

CAP 168 Chapter 2 The Aerodrome Manual

1 INTRODUCTION

- 1.1 Article 211 of the Air Navigation Order 2009 governs the grant of aerodrome licences by the Civil Aviation Authority. The Article together with Schedule 12 sets out the requirements for the Aerodrome Manual within the licensing process. The CAA uses the Manual to assess the suitability of licence holders and their organisations against the safety related requirements set out in Article 211 of the Order. The assessment is a continuous process; this is particularly relevant when changes likely to affect safety are proposed or made.
- 1.2 An application for an aerodrome licence should be accompanied by an Aerodrome Manual produced in accordance with CAP 168. Once granted a licence, the licence holder is required to maintain the Manual in conformity with Chapter 2 of CAP 168, and all aerodrome operating staff must have access to the relevant parts of the Manual. The term 'operating staff' means all persons, whether or not the aerodrome licence holder and whether or not employed by the aerodrome licence holder, whose duties are concerned either with ensuring that the aerodrome and airspace within which its visual traffic pattern is normally contained are safe for use by aircraft, or whose duties require them to have access to the aerodrome manoeuvring area or apron. The Manual will be regarded by the CAA as the primary indication of the standards likely to be achieved by the aerodrome operator. A copy is to be lodged with the Aerodrome Standards Department.

2 PURPOSE AND SCOPE OF THE MANUAL

- 2.1 An efficient management structure and a systematic approach to aerodrome operation is essential. The Manual should contain all the relevant information to describe this structure satisfactorily. It is the means by which all aerodrome operating staff are fully informed as to their duties and responsibilities with regard to safety. It should describe the aerodrome services and facilities, all operating procedures, and any restrictions on aerodrome availability.
- 2.2 Accountability for safety must start at the very top of any organisation. One of the key elements in establishing safe working practices is the "top down" approach where all staff should understand the safety aims of the organisation, the chain of command, and their own responsibilities and accountabilities. As safety management principles are applied, the Manual should be expanded to describe clearly how the safety of operations is to be managed at all times. To a reader or user of the Manual there should never be any doubt in "safety accountability" terms about who is responsible, who has the authority, who has the expertise and who actually carries out the tasks described in any section.
- 2.3 The principle objective of an Aerodrome Manual should be to show how management will discharge its safety responsibilities. The Manual will set out the policy and expected standards of performance and the procedures by which they will be achieved.

3 OWNERSHIP OF AN AERODROME MANUAL

- 3.1 The licence holder is responsible for providing the Aerodrome Manual. It should reflect the requirements and guidance material contained in Civil Aviation Publications and other documents.
- 3.2 It is the responsibility of the licence holder to be satisfied as to the appropriateness of each provision of the Manual to the particular operation, and to make amendments and additions as necessary.

3.3 The safety aim and objectives of the Manual and how it is to be used by employees, tenants etc. should be stated in a preface by the licence holder.

3.4 In this format and under the signature of the person with overall responsibility for safety in the company, the Manual demonstrates from the highest level, a commitment to the way in which safety will be managed.

4 AMENDMENT OF THE MANUAL

4.1 Responsibility for maintaining the accuracy of the Manual should be clearly defined. Each copy of the Manual should be numbered and a list of holders maintained by the person responsible for the issue of amendments. In the front of each volume should be an amendment page available for recording the amendment numbers, date of incorporation, signature of the persons amending and the page or paragraph affected.

4.2 Manuscript amendments are not acceptable. Changes or additions should always be the subject of an additional or replacement page on which the amended material is clearly identified.

4.3 Amendments to the Manual will be needed either because the document needs to be brought up to date or in response to a request by the CAA. Any amendments or additions must be furnished to the CAA by the holder of the licence before or immediately after they come into effect.

5 FORM OF THE MANUAL

5.1 The Aerodrome Manual is a key document both for the licence holder and the CAA. The Manual is the source document describing how operational procedures and their safe management will be delivered. It should contain all such information and instructions as may be necessary to enable the aerodrome operating staff to perform their duties. This must include information and instructions relating to those matters specified in Schedule 12 to the ANO. The CAA will expect the Aerodrome Manual to be an accurate reflection of the aerodrome's visible safety management system and safety culture. It will need to show how the aerodrome intends to measure its performance against safety targets and objectives. An Aerodrome Manual should not just satisfy the CAA's requirements. One of the principal objectives should be to create a medium for promulgating all procedures and information relating to the safe management of the aerodrome. The reader of a Manual should be given a clear and unambiguous statement of how safety is developed, managed and maintained on the aerodrome. All safety policies, operational procedures and instructions should be contained in detail or cross-referenced to other formally accepted or recognised publications.

5.2 At larger aerodromes the size and complexity of operations and related procedures may dictate that these procedures could not easily be included in a single document. In such circumstances it is acceptable to identify and reference within the Manual the procedures which are not included within it. If this system is to be successful it is essential that any referenced information, documentation and procedures are subjected to exactly the same systems of consultation and promulgation as the Manual itself. For many small aerodromes the Manual can be both simple and brief as long as it covers procedures essential for satisfactory day-to-day operations. Nevertheless it is possible to adopt a common format embracing the essential elements that define a safety management system.

5.3 The numbering of pages and paragraphs should be orderly and systematic to facilitate reference.

6 CONTENTS OF MANUAL

6.1 As a general guide, the following paragraphs set out the items which should be included in the Manual, although it is recognised that the need to include all items will vary between aerodromes, depending on the nature and scale of operations. It is not necessary for all operational procedures to be included in the Manual. However, when these are relevant to achievement of policy their location should be clearly referenced within the Manual.

YES	NO	N/A	PARA No.
-----	----	-----	----------

6.1.1 Introduction

- (a) Purposes of the Manual.

--	--	--	--
- (b) Legal position regarding aerodrome licensing as contained in the Air Navigation Order.

--	--	--	--
- (c) Distribution of the Manual.

--	--	--	--
- (d) Procedures for distributing and amending the Manual and the circumstances in which amendments may be needed.

--	--	--	--
- (e) Check List of Pages.

--	--	--	--
- (f) Preface by licence holder.

--	--	--	--
- (g) Contents Page.

--	--	--	--
- (h) Glossary of Terms (other than those included in CAP 168).

--	--	--	--

Note: This section will contain a short explanation of the general terms used in the Manual including job titles and abbreviations.

6.1.2 Technical Administration

- (a) Name and address of aerodrome.

--	--	--	--
- (b) Name and address of licence holder.

--	--	--	--
- (c) Named Persons:
 - The name, status and responsibilities of the official in charge of day to day operation.

--	--	--	--
 - The name, status and responsibilities of other senior operating staff.

--	--	--	--

Instructions as to the order and circumstances in which the above named staff may be required to act as the official in charge.

--	--	--	--

The name, status and responsibility of staff authorised by the CAA under Article 232 of the ANO 2009.

--	--	--	--

The name, status and responsibilities of the Accountable Manager.

--	--	--	--

- (d) Details of the Aerodrome Safety Management System.
Note: This should include an organisational chart supporting the commitment to the safe operation of the aerodrome as well as simply showing the hierarchy of responsibility for safety management. (Appendix 2C)
- (e) Safety related committees.

--	--	--	--

--	--	--	--

6.1.3 Aerodrome Characteristics

- (a) Details of the following:
- (i) Latitude and Longitude of the Aerodrome Reference Point in WGS 84 format;
 - (ii) Elevations of –
 - (i) Aerodrome.
 - (ii) Apron.
- (b) Plans, to a scale of 1:2500, showing the position of the aerodrome reference point, layout of the runways, taxiways and aprons; the aerodrome markings and lighting (including PAPI, VASIS or LITAS and obstruction lighting); the siting of navigational aids within the runway strips, and their degree of frangibility. It will not be necessary for these plans or the information called for in the following sub paragraphs (c) to (g) to accompany all copies of the Manual, but they must be appended to the licence holder's master copy and to the copy lodged with the CAA. In the case of copies or extracts provided or made available to operating staff, plans of a scale reasonably appropriate to the relevant duties of the said staff should be provided.
- (c) Description, height and location of obstacles which infringe the standard protection surfaces, and whether they are lighted.
- (d) Location, reference number and date of the survey plans from which the data at (a) and (b) were derived, and details of the procedures for ensuring they are maintained and updated.

--	--	--	--

--	--	--	--

--	--	--	--

--	--	--	--

(e) Data for, and the method of calculation of Declared Distances and elevations at the beginning and end of each Declared Distance.

--	--	--	--

(f) Method of calculating reduced Declared Distances when there are temporary objects infringing the runway strip, or the approach and take-off surfaces.

--	--	--	--

(g) Details of the surfaces, dimensions, and classification or bearing strengths of runways, taxiways and aprons.

--	--	--	--

6.1.4 Operational Procedures for:

(a) The system of Aeronautical Information Service available and the system that the licence holder uses to promulgate AIP requirements.

--	--	--	--

(b) Routine aerodrome inspections, including lighting inspections, and reporting including the nature and frequency of these inspections. (Chapter 3, Appendix 3F).

--	--	--	--

(c) Inspecting the apron, the runways and taxiways following a report of debris on the movement area, an abandoned take-off due to engine, tyre or wheel failure, or any incident likely to result in debris being left in a hazardous position.

--	--	--	--

(d) Sweeping runways, taxiways and aprons.

--	--	--	--

(e) Obtaining and disseminating meteorological information, including RVR and meteorological visibility and local area forecasts; (detailed specifications and procedures for RVR assessment in Category I weather conditions using human observers are given in Appendix 2A).

--	--	--	--

(f) Protection of runways during low visibility (LVPs) if such operations are permitted (Appendix 2B).

--	--	--	--

(g) Measurement and promulgation of water and slush depths on runways and taxiways.

--	--	--	--

(h) Measurement and/or assessment, and promulgation of runway surface friction conditions.

--	--	--	--

(i) Promulgating information on the aerodrome operational state, temporary withdrawals of facilities, runway closures etc.

--	--	--	--

(j) The safe integration of other aviation activities such as gliding, parachuting and banner towing.

--	--	--	--

- (k) Recording aircraft movements.

--	--	--	--

- (l) The control of works, including trenching and agricultural activity, which may affect the safety of aircraft (Appendix 2F).

--	--	--	--

- (m) The control of access to the aerodrome and its operational areas, including the location of notice boards, and the control of vehicles on the operational areas.

--	--	--	--

- (n) Maintaining apron control, including marshallers instructions.

--	--	--	--

- (o) The availability of aviation fuel and its storage, handling and quality control (ANO Article 217 and CAP 748).

--	--	--	--

- (p) Complying with regulatory requirements relating to accidents, incidents and Mandatory Occurrence Reporting (ANO Article 226 and Civil Aviation (Investigation of Accidents and Incidents) Regulations 1996).

--	--	--	--

- (q) The removal of disabled aircraft.

--	--	--	--

- (r) The aerodrome snow plan.

--	--	--	--

- (s) The wildlife hazard control plan.

--	--	--	--

- (t) Aerodrome Safeguarding (Chapter 4, paragraph 11).

--	--	--	--

- (u) Runway incursion prevention (Appendix 2D).

--	--	--	--

- (v) Responsibility for monitoring the third parties operating on the aerodrome (Appendix 2E).

--	--	--	--

- 6.1.5 Visual Aids (Reference should be made to Chapters 6 & 7)**
- (a) Responsibilities with respect to the AGL system.

--	--	--	--

- (b) A full description of all visual aids available on each approach, runway, taxiway and apron. This shall include AGL signs, markings and signals.

--	--	--	--

- (c) Procedures for operational use and brilliancy settings of the AGL system.

--	--	--	--

- (d) Standby and emergency power arrangements, including operating procedures both in LVPs and during mains failure situations.

--	--	--	--

(e) Procedures for routine flight inspection of approach lights, runway lights and PAPIs.

--	--	--	--

(f) The location of and responsibility for obstacle lighting on and off the aerodrome.

--	--	--	--

(g) Procedures for recording inspection and maintenance of visual aids and actions to be taken in the event of failures.

--	--	--	--

6.1.6 Rescue and Fire Fighting Services (RFFS)

(a) Policy statement of the RFF category(s) to be provided.

--	--	--	--

(b) Where the SAFO or designated watch officers have specific safety accountabilities, these should be included in the relevant chapter of the Manual.

--	--	--	--

(c) Policy and procedures indicating how changes in the level of RFFS protection normally available at the aerodrome are managed. This should include the extent to which operations are to be restricted and how pilots are to be notified.

--	--	--	--

(d) At aerodromes where a higher category is available by prior arrangement the Manual should clearly state the actions necessary to upgrade the facility. Where necessary this should include actions to be taken by other departments.

--	--	--	--

(e) The licence holder's objectives for each RFF category provided should be defined. This should include a brief description of:

--	--	--	--

- Amounts of media provided;
- Discharge rates;
- Number of foam-producing appliances;
- Staffing levels;
- Levels of supervision.

Note: When the objectives are higher than those set out in CAP 168 Chapters 8 and 9, licence holders may also wish to indicate the minimum levels acceptable under their safety policies.

(f) Procedures for:

Monitoring the aircraft movement areas for the purpose of alerting RFF personnel.

--	--	--	--

Showing how RFF personnel are alerted throughout the range of functions (training, extraneous duties, etc.) and geographical locations from where they may be expected to respond.

--	--	--	--

Indicating how the adequacy of the response time capability throughout their functions and locations is monitored and maintained.

--	--	--	--

Indicating how RFF personnel engaged in extraneous duties are managed to ensure that response capability is not affected.

--	--	--	--

- (g) Where the aerodrome provides specialist equipment such as rescue craft, emergency tenders, hose layers, appliances with aerial capability, etc., details should be included in the Manual. Procedures to be followed if these facilities are temporarily unavailable should also be included.

--	--	--	--

Where the aerodrome is reliant upon other organisations to provide equipment which is essential for ensuring safe operation of the aerodrome (perhaps water rescue), policies or letters of agreement should be included in the Manual. Where necessary, contingency plans in the event of non-availability should be described.

--	--	--	--

- (h) A statement describing the process by which licence holders ensure the initial and continued competence of their RFF personnel. This should include the following;

- Realistic fuel fire training;
- Breathing Apparatus training in heat and smoke;
- First Aid;
- LGV Driving;
- Low Visibility Procedures CAP 168 Chapter 8 Para 25;
- Training CAP 168 Chapter 8 Para 9; CAP 699;
- Health and Safety policy with regard to training of personnel in RPE and PPE.

- (i) Procedures indicating how accidents within 1000 m of the threshold of each runway are to be accessed. Where other difficult environs exist the Manual should indicate how these are to be accessed.

--	--	--	--

- (j) Where licence holders expect the RFF facility to respond to domestic fires or special services, procedures for managing the impact of this upon the normal aircraft RFF response should be included.

--	--	--	--

- (k) Where licence holders expect the RFF facility to respond to aircraft accidents landside, the policy should be clearly described. This should include procedures to manage the effects on continued aircraft operations.

--	--	--	--

(l) The availability of additional water supplies following an aircraft accident should be described. Details of the policy to be followed in the event of contractual work which requires isolation or depletion of supplies should be included (work in progress).

--	--	--	--

(m) Where an aerodrome accepts freight aircraft, ambulance flights or movements not required to use a licensed facility, company objectives regarding RFF category should be included.

--	--	--	--

(n) Licence holder's arrangements for ensuring the adequacy of responses in abnormal conditions i.e. Low Visibility Procedures.

--	--	--	--

(o) A policy statement indicating how the licence holder ensures the training and competence of First Aid personnel.

--	--	--	--

(p) An indication of the scale of the medical equipment carried. Where medical equipment is held other than on the RFF vehicles a statement indicating its location and how it is to be transported to an incident should be included.

--	--	--	--

6.1.7 Integrated Emergency Planning

The licence holder's arrangements for determining and implementing plans that ensure the integrated management of response to an aircraft incident/accident. These arrangements should take account of the complexity and size of the aircraft operations.

--	--	--	--

6.1.8 Air Traffic Services

Details of the following:

(a) The system for the safe management of air traffic operating on the aerodrome or in the airspace associated with it.

--	--	--	--

(b) Procedures for the selection of the runway in use and circuit direction.

--	--	--	--

(c) Procedures for noise abatement.

--	--	--	--

(d) Procedures for evaluating the suitability for use and availability of the runway(s).

--	--	--	--

(e) Procedures for alerting emergency services *(except where these are included in documentation associated with an ATSU established at the aerodrome and approved by the CAA).*

--	--	--	--

6.1.9 Communications and Nav aids

(a) Description of and instructions for the use of air/ground and operational ground radio communications where these are not covered in ATC or AFIS manuals.

--	--	--	--

(b) Description of and operating procedures for navigation aids.

--	--	--	--

6.1.10 Bibliography

Cross Referenced Documentation.

--	--	--	--

Name:

Position:

Name of Aerodrome:

Signature:

Date: