



**EFRA ANNUAL GENERAL MEETING  
CLARION OSLO AIRPORT HOTEL  
SØR GARDEMOEN, N-2060 GARDEMOEN  
NORWAY  
2<sup>nd</sup> to 3<sup>rd</sup> of November 2002**

**MINUTES ELECTRIC OFF ROAD**

**SATURDAY 2<sup>ND</sup> OF NOVEMBER 2002**

*The meeting opened at:*

**1. CHAIRMAN'S WELCOME** A warm welcome to all delegates, especially to the "new ones". I know it's getting late but thank you all for the time you invested to make this sport possible for the drivers represented

**2. APOLOGIES FOR ABSENCE:** Apologies have been received from: Brian Harris

COUNTRY	PRESENT	SECTION SUBSCR	Alloc EC 2wd	Alloc EC 4wd	Alloc WC 2wd	Alloc WC 4wd	RE- ALLOC. EC
AUSTRIA	Michael Karner	x	25	25	3	3	
BELGIUM	Willy Heremans	x	7	4	?	?	
CROATIA							
CZECH REP.							
DENMARK	Soeren Boy Holst	x	0	1	0	0	
ESTONIA							
FINLAND	Tuoma Iso Aho	x	2	2	2	1	
France	Jean Patrick Caillaud	x	8	8	2	2	
GERMANY	Bernd Kempfner	x	15	15	5	5	
GREAT BRITAIN	Chris Hardisty	x	20	20	5	5	
GREECE							
HOLLAND							
HUNGARY							
IRELAND							
ITALY	Fiorento Orlandinotti	x	0	0	?	?	
LUXEMBOURG							
MONACO							
NORWAY	Georg Ellugsen	x					
POLAND							
PORTUGAL							
ROMANIA							
RUSSIA							
SLOVAK REP.							
SLOVENIA							
SPAIN	Javier Llobreodt	x	2	2	2	2	
SWEDEN							
SWITZERLAND	Peter Imboden	x	4	4	?	2	
<b>TOTAL</b>		<b>11</b>	<b>83</b>	<b>81</b>	<b>19</b>	<b>20</b>	

\* Sorry names phonetic.....

Other Present: None

### 3 MINUTES OF 2001 ANNUAL GENERAL MEETING

3<sup>rd</sup> to 4<sup>th</sup> November 2001— Hotel Tryp Barajas, Madrid, Spain

a) Matters arising: None ; The minutes were **adopted unanimously**

**Proposed by: Denmark**

**Seconded by: Austria**

### 4 CORRESPONDENCE RECEIVED:

### 5 CHAIRMAN'S REPORT :

Due to professional obligations I could not attend as many races nor invest the same amount of the time into the sport as I wanted to, I attended GP Vienna, which suffered from a lack of participants, The Belgian GP, race up to standards and the EC in Tiverton, above standards but maybe not profitable. One more signal that one should keep expectations to an acceptable level for organiser and participant.

### 6 PRESENTATIONS FOR APPLICATIONS FOR GP'S 2003 AND EC 2004

#### 2003

Date	Alt. Date	Status	Country	Venue
May 02-04		Int race	Austria	Wien
Aug 06-10		EC	Austria	WIEN
May 18		GP	Italy	Collegno Torino
Jul 02 -6		GP	Belgium	Kampenhout
Oct ????	TBA	WC	USA	Clearwater FLA

#### 2004

Date	Alt. Date	Status	Country	Venue
2004		EC	Italy	Collegno, TORINO
2004		International	France	Montigny le BX
2005		WC rqst	AUSTRIA ?	SZG or Krieglach

### 7 RACE CALENDAR

#### 2005

Month	Date	Status	Country	Venue	Add Info
2005		EC	FRANCE	MONTIGNY le BX	Request

### 8 ALLOCATIONS

Allocations were made to each country as printed in the table form under item 2 on the agenda.

### PROPOSALS

#### 2.4 QUALIFYING

**2.4.a) add the wording of a tie inside a round of the 1/8 off road section adapted (page 93) and change the wording "highest points" for "best result in points" and delete the word "total" from next sentence.**

**Remark:** There is no rule for a tie in a result inside a round, , i.e. 2 drivers scoring 10 laps on 5.10.59 ...

*The mention to highest points is wrong or confused... highest is bigger and bigger in electric is worse... the best result is the lowest result, the mention to total time and laps may lead to confusion of adding the results of the 2 rounds to count....*

**Proposed by AECAR, Spain**

**2.4 QUALIFYING**

- i) Heats will be run in the following sequence for the 5 qualifying rounds:  
Round 1: 1,2,3,4,5,6,7,8,9,10,11,12  
Round 2: 4,5,6,7,8,9,10,11,12,1,2,3  
Round 3: 7,8,9,10,11,12,1,2,3,4,5,6  
Round 4: 10,11,12,1,2,3,4,5,6,7,8,9  
Round 5: 12,11,10,9,8,7,6,5,4,3,2,1

**AMEND THE RULE TO READ::**

**2.4 QUALIFYING**

- i) Heats will be run in the following sequence for the 5 qualifying rounds:  
**Round 1: 1,2,3,4,5,6,7,8,9,10,11,12**  
**Round 2: 4,5,6,7,8,9,10,11,12,1,2,3**  
**Round 3: 7,8,9,10,11,12,1,2,3,4,5,6**  
**Round 4: 10,11,12,1,2,3,4,5,6,7,8,9**  
**Round 5: 12,1,2,3,4,5,6,7,8,9,10,11**

*Remark: The round 5 is unfair with the drivers of heat 9 as well as for the drivers of heats 1, 2 & 3*

Proposed by AECAR, Spain

Seconded by: Withdrawn by Spain

Not Seconded

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**DELETE:**

**3. TRACK SPECIFICATIONS**

- 3.3a. ***If an artificial track surface is used it should not be more than 80% of the total surface.*** The spirit of Off Road racing must be adhered to. (Modified On-Road tracks are not considered suitable).

Proposed by FBA, Belgium

Seconded by: Denmark For: 5 against: 0 Abstained 5

PASSED

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**DELETE:**

**5. TECHNICAL SPECIFICATIONS**

**5.1. GENERAL REQUIREMENTS**

- m) No automatic steering or power/traction control is allowed, The function of steering (movement of the servo), throttle (output of the speed control or movement throttle servo), motor, ignition or carburettor may only be influenced by the transmitter. In no way may they be influenced by the movement or acceleration of the car.  
Any sensor or electronic device attached to any moving part of the car is not allowed, Any sensor or device to measure movement or acceleration of the car that is connected to or integrated in any electrical or electronically unit, motor or carburettor (for example servos, receiver, speed control, motor, battery or ignition is not allowed.  
No signals are allowed to be send out of the car to any other device at the track except signals of the lap counting transponder ***provided by the race organiser***. In order to enforce the technical rules, the race organiser has the right to inspect any car, its component and transmitter at any time during the race event, even during a race heat.

Proposed by EFRA Executive

Seconded by: Denmark Ammend to Standardize with On-road, delete "by organiser":

Great Britain

**AMENDEMENT:**

**5.1. GENERAL REQUIREMENTS**

- m) No automatic steering or power/traction control is allowed, The function of steering (movement of the servo), throttle (output of the speed control or movement throttle servo), motor, ignition or carburettor may only be influenced by the transmitter. In no way may they be influenced by the movement or acceleration of the car.  
Any sensor or electronic device attached to any moving part of the car is not allowed, Any sensor or device to measure movement or acceleration of the car that

is connected to or integrated in any electrical or electronically unit, motor or carburettor (for example servos, receiver, speed control, motor, battery or ignition is not allowed.

No signals are allowed to be send out of the car to any other device at the track except signals of the lap counting transponder. In order to enforce the technical rules, the race organiser has the right to inspect any car, its component and transmitter at any time during the race event, even during a race heat.

**For: 9 Against 0 Abstention 1**

**PASSED**

**DELETE:**

**5.4. MODIFIED CLASS CAR MOTORS**

b) Specifications '05' sized displacements:

Can:

Can diameter to be a maximum of 36.02 mm. Can length to be a maximum of 53 mm measured from the mounting face of the motor to the furthest point not including solder, tabs or lead wires.

Ceramic magnets only (Cobalt and rare earth magnets are not allowed).

Current must be supplied to the armature by two brushes.

Armature:

Shaft diameter is 3.175 mm (.125 inches). Production tolerances are allowed. The rotor has to have three poles with windings. Stack minimum length 21.0 mm, maximum 22.8 mm (without Epoxy). No split rotor is allowed. The laminations have to be one after the other without anything between. The thickness of the stack plates is 0.35 +/- 0,05 mm, a maximum of 63 laminations have to be used. The minimum stack thickness is 3.5mm. Only Copper wire is to be used for the winding. A minimum of 10 continuous windings per wire and pole is allowed, to be checked by inductiontest.

The armature has to be permanently marked showing the number of windings and name of the **manufacturer**. From the 1<sup>st</sup> January of 2002 all motors without that marking will be illegal.

**AMEND THE RULE TO READ:**

**5.4. MODIFIED CLASS CAR MOTORS**

b) ..... The armature has to be permanently marked showing the number of windings and name of the **brand**. From the 1<sup>st</sup> January of 2002 all motors without that marking will be illegal.

**Proposed by EFRA Executive**

**Seconded by: Great Britain**

**Amended by Denmark**

**AMEND THE CURRENT RULE TO READ:**

**5.4 General Definition of a Modified Motor:**

Specifications '05' sized displacements:

Can:

Can diameter to be a maximum of 36.02 mm. Can length to be a maximum of 53 mm measured from the mounting face of the motor to the furthest point not including solder, tabs or lead wires.

Ceramic magnets only (Cobalt and rare earth magnets are not allowed). Current is supplied to the armature by 2 brushes.

Armature:

Shaft diameter is 3.175 mm (.125 inches). Production tolerances are allowed. The rotor has to have three poles with windings. Stack minimum length 21.0 mm, maximum 22.8 mm (without Epoxy). No split rotor is allowed. The laminations have to be one after the other without anything between. The thickness of the stack plates is 0.35 ±0.05 mm, a maximum of 63 laminations have to be used. The minimum stack thickness is 3.5mm. Only Copper wire is to be used for the winding. A minimum of 10 **continuous** windings per wire and pole is allowed (to be checked by an inductance test). The number of winding for each is defined in the table.

The armature has to be permanently marked showing the number of windings and name of the **manufacturer**, from the 1<sup>st</sup> Jan. 2002 all motors without this marking will be illegal.

**Seconded by Belgium: for 11 against 0 abstentions 0 PASSED**

**10 ELECTION OF SECTION CHAIRMAN**

Mr Frank Mostrey

Belgium

Meeting taken over by Carlos Gomez, Mr Frank Mostrey re-elected and called back to continue.

## 11 GENERAL DISCUSSION ITEMS

### *Proposed by BRCA, Great Britain*

We have, after several years of consultation, formed a committee for the homologation of motors and cells. We have long thought that these fundamental items should be common throughout the electric community and all would benefit from having a common policy throughout Europe. We would propose that EFRA look at the possibility of creating a body charged with the responsibility of producing homologation lists

**Was discussed before**

## 10 ANY OTHER BUSINESS

### **NEW: EC2003 TYRES**

2WD: PROLINE BOW-TIE (8186) & TEAM LOSI X2000 (7369)

4WD: PROLINE HOLE-SHOT (8184) & SCHUMACHER MINIPIN (U66)

**Gentlemen agreement to follow these rules whenever possible and to include them officially on next AGM:**

### **BATTERIES**

*Only Sub-C size Nicads or NiMh are approved. The size of the individual cells rated at 1.2volts nominal is 23mm diameter, 43mm length plus or minus manufacturers tolerance. Any new cells have to be submitted to the EFRA Section Chairman by the 31<sup>st</sup> December each year. Subject to the Chairman being satisfied that the new battery will be available, they will be included on the EFRA list for the following year, and can be legally used from the 1<sup>st</sup> April of that following year] Details of newly approved cells will be published on the EFRA website. Only batteries appearing on the official EFRA website list as at the 1<sup>st</sup> January annually will be legal for use in EFRA sanctioned meetings for that calendar year.*

### **DRIVERS AIDS**

*Radio Control receivers carried in the car may only have two devices connected (normally the steering servo and speed controller), plus an optional separate battery supply for the powering of radio control equipment/devices **and any timing equipment**. The use of further channels to receive electrical signals from sensors carried in the car is prohibited.*

### **Furthermore :**

*Chris Hardistie handed over a letter from Brian Harris: main points to keep in mind from his comments:*

*\* Be careful with the ruling on changing chassis solely based on the discretion of the race director.*

*\* Ten minutes protest limit is unfeasible when driver has to perform normal duties, do not be too strict when driver has a reasonable excuse. Change to 20 minutes next year*

Meeting Closed: 20H05