

# 4<sup>th</sup> European SAM RC Champs – Rules

## 1. General Rules

Competitors must provide copies of original plans and/or photos approved by SAM Chapters.

Models may be weighed – in this case checking will be done in a closed area.

Before beginning the contest or during the contest models may be checked by Contest Director (CD).

CD will hold a briefing before beginning the contest. Local plus English language must be used. Landing area, start and finish times, fly-offs etc. will be illustrated.

Landing area must be the largest possible according to flying field used. Landing out of said area will be considered an official flight with "0" flight time granted.

If weather conditions are bad CD may exceptionally reduce number of flights from 3 to 2. In this case all flights will be taken into consideration for final score.

Competitor has 5 minutes to take-off or, in any case, begin his official flight from the moment he is called by CD.

Time-keeper will start timing from the moment the model is released from hand or towline. Timing will continue for the entire flight until the model lands (landing means first ground contact), hits an obstacle or is lost OOS and does not reappear within 10".

Wing area is calculated on flat platform.

Model must comply with presented documentation.

Only non folding two bladed propellers made of wood, plastic or C/F may be used

Landing gear must be in same position as original. Single wheel gear may be substituted by a dual wheel landing gear but not vice versa.

Airfoil sections must be the same as original ones on plan.

It is permitted to scale any approved design up or down.

Model must have year, name of model and/or name of designer on its surfaces (wing and/or fuselage).

Fly-offs will have no time limitation or flight time may be determined by CD. All models taking part in the fly-off must be released and begin flight within max. five minutes from CD signal.

Fly-off may be repeated only in the following cases:

- a) engine over-run
- b) flight time less than 20"
- c) collision of models in flight

In case of very strong wind conditions (over 9 meters per second) flights will be stopped. Flights may be resumed when weather conditions change or resumed the day after if possible.

Proxy flights are not permitted. Only competitor may use the radio transmitter (TX). Should others use the TX timing will be immediately stopped.

Competitor will have 4 or 6 attempts at his disposal to carry out 3 official flights, but once he has 3 official flights or used all attempts his contest is over.

Use of binoculars is admitted but not required.

## **2. Events**

### **2.1 OTVR - Gliders**

All gliders designed, kitted or plans published prior to Dec. 31 1950 are admitted.

Max. wing span 3.5 meters (138 inches).

Flight time max. 5 minutes. **3 official flights determine the score.** 6 attempts.

Towline max. length 100 meters or 20 meters of rubber and 80 meters of normal towline.

Max. extension cannot be over 170 meters.

A flight of 40" will be considered official flight. If less than 40", competitor may repeat flight at his request or flight may be aborted within the same time (40") and will be considered attempt".

### **2.2 OTMR – Gas Models – LER**

All models designed, kitted or plans published prior to Dec. 31 1950.

#### **2.2.1 Engines**

All engines produced prior to Dec. 31 1956 or Dec. 31 1959 if plain bearing.

##### **2.2.1.1 Ignition engines**

Ignition engines (spark) using cam operated points, spark plugs, batteries and coil are admitted. Transistorized ignition systems are accepted.

Max. displacement 1.20 (20 cc.) if engine was produced prior to Dec. 31 1949, .65 (10.647 cc.) if produced later.

Engine run time : 35"

### **2.2.1.2 Glow engines**

Max. displacement .65 (10.647 cc.).

Engine run time : 23"

### **2.2.1.3 Diesel engines**

Max. displacement .65 (10.647 cc.).

Engine run time : 35" if produced prior to Dec. 31 1949.

" " " : 23" if produced later.

### **2.2.1.4 Glow engine converted to spark**

Max. displacement .65 (10.647 cc.).

Engine run time : 28"

Model must ROG. If model is hand launched (only with CD permission) the relative engine run time will be reduced by 2" (33"-21"-26").

Engine run time is max. permitted. Flight with engine over-run time will be considered attempt and may be repeated.

Engines with Schnuerle or PDP porting or ABC or AAC piston/liners are prohibited.

Supercharged or turbocharged engines (resonance or power pipes) are prohibited.

Approved repro engines are considered as original engines.

Model must weigh a minimum of 10 oz. per square foot of planform wing area ( 30.5 gr. per square decimetre ).

Glow engine powered models must have a minimum of 225 sq. inch wing area per .1 cubic inch of engine displacement ( 8.85 sq.dm. per 1 cc.).

A flight of 40" will be considered official flight, if less than 40" competitor may repeat flight at his request or flight may be aborted by competitor within the same time ( 40").

Flight time max. : 7 minutes – **3 official flights determine final score** – 6 attempts.

## **2.3 NMR – Nostalgia**

Any model designed, kitted or plan published prior to Dec. 31 1956 is admitted.

Any production cross scavenged glow, diesel engine up to .65 ( 10.647 cc.) displacement or any ignition engine up to 1.20 (20 cc.) if produced prior to Dec. 31 1960 is admitted.

Engine pressure is admitted.

Schnuerle, PDP porting or ABC-AAC piston/liner engines are prohibited.

Engine run time in all cases : 18".

Power loading of 100 oz. per cu.in. of displacement (173 gr. per cc.) is requested.

Two wheels OK if single wheel on plan. Single wheel is not permitted if two wheels are shown on plan.

Model must ROG but may be hand launched with CD permission written on flight card.

Flight time is 5 minutes – **3 official flights determine final score** – 6 attempts.

A flight of 40" will be considered official flight. If less than 40", competitor may repeat flight at his request or flight may be aborted within the same time (40") and will be considered attempt".

## **2.4 Texaco**

Any model designed, kitted or plans published prior to Dec. 31 1950.

Model must weigh a minimum of 10 oz. per sq.ft. of planform wing area (30.5 gr.per sq.dm.).

Any engine, original or repro, may be used. No production time limitation.

Max. displacement for glow and diesel engines .65 (10.647 cc.), for ignition engines 1.20 if produced prior to Dec. 31 1949 or .65 (10.647 cc.) if produced later.

No engine conversion is permitted.

Fuel allotment : 2 cc. of fuel for every 400 gr. of model weight ( 2 cc. for every 14.1 oz.)

The measured weight of model is rounded off to nearest 400 gr. multiple.

Weight of model (grams)	Allowed fuel (cc)
Up to 600	2
from 601 to 1000	4
1001 to 1400	6
1401 to 1800	8
1801 to 2200	10
2201 to 2600	12
2601 to 3000	14
3001 to 3400	16
3401 to 3800	18
3801 to 4200	20
4201 to 4600	22
4601 to 5000	24

The fuel tanks, of max. capacity allowed according to weight of model, must be in a position which can be easily verified (if transparent).

If the fuel tank is not transparent the same must be emptied and then filled with a previously measured amount of fuel.

Engine may be run before launching but, in this case, the tank must be emptied and refilled with a measured amount of fuel. This is not necessary if exact capacity of tank has been officially checked in advance and found of max. capacity admitted. In this case the checking of tank capacity must be marked on flight card by CD.

Flight time max. : 15 minutes – 3 official flights – 4 attempts – **sum of two best times determine the score.**

Models must ROG – no hand launch is permitted – and flight may be repeated if flight time is less than one minute.

Competitor may abort the flight within the first minute of flight.

Flight less than one minute or aborted will be considered attempt.

## **2.5 1/2A Texaco**

Any model designed, kitted or plan published prior to Dec. 31 1950 is admitted.

Model must weigh a minimum of 24.4 gr.per sq.dm. ( 8 oz. per sq.foot ) of planform wing area.

Engine : any Cox reed valve engine with 5.1 cc. tank.

Propeller : any non folding prop of 8" diameter or less.

Fuel : any fuel not containing gasoline (petrol):

Model must ROG from hard surface but may be hand launched from grass covered areas ( CD will decide before beginning of competition ).

Flight time max. 10 minutes – 3 official flights – 4 attempts – **sum of two best times determine the score.**

Competitor may abort flight within the first minute of flight. Flight less than one minute will be considered attempt.

## ***2.6. 1/2A Electric O.T.***

Models as per 1/2A Texaco.

Rules as per 1/2A Texaco but models must weigh a minimum 10 oz. per sq. foot ( 30.5 gr.per sq. dm.) of planform wing area.

Motor : "Graupner Speed 400" 6V ( ferrite ) – permanent magnet with no ball bearings and as produced ( no tuning is permitted ).

Motor must drive the propeller directly – no speed reduction is permitted.

A 6 cell NiCd or MiMh pack of any capacity or 2 cells of Lilon or Lipol batteries of any capacity with max. voltage 7.4 Volts are allowed.

Batteries without marked voltage by producer are not permitted.

Motor run time : 180" without any interruption or less. Flight with engine over-run time will be considered attempt.

Power flow from batteries to motor must be controlled by On/Off system.

Battery packs may be charged between flights.

Propeller : any non folding propeller may be used. Metal props are not permitted.

## ***2.7 Electric Old Timer***

Any model designed, kitted or published prior to Dec. 31 1950.

Model must weigh a minimum of 24.4 gr.per sq.dm. ( 8 oz. per sq. ft.) of planform wing area.

A 7 cell NiCd or NiMh rechargeable pack of any capacity or any amount of cells of Lilon or Lipol batteries with max. voltage 7.4 Volts.

Batteries without marked voltage by producer are not permitted.

Motor : any electric motor including brushless inrunners or outrunners. Motor may drive propeller directly or through a speed reduction drive.

Motor run time : 60" without any interruption or less. Flight with engine over-run time will be considered attempt.

Power flow from batteries to motor may be controlled by any system.

Flight time max. 10 minutes – 3 official flights – 4 attempts – **sum of two best times determine the score.**

A flight of 40" will be considered official flight. If less than 40", competitor may repeat flight at his request or flight may be aborted within the same time (40") and will be considered attempt".

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