

Aerodrome Emergency Planning Modular Exercises

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GENERAL

Overseas Territories Aviation Circulars are issued to provide advice, guidance and information on standards, practices and procedures necessary to support Overseas Territory Aviation Requirements. They are not in themselves law but may amplify a provision of the Air Navigation (Overseas Territories) Order or provide practical guidance on meeting a requirement contained in the Overseas Territories Aviation Requirements.

PURPOSE

This OTAC provides guidance on the requirements for modular emergency exercises and testing. This Circular relates to the requirements in OTAR Part 139, and is based on the Notes to ICAO Annex 14 Volume 1, Chapter 9.1.

RELATED REQUIREMENTS

This Circular relates to OTAR Parts 139 and 140.

CHANGE INFORMATION

Document review. Minor editorial changes.

ENQUIRIES

Enquiries regarding the content of this Circular should be addressed to Air Safety Support International at the address on the ASSI website www.airsafety.aero or to the appropriate Overseas Territory Aviation Authority.

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1 Introduction

This OTAC provides some guidance material in relation to the requirements in OTAR Part 139, OTAC 139-8 and ICAO Annex 14 Volume 1, Chapter 9.1.

2 General

- 2.1 OTAR Part 139 requires that a certificated aerodrome has an emergency plan commensurate with the aircraft operations. This plan shall contain procedures for periodic testing of the adequacy of the plan and for reviewing the results in order to improve its effectiveness.
- 2.2 The plan shall include all participating agencies and associated equipment. Section 3 contains a suggested list of those who may be involved in the emergency plan.
- 2.3 Annex 14 also requires that the plan shall be tested by conducting:
- a) a full-scale aerodrome emergency exercise at intervals not exceeding two years and partial emergency exercises in the intervening year to ensure that any deficiencies found during the full-scale aerodrome emergency exercise have been corrected; or
 - b) a series of modular tests commencing in the first year and concluding in a full-scale aerodrome emergency exercise at intervals not exceeding three years;

and reviewed thereafter, or after an actual emergency, so as to correct any deficiency found during such exercises or actual emergency.

Note 1: The exercises should be set to rotate the time of the year and daylight or darkness.

Note 2: Where an aerodrome has a responsibility to respond to emergencies in water and/or difficult environs, the programme of emergency exercises must adequately test these areas.

- 2.4 Where an aircraft accident occurs to which the response could be said to have tested adequately all or part of the plan, an aerodrome certificate holder may request to defer the biennial exercise. This request should be made in writing to the Regulator.

3 Modular programme

- 3.1 The modular approach provides an alternative to the established method of preparing, training and testing the emergency plan at aerodromes.
- 3.2 It comprises a series of modules, which, if completed over a time period agreed with the regulator, will at least equal the current arrangement and in most cases exceed the arrangement for testing the plan.
- 3.3 The modular system will result in the conducting of a number of smaller, more detailed exercises with a shorter time scale between each module. The period between modules should be organised locally and be agreed with the regulator.

- 3.4 It is suggested that a programme of approximately 10 modular exercises culminating in the full emergency exercise would be acceptable to adopt such a programme. However, the programme must adequately test all key areas of the emergency plan within the agreed period.
- 3.5 All modules and the full exercise should be completed within a maximum 3-year period and the programme should provide a comprehensive cycle of testing of all key elements of the emergency plan.

4 Examples of agencies or services involved

OTAC 139-8 3.2 and 3.3 identifies aerodrome and non-aerodrome organisations that may form part of the aerodrome emergency response.

5 Areas/subject for exercise

OTAC 139-8 5.4.1 lists some example subject areas that may be used for exercises.

6 Exercise types

6.1 The types of exercise that may be designed include:

- Subject area exercises
- Tabletop exercises
- Procedural tests

6.2 Subject area exercises

6.2.1 These are partial exercises, similar to the full-scale exercise, but focus on testing key elements or combinations of elements of the emergency plan. These may include:

- (a) Call-out System/Alerting procedures
- (b) Operation of the Rendezvous Point
- (c) Command and Control including co-ordination between agencies, eg:
 - i. Operational Command (Bronze) (if applicable)
 - ii. Tactical Command (Silver) (if applicable)
 - iii. Strategic Command (Gold) (if applicable)
- (d) Medical Response and Triage
- (e) Reception Centres/Non-Emergency services Response
- (f) Post Disaster Management/Operational re-start
- (g) Difficult environs
- (h) Business Continuity leading to re-start of operations
- (i) Practical Fire-Fighting/Search and Rescue
- (j) Emergency Co-ordination Centre
- (k) Crisis Management Team
- (l) Interfaces – ATC/AD/RFFS/Police/Ambulance/Municipal fire service

6.2.2 The purpose of a partial exercise is to ensure the adequacy of the response by individual participating agencies and components of the plan, such as the co-ordination and communications system. The purpose of modular tests is to enable concentrated effort on specific components or combination of components of established emergency plans.

6.3 Tabletop exercises

- 6.3.1 These are simulated exercises with the participation of all involved parties relating to the exercise scenario. Generally, it is carried out in a forum style in a meeting/conference room facility, perhaps with maps and charts of key facilities (eg aerodrome plan, terminal building plans or maps of the terrain in the approach/departure area).
- 6.3.2 Participants role play their part of the emergency plan to test its operation and practicality. The other participants check and test the integration to try and identify elements that work well or any gaps or omissions that may adversely affect the response.
- 6.3.3 Umpires should oversee the exercise and note learning points. They may also inject issues into the scenario to further test elements ('what if' questions).

6.4 Procedural tests

- 6.4.1 A procedural test is a 'walk-through' of the published emergency plans and any supporting relevant documentation. Generally, it is carried out in a forum style in a meeting/conference room facility. Some additional materials, such as plans and drawings, may be required to ensure the test adequately tests the procedures.
- 6.4.2 As with the tabletop exercise, to be effective, it should include multi-disciplinary participation from agencies and organisation identified within the plan's exercise scenario.
- 6.4.3 Again, it may be useful to nominate umpires to oversee the exercise and note learning points. They may also inject issues into the scenario to further test elements ('what if' questions).
- 6.4.4 The records of exercises will be used as evidence during audit of the application of the exercise programme.

7 Records and action plans

- 7.1 All parties (including the umpires) should keep logs of their experience during the exercise. Shortly after the exercise is completed, the involved parties may convene to review their respective findings and develop improvement actions where necessary.
- 7.2 The records of exercises will be used as evidence during audit of the application of the exercise programme.

8 Further guidance material

Guidance material to assist the appropriate authority in establishing aerodrome emergency planning is given in the ICAO Airport Services Manual (Doc 9137), Part 7.

Guidance material on Human Factors principles can be found in the Human Factors Training Manual (Doc 9683).

Guidance on notification of suspected communicable diseases on board an aircraft or other public health risks can be found in PANS ATM (ICAO Doc 4444) Chapter 16.