Minutes of the 2022 F2 eTechnical Meeting  
Sunday 10/04/22 at 12.00 by Zoom

Attendance List

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Country</th>
<th>Voting</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUNT Vernon</td>
<td>F2 Subcommittee Chairman</td>
<td>n/a</td>
<td>No</td>
</tr>
<tr>
<td>MIOIRINI Hanno</td>
<td>Representative</td>
<td>AUT</td>
<td>Yes</td>
</tr>
<tr>
<td>ELLS Harry</td>
<td>Delegate</td>
<td>CAN</td>
<td>Yes</td>
</tr>
<tr>
<td>ZXi Hui</td>
<td>Representative</td>
<td>CHN</td>
<td>Yes</td>
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<tr>
<td>BARTOVSKY Tomas</td>
<td>Delegate</td>
<td>CZE</td>
<td>Yes</td>
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<tr>
<td>FORBEC Henning</td>
<td>F2 Subcommittee Member</td>
<td>DEN</td>
<td>Yes</td>
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<tr>
<td>DELOR Bruno</td>
<td>CIAM 1st Vice-President &amp; Delegate</td>
<td>FRA</td>
<td>Yes</td>
</tr>
<tr>
<td>HALMAN Jo</td>
<td>World Cup Coordinator</td>
<td>GBR</td>
<td>No</td>
</tr>
<tr>
<td>HALMAN Peter</td>
<td>F2 Subcommittee Member</td>
<td>GBR</td>
<td>Yes</td>
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<tr>
<td>LEVER Barrie</td>
<td>Observer</td>
<td>GBR</td>
<td>No</td>
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<tr>
<td>HOLTERMANN Christoph</td>
<td>F2 Subcommittee Member</td>
<td>GER</td>
<td>Yes</td>
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<tr>
<td>RÄTSCH Stefan</td>
<td>Observer</td>
<td>GER</td>
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<tr>
<td>SEMOLI Massimo</td>
<td>CIAM Secretary - Observer</td>
<td>GER</td>
<td>No</td>
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<tr>
<td>UHLIG Peter</td>
<td>Alternate Delegate &amp; Observer</td>
<td>GER</td>
<td>No</td>
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<tr>
<td>PAPADOPOULOS Antonis</td>
<td>CIAM President - Zoom Facilitator</td>
<td>GRE</td>
<td>No</td>
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<tr>
<td>LANZONI Luigi</td>
<td>F2 Subcommittee Member</td>
<td>ITA</td>
<td>Yes</td>
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<tr>
<td>ZUKAUSKAS Nerijus</td>
<td>F2 Subcommittee Member &amp;</td>
<td>LTU</td>
<td>Yes</td>
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<tr>
<td>OLIJVE Rob</td>
<td>F2 Subcommittee Member</td>
<td>NED</td>
<td>Yes</td>
</tr>
<tr>
<td>DOMINIAK Marek</td>
<td>2022 F2 WCh Organiser</td>
<td>POL</td>
<td>No</td>
</tr>
<tr>
<td>DZIKOWSKI Michał</td>
<td>F2 Subcommittee Member</td>
<td>POL</td>
<td>Yes</td>
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<tr>
<td>MAPUA, Oscar B</td>
<td>Alternate Delegate</td>
<td>PHI</td>
<td>Yes</td>
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<tr>
<td>SKINNER Bob</td>
<td>CIAM President of Honour &amp; Representative</td>
<td>RSA</td>
<td>Yes</td>
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<tr>
<td>ROTA Daniel</td>
<td>Representative</td>
<td>SUI</td>
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<tr>
<td>LARSSON Ingemar</td>
<td>F2 Subcommittee Member</td>
<td>SWE</td>
<td>Yes</td>
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<tr>
<td>BARBARIC Pavol</td>
<td>F2 Subcommittee Member</td>
<td>SVK</td>
<td>Yes</td>
</tr>
<tr>
<td>LEE Bill</td>
<td>F2 Subcommittee Member</td>
<td>USA</td>
<td>Yes</td>
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The meeting was chaired by the F2 Sub-Committee Chairman, Vernon HUNT.

Apologies for absence were received from Pascal SURUGUE (FRA).

The meeting began at 12.05.

There were 18 voting members and a total of 26 people for this F2 Technical Meeting.

ePlenary Agenda Proposals

There was one CIAM General Rules proposal concerning F2 and nine F2 proposals.

See Appendix 1 of this document for the full proposals and associated agreed amendments.

Post-Meeting Note: Unfortunately, there had been no time for the Chairman to hold a discussion with the F2 Subcommittee directly on the F2 Proposals but there were ten of the 15 members plus two official member representatives at this eTechnical Meeting.

cont/…
**Other Business**

1. **2022 F2 World Championships, Poland**

   The Chairman requested an update from Marek DOMINIAK, the Organiser who informed the meeting that the Championships were on target to take place at the scheduled time and venue and that no teams had informed him that they intended to withdraw from the Championships.

   In response to concerns from the USA Representative, it was agreed that Mr Dominiak would produce an updated statement concerning COVID-19 regulations in Poland with special attention to people travelling from non-European countries. This document is to be provided by 17th April.

   **Action:** Marek DOMINIAK

   The Final Entry Form (FEF) submission date is 15th May and the final decision date is 8th June.

   The USA Representative raised the question of the return of entry fees if the Championship was cancelled after the FEF had been submitted and the entry fees paid. The CIAM President advised to consult the 2022 CIAM General Rules.

   **Post-meeting note:** The only mention of a refund of entry fees in the CIAM General Rules is at C.17.2 Interruption [of a contest] where “the organiser is not obliged to return the entry fee”

2. **2023 F2 European Championships**

   There was a firm bid on the 2022 ePlenary Agenda from Poland for these Championships. The Chairman had not received the bid documents for evaluation. The Organiser must send these documents to him forthwith as the ePlenary will be held on 16th April and time was very short. Plenary has to vote if there are multiple bids but if there is only one bid, then the decision could be taken by Bureau at the December meeting but the CIAM President would much prefer the F2 Subcommittee & Chairman to make the decision.

   **Action:** Marek DOMINIAK/ Vernon HUNT

3. **Proposed Delay to the Implementation date of F2C rule 4.3.3.2 i)**

   This rule prohibits retractable landing gear and 2020 Plenary agreed to an implementation date of 1st January 2023. The Chairman informed the meeting that as there had been almost no competition flying because of COVID-19 restrictions the F2C Working Group had recommended that the implementation date be delayed to 2025. The F2 Subcommittee had unanimously agreed and the Chairman asked what the next step should be.

   The French Delegate objected to any delay to the implementation date. He added that there must be a proposal to the 2022 ePlenary Meeting and at this late stage only Bureau could present a proposal.

   A vote was taken on the whether the Technical Meeting agreed for the matter to go to the Bureau to and the result was:

   - 12 For
   - 2 Against

   **Post-Meeting Note:** these are the figures given at the meeting but the numbers do not match the actual numbers of attendees with voting rights.

   On the outcome of the vote, the recommended delay of two years to the implementation date of 2023 will be taken to Bureau for a decision on whether or not a Bureau proposal will be put to the upcoming ePlenary meeting.

   With reference to these F2 eTechnical Meeting Minutes, the CIAM President said that the Bureau could discuss this matter and decide whether to submit a Bureau proposal to the 2022 ePlenary Meeting.

   **Action:** Bureau

   The meeting ended at 13.40.

   **Appendix 1 begins overleaf.**
14.2 Volume CIAM Records

a) 4.2.1 Control Line Open Records

Amend the table and 4.2.1.2 (after sub-class F135) to include a **new open sub-class F138** as shown below:

4.2.1.2 Control Line Open Records - Measurement of Speed

**Sub-class F138: Electric Motors – maximum weight of battery (or batteries) 200 g (incl. battery cables and connectors) ………. R = 17.69 m (9 laps = 1 km).**

Amended table shown below:

<table>
<thead>
<tr>
<th>Proposed New Open Subclass in Control Line Speed</th>
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<tbody>
<tr>
<td>F2 CONTROL LINE CIRCULAR FLIGHT</td>
</tr>
<tr>
<td>Open</td>
</tr>
<tr>
<td>F2A Open</td>
</tr>
<tr>
<td>F2C Open</td>
</tr>
<tr>
<td>Aeroplane</td>
</tr>
<tr>
<td>Open</td>
</tr>
<tr>
<td>Piston Motor</td>
</tr>
<tr>
<td>Speed in Competition</td>
</tr>
<tr>
<td>F134*</td>
</tr>
<tr>
<td>Reaction Motor</td>
</tr>
<tr>
<td>Open</td>
</tr>
<tr>
<td>Electric Motor</td>
</tr>
<tr>
<td>F135</td>
</tr>
<tr>
<td>F138</td>
</tr>
<tr>
<td>TEAM RACE (Race Time)</td>
</tr>
<tr>
<td>Piston Motor</td>
</tr>
<tr>
<td>100 laps - F136*</td>
</tr>
<tr>
<td>200 laps - F137*</td>
</tr>
</tbody>
</table>

Reason: Electrically power control line speed is becoming established and it is now time to have at least one open speed record for electric powered speed models.

Unanimously agreed by the Technical Meeting
F2B – Control Line Aerobatics

a) 4.2.7 Contest Flights

Clarification to a previous error in (g):

g) If, when making his second attempt for the respective round, any of the following occurs:
   i) the competitor did not pass through the entrance to the contest flight circle within 2 \( \frac{3}{2} \) minutes of being officially called;

Reason: The 2 minutes time limit in 4.2.7 g) i) does not match the limit indicated in 4.2.7 d) i) and is contradictory to 4.2.13 a) Starting procedure.

Unanimously agreed by the Technical Meeting

b) Annex 4J – F2B Manoeuvre Diagrams

Replace 4.J.14 Four-leaf clover manoeuvre diagram (Rule 4.2.15.16):

Reasons: Clarification with added dotted lines showing manoeuvre entry and horizontal segments flight tracks.

Unanimously agreed by the Technical Meeting.
F2C – Control Line Team Racing

4.3.5 Organisation of Races

The Netherlands

Replace the entire section b) with the paragraphs as shown below:

Post-Technical Meeting Note: For clarity, the instruction for the proposal should have read “Delete the second paragraph, amend the third and final paragraph of b) and add new paragraphs as follows:”

b) When a qualifying race does not contain three teams as per rule 4.3.5 a), the judges shall ask for volunteers (from different nations in case of World or Continental Championships) to allow the remaining race to start with three teams.

If there are sufficient or more, volunteers for a qualifying race, the Judges shall conduct a blind draw to start the race with three teams and shall conduct a separate draw for the segment choice order. The volunteer team(s) shall not be eligible to have a time registered or to be granted a re-flight from this race.

will invite team(s) who already have an official result in the ongoing round, to fill the vacancies in order to allow the remaining race to start with three teams.

The teams that fill in the vacant spots in the heat, accept that the official result that they had achieved in the ongoing round, will be replaced by the result they achieve in the heat they enter. These teams are defined as vacancy filling teams.

Only teams that have an official time in the ongoing round or a number of laps flown, can opt for filling up the remaining heat in the ongoing round. Teams that have been disqualified in the ongoing round, or did not start in this round, cannot apply for filling in vacancies in the heat concerned.

All teams, originally drawn, granted a re-flight or accepted vacancy filling teams will be treated as all other teams that have flown in the ongoing round.

In the case of World or Continental championships, the vacancy filling team(s) must have a different nationality from other already accepted teams in the heat.

If there are more teams willing to opt for vacant places in the heat than available, the team that has achieved the best result in the ongoing round (fastest time or flown most laps) gets the right to fill in vacancies first. In the case where candidate teams achieved equal results in the ongoing round, the Judges shall conduct a blind draw amongst the candidates concerned.

The Technical Meeting agreed that the six proposed paragraphs be re-worded and re-ordered with an additional new paragraph at the beginning, as follows:

Teams shall have a maximum of 10 minutes after the judges call for volunteers to register their interest.

Teams that were either disqualified or did not fly in the current round are not permitted to volunteer.

Any volunteer team shall have its existing result in the current round cancelled and replaced by its later result.

In order to fill the vacant places, the judges shall select the volunteer team(s) in descending order of their existing results in that round.

cont/…
In the case where two or more volunteer teams have identical existing results then a blind draw shall take place to establish which volunteer team(s) fill the vacant places. Volunteer and originally drawn teams shall be treated equally.

If there are sufficient or more volunteers for a qualifying race, the Judges shall conduct a blind draw to start the race with three teams and shall conduct a separate draw teams for the segment choice order. The volunteer team(s) shall not be eligible to have a time registered or to be granted a re-flight from this race.

The Judges shall conduct a separate draw for the segment choice order.

If there are insufficient volunteers, the competing team(s) will be allowed to start the race with fewer than three teams to complete their qualifying or semi-final race.

Reason: The current ruling of asking for volunteers is not in conjunction with good sportsmanship. In a sport, the rules are organised in such a manner that whoever enters a race, does that with the intention to get the best ranking result for him or his team. In the case of asking for volunteers, the rules introduce teams in a race who have no interest in the result of their effort, other than preventing their fellow official opponents in the race to realize a good result. This problem is mentioned in par. 4.C.6.5 of the Judges guide, in which judges are called upon to not accept candidate volunteers who have an ‘obvious interest’ in blocking good results of their opponents.

This clearly demonstrates that the current construction in which only bad intentions can lead to bad flying should be replaced by the proposed system, where all teams that enter the last heat in a round, start with teams that have all the equal target, to achieve the best official result in the ongoing round. More teams will opt for an opportunity to improve their result from the round, this will lead to less races with less than three teams at the start, making the heats result more in line with the effort all other teams in a round had to do. Asking for teams to volunteer and risk their costly equipment with no benefit other than ruining another team’s race is simply not fair.

NB: The Technical Meeting amendments have been applied for brevity & clarity. The reasons for the original rule proposal remain the same.

Amended by the Technical Meeting and Carried: For: 13
Against: 1
Abstentions: 0

Post-eTechnical Meeting Note: If this amendment is accepted by Plenary, it is suggested that the paragraphs of rule 4.3.5 b) be numbered as sub-paragraphs i), ii) etc for the 2023 edition of the F2 volume of the Sporting Code.

NB: If this amendment is accepted by Plenary, then rule 4.C.6.5 in Annex 4 C (the F2C Judges Guide) will need to be deleted.
d)  4.4.15 Individual and Team Classification  
F2 Subcommittee

Regarding Fly-offs, insert an additional sub-paragraph to h) as shown below:

h) In the event of a tie for second or third place, the equal placed flyers shall take part in a fly-off, during which they shall be allowed only one loss. In the event of a tie for third place after a fly-off for second place then there shall be a new fly-off for third place.

The pilots taking part in a fly-off are to be of equal status and must be treated as all of equal status as such, and no consideration should be taken into account if they have met earlier in the competition or if they are of the same nationality/team.

It has no bearing in a fly-off if the pilots have met earlier in the competition or if they are of the same nationality or team.

Reasons: Clarification regarding a fly-off for second or third place.
Amended and unanimously agreed by the Technical Meeting.

Annex 4D – Class F2D Judges Guide

e)  4.4.13 Penalties and Disqualification  
F2 Subcommittee

Add additional text at the end of section C, sub-paragraph t) as shown below:

Rule 4.4.13 Penalties and Disqualification

C. A competitor will be disqualified from the heat:

 t) For example, any tampering with the streamer in any way, shape or form can result in a disqualification. This rule can also be used to disqualify a competitor for any other breach of the rules that is not covered in a separate paragraph.

If the mechanic picks up the opponent’s model by mistake and then puts it back on the ground when they realise their mistake, no penalty shall be given unless it creates an unfair situation and affects the opponent in a negative way.

If the mechanic picks up an opponent’s model by mistake and immediately puts it back on the ground then no penalty shall be given unless an unfair situation has been created that negatively affects the opponent.

Reasons: Clarification.
Amended and unanimously agreed by the Technical Meeting.
Annex 4K – F2G Control Line Electric Speed

f) **4.K.2 Characteristics of a Speed Model … Electric Motor(s)**  F2 Subcommittee

Modify this section (sub-paragraphs d) and e)) with the deletions and addition of the text as shown. Consequential renumbering of the remaining sub-paragraphs:

- a) Maximum off-load voltage of power supply 42 V
- b) Maximum weight of battery (or batteries) 200 g (incl. battery cables and connectors)
- c) Minimum total projected area 5.0 dm²
- d) Maximum total projected area 6.0 dm² **Maximum model weight with battery 600 g.**
- e) Maximum wing loading 100 g/dm²
- f) Maximum wingspan 100 cm

Reason: Removing the wing loading requirement make it possible use easily available F2A model parts. Reverting to a maximum weight of 600g simplifies the rules.

Unanimously agreed by the F2 Technical Meeting.

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g) **4.K.2 Characteristics of a Speed Model … Electric Motor(s)**  F2 Subcommittee

Amend the original sub-paragraph h) with the deletion and addition of the text as shown. If the previous item is accepted, renumber this sub-paragraph as g):

- h) For safety reasons a radio control system as defined by CIAM General Rules B.1.2.2 c) may be used to control the start of the motor, in-flight power and the shutdown of the motor. A person other than the pilot may operate this system. **The system may be operated by the pilot and assigned mechanics/helpers.**

NB: Amended by the F2 Technical Meeting to read:

….. or an assigned mechanic/helper.

Reasons: The change is required in order to **clarify** that in F2G the pilot may control in flight power and the shutdown of the motor using a 2.4Ghz radio control system. This is a safety issue; control of this function by the pilot does not give him any performance advantage.

Amended and unanimously agreed by the Technical Meeting.

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h) **4.K.3 Diameter of Control Lines**  F2 Subcommittee

Amend sub-paragraph a) as shown below:

- a) Only two-line control is allowed, minimum control line diameter is 0.40 **0.45** mm with a tolerance of minus 0.011 mm.

Reason: The speed achieved by F2G models has now reached the point where 0.4mm wire is insufficient size. The increase in diameter to 0.45mm ensures a suitable safety margin on wire strength.

Unanimously agreed by the F2 Technical Meeting.
i) **4.E.1 Classes**

Amend the paragraph as shown:

4.E.1. Classes

The following separate classes are recognised for World Cup competition in Control Line: F2A (Speed), F2B (Aerobatics), F2C (Team Racing), F2F (Team Racing), and F2D (Combat) and **F2G (Electric Speed)**.

Reason: The performance of F2G has progressed rapidly over the past 4 years and making it into a World Cup class would raise its status and make it more attractive to competitors from more countries.

Amended and unanimously agreed by the Technical Meeting.

**Consequential changes if proposal accepted:**

**4.E.4. Points Allocation**

In each competition, points in a class will only be allocated if the competitors who have completed a flight in that class are from at least two different countries.

A competitor (team in F2C) has completed a flight if:

- he registers a speed not equal to zero (0) in F2A and or F2G.

In F2A and F2G, the points allocated to each competitor will be the same as the achieved speed result in km/h.

Amended and unanimously agreed by the Technical Meeting.