AEFA EOT Contest Guide 2018

GENERAL

This document has been prepared by the AEFA for its Electric Old Timer (EOT) events and competitions. This 2018 edition of the guide incorporates changes discussed and evaluated by the AEFA EOT Rules Committee and the EOT network during 2015/16 and adopted by the MAAA in 2017.

The document recognises that there is a set of national rules that have been published by the MAAA. Sponsored by the MAAA's Old Timer Special Interest Group, these were originally drafted and tested by the AEFA. The national rules apply to most aspects of the AEFA EOT models and events. However, the AEFA experience is that sometimes these rules can be altered to better fit the needs of its members, or to test new ideas, while ensuring the contests are fair and enjoyable. This document is limited to describing some of these alterations as well as offering a brief description of the rules for each event flown by the AEFA. Accordingly, it does not replace the national rules but can be considered a supplement to them for AEFA events. The national rules would, of course, apply in full at any MAAA event.

The national rules are not repeated in this document (they can be found on the MAAA website). They include details about:

- *Aircraft categories
- *Aircraft general requirements
- *Engine and motor general requirements
- *Safety
- *Contest procedures
- *Fly-off procedures
- *Guidelines for construction
- *Specific event rules

AIRCRAFT CATEGORIES

There are three categories of Old Timers described in the MAAA national rules, Antique, Old Timer and Nostalgia, and they relate to when the model was first designed or kitted. For AEFA EOT contests a simplified arrangement is used. This combines Antique and Old Timer categories which means that for most contests a model will be deemed to be eligible if its design was first published before the end of 1942. Electric Vintage Glider events allow models that were first published before the end of 1956. This rule allows contestants to fly in more events with a single model.

SPECIFIC EVENT RULES

In broad terms the range of EOT events set out in the national rules are:

- *Texaco limited battery allowance based on aircraft weight.
- *1/2A Texaco The same as Texaco but aircraft are limited in size and battery options are reduced.
- *Duration limited motor runs, battery allowance based on wing area.
- *Height Limited single limited motor run to a capped ceiling.
- *Nostalgia only one power system is permitted.
- *Vintage Glider single limited motor run to a capped ceiling with a vintage glider.

Nostalgia events are no longer run at AEFA events and are not discussed further

ELECTRIC TEXACO

Electric Texaco is like an economy trial. It is similar to IC Texaco in that each aircraft is allocated 'fuel' based on the model's weight. Energy allocations for electric models are listed in the national rules.

It is open to all models whose design was published before the end of 1942.

The flight task is 10 minutes. In EOT the motor may be stopped and started as desired throughout the flight.

(CD Guide. In some circumstances a fly-off may need to be constrained. Because all aircraft have a defined battery allowance, one method is to determine rankings based on battery status at a nominated time after take-off. If this method is to be used it should be declared

before the start of the fly-off. Pilots should be advised of the notional cut-off time for the flight, for example, 30 minutes after launch. At the end of this time models still flying are to land and the CD is to measure each one's remaining battery capacity <u>using the same meter for each measurement</u>. This measurement should then be adjusted to allow for any difference between the maximum battery capacity permitted for the model and the capacity of the battery actually used. Those that were still flying at the end of the designated time can then be ranked in order of remaining battery capacity.)

1/2A ELECTRIC TEXACO

1/2A Texaco is similar to Texaco but for smaller aircraft. Whereas IC mandates a standard motor, EOT specifies a standard battery capacity.

Any models whose design was published before the end of 1942 is allowed but models must have a wing area of less than 450 sq in.

This event has the same flight task as Texaco, as set out in the national rules.

(CD Guide. In some circumstances a fly-off may need to be constrained. Because all aircraft have the same battery allowance, one method is to determine rankings based on battery status at a nominated time after take-off. If this method is to be used it should be declared before the start of the fly-off. Pilots should be advised of the notional cut-off time for the flight, for example, 30 minutes after launch. At the end of this time models still flying are to land and the CD is to measure each one's remaining battery capacity <u>using the same meter for each measurement.</u> Those that were still flying at the end of the designated time can then be ranked in order of remaining battery capacity.)

ELECTRIC DURATION

The task has similarities to IC Duration. For IC motor run time is based on engine parameters whereas EOT models have the same motor run time but the battery allowance is based on aircraft wing area, as set out in the national rules.

It is open to all models whose design was published before the end of 1942.

The task is a 7 minute flight. The motor can be run at any time in the flight and for any length of time but the cumulative sum of all runs must not exceed 25 seconds.

(CD Guide. In some circumstances a fly-off may need to be constrained or avoided. In that case one alternative is to record motor usage as well as flight times for each flight. If this method is to be used the CD should advise all pilots before the start of the event. At the end of the contest if flight times are equal, total motor run time, excluding dropped round, can be used to determine rankings.)

ELECTRIC HEIGHT LIMITED OLD TIMER

Height Limited Old Timer (HLOT) has no IC equivalent. Its aim is to remove motor performance as a success factor. Effectively, all models begin the gliding phase of the task at about the same time and height. An on-board device is required to sense height and motor run time. This 'height limiter' will automatically shut down the motor at either the required time or height. Suitable devices are commercially available from a number of sources. The flight task and conditions are set out in the national rules.

HLOT is for any models whose design was published before the end of 1942.

The task is to complete a 7 minute flight. Motor is limited to a single run of no more than 30 seconds or until the aircraft reaches 200m above ground level, whichever comes first. The height limiter is allowed to rearm after turning off the motor so that, in an emergency, the motor can be restarted. However, any motor restart disqualifies that flight from competition.

ELECTRIC VINTAGE GLIDER

Electric Vintage Glider (EVG) is basically run to the same rules as HLOT as set out in the national rules. An on-board device is required to sense height and motor run time. This 'height limiter' will automatically shut down the motor at either the required time or height. Suitable devices are commercially available from a number of sources.

EVG is for any gliders whose design was published before the end of 1956.

The task is to complete a 7 minute flight. Motor is limited to a single run of no more than 30 seconds or until the aircraft reaches 200m above ground level, whichever comes first. The height limiter is allowed to rearm after turning off the motor so that, in an emergency, the motor can be restarted. However, any motor restart disqualifies that flight from competition.