



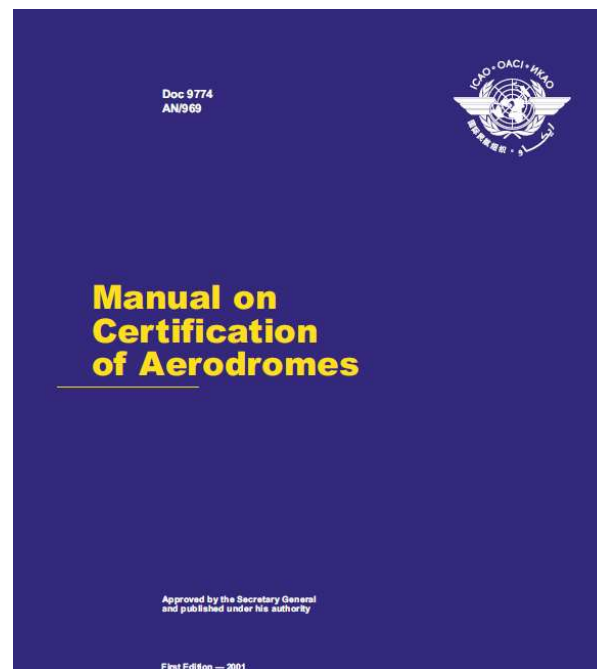
WORKING TOGETHER TO ENHANCE  
AIRPORT OPERATIONAL SAFETY



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ICAO-ACI Aerodrome Certification Workshop  
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# Understanding aerodrome manual building



## Purpose and scope

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 manual is a reference document and provides a **checklist of aerodrome certification standards** to be maintained and the level of airside services at the aerodrome.

## Structure and contents

For the purpose of uniformity and to **facilitate the CAA's review and acceptance/approval of the aerodrome manual**, the regulations should set out the structure and content of the aerodrome manual.

## A living document

The aerodrome manual is **subject to amendment in order to ensure that it provides current and accurate information.**

The aerodrome certificate holder should therefore be **made responsible for the amendment of the manual and for notifying the CAA of any such amendments.**

The content of an aerodrome manual should be treated with **due respect to the confidentiality requirements of individual States.**

## Information to be included

**Part 1.** General information set;

**Part 2.** Particulars of the aerodrome site;

**Part 3.** Particulars of the aerodrome required to be reported to the aeronautical information service;

**Part 4.** The aerodrome operating procedures and safety measures;

**Part 5.** Details of the aerodrome administration and the safety management system.

## PART 1 – General information set

### PART 1 GENERAL.

- 1.1 Purpose and Scope.
- 1.2 Legal Requirement.
- 1.3 Conditions of Use.
- 1.4 Aeronautical Information.
- 1.5 Recording Aircraft Movements.
- 1.6 Obligation of the Aerodrome Operator.

#### 1.1 Introduction

The Second Edition of HIA Aerodrome Manual reflects the way in which the Airport will be operated during the full commercial operations. The knowledge and experience gained during the normal operation of the Airport will be used to amend and update the procedures as necessary. Consequently, amendments to this edition will be undertaken in line with implementation of different phases of airport development, changes to the airport operating procedures, the implementation and continuous improvement of the safety management system, the airport systems and/or as agreed with the QCAA.

This manual can therefore be described as a *'continuously evolving document'*, which will develop to meet the needs of a constantly developing airport and its operation. Editorial responsibility for the manual rests with the Senior Manager of Safety and Airside Operations, to whom all requests for amendment should be submitted.

#### 1.2 Purpose and Scope of the Manual

Accountability for safety starts at the highest level of management and this Aerodrome Manual shows how the aerodrome management discharges its safety related responsibilities, and the expected standards of performance and procedures by which they will be achieved.

The purpose of the Aerodrome Manual is to provide confirmation of the Airport Operator - "Doha International Airport" ability to comply with QCAR-ADR regulations as enacted by Law No. 15 (2002) pertaining to civil aviation requirements set down by the Qatar Civil Aviation Authority (QCAA).

The Aerodrome Manual contains detail information regarding the aerodrome site, facilities, services, equipment, operating procedures, organization and management including Safety Management System of "Doha International Airport".

The Aerodrome Manual is also a reference document that provides:

- Description of how Aerodrome Licensing standards are met;
- HIA staff (airport contractors & tenants) with all of the instructions, information and guidance material necessary to enable safe and compliant aerodrome management, both with QCAA Regulations and HIA requirements.

Officers of the QCAA may utilize this document to determine compliance, with regard to the issue and continued validity of the HIA Aerodrome License.

## PART 2 -Particulars

**PART 2**      **PARTICULARS OF THE AERODROME SITE.**

- 2.1    General Information.
- 2.2    Aerodrome Land Titles.



## PART 3 - Particulars to be reported to the aeronautical information

**PART 3** PARTICULARS OF THE AERODROME REQUIRED TO BE REPORTED TO THE AERONAUTICAL INFORMATION SYSTEM (AIS)

- 3.1 General Information.
- 3.2 Aerodrome Dimensions and related Information.

### Aerodrome data:

RWYs, TWYs and apron(s); Aerodrome and RWY THR elevations, Dimensions of RWY strip, TWY strip, RESA, Stopways and clearways; Declared distances; Disabled aircraft removal; RFF category available; and Emergency planning & arrangements.

**Table 3.4 RWY Slope, Strips, RESA, CWY, SWY**

RWY	Slope of RWY	Dimensions of strip (m)	RESA (LxW)	Dimensions of clearway (m)	Dimensions of stopway (m)	Remarks
16L	NIL	4970x300	240x150	NIL	NIL	
34R	NIL		240x150	NIL	NIL	
16R	NIL	4370x300	240x150	NIL	NIL	
34L	NIL		240x150	NIL	NIL	

*Note 1: Runway shoulders – half load bearing. Note 2: outside of tarmac areas all runway and taxiway strips are consolidated and stabilised sand and/or gravel.*

**Table 3.5 Declared Distances**

RWY Designator	Take-off Run Available (TORA) (m)	Take-off Distance Available TODA (m)	Accelerated Stop Distance Available (ASDA) (m)	Landing Distance Available (LDA) (m)
16L	4850	4850	4850	4850
34R	4850	4850	4850	4850
16R	4250	4250	4250	4250
34L	4250	4250	4250	4250

**Table 3.6 Declared Distances for Intersection Departure**

RWY Designator	TWY	Take-off Run Available (TORA) (m)	Take-off Distance Available TODA (m)	Accelerated Stop Distance Available (ASDA) (m)
16L	A11	4730	4730	4730
	A10	4082	4082	4082
	A6	2497	2497	2497
34R	A1	4730	4730	4730
	A2	4266	4266	4266
	A6	2386	2386	2386
16R	L11	4130	4130	4130
	L10	3614	3614	3614
	L7	2348	2348	2348
34L	L1	4122	4122	4122
	L2	3646	3646	3646
	L7	1935	1935	1935

## PART 4 -Particulars of the aerodrome Operating procedures And safety measures

### PART 4 PARTICULARS OF THE AERODROME OPERATING PROCEDURES AND SAFETY MEASURES.

- 4.1 Aerodrome Reporting.
- 4.2 Access to the Aerodrome Movement Area.
- 4.3 Aerodrome Emergency Plan.
- 4.4 Rescue and Fire-Fighting.
- 4.5 Inspection of the Aerodrome Movement Area and Obstacle Limitation Surface by the Aerodrome Operator.
- 4.6 Visual Aids and Aerodrome Electrical Systems.
- 4.7 Maintenance of the Movement Area.
- 4.8 Aerodrome Works – Safety.
- 4.9 Apron Management.
- 4.10 Apron Safety Management.
- 4.11 Airside Vehicle Control.
- 4.12 Wildlife Hazard Management.
- 4.13 Obstacle Control.
- 4.14 Removal of Disabled Aircraft.
- 4.15 Handling of Hazardous Materials.
- 4.16 Low-Visibility Operations.
- 4.17 Protection of Sites for Radar and Navigational Aids.

#### AERODROME REPORTING

*Note: Refer to the Organisation Contact list in Appendix A for the telephone numbers of those persons identified as having responsibility for implementing the procedures detailed in this Section.*

##### 4.1.1 Purpose

The aim of these procedures is to ensure that QCAA AIS and Flight Crews are notified of any changes in the physical condition of the airport and of new obstacles that may affect the safety of aircraft operations.

##### 4.1.2 Responsibilities

- The Aerodrome Manager has responsibility within HIA for ensuring that procedures are established and resources provided to report changes to aerodrome physical characteristics, the Obstacle Limitation Surface (OLS), or any other change that may affect the safety of aircraft.

- The Senior Manager Safety and Airside Operations is responsible within HIA for the supply of aeronautical information (Data) by "Doha International Airport", as an Aerodrome Operator (Data Originator) to QCAA Aeronautical Information Services (AIS) as per the signed Service Level Agreement with QCAA AIS.

Quality requirements for the data provided shall be in accordance with the agreed standards to which the said information shall be published by the QCAA AIS.

- The Airfield Safety Manager is responsible for implementing the reporting procedures documented in the Service Level Agreement with QCAA AIS.

Airfield Safety Manager:

- Shall be responsible for any changes or amendments to the original data that have been already provided.
- Shall be responsible for originating a NOTAM, whenever the information is of a temporary nature and of short duration or when operationally significant permanent changes or temporary changes of long duration are made at short notice.
- Whenever significant changes (the circumstances listed in Appendix 2 of the SLA) are planned and where advance notice is desirable in order to comply with the requirements of the AIRAC procedure, the information shall be submitted at least 77 days in advance of the effective date to AIS.
- All data items provided shall be with the agreed Metadata Attributes and shall be satisfied the Aeronautical Data Quality requirements listed in Appendix 3 to the SLA;

Reporting procedures; Procedures for preventing unlawful interference; Plans for handling aircraft emergency; Details of RFF Services, personnel and equipment; Aerodrome inspections; Inspection and maintenance of visual & non-visual aids; Movement area maintenance; Operational safety management procedures; Wildlife hazard management; Obstacle control; Disabled aircraft removal; Handling of dangerous goods; Low visibility operations; Site protection.

## PART 5 - Aerodrome administration and Safety management system

**PART 5** AERODROME ADMINISTRATION AND SAFETY MANAGEMENT SYSTEM.

- 5.1 Aerodrome Administration.
- 5.2 Airside Safety Council
- 5.3 Safety Management System.

**5.1 AERODROME ADMINISTRATION**

The purpose of this chapter is to outline accountabilities, responsibilities, authorities and human resources necessary to implement the safety procedures described.

**5.1.1 Key personnel & Responsibilities**

**5.1.1.1 Accountable Manager**

The CEO as Accountable Manager is responsible for the organizational attitude towards safety. The success of the SMS depends on the extent to which senior management devotes the necessary time, resources and attention to safety as a core management issue. A safety management system will not be effective if it receives attention only at the operational level. The Accountable Manager is responsible to effectively implement the organization's Safety Management System. The Accountable Manager, having full authority over human resources and financial issues, must ensure that the necessary resources are allocated to the management of safety. He has direct responsibility for the conduct of the organization's affairs and final responsibility for all safety issues

The Accountable Manager is responsible for ensuring that adequate resources are made available to guarantee an appropriate level of safety throughout the organization for all operations.

The CEO as designated Accountable Manager is ultimately responsible for ensuring that resources are available for formation, implementation and monitoring of the safety policy and safety management system installed to effect the requirements of the said policy.

These authorities and responsibilities include, but are not limited to:

- Full authority for human resources issues.
- Authority for major financial issues.
- Direct responsibility for the conduct of the organization's affairs
- Final authority over operations under the aerodrome license; and
- Final responsibility for all safety issues

Although the Accountability cannot be delegated, key duties for the implementation and running of Airport Operator SMS are delegated to the EVP "Doha International Airport" as designated Aerodrome Manager and to the Senior Manager Safety and Airside Operations as designated Aerodrome Safety Manager.

Aerodrome organisation chart with contact details of key safety officials; Safety Policy and organisation; Safety strategy & planning; Hazard identification analysis and risk management; Data collection and analysis; Internal safety audit & review system; Safety measures programme including change management; Safety assurance, safety promotion & risk control; Staff training and competency.

## Keep it simple!

The following documents form part of this manual and are distributed by other means. Please contact the Head Airside Safety Management Unit if you need a copy of any of these documents.

- Aerodrome Emergency Plan
- Disabled Aircraft Recovery Plan
- Hurricane Preparedness Plan
- LOA between the ATS and the AMU
- Apron Control Manual
- Apron Management Unit Manual
- Tow Tractor Manual
- Passenger Boarding Bridge Training Manual
- Transport Vehicle for Passengers with Disabilities
- Airside Safety and Security
- Aircraft Fueling Manual
- Airside Vehicle Permit Manual
- Safety Management System Manual
- Fuel Overseer Manual
- Airside Driving Permit Manual



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**THANK YOU!**