

RCASA Events Handbook

Annexure 1



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1. Introduction

RC events forms the basis for the growth and continuation of Radio Control (RC) flying.

RC Events can be held for many different reasons, from just a "get together" to a show, wanting to showcase RC to the public or even some small display at a school or bazaar.

Irrespective of the purpose, RC Events should be planned in an orderly manner, well documented and kept safe for all. RC Events are categorised in different categories per risk profile and related safety measures and procedures in place.

RCASA is a SACAA approved ARO and is legally bound to control and regulate RC flying including events by its members at national level.

This Handbooks provides all relevant information for organizers and members in setting up an event whilst maintaining the RCASA MOP and all relevant SACAA rules and regulations aimed at total safety for all.

2. Scope

- This Handbook applies to all natural and juristic persons, RCASA Management and all RCASA members, and any of their sponsors that plans to, or intends to apply to host and/or present a RC air event in South Africa.
- This handbook was developed from the SAE Handbook, with special reference to Chapter 7, "Single discipline events organised by approved ARO's"
- If in doubt, the SAE Handbook enjoys priority above this Handbook.
- The processes and procedures listed must be followed with no exception, as a RCASA responsibility as ARO in maintaining SACAA objectives, ensuring safety at all times.
- Static displays are not considered as events.

3. Purpose

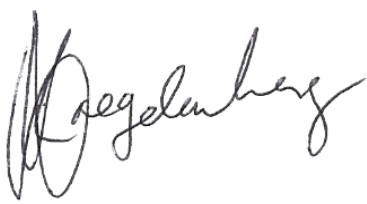
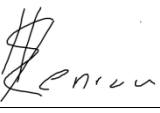
The purpose of this Handbook is to:

- Provide minimum standards and guidance to the organisers and sponsors on operations, administration and personnel in the performance of their duties with respect to events held by RCASA members.
- Ensure applicants understand and fully comply with all rules and regulations

- Ensure applicants complete and adhere to all required processes and procedures.

4. Authorisation

This handbook is a living document. If, because of development in, or an amendment to the scope and functions of this section, or possibly even developments in the aviation industry that necessitate changes, changes must be made, and this handbook must be amended. Everyone affected by this Handbook is encouraged to propose ideas and changes to this document for the general improvement of both the content and of the professional execution of their duties.

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7. List of Terminology and Definitions

TERMINOLOGY	DESCRIPTION
Air show	Is an approved RC air event held at an approved RC field, an aerodrome, or airfield for the purposes of a public gathering and entertaining the public by means of aerial displays including flat displays, aerobatic displays and formation displays.
Fly-In	Is a planned event or gathering of planes at an airfield where pilots fly their aircraft to an organised event for the purposes of a social get together as a group, club, association or organisation.
Local Air Traffic Control	The person or persons appointed at an event to communicate with air traffic if required as per event type.
Aviation Recreation	Means flying microlight, glider, balloon, gyroplane, hang-glider, paraglider, model aircraft, light sport aeroplane, touring motor glider, parachute or involvement in aviation events.
ARO	Aviation Recreational Organization.
Crowd Line	The forward edge of the areas intended for spectators or car parks to which the public has access during a Flying Display.
Display Line	A line defining the closest a display aircraft may fly parallel to or approaching the Crowd Line.
Display Pilot	A pilot who holds a Display Authorisation or Validation, that allows him to take part in a flying display. As per RCASA MOP
Event Organiser or Applicant	<ul style="list-style-type: none"> a. The Organiser of an event. b. The organiser remains the applicant, even if the application is submitted by an agent or nominated persons other than the organiser. c. The event organiser remains the accountable person responsible for all matters related to the event, legal and regulatory compliance, safety and risk to participants, officials and members of the public be they spectators or otherwise.
Approved Area	The approved flying area at the flying field, club or aerodrome. Also referred to as known location, location and limitations as approved by SACAA.
Club	A SACAA approved/registered RC flying field. Managed by the Club Committee
Spectator	Any person attending a Flying Display and remaining in the areas set aside for the public.
Bona Fide Spectator/Visitor	A visitor to the flying site or club, present in small numbers on a casual basis. These are people wandering by, not all at the same time, interested or curious. 15 people max at a given time.
Event Permit	Approval issued by the ARO with reference number to be displayed on all communications and/or posters if a applicable.
Safety Officer	The person appointed to maintain safety at the event. He can delegate at times but remains responsible for safety at all times.

Flight Line controller/Flight Manager	Also known to manage and monitor the “ready box”. His role is to manage the number of flights, the circuit flow and adjust with weather changes.
Crowd Manager	The person responsible to manage the crowd and maintain the crowd line.
Qualifications	The applicable Competencies required to part take in events. Qualification requirements vary per event category.
Safety at Sports and Recreational Act	An Act introduced to ensure safety at sporting events.
Vested Group	A group specialising on a specific sub-discipline within RC such as Helicopters, Jets, etc. Aimed at growing the segment and providing for competitions/events/gatherings within that sub-discipline.

8. Abbreviations

ABBREVIATION	MEANING
ATC	Air Traffic Control
LATC	Local Air Traffic Control
ATNS	Air Traffic and Navigation Services
CAMU	Central airspace management unit
NOTAM	Notice to Airman
SACAR	South African Civil Aviation Regulations
SO	Safety Officer at an event.
GA	General Aviation
RA	Recreational Aviation
ASSA	Air Show South Africa
SACAA / CAA	South African Civil Aviation Authority
EO	Event Organizer
FM	Flight Manager
RMC	RCASA Management Committee
Aerodrome, Airfield	We refer to a "full size" airfield in both cases.

9. References

- 9.1. Special Events Air Handbook (SAE Handbook)
- 9.2. RCASA Manual of Procedures.
- 9.3. RCASA 3rd Party insurance, as listed on RCASA Web
- 9.4. Special reference is made to Chapter 7 of SAE handbook.
- 9.5. Special reference is made to Chapter 3, point 2.1.4.
- 9.6. Event Application form as available from RCASA Web
- 9.7. SACARS as available from SACAA, available on the SACAA web.

10. Additional Tools

- 10.1. Some additional material available from the RCASA Web portal, member only access.
- 10.2. A sample Event plan in addition to the headings provided in this manual.
- 10.3. A sample Indemnity form. This is not binding to RCASA, merely a guide and example.
- 10.4. A Sample Daily Check list to that can be used daily for record keeping.
- 10.5. A Compliance Acceptance form should wish to print a hard copy to sign and email to us.
- 10.6. All the above to be living documents and updated as we gain experience from the feedback provided.
- 10.7. Event Document Check List, for event documents planning available on the RCASA web portal for download and use.

11. Organizational Role

- 11.1. RCASA shall only act as an aviation recreation organization in according with the provisions of approval under Part 149, and SA-CARS and SA-CATS.
- 11.2. Applications are submitted to RCASA.
- 11.3. RCASA as approved ARO to complete and apply at the relevant aviation authorities for approvals (ie SACAA, CAMU, ATNS, etc)
- 11.4. The Applicable Standards are this Manual, RCASA MOP and references within, including technical standards and/or limitations.
- 11.5. CAMU submission to be submitted 14 days before the event or sooner.
- 11.6. Any approvals, rejections or information required will be shared with the EO and RMC will assist with guidance if and when possible.
- 11.7. It is in the best interest of RCASA to assist all relevant parties in the complete process as a value adding ARO.
- 11.8. All Event Applications will be kept on record.
- 11.9. If and when all requirements are met as stipulated in this manual and all related SACAA requirements, RCASA will approve the event.
- 11.10. An Event permit will be issued after approval to the Event Director.

12. Legal Responsibility

- 12.1. The event organiser/applicant and their sponsors remain the accountable person(s) responsible for all matters during and related to the event, to ensure legal, regulatory and safety compliance, and to put into place and apply effective safety and risk management measures, to protect participants, officials and members of the public be they spectators or otherwise.

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- 12.2. It remains the responsibility of the event organiser, property owner, their sponsors and their agents to familiarise themselves and comply with all applicable legislation not limited to but including.
- 12.2.1. Any regional or local bylaws incidental to the planning and organizing of an event.
 - 12.2.2. Civil Aviation Act (Act 13, of 2009) As well as the Regulations issued in terms thereof;
 - 12.2.3. Disaster Management Act (Act 57, of 2002)
 - 12.2.4. Explosives Act (Act 15, of 2003)
 - 12.2.5. Fire Brigade Services Act (Act 99, of 1987)
 - 12.2.6. Liquor Act (Act 59, of 2003)
 - 12.2.7. Occupational Health and Safety Act (Act 85, of 1993)
 - 12.2.8. SA-CARS and CATS
 - 12.2.9. Safety at Sports and Recreational Events Act (Act 2, of 2010)
 - 12.2.10. South African Police Service Act (Act 68, of 1995)
 - 12.2.11. The contents of the SAE Handbook.
- 12.3. Where an event is at any venue open to the public, this places the responsibility on the event organiser, their sponsors and the participating pilots to ensure that all minimum safety standards and emergency response plans are adhered to.
- 12.4. In deciding if an application for approval should be made for a Air Show permit, organisers should note that the “accessible to the public” requirement is the principle requirement for complying with the “*Safety at Sports and Recreational Events Act (SASREA Act 2, of 2010)*” rather than relying on a “Fly-in” or “Free entry” element. Or limiting entry to “members of a club or organisation” such members, their friends and family remain members of the public. Rather "level up" if in doubt.

13. General

- 13.1. No event will be allowed without RCASA written approval. The relevant approval number to be used in all communication and displays.
- 13.2. The ARO shall notify the CAMU/SACAA of their intended event 14 days before the event.
- 13.3. The CAMU/SACAA if satisfied shall notify the ARO, club or association that they have no objection to the intended event taking place.
- 13.4. Any event held under the conditions laid down in this document must be subject to the direct authority & supervision of a safety officer.
- 13.5. The flying safety officer may delegate certain duties but retains overall responsibility for safety at the flying event.

- 13.6. It is the responsibility of the event organiser, the safety officer and the pilots of the participating aeroplanes to ensure that the planned activity does not infringe airspace restrictions, minimum distances and height from the other participants or members of the public as contained in this manual.
- 13.7. Appropriate emergency service providers, disaster management and evacuation plan as required in this manual shall be available, with communication to outside services arranged to deal with any emergency. This will be listed within the Event plan, when applicable.
- 13.8. Each pilot taking part in the event will hold the correct qualification as per RCASA Mop and being a paid up member and included in the ARO insurance.
- 13.9. Organisers are to ensure that each aircraft taking part in the event is per manufacturers specifications and will not operate outside of its intended design specification. No aircraft may exceed a manufacturer's published limitations.
- 13.10. In the case of an aerodrome/airfield being used, provision will be made for air traffic communication as suggested and approved by the aerodrome/airfield.
- 13.11. Use the checklists as available on the Web Portal to ensure you have all the correct documents available.

14. Exclusions

- 14.1. In some instances, RC pilots might be invited to participate/fly in an air show. In layman's terms as understood and known in the RC fraternity, participate in a "Full Size Event".
 - 14.1.1. In that case, Display Pilot approval is required from RCASA management as per RCASA MOP 14.2.7.
 - 14.1.2. Any additional insurance issues, not covered by any party falls outside of this manual and will be resolved by the EO of such events. RMC can assist if and when required.
 - 14.1.3. The additional costing related to such insurance will be agreed upon the parties and the resolution falls outside of this manual.

15. Display Pilots

- 15.1. RCASA is a Single Discipline ARO for Radio Controlled Aircraft Pilots.
- 15.2. Read this with Par 14 called "Exclusions"
- 15.3. RCASA MOP, 14.2.7 applicable to all Display pilots at all RC events.

16. Competency permissions

16.1. Novice Pilots

- 16.1.1. Novice Pilots are not allowed to participate in any event, local or away or with an instructor.

16.2. Solo Pilots

- 16.2.1. Solo Pilots can participate at club events, home and away.
- 16.2.2. Solo Pilots are not allowed to participate at any event with spectators.
- 16.2.3. Solo Pilots are not allowed to participate at any event at an Aerodrome.
- 16.2.4. Also refer Solo Variable at 16.2.4

16.3. Advanced Pilots/Instructors and Test Officers.

- 16.3.1. Can participate at any events, home, away and at aerodromes.

16.4. Solo Variable

- 16.4.1. The physical layout varies from field to field or aerodrome to aerodrome.
- 16.4.2. In some instances, the assets can be far from the runway.
- 16.4.3. In these circumstances, the EO might give permission to Solo pilots to participate at aerodromes.
- 16.4.4. We once again emphasize the related ownership and responsibility of the EO should the EO decide to allow this variation.
- 16.4.5. This is not applicable in the case of spectators, no variation allowed

16.5. Qualification Testing

- 16.5.1. No Solo competency testing allowed during or at the event.
- 16.5.2. Only higher than Solo or Turbine Competency testing allowed.
- 16.5.3. Testing at events only allowed with EO permission and no testing allowed during the event, hence before, after, early mornings or late afternoons.

17. Variations

- 17.1. Any variation from the provisions of this Handbook shall only be considered upon formal written application by the organiser/applicant on the prescribed application form.
- 17.2. Communicate to RMC for variation approval in writing. This will be elevated to SACAA if RMC deem it necessary.
- 17.3. It is strongly recommended not to deviate from the expected or current rules and regulations as it would impact on overall safety which is the cornerstone of all SACAA/RCASA processes and procedures.

18. Compliance Statement

- 18.1. As documented, the Event Manager or Event Organizer (EO) are the ultimate responsible person.
- 18.2. It is therefore required of the EO to accept his responsibilities.
- 18.3. Acceptance of compliance is done on the RCASA Web Portal. This is treated as legally binding and done in this way for practical reasons.

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- 18.4. An Compliance acceptance template also available on the RCASA web portal.

19. Central Airspace Management Unit

- 19.1. Abbreviated as CAMU.
19.2. All events will adhere to this process.
19.3. CAMU does not approve event applications but communicate applications to the various related departments for approval and possible NOTAM.
19.4. Our Event Application form structure was designed as per CAMU application on CAMU web portal.

20. Standard regulation relaxation

- 20.1. The regulatory height restriction as per SACAA approval of the specific flying site. It is the responsibility of the EO to check and confirm this limit.
20.2. Ensure that you indicate a different requirement when completing the application.
20.3. List and substantiate the reasoning for this relaxation of the default position.
20.4. All SACAA registered flying site/clubs have allocated and approved air-space.
20.4.1. Ensure you are familiar with the allotted flying space of the venue applied for.
20.4.2. It is not recommended to apply for a relaxation in these parameters, but it is allowed.
20.4.3. List and substantiate the reasoning for this relaxation of the default position.
20.4.4. Please indicated any requested changes when completing the application.
20.5. Both the above parameters is mandatory for Special events, displays and exhibitions.

21. Event Types

21.1. Fly-In

- 21.1.1. A fly-in is an event where RC Pilots are invited to get together at an SACAA approved/registered RC club or aerodrome/airfield.
21.1.2. This is usually intended to be a social gathering amongst RC pilots.
21.1.3. The event is not aimed at fundraising of any nature and is seen as a typical day at the field with more pilots from other clubs.
21.1.4. Letter of approval from the club/landlord/aerodrome/airfield clearly giving approval and designation of the person providing the approval, also stating special conditions/requirements or exclusions.
21.1.5. This is not a competition or a display.

21.1.6. The event safety/emergency and related as per club rules, regulations and processes. Or per aerodrome/airfield if as location of event.

21.1.7. Documents required

21.1.7.1. Apply 30 days prior to the event and complete application form on the RCASA web portal.

21.1.7.2. Letter of approval from the club/landlord/aerodrome/airfield clearly giving approval and designation of the person providing the approval, also stating special conditions or requirements and acceptance conditions, stating responsibilities.

21.2. Air Show

21.2.1. Air shows are mostly used to raise funds for the club.

21.2.2. Like a Fly-in, pilots can be invited to participate.

21.2.3. Funds are raised by gate entrance, food sales, etc and the key element is that spectators will be present.

21.2.4. Care must be taken with respect to crowd management, dependant on expected crowd size, i.e. safe distances maintained between flying activities and the crowd, etc.

21.2.5. An announcer with an adequate Public Address system is required for announcement of any changes and communication of any risks as notified by the EO or SO.

21.2.6. Documents required

21.2.6.1. Apply 30 days prior to the event and complete application form on the RCASA Web portal.

21.2.6.2. Letter of approval from the club/landlord/aerodrome/airfield clearly giving approval and designation of the person providing the approval, also stating special conditions/requirements or exclusions.

21.2.6.3. Event Plan. Headings provided as example in section 27

21.2.6.4. Pay specific attention to the following:

21.2.6.4.1. Ensure your Event plan is complete and signed of by the various local authorities.

21.2.6.4.2. This includes but not limited to local Traffic, Emergency Response, SAPS, Medical service providers.

21.2.6.4.3. Ensure structures and plans in place for immediate action and remote action required. ie, enough fire extinguishers on site, providing a first response. The same for all other possible emergencies.

21.2.6.4.4. It is suggested that the EO (or management team) communicate with local authorities for guidance, acceptance, and their approval as within the Event Plan to be approved by them before your submission.

21.3. Display, Exhibition

- 21.3.1. These are events that is used to entertain the public at non-registered sites ie Schools, bazaars or such.
- 21.3.2. Pilots are usually invited by an organization.
- 21.3.3. Only pilots with Instructor or TO qualification will be allowed to part take.
- 21.3.4. Apply 60 days prior to the event and complete application form section A, B.
- 21.3.5. Include a letter of invitation from the organizers stating the expected outcome, position with respect to insurance, liability and safety.

21.4. Special Air show

- 21.4.1. These are events that are not within the RCASA ARO jurisdiction.
- 21.4.2. See 14 and 15

21.5. Special Event

- 21.5.1. Special events are held at non-registered venue, another way might be to say, a fly-in at a non-registered venue or in a non-registered air space.
- 21.5.2. Examples might be a "float fly" at a dam, a slope soaring on a mountain site, etc.
- 21.5.3. For this, approval is required for the air space
- 21.5.4. If this is a cross country event, approvals is required from all municipalities, traffic and related parties.
- 21.5.5. Contact RMC for such an event 120 days prior to the event.
- 21.5.6. Dependant on the venue and specific event requirements, RCM will assist and guide towards a successful application.

21.6. Competitions

- 21.6.1. Contact RMC in the event of competitions planned.
- 21.6.2. Normally treated as Fly-in.

22. Selection Criteria

22.1. Safety Officer

- 22.1.1. Safety Officers play a vital role at events in overseeing safety related matters.
- 22.1.2. While we understand the practical implications which makes it difficult to always use the same people as safety officers, it is crucial to maintain a standard to ensure maximum safety protocols.
- 22.1.3. The Event Organizer is responsible for nominating the Safety Officer.
- 22.1.4. Therefore the following criteria is applicable:
 - 22.1.4.1. A person that was SO at 3 previous events.

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- 22.1.4.2. If the above not possible as per event participation, a person that attended at least 5 previous events, hence an understanding of such an event.
 - 22.1.4.3. This person also to be an RC Pilot (Advanced Pilot) for at least 5 years or more.
 - 22.1.4.4. Considering the associated risk owned by the EO, it is imperative that the EO is comfortable with the selection and under no undue pressure with the nominated person.

22.2. Flight Manager

- 22.2.1. The Flight manager is preferably a person with previous experience in this role.
- 22.2.2. As extension of SO role, this role can be seen as training for future SO role.
- 22.2.3. Minimum requirement is a person with at least 3 years RC experience and attended at least one previous event.

23. Responsibilities

23.1. The Event Organiser

- 23.1.1. Where an Event Organiser/Applicant is a juristic person, a natural person shall be appointed in writing as proxy and a letter detailing such appointment supplied to RCASA/SACAA. The organiser and sponsors accept the overall accountability, responsibility, risk and liability to ensure compliance with all legal and safety requirements at an event.
- 23.1.2. The person appointed on behalf of an organisation, body, committee or sponsor of the event shall be deemed to be the corresponding contact on behalf of the organisation, body, committee, sponsor of the event.
- 23.1.3. The organiser remains responsible for all matters of the event, to ensure legal and regulatory compliance, to put into place and apply effective safety and risk management measures, to protect participants, officials and members of the public be they spectators or otherwise.
- 23.1.4. The organiser has the responsibility to ensure all applicable approvals from the various and respective authorities have been obtained in writing, and to appoint suitable personnel, emergency services and other service providers to ensure compliance with legislation and regulations, safety, planning, administration and notification of particular aspects should only be allocated to people with the appropriate knowledge and experience.
- 23.1.5. Appoint a team or committee, to fulfil specific planning, functions and control in planning and executing the event.
- 23.1.6. The event organiser shall ensure that no person, object, activity or anything else on the public/spectator side shall present a risk or hazard to any person, object activity or anything else on the airside or aerial activities for the duration of the event.

- 23.1.7. It remains the responsibility of the EO to ensure compliance with all administrative and legislative requirements and that safety standards for public events are adhered to.
- 23.1.8. It remains the responsibility of the EO to apply a duty of care, to ensure adequate and suitable safety personnel and emergency services are physically present for the duration at such events for the benefit of public safety.
- 23.1.9. Event Organisers, when making application for a permit to hold an Event, are required to confirm that the organisation and conduct of the event will be in accordance with the provisions of this Handbook, Civil Aviation Regulations and applicable Acts, laws and bylaws.
- 23.1.10. Whilst nothing in this publication is intended to conflict with the SACARS it is understood that the very definition or purpose of a special air event means that special rules, conditions or operations may apply and take place with due consideration and approval, however in a case of doubt, the relevant Act's, National legislation and SACARS shall be regarded as superior to this Handbook.
- 23.1.11. The participation and hosting air event carries a lot of responsibility and risk. Planning and mitigating this risk to ensure safety of participants, and arguably most important the safety of spectators and public, irrespective if they are paying or not to gain entrance or observe such activities is of paramount importance. All aspects of such events must therefore be carefully planned, and all activities should be thoroughly considered prior to their taking place.

23.2. Safety Officer

- 23.2.1. The SO to assist the EO with organizing the event as well as ensuring all safety requirements are met and documented during the event.
- 23.2.2. Plan and ensure compliance with all matters related to public and spectator health and safety, and that the event is held in accordance with the Safety at Sports and Recreational Events Act, 2010, Health and Safety Act, local authorities' bylaws and any other applicable legislation or regulations relevant to such an event, and that an approved and signed disaster management, emergency response and evacuation plan is in place.
- 23.2.3. Sufficient and applicable insurance covers are obtained.
- 23.2.4. Apply to, notify, or negotiate with all relevant parties to arrange within the required time frames, for (When applicable, ie Air show)
- 23.2.5. If an event plan is required per event category, the following
- 23.2.5.1. Municipal approval,
 - 23.2.5.2. SAPS, event risk categorisation (SASRIA),

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- 23.2.5.3. Traffic police or Metro police as applicable to manage and control traffic,
 - 23.2.5.4. Fire Departments or private fire fighting services,
 - 23.2.5.5. Ambulances with advanced life support at the airfield,
 - 23.2.5.6. Hospitals and local Doctors and see if they are able and willing to assist in the event of emergencies,
 - 23.2.5.7. Disaster management and other emergency services to plan develop and approve emergency response, disaster management and evacuation plans.
 - 23.2.5.8. Applications and approvals from any other applicable authority or controlling body for activities or events other than flying displays.
- 23.3. It is required of all participants (pilots) to sign an Indemnity form before the event begin. These to be kept on file (Hard copy) and no pilot will be allowed to participate without an accepted and signed indemnity form.
- 23.4. The safety officer shall ensure that the number of aircraft in the circuit at any one time does not exceed a safe number. This to be dependant on conditions at the time and to be communicated to the Flight manager.
- 23.5. The safety officer must ensure that all aircraft remain within the permitted airspace.

24. Duties at the event

Communication between the EO, SO and FLM plays a very important role and as suggestion, hand held radio devices might be useful.

24.1. Event Organizer

- 24.1.1. The EO will manage the event at holistic level to fulfil his responsibilities with respect to safety and all regulations as covered in this document and any other issues that might become apparent at the event.
- 24.1.2. He will receive feedback from the SO and FM and adjust the program and environment to suite the conditions on the day.
- 24.1.3. Ensure constant contact with the LATC method employed between EO/SO/FLM and announcer, dependant on event category.
- 24.1.4. Perform a venue/site inspection daily, making sure the event is still safe and all requirements are in place.
- 24.1.5. Pilot briefings will be held each day before any flying.
 - 24.1.5.1. Any changes will be communicated.
 - 24.1.5.2. The pilots briefing will include a safety briefing.

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- 24.1.5.3. A register will be maintained for all attending the Pilots Briefing. Pilots that did not attend the pilots briefing for that day will be grounded for that day.
 - 24.1.6. An Event report will be generated after the event and submitted to RMC.
 - 24.1.6.1. This information to be used for possible improvements, amendments or additions to ensure continued improvement with respect to safety, processes or procedures.
 - 24.1.6.2. This will be submitted within 21 days after the event.

24.2. Safety Officer

- 24.2.1. Ensure all participants completed, accepted and signed an indemnity form to be kept on record.
- 24.2.2. Check and ensure that the event qualification requirements for pilots are met.
- 24.2.3. Perform a venue/site inspection daily, making sure the event is still safe and all requirements are met and in place.
- 24.2.4. Ensure all safety/emergency structures are in place as per Event plan.
- 24.2.5. Monitor and manage all the safe distances required.
- 24.2.6. Monitor and control when applicable pilots, their aircraft and behaviour.

24.3. Flight Manager

- 24.3.1. Check all craft before take-off and after landing, ensuring they are air-worthy to the best of his knowledge.
- 24.3.2. Manage the "ready box" and adjust take off and landing ensuring safety for all and the number of craft flying at any given time.
- 24.3.3. The FM to be an extension to the SO in assisting with overall safety.

24.4. Local Air Traffic Control

- 24.4.1. This is applicable in the case of an aerodrome used as venue.
- 24.4.2. A radio will be made available to monitor possible full size air traffic activity.
- 24.4.3. A person will be nominated to monitor all possible communication at the site.
- 24.4.4. This will vary from site to site as the aerodrome requires.
- 24.4.5. Preferably this function to be part of the SO and near the PA system and announced if and when applicable.
- 24.4.6. It is the responsibility of the EO and SO to implement a method and structure that will address and resolve all possible scenarios as a matter of high importance.

25. Duties After the event

- 25.1. Within 21 calendar days after the event a report must be submitted to RMC.
- 25.2. The feedback to be used for review and continues improvement within the quality system and documented.
- 25.3. The report to include at least the following information:
 - 25.3.1. Number of pilots attended
 - 25.3.2. Estimation of spectators if applicable
 - 25.3.3. Report back on any incidents or accidents
 - 25.3.4. Suggestions if any for overall improvement in the system
 - 25.3.5. Notes on any problems experienced.

26. Flight lines and ground plans

26.1. General

- 26.1.1. We must adhere to regulations as per SAE handbook, RCASA MOP and the related insurance. There are however relaxations from the SAE handbook with respect to safe distances. It would be difficult to produce one fixed or measurable standard based on the wide range of RC controlled aircraft available.
- 26.1.2. Aircraft taking part in the air shows should be segregated from both visiting and static aircraft parks unless arrangements are made to tow aircraft from the static aircraft parks to an aircraft parking or manoeuvring area, appropriately segregated from the public, prior to start.
- 26.1.3. In this case, adequate arrangements must be made to ensure public safety during the aircraft movement.
- 26.1.4. Aircraft parking/storing areas shall be out of bounds to spectators.
- 26.1.5. Appropriate security should be in place to guard against interference with aircraft.
- 26.1.6. All flying rules/regulations and methods must be employed with a specific focus on safety for all people and parties involved.
- 26.1.7. No running engines is allowed in what is generally referred to as the “pits area”, the starting of aircraft is only allowed in the “starting area” indicated by the EO or SO at the event.
- 26.1.8. Dependant of the site, this starting area will be at a safe distance from any spectators if applicable. This area is usually close to the runway.
- 26.1.9. Under no circumstances or at any time will aircraft be allowed to taxi under their own power towards the spectators. This includes the heading during the starting process.
- 26.1.10. Fire extinguishers should be readily available, and aircraft should be parked so that fire vehicles can achieve easy access and move freely among them.

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- 26.1.11. The EO and his team will mark areas available to the public. It is in their best interest, and based on experience, to allow enough distance between the crowd and moving or flying craft. This distance will be dependant of the type of event and craft participating.
 - 26.1.12. Spectator enclosures should be sited away from taxiways and runway strips.
 - 26.1.13. This distance will need to be increased if spectators are positioned behind or close to where aircraft are ground running engines particularly in the case of high-powered aircraft, jet aircraft or large helicopters, and more particularly when aircraft are likely to use significant amounts of power such as when turning.
 - 26.1.14. Effective and marshalling arrangements are required to keep spectators clear of aircraft manoeuvring areas.
 - 26.1.15. Areas in which spectators are not permitted, must be properly marked and enclosed at all times as applicable.

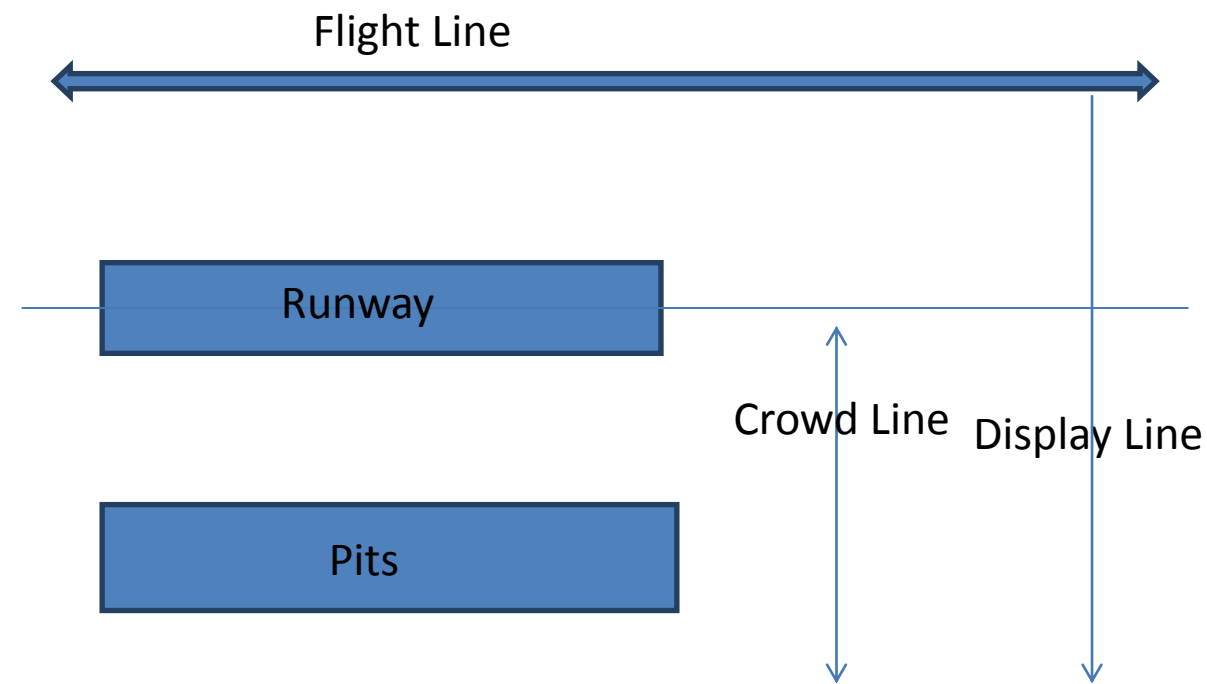
26.2. The display Line

- 26.2.1. Displaying aircraft perform relative to a display line, which must be clearly identified.
- 26.2.2. Under no circumstances will any flying over or above the spectators be allowed.
- 26.2.3. On an aerodrome, this is normally parallel to the far side of a runway in relation to the crowd line, on off-aerodrome sites, parallel to any spectators, public and some significant feature.
- 26.2.4. Where the flight line is not clearly delineated by a paved runway or other obvious line feature it can be marked with day-glow pyramids or panels, whitewashed lines, or by some other suitable method such as an imaginary line running parallel to a defined feature such as a road, runway, taxiway or structure.
- 26.2.5. Whilst the minimum distance shall be as per the table in 26.2.18 below, the minimum distance between the display line (flight line) and crowd line, shall be further as determined by the EO based on the type, size, weight, complexity and speed of the aircraft and display sequence, as well as any other factors that may have an influence on the safety of the display and spectators, such as topography, geography, fauna and flora and the layout of the airfield, buildings, structures and surrounding areas.
- 26.2.6. Having said that, the spectators will never be close than 30 m for a flight line.
- 26.2.7. Speciality acts such as ribbon cuts, knife edge fly pasts, touch and goes, short field take offs and landings etc, may be considered providing that a suitable plan to mitigate the risk and manage public safety, has been developed or the runway to crowd line distances are sufficiently further away to permit this.

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- 26.2.8. In the case where faster, heavier, or more complex aircraft are landing and taking off at an event, the minimum distance from the nearest edge of the runway and/or flight/display line to the closest point of the public/crowd line should be extended accordingly, special consideration should be given to the active runway in terms of landing and taking off in relation to where the spectators are positioned and the energy of the arriving and departing aircraft.
- 26.2.9. Pilots should plan their flying sequence such that they can always regain the display Line without infringing the minimum lateral separation distance from the crowd line.
- 26.2.10. Effects of any on-crowd velocity vectors and on-crowd wind components must be considered to further extend the display line.
- 26.2.11. No flights may be flown towards the crowd line or open assembly of persons or car park where people are permitted to gather.
- 26.2.12. Notwithstanding the requirements above approved manoeuvres such as a formation switchblade with aircraft flying toward the crowd line must always remain outside a 45° or greater cone depending on the width of the crowd line and may not extend closer than the distance of the applicable display line.
- 26.2.13. The EO/SO, based on the type, size, weight, complexity and speed of the aircraft and display sequence should determine further distances of such a manoeuvre.
- 26.2.14. No flights may be performed while approaching the crowd line from the rear, unless specifically approved by the safety officer and must always remain outside a 45° or greater cone of the crowd line.
- 26.2.15. Rotorcraft must not be flown in such proximity to spectators' enclosures, buildings or aircraft on the ground as to cause a possible hazard or nuisance either from down wash or as a result of control difficulties. Similarly, helicopters with underslung loads should only be flown over open and clear areas.
- 26.2.16. The energy component of a rotorcraft/helicopter lies with the inertia and energy forces stored in the main rotors or tail rotor, accordingly reasonable distances should be considered with these forces in mind in the event of a dynamic rollover ground impact or other incident whereby the rotors or parts of the rotors could potentially be propelled towards spectators or public areas.
- 26.2.17. Minimum distance parallel to and from the crowd line to the nearest edge of the display lines

26.2.18. Table: Distances

AIRCRAFT & DISPLAY SPEEDS	Flat Fly Pasts (Wings Level & Parallel to crowd line)	Aerobatics or Aerobatic Manoeuvres	Rotorcraft
Model aircraft (excluding Jets & large-scale models)	30m	50m	50m
Jets & large-scale models	50m	70m	NA



27. Event Plan

It is required for air shows to be as complete as possible in covering all possible risks and ensure information is shared with all possible role players.

Keep in mind that in the case of incidents and accidents, you need to plan much further than the people you see at the event.

It is suggested that the EO provide proof that the Event plan was shared with the local authorities and accepted in preparation for action in the unlikely event of accidents.

For that, we require the EO to submit an Event plan and as example we provide a heading list.

- 27.1. Event Area: Where will the event take place, the name
- 27.2. Event Area: Close-up and Layout, map showing flight lines, holding space, etc
- 27.3. Event Overview
- 27.4. Event Description
 - 27.4.1. Location
 - 27.4.2. The Site and Surrounding area
 - 27.4.3. Dates and Duration
 - 27.4.4. Entrance and Exit Points
- 27.5. Attendance
 - 27.5.1. Audience Profile
- 27.6. The Event Organisers
 - 27.6.1. Tree of Responsibilities
 - 27.6.2. Roles and Responsibilities
 - 27.6.3. Contacts
- 27.7. Catering and Hospitality, What type will be provided
 - 27.7.1. Liquid Petroleum Gas.
- 27.8. Litter Management , How will this be managed?
- 27.9. Entertainment. Are there any other activities like singers or so?
- 27.10. Barriers. Show on the map as part of crowd control
- 27.11. Security/Stewarding Companies. Will there be any and what will their role be
- 27.12. CCTV. Are there any?
- 27.13. Communications
 - 27.13.1. PA system
 - 27.13.2. Radio
 - 27.13.3. Loud Hailers
 - 27.13.4. Telephone
- 27.14. Signage and Public Information
- 27.15. Media Handling
- 27.16. Traffic Management
- 27.17. Medical and First Aid Cover
- 27.18. Fire Risk Management
- 27.19. Fire Extinguishers
- 27.20. Police and Security
- 27.21. Risk Management
- 27.22. Risk Management
- 27.23. Incident Recording
- 27.24. Insurance

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- 27.25. Weather
 - 27.26. Incident Management
 - 27.27. Extreme Weather
 - 27.28. Emergency Vehicle Access
 - 27.29. Event Evacuation Plan