F1 Free Flight Technical Meeting Minutes 2014

Report by Ian Kaynes

Present:

Name	Country	Title
Ian Kaynes	UK	F1 SC Chairman
Trevor Grey	UK	National representative to TM
Wilhelm Kamp	AUT	Delegate
Christoph Bachmann	SUI	National representative to TM
Mike Colling	UK	Observer
Ivan Horejsi	CZE	F1 SC member
Alexander Popa	ROU	Delegate
Andreea Popescu	ROU	Observer
Gianni Cesare	ITA	Delegate
Per Findahl	SWE	Observer
Bernhard Schwendemann	GER	F1 SC member
Jari Valo	Finland	Delegate

MINUTES - PROPOSALS

Page Bureau proposal	**Class: ALL**

	A.15 to A.17 World and Continental Championships status		**Submitted by:**	**Bureau**
	Amended at the Technical Meeting? NO			
	S-C Voting *(prior to the Technical Meeting)*:	For:	Against:	Abstain:
	Technical Meeting Voting:	For:	Against:	Abstain:
	Comments: The meeting was strongly opposed to the imposition of arbitrary limits which would be likely to eliminate two specialised free flight classes which both have strong junior participation and serve as an easy and valuable introduction to championship aeromodelling competition. Although junior events are exempt from the limit they would not remain viable without the related senior classes which are run concurrently. It is not in the interest of free flight if the negative aim of reducing the number of championships is activated only against free flight and, in particular, classes with significant junior championships. It is requested that the Bureau reconsider the proposal. At the very least any future proposal should consider the joint nature of these senior and junior championships.			

Page Bureau proposal	**Class: ALL**

	B.2.3 Continental Championships and B.2.4 World Championships		**Submitted by:**	
	Amended at the Technical Meeting? **NO**			
	S-C Voting *(prior to the Technical Meeting)*:	For:	Against:	Abstain:
	Technical Meeting Voting:	For:	Against:	Abstain:
	Comments: The minimum number of countries for World Championships – without any exception for juniors – would eliminate F1D Junior and F1P Junior events and possibly also F1E Junior. The minimum number for European championships would eliminate all F1D Junior and probably F1P Junior. The FFTM noted that using this definition to deny championship status to an event could occur just before the event after organisers and competitors had already incurred considerable expense. It is necessary to better defining if the numbers apply to when entries close or number arriving and competing at the championships. The FFTM request reconsideration of the proposal or, at least, to have junior events remain on the current limit of 4 countries.			

Page 9	Class: ABR			
d) B.6.1 Championships bids			**Submitted by:**	**F1SC**
Amended at the Technical Meeting? **NO**				
S-C Voting *(prior to the Technical Meeting)*:	For: 8	Against: 2	Abstain:	
Technical Meeting Voting:	For: 1	Against: 10	Abstain:	
Comments: The meeting considered there could be difficulties and negative aspects of the proposal. It will be withdrawn, but the President is requested to request delegates not to vote on bids in which they have no interest.				

Page 11	Class: F1			
i) Starting line			**Submitted by:**	**F1SC**
Amended at the Technical Meeting? **YES**				
c) Spectators are not allowed within 25m from the starting line. ~~**In addition to**~~ **The only people allowed at the starting position are contest officials, the competitor, his helper,** ~~**and**~~ **the team manager, and** ~~**or**~~ **the assistant team manager.**				
S-C Voting *(prior to the Technical Meeting)*:	For: 10	Against: 0	Abstain:	
Technical Meeting Voting:	For: unanimous		Against:	Abstain:
Comments: Supported unanimously with change to include TM and ATM instead of TM or ATM, plus simplification of wording.				

Page 12	Class: F1, S			
j) B.13.6 timing			**Submitted by:**	**F1SC**
Amended at the Technical Meeting? **NO**:				
S-C Voting *(prior to the Technical Meeting)*:	For: 9	Against: 1	Abstain:	
Technical Meeting Voting:	For: 5	Against: 5	Abstain:	

Page 12	Class: ALL			
l) B.16.2.National Team Classification			**Submitted by:**	**Bureau**
Amended at the Technical Meeting? **NO**				
S-C Voting *(prior to the Technical Meeting)*:	For: 8	Against:0	Abstain:2	
Technical Meeting Voting:	For:	Against:	Abstain:	
Comments: Not supported by the FFTM. In addition, it must be defined which classes use which option (not leave it as a choice by the organisers of each event)				

Page 13	Class: ALL			
n) B.17.6 Identification Marks			**Submitted by:**	**Austria**
Amended at the Technical Meeting? **NO**				
S-C Voting *(prior to the Technical Meeting)*:	For: 7	Against: 2	Abstain:	
Technical Meeting Voting:	For: unanimous		Against:	Abstain:

Page 17	Class: F1D			
3.4.2 Characteristics of Indoor Model Aircraft			**Submitted by:**	**Hungary**
Amended at the Technical Meeting? **NO**				
S-C Voting *(prior to the Technical Meeting)*:	For: 6	Against: 2	Abstain:	
Technical Meeting Voting:	For: 7	Against: 3	Abstain:	

Page Bureau proposal	Class: F1D			
3.4.6 Collision Rule			**Submitted by:**	
Amended at the Technical Meeting? **YES** In the event of a collision between two models in flight, each competitor must choose, in the time span between the collision and two minutes following the termination of his flight, either to retain the time of flight as an official time, or to have a reflight. **The competitor has the right to refly even if the round time expires in the meantime or the collision happens after the end of the round.** The reflight must be flown before his next official flight. **In case of the last round of the event, when there are no more official flights, the reflight should be launched within one hour of the end of the round.**				
S-C Voting *(prior to the Technical Meeting)*:	For: -	Against: -	Abstain:	
Technical Meeting Voting:	For: unanimous		Against:	Abstain:
Comments : Slight modification from last version previously seen				

Page 17	Class: F1C			
b) 3.3.2. Characteristics of Model Aircraft with Piston Motor(s) F1C			**Submitted by:**	**F1 SC**
Amended at the Technical Meeting? **NO**				
S-C Voting *(prior to the Technical Meeting)*:	For: 1	Against: 9	Abstain:	
Technical Meeting Voting:	For:	Against:	Abstain:	
Comments : The meeting noted the unpopularity of this proposal and potential practical difficulties. It was agreed to withdraw the proposal and request the F1SC to consider detail specific actions on F1C safety				

Page 17	Class: F1E			
c) 3.5.8 Classification			**Submitted by:**	**F1SC**
Amended at the Technical Meeting? **NO**				
S-C Voting *(prior to the Technical Meeting)*:	For: 7	Against: 1	Abstain:	
Technical Meeting Voting:	For: 5	Against: 3	Abstain:	

Page 18	Class: F1Q			
d) 3.Q.2 Characteristics			**Submitted by:**	**F1SC**

Amended at the Technical Meeting? **YES** Complete 3.Q.2 as amended by FFTM:

3.Q.2. Characteristics

~~Nickel Cadmium (NiCad),~~ Nickel Metal Hydrat~~i~~**id**e (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.

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

The motor run time will be determined by a maximum energy amount. In addition, motor runs over ~~20~~ 40 seconds are regarded as overruns. The energy budget of each model is ~~5~~ 4 joules per gram of the total weight. For energy calculations, weight exceeding ~~550~~ 500 grams is to be ignored.

Models must have provision for connecting a Static Energy Test (SET) device between the battery and the models systems via 3.5 mm male and female bullet connectors. The connectors from the battery should be male positive and female negative. It is the responsibility of the competitor to supply any adapters needed to connect to the SET.

Energy limitation will be by an energy limiter or by a motor run limit related to measured power.

a) For models with energy limiters. The allowed energy amount starts to be calculated with the release of the start button and finishes when the ESC has stopped supplying energy to the motor. The energy limiter has to calculate the energy consumed in real time. After coming to the end of the limited energy supply, the motor(s) must stop irreversibly.
For energy limit verification a SET is to be connected to the model to allow measurements to confirm the energy used between the release of the start button and until the ESC has stopped supplying energy to the motor. To synchronise the time of release of the start button the model must include a cable connected in parallel with the start button and terminated with a 2-pin female connector with 2.54mm pitch. The SET must store and display energy or store the time and power data.

b) For models without energy limiters the motor run will be controlled by a timer. The motor run is calculated as the allowed energy divided by the measured power and rounded down to the nearest whole second below. After the motor has reached full power, the power is measured with a Wattmeter at a time equal to ~~the nearest whole second below~~ half the planned motor run. A fully charged battery (4.2V per cell for lithium, 1.2V for NiMH) should be used for the power measurement. The calculated motor run should be clearly marked on the model. The motor run will be timed statically on the ground by timing from start button release to motor cut-off. The motor run will not be timed in flight.

F1Q models may use radio control only for irreversible actions to control dethermalisation of the model. This may include stopping the motor if it is still running. Any malfunction or unintended operation of these functions is entirely at the risk of the competitor.
The number of models eligible for entry by each competitor is four.

S-C Voting *(prior to the Technical Meeting)*:	For: 5	Against: 1	Abstain: 4
Technical Meeting Voting:	For: unanimous	Against:	Abstain:

	Comments : The meeting considered the F1SC proposal and made some minor changes to it. During subsequent discussions the meeting agree to incorporate selected features from the Finland and USA proposals into the F1SC proposal. Several people were satisfied with the current energy allowance(5) but discussion gave a majority in favour of a reduction but not as extreme as the reduction (3) proposed by Finland and the middle value of 4 Joules per gram was adopted by the meeting. The reduction of maximum weight considered for energy allocation was agreed to be reduced from 550 to 500g. There was support for increasing the maximum time allowed for motor run from 20sec but not so far as 60sec proposed by USA. The figure of 40sec was adopted. The principle of the USA proposal to time motor runs on the ground instead of in the air was accepted and implemented in a way similar to the way it had been included in earlier F1Q rules. The meeting considered changing the attempt rule 3.Q.5 and the timing rule 3.Q.9 to reflect the need not to time motor runs during the flight. However, it has been realised that there remains the 40sec maximum motor run rule and this must still be monitored, both for (a) energy limiter models and (b) models with energy limiter.

Page 18	**Class: F1Q**			
	e) 3.Q.2 Characteristics			**Submitted by:** **Finland**
	Amended at the Technical Meeting? **NO**			
	S-C Voting *(prior to the Technical Meeting)*:	For: 1	Against:3	Abstain: 5
	Technical Meeting Voting:	For:	Against:	Abstain:
	Comments : Some aspects incorporated in modified F1SC proposal above.			

Page 20	**Class: F1Q**			
	f) 3.Q.2 Characteristics			**Submitted by:** **Italy**
	Amended at the Technical Meeting? **NO**			
	S-C Voting *(prior to the Technical Meeting)*:	For: 2	Against: 4	Abstain: 3
	Technical Meeting Voting:	For:	Against:	Abstain:
	Comments :These changes included in F1SC proposal			

Page 21	**Class: F1Q**			
	g) 3.Q.2 Characteristics (RDT)			**Submitted by:** **USA**
	Amended at the Technical Meeting? **NO**			
	S-C Voting *(prior to the Technical Meeting)*:	For: 2	Against:4	Abstain: 4
	Technical Meeting Voting:	For:	Against: unanimous	Abstain:
	Comments : not supported by the meeting			

Page 21	**Class: F1Q**			
	h) 3.Q.2 Characteristics (motor run)			**Submitted by:** **USA**
	Amended at the Technical Meeting? **NO**			
	S-C Voting *(prior to the Technical Meeting)*:	For: 2	Against: 4	Abstain: 4
	Technical Meeting Voting:	For:	Against:	Abstain:
	Comments : Some aspects incorporated in modified F1SC proposal above.			

Page 22	**Class: F1Q**			
	i) 3.Q.2 Characteristics (motor run timing)			**Submitted by:** **USA**
	Amended at the Technical Meeting? **NO**			
	S-C Voting *(prior to the Technical Meeting)*:	For: 2	Against: 3	Abstain:5
	Technical Meeting Voting:	For:	Against:	Abstain:
	Comments : Some aspects incorporated in modified F1SC proposal above.			

Page 22	**Class: F1S**			
	i) New class F1S			**Submitted by:** **F1SC**
	Amended at the Technical Meeting? **NO**			
	S-C Voting *(prior to the Technical Meeting)*:	For: 7	Against: 3	Abstain:
	Technical Meeting Voting:	For:	Against:	Abstain:
	Comments : The FFTM considered that the class is growing in popularity internationally without need of any additional support from FAI, with consequential possible confusion of different flying organisation. To be withdrawn			