THE CIVIL AVIATION AUTHORITY OF SOUTH AFRICA
THE SOUTH AFRICAN MODEL AIRCRAFT ASSOCIATION

MANUAL OF PROCEDURE

For model aircraft and remote-piloted air vehicle operation.
February 2001

Foreword

The South African Model Aircraft Association is a fully constituted body, which is affiliated to the Aero Club of South Africa and the Fédération Aéronautique Internationale.

Model aircraft have in recent years become increasingly sophisticated, and the advances in materials technology and remote control technology have made possible the construction of larger and more elaborate machines. The South African Model Aircraft Association has long recognised the need for self-regulation of these activities, and has in fact imposed a high degree of control over its own activities.

The recognition of these activities by the SA Civil Aviation Authority, and official endorsement of our regulations, which circumscribe the practice of model aircraft operation, and also clearly define our relationship with all other aviation disciplines, is appropriate. Such recognition has the effect of strengthening authority of the SAMAA to enforce these regulations.

1. Specification of model aircraft

Model aircraft shall conform to the following requirements. Model aircraft exceeding any one of these requirements shall be subject to specific exemption by the Civil Aviation Authority.

1.1 Maximum allowable wing span for powered model aircraft shall not exceed 5 000mm, and for gliders 6 000mm.

1.2 Maximum weight for model aircraft shall not exceed 30 kilograms

1.3 Standard commercial radio control equipment may be used in aircraft up to the Fédération Aéronautique Internationale definitions. Any model aircraft exceeding the F.A.I. specifications in any respect shall be subject to the following requirements:

- Servos are to be rated heavy duty with a minimum torque of 1,9kg/cm for non-critical functions, and 4,0kg/cm for stress functions. Separate servos should be used for each control surface.
- On-board batteries shall be a minimum of 500mAh for model aircraft within the F.A.I. specifications. Model aircraft exceeding the F.A.I. specifications shall be equipped with batteries conforming to the following:
  - 9,0kg weight and less – 1000mAh
  - 13,5kg weight and less – 1200mAh
  - 18,0kg weight and less – 1800mAh
  - 18,0kg weight and over – 2000mAh
- For radio control sets powered by dry cell batteries, it is recommended that good quality alkaline batteries be used.
- All servo leads greater in length than standard commercially available equipment, shall be fitted with RF screening devices. Model aircraft not exceeding 1 500mm in wing span, free flight, and control line model aircraft within the F.A.I. specifications, are exempt from item 1.3 (servo and battery requirements).

1.4 All model aircraft built for professional and commercial purposes, such as research, defence, photography, etc. are subject to specific exemption by the Civil Aviation Authority.

1.5 The operation of model aircraft at non-registered flying sites, such as displays, cross-country events, float-fly's, etc. is subject to specific approval by the S.A.M.A.A.

2. Operating procedures

No model aircraft may be flown from any site or location other than a S.A.M.A.A. approved and registered model flying site. Model aircraft may only be flown at public displays/functions with the specific permission of the S.A.M.A.A. Flying from such an approved and registered flying site, is also subject to any specific or local provisions that have been imposed on such a site by the S.A.M.A.A., the Civil Aviation Authority, or municipal authorities.

Model aircraft flying sites will be located with due regard to normal full-size aircraft traffic patterns, and will only operate within an Air Traffic Zone with knowledge and permission of the appropriate air traffic control unit, or the Civil Aviation Authority. Due cognisance shall be taken of the particular flying disciplines to be practised at the specific model flying site. Model aircraft flying sites within a 5nm (9,27km) radius from the boundary of a licensed aerodrome shall only operate with the permission of the Civil Aviation Authority.

Operation of powered model aircraft at all S.A.M.A.A./CAA-approved and registered model flying sites should not exceed an altitude above ground level of 350m. Operation of soaring model aircraft should not exceed 1 500m.

Model aircraft flying sites shall be located with due consideration of the environment in general. Specifically, no model aircraft flying site shall be located in such a position that model aircraft are likely to over-fly any residential, industrial, or commercial areas, including houses, factories, offices, public roads, fuel installations or other sensitive locations. A distance of 5km shall separate model aircraft flying sites.

Runways should be marked with crosses of a single conspicuous colour, preferably white, at each end of each runway.

3. Standard operating procedures

No model aircraft may be flown at any public display unless it has been previously flight tested and trimmed.

No model aircraft shall be flown over facilities such as shelters, clubhouses, pit areas, parking areas, etc. or spectators.

Model aircraft pilots shall stand at all times between their airborne model aircraft and the public area. Under no circumstances shall pilots fly between themselves and the facilities. Under no circumstances should the distance between the flight line and spectators be less than 15 metres.

Only S.A.M.A.A.-approved radio control frequencies may be used for model aircraft operation.

4. Reporting of accidents and incidents

In the case of substantial damage or injuries caused by model aircraft operation, the following organisations should be advised without delay:

- Commissioner of Civil Aviation. Private Bag X8, Waterkloof
- Aero Club of South Africa, PO Box 1993, Halfway House, 1685
- Nearest SAPS

Reporting of an accident or incident shall take the form of a report, containing the following particulars:

- Type of model aircraft
- Location of accident/incident
- Full names and contact details of pilot of model aircraft
- Names and contact details of witnesses
- Date and time of accident/incident
- Nature of accident/incident
- Nature of accident/incident and the nature of damage and/or injuries caused
- Full description of accident or incident

The report shall be submitted without delay, and any information which is not directly available, must be submitted in writing as soon as it becomes available. An investigator shall be appointed in conjunction with the Civil Aviation Authority, who may require any information from any person concerning the investigation of an accident or incident. A suitably qualified safety officer of the S.A.M.A.A. may be appointed to assist with the investigation of an accident or incident.