APPENDIX 2 AERODROME MANUAL

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AERODROME MANUAL

1.0 INTRODUCTION

- 1.1 This appendix expands on the requirements of SD-Aerodrome chapter 2 section 2.6 pertaining to the requirements of an aerodrome manual.
- 1.2 As part of the certification process, applicable aerodrome operators shall ensure that an aerodrome manual, containing inter alia, information on how operational procedures and their safe management will be delivered is submitted for approval/acceptance by the Authority prior to the granting of an aerodrome certificate or registration approval.
- 1.3 The aerodrome manual describes all the information, for each certified aerodrome, pertaining to the aerodrome site, facilities, services, equipment, operating procedures, organization and management, including its SMS. The aerodrome manual should clearly define, for each of these items, which coordination and procedures have been put into place in the case of multiple responsible stakeholders.
 - Note1. The complexity and size of the aerodrome may necessitate the SMS to be included in a separate manual.
 - Note2. Where the aerodrome operator implements specific procedures related to other Annexes, these may be described in the aerodrome manual.
- 1.4 An application for an aerodrome certificate shall be accompanied by an aerodrome manual produced in accordance with this Standards Document. Once granted with a certificate the aerodrome operator is required to maintain the aerodrome manual in conformity with these standards and enable all aerodrome operating staff to have access to the relevant parts of the manual.
 - Note 1. The term "operating staff" refers to those persons, whether or not they are employed by the aerodrome operator, whose duties are concerned either with ensuring safety of aerodrome operations or require them to have access to the aerodrome movement areas and all other areas within the aerodrome perimeter.
 - Note 2. When considered suitable for security or management reasons, the aerodrome operator may restrict the access of some operating staff to parts of the aerodrome manual, if they are suitably briefed by other means to perform their duties adequately and this would not impair the safety of aerodrome operations.

2.0 PURPOSE AND SCOPE OF THE AERODROME MANUAL

2.1 The aerodrome manual is a fundamental requirement of the certification process. It contains all the pertinent information concerning the aerodrome site, facilities, services, equipment, operating procedures, organization and management including the safety management system. The information presented in the aerodrome manual should demonstrate that the aerodrome conforms to the certification/registration approval standards and practices and that there are no apparent shortcomings which would adversely affect the safety of aircraft operations. The manual is a reference document and provides a checklist of aerodrome certification/registration approval standards to be maintained and the level of airside

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services at the aerodrome. Information provided in the aerodrome manual will enable the Authority to assess the suitability of the aerodrome for the aircraft operations proposed and to judge an applicant's fitness to hold a certificate/registration approval. It is a basic reference guide for conducting site inspections for granting an aerodrome certificate/registration approval and for subsequent safety inspections. The aerodrome manual is a reference document agreed between the aerodrome operator and the Authority with respect to the standards, conditions and the level of service to be maintained at the aerodrome.

- 2.2 The aim and objectives of the aerodrome manual and how it is to be used by operating staff and other stakeholders should be stated in the manual.
- 2.3 The aerodrome manual contains all the relevant information to describe the management and operational structure. It is the means by which all aerodrome operating staff are fully informed as to their duties and responsibilities with regard to safety, including information and instructions related to those matters specified in the standards. It describes the aerodrome services and facilities, all operating procedures, and any restrictions in place.

3.0 OWNERSHIP OF THE AERODROME MANUAL

- 3.1 The aerodrome operator is responsible for developing and maintaining the aerodrome manual, as well as providing appropriate personnel access to it.
- 3.2 It is the responsibility of the aerodrome operator to be satisfied with the appropriateness of each provision of the aerodrome manual to a particular operation and to make amendments and additions as necessary.

4.0 FORMAT AND CONTENTS OF THE AERODROME MANUAL

- 4.1 For the purpose of uniformity and to facilitate the Authority's review and acceptance/approval of the aerodrome manual, the following structure and content shall make up the aerodrome manual.
- 4.2 The applicant for an aerodrome certificate shall be entirely responsible for the accuracy of the information provided in the aerodrome manual.
- 4.3 The aerodrome manual shall contain, as a minimum, the following particulars, to the extent that they are applicable to the aerodrome, under the following parts:
 - **Part 1.** General information. This section should state the purpose and scope of the aerodrome manual; the legal requirement for an aerodrome certificate/registration approval and the aerodrome manual as prescribed in the legislation and standards; conditions for use of the aerodrome; the aeronautical information services available and the procedures for their promulgation; the system for recording aircraft movements and the obligations of the aerodrome operator as specified in this SD-AD.

Part 2. Particulars of the aerodrome site.

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- **Part 3.** Particulars of the aerodrome required to be reported to the aeronautical information service.
- **Part 4.** The aerodrome operating procedures and safety measures. This may include references to air traffic procedures such as those relevant to low-visibility operations. Air traffic management procedures are normally published in the air traffic services manual with a cross-reference to the aerodrome manual.
- Part 5. Details of the aerodrome administration and the safety management system.
- 4.4 A full list of topics for inclusion in the aerodrome manual is given in the Authority's *Guidance Material Aerodrome Manual*.
- 4.5 Responsibilities attributed to other aerodrome stakeholders should be clearly identified and listed.
- 4.6 If, under SD-AD section 1.5, the Authority exempts the aerodrome operator from complying with any requirement of the SD- Aerodromes, the aerodrome manual shall show the identifying number given to that exemption by the Authority and the date the exemption came into effect and any conditions or procedures subject to which the exemption was granted.
- 4.7 If a particular is not included in the aerodrome manual because it is not applicable to the aerodrome, the aerodrome operator must state in the manual the reason for non-applicability of the particular.

5.0 UPDATING OF THE AERODROME MANUAL

- 5.1 The aerodrome manual is a living document and as such shall be subject to amendment in order to ensure that it provides current and accurate information. The aerodrome operator shall therefore be responsible for the amendment of the manual and for notifying the Authority of any such amendments.
- 5.2 Responsibility for maintaining the accuracy of the aerodrome manual shall be clearly defined in the manual.
- 5.3 The manual shall be updated using a defined process and includes a record of all amendments, effective dates and amendment approvals.
- 5.4 The method of enabling all aerodrome operating staff to have access to the relevant parts of the manual shall be defined and can be demonstrated.
- 5.5 A method of tracking amendments and ensuring their receipt shall be established when using an electronic means of distribution.
- 5.6 Any amendments or additions shall be communicated to the Authority in accordance with the continued oversight requirements established by the Authority.

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6.0 APPROVAL/ACCEPTANCE OF THE AERODROME MANUAL

6.1 Prior to on-site verification of the aerodrome (including procedures and SMS), the aerodrome manual is reviewed by the Authority.

Note1. — As compliance of all safety-relevant procedures of the aerodrome operator is assessed during the on-site verification, acceptance at that stage consists of checking that all the information that should be contained in the aerodrome manual is provided.

Note2. — The checklist given in section 7.0 to this appendix shows the information required in the aerodrome manual and has been organized to follow the list of topics given in section 4.0 of this appendix.

- 6.2 Prior to the approval/acceptance of the aerodrome manual, the Authority shall verify that:
 - (a) the operator has submitted an application;
 - (b) the aerodrome manual submitted by the aerodrome operator contains all the required information; and
 - (c) all the procedures related to aerodrome certification that will be assessed by the on-site verification team are provided in the aerodrome manual.
- 6.3 The Authority formally informs the aerodrome operator when the aerodrome manual is accepted.
- 6.4 The aerodrome operator shall inform the Authority of any changes to the approved/accepted aerodrome manual between the time of the application for a certificate and the end of the on-site verification.

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7.0 CHECKLIST OF THE COMPONENTS OF AN AERODROME MANUAL

1.	Introduction	YES	NO
	(a) Purpose of the aerodrome manual		
	(b) Legal position regarding aerodrome certification as contained in the applicable regulation		
	(c) Distribution of the aerodrome manual		
	(d) Procedures for distributing and amending the aerodrome manual and the circumstances in which amendments may be needed		
	(e) Checklist of pages		
	(f) Preface by aerodrome certificate holder		
	(g) Table of contents		
	(h) Glossary of terms		
	Note. — This section will contain a short explanation of the general terms used in the aerodro titles and abbreviations.		
2.	Technical administration	YES	NO
	(a) Name and address of the aerodrome	П	П
	(b) Name and address of the aerodrome operator		
	(c) The name of the accountable executive		
3.	Description of the aerodrome (aerodrome characteristics)	YES	NO
	(a) Details of the following		
	 latitude and longitude of the aerodrome reference point in World Geodetic System — 1984 (WGS-84) format 		
	elevations of: i. aerodrome		
	ii. apron(b) Plans showing the position of the aerodrome reference point, layout of the		
	runways, taxiways and aprons; the aerodrome markings and lighting (including the precision approach path indicator (PAPI) and obstruction lighting); and the siting of navigation aids within the runway strips. It will not be necessary for these plans or the information called for in subparagraphs c) to f) below to accompany all copies of the aerodrome manual, but they are to be appended to the licence holder's master copy and to the copy kept with the State regulator. Operating staff are to be provided with scaled-down copies or		

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		extracts of plans relevant to their duties		
	(c)	Description, height and location of obstacles that infringe upon the standard protection surfaces, whether they are lighted and if they are noted in the aeronautical publications.		
	(d)	Procedures for ensuring that the plans are up to date and accurate.		
	(e)	Data for, and the method used to calculate, declared distances and elevations at the beginning and end of each declared distance.		
	(f)	Details of the surfaces, dimensions and classification or bearing strengths of runways, taxiways and aprons.		
		'		
4.	l is	t of authorized deviations, if any.	YES	NO
		t of dutilotized deviations, if diff.		
5.	Ор	erational procedures for:	YES	NO
5.1	Th	omulgation of aeronautical information e system of aeronautical information service available and the system that the tificate holder uses to promulgate AIP requirements		
5.2	Co	ntrol of access ntrol of access to the aerodrome and its operational areas, including the ation of notice boards, and the control of vehicles in the operational areas.		
5.3		The aerodrome operator's arrangements in response to an emergency. These arrangements should take account of the complexity and size of the aircraft operations		
	b)	Description of actions to be taken by the aerodrome operator as part of plans for the dealing of different emergencies occurring at the aerodrome or in its vicinity		
	c)	Contact list of organisations, agencies and persons of authority		
	d)	Procedures of the appointment of an on-scene commander for the overall emergency operation and description of responsibilities for each type of emergency.		
	e)	Reporting mechanism in event of emergency		
	f)	Details of tests of aerodrome facilities and equipment to be used in emergencies; including the frequency of those texts		
	g)	Details of the exercises to test emergency plans, including the frequency of those exercises		

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ŀ	h) Arrangements for personnel training and preparation for dealing with emergencies		
5.4	Rescue and Fire Firefighting (RFF) services.	YES	NO
a)	Policy statement on the RFF categories to be provided		
b)	Where the senior aerodrome fire officer or the designated fire watch offices have specific safety accountabilities, these should be included in the relevant chapter of the aerodrome manual.		
c)	Policy and procedures indicating the depletion of the RFF services is to be managed. This should include the extent to which operations are to be restricted, how pilots are to be notified and maximum duration of any depletion.		
d)	At aerodromes where a higher category of RFF is available by prior arrangement, the aerodrome 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 aerodrome operator's objective for each RFF category provided should be defined, including a brief description of: 1. amounts of extinguishing agents provided;		
	2. discharge rates;		
	number of foam-producing appliances;		
	4. manning levels;		
	5. levels of supervision.		
f)	Procedures for: 1. monitoring the aircraft movement areas for the purpose of alerting RFF personnel;		
	indicating how the adequacy of the response time capability of the RFF services 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, and appliances with aerial capability, details should be included in the aerodrome manual. Procedures to be followed if these facilities are temporarily unavailable should also be included.		
h)	Where the aerodrome is reliant upon other organizations to provide equipment, which is essential for ensuring the safe operation of the aerodrome (perhaps water rescue), policies or letters of agreement should be included in the aerodrome manual. Where necessary, contingency plans in the event of non-availability should be described.		
i)	A statement describing the process by which aerodrome operators ensure the initial and continued competence of their RFF personnel, including the following: 1. realistic fuel fire training;		
	2. breathing apparatus training in heat and smoke		

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		3. first aid		
		 low visibility procedures; LVP (where applicable); any legal requirements; 		
		6. health and safety policy with regard to training of personnel in the use of		
		respiratory protection equipment and personal protection equipment.		
	j)	Procedures indicating how accidents in the immediate vicinity of the aerodrome are to be accessed. Where difficult environs exist, the aerodrome manual should indicate how these are to be accessed.		
	k)	Where local authorities or the aerodrome operator expects the RFF facility to respond to domestic fires or special services, procedures for managing their impact upon normal aircraft RFF responses should be included.		
	l)	Where the aerodrome operator expects the RFF facility to respond to aircraft accidents landside, the policy should be clearly described, including procedures to manage the effects on continued aircraft operations		
	m)	The availability of additional water supplies should be described.		
	n)	Aerodrome operator's arrangements for ensuring the adequacy of responses in abnormal conditions, i.e. LVP.		
5.5		Inspections of the movement area	YES	NO
	a)	Routine aerodrome inspections, including lighting inspections, and reporting, including the nature and frequency of these inspections.		
	b)	Inspecting the apron, runways and taxiways following a report of debris on the movement area, an abandoned take-off due to engine, tire or wheel failure, or any incident likely to result in debris being left in a hazardous position.		
	c)	Sweeping of runways, taxiways and aprons.		
	d)	Measurement and promulgation of water, slush and other contaminants including depths on runways and taxiways.		
	e)	Assessment and promulgation of runway surface conditions: 1. details of inspection intervals and times;		
		completion and effective use of an inspection checklist;		
		 arrangements and methods for carrying out inspections on FOD, lighting, pavement surface, grassing; 		
		 arrangements for reporting the results of inspections and for follow-up; 		
		5. arrangements and means of communication with air traffic control during an inspection;		
		arrangements for keeping an inspection logbook and the location of the logbook.		
5.6		Maintenance of the movement area	YES	NO
	a)	Promulgation of information on the aerodrome operational state, temporary withdrawals of facilities, runway closures, etc.: 1. arrangements for maintaining the paved areas, including the runway friction assessments;		
		2. arrangements for maintaining the unpayed runways and taxiways:		

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		3. 4. 5. 6. 7.	arrangements for maintaining the runway and taxiway strips; arrangements for maintaining aerodrome drainage; arrangements for maintaining the visual aids, including the measurement of intensity, beam spread and orientation of lights; arrangements for maintaining the obstacle lighting; arrangements for reporting and action taken in the event of failure or unsafe occurrence.		
5.7	На	azardo	ous meteorological conditions	YES	NO
	D	escrip	tion of the procedures		
5.8		sual A		YES	NO
6	a) R	Respor	sibilities with respect to the aerodrome ground lighting system.		
k			escription of all visual aids available on each approach, runway, taxiway on, including signs, markings and signals.		
(c) P	Proced	ures for operational use and brilliancy settings of the lighting system.		
(y and emergency power arrangements, including operating procedures LVP and during main power failure situations.		
6			ures for routine inspection and photometric testing of approach lights, light and PAPIs.		
f			ation of and responsibility for obstacle lighting on and off the actions to be a the event of failures.		
(ures for recording inspection and maintenance of visual aids and actions ken in the event of failures.		
ŀ			ntrol of work, including trenching and agricultural activity, which may ne safety of the aircraft.		
5.9	Α	pron I	Management	YES	NO
	a)		angements between air traffic control, the aerodrome operator and the on management unit		
	b)) Arra	angements for allocating aircraft stands		
	c)		angements for initiating engine start and ensuring clearance of aircraft hback.		
5	5.10		on Safety Management	YES	NO
	a)	•	ans and procedures for jet blast protection		
	b)	•	angements of safety precautions during aircraft refueling operations		
	c)	•	angements for apron sweeping and cleaning.		
	d)	•	angements for reporting incidents and accidents on apron		
	e)		angements for assessing the safety compliance of all personnel working he apron		

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	f) Arrangements for the use of advanced visual docking systems, if provided		
5.1	1 Vehicles on the movement area	YES	NO
	 a) Details of the applicable traffic rules (including speed limits and the means of enforcing the rules) 	of	
	 Method and criteria for allowing drivers to operate vehicles on the movemer area 	nt 🗆	
	c) Arrangements and means of communicating with air traffic control		
	d) Details of the equipment needed in vehicles that operate on the movemer area	nt 🗆	
5.1	2 Wildlife hazard management	YES	NO
a)	Arrangements and method for the dispersal of bird and other wildlife		
b)	Measure to discourage birds and other wildlife hazards		
c)	Arrangements for assessing wildlife hazards		
d)	Arrangements for implementing wildlife control programmes		
5.1	3 Obstacles	YES	NO
5.1 a)	Arrangement for monitoring the height of buildings or structures within the	YES	NO
a) b)	Arrangement for monitoring the height of buildings or structures within the boundaries of the obstacle limitation surfaces (OLS) Arrangements for controlling new developments in the vicinity of aerodromes		NO
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a) b)	Arrangement for monitoring the height of buildings or structures within the boundaries of the obstacle limitation surfaces (OLS) Arrangements for controlling new developments in the vicinity of aerodromes The reporting procedures and actions to be taken in the event of the appearance of unauthorised obstacles.		NO
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	visual range (RVR) and surface visibility		
b)	Protection of runways during LVP if such operations are permitted		
c)	The arrangement and rules before, during and after low visibility operations including applicable rules for vehicles and personnel operating in the movement area		
5.17 F	Protection of sites for radar, navigation aids and meteorological		NO
equipn	nent		
a)	Description of the areas to be protected and procedures for their protection		
6.Safet	ty Management System (SMS)	VEC	NO
		YES	
a)	Safety policy		
b)	Operator's structure and responsibility. This should include: 1. the name, status and responsibilities of the accountable executive		
	 the name, status and responsibilities of the safety manner 		
	3. the name, status and responsibilities of other senior operating staff		
	4. the name, status and responsibilities of the official in charge of day-to-day operations;		
	5. instructions as to the order and circumstances in which the above-named staff may act as the official in charge or accountable executive;		
	6. an organizational chart supporting the commitment to the safe operation of the aerodrome as well as one simply showing the hierarchy of responsibility for safety management.		
c)	Training		
d)	Complying with regulatory requirements relating to accidents, incidents and mandatory occurrence reporting		
e)	Hazard analysis and risk assessment		
f)	The management of change		
g)	Safety criteria and indicators		
h)	Safety audits.		
i)	Documentation		
j)	Safety-related committees		
k)	Safety promotion		
l)	Responsibility for monitoring the contractors and third parties operating on the aerodrome		

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