

70th NATS NOTES. 8th March 2018

GENERAL

These notes are intended to clarify some rules and processes for the successful running of the 70th Nationals in West Wyalong 23rd-30th April 2018.

Registration.

Nats HQ is the Indoor Stadium in Operator Street West Wyalong.

The registration process for the Nats will consist of checking each entrants MAAA card and handing over the "Goodies Bag".

Nats HQ will be open from 9.00am -3.00pm and 6.00pm-9.00pm each day until and including Friday 27th April 2018.

Please be sure to pack your MAAA card !!

Celebration Dinner and BBQ .

If you have indicated you wish to attend either or both of these social activities

Tickets will be available only at Nats HQ.

BBQ \$20 each and \$5 for juniors. Celebration Dinner \$25 each and \$10 for juniors.

Event cancellations.

Due to lack of entries and or support the following events have been cancelled:

Refunds of Event and or Admin fees will be made available to those affected ASAP.

CL

Bendix, 2.5cc Junior Combat. Please note that any juniors entered in 2.5cc Combat will be included in F2D and a Nats Medal will be made available to the highest placed junior.

RC

F3K, Open Thermal, Open Electric Glider.

FF

All events to run.

SAFETY

RC at the WW Aerodrome.

With 3 Flight Lines operating simultaneously at the WW Aerodrome, the use of **2.4 GHz** is mandatory. No other frequency shall be permitted to be used for any events at the WW Aerodrome.

2.5cc Rat Race

The organisers of the 70th Nationals Control Line events advise competitors of 2.5cc Rat Race that the minimum requirement for control line wire diameter will be .385mm with a negative tolerance of -.011 This change is required due to the recent number of line breakages experienced in racing events and to ensure that the safety of competitors and spectators are kept to the highest possible standards whilst maintaining the competitive nature of the event.

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Free Flight Night Scramble

All aircraft being flown in the 70th Nats Night Scramble, shall be fitted with lights in a manner that enables all persons present to be aware of the location and flight path when within 30 metres of it.

Any contestant whose aircraft is not fitted with lights that comply with this requirement will NOT be permitted to fly.

Spectators shall be upwind of the launch point and at a sufficient distance from it to make it unlikely that the safe distance requirements of CAR (1998) Part 101 will be breached during the flight.

RC Indoor.

In order to maintain the safety of spectators, pilots and helpers, a maximum weight of 150 grams shall apply to all models (fixed wing, single or multi rotor) flown inside the WW Indoor Stadium.

In addition any pilot of a model deemed by the organizers, to present a danger to other contestants, spectators or likely to cause damage to the venue, will be asked to cease flying immediately and barred from taking any further part in the indoor flying activities.

EVENT SPECIFIC RULES

There are rules for events being run at the 70th Nats that are not covered in the current MAAA published rules. They are as follows;

27/10 Goodyear. (see attached document)

1/2 A Combat. (see attached document)

E36. (see attached document)

Combined Speed and Jet

The Combined Speed event at the West Wyalong Nationals 2018 requires a change in the scoring system as the MAAA have now mandated a controlled 10% Nitromethane, 20% castor oil, 70% methanol fuel. As this rule change has only recently come into effect, there are several Combined Speed categories that do not have controlled fuel records to base our competition results on.

To permit the contest to take place on a level playing field, all Combined Speed categories will compete against the previous non restricted fuel records and their performance as a percentage will be calculated on this to determine the placings in the event.

In addition, jet speed will be run as a "stand alone " event as it is not subject to any fuel changes.

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Pylon Racing.

These updates have been approved by the VMPRA committee, who are running all Pylon Racing events at the 70th Nationals.

“Pylon racing F400 – APC props will be allowed in addition to the current propeller rule. For wording of the APC propeller rule refer to the F3t rules”.

“Pylon racing Q500 – allowable engines will be per the AMPRA engine rule”.

Old Timer Sport Cabin Scramble. (see attached document)

These are the rules for OT Sport Cabin Scramble that will be in use at the 70th Nationals. They were first published in 2015 and have been used ever since.

Cabin/Sport Model Scramble Rules - Version 2

Model: Any cabin or semi scale sport model, designed before 1960. e.g. Tomboy, Cardinal etc.

Engine: Any engine up to 1.0 cc or replica thereof produced before 1960. (0.6cc MP Jet diesel engines are also permitted).

Flying: Models are to be launched from the flight line into wind.

Model must land in the designated landing area behind the flight line as determined by the contest director. If any part of the model crosses the designated landing area boundaries when landing this will result in a zero flight score. If unsure ask the contest director.

At the end of the competition (usually after 30 minutes) the model **MUST** land in the designated landing area, otherwise a zero flight score.

Pilots must not enter the designated landing area until the model has landed.

Transmitters must remain on the flight line whilst the model is retrieved.

The model must have the engine stopped **BEFORE** returning the model to the flight line.

The engine must be hand started, no electric fingers.

No runners are allowed. Pilot must retrieve the model.

Time Keeper: Please arrange yourself a time keeper beforehand.

Score cards will be provided.

Minimum flight to count is 30 secs.

Maximum flight is 3 minutes (180 secs).

Flight times to be written down in minutes and seconds.

Record all flights even if less than 30 seconds in duration.

Most time in the air, over the allotted time, wins. (The length of the contest will be announced on the day but is usually 30 minutes).

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27 second GOODYEAR Speed limited at 27 seconds for 10 laps

Definition of 27 second Goodyear Racing

27 second Goodyear Racing is a simplified version of the successful MAAA "Goodyear Scale Racing" class to encourage both new first time teams and long time racers compete together with a true level playing field by way of speed limiting the models. By having expert and novice teams competing together it is hoped that the expert teams will assist, coach and encourage new teams in all facets of racing techniques and broaden the appeal of control line racing.

The contest is a simultaneous race between either two or three models, each model being flown by a separate team. The team shall consist of one pilot who shall remain in the centre of the circle piloting the model, and one mechanic who shall remain outside the flight circle and who shall start the engine and perform any other necessary duties throughout the race. The objective of the race is to complete the required number of laps in the shortest possible time without breaking the speed limit of 27 seconds per 10 laps.

Number of Models:

A team may enter and have checked only two models; either or both may be used to complete the necessary number of flights. Only one model may be used in each race. The team may interchange the various model parts provided that the resulting model is re-checked by the Contest Director.

Spare propellers, general accessories and engines are permitted.

Model Characteristics:

- a) Engines are to be up to 2.5 cc capacity engines.
- b) Propellers – Only commercially available wood, nylon or glass filled nylon propellers may be used.
- c) Refuelling shall be allowed by squeeze bottle only. Squeeze bottles may be valved and the tanks may have a single function tank valve to allow filling. Tanks require a separate vent pipe.
- d) Models shall be models of actual Goodyear racing planes that have flown in Goodyear or Continental Trophy races or other NPRPA Formula 1 races.
- e) Model profiles shall be within 5% of scale linear dimensions, the scale being one-eighth except where noted below.
- f) Tail area may be increased by 25% over scale area to permit safe handling. The scale shape of the tail must not be altered.
- g) The racing number of the full sized aircraft is to be displayed on the fuselage sides and on the upper inboard wing. The contestant's MAAA number is to be displayed on the upper outboard wing. All numbers are to be of block type letters.
- h) Models shall have profile fuselages with a maximum width of 25 mm excluding cheek cowls. Motors shall be side-mounted and uncowed. Fuselage side cheeks are permitted in so far they do not cowl the motor.
- i) The landing gear may be mono or two wheel types
- j) The entrant, if requested, shall produce a three-view drawing to substantiate the scale outline of his model. The drawings shall be a source acceptable to the Contest Director. A commercial or published full-size plan shall be acceptable, provided it meets the above specifications.
- k) Distance between the centre of the control handle and the centre line of the model shall be 15.92 metres +100mm, - 0 mm.

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1/2A COMBAT.

Rules

4 1/2 A Combat [Victorian Rules]

4.1 General

FAI (F2D) combat rules apply unless specifically changed by these rules.

4.2 Combat Site

A combat site must consist of 2 concentric circles which shall be marked out on grass.

4.2.1 The flight circle: Radius 18 metres

4.2.2 The centre circle: Radius 3 metres

4.3 Characteristics of a 1/2 A Combat model

4.3.1 Maximum Engine capacity: 1.76 cc

4.3.2 Model design is unrestricted

4.3.3 Fuel system shall be suction feed or muffler pressure only. No crankcase pressure, bladders or pacifiers are permitted.

4.3.4 Fuel for Glow and Diesel engines is unrestricted

4.3.5 Any venturi diameter can be used

4.3.6 Mufflers are optional

4.4 Control Systems

4.4.1 **Line Length:** The length of the control lines must be $12.8 \pm 0.04\text{m}$ The length is measured from the face of the grip on the control handle to the centre line of the model.

4.4.2 **Control lines:** two multi-strand control line wires of a minimum diameter of 0.3mm must be used.

4.4.3 **Line test:** Before each bout a pull test of 20g shall be applied for 5 seconds to the model/line combination.

4.4.4 **Handle tether:** The FAI handle tether is not required for 1/2 A combat.

4.4.5 The FAI Engine tether is not required for 1/2A combat

4.5 Number of Models

4.5.1 Only one combat model and set of lines is permitted per combat bout.

4.6 Conduct of Combat Bouts

4.6.1 **Warm up period:** A 60 second warm-up period shall be used.

4.6.2 **Contest period:** Immediately after the 60 second preparation, the signal to launch models will be

given. The combat bout lasts for 4 minutes from the signal to launch.

4.6.3 The bout will be started after each model has completed 2 level laps and are separated by approximately half a lap.

4.7 Method of Scoring

4.7.1 100 points awarded for each cut taken on the opponents streamer.

4.7.2 1 point awarded for each second the model remains in the air.

4.7.3 Ground time will not be penalised.

4.8 Safety

4.8.1 Mechanics must wear a safety helmet fitted with a chin strap worn under the chin.

4.8.2 Pilots leaving the circle during the combat bout must also wear a safety helmet.

4.8.3 Releasing the control handle while the model is airborne will lead to disqualification.

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I. **E-36 POWER**

I.1 **Contest Format:** The contest consists of three flights.

I.2 **Characteristics of the model:**

36 inch projected wingspan maximum.

120 gm minimum weight ready to fly.

No auto surfaces permitted. After launch, only one movement of stabiliser or wing, for DT only.

I.3 **Power requirements:**

Any type electric motor allowed, two cell lithium battery limit.
Folding props allowed.

I.4 **Flight Time:**

Three (3) flights will be flown, with flights of 120 sec max.
Motor run will be 10 secs.

I.5 In the event of a **fly off**, the motor run will be reduced to 5 seconds. Subsequent fly-offs will continue with a 5 sec engine run until a tie break occurs.

I.6 **Attempts:**

- An attempt is a flight less than 20 seconds.
- A motor over run is an attempt.
- The second attempt is an official flight.