



Draft

14th November 2006

AUSTRALIAN ELECTRIC FLIGHT ASSOCIATION

ABRIDGED CONTEST RULES *for* MAAA 60th NATIONALS

Section 10

Radio Control Electric Old Timer

Notes:

A complete set of the Draft Rules is available on the following MAAA Website:-

www.maaa.asn.au/electric/rules/nefr_rg.htm

follow the Old Timer link

ABRIDGED R/C ELECTRIC OLD TIMER RULES

for

CONTEST DIRECTORS

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GENERAL PROVISIONS

INTENT: This abridged set of R/C Electric Old Timer Rules is designed to provide, in a condensed summary format for Contest Directors and Competitors, the essential operating rules clauses/criteria and reference links for this competition event.

COMPETITION SUMMARY DETAILS:

Event	Max Time	Flights counted	Launch Requirements
Electric Duration	10 min	best 3 of 4	ROG

Revised 26 June 2006

10.4.1.1 AIRCRAFT CATEGORIES

The following SAM approved aircraft categories are eligible to compete in Electric Duration events:

- (a) **ANTIQU**E aircraft are defined as aircraft which were designed, kitted, or published on or before 31st December 1938.
- (b) **OLD TIMER** aircraft are defined as aircraft which were designed, kitted, or published on or before 31st December 1942.

10.4.1.2 AIRCRAFT GENERAL REQUIREMENTS

- (a) Where the specific rules for an event state that the minimum wing area rules apply as defined in this clause, models used in those events shall comply with the following:
Aircraft must have a minimum of 30 sq in of wing area per volt of flight battery pack (see also battery cell limits for specific events).
Note: Based on nominal voltage where Ni = 1.2v/cell and Li = 3.6v/cell.
- (b) The formula to be used to determine the wing area is:
WING AREA = CHORD x WINGSPAN where:
The Wingspan is defined as a straight line dimension from wing tip to wing tip, with no allowance being made for tapered or rounded tips, and the Chord is measured half way between the wing tip and the centre-line of the fuselage.

10.4.1.3 ELECTRIC MOTOR GENERAL REQUIREMENTS

- (a) Any DC electric motor (brushed or brushless) is permitted.
- (b) Any motor magnets (ferrite, cobalt or neodymium, etc) are permitted.
- (c) Any single propeller drive system is allowed.
- (d) A means of remotely cutting the power to the motor is mandatory and shall be demonstrated on demand.
- (e) The electric motor must be fitted with a propeller brake function.
- (f) No folding, freewheeling, variable pitch or single bladed propellers shall be permitted (locking up a folding prop is permitted).

10.4.1.4 SAFETY

Competitors using an Electronic Speed Controller (ESC) with Battery Eliminator Circuit (BEC) in lieu of a separate Rx battery must ensure that there is sufficient energy in the main flight battery pack for an extended flight in the event of a fly-off.

RULES
for
ELECTRIC DURATION EVENT

DESCRIPTION: This is a timed motor run event where competitors attempt to achieve maximum flight times from allocated motor run time based on the flight battery pack cell count.

10.4.4.1 AIRCRAFT ELIGIBILITY

- (a) This event is open to all Antique and Old Timer aircraft as described in rules 10.4.1.1 (a) and 10.4.1.1 (b).
- (b) The minimum wing area rule applies to this event as defined in clause 10.4.1.2 (a)

10.4.4.2 MOTOR ELIGIBILITY

This event is open to any class of DC electric motor conforming to section 10.4.1.3 of these rules.

10.4.4.3 FLIGHT BATTERY PACK

The Flight Pack Battery powers the electric motor.

- (a) Ni or Li chemistry cells are permitted.
- (b) Flight battery pack cell chemistry cannot be mixed.
- (c) The maximum number of cells for any flight battery pack is 14 Ni or 4 Li.

10.4.4.4 FREE MOTOR RUN TIME ALLOCATION

- (a) 50 seconds for 7 or fewer Ni cells or 2 Li cells
- (b) 35 seconds for 8 to 10 Ni cells or 3 Li cells
- (c) 25 seconds for 11 to 14 Ni cells or 4 Li cells

10.4.4.5 FLIGHT PROCEDURES

- (a) The maximum flight time as defined in 10.4.1.5 (f) is ten (10) minutes (600) points for all flights except the fly off (refer 10.4.1.6 (e) below). This includes the Free Motor Run Time as above.
- (b) The model must land in the defined area for the flight to count towards the score.
- (c) The electric motor may be started and stopped at the competitor's discretion.
- (d) Points are deducted from the maximum score for the following:
 - (i) 1 point for each second of flight time under or over 10 minutes, plus
 - (ii) 1 point for each second of motor run time over the free motor run time.

Note: Landing 'on time' is facilitated by the ability of the competitor to start and stop the motor at any time during the flight.

10.4.4.6 FLY-OFF

- (a) If at the end of the official flights a fly-off is necessary, it will be conducted as set out in rule 10.4.1.6.

“10.4.1.6 FLY-OFF PROCEDURES

- (a) If, on the completion of the official flights, a tie exists that in the opinion of the Contest Director needs to be resolved to determine the results of the contest, a fly-off shall be held involving the tied competitors/models only.*
 - (b) All models in the fly-off should commence the fly-off simultaneously if possible. Should a second round of the fly-off be required, (e.g. as a result of a frequency clash), then those competitors who qualified for the fly-off with the least number of flights should be included in the first round. Where there is more than one competitor so qualified, then the matter should be settled by a toss of a coin.*
 - (c) Only one opportunity will be given to a competitor to make a fly-off flight. Once the model is released to commence a fly-off flight the result of that flight becomes the competitor's fly-off score.*
 - (d) N/A*
 - (e) Maximum flight times do not apply to fly-offs.*
 - (f) The model must land in the defined landing area in a fly-off flight for the score to count.”*
- (b) For the fly-off, the motor must not be run over the free motor run time otherwise the competitor will be disqualified.
 - (c) For the fly-off, the longest flight shall determine the winner (see safety clause 10.4.1.4).

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