

MODEL AERONAUTICAL ASSOCIATION OF AUSTRALIA



INDOOR FLYING POLICY AND GUIDELINES

MOP059

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This Policy and/or Procedure forms part of the MAAA Manual of Procedures. This entire document is for the use of all classes of members of the MAAA in the conduct of activities associated with the MAAA and is not be used for any other purpose, in whole or in part, without the written approval of the MAAA Executive.

INDOOR FLYING POLICY AND GUIDELINES

1. PURPOSE

- 1.1 The purpose of this publication is to provide all affiliate members of the MAAA a ready reference to their obligations and regulations as required under MAAA rules and procedures for the safe operation of model aircraft indoors.

2. DEFINITIONS

- Affiliate Member** A person properly affiliated with a Club that is properly affiliated to an MAAA Ordinary Member.
- Safety Officer** Participant(s) responsible for the adherence of all participants and spectators to the rules in this document, who also controls the safety aspects of the session. The person(s) acting as Safety Officer shall be clearly identifiable.
- Event Organiser**..... The person(s) who is responsible for organising the overall flying activity at the venue.
- Fixed Wing Aircraft**..... An aircraft having most of its lifting surfaces fixed in size and position.
- Rotary Wing Model Aircraft** Otherwise know as a helicopter.
- Free Flight**..... Model aircraft which are flown without any input from the pilot after launch.
- MAAA** Model Aeronautical Association of Australia Inc.
- MOP**..... Manual of Procedures.
- Pits** An area set aside for the assembly, preparation and maintenance of aircraft prior to and after flight.
- R/C**..... Radio Control.
- R/C Model**..... A model aircraft which is controlled via an R/C transmitter and receiver unit.
- Spectator**..... A person not participating in the flying of model aircraft.
- Visitor** A person who is not an Affiliate Member of the MAAA.

3. POLICY

- 3.1 The MAAA requires special safety measures for the conduct of indoor flying. This requirement takes into account the operation of model aircraft within a confined space.

4. RULES, GUIDELINES AND PROCEDURES

4.1 Defining the flying, non-flying, and spectator areas

- 4.1.1 Prior to any flying the Safety Officer shall provide a full safety and evacuation briefing, specifically targeting Exits and smoking (dependent on State Laws) for the building in use. This shall also include identifying the flying and spectator areas and advising pilots how the event will be conducted.
- 4.1.2 The types and sizes of aircraft, both fixed wing and helicopters, should be established for each venue based on its physical size and layout. Safety of pilots and spectators shall be given priority when establishing these limits.
- 4.1.3 Pits and spectator areas will be established prior to any flying taking place and where possible shall be adjacent to the venue entrance(s), and their number kept to a reasonable minimum consistent with the size and layout of the venue and the flying area. The boundary of the pits and spectator areas will be clearly defined.
- 4.1.4 A clearly defined safety line for the operation of fixed wing aircraft will be established no less than 3 metres from the pits and spectator area boundaries.
- 4.1.5 A clearly defined safety line for the operation of helicopters will be established no less than 10 metres from the pits and spectator area boundaries. However, at the discretion of the Safety Officer, particularly in the case of small venues, a safety line for the operation of helicopters may be established no less than 5 metres from the pits and spectator area boundaries.
- 4.1.6 Where a safety line for the operation of helicopters has been established less than 10 metres from the pits or spectator area boundaries, the Safety Officer, at their discretion, may place specific restrictions on the type of flying that helicopters can undertake within 10 metres of the pits or spectator area boundaries.
- 4.1.7 No intentional flying of aircraft is permitted on the pits or spectator area side of the respective safety lines.
- 4.1.8 All pilots will stand between the fixed wing safety line and the pits boundary while flying their aircraft.
- 4.1.9 Pilots operating helicopters may stand on the pits side of the helicopter safety line if there are no fixed wing aircraft flying at the time.
- 4.1.10 While flying is under way, only pilots, their helpers or persons authorised by the Safety Officer may cross the safety line into the flying area and only after all pilots flying at the time are made aware beforehand. The frequency and time spent by a person in the flying area must be kept to a minimum while flying is under way.

4.2 Aircraft Specifications

4.2.1 General

All aircraft will be airworthy before the commencement of flying.

If the airworthiness of an aircraft is in question, it may be briefly test flown at the discretion of the Safety Officer, provided all people present are made aware of the test. The following are not permitted: internal combustion motors; any propulsion system that produces a discharge that is damaging to indoor surfaces; and propellers or rotors constructed from metal. All models over 120 grams will have a controllable motor cut off.

4.2.2 Lighter-than-air craft which includes, blimps, balloons etc.

The operation of these aircraft will be at the discretion of the Safety Officer.

4.2.3 Fixed wing aircraft and autogyros

These may not exceed a weight of 350 grams in flying trim unless an exemption has been approved in accordance with 4.2.5.

4.2.4 Helicopters

These may not exceed a weight of 800 grams in flying trim. They may not have a rotor diameter exceeding 800 millimetres and may not have an individual blade weight of more than 25 grams unless an exemption has been approved in accordance with 4.2.5.

4.2.5 Exemptions

Event Organisers wishing to fly aircraft that do not comply with the above specifications may seek an exemption from the specifications from their State Association, which may then allow the aircraft to be flown. This can be either venue or event specific. An application for an exemption from the model specifications can be found in Appendix 'A' and must be accompanied by a plan of the venue; an example is shown in Appendix 'B'. At any event, in addition to any restrictions placed by the State Association, the Safety Officer may impose restrictions on the type of flight undertaken by specific pilots under an exemption.

4.3 Safety Officer(s)

4.3.1 Flying shall not commence until a Safety Officer or Safety Officers have been appointed.

4.4 Participating Pilots

4.4.1 MOP057 'Insurance Conditions' and MOP042 'Visitor Policy' apply equally to indoor flying as well as outdoor. If non MAAA Affiliated Members are intending to fly at the same venue as MAAA Affiliated Members, then these policies shall be followed. In particular, any non MAAA Affiliated Members must be signed in as visitors under MOP042.

4.4.2 When there are multiple aircraft flying, all aircraft shall be flown in circuits in the same direction to be set by the Safety Officer, unless otherwise agreed by all pilots.

4.4.3 It is recommended that aircraft flying particularly slowly or hovering be flown on the inside of the normal flight circuit.

4.4.4 Pilots shall not fly their aircraft in a dangerous or erratic manner.

- 4.4.5 Whenever a collision with any person or model is imminent, or seemingly unavoidable, the pilot must immediately cut the throttle on the model's controlling transmitter to lessen the impact on any other pilot or spectator.
- 4.4.6 Pilots shall avoid flying their aircraft near people retrieving grounded aircraft.
- 4.4.7 Pilots shall abide by instructions given by the Safety Officer.

4.5 Spectators and Children

- 4.5.1 Spectators shall remain on the pits' side of the pits' boundary or within clearly defined spectator areas at all times while aircraft are flying, unless assisting a pilot.
- 4.5.2 Children younger than 12 years of age shall be supervised by a responsible adult at all times.
- 4.5.3 Spectators shall abide by instructions given by the Safety Officer and **Event Organiser**.

4.6 Frequency Control

- 4.6.1 All R/C equipment used to operate aircraft specified in Section 4.2 of this Procedure will operate only on MAAA approved radio frequencies.
- 4.6.2 A keyboard, preferably the MAAA recommended one (or similar), should be used at all times for frequency control. The use of this board must be explained to any new pilot before they turn on their transmitter.
- 4.6.3 It is recommended that all transmitters on frequencies that are covered by MOP013 Frequency Directive No. 5 are bandwidth tested to a minimum of the 20 kHz standard, but if not, they should be of a type that is known to pass the 20 kHz specification. The receiver(s) used should also be of a similar standard.
- 4.6.4 No two transmitters of the type covered by 4.6.3 are permitted to operate simultaneously on frequencies less than 20 kHz apart.

4.7 Flying Slots

- 4.7.1 Free Flight and R/C flying shall not take place simultaneously. It is recommended that time slots be set aside for free flight, where R/C flight is temporarily suspended, and vice versa.
- 4.7.2 In small venues, it is recommended that there are separate flying slots for fixed wing aircraft and helicopters.
- 4.7.3 All pilots shall be made aware of the change over in flying slots.
- 4.7.4 The number of aircraft permitted in the air at any one time shall be at the discretion of the **Event Organiser with the agreement of the Safety Officer**.

4.8 Displays

- 4.8.1 Displays of indoor flying shall be carried out in accordance with the MAAA Manual of Procedures 019, 'Display Procedure'.
- 4.8.2 Based on the information provided by the Organiser of the Display, the State Association shall decide if the public viewing area(s) need to be separated either partially or fully from the flying area by netting or a solid barrier.
- 4.8.3 During Displays of indoor flying, where netting or a solid barrier has been made a requirement by the State Association to separate the flying area from the public viewing area, the netting or barrier will be strong enough to completely arrest the heaviest aircraft flying at its maximum speed and netting will have openings small enough to prevent the smallest aircraft passing through. Spectators will not be permitted within 1 metre of netting.

4.9 Charging of Batteries

- 4.9.1 Batteries can be volatile if mistreated. All charging of batteries shall be carried out on or over a fireproof surface that will prevent damage to venue surfaces, should batteries overheat.

5. GENERAL


5.1 Disciplinary measures

- 5.1.1 The Safety Officer shall reserve the right to ground any model, if it is thought necessary, for any major infringement of these guidelines or the MAAA Manual of Procedures. Pilots shall land immediately if asked to do so by the Safety Officer.
- 5.1.2 The Safety Officer, in consultation with the Event Organiser, shall have the right to ask pilots or spectators not adhering to these regulations to modify their behaviour or, in extreme cases, leave the flying venue.

6. SAFETY

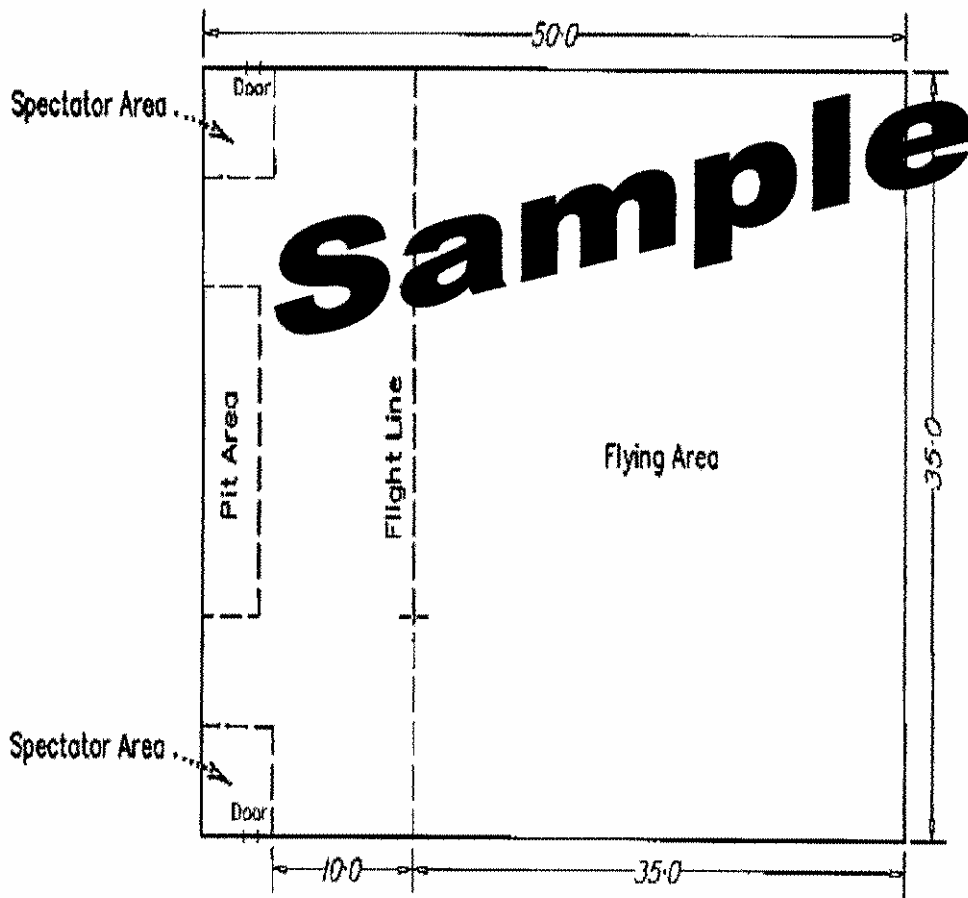
- 6.1 A basic first aid kit must be present during indoor flying.
- 6.2 Where practical, netting should be used along the pits boundary and between flying and spectator areas to prevent stray aircraft from flying into these areas.
- 6.3 A notice (minimum text height 25mm) shall be placed in a visible location at the flying venue to warn pilots and spectators alike that the flying of indoor model aircraft could be an eye hazard due to rotating propellers and rotor blades, and that eye protection is strongly recommended within the confines of the flying venue.
- 6.4 All pilots will stand within range of normal and unassisted verbal communication unless, due to the size of the venue, more than one pilot area is utilised.

APPENDIX A

	<p align="center"><u>MODEL AERONAUTICAL ASSOCIATION OF AUSTRALIA</u></p> <p align="center"><u>APPLICATION FOR AN EXEMPTION FROM THE INDOOR MODEL SPECIFICATIONS</u></p>								
<p>1. Name of Event Organiser.....</p>									
<p>2. Address.....</p> <p>.....Postcode.....Phone.....AUS No.....</p>									
<p>3. Name of MAAA affiliated club where the Event Organiser is a current member:</p> <p>.....</p>									
<p>4. Details of Event for which exemption is required:</p> <p>.....</p>									
<p>5. Period of time for which exemption is required: From: To:</p>									
<p>6. Name and address of indoor flying venue:.....</p> <p>.....</p>									
<p>This application must be accompanied by a scale diagram in plan view of the flying venue, showing the flight line and the flying, pits and spectator areas and displays (as per sample in MOP059).</p>									
<p>7. Details of model(s) for exemption:</p> <table><tr><td>Fixed Wing:</td><td>Helicopter:</td></tr><tr><td>Flying weight.....g</td><td>Flying weight.....g</td></tr><tr><td>Wing span.....mm</td><td>Main Rotor diameter.....mm</td></tr><tr><td>Wing loading.....g/dm</td><td>Individual main rotor blade weight.....g</td></tr></table>		Fixed Wing:	Helicopter:	Flying weight.....g	Flying weight.....g	Wing span.....mm	Main Rotor diameter.....mm	Wing loading.....g/dm	Individual main rotor blade weight.....g
Fixed Wing:	Helicopter:								
Flying weight.....g	Flying weight.....g								
Wing span.....mm	Main Rotor diameter.....mm								
Wing loading.....g/dm	Individual main rotor blade weight.....g								
<p>Details of additional models may be attached separately. This exemption applies only to the venue and models listed.</p> <p>This exemption is valid for twelve months from the date endorsed by the State Association.</p>									
<p>I..... as Event Organiser for</p> <p>(Print name) (Venue/Event name)</p>									
<p>in making this application for an exemption from the indoor model specifications, agree to abide by the guidelines as set out in the MAAA MOP059 Policy.</p>									
<p>Signed..... Date.....</p> <p>(Event Organiser)</p>									
<p>-----</p> <p>Application received by:..... Date:.....</p>									
<p>Approved on behalf of State Association: YES</p>									
<p>Authorised person: Position: Date:.....</p>									

APPENDIX B

Acme Sports Stadium



Scale 1:500 - Lengths are in Metres.

