in the qualifying rounds.~~ **A minimum of four qualification rounds must be flown for the competition to be valid.**

*Reason: The current wording does not have a comprehensible meaning. The proposed wording clearly fixes the minimum number of rounds in a competition, for it to be validated*

## 14.9 Section 4 Volume F9 – Drone Sports

### a) B.2 Playing Field

GERMANY

Clarification: Put in new bullet point B.2.2 Padding of the cage.

B.2.2 Padding of the cage (new) all following bullet point shift

**All hard surfaces (if there are any) of the cage must be covered by padding to protect the material of the drone balls.**

*Reason: It has been noticed in past competitions that the material can be severely damaged when in contact with hard surfaces. to avoid this, all hard surfaces should be covered.*



## 14.10 Section 4 Volume **SPACE MODELS**

### Part 2 – Space Model Specifications

#### a) 2.4.1 General

Slovakia/Space S/C Chair

Safety: Add the following text to paragraph 2.4.1.

**In classes S1,S5 and S7, the minimal recovery device dimensions are: 25x400mm for streamer and 4dm<sup>2</sup> for parachute recovery. Streamer recovery might be used to a maximum weight of 50grams, where the minimal streamer area is 3dm<sup>2</sup>. For parachute recovery, the minimal area is 7dm<sup>2</sup> for every 50 grams the part weights (e.g. 150g part has to have a minimal parachute area of 21dm<sup>2</sup>). A tolerance of maximum 10% is allowed. The RSO, Judges and Jury may request to have the recovery device area re-measured if there is a doubt. If the recovery device is not matching the minimal allowed size, the flight is considered DQ.**

Reason:

*It is shown that there is a missing line for minimal area of recovery devices in the sporting code. At the last WSMCh (Austin, Texas) it was observed that evidently heavy parts descended on recovery devices which were too small to safely descend them, thus this is a large safety risk and hazard to people and property. In the classes mentioned above it is sometimes very hard for the RSO and/or his assistant to estimate quickly if all parts are safely descending. The introduction of minimal sizes and areas gives a guideline for safe descent of all parts, as this factor is easily checkable by all involved – the competitors and the Jury/judges. This Idea was supported by the RSO's and at the 2023 Space S/C meeting.*

## 15. FAI WORLD AND CONTINENTAL CHAMPIONSHIPS 2023 – 2027

**VERY IMPORTANT:** Each NAC/country/Delegate presenting a bid prior to voting for the award of the Championships may give a presentation of the championship organisation, lasting a **MAXIMUM of 2 minutes** only. 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 review the contents of the bid, so that they may make informed decisions at the meeting. During the meeting only questions will be accepted.

**Validity Status:** The Bids status listed in the below tables is relevant to the date of completion of this Plenary Meeting agenda. At the Plenary Meeting, the Bids will be relevant to the actual status at the time of the meeting.

Date of table status: 25 February 2024

### FAI WORLD CHAMPIONSHIPS

2024 FAI World Championships for...	Awarded to	Location and Actual Dates
F1A, F1B, F1P Juniors	NORTH MACEDONIA	
F1D (Seniors and/or Juniors)	ROMANIA	
F2A, F2B, F2C, F2D (Seniors and Juniors)	USA	
F3F (Seniors and Juniors)	FRANCE	
F3J (Seniors and/or Juniors)	NORWAY	
F4CH (Seniors and Juniors)	ROMANIA	
F5B (Seniors and Juniors)	USA	

2025 FAI World Championships for...	Awarded to	Location and Actual Dates
F1A, F1B, F1C Seniors	ROMANIA	
F1E (Seniors and/or Juniors)	CZECH REPUBLIC	
F3A (Seniors and Juniors)	USA Awarded since postponed from 2021	
F3B (Seniors and Juniors)	Offers invited	
F3CN (Seniors and Juniors)	ROMANIA	

	Awarded since postponed from 2021	
<b>F3D, F3E (Seniors and Juniors)</b>	Offers invited	
<b>F3K (Seniors and/or Juniors)</b>	<b>GERMANY</b>	
<b>F3P (Seniors and Juniors)</b>	<b>SWITZERLAND</b>	
<b>F5J (Seniors and Juniors)</b>	<b>ARGENTINA</b>	
<b>SPACE MODELS (Seniors and Juniors)</b>	<b>SERBIA</b>	

2026 FAI World Championships for...	Bids From	To be Awarded in 2024
<b>F1A, F1B, F1P Juniors</b>	North Macedonia (firm)	
<b>F1D (Seniors and/or Juniors)</b>	USA (firm)	
<b>F2A, F2B, F2C, F2D (Seniors and Juniors)</b>	Offers invited	
<b>F3F (Seniors and Juniors)</b>	Offers invited	
<b>F3J (Seniors and/or Juniors)</b>	Offers invited	
<b>F4CH (Seniors and Juniors)</b>	UK (firm)	
<b>F5B (Seniors and Juniors)</b>	Offers invited	

2027 FAI World Championships for...	Bids From	To be Awarded in 2025
<b>F1A, F1B, F1C, F1Q Seniors</b>	Mongolia (firm)	
<b>F1E (Seniors and/or Juniors)</b>	Offers invited	
<b>F3A (Seniors and Juniors)</b>	Offers invited	
<b>F3B (Seniors and Juniors)</b>	Offers invited	
<b>F3CN (Seniors and Juniors)</b>	Offers invited	
<b>F3D, F3E (Seniors and Juniors)</b>	Offers invited	
<b>F3K (Seniors and/or Juniors)</b>	Offers invited	
<b>F3P (Seniors and Juniors)</b>	Offers invited	
<b>F5J (Seniors and Juniors)</b>	USA (firm)	Early award requested
<b>SPACE MODELS (Seniors and Juniors)</b>	Offers invited	

## FAI CONTINENTAL CHAMPIONSHIPS

2024 FAI Continental Championships for...	Awarded to	Location and Actual Dates
F1A, F1B, F1C Seniors	ROMANIA	
F1 Asian-Oceanic (Seniors and Juniors)	MONGOLIA	
F1E (Seniors and/or Juniors)	CZECH REPUBLIC	
F3A (Seniors and Juniors)	BELGIUM	
F3CN (Seniors and Juniors)	DENMARK	
F3K (Seniors and/or Juniors)	POLAND	
F5J (Seniors and Juniors)	ROMANIA	
SPACE MODELS (Seniors and Juniors)	SERBIA	

2025 FAI Continental Championships for...	Awarded to	Location and Actual Dates
F1A, F1B, F1P Juniors	ROMANIA	
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	

2026 FAI Continental Championships for...	Bids from	To be Awarded in 2024
F1A, F1B, F1C Seniors	Offers invited	
F1E (Seniors and/or Juniors)	Offers invited	
F3A (Seniors and Juniors)	France (firm)	
F3A Asian-Oceanic (Seniors and Juniors)	Offers invited	
F3B (Seniors and Juniors)	Offers invited	
F3CN (Seniors and Juniors)	Offers invited	
F3CN Asian-Oceanic (Seniors and Juniors)	Offers invited	
F3K (Seniors and/or Juniors)	Offers invited	

<b>F3P (Seniors and Juniors)</b>	Offers invited	
<b>F5J (Seniors and Juniors)</b>	Offers invited	
<b>SPACE MODELS (Seniors and Juniors)</b>	Offers invited	

<b>2027 FAI Continental Championships for...</b>	<b>Bids from</b>	<b>To be Awarded in 2025</b>
<b>F1A, F1B, F1P Juniors</b>	Offers invited	
<b>F1D (Seniors and/or Juniors)</b>	Offers invited	
<b>F2A, F2B, F2C, F2D (Seniors and Juniors)</b>	Offers invited	
<b>F3F (Seniors and/or Juniors)</b>	Offers invited	
<b>F3J (Seniors and/or Juniors)</b>	Offers invited	

**17. CIAM LEGENDS MEDAL – CIAM EVENTS HISTORY Data Base**

**18. CIAM SURVEY - Presentations**

**19. NEXT CIAM MEETINGS**

Bureau meeting on December 2024 dates to be confirmed

Bureau meeting on April 2025 date to be confirmed

Plenary meeting on April 2025 dates to be confirmed.

**The plenary will discuss the option to host such a meeting at a different place.**

The table of Agenda Annexes appears overleaf.

## ANNEXES TO THE AGENDA OF THE 2024 CIAM PLENARY MEETING

[illegible]
$$\text{---oOo---}$$