



**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 1:10 IC TRACK**

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

*The meeting opened at: 14h 35m*

**1. CHAIRMAN'S WELCOME**

Mr Eduardo Picolo

Eduardo Picolo welcomed the delegates of all countries to the meeting.

**2. APOLOGIES FOR ABSENCE**

Apologies have been received from:

- Czech Republic
- Estonia
- Luxembourg
- Romania
- Russia
- Slovenia

COUNTRY	PRESENT	SECTION SUBSCR	ALLOC 1	ALLOC 2	ALLOC 2	RE- ALLOC.
AUSTRIA	Dieter Funke		2	3		
BELGIUM	Franky Noens		2	Latter		
CROATIA						
CZECH REP.						
DENMARK	Jan Juul		0	Latter		
ESTONIA						
FINLAND	Tony Raikas		2	3		
FRANCE	Philippe Bertrand		7	6		
GERMANY	Peter Reichelsdoerfer		4	6		
GREAT BRITAIN	Bob Harley		4	Latter		
GREECE						
HOLLAND	Sander B De Graaf		0	Latter		
HUNGARY						
IRELAND						
ITALY	Roberto Cairo					
LUXEMBOURG						
MONACO						
NORWAY	Svein Harald Ytternes		6	3		
POLAND						
PORTUGAL	Paulo Sousa		14	25		
ROMANIA						
RUSSIA						
SLOVAK REP.						
SLOVENIA						
SPAIN	Jose Alfonso Pineda		10	13		
SWEDEN	Sune Wall		0	Latter		
SWITZERLAND	Ernesto Camponovo		0	5		
<b>TOTAL</b>			<b>51</b>	<b>64</b>		

Other Present:

EFRA President  
EFRA Secretary  
EFRA 1/8 IC Track Chairman  
EFRA PR Officer  
EFRA Honorary Life Vice President  
EFRA Homologation Officer  
Advisory Associate Member- Serpent

Mr. Gary Culver  
Mr. E. Dallas Mathiesen  
Mr. Sander B. De Graaf  
Mr. Carlos Gomez  
Mr. Peter Bervoets  
Mr. Gerhard Binder  
Mr. Peter Bervoets

### 3 MINUTES OF 2001 ANNUAL GENERAL MEETING

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

- Matters arising:
  - No matters arising.

The minutes were:

**Proposed by: BELGIUM**  
**Seconded by: DENMARK**

Unanimous approval was given to the minutes of the 2000 Annual General Meeting.  
No comments received.

### 4 CORRESPONDENCE RECEIVED

No correspondence received regarding this AGM.

### 5 CHAIRMAN'S REPORT

The Chairman's Report was presented to the countries. This year we had the 40+ EC in Austria with 19 drivers, the EC took place in Sweden with 62 drivers from 9 Countries, Martin Christensen from Denmark with a very consistent and fast driving became the new European Champion, and the World Championship including the World Cup Race for the 200mm class took place in the USA, with a total of 90 drivers on both classes.

All the information regarding these events on the Chairman's Report attached.

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

#### 2003

Date	Alt. Date	Status	Country	Venue
June 26-28		GP	Austria	Kirchberg
August 8-10		EC	Portugal	Vila Real
August 16-18		40+ EC	Italy	Melzo
October 11-12		GP	Switzerland	Lostallo

#### 2004

Date	Alt. Date	Status	Country	Venue
2004		EC	Austria	Amstetten

### 7 RACE CALENDAR

#### 2003/2004

Month	Date	Status	Country	Venue	Add Info
June	26 – 28	GP	Austria	Kirchberg	
August	8 - 10	EC	Portugal	Vila Real	
August	16 - 18	40+ EC	Italy	Melzo	
October	11 -12	GP	Switzerland	Lostallo	
	2004	EC	Austria	Amstetten	

## 8 ALLOCATIONS

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

**ALLOC. 1** refer to 1/10 IC Track

**ALLOC. 2** refer to an indication of drivers to attend the EC.

Confirmation of allocation for both classes up to the 15<sup>th</sup> of December the latest.

## 9 RULE PROPOSALS

---

### 1. GENERAL

#### 1.1 GENERAL FORMAT FOR EUROPEAN CHAMPIONSHIPS 1:10 IC TRACK

No A-drivers 1:8 track IC, no finalists of the last 3 years EC's from other sections, except 1:10 track IC and finalists open entry European Championships (3.2.12).

The time shall be counted from the last 1.st of January

Free practice possible at least from Thursday or otherwise specified by the organiser.

Friday: technical inspections and in the afternoon, one round timed and controlled practice, opening ceremony and the first of the 4 qualifying rounds.

Saturday: 3 qualifying rounds and 1/64 finals and if possible consolation finals.

Sunday: subfinals (1/32 >>> 1/2) and final, prize ceremony.

#### **Qualifying rounds**

5 consecutive best laps on 7 minutes training sessions. Minimum of 4 rounds, and a maximum of 6 rounds, best 5 laps to count for qualification result. In case of equal times the second -best result will decide the order.

#### **AMEND THE CURRENT RULE TO READ:**

### 1. GENERAL

#### 1.1 GENERAL FORMAT FOR EUROPEAN CHAMPIONSHIPS 1:10 IC TRACK

***No A-drivers 1/8 track which have entered in the final of their class European Championships in the last 3 years. No drivers that have entered in a final of any European Championships in the last year from the other sections except 1/10 track. Any driver not included into these restrictions can participate in the event.***

The time shall be counted from the last 1.st of January

Free practice possible at least from Thursday or otherwise specified by the organiser.

Friday: technical inspections and in the afternoon, one round timed and controlled practice, opening ceremony and the first of the 4 qualifying rounds.

Saturday: 3 qualifying rounds and 1/64 finals and if possible consolation finals.

Sunday: subfinals (1/32 >>> 1/2) and final, prize ceremony.

#### **Qualifying rounds**

5 consecutive best laps on 7 minutes training sessions. Minimum of 4 rounds, and a maximum of 6 rounds, best 5 laps to count for qualification result. In case of equal times the second -best result will decide the order.

**Remark:** *Open slightly the class to good average eurodrivers...*

**Proposed by** AECAR, Spain

**Seconded by:**

#### **AMENDED TO READ:**

### 1. GENERAL

#### 1.1 GENERAL FORMAT FOR EUROPEAN CHAMPIONSHIPS 1:10 IC TRACK

***No drivers that have entered in a final of any European Championships in the last year from the other sections except 1/10 track. Any driver not included into these restrictions can participate in the event.***

The time shall be counted from the last 1.st of January

Free practice possible at least from Thursday or otherwise specified by the organiser.

Friday: technical inspections and in the afternoon, one round timed and controlled practice, opening ceremony and the first of the 4 qualifying rounds.

Saturday: 3 qualifying rounds and 1/64 finals and if possible consolation finals.

Sunday: subfinals (1/32 >>> 1/2) and final, prize ceremony.

#### **Qualifying rounds**

5 consecutive best laps on 7 minutes training sessions. Minimum of 4 rounds, and a maximum of 6 rounds, best 5 laps to count for qualification result. In case of equal times the second -best result will decide the order.

Proposed by: HOLLAND  
Seconded by: AUSTRIA

**AMENDED TO READ:**

1. GENERAL
- 1.1 GENERAL FORMAT FOR EUROPEAN CHAMPIONSHIPS 1:10 IC TRACK  
Open it to everybody.....

Proposed by: NORWAY  
Seconded by: SWITZERLAND

**AMENDED TO READ:**

1. GENERAL
- 1.1 GENERAL FORMAT FOR EUROPEAN CHAMPIONSHIPS 1:10 IC TRACK  
Keep the current rule as it is for the 1/10 IC Track, and have it open with no restrictions for the 1/10 200mm Class.

Proposed by: BELGIUM  
Seconded by: FINLAND

Not Seconded

Passed with 11 in favour and 2 abstentions

---

**AMEND THE CURRENT RULE TO READ:**

1.2 RACE PROCEDURES

- 4 From 30 seconds till 3 seconds the cars must be held at the starting boxes. If a car is not at the starting box at **30** seconds due to unforeseen problems the car may start from the pitlane after other cars have officially started. The race director and referees will monitor for the abuse of this facility.

**REMARK:** It must be a writing failure. If a driver comes running in to 3 seconds he disturb the other drivers.

Proposed by SBF, Sweden  
Seconded by:

Not Seconded

**AMENDED TO READ:**

1.2 RACE PROCEDURES

- 4 From 30 seconds till 3 seconds the cars must be held at the starting boxes. If a car is not at the starting box at **10** seconds due to unforeseen problems the car may start from the pitlane after other cars have officially started. The race director and referees will monitor for the abuse of this facility.

Proposed by: GERMANY  
Seconded by: BELGIUM

Not Seconded

Passed with unanimous decision.

---

**AMEND THE CURRENT RULE TO READ:**

1.8. TECHNICAL INSPECTION

Before the start of the qualifying rounds all cars will have to go to technical inspections. Cars will be checked for weight limit, motor, muffler, body/spoiler. **and overall dimensions.**

**All specified dimension inside the motor shall be tested. This can be done during the qualifying rounds to save time. Every tested motor shall be marked.**

The chassis will be marked before the race and if a driver wants to change chassis the new and old chassis must to be present to the technical inspector. Random checks on technical

specification can be done during the whole race. For GP's the same race format must be used, with free practice at Friday, qualifying on Saturday and finals on Sunday.

**REMARK:** To avoid discussions of the measurement method at the end of the finals.

**Proposed by SBF, Sweden**

**Not Seconded**

**AMENDED TO READ:**

1.8. TECHNICAL INSPECTION

Before the start of the qualifying rounds all cars will have to go to technical inspections. Cars will be checked for weight limit, motor, muffler, body/spoiler. **and overall dimensions.**

The chassis will be marked before the race and if a driver wants to change chassis the new and old chassis must be present to the technical inspector. Random checks on technical specification can be done during the whole race. For GP's the same race format must be used, with free practice at Friday, qualifying on Saturday and finals on Sunday.

**Proposed by: BELGIUM**

**Seconded by: PORTUGAL**

**Not Seconded**

Passed with unanimous decision.

---

2.10 BODIES AND WINGS

Bodies as used in the European Saloon Touring Car racing class are allowed in 1/10 scale , and must be one piece and used in the standard form (bodyshell + wing) , with no modifications or additions allowed (i.e. separate front spoiler for example).

All bodies that are approved.....

**AMEND THE RULE TO READ:**

2.10 BODIES AND WINGS

**Bodies for 1/10th IC should be replicas of cars that are raced in any European touring car class. They must be cars based on road-approved cars that have a minimum of four seats. To be homologated the side profile must be an accurate replication of the original.**

They must be one piece and used in the standard form (bodyshell + wing), with no modifications or additions allowed (i.e. separate front spoiler for example).

All bodies that are approved.....

**Remark:** This rule would keep all current raced bodies legal. It gives manufactures the opportunity to make replicas of cars from the popular BTCC and DTM like the Peugeot 406 Coupe (BTCC) or the Opel Astra Coupe (raced in both DTM and BTCC). Adding the four seats rule keeps "specialist cars" like the GT-1 cars or le-Mans prototypes from being eligible.

**Proposed by OFMAV, Austria**

**Not Seconded**

**AMENDED TO READ:**

2.10 Touring car (Sedan) style bodies, 2- and 4-door versions allowed as raced in International 2 litre Touring series. No GT or Sports car bodies allowed.

No homologation required.

**Rule to effective from the 1<sup>st</sup> of January 2003.**

**Proposed by: AUSTRIA**

**Seconded by: NORWAY**

**Not Seconded**

Passed with unanimous decision.

---

**DELETE:**

**2 1:10 IC TRACK**

2.11 GENERAL

The cars will be two wheel drive **with only the rear wheels driven.** Mechanically operated brakes must be fitted acting on the rear wheels only. Maximum two speed transmission to be used.

**AMEND THE CURRENT RULE TO READ:**

**2 1:10 IC TRACK**  
2.11 GENERAL

The cars will be **four** wheel drive. Mechanically operated brakes must be fitted acting on the rear wheels only. Maximum two speed transmission to be used.

**Remark:** *This is the valid rule in Norway for 2002, and it has been a big success. It is much easier to make the car handle well, especially for new beginners. And they are much easier to drive when raining as opposed to 2WD.*

*this rule change should probably also imply a higher min. weight due to the extra transmission parts > 2.000 grams or something*

**Proposed by NrcBF, Norway**  
**Seconded by:**

**Not Seconded**

**AMENDED TO READ:**

**2 1:10 IC TRACK**  
2.11 GENERAL

The cars will be **2WD** and **4WD**. Mechanically operated brakes must be fitted acting on the rear wheels only. Maximum two speed transmission to be used.

**Proposed by: GREAT BRITAIN**  
**Seconded by: NORWAY**

**Not Seconded**

Defeated with 10 votes against.

---

**10 REPORT FROM THE "OPEN DISCUSSION FORUM 1:10 200 MM CLASS" FRIDAY AFTERNOON**

Acceptance and amendments of/to the proposal and suggested rules discussed at the "Open Forum" on Friday afternoon.

The meeting started at 16h.15m and finished at 19h.35m.

A very well participated meeting with over 40 persons representing 13 Countries, (Austria, Belgium, Denmark, Finland, France, Germany, Great Britain, Holland, Italy, Norway, Portugal, Spain and Sweden).

The amended and suggested rules discussed at the "Open Forum" were:

**Proposed by: PORTUGAL**  
**Seconded by: DENMARK**

**Not Seconded**

Passed with 1 vote against



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

---

## OPEN DISCUSSION FORUM 1:10 200 MM CLASS

---

FRIDAY 1<sup>ST</sup> OF NOVEMBER 2002  
16.00 – 19.00

*NOTE: No decision will be taken during this meeting*

---

### RULE PROPOSALS RECEIVED

---

*Proposed by NrcBF, Norway*

*In case EFRA rules will be created for this new class, we would like to opt for the following:*

**Current recommended guideline rule is to be AMENDED.**

-1.19 Wheel width (including tyre bead) MAXIMUM (mm) **30,00**

**ARGUMENT:** 30mm rear wheels gives more even tire wear between the front- and rear wheels.

**Current recommended guideline rule is to be DELETED.**

-1.4 ...is to be 5.00mm. **No turbo style glow plugs - only 1/4 UNF glow plugs.**

**ARGUMENT:** "Turbo" plugs are longer lasting and gives better throttling.

**Current recommended guideline rule is to be AMENDED.**

-1.4 The carburettor size is to be **5.50** mm.

**ARGUMENT:** Very few manufacturers produce 5,0mm carburettors or venturis. I.e. 5.00mm carburettors are to very little extent commercially available.

*These 3 rules mentioned above, which are different from EFRA;s recommended guideline rules, have been used in the 2002 season in Norway, and they seem to produce good and even competition. And the cars are handling very well.*

**We would also like to change the following rule:**

**Current recommended guideline rule is to be AMENDED.**

-1.19 Height to top of the roof MINIMUM (mm) **115,00**

**ARGUMENT:** Because there are several bodies on the market that work very well with this type of cars. But they are a little bit lower than 120,00 mm.

---

### MOST IMPORTANT RULES FOR 1/10 200MM TC CLASS

*Proposed by Hon. Life Vice President Pieter Bervoets*

#### TRANSMISSION AND BRAKES

4-WD and 2-WD allowed

Single mechanical brake device

Gear-box with max. 2 transmissions

**Notes:** None

#### OVERALL DIMENSIONS

Max. width front and rear: 200mm

Max. width with body: 205mm

Min. height: 120mm (measured with chassis placed on a 10mm high block)

Max. fuel tank capacity: 75cc

Min. weight: 1.700 gram

**Notes:** *The sizes are generally accepted I believe. To measure the height of the car while standing on a 10mm high block eliminates variations caused by suspension settings and position. Present US made bodies which are very low and flat, measure approx. 115mm, and more scale like European style bodies measure 125-130mm. Therefore 120mm would be a good compromise. The minimum weight should be without fuel and without transponder, measured at the end of the race. When built-in personal transponder is used, the minimum weight should be 1.705 gram including personal transponder.*

#### **ENGINE SPECS**

Max. 2.1cc (.12 cu) capacity, 2-stroke  
Maximum 4 ports (including the exhaust port)  
Max. carburetor bore: 5.5mm  
No exhaust port height restriction  
No holes in piston  
Standard and conical glowplugs allowed  
Internal modifications allowed

**Notes:** *Engine specs should be as simple as possible for both racers and organizers. The .15 class has learned us that too many restrictions only lead to less support, and greater hesitation of organisers to get involved in the class. Allow internal modifications as imposing restrictions will only lead to suspicion, discussions and protests, and increases the workload for technical inspection officers. Allow conical (Turbo) plugs. They are more reliable, less critical and should not be more expensive than regular ¼ UNC plugs. A conical plug has only a limited effect on performance increase.*

#### **EXHAUST SYSTEM**

2-chamber pipe  
tail-pipe (stinger) diam. max. 5.2mm  
min. tail pipe length 10mm (measured from outside of pipe)

**Notes:** *I think the double-chamber principle has served us well over the past 17 or 18 years since its introduction. Sound levels are very acceptable, especially with the smaller .12 engines. The tail-pipe diameter to be nominal 5.0mm but as most of them are made of commercial available tubing, the max. diameter should be set on 5.2mm to allow for production tolerance. The length of 10mm, measured from the outside of the pipe, cannot be longer as it will protrude too much outside the wheels. To put a theoretical max. noise-level in the rules, like max. 84dB(A) is probably needed to enable an organiser to ban pipes that are simply too noise.*

#### **FUEL**

Max. 16% of nitro-methane (alternative 25%)

**Notes:** *In 1/10 235mm 16% Nitro has worked well. To put a maximum on this will reduce performance and cost, and increase reliability. With the use of the NitroMax 16 checking is relatively easy. Alternatively the max. could be set at 25%.*

#### **TIRES**

Both foam and rubber tires can be used  
Max. width in front: 26mm  
Max. width in rear: 30mm  
Max. rim diameter: 51mm  
No tire additives allowed

**Notes:** *Foam or rubber tires is no longer a subject of controversy. Foam tires are far less complicated technology, makes the car less critical for tires, and is ultimately cheaper. Width of front tires of 26mm is accepted throughout the world. Width of the rear tire used to be 26mm, but has changed to 30 and 32mm in Asia and USA. Different width of front and rear tires is essential as it gives the 200mm cars much better balance and more equal tire wear. As 30mm rear wheels and tires are already widely available I believe the it is best to go for 30mm maximum width. The use of tire additives should be avoided and banned in I.C. racing. We have always been able to do without, and should not import this from the electric car scene.*



## BODIES

Touring car (Sedan) style bodies, 2- and 4-door versions allowed as raced in international 2 Liter Touringcar series

Max. width: 205mm  
Max. wing width: 200mm  
Max. wing depth: 40mm  
Max. cut-out height rear side of the body 45mm (measured on 10mm block)

**Notes:** *To restrict the body style to 2-Litre touring cars will avoid seeing exotic type of touring cars like DTM. Nowadays both 2- and 4-door sedans are raced. Roof (not a protrusion in the roof) must be the highest point of the car when the chassis is placed on a 10mm block. Restrict the cut-out height of the rear bumper section of the body to 45mm, also measure on a 10mm block. This rule has simplified the checking also in 1/10 235mm.*

## RACING FORMAT FOR EC

Qualifying: 5 minutes, 4 heats  
Christmas tree system for lower finals  
Lower finals: 15 minutes  
Semi finals: 25 minutes  
Final: 45 minutes

**Notes:** *This is arbitrate, but is either the same as other classes, or different. Longer races may require tire change. Current cars do not have quick-change wheels systems. This may trigger the development of such systems. If such a development is not desirable, it should be put in the rules, else it will certainly happen.*

## MAIN DIFFERENCES WITH PROVISIONAL EFRA RULES:

	Guideline rules	Proposed rules
Max. carburetor size	5.0mm	5.5mm
Conical plugs	prohibited	conical plugs allowed
Min. weight:	1.800 gram	1.700 gram
Max. tire width	26mm (front and rear)	26mm front, 30mm rear
Wing width max.	185mm	200mm
Wing cord: max.	50mm	40mm

---

### **Proposed by BRCA, Great Britain**

We would like all present to discuss the possibility of two classes within the 1/10 ic 200mm class.

- i. The first is a rubber scale class, which would run to as little as possible rules (Rubber tyres, Percentage of nitro, Width of chassis, Bodysell with engine contained, carburettor diameter, Exhaust port height, Pipe outlet diameter etc.) without spoiling the racing and to keep the racing as close as possible.
- ii. The second is to be an open type class with restrictions only on fuel (percentage of nitro), width of chassis (200mm) and engine capacity (.12- 2.11cc).
- iii. Fuel to be 16% nitro-max tested.

Glow plug to be of any type.

## RULES FOR RUBBER SCALE CLASS

1. All cars must have a de-clutching device and have an operating brake capable of stopping the car and holding the car motionless with the engine running.
2. The front bumper must be fitted to the car to the same shape of the body shell and material as supplied in any standard kit car. The bumper must not protrude outside the body nor shall it be cut down beyond the shape of the body, Also constructed as to minimise injury that may result from being hit by a car.
3. Scale rubber .12 engine cars minimum of 1750grams.
4. 4wd Scale rubber .12 engine cars with central brake that works on all four wheels.

5. The engines for 2wd and scale rubber cars shall be air-cooled, With front rotary valve two-stroke induction type, With a maximum of four ports including the exhaust port. No form of forced induction is allowed or any form of variable port timing.
6. Capacity 12-2.11cc
7. Stroke min 14mm  
Exhaust port height 4.5mm  
Crankshaft max End gas  
Passage internal dia. 7.0mm  
Carburettor max throat dia. 5.5mm.
8. Gearboxes up to two-speed only shall be used in all classes.
9. All mufflers in all classes will have a single outlet pipe. A muffler of approved double chamber design including silencer chamber must be fitted having the following internal dimensions 5.2mm (measured at the widest point). NOTE this dimension includes a tolerance to account for manufacturers variation in commercial available tubing.
10. Wheelbase 250mm min-270mm max  
Overall length (incl. wing) 360mm min-460mm max  
Overall width (with body) 175mm min-210mm max  
Overall width (without body) 170mm min-200mm max
11. Fuel tank, fuel tube and any external fuel filters are not to exceed a total capacity of 75cc.
12. Fuel may only contain Methanol, Oil/lubricant and nitro methane. A maximum of 16% fuel. Verifying these fuels will be done by simple floaters called nitromax 16.
13. Any available body shell up to 200mm providing the engine is contained within the body shell may be used
14. Bodysshell holes.  
Front windshield 50mm max  
Roof for re-fuelling 30mm max  
Roof for glow plug access 20mm max  
Roof for mixture screw 10mm max  
Hole for aerial tube 10mm max  
Exhaust hole To be reasonable size.
15. All windows must remain transparent. Only the front side windows and the rear window may be removed in part or whole. The side rear windows must remain whole.
16. Details of all the front and rear lights, Grills and air intakes etc must be clearly contrasted from the surrounding paintwork. The bodies are not to be cut above the lowest original bodyline at the front, Sides and rear.
17. Rear wings,  
Cord 50mm Width 200mm  
End plate 50mmx30mm

---

***After consulting various manufactures have the 1:10 IC Section Chairman, Mr Eduardo Picolo received the following recommendation***

Dear Sir,  
Thank you for your e-mail.  
My proposals:

- carburetor size 5,5mm
- maximum exhaust high 4,5mm
- conical (turbo) glow-plug
- maximum crankshaft internal diameter 7mm

-change body to Group-C type or Lola type

All this changes are due to the fact that engines are running to hot now and modellers are suffering in getting an enjoyable performance out of this class. This is very important.

- front tires 26mm
- rear tires 30/32mm

This change is needed because to finish 1 front set we have to change 2 or 3 rear sets.

I am at your disposal for any request  
Best regards  
A.Picco

---

Dear Eduardo,  
Thanks a lot for your letter regarding the next AGM meeting.  
We are very glad to give some suggestions for the future 2.1cc rule.  
As you know we already ask for 5,5mm carburettor, as we already produce this diameter for the whole world allowed by the other federations.  
The choice was due to the fact that 2.1cc motor is critical to use and it need more internal refreshing by more cool fuel. A smaller carburettor will increase the heating and if you stop the engine is really difficult to restart!!

Turbo glow: the use of the turbo glow make a better reliability and carburetion stability. The price is almost same.

Exhaust height: make a 4.5mm exhaust height make a better gas fluency out of the cylinder giving a better behaviour in connection with 5,5 carb. increasing cooling and carburetion stability.

Thanks in advance for cooperation  
Fabio Domanin  
Tech dep.  
Novarossi snc

- 
- EFRA Executive proposes: 1** *Establish a new section for the 1:10 200 mm Class to be handled under Appendix 7*  
**2** *Following EFRA 1:10 200 mm Class recommended guidelines the EC for this class should be raced combined with the other 1:10 IC Track Class.*

This rule was amended to:

- EFRA Executive proposes: 1** *Establish a new class for the 1:10 200 mm Class to be handled under Appendix 7*  
**2** *Following EFRA 1:10 200 mm Class recommended guidelines the EC for this class should be raced combined with the other 1:10 IC Track Class.*  
**3** *At European Championships Drivers can only compete in 1 Class.*

**Proposed by: AUSTRIA**  
**Seconded by: PORTUGAL**

Not Seconded

Passed with one abstention.

## 11 ANY OTHER BUSINESS

Eduardo Picolo informed that he will not be standing again next year.

Meeting closed at: 18h 05m.

XXXXXXXXXXXXXXXXXXXXXXXXXXXX

## EFRA RULES FOR 1/10TH I.C. 200MM CLASS

### 1. TECHNICAL SPECIFICATIONS

- 1.1 The class to be run will be the "200mm TOURING CAR". 4-WD and 2-WD allowed. Only a Single mechanical brake device.
- 1.2 Maximum 2 speed gearbox allowed.
- 1.3 All cars must have a de-clutching device and have an operating brake capable of stopping the car and holding the car motionless with the engine running.
- 1.4 It's only permitted to use .12 engines. They shall be air-cooled, with front rotary valve, two-stroke induction. The engines may have a maximum of four (4) ports, including the exhaust port. No form of forced induction is allowed or any form of variable port timing. Only glow plug ignition is allowed. No holes in the piston and no additional holes in the liner. The maximum carburettor size is 5.50mm. Standard and conical glow plugs allowed. The crankshaft hole shall have a maximum diameter of 7.00mm at its end. The hole can be finished with a continuous unbroken chamfer with a maximum width of 0.50mm if this is required for manufacturing purposes at the crank web end.

(Crankshaft drawing equal to one on page 141 for the 1/10 IC Track Class)

- 1.5 Maximum engine capacity - .12 (2.11 cc) only.
- 1.6 Engine internal modifications are allowed as long as they are within the parameters of Rules 1.4 and 1.5.
- 1.7 A muffler of approved double chamber design, including silencer chamber must be fitted having the following dimensions:
- |                                       |  |
|---------------------------------------|--|
| Tail pipe maximum internal diameter * | 05,20 mm.  |
| Tail pipe minimum length              | 10.00 mm. (measured from the outside of the pipe.) |

(Drawing to be fitted)

The tail pipe must be oriented on or below the horizontal.

- This dimension includes a tolerance to account for manufacturing variations in commercially available tubing.

The use of the INS box is mandatory.

Maximum noise level of 82dB(A).

- 1.8 Minimum weight without fuel and transponder: 1700.00 grams. 1715.00 grams when built-in personal transponder is used.
- 1.9 Fuel tank capacity to be 75.00cc including all fuel tubing, filters, etc. No loose inserts allowed inside the tank.
- 1.10 Touring car (Sedan) style bodies, 2- and 4-door versions allowed as raced in International 2 litre Touring series. No GT or Sports car bodies allowed.
- 1.11 The front bumper must follow the body contour and must be constructed so as to minimise injury that may result from being hit by a car. The bumper must be made from foam rubber or a flexible plastic material.
- 1.12 The body must be made from a flexible material and be painted properly. All windows must remain clear or be semi-transparent.

1.13 Bodies are not to be cut above the lower bumper line at the front or the back or above the lower bottom line of the doors. Details of all front and rear lights, grills, air intakes and windows must be clearly contrasted from the surrounding paintwork.  
Rear of the body may not be cut away higher than 45.00mm, measured with a 10.00mm spacer under the chassis plate.

1.14 Only the following AIR HOLES and sizes are permitted in the body shells:

One (1) cooling hole may be cut in the front windscreen with a maximum dimension in any direction of 50.00mm.  
20.00 mm maximum diameter hole in the roof for glow plug access.  
Both front side windows and the rear window can be removed for ventilation, except for the side rear windows~ which must remain intact.  
Re-fuelling hole maximum 30.00mm diameter,  
Small holes can be made for the transponder, carburettor adjustment and radio antenna, (Max. 10mm).  
The hole for the exhaust pipe must be of reasonable size.  
No other holes are permitted.

1.15 Roll-bars (roll-over bars) must be kept under the body.

1.16 No parts of the car, except the muffler outlet may protrude outside of the body shell when viewed from above.

1.17 Under body/chassis aerodynamic aids of any nature are not allowed,

#### 1.18 GENERAL DIMENSIONS

	MINIMUM (mm)	MAXIMUM (mm)
Wheelbase	230.00	270.00
Width without body	170.00	200.00
Width with body	175.00	205.00
Length inc Body & wing	360.00	460.00
Height to the top of the roof (measured with a 10mm spacer under the chassis plate on level	120.00	175.00
Wing width inclusive	125.00	200.00
Wing chord	30.00	40.00
Side Dams		25,00 x 40.00
Wing overhang (at rear)		10.00
Wheel dia. (excluding tyre bead)	46.00	50.00
Wheel width (including tyre bead) and Tyre width (across side walls):		
Front:		26.00
Rear:		30.00

1.19 One wing and one spoiler may be mounted to any car (if the original full-size car had more, it is allowed to do the same). Wing and spoiler must be made from a flexible material and be painted. Wing and spoiler may not be fixed to body with piano wire. Basically they must be mounted to the body directly. Wing and spoiler must not protrude outside the maximum height and width of the body (including the side dams). Rear wings must be mounted in the same place as was intended by the body manufacturer. The overhang must not exceed 10.00mm at the furthest point, to be measured from boot lid.

Side dams may be fitted but must be a reasonable representation of those fitted to the original car, fit in a rectangle with the measurements defined, and must not project above the height of the roofline.

The height of the wing may be adjusted but the wing, including side dams must not extend higher than the roofline. Wings (excluding side dams) are to be of single moulded construction (no flat-packs/bend your Own). Gurney strip must not exceed the width of the wing and have an edge not more than 5.00mm high.  
Total cord of wing, plus the strip is 45.00mm.

- 1.20 WHEELS & TYRES:
- Foam and/or Rubber tyres can be used.
  - Treatment of the tyres with additives is prohibited.
  - Wheels must be fixed by a screw or nut.
  - Quick - change wheel systems are not allowed.
  - No automatic system to change the wheels allowed.
- 1.21 Fuel may only contain methanol (methyl alcohol), lubricating oil and a maximum of 16% nitro methane in volume. The specific gravity of the mixture may not be heavier than 0.87. An EFRA approved fuel tester, e.g. Nitromax 16 will be available to verify fuel's conformity to the rules at Technical Inspection.
- 1.22 The aerial must be flexible. Carbon, metal, etc. is not allowed.
- 1.23 Only two (2) servos are allowed.
- 1.24 Telemetry:  
It is not allowed to use any electronic device with the exception of:
- Two radio channels of the receiver, which will be used to operate steering, throttle & brakes.
  - A passive data recording system to record functions of the car.
  - A feedback recording or information system can only be used up to the end of controlled practice.
- 1.25 All measurements referred to in these rules are maximum or minimum values.

**IMPORTANT NOTE:**

Racing format for EC's:

The general existing rules for qualifying will be modified to consider the decided racing format for this class that will be 4 heats of 5 minutes. Christmas tree system for lower finals and finals as usual.

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX



# EUROPEAN FEDERATION OF RADIO OPERATED MODEL AUTOMOBILES

## 1/10 IC TRACK REPORT 2002

-EUROPEAN CHAMPIONSHIP 40+ 31<sup>st</sup> AUGUST – 01<sup>st</sup> SEPTEMBER 2002, AUSTRIA - AMSTETTEN

-EUROPEAN CHAMPIONSHIP, 9<sup>TH</sup> – 11<sup>TH</sup> AUGUST 2002, GOTEBOG - SWEDEN

-WORLD CHAMPIONSHIP, 11<sup>TH</sup> – 22<sup>ND</sup> SEPTEMBER 2002, CINCINNATI - USA

XXXXXXXXXXXXXXXXXXXXXXXXXXXX

### EUROPEAN CHAMPIONSHIP 40+ 31<sup>st</sup> AUGUST – 01<sup>st</sup> SEPTEMBER 2002, AUSTRIA - AMSTETTEN

As usual this combined EC for 1/8 (31 drivers), and 1/10 (19 drivers), is always a very nice and good race to attend. The club has done a lot of work to organize this EC. Part of the track was destroyed 25 days before the event, and was repaired in 14 days for the race. Heavy rainfalls made a small river very wide and thus taking one part of the track away.

We had one big shower during practice on Tuesday, the rest of the week was dry, only on Saturday night one big shower made the first finals on Sunday very slippery.

#### RESULTS OF THE 1/10 FINAL:

1 - Helmut Holler	Austria	155 Laps
2 – Jakob Buhler	Switzerland	154 Laps
3 – Roland Fan	Switzerland	153 Laps
4 – Gunter Reitbauer	Austria	150 Laps
5 – Franc Kuhne	Germany	146 Laps
6 - Andreas Kohlgruber	Austria	141 Laps
7 - Gerhard Gaschnitz	Austria	135 Laps
8 - Hermann Bohz	Austria	116 Laps
9 - Alain Levy	France	18 Laps
10- Peter Plug	Netherlands	0 Laps

POLE POSITION – Jakob Buhler

## EUROPEAN CHAMPIONSHIP, 9<sup>TH</sup> – 11<sup>TH</sup> AUGUST 2002, GOTEBOG - SWEDEN

The eighth European Championship took place in Goteborg, Sweden, on the Vast – 8 Track, a very good track with a large history of involvement with International racing.

62 Drivers from 9 Countries were present, 1 from Austria, 4 from Denmark, 4 from United Kingdom, 5 from Finland, 5 from Netherlands, 5 from France, 9 from Norway, 10 from Germany and 19 from Sweden.

The organization was very good, mostly good weather, some rain on the finals, but the track dried very fast. The qualifying and the finals were very competitive, with Roland Strom from Sweden on the Pole Position, and on the Final, Maria Tornblom, also from Sweden, managed to be on the lead for some time, finished on the second place, Martin Christensen from Denmark with a very consistent and fast driving became the new European Champion, and Timo Rinne from Finland, former World Champion, was third.

This year we had a big discussion about body shells, now that we have introduced homologation effective from the beginning of next year. The whole situation was explained to our Country members, we have received a formal proposal from Austria, and we expect that the discussion and decisions taken at the coming AGM, will clarify this rule to avoid this kind of situation in the future. To avoid problems on the EC, an International Jury Meeting before the start of the event decided to accept all body shells present on the track, including the Mercedes CLK, and the Proton.

At the EC this Year we have also received a formal protest against many different aspects of the organization, and for that reason it was decided to call another International Jury Meeting, and the decision was taken with 0 votes in favor of the protest, 1 abstention, and 11 votes against the protest. One of the main issues was regarding verbal blue flag warnings to slower drivers, that the Referees did not felt it was necessary to issue, specially with the 5 best consecutive laps system, that we use.

### RESULTS OF THE FINAL:

1 - Martin Christensen	Denmark	135 Laps
2 - Maria Tornblom	Sweden	131 Laps
3 - Timo Rinne	Finland	128 Laps
4 - Bengt V. Andersson	Sweden	127 Laps
5 - Peter Frodell	Sweden	125 Laps
6 - Pim Janmaat	Netherlands	123 Laps
7 - Tom Kalves	Finland	122 Laps
8 - Roland Strom	Sweden	122 Laps
9 - Daniel Kalves	Finland	116 Laps
10- Julius Kolff	Netherlands	114 Laps

POLE POSITION – Roland Strom

## WORLD CHAMPIONSHIP, 11<sup>TH</sup> – 22<sup>ND</sup> SEPTEMBER 2002, CINCINNATI - USA

Due to the change in the date, from July to September, I could not be present at this event, but we have a report from our delegate.

**Report on Ifmar 1/10 Gas On Road events – by Carlos Gomes, Efra delegate to the event and Ifmar AGM and other meetings;  
Gary Culver was also present at the Ifmar meetings.**

*“ Race was held in Hamilton, Cincinnati, Ohio, Poor attendance with 46 drivers in one class and 44 in the other one (official one), rules were not correctly handled since the*



very first moment and the race organisation was on the US standards, so that, poor on Man power and poor on facilities.

Luckily pit area was asphalted but tents were small, until Sunday there were no water for cleaning body neither air compressor nor power supply for the tire truer.

Track was nice, even in a kind of European way, and the driver's rostrum was a nice looking one although visibility of the left part of the track was not good enough.

European drivers coming from Austria, France, Great Britain, Holland, Germany and Italy meant to be the biggest number of countries while other drivers coming from Venezuela, Australia, Japan, Canada & USA fulfilled the whole camp.

Both classes, the official one and 200 mm. were held consecutively one after the other, with prevalence of the official one. Weather was not good with really hot & humid conditions and rainy afternoons even with Tornado alerts and similar...

Rain interruptions and delays to dry the track completely (pure American way) caused at the end the cancellation of round 6 of qualifying on 200 mm. Cup and the full compression of the principal finals on Saturday, luckily preference was given to the official World Champ. And the victory after 1 hour racing was to Roar driver Brian Berry on the European car Serpent 835.

Immediately after the end of the W.Ch. final, the 200 mm. final took place with 5 drivers repeating in a kind of endurance racing driving at top level for more than 2 hours..., victory in this class was for Off road driver Mark Pavidis on Associated powered by RB, although the clear dominium held by Michael Salven during 36 astonishing minutes on the new 705. “

## 1/10<sup>th</sup> IC Track 2WD World Championship

Pos.	Car	Driver's Name	Total Laps	Total Time	Fastest Lap	On Lap	Avg. Speed
1	5	Brian Berry	150	01:00:07.957	00:22.861	114	34.016
2	2	Josh Cyrul	150	01:00:10.431	00:22.554	147	33.992
3	7	Julius Kolff	148	01:00:06.728	00:23.006	35	33.574
4	6	Uwe Baldes	139	01:00:10.576	00:23.409	17	31.498
5	8	Marty Barnes	139	01:00:24.467	00:23.326	22	31.378
6	9	Frank Calandra Jr.	131	01:00:16.936	00:23.996	9	29.633
7	10	Don Jones	125	00:58:47.405	00:24.205	3	28.994
8	3	Ralph Burch Jr.	86	00:36:16.720	00:22.874	69	32.326
9	1	Michael Salven	69	00:33:09.169	00:22.745	42	28.381
10	4	Mark Green	36	00:40:26.900	00:18.560	34	12.137

Pole Position – Michael Salven

4 European drivers on the final, with Julius Kolff from Holland on the podium, on the 3<sup>rd</sup> place, Uwe Baldes from Germany on the 4<sup>th</sup> place, Michael Salven from Germany on the 9<sup>th</sup> place and with the pole position, and Mark Green from Great Britain on the 10<sup>th</sup> Place.

## 1/10<sup>th</sup> IC Track 200mm World Cup Race

Pos.	Car	Driver's Name	Total Laps	Total Time	Fastest Lap	On Lap	Avg. Speed
1	3	Mark Pavidas	151	01:00:11.144	00:22.439	53	34.212
2	7	Josh Cyrul	151	01:00:14.515	00:22.527	75	34.180
3	5	Toshiyuki Iwamoto	147	01:00:15.199	00:22.755	101	33.269
4	8	Mark Green	144	01:00:21.116	00:23.323	10	32.536
5	10	Brian Berry	142	01:00:06.595	00:23.744	134	32.214
6	4	Billy Easton	118	01:00:16.101	00:22.470	74	26.699
7	1	Barry Baker	108	00:56:52.500	00:22.704	5	25.894
8	9	Ralph Burch jr	104	00:42:02.592	00:22.596	44	33.732
9	2	Michael Salven	99	00:45:06.415	00:22.695	59	29.929
10	6	Marty Barnes	72	00:30:14.822	00:22.868	64	32.460

Pole Position - Barry Baker

2 European drivers on the final, with Mark Green from Great Britain on the 4<sup>th</sup> place and Michael Salven from Germany, dominating for 36 minutes.

## 1/10<sup>th</sup> IC Track Ifmar Meeting

Regarding the Ifmar Meeting, we will have Carlos Gomes at our Section Meeting to give us full information on the items discussed.

Nevertheless, all major decisions were postponed to Uruguay, so that we can have a clear position after our AGM, in order to vote according to the wish of our Country Members. This year we have experienced a lot of pressure to vote on new rules for the 200mm class for the World Cup Race, situation that we did not accept, as we followed the decisions taken at the last AGM regarding the recommended guideline rules, and we voted NO to all those rule changes.

Important issues to be discussed in Uruguay:

- 1/10<sup>th</sup> IC Track - 2WD / 4WD.
- Touring Car 2 door / 4 door.
- Group C Body shells.
- 16% / 25% Nitro.

