

**THE SCALE AVIATORS  
PRACTICES AND PROCEDURES  
MANUAL**

**V6.0  
2024**

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<b>FLYING FIELD ETIQUETTE AND GUIDELINES.</b>	These items are intended as a guide, which if followed by all members and visitors will help to make flying at the <b>TSA</b> field an enjoyable experience.
<b>THE SCALE AVIATORS INC  MEMBERSHIP</b>	
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APPENDIX A MAAA Forms	MAAA Forms specifically relevant to TSA
APPENDIX B MAAA Policies	MAAA Policies specifically relevant to TSA
APPENDIX C MAAA Procedures	MAAA Procedures specifically relevant to TSA

# FLYING RULES

## Version: 6.0 (2024)

These *TSA* rules are intended to provide a basis for the safe and enjoyable operation of model aircraft at *TSA* facilities and minimising the risk of injury to people and/or damage to property.

*TSA* members and invited visitors are expected to observe and follow these *TSA* rules in conjunction with MAAA Manual of Procedures (MOP) and CASA Area Approvals at all times.

It is the *TSA* members and invited visitor's individual responsibility to access, understand and follow these MOP's before undertaking the flying of aircraft at the *TSA facilities*.

*Copy of relevant information can be also found on The Scale Aviators website under the SAFETY MATTERS Menu <https://www.thescaleaviators.org.au/safetymatters>*

If any *TSA* members or invited visitors has any issue associated with following the rules or they feel that following the rules jeopardises safety in any way, then it is their individual responsibility to draw this to the attention of *TSA* President for resolution.

The *TSA* may initiate disciplinary (Internal and or external) action against any member or invited visitor who fails to comply with the *TSA* Flying Rules, MAAA Manual of Procedures as well as CAR Part 101.

For your information:

The Scale Aviators website has a lot of useful information [www.thescaleaviators.org.au](http://www.thescaleaviators.org.au).

The main page dedicated to safety is under the SAFETY MATTERS menu [www.thescaleaviators.org.au/safety](http://www.thescaleaviators.org.au/safety) matters . This page contains a range of very relevant safety related links including a range of forms for collecting safety related information to enable evidence based management of safety matters.

The Scale Aviators Rules	ANSW Event initiation document
TSA Risk Analysis	ANSW HMTI Permit to Fly MAAA-038
TSA no Fly zone	LARGE MODEL ISSUE DATA ENTRY FORM
The Scale Aviators Layout	LARGE MODEL OCCURRENCE FOAM
CASA Advisory Circular 101-03	ANSW HMTI Application Process
The Scale aviators fact sheet	ANSW HMTI Guide,

# THE SCALE AVIATORS PRACTICES AND PROCEDURES MANUAL 2024

The screenshot shows the website for 'The Scale Aviators' with the following elements:

- Header:** 'The Scale Aviators' logo and name, location 'Tharwa, Canberra The National Capital of Australia', and a 'Got In Touch' button.
- Navigation Menu:** Home, facilities, Past events @ TSA, WW1 Album, Members aircraft, Body of Knowledge (BOK), Events, Video's, Forum, Members, SAFETY MATTERS, More.
- Central Content Area:** A large image of a vehicle interior with a view of a green field and mountains. Surrounding the image are several colored buttons for links:
  - Click link to:- *The Scale Aviators Rules* (pink)
  - Click link to:- *TSA Risk Analysis* (pink)
  - Click link to:- *TSA no Fly zone* (pink)
  - Click link to:- *The Scale Aviators Layout* (pink)
  - Click Link to:- **CASA Advisory Circular 101-03** (yellow)
  - Click link to:- *The Scale Aviators facts sheet* (green)
  - Click link to:- ANSW Event initiation document Event's Layout (purple)
  - Click link to:- ANSW HMTI Permit to Fly MAAA-038 (purple)
  - Click link to:- **LARGE MODEL ISSUE DATA ENTRY FORM (TSA 04)** (purple)
  - Click link to:- **LARGE MODEL OCCURRENCE FORM (TSA 03)** (purple)
  - Click link to:- ANSW HMTI Application Process (orange)
  - Click link to:- ANSW HMTI Guide (orange)
- Footer:** Copyright notice: ©2019 by Scale Aviators. Proudly created with Wix.com.

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1.3. Visiting pilots must be affiliated with the Model Aircraft Association of Australia (MAAA), be carrying a current MAAA FIA membership card, and be invited by *TSA*'s. ....10

1.4. Visiting pilots and prospective new members must be sponsored and accompanied by a founding member of *TSA* and must record their attendance in the *TSA* visitor's book or be formally registered as an event participant. (*The visitors book can be found in the entrance to the club house.*) .....10

1.5. A person who is operating a model aircraft must ensure that, while the model aircraft is IN FLIGHT, or is LANDING or TAKING OFF, stays at least 30 meters away from anyone not directly associated with the operation of model aircraft and any property not directly associated with the flying of model aircraft. ....10

1.6. Any accident or incident having the potential to result in an insurance claim must be reported to the *TSA President* as soon as possible and the details recorded on an MAAA Incident Report Form MAAA010 by the parties involved. The completed form is to be forwarded to the Secretary of *TSA* as soon as practical. Any incident that could potentially create a risk or that could bring the club into disrepute must be reported to the *TSA President* as soon as possible.....10

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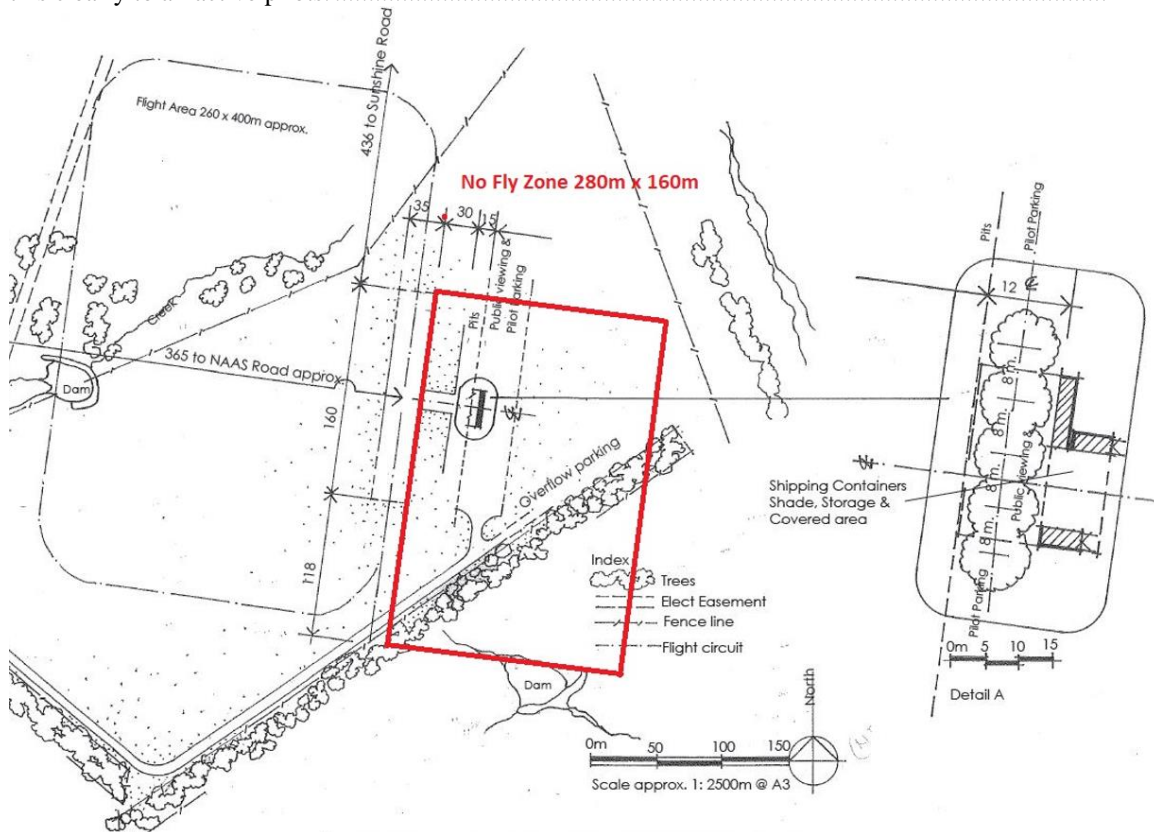
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8.4.2. In the event of a safety incident occurring, you must contact the Flightline Director immediately, you will be guided to the appropriate MAAA incident investigation process to follow and or the TSA Large Model Occurrence form (TSA L001) that can be found on TSA website under SAFETY MATTERS menu. ....18

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9.5. Members and guests consuming alcohol accept full responsibility for their actions once they leave club property. ....19

9.6. All rubbish to be removed upon leaving the field. ....19

9.7. Lastly we ask that your consumption of alcohol be done sensibly and in line with government policy regarding road rules. ....19

10. Mobile Phones 22-05-2015..... **Error! Bookmark not defined.**

10.1. MAAA MOP045, Has been revised and is no longer applicable. Mobile phones can now be used in the pit area and car park. .... **Error! Bookmark not defined.**

**FLYING FIELD ETIQUETTE AND GUIDELINES.** .....20

## **MANDATORY FLYING RULES TO BE OBSERVED AT ALL TIMES WHEN USING THE FACILITIES**

### **1. MEMBERS & INVITED VISITORS**

- 1.1. These The Scale Aviators Inc. (**TSA**) Flying rules are to be followed at all times in conjunction with and not limited to MAAA MOP014 General Model Rules.
- 1.2. Flying members must be current financial members of **TSA**.
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Bronze wings and are then considered competent to fly solo in pursuit of their Gold wings.

### **3. FREQUENCY MANAGEMENT**

#### **3.1. PROCEDURES FREQUENCY KEYS & TRANSMITTERS.**

3.1.1. AM/FM Transmitters: *Unless specifically under the control of the Event Coordinator or Display Director*, No AM/FM transmitter is to be switched on anywhere at or near the TSA field, including the car park. If you wish to do so you must get guidance and approval from the all members present on the day.

#### **3.2. SPREAD SPECTRUM 2.4 GHz**

3.2.1. Members operating on 2.4GHz are not required to use frequency keys or keyboard as these systems utilise frequency management protocols.

3.2.2. Radio systems fitted with “fail safe” must as a minimum requirement have the throttle set to minimum in the event of radio failure or loss of signal. *There are additional requirements for any heavy model (>7kgs).*

3.2.3. Range checks must be conducted before flying commences. Please ensure that the range check tests all frequency channels that the transmitter and receiver are operating on. (*2.4 and 900 if applicable*)

### **4. AIRSTRIP AND FLYING OPERATIONS**

#### **4.1. Airspace Management.**

4.1.1. As per the current Instrument pilots cannot fly greater than 1800feet/ above the field and they must at all times maintain Visual Line Of Sight (VLOS) of their model aircraft at all times.

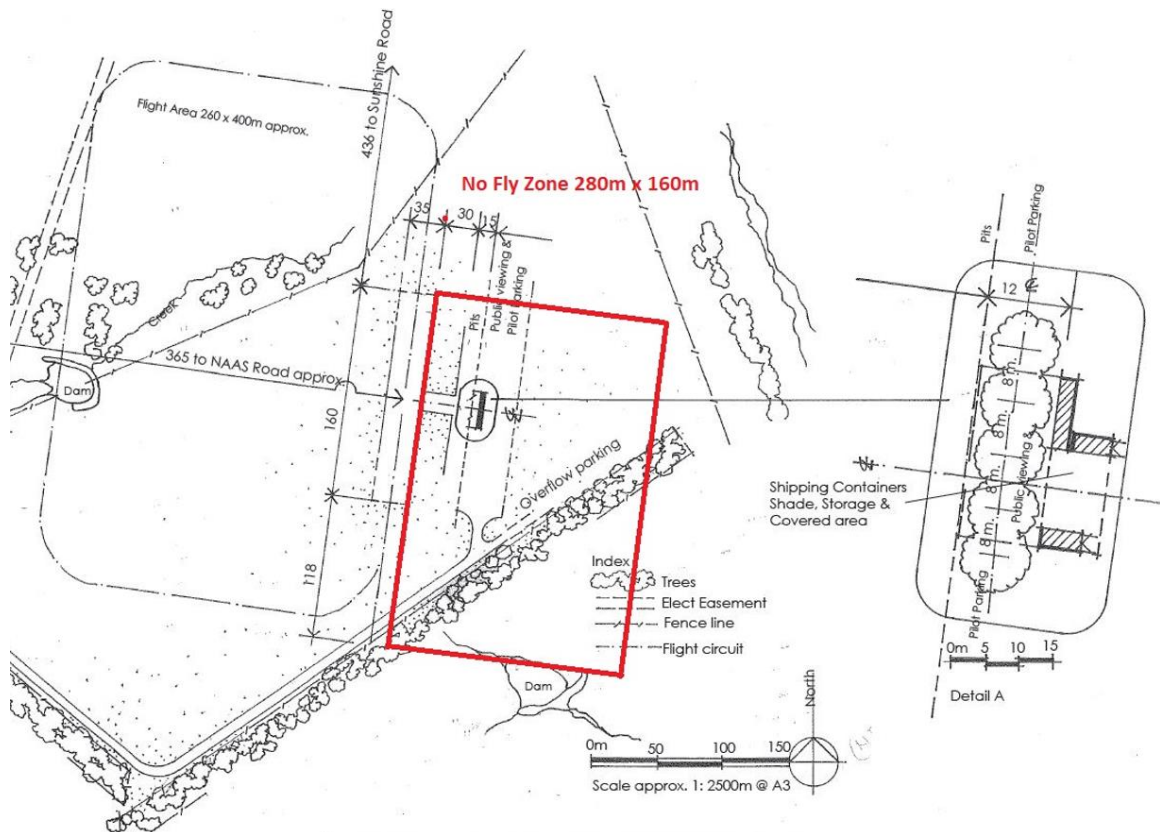
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- 4.1.8. All pilots have a responsibility to assist the Flighting Director/Observer in maintaining vigilance and lookout for full size aircraft, identifying their location, height and flight trajectory and communicate this clearly to all active pilots.



**NO Fly-Zone**

**4.2. FLIGHTLINE DIRECTOR and OBSERVER ('Spotter')**

- 4.2.1. In accordance with CASA requirements full size aviation has absolute priority over model aircraft operations.
- 4.2.2. At all TSA events there will be a nominated Flightline Director. It is the Flightline director's responsibility to hold a Pilots briefing every morning during an event and to reach out to any pilots that miss the briefing before they commence any flying activities. It is also the responsibility of any pilot to ensure that they receive a briefing form the Flightline Director before they commence any flying activities.
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  - 4.2.5.5. All pilots have the responsibility to assist the Flightline Director/Observer in maintaining a vigilant lookout for full size aircraft and identify their location, height flight trajectory of that aircraft and communicate this information to other active pilots.

**4.3. STARTING ENGINES, ENGINE TUNING OR AIRCRAFT REPAIR.**

- 4.3.1. Starting, tuning engines and aircraft repairs on the airstrip is prohibited. Unless,
  - (a) All pilots present on the day have been consulted and full agreement has been reached.

- (b) No other aircraft are operating or are intending to operate.
- (c) Remove model well away from the airstrip or to the Pit Area for restarting or tuning.

4.3.2. There is to be NO arming of any electric powered aircraft for any reason in the member's area, designated pit area or car park. Arming it to only take place in the starting area with the aircraft suitably restrained.

4.3.3. Aircraft must always be adequately restrained when starting. **TSA** provided several starting posts for this purpose. Always ask for assistance if you need it or it makes starting safer.

4.3.4. There is to be no starting/running of any engines/turbines/electric motors/EDF's for any reason in the members / spectator area designated pit area or car park.

4.3.5. Shutting down engines is to be carried out from behind the aircraft and under no circumstance should tuning be carried out from in front of the aircraft i.e. you must never reach over a spinning propeller.

#### **4.3.6. Gas Turbine Engines**

4.3.7. Gas turbine operators must ensure that any person not involved in start-up sequence is a minimum of 8 meters from the aircraft. Refer. MAAA. MOP030.

4.3.8. **Gas** turbine operators must remain vigilant and mindful of their jet blast when starting.

4.3.9. When starting your engine your model must face towards the main runway and be secured by the ground pegs provided in the start-up area, or members may use their own restraining system if they need to start closer to the runway, this may mean that another member holds your model while starting.

#### **4.4. Pre Flight Preparation**

4.4.1. Ensure you have checked your radio gear (range check etc.) Range checks must be conducted before flying commences. Please ensure that the range check tests all frequency channels that the transmitter and receiver are operating on. ( 2.4 and 900 if applicable)

4.4.2. Correctly pre-flight your aircraft, refer to MOP015 pre-flight check list.. Always check control surfaces are going the right direction with the correct throw and centre correctly.

- 4.4.3. Before you start your engine ensure your aircraft is adequately restrained and facing towards the main runway i.e. away from the pit area and that your aircraft is in the designated start up area.

## **5. Clear For Take-Off.**

- 5.1.1. Prior to aircraft being taxied onto the strip or carried onto the airstrip for take-off, each pilot must check that no-one is landing and then call "Clear for take-off?"
- 5.1.2. The pilot must not proceed until all pilots currently flying acknowledge with a "Clear".

## **5.2. Take-Off.**

- 5.2.1. A pilot may move onto the airstrip to control the model during take-off if all pilots currently flying agree, but must then move promptly to the Pilot Area behind the Safety Barrier. Once behind the Safety Barrier the pilot will call "Clear from the strip"
- 5.2.2. Take-offs are to be along the airstrip and not across the airstrip, except by prior arrangement with pilots currently flying.

## **5.3. Circuit.**

- 5.3.1. General flying is to be in a rectangular circuit.
- 5.3.2. Direction of circuit is decided by agreement between the pilots but is normally determined by the wind direction. Northerly wind direction dictates that the circuits are predominantly anti clockwise, and Southerly wind direction dictates that the circuits are predominantly clockwise.
- 5.3.3. Pilots must not fly against the general traffic direction.
- 5.3.4. Direction of traffic can only be change when all pilot at the flight line are consulted and the request for a direction change is acknowledge by all. If a flight line director is present he will be responsible for coordinating the request.
- 5.3.5. If vehicles are entering the field, aircraft are not permitted to over fly the vehicles and must cut short any approaches from the south.

## **5.4. Out Of Bounds Flying Areas.**

5.4.1. All flying is to be in front of the Pilot Area Barrier facing away from the Pit Area, car park. Under no circumstances are aircraft to be flown in the area behind the Pilot Area Barrier, over the Pit area, car park or over NAAS road.

#### **5.5. Dead Stick / Failure or difficulty.**

5.5.1. A pilot whose model experiences an engine failure or any other difficulties must “clearly” call ‘Dead Stick’. Other pilots must immediately give landing priority to the pilot of the ‘Dead Stick’ aircraft.

#### **5.6. Landing**

5.6.1. When preparing to land, the pilot must call “Landing” before initiating the landing procedure turn.

5.6.2. The pilot must not proceed until all pilots flying acknowledge with a “Clear”

5.6.3. Landings or any emergency situation have right of way ahead of take-offs.

5.6.4. If an aircraft is in the air and being flown for large or heavy model inspection purposes, or a pilot is having trimming issues, any additional aircraft should not be lined up in the taxi way and should not consider taking off.

5.7. The pilot can move out from behind the Safety Barrier and on to the edge of the airstrip to control the model during landing if required.

#### **5.8. Entering the Airstrip.**

5.8.1. Anyone wanting to enter the airstrip (for purpose other than take-off) must seek clearance from pilots currently flying, before proceeding.

#### **5.9. Taxing**

5.9.1. Pilots are permitted to taxi out of the start-up area and onto the taxi lane in preparation for take-off.

5.9.2. When returning to the pit area, aircraft must not be taxied beyond the start-up area and into the pit area.

5.9.3. Aircraft must be restrained when entering the taxi way after landing.



5.9.4. Once at the end of the taxi way ( Level with the starting area) Internal combustion engines should be shut down and electric motors must be de-armed.

**5.10. Aerobatics.**

5.10.1. Pilots performing Aerobatic manoeuvres (including hovering) are to have due regard to the safety of other aircraft.

5.10.2. When other aircraft are flying, all forms of aerobatics should be performed in the area directly in front of the airstrip, not in the circuit. Those in the circuit should avoid this area when aerobatic manoeuvres are being flown.

**5.11. Beat Ups / Buzz the strip**

5.11.1. Pilots intending to make a high or low -speed, low level pass over the airstrip must advise other pilots.

5.11.2. The pilot must not proceed until all pilots currently flying acknowledge with a “Clear”

**5.12. Unique Aircraft / display / Test flight or other.**

5.12.1. Pilots wishing to fly aircraft (for example a test flight, pylon racers, other high speed aircraft, hovering and other low speed aircraft) having performance that is substantially different from aircraft already in the circuit or a test flight, must seek clearance from other pilots prior to flying. Dedicated time slot is the preferred solution and is to be fully supported.

**6. LARGE MODEL AIRCRAFT > 7kg**

6.1. Radio Control (RC) Aircraft exceeding 7 kilograms in weight must not be operated without a current MAAA Permit to Fly issued by an MAAA approved heavy model

6.2. Inspector. Models over seven kilograms must be re-certified every three years.

6.3. RC aircraft exceeding 50 kilograms in weight must not be operated without current MAAA Permit to Fly and approval for each flight.

**7. NORMAL CLUB FLYING DAY**

7.1. It is expected on a normal club flying day that:

Up to 20 members and their invited guests would be in attendance.

All invited guests sign the visitors book.

No general public are in attendance.

Flying is conducted as defined in the TSA club Practices and procedures Manual

Flying is conducted on an informal basis.

All forms of model aircraft are permitted to fly.  
Any large models must hold a current large model permit or be under inspection.

## 8. EVENTS / DISPLAYS

### 8.1. General

- 8.1.1. Any specifically organized flying activity at the field that differs from a normal club flying day definition is to be considered an event. If members of the general public are invited then it must be managed as a Display.
- 8.1.2. The *TSA Display Procedures (DP)* must be followed when developing the specific *TSA Display Procedures (DP)*.
- 8.1.3. The DP must be presented to the ANSW for comment and approval in line with MAAA MOP 019. Only once the ANSW has agreed and signed the DP the event can then be conducted.

### 8.2. Displays

- 8.2.1. Display Specific details will be presented and approved through the Display approval process and will be on a case by case basis.

### 8.3. Events

- 8.3.1. On arrival
- 8.3.2. On your arrival to a TSA event you will have pre-registered online but we still ask you to present to the event organiser so that we can allocate an area for you and if you have not been to the field before you will be taken through the initiation process.
- 8.3.3. During the initiation process we will give you a briefing on the facilities, field specific safety matters including club rules, no fly zones, area approval details and point out the specific safety officer/ flight line Director personnel.

### 8.4. Event Flight line Director

- 8.4.1. The flight line Director will be available for consultation and to answer any questions regarding the Practices and procedure. The Flight line Directors have the final say on any of the activities related to Model Flying and general behaviour. If you are asked to land or not fly your model, maybe until an issue has been resolved, then you are required to comply with their direction or otherwise withdraw from the event.
- 8.4.2. In the event of a safety incident occurring, you must contact the Flight line Director immediately, you will be guided to the appropriate MAAA incident investigation process to follow and or the TSA Large Model Occurrence form (TSA L001) that can be found on TSA website under SAFETY MATTERS menu.

9. *Drinking of Alcohol.*

- 9.1. Alcoholic drinks may be consumed after an individual member has finished their own flying for the day.
- 9.2. No flying by an individual member to be done once any alcohol has been consumed.
- 9.3. Those members wishing to drink alcoholic drinks will be limited to the Pits and carpark areas only.
- 9.4. Visitors consuming alcohol are the direct responsibility of the member sponsoring the visit.
- 9.5. Members and guests consuming alcohol accept full responsibility for their actions once they leave club property.
- 9.6. All rubbish to be removed upon leaving the field.
- 9.7. Lastly we ask that your consumption of alcohol be done sensibly and in line with government policy regarding road rules.

## **FLYING FIELD ETIQUETTE AND GUIDELINES**

These items are only intended as a guide, which if followed by all members and visitors will help to make flying at *TSA* field an enjoyable experience.

### **1. PROLONGED ENGINE RUNNING AND RUNNING-IN ENGINES IN THE PIT AREA**

Prolonged engine running and running-in of engines should be avoided. Move well away from others in the Pit Area if running-in an engine. If you require the use of the restraining facilities in the starting area for testing and tuning an engine, please ensure that all pilots present are aware of what you are doing and why. They may be able to assist you.

### **2. PROP WASH / JET WASH**

When running motors in the starting Area ensure that dust, smoke or oil does not blow onto other models or people.

### **3. FUEL OVERFLOW**

Fuel kills the grass in the Pit Area, where possible please refuel over the rubber restraining areas, we need the weeds killed around the starting posts.

### **4. LITTER AND RUBBER BANDS**

Please do not litter in any way. Take any litter you see with you. Do not leave anything around that could be dangerous to grazing live stock. (Broken propellers, rubber bands, conrods, etc)

### **5. CRASH DEBRIS**

If an aircraft is crashed, please pick up and remove all pieces. Take the debris home with you.

Please mark the crash site on the *TSA* crash map with a note reflecting the most probable cause.

### **6. FLYING ALONE**

Due to potential increased risk and the remote location of the field and limited phone coverage, Flying alone is strongly discouraged. If flying alone you are limited to below 400feet.

## 7. NUMBER OF AIRCRAFT FLYING THE CIRCUIT.

A maximum of five aircraft are allowed to fly the circuit at once unless specific approval is obtained from the flight line director or in his absence all pilots currently flying. It is best practice that less aircraft should be flying at once if their flight performance is markedly different.

## 8. AIRCRAFT

Pilots must observe Commonwealth of Australia Civil Aviation Safety Regulations (CASR), in particular regulation 101 of the CASR 1998 and Civil Aviation Order 95.21 which specifically relates to model aircraft.

Key points of 101 to note: Please attach

## 9. AIRCRAFT TYPES

### Helicopters

When flying at the *TSA* field, helicopter pilots must seek clearance from all the fixed wing pilots before flying on the runway. Hovering helicopters in the flight path puts other pilots "off" and if necessary they should move to the stated hovering area mentioned below.

Starting: Helicopters may be electronically initiated in the pits (such as connecting a receiver battery). Ignition should occur outside of the pits, and rotors must not turn until the aircraft is at the flight line.

### Gliders

Gliders must be towed, winched or bungee launched as close to the airstrip as conditions permit, but must be controlled after launch from the pilots box.

### Turbines

Committee approval is required before a Turbine aircraft is permitted to fly at the *TSA* field.

Pilots must hold Gold Wings proficiency.

Turbine models must have the required *MAAA* inspections and permits before they can be flown. Surrounding grass lands should be considered before commencement of flying to minimise potential fire risks.

No models including Turbines are to be flown on Total Fire Ban days.

### Free Flight Aircraft

Free flight aircraft can be flown. All care should be taken to minimise potential fire risks. Other pilots should be made aware of the activity involved. Due care should be taken to

allow for wind drift and fly always. Models are not to be launched from the pits and car park.

## 10. Trailers and vehicles

Trailers and vehicles directly associated with the flying of model aircraft are allowed in the pit area as long as there is sufficient room for all present. If space is an issue then agreement shall be made between all present and with full regard for all.

## 11. Spectators.

Spectators are allowed in the pits if specifically invited and accompanied by a *TSA* club member

## 12. Fire Control

- 12.1. Flying of model aircraft is not permitted on days of total fire ban.
- 12.2. This is not only due to the fire risk of model aircraft but also the potential fire hazard caused by vehicles and other activities on those days.
- 12.3. Visiting the field on total fire ban days is only permitted for the sole purpose of offering fire protection to our facilities.

Example: We may wish to remove the mower from the field to protect it from the potential path of a bush fire. Any actions of this nature are to be performed with both the land owner and the President's approval.

### 12.4. For Grass fires

- 12.4.1. *TSA* has a 20 litre firefighting pack, this should be full and ready for use at all times. This pack is to be placed on the main steps to the club house during summer months and whenever we are holding an event.
- 12.4.2. *TSA* has a water tape fitted to the outside of the shower block for refilling any water firefighting containers if required. There is one 20 litre blue water container that is stored in the shower block that can be used as a mobile container to refill the 20 litre firefighting pack if we have a fire event. There is also usually 5 or more 20 litre water containers in the kitchen that can be used if there is a fire event.
- 12.4.3. *TSA* generally has around 4000 litres of rain water in the tanks around the club house that are available if required.

### 12.5. For Fuel Fires

- 12.5.1. *TSA* has a several CO2 extinguishers just outside the Kitchen area in the club house that can be used in case of a fuel fire.
- 12.5.2. *TSA* also has a fire blanket just outside the Kitchen area in the club house that can be used in case of a fuel fire.

## **The Scale Aviators**

### **MEMBERSHIP**

The Scale Aviators (TSA) has been founded to promote all aspects of aeromodelling and model aviation within the community.

Membership of the (*TSA*) is take seriously and managed very closely by all Committee Members. *TSA* is a positive community which enjoys aeromodelling.

Protection of *TSA* and what it stands for is of paramount importance.

Disrespect for the *TSA* community will not be tolerated.

Prospective flying members may apply to join the *TSA* by completing a Membership Inquiry Form. The Scale Aviators Membership Inquiry Form can be obtained by emailing the [thescaleaviators@outlook.com](mailto:thescaleaviators@outlook.com) . Once the completed form is received by **TSA** committee your application will be considered.

# The Scale Aviators

## BYLAWS

Members and visitor shall respect each other, *TSA* and its facilities; any contravention will result in immediate disciplinary action by the *TSA* Committee.

Dated this.....day of.....

Full name .....

Signature .....

Committee Member signature.....



## **DISCIPLINARY ACTION**

*TSA* committee members have the right to:

1. Instruct any member or visitor to leave the field immediately.
2. Through the committee, arrange disciplinary actions, which may include expulsion from the club.

*TSA* members have the right to:

1. Submit a written statement detailing the incident including the disciplinary action the member deems appropriate to the *TSA* President for consideration.

## **TSA VISITORS**

All visitors to the *TSA* facilities are bound by the *TSA* Practices and procedures and by-laws.

At the *TSA* facilities the operation of all model aircraft is subject to the requirements of the MAAA Manual of Procedures as well as CAR Part 101.

The individual operator of a model aircraft is responsible for his/her compliance, and his/her model's compliance with CAR Part 101 and also with all MAAA rules as required by the MAAA Manual of Procedures.

### Visitor types:

1. Public visitor.
  - a. Passing public visitor
  - b. Invited public visitor
2. MAAA Affiliated visitor.
  - a. Flying visitors
    - i. Social
    - ii. Test flights.
3. Non-Affiliated flying visitors.
  - a. Example: Scout groups, rotary groups, car clubs ect.

### Passing Visitors

Members must ensure passing public visitors sign the visitor book and stays within the visitor area unless escorted by a member.

### Invited Public Visitor

Invited Public Visitors are Visitors that are invited through public invitation such as radio or newspaper marketing. Public Visitors are only allowed when *TSA* is holding an Approved Flying Display (CASA, MAAA, ANSW Display). As such they are bound by the approved Display Procedures.

### Approved Flying Visitors (AFV)

AFV is a person that has been previously approved by the founding members and is listed on the Approved Flying Visitors List.

The Approved Flying Visitors list is to be maintained by the committee and regularly reviewed.

An approved flying visitor must as a minimum:

- a. Be approved by all founding members.
- b. Have Gold wings
- c. Must abide by the *TSA* club rules and By-laws.
- d. Be sponsored by a founding member.
- e. Be invited by the sponsoring *TSA* Founding member

People listed on the Approved Flying Visitor List are eligible to submit an application to become a *TSA* Flying Member.

#### Non Affiliated flying visitors

Non Affiliated Flying visitors must be previously approved by the founding members and must be an organized activity.

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# The Scale Aviators

## Standard Operating Procedure

### Public Flying Display

**This is a DRAFT that is to be tailored to meet the specific requirements of a proposed Display**

## General Information

### Introduction

This procedure. Provides guidance on the minimum safety and administrative procedures necessary to run a public flying displays at the *TSA WILLIE EMMITT FLYING FIELD*. The information in this guide is based upon CASA Air Displays: Safety and Administrative Arrangements May 2004 and MAAA MOP 019. Nothing in this guide is intended to conflict with the AC 101-3, or other legislation which, in case of doubt, must be regarded as overriding

## Legal Requirements

The definitions contained in this document are derived from those of the Civil Aviation Safety Authority (CASA) except where otherwise noted.

### Definitions

#### Model Air Display

For the purposes of this guide, an *Air Display* means a club organised flying activity, where members of the general public are specifically invited through advertising or where by the nature of the activity members of the general public are likely to attend.

#### Non – Public Flying Display

For the purposes of this guide, a *Non – Public Flying Display* means organised flying, including contests, and exhibitions of model aircraft flying made for the purpose of enjoyment of aero-modelling and performed in front of MAAA affiliated members and invited guests. Such a display is not open to a public gathering.

### **Public Flying Display**

For the purposes of this guide, a *Public Flying Display* means organised flying, including contests, and exhibitions of model aircraft flying made for the purpose of enjoyment of aero-modelling and performed in front of MAAA affiliated members and invited guests including Public gathering.

### **Public Gathering**

For the purposes of this guide, a *Public Gathering* means people assembled at a location on the basis of a general public invitation, with or without subscription or levy. The general public having been invited through media advertising or word of mouth.

### **Non - Public Gathering**

A gathering of persons affiliated with the MAAA or are invited guests who have been entered into the *TSA* Visitor Book.

### **An Acrobatic Flight**

*Acrobatic Flight* means manoeuvres intentionally performed by an aircraft involving an abrupt change its attitude, an abnormal attitude or an abnormal variation in speed. Acrobatic manoeuvres include slow rolls, aileron rolls, loops, stall turns.

### **Operate In an Unsafe Manner**

An arbitrary decision based upon the experience and knowledge of the Flying Safety Director or Display Organiser. As such any judgement made is final and binding on all participants.

### **Type of Model Aircraft**

The type of model aircraft are categorised as, fixed wing, glider, helicopter (rotary wing) large scale.

## **Personnel**

### **Officials and Committees**

The responsibilities of personnel and committees are as given below.

#### **Display Director**

For Model Air Displays *TSA* will appoint by invitation a Display Director to assume organisational responsibility. Responsibility for particular aspects (such as site survey, air traffic services, first aid and conduct of flying activities) should only be allocated to people with the appropriate experience and knowledge of running model aviation events.

The Display Director is also responsible for generating and submitting the proposed display procedures to the ACTAA for approval. It is advisable to submit the required documentation as described in:

- MAAA Form-001 Display Application
- MAAA Form-002 Display Directors Statement

up to two months before the planned event.

The Display Director, in particular, needs to consider and, where appropriate, make arrangements for the following aspects:

### **Event Personnel**

- The Display Director
- The appointment of a Flight Line Director
- The appointment of a Ground Coordinator to coordinate field setup
- The appointment of officials for registration and judging
- The Display Entrants
- The Event Public Officer
- The First Aid Officer
- The catering Team
- The field preparation team

(See *TSA EVENT RESOURCE LIST* for key roles)

### **Event Site and Display Management**

- Liaison with Facilities Officer for ground mowing and provision of facilities other than those normally available at the site
- Catering
- Site assessment – assess current site for suitability of event including temporary changes necessary to run an event
- Marking of the display axis
- Marking out of model aircraft pit positions
- The siting and control of barriers to prevent public access
- Car parking
- Establishing minimum heights
- Stipulating weather minima
- Coordinating pyrotechnics and other ground special effects
- Pre-display pilot briefing
- Document checks and MAAA affiliation confirmations
- Pilots' display programs (both normal and weather-restricted programs)

### **Event Public Officer**

- A *TSA* representative is to be made available as the Events Public Officer on any day where public are expected to attend. Their sole role is to manage, coordinate and control the public and the public safety aspects of the event. The Event Public Officers is advised to enlist additional resources to assist with the required tasks.
- Ensure the Public are aware of the role of the Events Public Officer.
- Ensure the Public are awaited of the safety requirements.
- Manage the public vehicle access and parking.
- Manage Public access control.
- Manage Public amenities.

### **Event First Aid Officer**

- Responsible for administrating any required first aid.
- Responsible for the provision of the first aid facilities.
- Must be a current St Johns registered first aid officer.

The responsibility of the Display Director is not necessarily limited to the above items. This list, however, is a good place to start. Each of the above items is dealt with in detail in the section entitled [Site and Display Management](#).

### **The Flight-line Safety Director (FSD)**

The person appointed to be the FSD shall have considerable model or general aviation experience particularly as it relates to running of organised model aviation events. He/she may also assume the function of Display Coordinator.

The FSD is responsible for:

- Pre display pilot safety briefing
- Flying discipline in general
- The compiling, approval and modification of individual flying routines
- The overall flying program
- The cancellation or modification of the flying program in the event of unsuitable weather or other such conditions
- Take such action as is necessary should a display aircraft deviate from the bounds of display area or operate in an unsafe manner

During the running of events *TSA* recommends that, members wanting to perform the role of Display Organiser or FSD assist at several events of complexity that involves interclub participants.

### **Officials**

Club members are needed to nominate as officials and detailed to:

- Supervise the pit layout and parking of cars with trailers
- Assist with maintaining integrity of the non-public area

- Event registration – capture of the entrants details and current MAAA affiliation number
- Control messengers and any other staff deemed necessary.
- A *TSA* representative is to be made available as the Events Public Officer on any day where public are expected to attend. Their sole role is to manage, coordinate and control the Public and the public safety aspects of the event.

All *TSA* members have the opportunity to undertake such duties either as coordinating the role or assisting to fulfil the functions of that role. Public Flying Displays don't just happen they take time and effort of the members to make happen and all members are encouraged to take an active role in helping the organisation of events.

### **Display Entrant (Pilot)**

- Each participant must:
- Hold a valid FAI licence which entitles the holder (pilot) to fly solo the type of aircraft which is to be displayed
- Present with a previously flown and airworthy craft for display
- If the aircraft falls into the large model category then a current permit to fly as described in MAAA MOP015 Heavy Model Aircraft Inspection and Operating Procedure must be presented.
- must be presented for inspection before any flying of the aircraft is permitted,
- Non *TSA* entrants are responsible for ensuring they have read the club rules relating to operating at the field.
- Obey all reasonable directions given by the Display Organiser, a FSD or other Club Official
- Cease to operate the model whenever so directed.

The responsibility for ensuring that an aircraft is operated in accordance with MAAA rules, CASRs and any Permit to Fly rests with the pilot in command. An Entrant must not operate in an unsafe manner.



# Site and Display Management

## General

This section covers the following aspects of site and display management:

Site assessment

Marking of display axis

Parking of aircraft

Public safety, enclosures and car parking

Setting of . Heights

Weather minima

Ground special effects safety

Briefing

Document checks and insurance

Pilots' display programs

Post-display planning.

## Site Assessment

The WILLIE EMMITT site at Tharwa is an approved flying site located 8.8 km south of the village of Tharwa on the Naas road and has been promulgated by CASA in

NOTAMs:

- The surface is lawn and is suitable for use by model aircraft for take-off, landing, taxiing and dispersal
- The take-off and landing distance is approximately 160 metres with a runway width of 25m. The runway is suitable for all model types up to and including large models
- There are no obstructions in the vicinity of the runway.
- The WILLIE EMMITT field has a 1,800 ft ceiling and has approval to operate over the adjoining farmland.
- There are no congested areas in proximity to the display site.
- There are no prohibited, restricted or danger areas, or areas that during normal times of operation may be considered noise sensitive
- There is a presence of livestock on the adjoining farm as well as a local population of native wedge tail eagles. There are no wildlife conservation areas within the bounds of the display area.
- There are within several kilometres proximity two known aircraft landing areas, one being approximately 11.9 kilometres north-north east, while the Namadgi Visitors Centre located 6.2 km south of the field has a helicopter operating pad. Neither site is considered an impediment to the operation of model aircraft at the WILLIE EMMITT Field. Both sites experience low levels of activity.
- There is a clear entry and exit routes for club members and invited guests and the field is accessible to emergency service vehicles.
- Due to the field layout there are no assets or spectator / club member areas over flown at any time.

In addition to the points listed above, consideration has been given to the

following factors:

A public viewing area is provided. The public can be housed within the bounds of the viewing area (see Site Map.)

From past experience it is expected that no more than 35 members of the public would attend a large Model Aircraft Display.

A Scale Aviators representative is to be made available as the Public Officer on any day where public are expected to attend. Their sole role is to manage and coordinate the Public.

## Marking of the Display Axis

Participating aircraft will perform the display to the west of the runway with the runway being the line known as the *display axis*. All participants must be thoroughly briefed about the display axis and the requirement to not operate model aircraft east of the runway to maintain the 30 m separation required by the MAAA Manual of Procedures. Pilots in command must not

- Track or manoeuvre towards spectators within a horizontal distance of 30 m, that area immediately East of the runway
- Pass within 30 m horizontal distance from spectators.

## Model Aircraft Dispersal

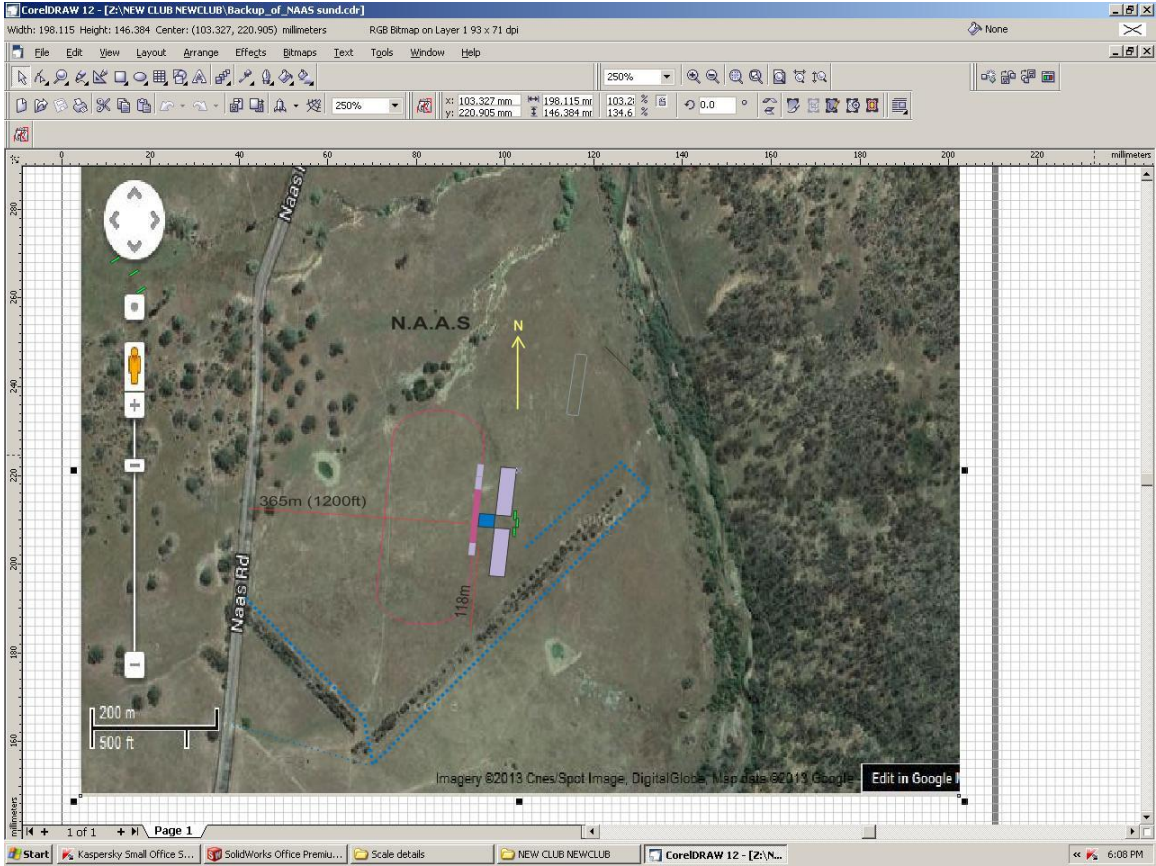
Model aircraft are to be dispersed in the pit area according to the layout on the day. All models are to be restrained for the purpose of starting. *TSA* will give consideration to the use of start up bays where it is considered that safety within the general pit area can not be assured during a display. Pit areas are out of bounds to visitors when model aircraft engines are running or model aircraft are taxiing from the pit to the runway. Aircraft must not taxi back into the pit area.

In the interests of safety, smoking is not advised in the pit area.

## Public Enclosures and Car Parking

Public Enclosures and parking are available on Public Flying Displays at the *TSA WILLIE EMMITT* Field (see field map). The Display appointed Public Officer is responsible for all aspects of public coordination, control and safety.

# THE SCALE AVIATORS PRACTICES AND PROCEDURES MANUAL



## Weather Minima

Minimum weather conditions shall be determined by the Display Organiser or FSD on the day. Visibility shall be maintained at Day Visual Metrological Conditions and visibility with the model assured at all times. This makes the decision to cancel the display in the event of bad weather less subjective, and makes the Display Organiser less likely to be subject to pressure to allow the display to commence in less than favourable conditions.

In any event, **no** display should take place in less than the prescribed Visual Meteorological Conditions (VMC).

## Briefing

Regardless of the size of the event, the importance of thorough, formal briefing cannot be over-emphasised. No pilot should take part in a flying display unless he/she has received appropriate briefing. A written brief on the arrangements of the flying program may be circulated in advance to all entering model aircraft operators and those in charge of particular functions, such as safety and field marshals.

The briefing should include the following items as a minimum:

- Current and forecast meteorological conditions
- Air traffic briefing
- A time check
- Any changes to the written brief
- Program of events and any changes since the written brief was distributed
- Any changes to procedures advised in the written brief;
- Radio frequency control procedures
- Runway(s) and taxiway(s) in use, and dispersal or movement area arrangements
- Circuit patterns, holding areas and holding heights
- Departure and arrival procedures during the display
- Emergency procedures
- Minimum heights and distances that apply to the display
- Procedures in the event of movements by aircraft not participating in the Air Display
- Display axis and crowd line locations.

The briefing should also include a reminder to all participants of the authority of the Display Organiser and FSD to stop the display program at any stage during the proceedings.

Pilots should also be reminded that flying over the crowd, pits adjacent public road is prohibited and any turns towards these areas must be completed without infringing the safety buffer between the display axis and the pit area.

## Document Checks and Insurance

The Display Organiser or delegated representative (registration officers, FSD) shall ensure that he/she has sighted a valid FAI Licence and that the entrant holds endorsement for the model type(s) being entered.

All visitors must be signed into the visitor book

## **Display Program**

Public Flying Displays are generally at *TSA* events which have no strict order of proceedings. Generally aircraft can be flown without the need to nominate a flying routine prior to the flight. Routine flying is considered to be normal scale manoeuvres conducted by that type of aircraft.

Display Flights conducted by specifically invited pilots are to be conducted in nominated time slots with pre defined and approved manoeuvre schedules.

Pilots are to maintain a watch for other models and maintain safe distances at all times. The FSD will ensure that there are no more than 4 or 5 model aircraft operating at any one time. This ensures that the airspace doesn't become over crowded leading to accidents and maintains a comfortable level of activity for pilots participating. You may be asked to hold prior to entering the runway until there are fewer numbers of aircraft in the air. Normal *TSA* flying procedures are promulgated and made available to all visitors before flying.

## **Emergency and First Aid Services**

A first aid box is located made available at all Flying displays.

First aid will be administered by the Displays appointed First aid officer.



**Australian Government**  
**Civil Aviation Safety Authority**

**Instrument number: CASA.AreaApp.0198**

I, Scott Duffy, a delegate of CASA, make this instrument under paragraph 101.030 (1) (a) of the *Civil Aviation Safety Regulations 1998* (CASR).

A handwritten signature in black ink, appearing to be 'S. Duffy', written over a horizontal line.

Scott Duffy  
Manager Remotely Piloted Aircraft Systems (RPAS) Operations  
RPAS Branch  
National Operations & Standards  
Aviation Group

21 January 2020

**Approval for area of operation of model aircraft**

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**1 Application**

This instrument applies to The Scale Aviators (**the club**), an affiliated member of the Model Aeronautical Association of Australia (MAAA), Aviation Reference Number 578375 to operate model aircraft.

**2 Approval**

*The club* may operate model aircraft within the limits as defined in Schedule 1, Condition 2.

**3 Expiry**

This instrument commences on the date of signing and expires at the end of 21 January 2025, unless it has been revoked by another instrument or by the Civil Aviation Safety Authority beforehand.

**Schedule 1 General Conditions**

1. Any person operating model aircraft under the conditions of this Instrument, must be a member of the MAAA or a bona-fide visitor to *the club* as described in **Section 1 Application** of this Instrument.
2. Model aircraft operators must operate model aircraft within the following area (**the site**):
  - a) Within a 500 metre lateral radius of 35 35 08.6S 149 03 50.7E; and
  - b) Not above 1800 feet Above Ground Level (AGL); and
  - c) During daylight hours only.
3. *The club* must ensure:
  - a) Model aircraft are operated in accordance with the written permission and associated conditions from *the site's* landowner; and
  - b) In the event that a manned aircraft is identified operating in the vicinity of *the site*, ensure that all model aircraft are operated below 400FT AGL.
4. Model aircraft are not to be flown unless a current NOTAM advising of model aircraft operations is active, or a model aircraft symbol appears on the current AIP charts.

Note: This area approval does not confer on the operator any rights as against the owner or occupier of any land on or over which operations are conducted, or prejudice in any way, the rights and remedies which any person may have in law in respect of any injury to persons or damage to property resulting directly or indirectly from the operation.

# TSA EVENT RESOURCE LIST

V1.0

 confirmed

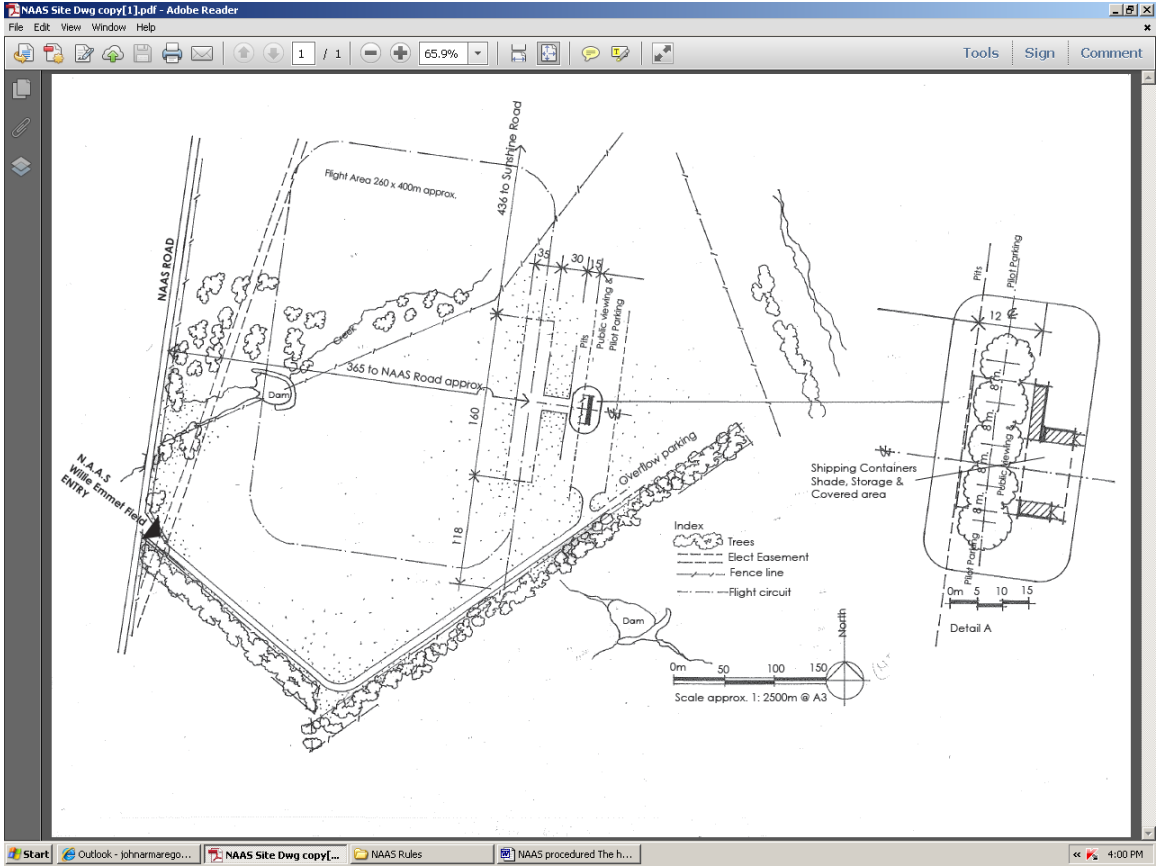
POSITION	RESOURCE	CONTACT	ROLE
Display Director			Organize the event, Run the event, Opening speech and presentation
Event marketing officer			Market the event
Safety officer (1)			Focus on the safe running of the event
Flight line Director (1)			Assist pilots with flight line control
Flight line coordinator (2)			Assist pilots with flight line control
Registration Officer			Run the morning registration collections
Registration Officer assistant			Run the morning registration collections
Ground Coordinator (Field Preparation)			Organize the layout of the field for the event
Field Layout officer (1)			Organize the layout of the field for the event
Field Layout officer (2)			Organize the layout of the field for the event
Field Layout officer (3)			Organize the layout of the field for the event
Event First Aid Officer			Organize the layout of the field for the event
Food acquisition			Purchase all sausages, meat, bacon, eggs bread, butter, serviettes including ICE.
Trophies acquisition			Purchase trophies for Military scale 1-2-3, Military ARF 1-2-3, Bomb drop, Most memorable flight



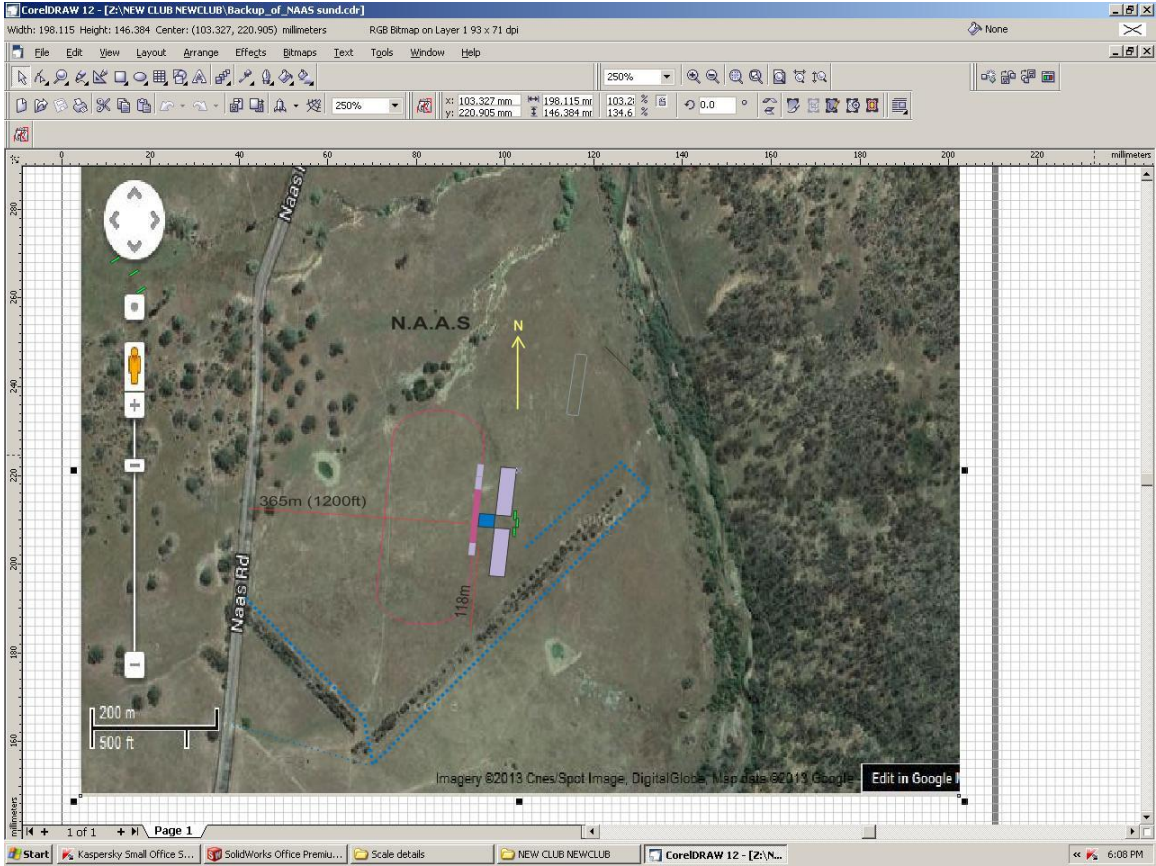
THE SCALE AVIATORS PRACTICES AND PROCEDURES MANUAL

Drinks acquisition			Purchase all drinks for the day including ice
Cooking facilities organizer			Ensure BBQ is functional and tea and coffee facilities.
Cooking facilities organizer apprentice			Ensure BBQ is functional and tea and coffee facilities.
Chief cook			Cook 10 thousand sausages
Chiefs apprentice			Cook more sausages
Chiefs laky			Ensure sales are running well including drumming up business
Bomb drop coordinator			Coordinate the running of the bomb drop event
Event Public Officers			escort visitors through the pit area as required, talking to them about <b>TSA</b> and answering questions
Mower coordinator			Ensure that the field is mowed for the event.
Field set designer			Field panoramas

THE SCALE AVIATORS PRACTICES AND PROCEDURES MANUAL  
2024



# THE SCALE AVIATORS PRACTICES AND PROCEDURES MANUAL



## ***TSA* Approved Flying Visitors (AFV)**

<b>Approved Flying Visitors (AFV) Name:</b>	<b>Approval Date</b>	<b>Contact details</b>	<b>Conditions: Non/Invitation/events</b>

***TSA* Competency Program  
*TSACP***

**Aeromodelling University  
Courses provided by certified instructors  
Certified training facility.**

Beginners guide to model aircraft.

**Administration Wings**

- AW:1 MAAA, ANSW, MOPS and Clubs
- AW:2 Model Displays made easy :MOP19
- AW:3 Heavy models techniques and requirements

**Aviators Wings**

- AVW:1 Stalls and Spins and why you crash
- AVW:2 Basic Pattern flying
- AVW:3 PROPELLERS
- AVW:4 Avionics: Technology and setup
- AVW:5 Introduction into MAAA Bronze wings requirement

**Aeromodellers wings**

- AMW:1 Scale covering materials and techniques
- AMW:2 Basic painting and airbrushing
- AMW:3 The art of Engine tuning
- AMW:3 Scale Aeromodelling and techniques

**Test Pilot Wings**

- AVW:1 Stalls and Spins and why you crash
- TPW:
- TPW:1 The art of Engine tuning
- TPW:2 Electric motors, speed controllers and batteries

**Advanced Aviators Wings**

- AAW: MAAA Gold wings Aviators Wings
- AAW:Basic slope soaring
- AAW:Advances aircraft setup and trim.
- AAW:Expert Pattern flying
- Introduction into MAAA Gold Wings

**Advanced Aeromodelling wings**

Aeromodellers Wings

AAMW:1 Basic workshop tools and techniques  
AAMW:2 Batteries and Battery technology  
IAAMW:3 Intermediate workshop tools and techniques  
AAMW:4 Simple electronics for aeromodelling  
AAMW:5 Heavy models techniques and requirements

AAMW:6 Advance workshop tools and techniques  
AAMW:7 Computer aided design and computer aided manufacture.  
AAMW:8 Lift devices.

## **APPENDIX**

### **APPENDIX A**

#### **FORMS**

- 1) MAAA Form-001 Display Application
- 2) MAAA Form-002 Display Directors Statement
- 3) MAAA Form-010 INCIDENT REPORT
- 4) MAAA Form-011 MAAA INCIDENT INVESTIGATION
- 5) MAAA Form-014 CHECK LIST FOR INSPECTION OF MODEL
- 6) MAAA Form -031 RISK ASSESSMENT BEFORE-AFTER
- 7) MAAA Form-032 RISK ASSESMENT – TEMPLATE
- 8) MAAA Form-033 CHECK LIST FOR INSPECTION OF ROTARY WING
- 9) MAAA Form-036 CONFIDENTIAL RECORD OF FORMAL COMPLAINT

### **APPENDIX B**

#### **PROCEDURES**

- 20) MAAA MOP001 ACCIDENT REPORTING
- 21) MAAA MOP005 APPLICATION FOR APPROVED AREA
- 22) MAAA MOP014 GENERAL MODEL RULES
- 23) MAAA MOP015 HEAVY MODEL AIRCRAFT INSPECTION AND OPERATION
- 24) MAAA MOP018 NIGHT FLYING
- 25) MAAA MOP019 DISPLAY PROCEDURES
- 26) MAAA MOP22 RISK ASSESSMENT
- 27) MAAA MOP026 DUTIES OF THE CFI
- 28) MAAA MOP027 AWARD OF WINGS
- 29) MAAA MOP028 DISCIPLINING OF AFFILIATED MEMBERS

### **APPENDIX C**

#### **POLICIES**

- 30) MAAA MOP041 MEMBER PROTECTION POLICY
- 31) MAAA MOP042 VISITOR INSURANCE
- 32) MAAA MOP043 EMERGENCY
- 33) MAAA MOP045 MOBILE PHONES
- 34) MAAA MOP055 ALCOHOL-DRUGS-MED-CONDITION
- 35) MAAA MOP056 SAFE FLYING CODE
- 36) MAAA MOP063 DOGS AT FLYING FIELD.

