

## 2018 F2 S/C Technical Meeting Minutes

Report by: Peter Halman, F2 Sub-Committee Chairman

Attendees:	Name	Country	Title/Post
	HALMAN, Peter	GBR	F2 Subcommittee Chairman
	HALMAN, Jo	GBR	Delegate
	PERRET, Jean-Paul	FRA	Delegate
	METKEMEIJER, Rob	NED	Delegate
	GERMANN, Peter	SUI	Delegate
	VALO, Jari	FIN	Delegate
	DOMINIAK, Marek	POL	Delegate
	DUCAS, Guy	SUI	Observer

### MINUTES - PROPOSALS

- Instructions:
- i) Copy and paste a blank table if there are more proposals than there are tables provided; delete those tables that are not required.
  - ii) Complete the "Page" and "Class" cells if appropriate, and the "Submitted by" cell.
  - iii) Add the proposal agenda paragraph number and proposal title in blank cell in the second row.
  - iv) Complete the rest of the cells appropriately
  - v) *Make any amendments in red text.*

Page 10	CGR				
a)	<b>C.2.2.3 World Cup</b>			<b>Submitted by:</b>	<b>F2 S-C</b>
	Amended at the Technical Meeting? <b>No.</b>				
	S-C Voting (prior to the Technical Meeting):		For: 15	Against: 0	Abstain: 4
	Technical Meeting Voting:		For: 6	Against: 0	Abstain: 0
	Comments (if necessary):				

Page 10	CGR				
c)	<b>C.5.1 Competitor</b>			<b>Submitted by:</b>	<b>F2 S-C &amp; POL</b>
	Amended at the Technical Meeting? <b>No.</b>				
	S-C Voting (prior to the Technical Meeting):		For: 14	Against: 3	Abstain: 4
	Technical Meeting Voting:		For: 6	Against: 0	Abstain: 0
	Comments (if necessary):				

Page 13	CGR				
l)	<b>C.15.6 Classification</b>			<b>Submitted by:</b>	<b>F2 S-C</b>
	Amended at the Technical Meeting? <b>YES</b>				
	C.15.6.2 National team classification				
	d) In each class, a diploma will be awarded by the FAI to each member including the team manager of the teams <b>and for F2D all of the mechanics registered to the teams</b> <del>to the designated mechanics</del> in first, second and third places.				
	S-C Voting (prior to the Technical Meeting):		For: 16	Against: 1	Abstain: 2
	Technical Meeting Voting:		For: 4	Against: 1	Abstain: 1
Comments (if necessary):					

## a) 4.2.16 Concours d'Elegance

Submitted by:

SUI

Amended at the Technical Meeting? YES

4.2.16 Concours d'Elégance

At F2B Continental and World Championships the organiser **may** arrange a contest for registered F2B pilots competing in F2B with own-constructed Class F2B model airplanes. The winner is awarded the FAI Concours d'Elégance Diploma.

4.2.16.1 Construction of the model by the pilot; Definition

"Constructed" by the pilot is to be interpreted as the action required to complete a model starting with no more prefabrication than acquiring one of the two main structures preassembled prior to merging and finishing. The two main structures are considered to be: 1) the wing and 2) the fuselage. Flaps, rudders, elevators & horizontal stabilizers are not considered main structures, therefore there are no limitations on level of their prefabrication, and only the finish portion of this rule applies to them. In unconventional stunt designs, such as a multi-engine wing with engine nacelles, or a flying wing, they are to be considered as multiple merged structures, so no level of prefabrication is allowed, and on multi wing planes, the wing total counts as one structure, but the pilot must be the one who joins and aligns the multiple wings together. In the case of take-apart models, the take-apart hardware must be installed by the pilot. The pilot must be the person who applies the finish to the plane, to "finish" meaning the pilot fills the surfaces and applies the covering and finish to the completed model where covering and finish is applied. Whereas on the surface of the main structures, moulded structural surface underlayment's including but not limited to moulded fiberglass, or carbon fibre that are filled or coloured as a result of the manufacturing process that may show as part of the final finish may be used, as long as this surface underlayment is applied, filled and coloured by the pilot. Control systems such as but not limited to the bellcrank, control horns, pushrods, etc. may be purchased but must be installed by the pilot. Other accessories and hardware may be purchased or otherwise obtained for their function such as, but not limited to: engines, tanks, wheels, canopies, airframe take-apart hardware, and have no bearing in the way "main structures" are counted.

~~a) At time of models processing and by ticking the "own-construction" box on the "F2 Model Specification Certificate" as well as by his and his NAC's signatures on the Certificate, the competitor confirms the personal construction of the model as per article 4.2.16.1 and his wish to register for the Concours d'Elégance. One model per competitor may be registered. FAI will modify the F2 Model Specification Certificate accordingly.~~

**a.) At time of official models processing a competitor wishing to enter the Concours d'Elégance must register his airplane into a list to be prepared by the organiser. By registering his airplane the competitor bindingly confirms the personal construction of the model as per article 4.2.16.1. For the Concours d'Elégance alone, one model per competitor may be registered.**

**b.) Models processed and registered for the Concours d'Elégance must be marked with a Concours d'Elégance sticker by suitable means, such as an easy to remove sticker, indicating the pilot's name a sequential number and the year of the competition. FAI will provide organisers with such stickers and/or templates.**

4.2.16.2 Appearance Judging

Registered models for the Concours d'Elégance must have flown in at least ~~two~~ **one** F2B qualification round of the ongoing F2B Championship before entering the static display for appearance judging.

**a.) After the qualification rounds and before the beginning of the fly-off rounds all of the Concours d'Elégance registered model airplanes shall be put on display, arranged side by side and with sufficient space for the judges for to walk around.**

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**b.) The self-constituent panel of appearance judges consists of one member of the FAI Jury and two members of the FAI F2B Judges panel, three members who shall be:**

**At two circles contests: the F2B Contest Director plus the two F2B Circle Marshals.**

**At single circle contests: the F2B Contest Director plus the F2B Circle Marshal plus a third person holding an official position within the contest organisation or within FAI/CIAM.**

**Members of the F2B judges panel must not be part of the panel of Appearance Judges.**

**c.) Appearance judging for all models on display shall not take longer than two hours. While it takes place, public, other officials, and team members must not be present near the models to be judged. With approval from the appearance judges media representatives may be allowed in.**

**c.) The panel of appearance judges jointly defines the winner of the Concours d'Élégance based on criteria such as elegance of outlines and shapes, visible building and finish quality, colour scheme and complexity and further non-technical aspects contributing to the overall impression of elegance and beauty, while strictly observing article 4.2.16.1. The panel communicates the winner's name and nationality to the organiser. No individual ranking is published and the winner shall be kept secret until the end of the WCh.**

**d.) Related to the Concours d'Élégance no formal protest can be filed.**

#### **4.2.16.3 Awards**

**FAI will issue an official FAI F2B Concours d'Élégance Diploma or a template. The F2 Subcommittee will arrange for a suitable FAI diploma to be generated.**

**a.) The Diploma will be awarded to the winner at the prize-giving ceremony to be held at the banquet concluding the event.**

**b.) Illustrated with a high quality picture of the winning model airplane and its pilot constructor, the organiser communicates the winner of the FAI F2B Concours d'Élégance Diploma to the media.**

Note: The Concourse d'Elegance will appear in a new F2 Annex number of which will be advised later.

S-C Voting ( <i>prior to the Technical Meeting</i> ):	For: 13	Against: 6	Abstain: 0
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Technical Meeting Voting:	For: 6	Against: 0	Abstain: 0
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Comments (*if necessary*):

Page 30	Class: F2C
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<b>b)</b>	<b>4.3.1. Team Racing Event</b>	<b>Submitted by:</b>	<b>SUI</b>	
	Amended at the Technical Meeting? <b>NO</b>			
	This proposal is to be referred to the F2 Subcommittee.			
	S-C Voting ( <i>prior to the Technical Meeting</i> ):	For: 9	Against: 9	Abstain: 3
	Technical Meeting Voting:	For:	Against:	Abstain:
Comments ( <i>if necessary</i> ):				

Page 30	Class: F2C
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<b>c)</b>	<b>4.3.3.1 b) &amp; c) Team Racing Model, Engine and Control System</b>	<b>Submitted by:</b>	<b>USA</b>
	Amended at the Technical Meeting? <b>NO</b>		
	S-C Voting ( <i>prior to the Technical Meeting</i> ):		
	For: 8	Against: 8	Abstain: 3
	Technical Meeting Voting:	For: 1	Against: 4
Comments ( <i>if necessary</i> ):			
The F2 Subcommittee amended the intake diameter to 2.5 mm but the Technical Meeting rejected this amendment.			

Page 30	Class: F2C		
d)	<b>4.3.3.2 f) Team Racing Model, Engine and Control System</b>	Submitted by:	USA
	Amended at the Technical Meeting? <b>NO</b>		
	S-C Voting (prior to the Technical Meeting):	For: 9	Against: 7      Abstain: 3
	Technical Meeting Voting:	For: 2	Against: 3      Abstain: 1
	Comments (if necessary): The F2 Subcommittee amended the tank to 5 cm <sup>3</sup> but the Technical Meeting rejected this amendment.		

Page 30	Class: F2C		
e)	<b>4.3.3.2 I) Team Racing Model, Engine and Control</b>	Submitted by:	USA
	Amended at the Technical Meeting? <b>NO</b>		
	S-C Voting (prior to the Technical Meeting):	For: 5	Against: 10      Abstain: 4
	Technical Meeting Voting:	For: 0	Against: 5      Abstain: 1
	Comments (if necessary):		

Page 32	Class: F2C		
f)	<b>4.3.3.1 e) &amp; h) Team Racing Model, Engine and Control</b>	Submitted by:	F2 S-C
	Amended at the Technical Meeting? <b>YES</b>		
	4.3.3.1 e) The maximum exhaust outlet area is 60 mm <sup>2</sup> projected at the cylinder exhaust port or crankcase exhaust outlet whichever is smaller. If a silencer is used the exhaust outlet measurement is taken at the exhaust outlet end of the silencer. <del>The piston face at the exhaust outlet shall not be visible from the exterior of the model when side or front exhaust engines are used.</del>		
	<b>Note: if a silencer is used then rule 4.3.3.2 h) does not apply to this rule.</b>		
	4.3.3.2 h) The Engine must be entirely enclosed within the fuselage except for the necessary openings to allow for engine air induction, compression, fuel rate adjustment, fuel filler and overflow tubes and cylinder cooling air intake / <del>outlet and exhaust</del> . The engine may be visible through these openings. Compression, fuel rate controls and fuel filler and overflow tubes and silencer (if fitted) may extend outside the fuselage. <del>The engine exhaust must be entirely enclosed either within the fuselage or by an external cover for a distance of 40mm behind the centre line of the piston. The maximum exhaust outlet area in the model is 90mm<sup>2</sup>. The piston face at the exhaust outlet shall not be visible from the exterior of the model.</del>		
	<b><u>i) The engine exhaust must be entirely enclosed by an external cover the outlet of which shall be on the pilot's side of the fuselage.</u></b>		
	<b><u>ii) The engine exhaust port centre line shall be perpendicular to the crankshaft axis and piston centreline.</u></b>		
	<b><u>iii) The exhaust gas must exit the crankcase along the centre line of the exhaust port. The gas must then turn through a minimum of 90 deg before exiting the cover.</u></b>		
	<b><u>iv) The minimum distance between any part of the outlet window projected onto crankshaft axis and the piston axis shall be 40 mm measured along the crankshaft axis.</u></b>		
	<b><u>v) The maximum size of the exhaust cover outlet window shall be a 13 mm x 7 mm rectangle and it must lie on single flat plane.</u></b>		
	<b><u>vi) The engine exhaust cover may only have three openings/holes; exhaust in, exhaust out and exhaust port cooling air inlet channel.</u></b>		
	<b><u>vii) Any air inlet channel which leads to where the engine exhaust enters into the model shall have a maximum size of 5 mm x 5 mm.</u></b>		
	cont/...		

	<p><b><u>viii) The engine shall not be visible from the exhaust outlet of the model aircraft.</u></b>  <b><u>The above specifications can be seen in the Specification drawing in Annex (tba).</u></b>  <b><u>ix) The exhaust outlet size shall be checked by no-go gauges, 13.05 mm x 3 mm and 7.05 mm x 3 mm.</u></b>  <b><u>See the following diagram: (tba)</u></b></p>			
	S-C Voting ( <i>prior to the Technical Meeting</i> ):	For: 5	Against: 9	Abstain: 5
	Technical Meeting Voting:	For: 5	Against: 0	Abstain: 1
	Comments ( <i>if necessary</i> ):			

<b>Page 32</b>	<b>Class: F2C</b>			
<b>g)</b>	<b>4.3.3.2 f) Team Racing Model, Engine and Control</b>	<b>Submitted by:</b>	<b>SUI</b>	
	Amended at the Technical Meeting? <b>NO</b> This proposal is to be referred to the F2 Subcommittee.			
	S-C Voting ( <i>prior to the Technical Meeting</i> ):	For: 5	Against: 11	Abstain: 3
	Technical Meeting Voting:	For:	Against:	Abstain:
	Comments ( <i>if necessary</i> ):			

<b>Page 33</b>	<b>Class: F2C</b>			
<b>h)</b>	<b>4.3.5.e) Organisation of Races</b>	<b>Submitted by:</b>	<b>SUI</b>	
	Amended at the Technical Meeting? <b>NO</b> This proposal is to be referred to the F2 Subcommittee.			
	S-C Voting ( <i>prior to the Technical Meeting</i> ):	For:	Against:	Abstain:
	Technical Meeting Voting:	For:	Against:	Abstain:
	Comments ( <i>if necessary</i> ):			

<b>Page 33</b>	<b>Class: F2C</b>			
<b>i)</b>	<b>4.3.11. National Team Classification</b>	<b>Submitted by:</b>	<b>SUI</b>	
	Amended at the Technical Meeting? <b>NO</b> This proposal cross-refers to proposal b) on the agenda and this proposal is to be referred to the F2 Subcommittee.			
	S-C Voting ( <i>prior to the Technical Meeting</i> ):	For:	Against:	Abstain:
	Technical Meeting Voting:	For:	Against:	Abstain:
	Comments ( <i>if necessary</i> ):			

Page 34	Class: F2D			
j)	<b>4.4.3. Combat Site</b>	Submitted by:	F2 S-C	
	Amended at the Technical Meeting? <b>NO</b>			
	S-C Voting (prior to the Technical Meeting):	For: 14	Against: 2	Abstain: 3
	Technical Meeting Voting:	For: 6	Against: 0	Abstain: 0
	Comments (if necessary):			

Page 34	Class: F2D			
k)	<b>4.4.5. j) Characteristics</b>	Submitted by:	F2 S-C	
	Amended at the Technical Meeting? <b>NO</b>			
	S-C Voting (prior to the Technical Meeting):	For: 14`	Against: 2	Abstain: 3
	Technical Meeting Voting:	For: 2	Against: 3	Abstain: 1
	Comments (if necessary):			

Page 34	Class: F2D			
l)	<b>4.4.5 Mechanics for Category 1 Competitions</b>	Submitted by:	F2 S-C	
	Amended at the Technical Meeting? <b>NO</b>			
	S-C Voting (prior to the Technical Meeting):	For: 14	Against: 2	Abstain: 3
	Technical Meeting Voting:	For: 4	Against: 2	Abstain: 0
	Comments (if necessary):			

Page 35	Annex 4C - Team Race Panel of Judges Guide			
m)	<b>4.C.6.8</b>	Submitted by:	F2 S-C	
	Amended at the Technical Meeting? <b>NO</b>			
	S-C Voting (prior to the Technical Meeting):	For: 14	Against: 1	Abstain: 4
	Technical Meeting Voting:	For: 4	Against: 1	Abstain: 1
	Comments (if necessary):			

Page 35	Annex 4D - F2D - Combat Judges Guide			
n)	<b>Rule 4.4.3. Combat Site</b>	Submitted by:	FS S-C	
	Amended at the Technical Meeting? <b>YES</b>			
	<b><u>It is strongly recommended that the Circle Marshall, the pilots and the mechanics use a protective helmet that includes a face guard (grid) and neck protector. It is also recommended that upper body protection in the form of a long sleeved jacket or vest reinforced with "Kevlar" or a similar material is worn during the match.</u></b>			
	S-C Voting (prior to the Technical Meeting):	For: 14	Against: 2	Abstain: 3
	Technical Meeting Voting:	For: 6	Against: 0	Abstain: 0
Comments (if necessary):				

<b>Page 35</b>	<b>Annex 4E - Control Line World Cup Rules</b>			
<b>o)</b>	<b>4.E.1. Classes</b>	<b>Submitted by:</b>		<b>F2 S-C</b>
	Amended at the Technical Meeting? <b>NO</b>			
	S-C Voting ( <i>prior to the Technical Meeting</i> ):	For: 15	Against: 1	Abstain: 3
	Technical Meeting Voting:	For: 1	Against: 5	Abstain: 0
	Comments ( <i>if necessary</i> ):			

<b>Page 36</b>	<b>Annex 4E - Control Line World Cup Rules</b>			
<b>p)</b>	<b>4.E.2. Competitors &amp; 4.E.3 Contests</b>	<b>Submitted by:</b>		<b>GBR</b>
	Amended at the Technical Meeting? <b>NO</b>			
	S-C Voting ( <i>prior to the Technical Meeting</i> ):	For: 14	Against: 2	Abstain: 3
	Technical Meeting Voting:	For: 4	Against: 1	Abstain: 1
	Comments ( <i>if necessary</i> ):			

<b>Page 36</b>	<b>Annex 4E - Control Line World Cup Rules</b>			
<b>q)</b>	<b>4.E.6. Awards</b>	<b>Submitted by:</b>		<b>F2 S-C</b>
	Amended at the Technical Meeting? <b>NO</b>			
	S-C Voting ( <i>prior to the Technical Meeting</i> ):	For: 16	Against: 0	Abstain: 3
	Technical Meeting Voting:	For: 6	Against: 0	Abstain: 0
	Comments ( <i>if necessary</i> ):			

<b>Page 37</b>	<b>Annex 4F - Control Line Organisers' Guide</b>			
<b>r)</b>	<b>First Part: Pre-Contest Arrangements, 3. Time Schedule</b>	<b>Submitted by:</b>		<b>POL</b>
	Amended at the Technical Meeting? <b>NO</b>			
	S-C Voting ( <i>prior to the Technical Meeting</i> ):	For: 13	Against: 3	Abstain: 3
	Technical Meeting Voting:	For: 1	Against: 5	Abstain: 0
	Comments ( <i>if necessary</i> ):			

<b>Page 37</b>	<b>Annex 4F - Control Line Organisers' Guide</b>			
<b>s)</b>	<b>First Part: Pre-Contest Arrangements, 6. Contest Ground</b>	<b>Submitted by:</b>		<b>F2 S-C</b>
	Amended at the Technical Meeting? <b>NO</b>			
	This proposal was withdrawn by the F2 Subcommittee Chairman.			
	S-C Voting ( <i>prior to the Technical Meeting</i> ):	For: 13	Against: 2	Abstain: 4
	Technical Meeting Voting:	For:	Against:	Abstain:
Comments ( <i>if necessary</i> ): Withdrawn by the F2 Subcommittee Chairman & the Technical Meeting did not vote.				

<b>Page 38</b>	<b>Annex 4F - Control Line Organisers' Guide</b>		
<b>t)</b>	<b>Second Part: Contest Arrangements, 13. Field Processing</b>	<b>Submitted by:</b>	<b>GBR</b>
Amended at the Technical Meeting? <b>NO</b>			
Early implementation of 1st May 2018 is requested so that the rule is in force for the 2018 World Championships.			
S-C Voting ( <i>prior to the Technical Meeting</i> ): For: 15 Against: 1 Abstain: 3			
Technical Meeting Voting: For: 6 Against: 0 Abstain: 0			
Comments ( <i>if necessary</i> ):			

<b>Page 38</b>	<b>Annex 4H - F2F - CL Diesel Profile Team Racing</b>		
<b>u)</b>	<b>Proposal 1 for Annex 4H (Race Procedure)</b>	<b>Submitted by:</b>	<b>F2 S-C</b>
Amended at the Technical Meeting? <b>NO</b>			
S-C Voting ( <i>prior to the Technical Meeting</i> ): For: 13 Against: 3 Abstain: 3			
Technical Meeting Voting: For: 5 Against: 0 Abstain: 1			
Comments ( <i>if necessary</i> ):			

<b>Page 39</b>	<b>Annex 4H - F2F - CL Diesel Profile Team Racing</b>		
<b>v)</b>	<b>Proposal 2 for Annex 4H (Aircraft Specification)</b>	<b>Submitted by:</b>	<b>F2 S-C</b>
Amended at the Technical Meeting? <b>NO</b>			
S-C Voting ( <i>prior to the Technical Meeting</i> ): For: 12 Against: 4 Abstain: 3			
Technical Meeting Voting: For: 6 Against: 0 Abstain: 0			
Comments ( <i>if necessary</i> ):			

<b>Page 39</b>	<b>Annex 4K - F2G - Control Line Electric Speed</b>		
<b>w)</b>	<b>4.K.2.e) Characteristics of an Electric Speed Model</b>	<b>Submitted by:</b>	<b>F2 S-C</b>
Amended at the Technical Meeting?			
This proposal was withdrawn by the F2 Subcommittee Chairman.			
S-C Voting ( <i>prior to the Technical Meeting</i> ): For: 8 Against: 5 Abstain: 6			
Technical Meeting Voting: For: 1 Against: 4 Abstain: 1			
Comments ( <i>if necessary</i> ):			

<b>Page 39</b>	<b>Annex 4K - F2G - Control Line Electric Speed</b>		
<b>x)</b>	<b>4.K.2.d) Characteristics of an Electric Speed Model</b>	<b>Submitted by:</b>	<b>USA</b>
Amended at the Technical Meeting? <b>NO</b>			
S-C Voting ( <i>prior to the Technical Meeting</i> ): For: 10 Against: 3 Abstain: 6			
Technical Meeting Voting: For: 5 Against: 0 Abstain: 1			
Comments ( <i>if necessary</i> ):			



Page 40	Annex 4K - F2G - Control Line Electric Speed			
y)	4.K.2.d) Characteristics of an Electric Speed Model		Submitted by:	FRA
Amended at the Technical Meeting? <b>Yes</b> d) <b><u>weight</u></b> <b><u>i) maximum weight in order of flight 600g</u></b> <b><u>ii) minimum weight of the model without the battery (complete with its own connecting wire and plug) 410 g 400 g</u></b>				
S-C Voting ( <i>prior to the Technical Meeting</i> ):      For: 10      Against: 3      Abstain:6				
Technical Meeting Voting:                              For: 3      Against: 3      Abstain: 0				
Comments ( <i>if necessary</i> ):				

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PH/27/04/18