

# National Air Races Rules and Standards



## THE COURSE

This is navigated by dead reckoning Pylon 1 is adjacent the pilot area for pilots to judge the right hand turn away from themselves. Makes for a better spectacle too.

The 310 metre back straight towards Pylon 2 is angled away to increase horizontal separation as aeroplanes exit Pylon 3 and navigate towards Pylon 1.

Distance between Pylon 2 to Pylon 3 is 60 metres. Two bites at rounding both corners reduces the need for another very tight turn at Number 1. The 275 metre main straight runs parallel to the runway.

All pylons, startline and sideline will be judged for incursions. (ie Cuts). Competitors can use technology such as gyros\*, second person view cameras and GPS telemetry to assist. You can have your own flag waver at Pylon 2 or use UHF radio. MAAA MOPs state mobile phones cannot be used at the flight line.

## Scoring System

### 4, 3 ,2 ,1 first past the post

First past the post racing is far more exciting than deducting individual heat times from 300 Points.

Round 1,2,3	Saturday-Racing Starts	12.00
Round 4,5,6	Sunday-Racing Sarts	09.30
Finals	Sunday	14.00

## FORMULA 1

Seagull Nemesis or Cassutt ARF  
Engine spark ignition petrol  
Maximum Capacity 62 cc petrol engine  
Commercially available fixed pitch prop  
Battery Pack 1700 mAh minimum  
Minimum servo torque rating 6.5kg/cm.  
Maximum static engine RPM 8000.\*

## FORMULA 2

Seagull Nemesis ARF  
Engine spark ignition petrol  
Maximum Capacity 35 cc petrol engine  
Battery Pack 1700 mAh minimum  
Commercially available fixed pitch prop  
Minimum servo torque rating 3.5kg/cm\*  
Maximum static engine RPM 9000.

## FORMULA E

Seagull Nemesis  
Battery - 10S LiPo  
RX Battery Pack 1700 mAh minimum  
Minimum servo torque rating 6.5kg/cm.\*

## AT-6 TEXAN

20cc WW11 Fighter Trainer  
Engine glo ignition methanol nitro  
Maximum Capacity 20 cc  
Battery Pack 1700 mAh minimum  
Minimum servo torque rating 3.5 kg/cm\*  
APC 15x10 control prop  
GloMax 2 stroke 10% nitro fuel supplied  
Type must have retractable undercarriage  
Fuel supplied GloMax Aircraft 10% nitro.  
Maximum static engine RPM 10,000.

## GOLDEN ERA

Original Adelaide rules apply  
3lb per 10cc power loading discarded.  
Battery Pack 1700 mAh minimum  
Minimum servo torque rating 6.5kg/cm\*  
\* minimum torque rating each contol surface.

## FLYING STANDARD

MAAA Gold Wings is the minimum standard.

F1 & Golden Era competitors must be able to safely navigate the race course below 100 feet agl.

F2, F3, Texan competitors are expected to be able to safely navigate the race course not above 200 feet agl.

## RADIO STANDARD

2.4 GHz with Australian C Tick or RCM Label. Receiver must be the same brand as the transmitter.  
MOP 058/3.5 - Non ACMA compliant radio gear not accepted.

## FAILSAFE SETTINGS\*

Ignition off - Throttle closed - Engine must stop  
Elevator - Neutral  
Aileron and Rudder approx 3-5mm to the right  
Undercarriage and Flap - Pilot's Choice  
\* **Daily Check.** Engine start on first heat at flight line.

## Failsafe Check Failure

AEROPLANE GROUNDED  
\*Closed Event  
Failsafe test available before next flight.  
\*Public Event  
AEROPLANE GROUNDED  
Failsafe test available at the end of the display when the public have left  
\*Gyro equipped aircraft required to demonstrate a full throttle 45 degree dive.

Two days of man versus manufactured radio controlled machinery

## Right Hand Cicuit

Changes include ....  
**Number 1** - Safety.

**Number 2** Area Approvals. It ensures aircraft remain within the property boundary.

**Number 3** reduce the number of pylon officials required to conduct the meeting.

## Fly Neighbourly

To reduce the noise footprint aircraft are to circle in the milling area at or below half throttle until the start of the thirty second count down timer.