

# 2011 - 2013 Rules for SAM RC Euro Champs

## A. General Contest Requirements

In order to demonstrate fidelity to an original design, entrants may be required to provide SAM approved plans and/or photos of their models. The contest officials may measure and weigh models at any time in order to assure compliance with specifications.

The model's design year and name or the designer's name must appear on its surface. The model's airfoil sections and landing gear position must be the same as the original. Dual wheel landing gears may be substituted for original one-wheel designs but not vice versa. Unless otherwise stated propellers must be two bladed, non-folding, and non-metal. All events permit scaling.

All events permit the contestant multiple entries provided they represent different designs. However, only one model from each contestant may earn a prize or receive points if an overall championship is to be awarded. Points for an overall championship will be three for each first place finish, two for each second place, and one point for each third. All models entered should be reported in the final results regardless of flights or placements.

Prior to model flying the contest director will hold a pilot's briefing each morning in English and the local language or languages. He will name the events to be contested, the time periods each day during which official flights may be launched, and a tentative flyoff schedule in case of ties. He will explain the launch and landing areas, the RC channel control procedure, the safety rules, and any additional considerations for retrieving flyaway models from adjacent fields. The CD may also answer questions during these briefings.

The contest field will provide a smooth take-off area for the ROG of larger models and a generous landing area appropriate to the site. All events permit the use of binoculars and assistants. All model landings outside the designated area are to be scored zero. All engine or motor overruns are to be scored zero. Ground poles with mylar tape are acceptable but no thermal detecting devices of any type may be used in any model. Violation will result in disqualification of the contestant. To avoid flying over spectators, car parking, tents, and caravan areas, a safety line will be established. Officials will enforce this safety line by issuing a warning for the first infraction and scoring the flight zero for a second infraction.

This document has been approved in English by members of the below listed jury for years 2011, 2012, and 2013 of the SAM RC Euro Champs and will be the basis for any and all translations. It may be posted on SAM websites in other languages for convenience. SAM Euro Champs hosts will post specific venue and date information as soon as it is available. San Marino will host 2011 to be followed by Slovakia in 2012 and Hungary in 2013.

Current jury members are: Domenico Bruschi, San Marino; Leo Bussmeier, Germany; Tiziano Bortolai, Italy; Jaroslav Rybak, Czech Republic; Alojz Pajdlhauser, Slovakia; Kalman Gelencser, Hungary, and Ed Hamler, USA. Approvals registered in July 2010.

## **B. Standard Contest Procedures**

The contestant is responsible for adherence to all contest procedures. He must know and comply with all rules for models in those events in which he competes. He must sign a statement to this effect on his official application form.

Transmitters may be checked for compliance with frequency specifications at any time. A frequency control board or carousel will be employed to avoid radio interference. Only one unique channel pin will exist for each specific frequency on the board. The control board or carousel will also provide for the display of the name pins of those contestants waiting to fly on each specific channel. Contestants will share the use of popular channels by taking turns in the order of the name pins displayed.

Transmitters in use for flying or in the pit area must have the exact numbered channel pin attached prior to operation. The contestant's name pin must be attached to the control board in place of each channel pin in use. The contestant himself must replace the channel pin after its use and return his name pin to the bottom of the waiting stack if he wishes to use the same channel pin later. The announcement of available channel pins by an official will expedite timely completion of the scheduled events.

After taking a channel pin the contestant is allowed five minutes to launch an official flight whenever another contestant is waiting to fly on the same channel.

By announcement of the CD, the above channel control procedure may be waived only for radio control systems utilizing 2.4 GHz spread spectrum technology.

Due to glider towline launches, OTVR will be the only event flown in specific rounds announced by the CD. Glider flight times start upon release from the towline and end when the model first touches the ground, or an object on the ground, or another person operates the controls of the radio transmitter.

Except for the Old Time Glider event, OTVR, a contestant may launch an official flight in a scheduled event at any time during the daily contest flying period provided: a) he has in place on his transmitter the appropriate channel pin, b) he has in his sole service another contestant and/or official as timekeeper, c) the timekeeper has a digital stopwatch and the contestant's flight card, and d) all previous flights on the card have been posted officially. The timing of a powered model's flight starts upon release from the hand and continues throughout its flight until it first touches the ground, an object on the ground, or another person operates the controls of the radio transmitter.

Fractions of seconds are omitted in recording all model flight times.

Officials are required to adhere to these procedures, rules, and requirements, as approved. In exceptional situations however, the CD may reduce motor run times, max flight times, and/or number of flights taken in an event in order to assure that reasonable opportunities to fly exist when inclement weather, winds exceeding nine meters/second (20 mph), fading daylight, limited visibility, and other special circumstances arise.

## **C. Special Contest Procedures**

In order to enforce and assure compliance with rules the CD may, at any time and without notice, assign officials to monitor engine run times, model flight times, and adherence to model weights, motor specifications, and fuel allotments. The official will verify all recorded information with his signature on the contestant's official flight card.

Protests must be made to the CD in writing and must specify the particular procedure or rule to be considered by the SAM International Jury. The Jury and the CD will hear arguments from plaintiff and defendant before reaching a decision.

## **D. Special Flyoff Procedures**

Tied scores in an event will be resolved by a flyoff unless all contestants with the same final scores agree unanimously to another method such as tossing coins or drawing lots. The tentative times for possible flyoffs will be announced at each morning's pilot briefing. At the discretion of the CD, flyoffs may be scheduled in the afternoon following regular contest flying or in the next morning before the regular events begin.

The actual start of a flyoff must be announced to the contestants at least one half hour prior to launch and again at one quarter hour prior to launch in order to discover any channel conflicts. Unresolved conflicts in one flyoff will require two or more heats with order determined by the tossing of coins or drawing of lots.

Each contestant will have two timekeepers assigned to him, one of which is designated the primary timekeeper who should speak the contestant's language and count down the engine or motor cutoff. The second timer will act as back up and confirmation for the first. Both will time the engine run and total flight time.

Contestants in the first heat will be allowed five minutes to ready and launch their models. Contestants in a second or third heat of the flyoff may launch as soon as the conflicted channel pin has been given to them for their use.

In order to break the initial tied scores in an event, the flights of models in flyoffs will be of unlimited duration. All other rules specific to the event will apply.

# 2011 - 2013 SAM Euro Champs Event Rules

## 1. Class A OTMR - Old Timer Gas LER

Entries may be any gas powered model airplane designed prior to 1951. Models must weigh a minimum of 10 ounces per square foot of planform wing area (30.5 gr. per sq.dm.) The maximum displacement of all engines is 4.9 cc (0.300 cu.in.) All engines produced prior to 1957 or 1960, if plain bearing, are accepted. Engines with Schnuerle porting, PDP porting or ABC or AAC piston/liners are prohibited. Engines with supercharging, turbocharging, tuned resonance pipes, or power pipes are prohibited. SAM approved repro engines are accepted as original engines.

Spark ignition engines using cam operated points, spark plugs, batteries, coils, and transistors are accepted. Spark ignition engine run time is 35 seconds.

The engine run time for diesels produced prior to 1950 is 35 seconds.  
The engine run time for diesels produced after 1949 is 23 seconds.

Glow engine powered models must have a minimum of 225 sq.in. wing area per 0.1 cu.in. of engine displacement (8.85 sq.dm./cc.) Glow engine run time is 23 seconds.

Converted engine powered models must have a minimum of 225 sq.in. wing area per 0.1 cu.in. of displacement (8.85 sq.dm./cc.) Converted engine run time is 28 seconds.

**Class A OTMR** models must ROG, or be hand launched with CD's prior authorization for all models. Model's score will be the sum of the three best flights of four 8 minute max flights.

## 2. Class B OTMR - Old Timer Gas LER

Entries may be any gas powered model airplane designed prior to 1951. Models must weigh a minimum of 10 ounces per square foot of planform wing area (30.5 gr. per sq.dm.) All engines produced prior to 1957 or 1960, if plain bearing, are accepted. Engines with Schnuerle porting, PDP porting or ABC or AAC piston/liners are prohibited. Engines with supercharging, turbocharging, tuned resonance pipes, or power pipes are prohibited. SAM approved repro engines are accepted as original engines.

Spark ignition engines using cam operated points, spark plugs, batteries, coils, and transistors are accepted. The displacement of engines produced prior to 1950 is 5.0 cc to 20 cc (0.301 to 1.20 cu.in.) Displacement for spark ignition engines produced after 1949 is 5.0 to 10.65 cc (0.301 to 0.65 cu.in.) Spark ignition engine run time is 35 seconds.

The displacement for diesel engines is 5.0 to 10.65 cc (0.301 to 0.65 cu.in.)  
The engine run time for diesels produced prior to 1950 is 35 seconds.  
The engine run time for diesels produced after 1949 is 23 seconds.

Glow engine powered models must have a minimum of 225 sq.in. wing area per 0.1 cu.in. of engine displacement (8.85 sq.dm./cc.) The displacement for glow engines is 5.0 to 10.65 cc (0.301 to 0.65 cu.in.) Glow engine run time is 23 seconds.

Converted engine powered models must have a minimum of 225 sq.in. wing area per 0.1 cu.in. of displacement (8.85 sq.dm./cc.) The displacement for converted engines is 5.0 to 10.65 cc (0.301 to 0.65 cu.in.) Converted engine run time is 28 seconds.

**Class B OTMR** models must ROG.

Model's score will be the sum of the three best flights of four 8 minute max flights.

### 3. NMR 2.5 - Nostalgia Gas LER

Entries may be any gas powered model airplane designed prior to 1957. Models must weigh a minimum of 100 ounces per cu.in. of engine displacement (173 gr. per cc.) Any spark ignition, cross scavenged glow or diesel engine up to .152 cu.in. (2.49 cc) displacement produced prior to 1961 is acceptable. Pressurized fuel systems are acceptable. Engines with Schuerle porting, PDP porting or ABC or AAC piston/liners are prohibited. The engine run time for all NMR models is 18 seconds.

2.5 NMR models must ROG, or be hand launched with CD's prior authorization for all models. Model's score will be the sum of the three best flights of four 6 minute max flights.

### 4. NMR - Nostalgia Gas LER

Entries may be any gas powered model airplane designed prior to 1957. Models must weigh a minimum of 100 ounces per cu.in. of engine displacement (173 gr. per cc.) Any cross scavenged glow or diesel engine from .153 up to .65 cu.in. (2.50 to 10.65 cc) displacement or any spark ignition engine from .153 up to 1.20 cu.in. (2.50 to 20 cc) produced prior to 1961 is acceptable. Pressurized fuel systems are acceptable. Engines with Schuerle porting, PDP porting or ABC or AAC piston/liners are prohibited.

NMR models must ROG. The engine run time for all NMR models is 18 seconds. Model's score will be the sum of the three best flights of four 6 minute max flights.

### 5. Texaco

Entries may be any gas powered model airplane designed prior to 1951. Models must weigh a minimum of 10 ounces per square foot of planform wing area (30.5 gr. per sq.dm.) Any engine, original or repro, may be used. Any spark, glow, or diesel engine up to .65 cu.in. (10.65 cc) displacement or any pre-1950 spark ignition engine up to 1.20 cu.in. (20 cc) is acceptable. Throttles are acceptable. RC engine cut-off is required for safety. No conversions of glow engines to spark ignition are permitted.

The fuel allocation for Texaco models will be 2 cc per 400 grams of model weight (2 cc per 14.1 ozs. Advp). Model weights are rounded to the nearest 400 gram multiple.

Grams weight	Fuel	Grams weight	Fuel
0-600	2 cc	2601-3000	14 cc
601-1000	4 cc	3001-3400	16 cc
1001-1400	6 cc	3401-3800	18 cc
1401-1800	8 cc	3801-4200	20 cc
1801-2200	10 cc	4201-4600	22 cc
2201-2600	12 cc	4601-5000	24 cc

Texaco fuel tanks must be no greater than the maximum capacity allowed according to the model weight chart above and must be in a position to be easily verified. An official will weigh the model, measure and record the tank capacity on the flight card and sign his approval.

The engine may be run before launching and the tank may be topped off with engine running.

All **Texaco** models must ROG.

The model's score will be the single best flight of three 30 minute max flights.

### 6. 1/2A Texaco

Entries may be any gas powered model airplane designed prior to 1951. Model must weigh a minimum of 24.4 grams per sq.dm. (8 ozs./sq.ft.) of planform wing area. Engine must be a Cox reed valve engine of .049 cu.in. displacement (0.80 cc) with integral 5.1 cc capacity fuel tank. Propeller may be any non-folding prop of 8 inches diameter or less. Any fuel without gasoline (petrol/benzene) is acceptable. Tanks may be topped off with engine running.

½ **A Texaco** models may be hand launched or ROG at pilot's discretion. The model's score will be the sum of the three best flights of four 15 minute max flights.

## **7. Speed 400 Old Timer - 1/2A Electric Limited Motor Run**

Entries may be any gas powered model airplane designed prior to 1951. The minimum wing loading will be 24.4 gr. per sq.dm. (8oz./sq.ft.)

Regardless of size, the absolute minimum weight for all models will be 454 grams (16 ozs. Advp.)

Propulsion must only be a Graupner Speed 400 6.0v ferrite permanent magnet motor (27.6 mm diameter, 38 mm long with a 2.3 mm shaft without ball bearings) with direct drive to a non-metal propeller. Folding propellers are acceptable.

The battery pack may be six NiMH cells or two Lithium chemistry cells of any capacity with manufacturer's label clearly visible. Any BEC-ESC power control system is acceptable.

The model may be hand launched or ROG at pilot's discretion. The motor may be run only during the first 90 seconds of flight. The model's score will be the sum of the best two of three 15 minute max flights.

## **8. ELOT - Electric Old Timer Limited Motor Run**

Entries may be any gas powered model airplane designed prior to 1951. Motor type, propeller, drive, and power control systems are unrestricted. Battery may be a 7 cell NiMH or a 2 cell LiIon/LiPo pack of any capacity with producer's label clearly visible. Model must weigh a minimum of 24.4 grams per sq.dm. (8 ozs./sq.ft.) of planform wing area. Motor may be run only during the first 45 seconds of the flight.

Model must ROG, or be hand launched with CD's prior authorization for all models.

Model's score will be the sum of the three best flights of four 10 minute max flights.

## **9. OTVR - Old Time Gliders**

Entries may be any model airplane glider designed prior to 1951. Wingspan must not exceed 3.5 meters (138 inches).

The launching towline must not exceed 100 meters in length or 20 meters of elastic rubber and 80 meters of normal line. The extended towline must not exceed 170 meters.

Model's score will be the sum of the three best flights of six 5 minute max flights.