



Advisory Circular

AC 139-7(0)

SEPTEMBER 2012

AERODROME EMERGENCY PLANNING

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1. REFERENCES

- This Advisory Circular (AC) should be read in conjunction with:
- Part 139 of the *Civil Aviation Safety Regulations 1998* (CASR 1998) – Aerodromes.
 - Part 139 Manual of Standards (MOS) – Aerodromes.

2. PURPOSE

The purpose of this AC is to provide general information and advice for Aerodrome Emergency Planning and Exercising.

3. STATUS OF THIS ADVISORY CIRCULAR

This is the first AC on the subject of Aerodrome Emergency Planning and replaces CAAP 89I-2 (0) issued in March 2004 and updated in September 2005.

Advisory Circulars are intended to provide advice and guidance to illustrate a means, but not necessarily the only means, of complying with the Regulations, or to explain certain regulatory requirements by providing informative, interpretative and explanatory material.

Where an AC is referred to in a 'Note' below the regulation, the AC remains as guidance material.

ACs should always be read in conjunction with the referenced regulations.

This AC has been approved for release by the Executive Manager Standards Division.

4. ACRONYMS

4.1 The following are acronyms used throughout this AC:

AC	Advisory Circular
AEC	Aerodrome Emergency Committee
AEP	Aerodrome Emergency Plan
CASA	Civil Aviation Safety Authority
CASR	Civil Aviation Safety Regulations 1998
EMA	Emergency Management Australia
ICAO	International Civil Aviation Organization
MOS	Manual of Standards
SOP	Standard Operating Procedure

5. DEFINITIONS

5.1 The following definitions explain various terms used throughout this AC:

Command – The direction of members and resources of an organisation in the performance of the organisation's role and tasks. Authority to command is established in legislation or by agreement with an organisation. Command relates to organisations and operates vertically within an organisation (*EMA*).

Control – The overall direction of emergency management activities in an emergency situation. Authority for control is established in legislation or in an emergency plan, and carries with it the responsibility for tasking and coordinating other organisations in accordance with the needs of the situation. Control relates to situations and operates horizontally across organisations (*EMA*).

Coordination – The bringing together of organisations and elements to ensure an effective response, primarily concerned with the systematic acquisition and application of resources (organisation, manpower and equipment) in accordance with the requirements imposed by the threat or impact of an emergency. Coordination relates primarily to resources, and operates, vertically, within an organisation, as a function of the authority to command, and horizontally, across organisations, as a function of the authority to control (*EMA*).

Emergency Management Team – The team which enables an incident controller's response strategy to be carried out by support agencies through their own commanders, and assists the emergency response coordinator in determining resource acquisition needs, and in ensuring a coordinated response to the emergency (*EMA*).

Incident Controller – The individual responsible for the management of all incident operations (*EMA*).

Full Scale Emergency Exercise – Assembling and utilization of all the resources that would be available and used in a real emergency (*ICAO*).

Hazard – Generally a hazard is a source of potential harm or a situation with a potential to cause loss.

Recovery – The coordinated process of supporting emergency-affected communities in reconstruction of the physical infrastructure and restoration of emotional, social, economic and physical wellbeing (*EMA*).

Note: Definitions may vary between States and Territories. CASA recommends that all aerodrome operators and their Aerodrome Emergency Committees ensure that the correct and consistent terminology is used for their procedures and documentation.

6. GENERAL

6.1 The purpose of this AC is to provide guidelines to assist certified aerodrome operators achieve a high standard of compliance with respect to Aerodrome Emergency Planning. This document expands upon the requirements contained in the Part 139 of CASR 1998 and the Part 139 MOS.

6.2 Operators of non certified aerodromes are not required to observe the guidelines in this AC however may choose to do so to satisfy their general duty of care.

6.3 This AC gives consideration of the following:

- The function of the Aerodrome Emergency Committee (AEC) and the roles and responsibilities of the participating agencies.
- That at the less complex aerodromes located in remote or rural locations, the alternative options to achieve compliance may rely on minimal local emergency volunteer resources. The Civil Aviation Safety Authority (CASA) understands that many locations will have local or district emergency committees with the same representation as that required for the AEC. Where these committees have oversight over an aerodrome, the agenda may include AEC requirements however these items **must be chaired by an aerodrome representative**.

6.4 CASA acknowledges that the responding agencies, such as police and fire services, have their own Standard Operating Procedures (SOP) which are regularly actioned and tested during real emergencies and exercises. Although unrelated to aviation, where multi-agency coordination is tested, outcomes may be considered for an aerodrome related response.

6.5 The function of Control, Command and Coordination are the key elements for responding agencies, such as police, fire services, medical teams and other emergency services. The Aerodrome Emergency Plan (AEP) must establish a co-ordinated response to an emergency that is controlled and commanded to maximise the preservation of life and property.

6.6 As prescribed throughout Part 139 of CASR 1998 and the Part 139 MOS, CASA expects that aerodrome specific elements will be included in the AEP procedures and should include:

- the AEC structure including its responsibilities, tasks and objectives;
- the testing of multi agency Command, Control and Co-ordination; and
- a process to ensure exercises will deliver the opportunity to test and review the procedures contained within the AEP document.

6.7 Minimum frequencies of meetings and events are described in paragraph 7.5 of this AC. However, aerodrome operators are encouraged not to limit their number of activities just to meet CASA requirements. Additional emergency training activities are recommended where it is considered appropriate by the AEC. Please refer to sections 10.7 and 10.8 of the Part 139 MOS for more information.

6.8 The most successful exercises are those events that challenge the emergency arrangements and identify improvements to the response agency procedures associated with the AEP.

6.9 The aerodrome operator should assess the adequacy of aerodrome or community based equipment that can assist with aircraft recovery. The equipment list should be reviewed regularly with the contact details and the location of this equipment included in the aerodrome manual.

7. AERODROME EMERGENCY COMMITTEE

7.1 The AEC must be chaired by the aerodrome operator. The aerodrome operator cannot devolve and abrogate their regulatory responsibility for compliance and must be able to demonstrate the function of their committee.

7.2 AEC must include representation from:

- Police;
- Fire;
- Ambulance; and
- Other emergency agencies.

7.3 Airlines and other support agencies should also be considered for attendance on the AEC.

7.4 For those remote aerodromes where limited resources are available, CASA acknowledges that the AEC can be 'co-chaired' with their local emergency management representative so long as the aerodrome operator maintains equal authority and representation.

7.5 AEC meetings must be convened at a minimum of once a year to ensure the annual review of the AEP is completed. The committee should also consider additional meetings following:

- an activation of the AEP;
- an AEP exercise; and
- any other circumstances where the currency and procedural validity of the AEP needs to be addressed.

7.6 AEC meeting agenda and minutes must be recorded as evidence of compliance. These records must be maintained for a period of at least three years.

7.7 Aerodrome operators may consider forming subcommittees to concentrate on support elements of the AEP. Depending on the complexity of the aerodrome and the availability of emergency services, support committees may include but are not limited to:

- Welfare Committee;
- Exercise writing team; and
- Local or District Emergency Management Committees.

8. AEP SCOPE AND REQUIRED CONTENT

8.1 The AEP must be prepared and accepted by the AEC. The content of the plan will be an overview and description of the roles and responsibilities for all AEP stakeholders and participants who will respond to the type of emergency. Consideration to the complexity of the aerodrome facility and category of the critical aircraft servicing the aerodrome is essential.

8.2 The AEP should make reference to support agency SOPs but it is not necessary to include the SOP in its entirety. Where the AEC considers the content of a particular SOP has a significant benefit to effective coordination, a more detailed summary should be included in the AEP.

8.3 The AEP must ensure that the procedures associated with Control, Command and Coordination are clearly defined and are consistent with the applicable state, territory or federal legislation.

8.4 The AEC should consider the availability of the nominated incident controller/emergency commander (as applicable to their emergency management legislation) and their likely response time. In the case where a delay in their response is possible, the AEC should consider nominating an interim manager who will assume the role. Any relevant procedures, including handover arrangements, should be clearly documented in the AEP.

9. AEP SUPPORT PLANS

9.1 Depending on the complexity of the aerodrome, the operator should consider the following optional support plans:

- disabled aircraft recovery plan;
- care of the uninjured;
- care of the relatives;
- media;
- terminal evacuation; and
- off airport assistance.

10. AEP EXERCISES

10.1 The purpose of emergency exercises is to provide an opportunity for the aerodrome operator and the committee to test the AEP. Such exercises are categorised by the following types:

- full scale (field/practical) emergency exercise;
- speciality emergency exercises; and
- tabletop (discussion) exercises.

10.2 Emergency exercises must be conducted at least once every two years. Collectively, these exercises must be commensurate with the size and scale of operations at the aerodrome. CASA acknowledges it could be difficult for aerodrome operators with limited community capability to simulate an emergency response to their critical aircraft. In these cases, a full scale emergency exercise would need to be supplemented by specialty and/or tabletop exercises.

10.3 The recommended process for planning an exercise is to:

- establish the objectives of the aerodrome operator;
- determine the multi agency and/or combatant authority objectives;
- plan the exercise to test the agency response to the documented procedures; and
- prepare and promulgate an exercise brief.

10.4 When conducting an exercise, the aerodrome operator should:

- Ensure the exercise is run in accordance with the exercise brief and established procedures;
- Ensure suitable personnel are present to monitor exercise performance and safety;
- Consider suspending or delaying the exercise where a divergence from the exercise brief is identified and/or safety is affected. Once the intent of the exercise and/or safety has been re-established, the exercise can recommence; and
- Ensure every opportunity is provided for exercise participants to be:
 - trained for their roles and responsibilities;
 - made familiar with the aerodrome environment; and
 - made aware of other activities and hazards present at the aerodrome.

10.5 On completion of the exercise, it is important that the aerodrome operator:

- assesses the exercise outcomes against established objectives;
- identifies any improvements required to the documented procedures;
- summarise the critiques of agency performance; and
- prepare a summary report for presentation to the AEC.

10.6 Full Scale Emergency Exercises

10.6.1 The aerodrome operator is responsible to ensure that a full scale emergency exercise is conducted at least once every two years. This means that such exercises must be conducted no more than 24 months apart. CASA recommends that these exercises are conducted annually.

10.6.2 The Part 139 MOS requires that emergency exercises are commensurate with the size and scale of operations at an aerodrome. The term ‘commensurate’ should be considered in context. The aerodrome operator shall assess the most demanding aircraft type and ensure that their AEP field exercise and/or tabletop exercise caters for that size and type of aircraft.

10.6.3 Where it is not possible to conduct a field exercise for the most demanding aircraft, the most common regular air transport type shall be the minimum exercise aircraft.

10.6.4 A full scale emergency exercise permits the agencies to evaluate the operational capabilities of the plan in an interactive manner and in real time. These exercises permit:

- the mobilisation of personnel and resources; and
- the actual movement of emergency workers, equipment and resources required to demonstrate a coordinated response capability.

10.7 Specialty Emergency exercises

10.7.1 Specialty exercises are generally smaller and are promoted by specific agencies wishing to provide site specific training and/or improved coordination. For example, a combined exercise of Fire and Emergency personnel would permit these agencies to practice interaction and coordination - particularly where the Aerodrome Rescue and Fire Fighting Service is established as the primary responder and the local authorities fulfil a support role through a mutual aid agreement.

10.7.2 In conjunction with the aerodrome operator, local emergency agencies should undertake tours of the aerodrome to become familiar with physical features, local topography and the location of aerodrome boundary access points. A briefing on aircraft characteristics including hazards and access points is also recommended.

10.8 Tabletop exercises

10.8.1 Tabletop exercises provide an opportunity for aerodrome operators and responding emergency agencies to assess procedures without the disruption to operations that may be incurred by the conduct of a full scale field exercise.

10.8.2 The exercise should test the capability and integration of emergency response resources. Such an exercise normally only requires the participation of, but is not limited to, key emergency response personnel.

10.8.3 The exercise may require a large meeting room and the availability of maps and other geographical and topographical information.

10.8.4 Table top exercises can also provide valuable information as a preliminary meeting of exercise organisations prior to a programmed field exercise.

10.8.5 The exercise outcomes should be reported to the AEC. It is the responsibility of the AEC to ensure that those outcomes requiring further assessment and review are assigned for corrective action to the appropriate agency or AEP representative.

11. AEP REVIEW

11.1 The AEP must be considered by the aerodrome operator as a document that requires continuous review. This review must be completed at least once every twelve months.

11.2 Regulation 139.210 of CASR 1998 clearly describes a requirement to consider changes to the AEP as they occur. This ensures that all learning outcomes from incidents or exercises are assessed and, where applicable, implemented as revised procedures.

11.3 Regulation 139.210 of CASR 1998 states that as soon as practical after an exercise or incident, the aerodrome operator must arrange for the AEC to:

- review the effectiveness of the response to the exercise or the emergency;
- assess the adequacy of the emergency plan to deal with emergencies at the aerodrome; and
- take corrective action as is necessary to ensure that the plan operates effectively.

11.4 The review process may identify and question concerns of a particular agency. Although there may be no requirement to revise sections of the plan, the AEC will be required to ensure that the agency in question has assessed their internal SOPs.

11.5 The aerodrome manual must identify the process of AEP review in accordance with Appendix 1 to subparagraph 139.095 (a) (ii) of CASR 1998. The AEC should collate all agency representative reports and/or critiques and summarise comments into one report.

11.6 The findings contained within the incident/exercise report summary should be reviewed by the committee who should assign nominated officers/agencies to address any issues.

11.7 For those findings requiring aerodrome operator support or implementation, the summary report should be tabled as an agenda item through the aerodrome Safety Management System.

12. ACTUAL INCIDENTS OR EMERGENCY EVENTS

12.1 If an actual emergency response has occurred at an aerodrome, the AEC must then review the effectiveness of the AEP. This review must:

- assess the effectiveness of the response;
- assess the adequacy of the plan; and
- take corrective action as soon as practicable to ensure the plan operates properly.

12.2 The aerodrome operator in conjunction with the AEC may assess that the outcomes of the actual emergency response have satisfied the requirement of Regulation 139.215 of CASR 1998 'Testing of aerodrome emergency plan'. If so, the AEC may then request that CASA extend the period in which the next planned exercise will need to be conducted.

12.3 Before the aerodrome operator requests an extension from CASA, the application must provide adequate evidence that:

- all emergency services organisations referenced in the plan responded to the real emergency; and
- the real emergency adequately tested the plan.

12.4 CASA will then assess the request before responding with its decision under Regulation 139.215 of CASR 1998.

12.5 CASA acknowledges that in rural and/or regional communities, where there is a response from multiple agencies to an emergency that is unrelated to aviation, it is likely that Control, Command and Coordination may be tested. This likelihood is acknowledged where separate 'Community Exercises' of a non-aviation nature have been conducted and involve the same key agencies that would normally attend an AEP field exercise (for example, rail, road, or marine type emergency exercises).

12.6 In these unique cases, the AEC may approach CASA with a request to extend the period in which the next planned exercise needs to be conducted.

13. FURTHER INFORMATION

13.1 Aerodrome Emergency Planning is not specifically contained within all the International Civil Aviation Organization (ICAO) Standards and Recommended Practices, CASA Regulations or the ICAO Guidance Material contained in the ICAO Airport Services Manual Part 7. Aerodrome operators should consider the complexity of their aerodrome and geographical location. Further advice should be sought from local authorities on how to ensure the most effective response to an incident can be achieved.

13.2 Further information on Aerodrome Emergency Planning can also be obtained from the following websites:

- Emergency Management Australia (EMA)
<http://www.ema.gov.au>
- Australian Journal of Emergency Management (EMA)
<http://www.em.gov.au/Publications/Australianjournalofemergencymanagement/Pages/default.aspx>

- Emergency Exercise and Training Techniques (EMA)
[http://www.ema.gov.au/www/emaweb/rwpattach.nsf/VAP/\(3A6790B96C927794AF1031D9395C5C20\)~Emergency_exercise_and_training_techniques.pdf/\\$file/Emergency_exercise_and_training_techniques.pdf](http://www.ema.gov.au/www/emaweb/rwpattach.nsf/VAP/(3A6790B96C927794AF1031D9395C5C20)~Emergency_exercise_and_training_techniques.pdf/$file/Emergency_exercise_and_training_techniques.pdf)
- Airport Emergency Planning in Australia 2012 (Australian Airports Association)
www.airports.asn.au

Note: CASA makes no representation regarding the currency and accuracy of the information available from these resources.

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